

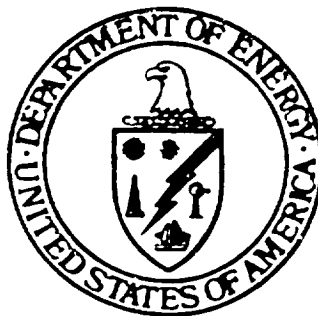
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**PROGRAMMATIC AGREEMENT  
BETWEEN THE  
UNITED STATES DEPARTMENT  
OF ENERGY  
AND THE ADVISORY COUNCIL  
ON HISTORIC PRESERVATION**

**YUCCA MOUNTAIN, NEVADA**

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**DECEMBER 1988**

PROGRAMMATIC AGREEMENT  
BETWEEN  
THE UNITED STATES DEPARTMENT OF ENERGY  
AND THE  
ADVISORY COUNCIL ON HISTORIC PRESERVATION  
FOR THE  
NUCLEAR WASTE DEEP GEOLOGIC REPOSITORY PROGRAM  
YUCCA MOUNTAIN, NEVADA

December 1988

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ADVISORY COUNCIL ON HISTORIC PRESERVATION  
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WHEREAS, the United States Department of Energy (DOE) has been directed by Congress under the Nuclear Waste Policy Act of 1982 (Public Law 97-425) and the Nuclear Waste Policy Amendments Act of 1987 (Public Law 100-203, Part A) to identify and evaluate sites for repositories for the deep geological disposal of high-level radioactive waste and spent nuclear fuel; and

WHEREAS, the undertaking, for purposes of this Programmatic Agreement, is considered to be the:

1. Characterization of the Yucca Mountain site as provided by the Nuclear Waste Policy Amendments Act, including extensive data collection and analysis and testing.
2. Recommendation by the Secretary of Energy to the President of a site for development as the repository, supported by a final environmental impact statement (EIS) prepared pursuant to the National Environmental Policy Act, and the Nuclear Waste Policy Act, as amended by the Nuclear Waste Policy Amendments Act; and

WHEREAS, development of the repository and other facilities specified in the Nuclear Waste Policy Act are not within the scope of this Programmatic Agreement, but will be dealt with through additional consultation with the Advisory Council on Historic Preservation (Council) per the Council's regulations "Protection of Historic Properties" (36 CFR Part 800 as revised on September 2, 1986) (Appendix 1); and

WHEREAS, Section 120 of the Nuclear Waste Policy Act requires Federal agencies, including the Council, to expedite consideration and issuance of any required authorizations related to site characterization; and

WHEREAS, DOE has undertaken preliminary surveys of the Yucca Mountain site to identify historic, prehistoric, archeological, architectural, and cultural properties included in or eligible for inclusion in the National Register of Historic Places (hereinafter referred to as "historic properties") the results of which surveys are listed in Appendix 2; and

WHEREAS, DOE has determined that the proposed undertaking potentially could have effects upon historic properties including, but not limited to, those historic properties identified in surveys conducted to date; and

WHEREAS, pursuant to Sections 106 and 110 of the National Historic Preservation Act of 1966, Section 2(b) of Executive Order 11593, and the Council's regulations, the DOE has requested the comments of the Council; and

WHEREAS, pursuant to 36 CFR 800.13 of the Council's regulations, the DOE has requested the development of a Programmatic Agreement to fulfill DOE's responsibilities under Sections 106 and 110 of the National Historic Preservation Act, the Council's regulations, and the Secretary of the Interior's "Guidelines for Historic and Archeological Resource Management; for Federal Agency Responsibilities Under Section 110 of the National Historic Preservation Act" (FR Vol. 53, No. 31, February 17, 1988, pages 4727 - 4746); and

WHEREAS, DOE has consulted with the Council and the Nevada State Historic Preservation Officer (SHPO) and will continue to consult and to review the undertaking to consider feasible and prudent alternatives to avoid, minimize, or satisfactorily mitigate adverse effects to historic properties;

NOW, THEREFORE, it is mutually agreed between DOE and the Council that implementation of the undertaking in accordance with the following stipulations will avoid or satisfactorily mitigate the adverse effects of the undertaking on historic properties and will, therefore, satisfy all of DOE's responsibilities under Sections 106 and 110 of the National Historic Preservation Act, the Council's regulations, and the guidelines for Federal agency responsibilities under Section 110 of the National Historic Preservation Act.

#### STIPULATIONS

##### 1. MONITORING THE PROGRAMMATIC AGREEMENT

DOE will monitor compliance with the Programmatic Agreement and will afford the Nevada SHPO the opportunity to participate in monitoring. At a minimum, DOE will provide the Nevada SHPO the opportunity to inspect the project areas to ensure adherence to the stipulations of this Programmatic Agreement on a quarterly basis, if requested by the SHPO.

Representatives of DOE will ensure that the stipulations in this Programmatic Agreement are satisfied in a complete and timely fashion and will send reports to the Council and Nevada SHPO annually on implementation progress. This annual report will



include a compilation of the monitoring reports written during the year and provided to the SHPO as actions occurred.

2. RESEARCH DESIGN

DOE will develop and implement a research design which will permit the archeological and historic data base to be seen as a whole in order to better guide archeological and historical data recovery efforts during site characterization. DOE will seek guidance from the SHPO in preparing this research design. This research design should:

- A. Be built on data identification already undertaken by DOE at the Yucca Mountain site and elsewhere on the Nevada Test Site. Systematic cultural resource surveys have been conducted in advance of land disturbing activities on the Nevada Test Site since 1977, the area has been studied by archeologists since 1940, and numerous potentially eligible historic properties already have been identified (reference by number in Appendix 2). Cultural resource overviews have been prepared for both Yucca Mountain and Pahute and Rainier Mesas (Appendix 2, references 17 and 23), and intensive archeological surveys have identified and evaluated over 200 historic properties on over 17 square miles of the proposed repository locality (references 4, 6, 7, 10-12, 14, 15, 19-22, 27, 28, 31-32). Test excavations have been performed at 29 sites and long-term management procedures and research objectives have been recommended specifically for the Yucca Mountain locality (reference 16). Related cultural resource studies also have been conducted in Yucca Flat (reference 29), on the Groom Range (reference 30), and throughout the Nellis Bombing and Gunnery Range (reference 1, 2, 8, and 9).
- B. Be at a level of detail appropriate to the known and expected resource base at the site and its environs.
- C. Establish and address significant, defensible research questions. Such questions should be developed with reference to the Council's Handbook, "Treatment of Archeological Properties" (Handbook), particularly Appendix A (Appendix 3), and the archeological element of the Nevada State Historic Preservation Planning Process.
- D. Establish and use cost-effective strategies and methods for addressing the research questions.
- E. Identify those historic properties useful in addressing the research questions, and which are subject to direct or indirect effect by the project.

F. Be consistent with the Handbook, cultural resources management programs developed by the Air Force for the Nellis Bombing Range, and by the Bureau of Land Management (BLM) for subject lands in the public domain, the Nevada State Historic Preservation Planning Proces, Secretary of the Interior's Standard and Guidelines "Archeology and Historic Preservation" (Appendix 4); and, as applicable, the "Standards of Research Performance of the Society of Professional Archeologists" (Appendix 5).

3. DATA RECOVERY

- A. The research design described in Stipulation 2 shall include a plan for the recovery of archeological data from historic properties subject to effect during site characterization, where such effects cannot otherwise be avoided.
- B. DOE will make every effort to design project activities to avoid damage to any historic property.
- C. Archeological sites identified (Appendix 6) as of the date of this agreement as potentially meeting the eligibility criteria of the National Register are assumed by DOE to be eligible for inclusion in the National Register of Historic Places and will be treated as such under Section 106 of the National Historic Preservation Act unless a formal determination is made by the Keeper of the National Register that they are not eligible. Archeological sites and other historic properties identified subsequent to the date of this agreement will be reviewed by DOE and the Nevada SHPO to determine eligibility in accordance with 36 CFR Part 800.4(c).
- D. The data recovery plan will outline activity-specific and site-specific procedures to be followed in mitigating adverse impacts through data recovery. Further consultation with the Council and Nevada SHPO will not be required unless conditions differ from those specified in the data recovery plan.
- E. Permanent curation of any recovered artifact will be coordinated with the Nevada SHPO to assure use of a qualified local facility.
- F. DOE will request an opportunity for consultation with the Nevada SHPO, the Nevada Indian Commission, and the Indian groups identified pursuant to Stipulation 5C to determine treatment of prehistoric or historic American Indian burials in the event any such burials are discovered, in a manner consistent with the January 4, 1979, Memorandum of

Understanding between the Nevada SHPO and the Nevada State Indian Commission (Appendix 7).

- G. DOE will submit the data recovery plan to the Nevada SHPO, the BLM, and the Council for review and comment within 120 days after execution of this agreement, and will request consultation with the Nevada SHPO and the Council to resolve any disagreements concerning its implementation. No disturbance of a historic property to which the data recovery plan pertains will be permitted by DOE until the data recovery plan has been implemented with respect to that property.

#### 4. ADDITIONAL SURVEY

- A. Before any earthmoving or other activities that could effect a unit of land are undertaken in connection with site characterization, DOE will continue to ensure completion of archeological surveys in areas not previously surveyed on that unit of land. Such surveys will:
- i) be conducted to identify and evaluate historic properties on the basis of the criteria of the National Register of Historic Places (36 CFR Part 60) (Appendix 8);
  - ii) identify properties which may be subject to effect as determined with reference to the Council's regulations (36 CFR Part 800) (Appendix 1); and
  - iii) be consistent with the research design developed pursuant to Stipulation 2.
- B. Surveys will concentrate on both on-site and off-site direct and indirect effects (such as impacts from construction, land-use changes, vandalism, and induced growth). Such effects are those which are reasonably foreseeable and can reasonably be tied to the project. Such potential effects will be those identified during the EIS scoping process, in ongoing environmental planning, and in site planning and evaluation documents.
- C. If potentially eligible properties which are already known or are identified as the result on ongoing surveys are subject to effect, they will be treated according to the direction in Stipulation 3, "Data Recovery."

#### 5. COORDINATION

In carrying out the terms of this agreement, as soon as possible, before any earthmoving or other activities connected

with site characterization that could affect a unit of land are undertaken on the site, and throughout the process, DOE will:

- A. Consult with the Advisory Council on Historic Preservation and the BLM to ensure that their concerns relevant to historic properties are met. DOE will ensure that data, materials, and reports from its contractors will be available in a timely manner to those agencies during the course of ongoing work relevant to this Programmatic Agreement.
- B. Provide opportunities for consultation with the SHPO to ensure that their concerns relevant to historic properties are met. DOE will ensure that data, materials, and reports from its contractors will be available in a timely manner to the Nevada SHPO during the course of ongoing work relevant to this Programmatic Agreement.
- C. Consult with the Bureau of Indian Affairs, the Western Shoshone, the Southern Paiute, other tribes with current or historic ties to the land, and other parties that have expressed interest to ensure identification and notification of all potentially involved American Indian groups. DOE will conduct consultation with American Indian groups having traditional cultural ties to the area, including both Federally recognized tribes and groups that are not Federally recognized, but that can be identified through consultation with ethnographic authorities and others as having traditional cultural ties to the area. Consultation will be held to assure that significant properties of traditional cultural or religious value to such groups are identified and avoided to the extent feasible.

If such properties are identified and effects on them cannot be avoided, DOE will consult further with the American Indian group(s) involved, the Nevada SHPO, and the Council to seek ways to mitigate project effects on such properties. DOE will consider recommended mitigation measures.

Consultation will be undertaken with reference to the Council's March 1985, draft, "Guidelines for Consideration of Traditional Cultural Values in Historic Preservation Review" (Appendix 9).

DOE will ensure that reports from its contractors will be available in a timely manner during the course of ongoing work relevant to this Programmatic Agreement to those local tribes with current or historic ties to the land which request such information.

6. WORKER EDUCATION PROGRAM

As early as possible, and before a significant influx of workers arrives at the site, DOE will develop and implement a comprehensive worker education program for archeological and historic resources. The program will be integrated with the data recovery, survey, and consultation required by Stipulations 3, 4, and 5 and will include, but need not be limited to, the following components:

- A. Distribution of information to all project workers and their dependents, informing them about the Archeological Resources Protection Act, warning them against the unauthorized collection or disturbance of archeological materials, and explaining the requirement to report the discovery of such materials to appropriate authorities.
- B. Development of an education program using such techniques as video tape, brochures, or films to inform workers and their dependents about local history and prehistory, the science of archeology, and the importance of archeological resources.
- C. Consultation with Archaeo-Nevada, the avocational archeological organization in southern Nevada, to establish ways to encourage interested workers, dependents, and Nevada Test Site employees to participate in Archaeo-Nevada activities, in order to provide interested workers and dependents an opportunity to view the archeological record in a positive way.
- D. Continued development and maintenance of the Nevada Test Site archeology display in the Mercury Cafeteria.
- E. Placement of warning signs and physical barriers as necessary around highly visible sites which are potentially subject to vandalism.

7. PROFESSIONAL QUALIFICATIONS

All required archeological work will be carried out under the direct supervision of a professional archeologist who meets the Certification Requirements of the Society of Professional Archeologists (Appendix 10) or the Secretary of the Interior's "Professional Qualifications Standards" (Appendix 11). Historic work will be carried out under the direct supervision of a professional historian, architectural historian, or historic architect, as appropriate, who meets the Secretary of the Interior's "Professional Qualifications Standards" for historians (Appendix 11).

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### 3. DOE CONTRACTORS

DOE will ensure that contractors and subcontractors used in connection with this undertaking are provided copies of this Programmatic Agreement and will comply with its terms.

### 9. DISPUTE RESOLUTION

A. Disagreements regarding interpretation and implementation of this Programmatic Agreement will be resolved by consultation between DOE and the Nevada SHPO, with participation by the Council, at the request of either DOE or the Nevada SHPO.

B. Should disagreements not be resolved in accordance with Stipulation 9A (above), DOE will provide to the Council documents and information regarding the disagreement necessary to allow the Council to comment pursuant to its responsibilities under 36 CFR 800.6. Within 15 working days of receipt of such documents and information, the Council will:

i) provide DOE a finding of fact and recommendations, after consideration of which DOE will make a final decision in the matter; or

ii) notify DOE that the matter will be scheduled for review and comment by the full Council or a panel and conclude such review and comment within 45 days thereafter, after which DOE will make a final decision in the matter.

C. DOE will provide to the Nevada SHPO, the Council, and relevant agencies copies of all written objections, findings, and recommendations or comments of the Council, determinations from the Keeper, and determinations of final action of its own.

### 10. COUNCIL MEMBERS

If DOE is unable to carry out the terms of the Programmatic Agreement, in accordance with 36 CFR 800.13(g), DOE will not take or sanction any action or make any irreversible commitment that would result in an adverse effect on National Register or eligible properties within the scope of this Programmatic Agreement or would foreclose the Council's consideration of avoidance or mitigation alternatives until it has obtained the Council's comments, pursuant to the Council's regulations, for each individual action carried out as part of the undertaking.

## 11. MODIFICATION

Any modification of this Programmatic Agreement, to become effective, will require consultation and agreement in the same manner as the original Programmatic Agreement was developed and signed, pursuant to 36 CFR 800.13.

## 12. EFFECTIVE DATE AND TERM

This Programmatic Agreement will become effective upon the latest date of execution by DOE and the Council signatories, and will remain in effect until terminated by DOE or the Council, by 30 days prior written notice to the other party.

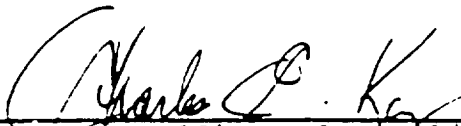
## 13. ONGOING WORK

DOE already has initiated implementation of various stipulations in this Programmatic Agreement, and will not be required to begin them anew, but will continue ongoing activities in satisfaction of the terms of this Programmatic Agreement, including seeking determinations of eligibility to the National Register and appropriately treating potentially eligible properties previously identified.

## 14. DEVELOPMENT OF THE REPOSITORY

DOE will again seek the comments of the Council and the appropriate State Historic Preservation Officer pursuant to Section 106 and the Council's regulations prior to the development of the repository site.

Execution of this Programmatic Agreement evidences that DOE has afforded the Council a reasonable opportunity to comment on the subject undertaking and its effect on historic properties and that DOE has taken and will continue to take into account the effects of its undertakings on historic properties.



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Director, Office of Civilian Radioactive  
Waste Management, Department of Energy

11/1/88  
Date



\_\_\_\_\_  
Chairman, Advisory Council on Historic  
Preservation

12/15/88  
Date



\_\_\_\_\_  
Project Manager, Yucca Mountain Project  
Office

10/6/88  
Date



## APPENDICES

1. Council's Regulations "Protection of Historic Properties" (36 CFR 800).
2. NWSI archeological surveys, references, reports.
3. Council's Handbook "Treatment of Archeological Properties".
4. Department of the Interiors' Standards and Guidelines "Archeology and Historic Preservation".
5. "Standards of Research Performance of the Society of Professional Archeologists".
6. List of sites potentially eligible to the National Register of Historic Places.
7. January 4, 1979 Memorandum of Understanding between the Nevada SHPO and the Nevada State Indian Commission.
8. National Register of Historic Places (36 CFR Part 60).
9. Advisory Council on Historic Preservation's draft "Guidelines for Consideration of Traditional Cultural Values in Historic Preservation Review". (March 1985)
10. Certification Requirements of the Society of Professional Archeologists.
11. Secretary of the Interior's "Professional Qualifications Standards".

APPENDIX 1

Council's Regulations  
"Protection of Historic Properties" (36 CFR 800)

undertakings that affect historic properties. These final regulations supersede the Council's existing section 106 regulations.

**EFFECTIVE DATE:** October 1, 1986.

**FOR FURTHER INFORMATION CONTACT:** John M. Fowler, Acting Executive Director, Advisory Council on Historic Preservation, Room 809, 1100 Pennsylvania Ave., NW., Washington, DC 20004 (202) 786-0503.

**SUPPLEMENTARY INFORMATION:** The Council published proposed revisions to its existing regulations on pages 41828-41833 of the *Federal Register* of October 15, 1985, and invited comments for 60 days, followed by a 30-day extension period ending January 15, 1986. The purpose of the proposed changes is to reduce regulatory burdens and paperwork, increase flexibility of compliance with section 106, and generally streamline the administrative process. An appropriate degree of Council involvement is maintained in the process, while encouraging State- and local-level decisionmaking and providing a reasonable opportunity for public participation. The Council received 240 comments from Federal agencies, State and local governments, preservation organizations, businesses, Indian representatives, and individuals. The full Council met to consider and discuss all the comments. The Council organized the comments into nine major areas. These areas of concern and the Council's response to them follow.

The Council has determined that these amendments are not "major rules" within the meaning of Executive Order 12291. Because the revised regulations expedite the current commenting process under section 106 of the National Historic Preservation Act, they will not cause increases in costs for local government agencies and will not have significant adverse effects on competition, employment, or investment. These amendments were submitted to the Office of Management and Budget 10 days prior to publication.

Pursuant to 36 CFR Part 805, "National Environmental Policy Act Implementation Procedures," the Council has determined that an Environmental Impact Statement is not required.

The Council has determined there are no information collection reporting or recordkeeping requirements in these revised regulations that require Office of Management and Budget approval under the Paperwork Reduction Act of 1980 (Pub. L. 96-511).

It should be noted that special regulations governing section 106 requirements for Urban Development

Action Grant Projects, currently set forth in 36 CFR Part 800, will be amended in the future.

#### *Major Comments*

1. *Comment:* The proposed regulatory revisions, particularly in sections 800.5 and 800.6, reduce the effectiveness of the Council's role in the consultation and commenting processes.

To streamline the process and eliminate potential for delay of a project by the Council, the proposed regulations made several revisions to the Council's current role. First, the Council was given an optional role in the consultation process, the objective being to encourage the resolution at the Agency Official-State Historic Preservation Officer (SHPO) level and to conserve Council resources. Second, agencies could terminate the consultation process at any time after initiating discussions with the SHPO on ways to reduce or avoid effects on historic properties. This was intended to avoid agencies being delayed by the consultation process and forced to reach agreement. Finally, time limits were imposed on the Council when it reviewed Memoranda of Agreement and provided comments.

Many commenters viewed these provisions as weakening the Council's role in the process and lessening the level of protection afforded to historic properties. While many commenters applauded the increased reliance on agency-SHPO negotiation and agreement, there was a recurring concern that the Council had removed itself too far from the consultation. Concern over the termination of consultation provision was particularly widespread. The proposed language was viewed as discouraging agencies from resolving preservation/development conflicts through consultation. Finally, while a number of commenters, notably Federal program agencies and their State counterparts, supported the notion of time limits on Council action, many commenters, including some of those agencies, felt the time limits were too short and inflexible.

In response, changes were made in the final regulations. While the emphasis on agency-SHPO consultation has been maintained, minor revisions have been made in the Council's relation to the consultation process, allowing for greater involvement when necessary (§ 800.5(e)). Agencies are also required to notify the Council when consultation is initiated (§ 800.5(e)). Language regarding termination of consultation has been revised to extend the authority to terminate to the SHPO and the Council and has been recast to

## ADVISORY COUNCIL ON HISTORIC PRESERVATION

36 CFR Part 800

Protection of Historic Properties

AGENCY: Advisory Council on Historic Preservation.

ACTION: Final rule.

**SUMMARY:** On October 15, 1985, the Council published proposed revisions to its regulations implementing section 106 of the National Historic Preservation Act. This final rulemaking establishes the Council's revised regulations governing the process of review and comment upon federally supported

encourage, rather than discourage, agencies from using the consultation process (§ 800.5(e)(6)). The Council retained the fixed time limits on its actions as one of the fundamental objectives of regulatory reform (§ 800.6), but modified the 60-day limit on the Council set forth in § 800.6(b) to apply only when requested by an agency.

2. *Comment:* Revisions to the criteria of effect and associated procedural changes would make the section 106 process more complicated and less effective.

One of the initial objectives of the Council's regulatory reform was to eliminate the negative tone in the existing regulations, an example of which was the term "adverse effect." Some agencies objected to characterizing their actions, which they obviously felt were beneficial, as having "adverse effects." For example, rehabilitation projects, the effects of which were clearly beneficial to historic properties, typically had some impact on historic fabric and, therefore, were technically "adverse."

While many commenters supported those objectives, a far greater number expressed dissatisfaction with how the regulations were changed to achieve them. A widespread comment was objection to Council review of the new "no effect" determination. When the definition of "effect" was changed to eliminate the need for a separate determination of "adverse effect," a situation was created in which a substantial number of marginal cases that now are treated as "no adverse effect" and are submitted to the Council for review could fall into the "no effect" category. To monitor such cases to avoid misuse, a provision was established for notification of the Council in "no effect" cases. However, this requirement extended to a large number of cases that are not seen by the Council under the current "no effect" determination. Commenters noted that this would introduce a new review step, which most felt was unnecessary. In fact, this was one of the most commented upon revisions, and comments were overwhelmingly negative.

Another large group of commenters, primarily user agencies and SHPO's, expressed concern over elimination of the "no adverse effect" determination, a procedural device used for quick processing of simple cases with a minimum of paperwork. Commenters did not want this to be replaced by the more involved Memorandum of Agreement process.

In response, the Council has reinstated the distinction between

"effect" and "adverse effect." Changes to the criteria (§ 800.9) and the process (§ 800.5(b)-(d)) have been made to achieve this, similar to the existing criteria and process. Council review of no effect determinations has been eliminated. Several innovations have been made to streamline the no adverse effect determination procedure and to meet the original objectives of reform. First, review of no adverse effect determinations, at agency discretion, is assigned to either the SHPO or the Council (§ 800.5(d)), rather than requiring all such findings to be submitted to the Council for 30-day review. Second, the criteria themselves have been revised for clarity (§ 800.9). Finally, a category of exceptions, covering such things as rehabilitation, has been created (§ 800.9(c)) so that certain kinds of projects need not be labeled and processed as adverse effect cases. Provision has also been made for a more flexible approach to no adverse effect determinations, allowing the Council and the agency to negotiate what would otherwise be an adverse effect situation into one that qualifies for expedited no adverse effect review (§ 800.5(d)(2)).

3. *Comment:* Proposed regulatory language and procedures that introduce new terminology and concepts would complicate compliance and require retraining, often without any clear increase in efficiency.

The proposed regulations contained many introductions of new language and processes to eliminate some of the negative elements of the current regulations, to use simpler language for increased clarity, and to introduce more flexibility in agency application of the regulations.

A large number of commenters, especially those Federal agencies and SHPO's who work regularly with the regulations, expressed reservations about new terminology or new procedures without any demonstrable improvement in clarity or efficiency. They noted that the terminology and basic structure of the current section 106 process have been in place since 1974. Both Federal and State agencies noted the substantial investment in the development of internal procedures for compliance with section 106 and in the education of staff. Likewise, the interaction among the Council, SHPO's and agency officials on a daily basis has led to a widespread understanding of current terminology and attendant procedural steps. Recalling the amount of time and effort required to reach this level of understanding, a sizable number of commenters felt that introduction of new terms and procedures would cause

a disruption in smooth operations, resulting in increased costs and delays.

The changes that cause this concern included the elimination of the distinction between "effect" and "adverse effect," which in turn abolished the current procedure for no adverse effect and conditional no adverse effect determinations; changes in the Council's participation in the consultation process; elimination of certain definitions such as "area of potential environmental impact"; changes in the existing Memorandum of Agreement process; and numerous minor changes in language, terminology, and section renumbering. Commenters felt that the proposed regulations created the perception of new regulatory processes that would require widespread retraining.

The Council was sensitive to these comments as it redrafted the regulations. In response, the concept of "effect"/"adverse effect" and associated procedures were reinstated in a streamlined manner (§ 800.5(d)). In modified form, the "conditional no adverse effect" device was revised (§ 800.5(d)(2)) and "area of potential effects" added to definitions (§ 800.2(c)). In other places, editing has taken place, with the objective of introducing new words, phrases, and processes only where necessary to meet specific requirements of regulatory reform. The Council believes the result is to integrate innovative concepts and procedures into a document that maintains familiar reference points for users.

4. *Comment:* The regulations lack sufficient guidance and clear standards for the identification and evaluation of historic properties.

The proposed regulations moved to a more general statement of agency responsibilities for identifying and evaluating historic properties. The emphasis was more on process (e.g., who to contact, etc.) rather than specific technique. Reliance for detailed guidance in these areas was placed on the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, which are quite specific but nonbinding. Commenters from both the preservation community and user agencies requested more specificity and guidance on this aspect of the process.

In response, §§ 800.4(a) and 800.4(b) have been redrafted to more clearly state the Council's expectations for agency identification efforts. However, the Council continues to believe detailed guidance in these areas should be set forth in nonregulatory material. Accordingly, the Council intends to

work with Interior to provide nonbinding guidance to assist agencies in meeting their identification responsibilities under section 106.

**5. Comment:** The language of the proposed regulations is ambiguous and unclear in many places, lacking specificity and guidance for the user.

The Council's regulations are general-purpose regulations, intended to apply to all kinds of undertakings, all kinds of effects, and all kinds of historic properties. The proposed revised regulations used general language to permit flexibility in the application of the regulations.

Many commenters, viewing the proposed process from the perspective of their undertakings and the kinds of effects and properties with which they are familiar, objected to the changes of language, commenting that the proposed regulations were too general, or ambiguous and unclear. Thus, land-management agencies raised concerns about procedural steps and consultation with the public; urban citizen organizations sought more procedural safeguards and public participation; oil and gas companies wanted "avoidance" discussed, a matter relevant to them, but meaningless in an urban development context; and applicants for Federal assistance and permits requested a specific role in the process.

In response, the Council undertook to introduce more precision to the regulations while retaining the general principles of regulatory flexibility and economy of language. Throughout the final regulations, the Council has refined language to meet specific concerns raised by commenters. In particular, § 800.1(c) has been extensively rewritten to better spell out the roles of participants in the section 106 process, including the public.

**6. Comment:** Regulatory flexibility is desirable, but the language proposed in § 800.3 was vague.

The Council has endorsed the principle of flexible application of the Section 106 regulations as fundamental to regulatory reform. It specifically asked commenters whether the policy formulation in the proposed regulations at § 800.3 accomplished the Council's purposes. Many commenters applauded the notion of regulatory flexibility but, felt that the language as proposed was vague. Others expressed concern that the notion of "substantial fulfillment" would encourage agencies to disregard the regulations. Commenters were nearly all in agreement that the section needed to be redrafted.

In response, the Council revised the language to retain but clarify the concept of regulatory flexibility. The

term "substantial fulfillment" was deleted. As noted in the preamble to the proposed regulations, the Council continues to be concerned that its regulations primarily be of assistance to Federal agencies in complying with section 106 and not be the source of unwarranted litigation regarding insubstantial procedural details.

**7. Comment:** The regulations should deal more clearly with coordination with other statutes that establish preservation review responsibilities.

The existing section 106 regulations set forth a process for coordinating Section 106 reviews with environmental reviews under the National Environmental Policy Act. The provision was deleted in the proposed rules in the interests of shortening the regulations. A number of commenters asked for more definite coordination of the requirements of the regulations with those of statutory authorities other than section 106. The National Environmental Policy Act was mentioned most often, but the Archeological Resources Protection Act, section 4(f) of the Department of Transportation Act, and the Archeological and Historic Preservation Act of 1974 were also referred to.

In response, the Council agreed with this idea and added a section to carry out the suggestion (§ 800.14). It deals with each of the enumerated statutory requirements, but in a general and nonmandatory manner.

**8. Comment:** The regulations are either too specific or too general concerning public participation.

The proposed regulations eliminated the existing section dealing with public participation, opting instead to add specific requirements for public notification and opportunity for input. This was intended to strengthen the public role in the process and at the same time encourage the use of established agency public involvement processes.

Comments on public participation ran in several directions: objection to excessive public involvement requirements; proposals for more mandatory involvement; proposals for better integration with existing processes; and proposals to relate public participation requirements to project type and level of public interest or controversy.

In response, the Council reconsidered its treatment of public participation. The general section on public participation (§ 800.1(c)(iv)) was revised to urge use of existing public involvement processes, such as those used to meet NEPA obligations, and to encourage greater opportunities for public input.

Certain additional revisions were made in the body of the regulations to promote public involvement in a flexible, nonmandatory manner. In particular, § 800.6(e) was added, allowing the public to bring questions about individual section 106 cases to the Council.

**9. Comment:** Participation by American Indians and other Native Americans needs to be strengthened.

In revising the regulations, the Council was sensitive to creating a more prominent role for affected Native Americans and inserted specific references to promote notification and consultation. A large number of commenters raised questions and offered comments about how the regulations afforded Indian tribes and other Native Americans the opportunity to participate in section 106 review. The comments generally broke down into concerns about sovereignty and about who is the appropriate representative of Native Americans.

A number of commenters raised the question of the sovereignty of Indian tribes, most pointing out that Indian tribes are sovereign entities and arguing, at least, that SHPO's should not be expected to represent Indian concerns. A few argued that section 106 should not apply to actions undertaken by Indians on Indian land.

How "Indian tribe" should be defined was also a major issue, as it determined participation in the process. One commenter felt that only officially recognized tribal governments should be dealt with. Others did not propose limiting section 106 consultation to "government-to-government" interaction, but did want to deal only with officially recognized tribes. Still others argued for a broad definition that would allow both formally recognized and currently unrecognized tribes to participate. Commenters also urged that more attention should be given to participation by traditional cultural authorities in the tribes. A few commenters suggested that the same opportunities to participate in review of impacts on their traditional properties should be afforded to other Native American groups, such as Native Hawaiians, as is afforded to Indians.

In response, the Council revised the provisions related to this area (§ 800.1(c)(2)). Formal government-to-government consultation remains with recognized tribes as defined in the National Historic Preservation Act, but traditional cultural leaders and others are provided the opportunity to participate as interested persons. Tribes with established historic preservation

programs are given the opportunity to assume the role of the SHPO (§ 800.1(c)(2)(iii)).

Title 36, Chapter VIII, is amended by revising Part 800 to read as follows:

**PART 800—PROTECTION OF HISTORIC AND CULTURAL PROPERTIES**

**Subpart A—Background and Policy**

**Sec.**

- 800.1 Authorities, purposes, and participants.
- 800.2 Definitions.

**Subpart B—The Section 106 Process**

- 800.3 General.
- 800.4 Identifying historic properties.
- 800.5 Assessing effects.
- 800.6 Affording the Council an opportunity to comment.
- 800.7 Agreements with States for section 106 reviews.
- 800.8 Documentation requirements.
- 800.9 Criteria of effect and adverse effect.

**Subpart C—Special Provisions**

- 800.10 Protecting National Historic Landmarks.
- 800.11 Properties discovered during implementation of an undertaking.
- 800.12 Emergency undertakings.
- 800.13 Programmatic Agreements.
- 800.14 Coordination with other authorities.
- 800.15 Counterpart regulations.

Authority: Pub. L. 89-663, 80 Stat. 915 (16 U.S.C. 470), as amended, 84 Stat. 204 (1970), 87 Stat. 139 (1973), 90 Stat. 1320 (1976), 92 Stat. 3487 (1978); E.O. 11593, 3 CFR 1971 Comp., p. 154.

**Subpart A—Background and Policy**

**§ 800.1 Authorities, purposes, and participants.**

(a) *Authorities.* Section 106 of the National Historic Preservation Act requires a Federal agency head with jurisdiction over a Federal, federally assisted, or federally licensed undertaking to take into account the effects of the agency's undertaking on properties included in or eligible for the National Register of Historic Places and, prior to approval of an undertaking, to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. Section 110(f) of the Act requires that Federal agency heads, to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to any National Historic Landmark that may be directly and adversely affected by an undertaking and, prior to approval of such undertaking, afford the Council a reasonable opportunity to comment. These regulations define the process used by a Federal agency to meet these

responsibilities, commonly called the section 106 process.

(b) *Purposes of the section 106 process.* The Council seeks through the section 106 process to accommodate historic preservation concerns with the needs of Federal undertakings. It is designed to identify potential conflicts between the two and to help resolve such conflicts in the public interest. The Council encourages this accommodation through consultation among the Agency Official, the State Historic Preservation Officer, and other interested persons during the early stages of planning. The Council regards the consultation process as an effective means for reconciling the interests of the consulting parties. Integration of the section 106 process into the normal administrative process used by agencies for project planning ensures early, systematic consideration of historic preservation issues. To this end, the Council encourages agencies to examine their administrative processes to see that they provide adequately for the efficient identification and consideration of historic properties, that they provide for participation by the State Historic Preservation Officer and others interested in historic preservation, that they provide for timely requests for Council comment, and that they promote cost-effective implementation of the section 106 process. When impediments are found to exist in the agency's administrative process, the agency is encouraged to consult with the Council to develop special section 106 procedures suited to the agency's needs.

(c) *Participants in the section 106 process.*—(1) *Consulting parties.*

Consulting parties are the primary participants in the section 106 process whose responsibilities are defined by these regulations. Consulting parties may include:

(i) *Agency Official.* The Agency Official with jurisdiction over an undertaking has legal responsibility for complying with section 106. It is the responsibility of the Agency Official to identify and evaluate affected historic properties, assess an undertaking's effect upon them, and afford the Council its comment opportunity. The Agency Official may use the services of grantees, applicants, consultants, or designees to prepare the necessary information and analyses, but remains responsible for section 106 compliance. The Agency Official should involve applicants for Federal assistance or approval in the section 106 process as appropriate in the manner set forth below.

(ii) *State Historic Preservation Officer.* The State Historic Preservation

Officer coordinates State participation in the implementation of the National Historic Preservation Act and is a key participant in the section 106 process. The role of the State Historic Preservation Officer is to consult with and assist the Agency Official when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce those effects. The State Historic Preservation Officer reflects the interests of the State and its citizens in the preservation of their cultural heritage and helps the Agency Official identify those persons interested in an undertaking and its effects upon historic properties. When the State Historic Preservation Officer declines to participate or does not respond within 30 days to a written request for participation, the Agency Official shall consult with the Council, without the State Historic Preservation Officer, to complete the section 106 process. The State Historic Preservation Officer may assume primary responsibility for reviewing Federal undertakings in the State by agreement with the Council as prescribed in § 800.7 of these regulations.

(iii) *Council.* The Council is responsible for commenting to the Agency Official on an undertaking that affects historic properties. The official authorized to carry out the Council's responsibilities under each provision of the regulations is set forth in a separate, internal delegation of authority.

(2) *Interested persons.* Interested persons are those organizations and individuals that are concerned with the effects of an undertaking on historic properties. Certain provisions in these regulations require that particular interested persons be invited to become consulting parties under certain circumstances. In addition, whenever the Agency Official, the State Historic Preservation Officer, and the Council, if participating, agree that active participation of an interested person will advance the objectives of section 106, they may invite that person to become a consulting party. Interested persons may include:

(i) *Local governments.* Local governments are encouraged to take an active role in the section 106 process when undertakings affect historic properties within their jurisdiction. When a local government has legal responsibility for section 106 compliance under programs such as the Community Development Block Grant Program, participation as a consulting party is required. When no such legal responsibility exists, the extent of local government participation is at the

discretion of local government officials. If the State Historic Preservation Officer, the appropriate local government, and the Council agree, a local government whose historic preservation program has been certified pursuant to section 101(c)(1) of the Act may assume any of the duties that are given to the State Historic Preservation Officer by these regulations or that originate from agreements concluded under these regulations.

(ii) *Applicants for Federal assistance, permits, and licenses.* When the undertaking subject to review under section 106 is proposed by an applicant for Federal assistance or for a Federal permit or license, the applicant may choose to participate in the section 106 process in the manner prescribed in these regulations.

(iii) *Indian tribes.* The Agency Official, the State Historic Preservation Officer, and the Council should be sensitive to the special concerns of Indian tribes in historic preservation issues, which often extend beyond Indian lands to other historic properties. When an undertaking will affect Indian lands, the Agency Official shall invite the governing body of the responsible tribe to be a consulting party and to concur in any agreement. When an Indian tribe has established formal procedures relating to historic preservation, the Agency Official, State Historic Preservation Officer, and Council shall, to the extent feasible, carry out responsibilities under these regulations consistent with such procedures. An Indian tribe may participate in activities under these regulations in lieu of the State Historic Preservation Officer with respect to undertakings affecting its lands, provided the Indian tribe so requests, the State Historic Preservation Officer concurs, and the Council finds that the Indian tribe's procedures meet the purposes of these regulations. When an undertaking may affect properties of historic value to an Indian tribe on non-Indian lands, the consulting parties shall afford such tribe the opportunity to participate as interested persons. Traditional cultural leaders and other Native Americans are considered to be interested persons with respect to undertakings that may affect historic properties of significance to such persons.

(iv) *The public.* The Council values the views of the public on historic preservation questions and encourages maximum public participation in the section 106 process. The Agency Official, in the manner described below, and the State Historic Preservation

Officer should seek and consider the views of the public when taking steps to identify historic properties, evaluate effects, and develop alternatives. Public participation in the section 106 process may be fully coordinated with, and satisfied by, public participation programs carried out by Agency Officials under the authority of the National Environmental Policy Act and other pertinent statutes. Notice to the public under these statutes should adequately inform the public of preservation issues in order to elicit public views on such issues that can then be considered and resolved, when possible, in decisionmaking. Members of the public with interests in an undertaking and its effects on historic properties should be given reasonable opportunity to have an active role in the section 106 process.

#### § 800.2 Definitions.

(a) "Act" means the National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470-470w-8.

(b) "Agency Official" means the Federal agency head or a designee with authority over a specific undertaking, including any State or local government official who has been delegated legal responsibility for compliance with section 106 and section 110(f) in accordance with law.

(c) "Area of potential effects" means the geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist.

(d) "Council" means the Advisory Council on Historic Preservation or a Council member or employee designated to act for the Council.

(e) "Historic property" means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. This term includes, for the purposes of these regulations, artifacts, records, and remains that are related to and located within such properties. The term "eligible for inclusion in the National Register" includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria.

(f) "Indian lands" means all lands under the jurisdiction or control of an Indian tribe.

(g) "Indian tribe" means the governing body of any Indian tribe, band, nation, or other group that is recognized as an Indian tribe by the Secretary of the Interior and for which the United States holds land in trust or restricted status for that entity or its members. Such term

also includes any Native village corporation, regional corporation, and Native Group established pursuant to the Alaska Native Claims Settlement Act, 43 U.S.C. 1701, *et seq.*

(h) "Interested person" means those organizations and individuals that are concerned with the effects of an undertaking on historic properties.

(i) "Local government" means a city, county, parish, township, municipality, borough, or other general purpose political subdivision of a State.

(j) "National Historic Landmark" means a historic property that the Secretary of the Interior has designated a National Historic Landmark.

(k) "National Register" means the National Register of Historic Places maintained by the Secretary of the Interior.

(l) "National Register Criteria" means the criteria established by the Secretary of the Interior for use in evaluating the eligibility of properties for the National Register (36 CFR Part 60).

(m) "Secretary" means the Secretary of the Interior.

(n) "State Historic Preservation Officer" means the official appointed or designated pursuant to section 101(b)(1) of the Act to administer the State historic preservation program or a representative designated to act for the State Historic Preservation Officer.

(o) "Undertaking" means any project, activity, or program that can result in changes in the character or use of historic properties, if any such historic properties are located in the area of potential effects. The project, activity, or program must be under the direct or indirect jurisdiction of a Federal agency or licensed or assisted by a Federal agency. Undertakings include new and continuing projects, activities, or programs and any of their elements not previously considered under section 106.

#### Subpart B—The Section 106 Process

##### § 800.3 General.

(a) *Scope.* The procedure in this subpart guides Agency Officials, State Historic Preservation Officers, and the Council in the conduct of the section 106 process. Alternative methods of meeting section 106 obligations are found in § 800.7, governing review of undertakings in States that have entered into agreements with the Council for section 106 purposes, and § 800.13, governing Programmatic Agreements with Federal agencies that pertain to specific programs or activities. Under each of these methods, the Council encourages Federal agencies to reach agreement on developing alternatives or

measures to avoid or reduce effects on historic properties that meet both the needs of the undertaking and preservation concerns.

(b) *Flexible application.* The Council recognizes that the procedures for the Agency Official set forth in these regulations may be implemented by the Agency Official in a flexible manner reflecting differing program requirements, as long as the purposes of section 106 of the Act and these regulations are met.

(c) *Timing.* Section 106 requires the Agency Official to complete the section 106 process prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license or permit. The Council does not interpret this language to bar an Agency Official from expending funds on or authorizing nondestructive planning activities preparatory to an undertaking before complying with section 106, or to prohibit phased compliance at different stages in planning. The Agency Official should ensure that the section 106 process is initiated early in the planning stages of the undertaking, when the widest feasible range of alternatives is open for consideration. The Agency Official should establish a schedule for completing the section 106 process that is consistent with the planning and approval schedule for the undertaking.

#### § 800.4 Identifying historic properties.

(a) *Assessing information needs.* (1) Following a determination by the Agency Official that a proposed project, activity, or program constitutes an undertaking and after establishing the undertaking's area of potential effects, the Agency Official shall:

(i) Review existing information on historic properties potentially affected by the undertaking, including any data concerning the likelihood that unidentified historic properties exist in the area of potential effects;

(ii) Request the views of the State Historic Preservation Officer on further actions to identify historic properties that may be affected; and

(iii) Seek information in accordance with agency planning processes from local governments, Indian tribes, public and private organizations, and other parties likely to have knowledge of or concerns with historic properties in the area.

(2) Based on this assessment, the Agency Official should determine any need for further actions, such as field surveys and predictive modeling, to identify historic properties.

(b) *Locating historic properties.* In consultation with the State Historic

Preservation Officer, the Agency Official shall make a reasonable and good faith effort to identify historic properties that may be affected by the undertaking and gather sufficient information to evaluate the eligibility of these properties for the National Register. Efforts to identify historic properties should follow the Secretary's "Standards and Guidelines for Archeology and Historic Preservation" (48 FR 44716) and agency programs to meet the requirements of section 110(a)(2) of the Act.

(c) *Evaluating historical significance.* (1) In consultation with the State Historic Preservation Officer and following the Secretary's Standards and Guidelines for Evaluation, the Agency Official shall apply the National Register Criteria to properties that may be affected by the undertaking and that have not been previously evaluated for National Register eligibility. The passage of time or changing perceptions of significance may justify reevaluation of properties that were previously determined to be eligible or ineligible.

(2) If the Agency Official and the State Historic Preservation Officer agree that a property is eligible under the criteria, the property shall be considered eligible for the National Register for section 106 purposes.

(3) If the Agency Official and the State Historic Preservation Officer agree that the criteria are not met, the property shall be considered not eligible for the National Register for section 106 purposes.

(4) If the Agency Official and the State Historic Preservation Officer do not agree, or if the Council or the Secretary so request, the Agency Official shall obtain a determination from the Secretary of the Interior pursuant to the applicable National Park Service regulations.

(5) If the State Historic Preservation Officer does not provide views, then the State Historic Preservation Officer is presumed to agree with the Agency Official's determination for the purpose of this subsection.

(d) *When no historic properties are found.* If the Agency Official determines in accordance with §§ 800.4(a)-(c) that there are no historic properties that may be affected by the undertaking, the Agency Official shall provide documentation of this finding to the State Historic Preservation Officer. The Agency Official should notify interested persons and parties known to be interested in the undertaking and its possible effects on historic properties and make the documentation available to the public. In these circumstances, the

Agency Official is not required to take further steps in the section 106 process.

(e) *When historic properties are found.* If there are historic properties that the undertaking may affect, the Agency official shall assess the effects in accordance with Section 800.5.

#### § 800.5 Assessing effects.

(a) *Applying the Criterion of Effect.* In consultation with the State Historic Preservation Officer, the Agency Official shall apply the Criteria of Effect (§ 800.9(a)) to historic properties that may be affected, giving consideration to the views, if any, of interested persons.

(b) *When no effect is found.* If the Agency Official finds the undertaking will have no effect on historic properties, the Agency Official shall notify the State Historic Preservation Officer and interested persons who have made their concerns known to the Agency Official and document the findings, which shall be available for public inspection. Unless the State Historic Preservation Officer objects within 15 days of receiving such notice, the Agency Official is not required to take any further steps in the section 106 process. If the State Historic Preservation Officer files a timely objection, then the procedures described in § 800.5(c) are followed.

(c) *When an effect is found.* If an effect on historic properties is found, the Agency Official, in consultation with the State Historic Preservation Officer, shall apply the Criteria of Adverse Effect (§ 800.9(b)) to determine whether the effect of the undertaking should be considered adverse.

(d) *When the effect is not considered adverse.* (1) If the Agency Official finds the effect is not adverse, the Agency Official shall:

(i) Obtain the State Historic Preservation Officer's concurrence with the finding and notify and submit to the Council summary documentation, which shall be available for public inspection; or

(ii) Submit the finding with necessary documentation (§ 800.8(a)) to the Council for a 30-day review period and notify the State Historic Preservation Officer.

(2) If the Council does not object to the finding of the Agency Official within 30 days of receipt of notice, or if the Council objects but proposes changes that the Agency Official accepts, the Agency Official is not required to take any further steps in the section 106 process other than to comply with any agreement with the State Historic Preservation Officer or Council concerning the undertaking. If the



Council objects and the Agency Official does not agree with changes proposed by the Council, then the effect shall be considered as adverse.

(e) *When the effect is adverse.* If an adverse effect on historic properties is found, the Agency Official shall notify the Council and shall consult with the State Historic Preservation Officer to seek ways to avoid or reduce the effects on historic properties. Either the Agency Official or the State Historic Preservation Officer may request the Council to participate. The Council may participate in the consultation without such a request.

(1) *Involving interested persons.*

Interested persons shall be invited to participate as consulting parties as follows when they so request:

(i) The head of a local government when the undertaking may affect historic properties within the local government's jurisdiction;

(ii) The representative of an Indian tribe in accordance with § 800.1(c)(2)(iii);

(iii) Applicants for or holders of grants, permits, or licenses, and owners of affected lands; and

(iv) Other interested persons when jointly determined appropriate by the Agency Official, the State Historic Preservation Officer, and the Council if participating.

(2) *Documentation.* The Agency Official shall provide each of the consulting parties with the documentation set forth in § 800.8(b) and such other documentation as may be developed in the course of consultation.

(3) *Informing the public.* The Agency Official shall provide an adequate opportunity for members of the public to receive information and express their views. The Agency Official is encouraged to use existing agency public involvement procedures to provide this opportunity. The Agency Official, State Historic Preservation Officer, or the Council may meet with interested members of the public or conduct a public information meeting for this purpose.

(4) *Agreement.* If the Agency Official and the State Historic Preservation Officer agree upon how the effects will be taken into account, they shall execute a Memorandum of Agreement. When the Council participates in the consultation, it shall execute the Memorandum of Agreement along with the Agency Official and the State Historic Preservation Officer. When the Council has not participated in consultation, the Memorandum of Agreement shall be submitted to the Council for comment in accordance with § 800.6(a). As appropriate, the Agency Official, the State Historic Preservation

Officer, and the Council, if participating, may agree to invite other consulting parties to concur in the agreement.

(5) *Amendments.* The Agency Official, the State Historic Preservation Officer, and the Council, if it was a signatory to the original agreement, may subsequently agree to an amendment to the Memorandum of Agreement. When the Council is not a party to the Memorandum of Agreement, or the Agency Official and the State Historic Preservation Officer cannot agree on changes to the Memorandum of Agreement, the proposed changes shall be submitted to the Council for comment in accordance with § 800.6.

(6) *Ending consultation.* The Council encourages Agency Officials and State Historic Preservation Officers to utilize the consultation process to the fullest extent practicable. After initiating consultation to seek ways to reduce or avoid effects on historic properties, State Historic Preservation Officer, the Agency Official, or the Council, at its discretion, may state that further consultation will not be productive and thereby terminate the consultation process. The Agency Official shall then request the Council's comments in accordance with § 800.6(b) and notify all other consulting parties of its request.

§ 800.6 *Affording the Council an opportunity to comment.*

(a) *Review of a Memorandum of Agreement.* (1) When an Agency Official submits a Memorandum of Agreement accompanied by the documentation specified in § 800.8(b) and (c), the Council shall have 30 days from receipt to review it. Before this review period ends, the Council shall:

(i) Accept the Memorandum of Agreement, which concludes the section 106 process, and informs all consulting parties; or

(ii) Advise the Agency Official of changes to the Memorandum of Agreement that would make it acceptable; subsequent agreement by the Agency Official, the State Historic Preservation Officer, and the Council concludes the section 106 process; or

(iii) Decide to comment on the undertaking, in which case the Council shall provide its comments within 60 days of receiving the Agency Official's submission, unless the Agency Official agrees otherwise.

(2) If the Agency Official, the State Historic Preservation Officer, and the Council do not reach agreement in accordance with § 800.6(a)(1)(iii), the Agency Official shall notify the Council, which shall provide its comments within 30 days of receipt of notice.

(b) *Comment when there is no agreement.* (1) When no Memorandum of Agreement is submitted, the Agency Official shall request Council comment and provide the documentation specified in § 800.8(d). When requested by the Agency Official, the Council shall provide its comments within 60 days of receipt of the Agency Official's request and the specified documentation.

(2) The Agency Official shall make a good faith effort to provide reasonably available additional information concerning the undertaking and shall assist the Council in arranging an onsite inspection and public meeting when requested by the Council.

(3) The Council shall provide its comments to the head of the agency requesting comment. Copies shall be provided to the State Historic Preservation Officer, interested persons, and others as appropriate.

(c) *Response to Council comment.* (1) When a Memorandum of Agreement becomes final in accordance with § 800.6(a)(1) (i) or (ii), the Agency Official shall carry out the undertaking in accordance with the terms of the agreement. This evidences fulfillment of the agency's section 106 responsibilities. Failure to carry out the terms of a Memorandum of Agreement requires the Agency Official to resubmit the undertaking to the Council for comment in accordance with § 800.6.

(2) When the Council had commented pursuant to § 800.6(a), the Agency Official shall consider the Council's comments in reaching a final decision on the proposed undertaking. The Agency Official shall report the decision to the Council, and if possible, should do so prior to initiating the undertaking.

(d) *Foreclosure of the Council's opportunity to comment.* (1) The Council may advise an Agency Official that it considers the agency has not provided the Council a reasonable opportunity to comment. The decision to so advise the Agency Official will be reached by a majority vote of the Council or by a majority vote of a panel consisting of three or more Council members with the concurrence of the Chairman.

(2) The Agency Official will be given notice and a reasonable opportunity to respond prior to a proposed Council determination that the agency has foreclosed the Council's opportunity to comment.

(e) *Public requests to the Council.* (1) When requested by any person, the Council shall consider an Agency Official's finding under §§ 800.4(b), 800.4(c), 800.4(d), or 800.5(b), and, within 30 days of receipt of the request, advise the Agency Official, the State Historic

Preservation Officer, and the person making the request of its views of the Agency Official's finding.

(2) In light of the Council views, the Agency Official should reconsider the finding. However, an inquiry to the Council will not suspend action on an undertaking.

(3) When the finding concerns the eligibility of a property for the National Register, the Council shall refer the matter to the Secretary.

**§ 800.7 Agreements with States for section 106 reviews.**

(a) *Establishment of State agreements.* (1) Any State Historic Preservation Officer may enter into an agreement with the Council to substitute a State review process for the procedures set forth in these regulations, provided that:

(i) The State historic preservation program has been approved by the Secretary pursuant to section 101(b)(1) of the Act; and

(ii) The Council, after analysis of the State's review process and consideration of the views of Federal and State agencies, local governments, Indian tribes, and the public, determines that the State review process is at least as effective as, and no more burdensome than, the procedures set forth in these regulations in meeting the requirements of section 106.

(2) The Council, in analyzing a State's review process pursuant to § 800.7(a)(1)(ii), shall:

(i) Review relevant State laws, Executive orders, internal directives, standards, and guidelines;

(ii) Review the organization of the State's review process;

(iii) Solicit and consider the comments of Federal and State agencies, local governments, Indian tribes, and the public;

(iv) Review the results of program reviews carried out by the Secretary; and

(v) Review the record of State participation in the section 106 process.

(3) The Council will enter into an agreement with a State under this section only upon determining, at minimum, that the State has a demonstrated record of performance in the section 106 process and the capability to administer a comparable process at the State level.

(4) A State agreement shall be developed through consultation between the State Historic Preservation Officer and the Council and concurred in by the Secretary before submission to the Council for approval. The Council may invite affected Federal and State agencies, local governments, Indian

tribes, and other interested persons to participate in this consultation. The agreement shall:

(i) Specify the historic preservation review process employed in the State, showing that this process is at least as effective as, and no more burdensome than, that set forth in these regulations;

(ii) Establish special provisions for participation of local governments or Indian tribes in the review of undertakings falling within their jurisdiction, when appropriate;

(iii) Establish procedures for public participation in the State review process;

(iv) Provide for Council review of actions taken under its terms, and for appeal of such actions to the Council; and

(v) Be certified by the Secretary as consistent with the Secretary's Standards and Guidelines for Archaeology and Historic Preservation.

(5) Upon concluding a State agreement, the Council shall publish notice of its execution in the *Federal Register* and make copies of the State agreement available to all Federal agencies.

(b) *Review of undertakings when a State agreement is in effect.* (1) When a State agreement under § 800.7(a) is in effect, an Agency Official may elect to comply with the State review process in lieu of compliance with these regulations.

(2) At any time during review of an undertaking under a State agreement, an Agency Official may terminate such review and comply instead with §§ 800.4 through 800.6 of these regulations.

(3) At any time during review of an undertaking under a State agreement, the Council may participate. Participants are encouraged to draw upon the Council's expertise as appropriate.

(c) *Monitoring and termination of State agreements.* (1) The Council shall monitor activities carried out under State agreements, in coordination with the Secretary of the Interior's approval of State programs under section 101(b)(1) of the Act. The Council may request that the Secretary monitor such activities on its behalf.

(2) The Council may terminate a State agreement after consultation with the State Historic Preservation Officer and the Secretary.

(3) A State agreement may be terminated by the State Historic Preservation Officer.

(4) When a State agreement is terminated pursuant to § 800.7(c)(2) and (3), such termination shall have no effect on undertakings for which review under the agreement was complete or in

progress at the time the termination occurred.

**§ 800.8 Documentation requirements.**

(a) *Finding of no adverse effect.* The purpose of this documentation is to provide sufficient information to explain how the Agency Official reached the finding of no adverse effect. The required documentation is as follows:

(1) A description of the undertaking, including photographs, maps, and drawings, as necessary;

(2) A description of historic properties that may be affected by the undertaking;

(3) A description of the efforts used to identify historic properties;

(4) A statement of how and why the criteria of adverse effect were found inapplicable; and

(5) The views of the State Historic Preservation Officer, affected local governments, Indian tribes, Federal agencies, and the public, if any were provided, as well as a description of the means employed to solicit those views.

(b) *Finding of adverse effect.* The required documentation is as follows:

(1) A description of the undertaking, including photographs, maps, and drawings, as necessary;

(2) A description of the efforts to identify historic properties;

(3) A description of the affected historic properties, using materials already compiled during the evaluation of significance, as appropriate; and

(4) A description of the undertaking's effects on historic properties.

(c) *Memorandum of Agreement.* When a memorandum is submitted for review in accordance with § 800.8(a)(1), the documentation, in addition to that specified in § 800.8(b), shall also include a description and evaluation of any proposed mitigation measures or alternatives that were considered to deal with the undertaking's effects and a summary of the views of the State Historic Preservation Officer and any interested persons.

(d) *Requests for comment when there is no agreement.* The purpose of this documentation is to provide the Council with sufficient information to make an independent review of the undertaking's effects on historic properties as the basis for informed and meaningful comments to the Agency Official. The required documentation is as follows:

(1) A description of the undertaking, with photographs, maps, and drawings, as necessary;

(2) A description of the efforts to identify historic properties;

(3) A description of the affected historic properties, with information on

the significant characteristics of each property:

- (4) A description of the effects of the undertaking on historic properties and the basis for the determinations;
- (5) A description and evaluation of any alternatives or mitigation measures that the Agency Official proposes for dealing with the undertaking's effects;
- (6) A description of any alternatives or mitigation measures that were considered but not chosen and the reasons for their rejection;
- (7) Documentation of consultation with the State Historic Preservation Officer regarding the identification and evaluation of historic properties, assessment of effect, and any consideration of alternatives or mitigation measures;
- (8) A description of the Agency Official's efforts to obtain and consider the views of affected local governments, Indian tribes, and other interested persons;
- (9) The planning and approval schedule for the undertaking; and
- (10) Copies or summaries of any written views submitted to the Agency Official concerning the effects of the undertaking on historic properties and alternatives to reduce or avoid those effects.

**§ 800.9 Criteria of effect and adverse effect.**

- (a) An undertaking has an effect on a historic property when the undertaking may alter characteristics of the property that may qualify the property for inclusion in the National Register. For the purpose of determining effect, alteration to features of a property's location, setting, or use may be relevant depending on a property's significant characteristics and should be considered.
- (b) An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:
  - (1) Physical destruction, damage, or alteration of all or part of the property;
  - (2) Isolation of the property from or alteration of the character of the property's setting when that character contributes to the property's qualification for the National Register;
  - (3) Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;
  - (4) Neglect of a property resulting in its deterioration or destruction; and

(5) Transfer, lease, or sale of the property.

(c) Effects of an undertaking that would otherwise be found to be adverse may be considered as being not adverse for the purpose of these regulations:

- (1) When the historic property is of value only for its potential contribution to archeological, historical, or architectural research, and when such value can be substantially preserved through the conduct of appropriate research, and such research is conducted in accordance with applicable professional standards and guidelines;
- (2) When the undertaking is limited to the rehabilitation of buildings and structures and is conducted in a manner that preserves the historical and architectural value of affected historic property through conformance with the Secretary's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings", or
- (3) When the undertaking is limited to the transfer, lease, or sale of a historic property, and adequate restrictions or conditions are included to ensure preservation of the property's significant historic features.

**Subpart C—Special Provisions**

**§ 800.10 Protecting National Historic Landmarks.**

(a) Section 110(f) of the Act requires that the Agency Official, to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to any National Historic Landmark that may be directly and adversely affected by an undertaking. When commenting on such undertakings, the Council shall use the process set forth in §§ 800.4 through 800.6 and give special consideration to protecting National Historic Landmarks as follows:

- (a) Any consultation conducted under § 800.5(e) shall include the Council;
- (b) The Council may request the Secretary under section 213 of the Act to provide a report to the Council detailing the significance of the property, describing the effects of the undertaking on the property, and recommending measures to avoid, minimize, or mitigate adverse effects; and
- (c) The Council shall report its comments, including Memoranda of Agreement, to the President, the Congress, the Secretary, and the head of the agency responsible for the undertaking.

**§ 800.11 Properties discovered during implementation of an undertaking.**

(a) *Planning for discoveries.* When the Agency Official's identification efforts

in accordance with § 800.4 indicate that historic properties are likely to be discovered during implementation of an undertaking, the Agency Official is encouraged to develop a plan for the treatment of such properties if discovered and include this plan in any documentation prepared to comply with § 800.5.

(b) *Federal agency responsibilities.* (1) When an Agency Official has completed the section 106 process and prepared a plan in accordance with § 800.11(a), the Agency Official shall satisfy the requirements of section 106 concerning properties discovered during implementation of an undertaking by following the plan.

(2) When an Agency Official has completed the section 106 process without preparing a plan in accordance with § 800.11(a) and finds after beginning to carry out the undertaking that the undertaking will affect a previously unidentified property that may be eligible for inclusion in the National Register, or affect a known historic property in an unanticipated manner, the Agency Official shall afford the Council an opportunity to comment by choosing one of the following courses of action:

- (i) Comply with § 800.6;
- (ii) Develop and implement actions that take into account the effects of the undertaking on the property to the extent feasible and the comments from the State Historic Preservation Officer and the Council pursuant to § 800.11(c); or
- (iii) If the property is principally of archeological value and subject to the requirements of the Archeological and Historic Preservation Act, 16 U.S.C. 460(a)-(c), comply with that Act and implementing regulations instead of these regulations.

(3) Section 106 and these regulations do not require the Agency Official to stop work on the undertaking. However, depending on the nature of the property and the undertaking's apparent effects on it, the Agency Official should make reasonable efforts to avoid or minimize harm to the property until the requirements of this section are met.

(c) *Council comments.* (1) When comments are requested pursuant to § 800.11(b)(2)(i), the Council will provide its comments in a time consistent with the Agency Official's schedule, regardless of longer time periods allowed by these regulations for Council review.

(2) When an Agency Official elects to comply with § 800.11(b)(2)(ii), the Agency Official shall notify the State Historic Preservation Officer and the

Council at the earliest possible time, describe the actions proposed to take effects into account, and request the Council's comments. The Council shall provide interim comments to the Agency Official within 48 hours of the request and final comments to the Agency Official within 30 days of the request.

(3) When an Agency Official complies with § 800.11(b)(2)(iii), the Agency Official shall provide the State Historic Preservation Officer an opportunity to comment on the work undertaken and provide the Council with a report on the work after it is undertaken.

(d) *Other considerations.*

(1) When a newly discovered property has not previously been included in or determined eligible for the National Register, the Agency Official may assume the property to be eligible for purposes of section 106.

(2) When a discovery occurs and compliance with this section is necessary on lands under the jurisdiction of an Indian tribe, the Agency Official shall consult with the Indian tribe during implementation of this section's requirements.

§ 800.12 *Emergency undertakings.*

(a) When a Federal agency head proposes an emergency action and elects to waive historic preservation responsibilities in accordance with 36 CFR 78.2, the Agency Official may comply with the requirements of 36 CFR Part 78 in lieu of these regulations. An Agency Official should develop plans for taking historic properties into account during emergency operations. At the request of the Agency Official, the Council will assist in the development of such plans.

(b) When an Agency Official proposes an emergency undertaking as an essential and immediate response to a disaster declared by the President or the appropriate Governor, and § 800.12(a) does not apply, the Agency Official may satisfy section 106 by notifying the Council and the appropriate State Historic Preservation Officer of the emergency undertaking and affording them an opportunity to comment within seven days if the Agency Official considers that circumstances permit.

(c) For the purposes of activities assisted under Title I of the Housing and Community Development Act of 1974, as amended, § 800.12(b) also applies to an imminent threat to public health or safety as a result of natural disaster or emergency declared by a local government's chief executive officer or legislative body, provided that if the Council or the State Historic Preservation Officer objects, the Agency

Official shall comply with §§ 800.4 through 800.6.

(d) This section does not apply to undertakings that will not be implemented within 30 days after the disaster or emergency. Such undertakings shall be reviewed in accordance with §§ 800.4 through 800.6.

§ 800.13 *Programmatic Agreements.*

(a) *Application.* An Agency Official may elect to fulfill an agency's section 106 responsibilities for a particular program, a large or complex project, or a class of undertakings that would otherwise require numerous individual requests for comments through a Programmatic Agreement. Programmatic Agreements are appropriate for programs or projects:

(1) When effects on historic properties are similar and repetitive or are multi-State or national in scope;

(2) When effects on historic properties cannot be fully determined prior to approval;

(3) When non-Federal parties are delegated major decisionmaking responsibilities;

(4) That involve development of regional or land-management plans; or

(5) That involve routine management activities at Federal installations.

(b) *Consultation process.* The Council and the Agency Official shall consult to develop a Programmatic Agreement. When a particular State is affected, the appropriate State Historic Preservation Officer shall be a consulting party. When the agreement involves issues national in scope, the President of the National Conference of State Historic Preservation Officers or a designated representative shall be invited to be a consulting party by the Council. The Council and the Agency Official may agree to invite other Federal agencies or others to be consulting parties or to participate, as appropriate.

(c) *Public involvement.* The Council, with the assistance of the Agency Official, shall arrange for public notice and involvement appropriate to the subject matter and the scope of the program. Views from affected units of State and local government, Indian tribes, industries, and organizations will be invited.

(d) *Execution of the Programmatic Agreement.* After consideration of any comments received and reaching final agreement, the Council and the Agency Official shall execute the agreement. Other consulting parties may sign the Programmatic Agreement as appropriate.

(e) *Effect of the Programmatic Agreement.* An approved Programmatic Agreement satisfies the Agency's

section 106 responsibilities for all individual undertakings carried out in accordance with the agreement until it expires or is terminated.

(f) *Notice.* The Council shall publish notice of an approved Programmatic Agreement in the Federal Register and make copies readily available to the public.

(g) *Failure to carry out a Programmatic Agreement.* If the terms of a Programmatic Agreement are not carried out or if such an agreement is terminated, the Agency Official shall comply with §§ 800.4 through 800.6 with regard to individual undertakings covered by the agreement.

§ 800.14 *Coordination with other authorities.*

To the extent feasible, Agency Officials, State Historic Preservation Officers, and the Council should encourage coordination of implementation of these regulations with the steps taken to satisfy other historic preservation and environmental authorities by:

(a) Integrating compliance with these regulations with the processes of environmental review carried out pursuant to the National Environmental Policy Act, and coordinating any studies needed to comply with these regulations with studies of related natural and social aspects;

(b) Designing determinations and agreements to satisfy the terms not only of section 106 and these regulations, but also of the requirements of such other historic preservation authorities as the Archeological and Historic Preservation Act, the Archeological Resources Protection Act, section 110 of the National Historic Preservation Act, and section 4(f) of the Department of Transportation Act, as applicable, so that a single document can be used for the purposes of all such authorities;

(c) Designing and executing studies, surveys, and other information-gathering activities for planning and undertaking so that the resulting information and data is adequate to meet the requirements of all applicable Federal historic preservation authorities; and

(d) Using established agency public involvement processes to elicit the views of the concerned public with regard to an undertaking and its effects on historic properties.

§ 800.15 *Counterpart regulations.*

In consultation with the Council, agencies may develop counterpart regulations to carry out the section 106 process. When concurred in by the Council, such counterpart regulations

shall stand in place of these regulations for the purposes of the agency's compliance with section 106.

Dated: August 27, 1986.

John M. Fowler,

Acting Executive Director.

[FR Doc. 86-19814 Filed 8-29-86; 8:45 am]

BILLING CODE 4310-10-M

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

(A-8-FRL-3071-2)

#### Approval and Promulgation of State Implementation Plans; Colorado Prevention of Significant Deterioration Regulation

**AGENCY:** Environmental Protection Agency.

**ACTION:** Final rulemaking.

**SUMMARY:** Colorado's Prevention of Significant Deterioration (PSD) Regulation was submitted on April 18, 1983, and EPA proposed to approve the regulation with some exceptions on July 12, 1985.

EPA today is approving this PSD revision to the Colorado State Implementation Plan with some exceptions. These exceptions should not affect the ability of Colorado to assume the major portion of the PSD permitting responsibility. Further, if any source otherwise required to obtain a PSD permit under federal interpretation, is not required to obtain a PSD permit from the State because of these exceptions such source will be required to obtain a permit from EPA in accordance with EPA's PSD regulations. EPA does not expect that any such sources will actually request a permit to construct in Colorado, however, EPA's PSD regulations will also remain in effect for sources located on Indian Reservations and for sources that have received earlier PSD permits from EPA. EPA is taking this action, because except as noted, the Colorado PSD regulations meet EPA policy. The effect of this approval will mean that Colorado will be issuing almost all PSD permits within the State after today.

**EFFECTIVE DATE:** September 2, 1986.

**ADDRESSES:** Copies of the revision are available for public inspection between 8:00 a.m. and 4:00 p.m. Monday through Friday at the following offices.

Environmental Protection Agency,  
Region VIII, Air Program Branch, One  
Denver Place, Suite 1300, 999 18th  
Street, Denver, Colorado 80202

Environmental Protection Agency.

Public Information Reference Unit.

Waterside Mall, 401 M Street SW.,

Washington, DC 20460

The Office of the Federal Register, 1100

L Street NW., Room 8301.

Washington, DC.

**FOR FURTHER INFORMATION CONTACT:**

Dale Wells, Air Programs Branch, One  
Denver Place, Suite 1300, 999 18th Street,  
Denver, Colorado 80202. (303) 293-1773.

**SUPPLEMENTARY INFORMATION:** The Colorado PSD Regulation was submitted to meet the requirements of 40 CFR 51.24, as promulgated by EPA on August 7, 1980. EPA proposed to approve the Regulation on July 12, 1985, with certain exceptions. The first exception related to the 15 source categories which the State omitted from the list for which fugitive emissions must be included in calculating potential to emit. The second exception related to the State's exemption of fugitive dust from a number of requirements, including increment consumption.

EPA also proposed to take no action regarding the stack height provisions of the Colorado PSD Regulation because the applicable EPA regulation had not yet been promulgated. EPA's stack height regulation has now been promulgated; and by letter dated December 18, 1985, the State of Colorado has committed to comply with the federal stack height regulation in issuing PSD permits. Presently, Colorado is in the process of revising the stack height provision, and EPA is reserving action on said stack height provision until Colorado adopts and submits its new regulation.

Finally, EPA also proposed disapproval of certain waivers and exemptions in the Colorado PSD regulation, as noted below in the Section on "Final Action".

**Comments:**

EPA Region VIII received two comments on the proposed Colorado PSD regulation during the 30-day comment period. The first comment requested that EPA clarify whether the Agency was taking any action to approve the Category I areas in Colorado's PSD regulation. Category I is a designation authorized by Colorado's Air Pollution Control Act which applies the Class I SO<sub>2</sub> increment to certain pristine areas in Colorado not designated Class I by the Federal PSD regulations. Colorado law does not allow the State Implementation Plan to be more restrictive than the Federal requirements; therefore, the State has requested that the Category I areas be excluded from the SIP. EPA does not

consider this portion of Colorado's regulation to be federally enforceable. There are specific procedures listed in the Code of Federal Regulations for redesignation of Class II areas which must be followed for EPA to recognize the Class I protections for an area. Until those procedures are followed, EPA must regard Category I areas as Federal Class II areas.

The other comment consisted of excerpts of comments submitted to the Colorado Air Quality Control Commission (during the PSD regulation hearings) that pertained to the requirements and exemptions for fugitive dust. Colorado's PSD regulation has exemptions from several fugitive dust requirements; and, EPA's proposed action on Colorado's PSD regulation disapproved all such fugitive dust exemptions. EPA's proposed action further stated that the source would be required to obtain a PSD permit from EPA in accordance with 40 CFR Part 52.21, if Colorado so applied the exemptions to any source in such a way as to avoid required PSD permitting. The comment on fugitive dust emissions therefore was already addressed in the action proposed by EPA.

**Final Action**

In addition to the source categories which were proposed to be disapproved on July 12, 1985, EPA is disapproving the Colorado Regulations for sources which were regulated under section 111 or 112 of the Clean Air Act as of August 7, 1980. Excepted are sources for which fugitive dust emissions will be included in calculating potential to emit. EPA approves Colorado Regulation 3 and the Common Provision Regulations as amended for the PSD program except as follows:

1. The plan is disapproved for the following industrial source categories:

- a. Kraft Pulp Mills:
- Primary Zinc Smelters
- Primary Aluminum Ore Reduction Plants
- Primary Copper Smelters
- Municipal Incinerators (capable of charging more than 250 tons of refuse per day)
- Hydrofluoric, Sulfuric, and Nitric Acid Plants
- Phosphate Rock Processing Plants
- Sulfur Recovery Plants
- Carbon Black Plants (furnace process)
- Primary Lead Smelters
- Secondary Metal Production Plants
- Chemical Process Plants
- Taconite Ore Processing Plants
- Glass Fiber Processing Plants
- Charcoal Production Plants

APPENDIX 2

Nevada Nuclear Waste Storage Investigation  
Archeological Surveys, References, Reports

CULTURAL RESOURCES STUDIES IN AND ADJACENT TO  
THE NNWSI YUCCA MOUNTAIN PROJECT AREA

1. Bergin, Kathleen, R. Roske and R. Brooks (1978) Literature overview concerning cultural resources of the Nellis Bombing and Gunnery Ranges, Nye, Lincoln and Clark Counties, Nevada. Archaeological Research Center, Museum of Natural History, University of Nevada, Las Vegas. 86 pp.
2. Bergin, Kathleen et al (1979) Final report on the 1978 archaeological investigations of the Nellis Air Force Bombing and Gunnery Ranges, Nye, Lincoln, and Clark Counties, Nevada. Archaeological Resource Center, Museum of Natural History, University of Nevada, Las Vegas. 159 pp.
3. Brooks, R.H., et al (1978) An archaeological survey of U.S. Highway 95, from 0.6 M.N. SR16N, to 3.5 M.S. Beatty, Nevada. Archaeological Survey, Southern Division (now Archaeological Research Center), University of Nevada, Las Vegas. 46 pp.
4. Bill, Dennis and Wanda Walsh (1982) Archaeological reconnaissance of a proposed 69KV powerline into the NNWSI Yucca Mountain Project Area. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR072082-1. 21 pp.
5. Clerico, Robert (1981) Archaeological reconnaissance of two proposed drill sites and access road, Yucca Mountain, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR102281-1. 4 pp.
6. Clerico, Robert (1982) Archaeological reconnaissance of proposed access roads on the eastern slopes of Yucca Mountain, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR010782-1. 2 pp.
7. Clerico, Robert, Cari Lockett and Ronald Reno (1982) Archaeological reconnaissance of 12 seismic lines, a 300 x 1600 meter rectangle known as Location B and one drill site. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR021082-1. 8 pp.
8. Crownover, Christopher S. (1981) An archaeological survey of targets and support facilities on the Nellis Air Force Bombing and Gunnery Ranges, Nye, Lincoln and Clark Counties, Nevada. Archaeological Research Center, University of Nevada, Las Vegas. 176 pp.
9. Ellis, Robert R. (1979) Final report on the archaeological survey of electronic warfare sites and related developments, Nellis Air Force Base ranges. Archaeological Research Center, University of Nevada, Las Vegas. 59 pp.

10. Ferraro, David and Mollie Shortridge (1982) An archaeological survey of two proposed drill pads (H-6 and VH-2) and associated access roads, Crater Flat, southern Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR072182-1. 5 pp.
11. Henton, Gregory H. (1984a) A Class III cultural resources reconnaissance of six drill sites on Yucca Mountain, Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR090684-1. 6 pp.
12. Henton, Gregory H. (1984b) A Class III cultural resources reconnaissance of five well sites and a rain gage near Yucca Mountain, Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR101984-1. 10 pp.
13. Johnson, David S. and Cari Lockett (1981) Archaeological reconnaissance of three MX demonstration shelter sites and a proposed road right-of-way between shelter sites S2 and S3, Jackass Flats, Nevada Test Site, southern Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR 052681-1. 6 pp.
14. Pippin, Lonnie C. (1982) Class III cultural resources reconnaissance of U.S.G.S. exploration trenches nos. 16B and 17, Yucca Mountain, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR111882-1. 4 pp.
15. Pippin, Lonnie C. (1983) Cultural resource reconnaissance of fourteen water table exploration hole sites in the NNWSI Yucca Mountain Project Area, Southern Nye County, Nevada. Desert Research Institute Cultural Resource Reconnaissance Short Report Number SR040683-1. 13 pp.
16. Pippin, Lonnie C. (1984) Limited test excavations at selected archeological sites in the NNWSI Yucca Mountain Project Area, Southern Nye County, Nevada. Desert Research Institute Technical Report Number 40. 290 pp.
17. Pippin, Lonnie C. (1985) An overview of cultural resources on Pahute and Rainier mesas on the Nevada Test Site, Nye County, Nevada. Desert Research Institute Technical Report Number 45. 199 pp.
18. Pippin, Lonnie C. and Robert L. Clerico (1981) Archaeological reconnaissance of two localities in Fortymile Canyon in order to assess the impact or potential impact of road construction on National Register quality cultural resources. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR092481-1. 7 pp.
19. Pippin, Lonnie C., Robert L. Clerico and Ronald L. Reno (1982) An archeological reconnaissance of the NNWSI Yucca Mountain Project Area, Southern Nye County, Nevada. Desert Research Institute Technical Report Number 28. 117 pp.



0. Pippin, Lonnie C. and Cari Lockett (1983) Class III cultural resources reconnaissance of a proposed boulder-sized rock source on Busted Butte, Area 25, Nevada Test Site. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR012083-1. 5 pp.
1. Pippin, Lonnie C. and Ronald L. Reno (1982) Class III cultural resources reconnaissance of a proposed gravel pit along Fortymile Wash, Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR120982-1. 14 pp.
2. Pippin, Lonnie C. and Ronald L. Reno (1983) Cultural resources reconnaissance of fourteen U.S. Geological Survey water table exploration drill hole sites in the NNWSI Yucca Mountain Project Area, southern Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR040683-1. 13 pp.
23. Pippin, Lonnie C. and Donald L. Zerga (1981a) Cultural resources overview for the Nevada Nuclear Waste Storage Investigations, Nevada Test Site, Nye County, Nevada. Desert Research Institute Technical Report Number 24. 112 pp.
24. Pippin, Lonnie C. and Donald L. Zerga (1981b) An annotated bibliography of cultural resource literature for the Nevada Waste Storage Investigations. Desert Research Institute Technical Report Number 30. 141 pp.
25. Pippin, Lonnie C. et al. (1980) Archaeological reconnaissance of U.S. Geological Survey proposed trench areas and drill hole sites in Crater Flat, Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR071880-1. 4 pp.
26. Rafferty, Kevin (1980) Clearance and inventory for Soil Conservation Service backhoe excavations, Nye County, Nevada. Bureau of Land Management, Las Vegas District Office, Cultural Resources Report No. 5-676(P). 9 pp.
27. Reno, Ronald L. (1984) A Class III cultural resource reconnaissance of three drill holes and an access road on Yucca Mountain, Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR030784-1. 6 pp.
28. Reno, Ronald L. and Gregory Henton (1984) A Class III cultural resources reconnaissance of five drill holes and access roads near Yucca Mountain, Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR011884-1. 29 pp.
29. Reno, Ronald L. and Lonnie C. Pippin (1985) An archaeological reconnaissance of Yucca Flat, Nye County, Nevada. Desert Research Institute Technical Report No. 35. 198 pp.

30. Reno, Ronald L. and Lonnie C. Pippin (1985) An archaeological reconnaissance of the Groom Range. Lincoln County, Nevada. Desert Research Institute Technical Report Number 48. 140 pp.
31. Reno, Ronald L. et al (1982) Class III cultural resources reconnaissance of two alternative locations for drill hole Ph-1 and a short access road to alternative B. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR081682-1. 6 pp.
32. Reno, Ronald L. et al (1983) Class III cultural resources reconnaissance of several backhoe trenches, a stream gaging station and trenches, and Drill Hole Ue25c on Yucca Mountain and Fortymile Wash, Nye County, Nevada. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR061483-1. 12 pp.
33. Shutler, R., Jr. (1961) Lost City, Pueblo Grande de Nevada. Nevada State Museum Anthropological Papers No. 5. 85 pp. (reports sites in Fortymile Wash)
34. Tuohy, D.R. (1965) Stone age missiles from a modern test site. Masterkey 39(2).
35. Worman, F.C.V. (1966) The current status of archeology at the Nevada Test Site and the Nuclear Rocket Development Station. Los Alamos Scientific Laboratory, General, Miscellaneous and Progress Reports LA-3250-MS. 26 pp.
36. Worman, F.C.V. (1969) Archaeological investigations at the U.S. Atomic Energy Commission's Nevada Test Site and Nuclear Rocket Development Station. University of California, Los Alamos Scientific Laboratory Report LA4125. 201 pp.
37. Zerga, Donald (1979) Archaeological survey of proposed drill hole sites and geologic study areas on the Nevada Test Site. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR053079-1-4. 17 pp.
38. Zerga, Donald (1979) Archaeological reconnaissance of six proposed hydrologic testing drill hole sites in the Yucca Mountain area of the Nevada Test Site. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR060579-1. 2 pp.
39. Zerga, Donald (1980) Archaeological reconnaissance of three proposed geologic trenches in the Yucca Mountain Area of the Nevada Test Site. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR082980-4. 1 pp.
40. Zerga, Donald (1981a) An archaeological reconnaissance of approximately 4.48 kilometers of proposed road right-of-way and the proposed drill-hole site location (G-3) in the Yucca Mountain area of the Nevada Test Site. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR080381-1. 2 pp.

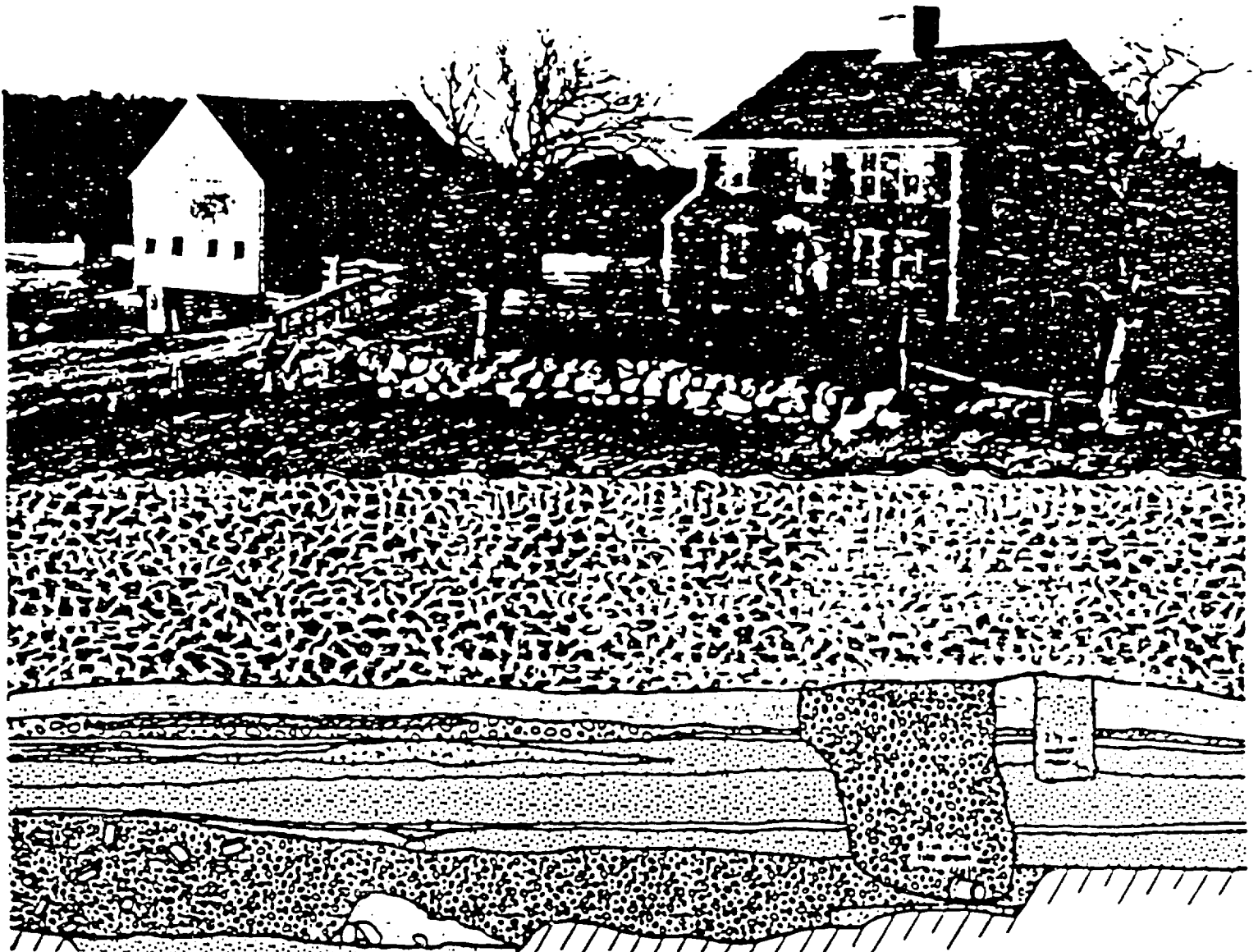
41. Zerga. Donald (1981b) An archaeological reconnaissance of approximately 1.12 kilometers of proposed road right-of-way in the Yucca Mountain area of the Nevada Test Site. Desert Research Institute Cultural Resources Reconnaissance Short Report Number SR081781-1. 3 pp.

APPENDIX 3

Council's Handbook  
"Treatment of Archeological Properties"

Advisory  
Council On  
Historic  
Preservation  
November 1980

Treatment of  
Archeological Properties  
A Handbook



**TREATMENT OF ARCHEOLOGICAL PROPERTIES**

**A HANDBOOK**

**A guide to principles, procedures, and  
methods for the treatment of archeological  
properties in accordance with 36 CFR Part 800.**

**Approved by the Council's Archeology  
Task Force September 26, 1980**

**Endorsed by the Advisory Council November 5, 1980.**

**PLEASE NOTE:**

Appendix B to 36 CFR Part 66, originally titled "Guidelines for the Location and Identification of Historic Properties Containing Scientific, Prehistoric, Historical, or Archeological Data," has been printed by the Council in its SECTION 106 UPDATE/3: MANUAL OF MITIGATION MEASURES (MOMM). The material appears in UPDATE/3 as Appendix C, "Guidelines for the Identification of Historic Properties." SECTION 106 UPDATE/3: MOMM was published by the Council on October 12, 1982, and is available without charge from the Council.

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## TREATMENT OF ARCHEOLOGICAL PROPERTIES:

## A Handbook

## PREFACE

Purpose

This Handbook is an elaboration on and explanation of the Supplementary Guidance published on November 26, 1980, in the Federal Register (45 FR 78808), under the authority of the Executive Director of the Advisory Council on Historic Preservation set forth in 36 CFR Sec. 800.14. As indicated by the cited section, its purpose is "to interpret... (the Advisory Council's) regulations to assist Federal agencies and State Historic Preservation Officers in meeting their responsibilities."

The Handbook is designed to assist the parties consulting under the Council's regulations to determine how archeological programs and projects should be conducted. It is also designed to assist the Council staff, Federal agencies, and the State Historic Preservation Officers in implementing recommendations of the Council's 1979 Task Force on Archeology. Most generally, it sets forth principles that will guide the Council staff in its review of proposals for archeological data recovery projects.

Background

For several years the Advisory Council has been concerned about treatment of archeological resources under the authority of Section 106 of the National Historic Preservation Act, Executive Order 11593, and the Council's regulations (36 CFR Part 800). Cases involving archeological resources and concerns have often presented difficult problems, and have stimulated controversy. In 1977, the Chairman of the Council appointed a Task Force on Archeology, which rendered its report to the Council in 1979. This report included a number of recommendations, directed to Federal agencies, the Secretary of the Interior, and the Council staff. Also in 1979, the General Accounting Office (GAO) conducted an investigation of archeological work at New Malones Dam and Reservoir in California, which had been the subject of a Memorandum of Agreement and substantial subsequent controversy. The GAO investigation was later broadened to deal with the general topic of how archeology is handled by Federal agencies. An important question raised by the GAO early in its investigation was that of "how much archeology is enough" in order to mitigate the adverse effects of Federal construction projects. The Executive Director of the Council takes the position that there is no simple standard by which to determine how much archeological data recovery is sufficient in every case, but that the nature, scope, and boundaries of each data recovery program should be determined by the parties consulting under the Council's regulations. Supplementary guidance was determined to be needed to simplify such

This Handbook was prepared under the principal authorship of Dr. Thomas F. King, the Council's Senior Archeologist and Director of the Office of Cultural Resource Preservation. It was extensively coordinated with Dr. Bennie Keel, the Department of the Interior's Departmental Consulting Archeologist. It was reviewed, commented upon, and approved after extensive rewriting and editing by the Council's Archeology Task Force on September 26, 1980. The Task Force members are as follows.

**Chairman:** Dr. Larry Tise, National Conference of State Historic Preservation Officers

**Alternate:** Dr. Adrian Anderson, Iowa State Historic Preservation Officer.

<b>Members:</b> Department of Agriculture:	Mr. Barry Flamm
	Dr. Janet Friedman
Department of the Interior:	Dr. Bennie Keel
Department of Defense:	Mr. Richard Leverty
Department of Transportation:	Mr. Robert Crecco
	Mr. Bruce Eberle
Smithsonian Institution:	Dr. Paul Perrot
National Endowment for the Humanities:	Dr. Kathryn Abramovitz
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Advisory Council Member:	Dr. Joseph Mahan, Jr.
Society for American Archeology:	Dr. Ruthann Knudson
American Society for Conservation Archeology:	Dr. Margaret Lyneis
Society of Professional Archeologists	Dr. James Hester

The Handbook was endorsed by the full Council at its November, 1980 quarterly meeting. Part II of this Handbook, the "Executive Director's Procedures," was published as Supplementary Guidance on November 26, 1980, in the Federal Register (45 FR 78808).

### Organization

The Handbook is divided into four parts. The first discusses principles that will guide the Executive Director in dealing with archeological matters. It should assist agencies in meeting their responsibilities under 36 CFR Part 800 by helping them understand the conceptual basis for Council advice, requests, and positions in the consultation process.

The second part sets forth internal procedures the Executive Director will employ in reviewing proposals for treatment of archeological properties. This is provided in order to help agencies ensure that determinations of "No Adverse Effect," Preliminary Case Reports, and other documentation provided to the Council will be organized so as to facilitate consultation. This part of the Handbook supersedes The "Guidelines for Making 'Adverse Effect' and 'No Adverse Effect' Determinations for Archeological Resources in Accordance with 36 CFR Part 800."

The third part provides recommendations for use in developing archeological data recovery programs. These are based on the principles set forth in the first part of the Handbook; full consideration of them by agencies planning data recovery will help ensure that documentation submitted to the Council is complete and understandable.

The fourth part includes two appendices presenting examples of research topics which provide bases for organizing archeological data recovery operations.

Development of this Handbook has been coordinated with the Department of the Interior. It is designed to be consistent with the standards and approaches set forth by the Department in 36 CFR Part 66. Agencies are urged to fully acquaint themselves with 36 CFR Part 66 as well as with this Handbook when considering archeological data recovery operations.

#### Interpretation and Application

This Handbook will not be interpreted inflexibly by the Council. For example, should an agency propose an expensive data recovery program in an urban area where there is an active, responsible, avocational archeological society, the Executive Director may draw the agency's attention to Part III, Section VIII of the Handbook, and ask what consideration has been given to involving the avocational group as a way of reducing costs and serving multiple public interests. If the program is being undertaken in circumstances where it appears that effective use of volunteers would be difficult, however, the Executive Director will not make an issue of volunteerism simply because it is in the Handbook.

The principles set forth in Part I will generally guide the Executive Director in dealing with archeological properties. They will provide a rationale for the Council's day-to-day activities where archeological matters are concerned. The procedures in Part II will be used with varying degrees of rigor. With respect to "Identification of Archeological Properties," Section II, the Executive Director will try to be sure that an adequate job of identification has been done. This does not require that the Executive Director review every survey report, only that the Executive Director be able to determine whether the responsible agency has made a reasonable effort to identify potentially affected properties. Similarly, the Executive Director will try to be sure that, within reason, adequate consideration has been given to preservation in place (Sec. III), and non-archeological interests (Sec. IV). If it appears that preservation in place might be feasible, or that there are non-archeological interests to be considered, the Executive Director will try to get the agency to look into the possibility and document its findings, but the Executive Director will not, as a matter of rote, demand such documentation. Sections V through VII will be used generally in reviewing data recovery plans.

With respect to budgets; some agencies are legitimately unable to provide budgets for review, and some will not do so as a matter of policy. Budget review is not the Council's main function, and the Executive Director will not insist on doing so as a matter of course. Where a budget is provided, however, the Executive Director will review it to see if anything appears unreasonable. The Executive Director will also be available to discuss appropriate expenses with agencies that seek advice.

In contrast with the above, fairly flexible procedures, Sec. X (Negating Adverse Effect) must be used with greater rigor. When an agency determines that its undertaking will have no adverse effect because of data recovery, it is making a very positive statement about the nature of the affected property and the quality of its data recovery effort, and it should be able to back up its claims.

In several subsections, notably X.3, XI.1.B., and XIII.1, reference is made to establishing data recovery plans "consistent with the 'Recommendations for Archeological Data Recovery.'" This does not mean that data recovery plans must conform exactly to the "Recommendations." Rather, the agency should use the "Recommendations" as general guidelines. If a data recovery program contains a glaring omission, from the point of view of the "Recommendations," the Executive Director will recommend its correction. If the omission appears serious, and no compromise can be reached, the Executive Director may determine that a failure to agree exists and the consultation process must be terminated. On the other hand, the Executive Director will not demand something just because it is in the "Recommendations." The "Recommendations" are not a cookbook. The "Recommendations" may be prescribed for step-by-step use in Programmatic Memoranda of Agreement or similar instruments, where an agency agrees to establish a data recovery plan at a later date.

PART I  
PRINCIPLES IN THE TREATMENT OF ARCHEOLOGICAL PROPERTIES

Introduction

Section 106 of the National Historic Preservation Act requires that Federal agencies take into account the effects of their undertakings on properties included in or eligible for the National Register of Historic Places, and afford the Advisory Council the opportunity to comment on such undertakings. Section 101(a)(1) of the Act defines properties "significant in American... archeology" among those that may be included in the Register.

Council comments are rendered through the process described in the Council's regulations (36 CFR Part 800). This process characteristically involves consultation among the Executive Director, agency officials, and the responsible State Historic Preservation Officer(s) to decide on methods to avoid, reduce, or mitigate adverse effects on historic and cultural properties. In this consultation process, the Executive Director is guided by certain basic principles about the nature of such properties and about appropriate and inappropriate methods of treating them. This part of the Handbook sets forth the principles that guide the Executive Director with respect to archeological properties.

Archeological properties are those properties included in, eligible for, or potentially eligible for, the National Register, whose significance lies wholly or partly in the archeological data they contain. Archeological data are data embodied in material remains (artifacts, structures, refuse, etc.) utilized purposely or accidentally by human beings, in the spatial relationship among such remains, and in the environmental context of such remains. Archeological data include historic, prehistoric, and scientific data as defined by the Department of the Interior in accordance with Public Law 93291 (cf. 36. CFR Part 66).

The following pages discuss 13 principles which the Executive Director will use in consultation with Federal agencies and State Historic Preservation Officers concerning archeological properties.

Principle I: Archeological research, addressing significant questions about the past, is in the public interest.

Among the stated intents of the National Historic Preservation Act is "to insure future generations a genuine opportunity to appreciate and enjoy the rich heritage of our Nation" (P.L. 89-665, Preamble). One of the many ways in which people appreciate and enjoy this heritage is through archeological research.

Archeological research seeks to answer major questions about human nature, human history, and the changing environment (see Appendix A). Answering such questions helps us to better understand ourselves and our world, and better prepare for our future.

Archeological research can also contribute directly to public understanding and hence appreciation of specific events in the past, specific processes

Principle II: Archeological properties may be sites, buildings, structures, districts, and objects.

Archeology is often erroneously thought of as involving only excavation in the ground, and as addressing archeological "sites" which may or may not contain the remains of buildings or other structures. In fact, however, it is possible for any sort of property to be "archeological" if its significance lies wholly or in part in the information it contains. For example:

1. A group of sites comprising a district might be important because one can learn about population dynamics, interaction processes, or social organization by studying the relationships among the sites.
2. An early 20th century garage (building), containing tools, car and buggy parts, receipt books, old trade magazines, and instruction manuals, might be important wholly or in part because of what it can tell us about the economics and social implications of the development of the automobile.
3. A bridge (structure) might be important in whole or in part because its study could elucidate methods of design, engineering, and construction.
4. A rock covered with petroglyphs (object) might be important because of what its study could reveal about symbolism and ancient forms of communication.

It might be appropriate to treat any property like those illustrated above as archeological, with due attention to any other types of historical, cultural, or architectural significance it possesses.

Principle III: Archeological properties are important wholly or in part because they may contribute to the study of important research problems.

An archeological property may have been created during the prehistoric period, the historic (postcontact) period, or both; it may consist of materials above the ground, below it, or both. It may have cultural or religious value to particular social groups, it may have actual or potential use as an exhibit in place for public understanding and enjoyment, it may be exemplary of great or vernacular architecture; it may contain artifacts of great beauty and monetary worth, or it may contain nothing but fragments of pottery, chips of flint, or glass shards. Whatever such characteristics it may or may not have, the defining characteristic of an archeological property is that it can be studied in order to identify, learn about, or solve problems in our understanding of the past. Properties draw their archeological value from the assumption that they can be used fruitfully for research.

Principle IV: Not all research problems are equally important; hence not all archeological properties are equally important.

Archeological research problems are derived from a variety of other disciplines as well as archeology itself. Archeologists address problems that are of importance to geographers, anthropologists, social historians, geologists,

biologists, medical researchers, climatologists, ecologists, and land use planners, among others. Archeologists also address questions that are of humanistic importance to local communities and social groups: "what was our town like 100 years ago?"; "how did our people live 5000 years ago?"; "when and how did our ancestors come to this area?". Finally, archeologists address questions that are of technical importance to archeologists: "how do refuse piles change over time into archeological sites?"; "how different are the trashpits of rich people and poor people after they have been buried for 200 years?" "does the processing of animal hides result in discernable changes in soil chemistry?". These questions are useful because they help archeologists become more skilled at interpreting the archeological record, although they may have no intrinsic value.

Not all research questions are equally important. An archeologist can develop research questions about almost any distribution of materials. Coming upon a scattered group of beer cans along a country road, an archeologist could easily undertake research into the drinking (and other) behavior that produced the phenomenon, by studying what had been left behind and how it was distributed on the land. The fact that such research can be done, however, does not mean that it is important enough to do. It may be more efficient to learn about drinking behavior by talking with the drinkers. We may not care enough about drinking behavior to bother about it. Only if (a) we think it is important to learn about drinking behavior, and if (b) studying discarded beer cans appears to be an efficient way to learn about such behavior, is such a study worth doing. In the same way, one can learn something from any archeological property, but what one can learn may not be worth the trouble to learn it. The question: "how many type 5B2 arrowheads are there in site 923" has no importance, unless answering it will provide a clue to answering some larger question. The question: "how have cultural systems changed over the last 10,000 years in Nevada" is important to the extent that (a) answering it may help anthropologists understand how cultural systems change in general; (b) knowing how culture has changed in the area may help us understand how the environment has changed, which can contribute to a better general understanding of the physical processes that affect our lives; (c) answering it may contribute to answering or asking other questions (e.g., "what caused the Paiute and related groups to spread through the Great Basin"), and (d) answering it may contribute to the understanding and appreciation that Nevadans have for the area in which they live. The question: "what will we find in the trashpit of a 17th century merchant in Manhattan" is only a matter of curiosity unless there is something about 17th century Manhattan merchants that is (a) likely to be learned from their trash pits and (b) likely to enlighten us about some important historical event or process.

If an archeological property can be used only to address unimportant questions, or questions that have been or can be better addressed using other sources of information, then the property itself is unimportant from an archeological standpoint. Of course, the same property may be valuable for some other reason, such as the quality of its architecture, its association with some important historical event, or its cultural significance to a local group.



Principle V: Treatment of an archeological property depends on its value for research, balanced against other public values.

All else being equal, any property that contains information that may help answer important research questions should be preserved in place for careful, long-term study by qualified scholars. Since all else is seldom equal, this ideal often cannot be attained. Decisions about treatment of archeological properties requires balancing the research value of each property or group of properties against at least 3 other considerations:

- A. Other aspects of the property's significance (architectural, cultural, artistic, etc.). If the property is perceived by a local social group to have religious cultural value, for example, this value must be taken into account.
- B. Other societal needs, most obviously those needs that stimulate the Federal undertaking that may affect the property.
- C. Preservation potential; if the property cannot be preserved in any event (eg, if it promptly will be destroyed by private construction, absent the Federal undertaking that threatens it), there is no point in considering preservation treatment.

Principle VI: Eligibility for the National Register suggests, but does not define, how an archeological property should be treated.

Archeological properties are often listed in or determined to be eligible for the National Register of Historic Places in whole or in part because they contain "information significant in history or prehistory (36 CFR Sec. 1202.6(d)). Such a determination implies that the property can productively be used for archeological research. That the information is "significant in history or prehistory" also implies that at least one of the other National Register criteria is satisfied, for example, that the information can be studied to learn about "events that have made a significant contribution to the broad patterns of our history" (36 CFR Sec. 1202.6(a)). If a property is determined eligible for the National Register entirely or primarily because of the information it contains, the implication exists that it would be desirable, under appropriate circumstances, to extract that information and make it available for study. It does not necessarily follow, however, that every archeological property determined eligible for the National Register is automatically determined appropriate for excavation or other forms of archeological investigation.

An archeological property may be important for nonarcheological reasons as well, and these may take precedence over its utility for research. For example, it may be in the public interest to preserve intact a property of cultural value to a local community, even though its excavation would help answer important research questions.

Even if a property is important solely for the information it contains, extraction of the information may not be in the public interest. Consider, for example, the following hypothetical cases:

Case 1: An ancient village site contains complicated soil strata, each of which contains the minute remains of plants and animals, well preserved but fragile. The remains are of great potential value to the reconstruction of past environments and food habits, but the excavation and analytical technology available to archeologists today is not sufficient to extract all the useful information contained in the strata. In such a case, all else being equal, it would be most appropriate not to excavate the site until the relevant technology has developed further.

Case 2: Most of the prehistoric sites in a metropolitan area have been destroyed over time by construction, agriculture, and other forms of modern land use. In one portion of the area, a cluster of fairly intact sites is found, and determined eligible for the information it may contain. Since this cluster is in essence the only surviving representative of the area's prehistory, it would be beneficial to preserve it for careful excavation over many years, as research questions about the area's past are refined.

Case 3: A Revolutionary War era shipwreck is found on the Continental Shelf, and determined eligible for the information it contains about marine architecture and the lifeways of 18th century sailors. Major historical studies are known to be underway or planned into this general research topic, by various university scholars. It is reasonable to expect that in another ten or twenty years, as these studies are completed, it will be possible to develop much more specific research questions than can now be used to guide investigation of the wreck. All else being equal, it would be beneficial to put off excavation of the wreck.

Case 4: An historic homestead site is determined eligible for inclusion in the National Register as part of an archeological district. No standing buildings remain, and the site is valuable solely for the information it may yield about local residential patterns in the early 19th century. Subsequent study of the district, historical records, and other source material in the context of current anthropological, geographic, and historical theory results in a research design that should answer all important questions about local residential patterns through the study of several other sites; the information contained in this particular homestead is not necessary. In such a case, excavation of the homestead is not cost effective.

Case 5: A small prehistoric site is determined eligible, during planning for a reservoir project, because it contains information that may be important to defining local settlement patterns during the period 200-100 B.C.; these in turn may indicate how the environment changed, how new forms of technology were adopted, and how social organization changed during the period. The project is delayed for a number of years, and in the meantime a great deal of research is done on similar sites. All major questions about settlement patterns during the subject time period are answered. The project is re-activated, and the site is reevaluated. Unless new questions have emerged from the recent research, to which the site is pertinent, it no longer may be worth excavation; the information it contains has become irrelevant because the research questions it could have helped address have been answered.

Case 6: Along a potential highway corridor, 75 archeological sites are found, all consisting of flakes and pottery sherds on the surface of the ground and in the plow zone. All are determined eligible for the information they can yield about population distribution and land use during the Upper Middle Stone Age Period. Review of the sites to develop a data recovery plan reveals that to answer the important research questions about the period all one needs to know is the size and depth of all the sites--which has already been determined during the identification survey--plus some details that can be learned by excavating five or ten representative sites. Further study of the remaining sites is unnecessary, and they can be sacrificed.

Case 7: A nuclear test site will destroy 4,000 stone rectangles on the surface of the ground; these represent ancient habitations. Testing has shown that subsurface cultural deposits are never found around such house squares. All have been determined eligible because their study can contribute to understanding social relationships 4,000 years ago when they were occupied. Such relationships are reflected in the ways the house squares lie in relation to one another on the ground. Information on these relationships has been gathered in full during the determination of eligibility process, through detailed aerial photography. No further relevant data are collectable given current technology and concepts; accordingly, no additional data recovery is appropriate.

Thus, while defining the significance of an archeological property for eligibility determination is important to later decisionmaking about the property, it does not by itself indicate how the property should be treated. How the property should be treated depends on its nature, its relationship to current and conceivable future important research questions, and the circumstances under which treatment is considered. In Cases 1 through 3 above, it would be preferable to preserve the properties in place, but if other public needs demanded their destruction, data recovery would probably be appropriate. In Cases 4 through 7, it would be preferable to preserve the properties (on the grounds that unforeseen research questions might someday arise that would make them important), but if preservation was not practical, data recovery would probably not be appropriate either, and the properties could be legitimately sacrificed without further study.

Principle VII: If an archeological property can be practically preserved in place, it should be.

It would be arrogant to assume that we who are alive today can decide precisely which questions we need to ask about the past, and which we do not. New questions about the past are always developing, and old questions are being answered. Answering old questions usually generates new ones. As new questions are asked, different kinds of information become important, and information may need to be examined in different ways. At the same time, techniques of field study and analysis are constantly being developed and improved, making it possible to address questions that could not be addressed using older techniques. Thus there is a danger that if only those archeological properties we see as valuable today are protected, we will allow the destruction of properties that will be of great value in the future.

Accordingly, it is appropriate to preserve in place as large a range of archeological properties as possible, even if we cannot define precisely how we would use the information they contain. There are obvious practical limits to application of this principle, but as a rule, if an archeological property can practically be left in place and preserved from damage, it should be. There is a large number of ways in which this may be done; for example, any of the following may be appropriate in a given case.

1. Designing construction projects so as to leave an archeological property in reasonably protected open space (eg., the median of a highway).
2. Covering an archeological site with fill, provided caution is exercised to limit compaction, disturbance of the soil, chemical changes, and changes in soil structure, and provided access can be assured within reason for future research.
3. Protecting properties from damage by nearby project activities through fencing, shoreline armoring, construction of berms, routing of construction activities, etc.
4. Designing structures over an archeological site in such a way as to minimize subsurface disturbance.
5. Establishing protective covenants or other arrangements with the residents, operators, or users of constructed facilities to protect properties within their control.

Principle VIII: If an archeological property is to be preserved in place, extensive excavation of the property is seldom appropriate.

Occasionally, agencies propose to conduct excavations in an archeological site that will be protected in place, in order to "evaluate" it or for some other reason. On the whole, such excavations are inappropriate uses of Federal funds, because they do not contribute to fulfillment of the agency's preservation responsibility. There are exceptions to this rule, of course, for example:

1. When a property is to be buried under fill, it may be appropriate to conduct test excavations so there will be a reasonable record of what has been buried;
2. If there is reason to be less than fully confident about the protective mechanism employed (for instance, protective covenants may be lost as title changes hands in the future), some data recovery may be appropriate.
3. If a property that can be protected within a project's area of impact needs study in order to deal fully with research questions being asked in connection with the project at other properties, this may be appropriate if carefully limited.

Principle IX: Both data recovery and destruction without data recovery may be appropriate treatments for archeological properties.

Where it is not practical to protect an archeological property in place, one of two things may occur.

1. The adverse effect of the property's destruction may be negated or mitigated through recovery of the valuable data contained in the property, or
2. Destruction of the property, without recovery of data, may be accepted by the consulting parties as a regrettable but necessary loss in the public interest.

If the data contained in the property can be used fruitfully to address valuable research questions, the data should be recovered. If the data cannot be so used, data recovery is not an appropriate use of public funds, and should not be undertaken.

To decide whether data recovery should be undertaken at a property that cannot be preserved in place, the responsible agency and its contractors must have a full understanding of previous local research, pertinent historic and prehistoric data, and the principles, models, and theories in history, anthropology, geography and other disciplines that form the basis for developing archeological research questions. Based on this knowledge, research questions should be developed and the property considered as a source of data for answering those questions. If it appears that it will be useful as a source, data recovery should be conducted; if it does not appear to be useful, data recovery should not be conducted.

The decision to destroy an archeological property without data recovery is a serious one; it is like throwing away a book without reading it. Accordingly, the responsible agency and its contractor should be sure to consider the widest reasonable range of potentially valuable research topics to which study of the property might contribute, and should consult with all those who might have useful suggestions about topics. Those reviewing agency decisions (the Council, the SHPO, and others) should give close attention to the justification for deciding not to conduct data recovery.

On the other hand, there is no more reason to study every archeological property than there is read every cheap novel ever published. If it cannot be shown, after a reasonable, good faith effort to do so, that a given archeological property can be studied usefully to address important research questions, it should not be studied at public expense.

Principle X: Once a decision is made to undertake data recovery, the work should be done in the most thorough, efficient manner

Deciding to conduct data recovery is an investment, both of the archeological property involved and of Federal (and sometimes non-Federal) funds. One should seek to get the most feasible return on the investment. It follows that:

1. Research questions to be asked through the data recovery effort should be defined as clearly and precisely as possible, and the methods employed should be directed toward answering the questions efficiently.

2. Wherever possible, the data recovery effort should be made to serve multiple public interest functions. For example, if it can serve educational functions by involving school classes or volunteers, if it can serve social and economic functions by providing employment to the unemployed, or if it can serve planning functions by experimenting with new techniques, without adversely impacting its prime function, it should be made to do so.

3. Data recovery should employ the fastest, least expensive techniques that will yield the desired research results. Excavation should not be done with a camel's hair brush if a shovel will provide the required data, nor should it be done with a shovel if a bulldozer will provide the required data. Conversely, of course, a bulldozer should not be used to seek the kinds of information that only a shovel or a brush can provide.

4. Data recovery budgets should be carefully developed, justified, and reviewed.

Principle XI: Data recovery should be based on firm background data and planning.

Decisions about what sorts of data to seek, and how to seek them, cannot be made in a vacuum; one needs to know, insofar as is feasible, the historical, environmental, and theoretical context in which one is working. It follows that:

1. Data recovery plans should be based on a reasonable level of prior survey, to identify the universe of archeological properties, and the overall environment, within which one is planning.

2. Data recovery should be preceded by appropriate types of background research, addressing pertinent aspects of local history and prehistory, the local environment, theoretical and methodological issues pertinent to the research topics to be addressed, and so on.

3. Data recovery should be carried out in accordance with a well thought out plan that has been subjected to a reasonable level of review.

Principle XII: Data recovery should relate positively to the development of State Historic Preservation Plans.

Section 102(a)(2) of the National Historic Preservation Act mandates the creation of comprehensive statewide historic preservation plans. The Heritage Conservation and Recreation Service, which administers the provisions of Section 102, is working with the States to develop and implement such Plans. State Historic Preservation Plans should guide the establishment of research and data recovery priorities and methods; conversely, data recovery efforts should produce information that supports development and refinement of the Plans. It is in the public interest for archeologists and agencies that conduct data recovery to work with State Historic Preservation Officers in developing, reviewing, and refining State Historic Preservation Plans, to ensure that the Plans, and hence future data recovery efforts, accommodate the development of new research questions and new data gathering techniques.

Ultimately, each State Historic Preservation Plan should provide a logical basis for determining which classes of archeological property contain no needed information and are hence neither eligible for the National Register nor appropriate for data recovery. Accordingly, data recovery efforts should be planned with reference to the State Historic Preservation Plan where relevant, and the results of such efforts should be used to the extent possible in State Historic Preservation Plan development.

Principle XIII: Completion of an approved data recovery plan consummates an agency's data recovery responsibilities.

When an agency has responsibly identified archeological properties eligible for inclusion in the National Register, considered alternatives to preserve the properties in place, obtained Council comment through the steps outlined in 36 CFR Part 800 (giving due consideration to the "Recommendations for Archeological Data Recovery" and 36 CFR Part 66), implemented a data recovery program developed through this process and ensured proper curation of recovered materials and dissemination of data to scholars and the public, its responsibilities toward the data in question are at an end. In other words, the answer to the question: "How much archeology is enough?" is, "enough to conclude the data recovery program approved by the consulting parties under 36 CFR Part 800." An exception to this rule would be the circumstance in which unexpected data are discovered after the consultation process prescribed by 36 CFR Sec. 800.4 and Sec. 800.6 is complete; in such an exceptional circumstance, the responsible agency is to be guided by 36 CFR Sec. 800.7 and the recommendations of the Department of the Interior.

PART II  
EXECUTIVE DIRECTOR'S PROCEDURES FOR REVIEW OF PROPOSALS  
FOR TREATMENT OF ARCHEOLOGICAL PROPERTIES

I. Introduction

The following procedures will be used by the Executive Director of the Council in review of projects involving treatment of archeological properties. They are based on the Council's "Principles in the Treatment of Archeological Properties" (Part I). They do not amend or modify the duties of Federal agencies under Section 106 of the National Historic Preservation Act and the implementing regulations (36 CFR Part 800), but agency cognizance of them will make consultation under the regulations easier.

II. Identification and Evaluation of Archeological Properties

1. 36 CFR Sec. 800.4 establishes that "it is the primary responsibility of each Agency Official requesting Council comments to conduct the appropriate studies and to provide the information necessary for an adequate review of the effect a proposed undertaking may have on a National Register or eligible property, as well as the information necessary for adequate consideration of modifications or alterations to the proposed undertaking that could avoid, mitigate, or minimize any adverse effects. It is the responsibility of each Agency Official requesting consultation with a SHPO under this section to provide the information that is necessary to make an informed and reasonable evaluation of whether a property meets National Register criteria and to determine the effect of a proposed undertaking on a National Register or eligible property." Identification is the obvious first step to be taken by an Agency in defining its responsibilities with respect to archeological and other historic properties.

In evaluation of proposals for treatment of archeological properties, the Executive Director may review field surveys and other identification efforts that have been conducted as part of the Agency's planning process, to determine whether:

A. the identification effort appears to be consistent with the scale and expected impacts of the proposed project;

B. the identification effort appears to be conducted at a sufficient level of intensity in relation to the numbers and types of archeological properties expected to occur in the area; and,

C. the data recovery proposal submitted for Council consideration appears consistent with the results of the identification effort.

2. The Executive Director will use 36 CFR Part 66, Appendix B, as a general standard for reviewing identification efforts.

3. The Executive Director will encourage recognition of the difference between "testing" archeological sites for identification and evaluation and excavating them for purposes of data recovery. Testing is usually conducted



in order to answer questions about an archeological site's eligibility for the National Register, or to obtain data needed to make decisions about how to mitigate project impacts on a site already determined eligible or placed on the Register. Such testing is directed toward determining the site's boundaries, the depth of its deposits, and/or its basic nature and condition. Only a very small sample of the site need be disturbed in order to make such determinations. Excavation for data recovery, on the other hand, is directed toward recovering as much of the important information in the site as possible, given time and other constraints. Unlike testing, excavation for data recovery is seldom simply directed at defining the size, depth, nature and condition of the site; it is directed at answering or contributing to research questions. Excavation for data recovery may result in very extensive--even complete--disturbance of a site. While it is impossible to define a point, applicable in all instances, at which testing ends and data recovery begins, a rule of thumb is that testing is completed when sufficient information has been gathered to make a determination of eligibility or a management decision. Since testing is done, in most cases, before the fate of the site has been determined through the consultation process, it should be kept to the absolute minimum necessary for eligibility determination and/or management purposes. "Testing" that destroys large portions of a site forecloses the Council's opportunity to comment, and circumvents the intent of Section 106. The Executive Director will discourage such "testing," and will notify the Secretary of the Interior, pursuant to P.L. 93-291 Sec.4(a), in instances where such "testing" threatens the irrevocable loss of scientific, prehistoric, historic, or archeological data.

### III. Consideration of In-Place Preservation

In review of projects involving archeological properties, the Executive Director will seek to ensure that all due consideration is given to practical methods of preserving such properties in place.

### IV. Consideration of Non-Archeological Interests

In review of projects involving archeological properties, the Executive Director will seek to ensure that all due consideration is given to whatever non-archeological historical and cultural values the properties may represent. For example, if an archeological property is also valuable to a local community for cultural reasons, the Executive Director will seek to ensure that this value is considered and given appropriate weight in decisionmaking.

### V. Data Recovery Directed to Research Questions

Where it is concluded through the consultation process that preservation in place is not practical, and that data recovery is appropriate, the Executive Director will seek to ensure that the data recovery effort addresses defined and defensible research questions. Such questions should relate to issues of importance in the sciences or humanities, or to matters of importance to local communities with historical connections to the property or properties. It is expected, however, that the specificity of research questions, and their relationship to larger issues, will vary with the character and quality of prior archeological work in the area, the state of existing

knowledge of the property, the nature of local, regional, and topical research efforts pertinent to the property, and the quality of the State Historic Preservation Plan in force in the state at the time the project is undertaken.

#### VI. Sacrifice of Properties Without Data Recovery

Where an archeological property cannot practically be preserved in place, and the responsible agency proposes to destroy or damage it without data recovery, the Executive Director will seek to ensure that all reasonable consideration has been and is given to the property's potential to yield information relevant to important research questions. The Executive Director will not support or sanction the recovery of data simply because they exist, nor will the Executive Director support arbitrary destruction of data.

#### VII. Efficiency of Data Recovery

Where data recovery is to be undertaken, the Executive Director will seek to ensure that it is conducted in the most efficient manner possible, in the context of an appropriate data recovery plan. Data recovery programs should be organized to extract, digest, and make available the pertinent data in the most efficient manner possible, taking into account local conditions, the potential for unexpected discoveries, non-archeological concerns, and other relevant factors. The kinds of techniques, tools, and expertise required in a given data recovery program are dependent on the kinds of data to be recovered and analyzed. Although all archeological projects share certain basic principles, there is no single, standard way to conduct archeological fieldwork. As a rule, the Executive Director will seek to ensure that the fastest, most economical methods are used that will achieve the desired research result.

#### VIII. Consideration of Guidance

Where data recovery is to be undertaken, the Executive Director will seek to ensure that due consideration has been given to the Council's "Recommendations for Archeological Data Recovery" (Part III) and 36 CFR Part 66 ("Recovery of Scientific, Prehistoric, Historic, and Archeological Data: Methods, Standards, and Reporting Requirements").

#### IX. Budgets

To the extent feasible given Council and staff priorities and agency contracting policy, the Executive Director will provide advice to agencies, seeking to ensure that budgets developed for data recovery and other archeological activities are reasonable and cost-effective.

#### X. Negating Adverse Effect: Documenting "No Adverse Effect" Determinations

1. Undertakings that result directly or indirectly in the disturbance of an archeological property clearly have adverse effects on that property. In some cases, however, this adverse effect can be essentially negated through data recovery; in such cases a determination of "no adverse effect,"

pursuant to 36 CFR Sec. 800.4(c), may be appropriate. When an agency makes such a determination, the Executive Director's review will focus on the extent to which the adverse effect will in fact be negated by the data recovery effort. The ability to negate adverse effect depends upon (a) the nature of the affecting action, (b) the nature of the archeological property, and (c) the quality of the data recovery effort proposed.

2. To determine whether a data recovery program will negate the adverse effects of an undertaking, the agency, in consultation with the State Historic Preservation Officer, should answer the following questions:

A(1) Does the significance of the property, as documented in the nomination to or determination of eligibility for the National Register, lie primarily in the data it contains, so that retrieval of the data in an appropriate manner may preserve this significance? If so:

A(2) Does it appear that preservation in place would be more costly, or otherwise less practical, than data recovery? If so:

B(1) Will the effects of the undertaking be minor relative to the size and nature of the property? Examples of such effects include:

(a) Marginal disturbance to an extensive archeological site by construction along one edge.

(b) Minor disruption of the surface of an archeological site whose primary valuable information lies in subsurface deposits, where this disruption is unlikely to have long-range effects on subsurface conditions (e.g., by causing erosion, etc.).

B(2) Is the property subject to destruction regardless of the undertaking, so the agency's action is only slightly hastening an inevitable process? Examples of such a condition include:

(a) Disturbance of an archeological site on a rapidly eroding cliff, where measures to halt erosion are not practical.

(b) Disturbance of an archeological site that is being vandalized or clearly will be subject to vandalism, where there is no practical way to deter the vandals;

(c) Disturbance of an archeological site on land that has great potential for non-Federal development, where no mechanisms (zoning, State or local preservation ordinances, easements) are likely to be employable for protection.

B(3) Is the property not:

(a) a National Historic Landmark, a National Historic Site in non-Federal ownership, or a property of national historical significance so designated within the National Park System;

(b) important enough to fulfillment of purposes set forth in the State Historic Preservation Plan to require its protection in place;

(c) in itself, or as an element of a larger property, significantly valuable as an exhibit in place for public understanding and enjoyment;

(d) known or thought to have historic, cultural, or religious significance to a community, neighborhood, or social or ethnic group that would be impaired by its disturbance; or,

(e) so complex, or containing such complicated data, that currently available technology, funding, time, or expertise are insufficient to recover the significant information contained in it.

3. If the agency and the SHPO agree that questions A(1) and A(2), and questions B(1), B(2) or B(3) are answered in the affirmative, and if the agency establishes a data recovery program consistent with the Council's "Recommendations for Archeological Data Recovery" (Part III) and 36 CFR Part 66, the agency has grounds for concluding that the data recovery program will negate the adverse effect, and can hence determine that the undertaking will have No Adverse Effect on the property.

4. In documenting a determination of No Adverse Effect based on this conclusion, pursuant to 36 CFR Sec. 800.4(c) and 800.13(a), the agency should:

- (A) report clearly and concisely how it has reached its conclusion;
- (B) document the concurrence of the SHPO and, if pertinent, consultation with, and the opinions of, other specialists and authorities concerned with the property, concerned social and ethnic groups, local government, and the public;
- (C) provide a copy of the data recovery plan; and,
- (D) show that sufficient time and funds have been allocated to execute the data recovery plan.

3. The Executive Director will review the documentation provided in accordance with 36 CFR Sec. 800.6(a) to determine whether (a) the property is shown to be valuable primarily for the information it contains, or whether other public interests are involved, and whether (b) it appears that the adverse effects of the undertaking will in fact be negated, thereby justifying a determination of No Adverse Effect.

## XI. Preliminary Case Reports

1. Where it is determined that the undertaking will have an adverse effect on historic properties, the Preliminary Case Report developed by the agency pursuant to 36 CFR Sec. 800.4(d)(1) should:

- A. document consideration of alternatives that would preserve the archeological property in place, and give reasons for rejecting those alternatives not preferred;

B. where data recovery is proposed, provide a data recovery plan consistent with the Council's "Recommendations for Archeological Data Recovery" (Part III) and with 36 CFR Part 66; and,

C. where data recovery is not proposed, explain why it is not proposed. An agency may demonstrate that loss of an archeological property without data recovery is acceptable by showing that:

(1) there is no reasonable way to protect the property in place; and,

(2) having made a good-faith effort to identify research questions of the kinds discussed in Appendices A and B of this Handbook, to which the recovery of data from the property would contribute, the agency has been unable to identify such questions. In seeking to identify such questions, the agency should utilize available literature in archeology, anthropology, history, and other disciplines, consult with the State Historic Preservation Officer, and consult with State, regional, and local archeological and historical organizations. The Executive Director will review closely the documentation of such efforts, and may suggest additional research questions or sources of advice to be considered.

## XII. Memoranda of Agreement

1. Ordinarily, Memoranda of Agreement executed pursuant to 36 CFR Sec. 800.6(c) that provide for data recovery from archeological properties should include or refer directly to a data recovery plan consistent with the Council's "Recommendations for Archeological Data Recovery" and 36 CFR Part 66. Exceptions to this rule may include, but are not necessarily limited to:

A. A Programmatic Memorandum of Agreement, which may provide for preparation and review of such plans in the context of an ongoing program;

B. A Memorandum of Agreement that covers a planning process, which may provide for preparation and review of a data recovery plan at a subsequent stage in the agreed-upon process; and,

C. A Memorandum of Agreement that provides for archeological monitoring or other forms of data recovery as guards against uncertain discovery possibilities (for example, where there is some possibility that archeological data will be discovered when a building is demolished). In such an instance, it may not be feasible to develop a detailed data recovery plan because the nature of the possible discovery situation is too uncertain.

2. The purpose of the data recovery plan is to ensure that the data are recovered in an effective manner using the best applicable professional standards under the circumstances. Technical assistance in developing data recovery plans is available from the State Historic Preservation Officer and Interagency Archeological Services, Heritage Conservation and Recreation Service, Department of the Interior. The Executive Director will give data recovery plans the same level of professional review afforded to architectural designs, plans for adaptive reuse, development plans, etc.

3. Memoranda of Agreement may provide for phased data recovery. An example of phased data recovery is:

A. Phase 1: Testing of archeological sites and other research leading to development of a detailed data recovery work plan. The Memorandum of Agreement should set forth guidelines for the testing and other research.

B. Phase 2: Development of a data recovery plan. The Memorandum of Agreement should provide an opportunity for appropriate technical review of the plan, usually by the SHPO and the Council, and where needed, through peer review by outside parties.

C. Phase 3: Selection of a contractor. The Memorandum of Agreement should ensure that the agency provides a reliable mechanism for obtaining the best qualified contractor(s) for the project at the most reasonable cost, consistent with satisfactory work performance.

D. Phase 4: Conduct of the work plan, typically including recovery of data, analysis, curation, and dissemination of results.

4. In developing Memoranda of Agreement including provisions for data recovery, the Executive Director will attempt to ensure that the data recovery plan in fact is the best feasible method of addressing the archeological value of the property in the public interest. An agency can facilitate development of such Memoranda by notifying the Council of the steps it has taken to develop its data recovery plan, by identifying the parties consulted during its preparation, by ensuring that all concerned parties have had an opportunity to contribute to its preparation, and by articulating the plan as clearly and concisely as possible.

### XIII. Programmatic Memoranda of Agreement

Where appropriate under 36 CFR Sec. 800.8, the Executive Director will consider execution of Programmatic Memoranda of Agreement with agencies to cover archeological data recovery activities and other activities discussed in this Handbook. Such a Programmatic Memorandum of Agreement should take this Handbook and 36 CFR Part 66 into account, and specify or stipulate a process for establishing:

1. Conditions in a given State or region, or with reference to the agency's specific types of undertakings, in which data recovery would be appropriate.

2. Guidelines for data recovery, taking into account conditions in a State or region, and/or the agency's types of undertakings and planning/development stages.

3. Methods for procuring appropriate specialists, and controlling costs, and

4. Consultation methods, establishing how the SHPO and other appropriate authorities will be involved in decisionmaking.

### XIV. Counterpart Regulations

The Executive Director will use this Handbook in reviewing and helping prepare guidelines, standards, and other measures as part of Counterpart Regulations authorized by 36 CFR Sec. 800.11.

**XV. Archeology For Research**

1. When archeological excavations are conducted on Federal land for research purposes, and the only Federal involvement in the excavations is issuance of a permit under the Archeological Resources Protection Act of 1979 (P.L. 96-95) the comments of the Council need not be sought (16 U.S.C. Sec. 470 cc(1)).

2. If Federal actions are involved in the research besides issuance of an ARPA permit (eg., funding, other permits or licenses) the Council's regulations (36 CFR Part 800) apply.

A. Research projects to which the regulations apply, that involve the physical disturbance of archeological properties, should in most cases be considered to have adverse effects on the properties; the responsible agency should seek the Council's comments in accordance with 36 CFR Sec. 800.4, or programmatically in accordance with 36 CFR Sec. 800.8.

B. Projects that address management needs as well as research interests may be taken to have no adverse effect on the properties they disturb, if the facts warrant. Generally, the Executive Director will concur in a "no adverse effect" determination when the following conditions exist:

- (1) the research project addresses management needs, such as:
  - (a) excavation of a site that is subject to uncontrollable vandalism;
  - (b) excavation of a site that is subject to serious natural erosion;
  - (c) recording of a site or structure that is deteriorating; and,
  - (d) stabilizing a deteriorating or endangered site or structure

(2) the determination has been made following Sec. X ("Negating Adverse Effect") of this part of the Handbook;

(3) the project will be conducted under the supervision of persons meeting, at a minimum, the qualifications set forth in 36 CFR Part 66, Appendix C; and,

(4) the project will be conducted in accordance with a research design that takes into account the Council's "Recommendations for Archeological Data Recovery" (Part III).

PART III  
RECOMMENDATIONS FOR ARCHEOLOGICAL DATA RECOVERY

The following recommendations are for agency consideration in developing archeological data recovery operations. They are not mandatory under the authority of the National Historic Preservation Act and 36 CFR Part 800, but full consideration of them will facilitate the consultation process. They are designed to be consistent with the standards of the Department of the Interior, issued pursuant to the Archeological and Historic Preservation Act of 1974 (P.L. 93-291), and embodied in 36 CFR Part 66.2.

I. Identification

1. Data recovery operations should be based on an adequate understanding of the range of archeological properties subject to adverse effect, and their importance and nature relative to other such properties. Accordingly, plans for data recovery should be based on an adequate identification effort.
2. Identification studies should be conducted in a manner consistent with 36 CFR Part 66, Appendix B, and with the recommendations of the State Historic Preservation Officer. If standards and guidelines for identification have been adopted as part of the State Historic Preservation Plan, the identification effort should be consistent with them.
3. Agencies should use "The Archeological Survey: Methods and Uses" (GPO Stock No. 024-016-0091-9), "Guidelines for Local Surveys: A Basis for Preservation Planning" (GPO Stock No. 024-016-00089-7), and relevant State, regional, and local literature for general guidelines.

II. Qualified Supervision

1. Data recovery operations should be conducted under the supervision of qualified professionals in the disciplines appropriate to the data that are to be recovered. Minimum qualifications commonly required for professionals are set forth in 36 CFR Part 66, Appendix C. For supervision of most projects, Appendix C qualifications should be taken as a minimum. The agency should develop additional qualifications for supervision of the particular project.

In some cases, it may be appropriate to select a supervisor whose qualifications differ from those given in 36 CFR Part 66, Appendix C. In such cases, the qualifications should be specified by the agency in project documents, together with the rationale for their selection.

2. A data recovery operation should be directed by a Principal Investigator, whose background and performance demonstrates:
  - A. an understanding of the research value of the property, as specified in location and identification studies, documentation



for determination of eligibility or nomination to the National Register, and/or other relevant documents, such as the scope-of-work prepared by the agency;

- B. familiarity with previous relevant research, including research in the vicinity of the proposed undertaking and research on topics germane to the data recovery program regardless of where such research has been carried out;
- C. competence to address research problems pertinent to the data to be recovered, taking into account the identified research value of the property and other relevant research and general theory in the social and natural sciences and humanities;
- D. responsiveness to the need to recover a usable sample of data on the major research problems that reflect the property's research value, and a sensitivity to other valuable research problems that may become apparent during the project; and,
- E. competence in the methods and techniques necessary to recover the pertinent data contained in the property, or in supervising staff or consultants with such competence.

### III. Relation to State Historic Preservation Plan and Other Plans

1. Where a State Historic Preservation Plan, developed by the State Historic Preservation Officer and approved by the Secretary of the Interior, details approved methods for data recovery from archeological properties, agency data recovery programs should take these methods into account.
2. Where regional or local plans, developed by the SHPO, professional organizations, local government, or others detail recommended methods for data recovery from archeological properties, agency data recovery programs should take these methods into account.

### IV. Data Recovery Plan

1. Every data recovery operation should be conducted in accordance with a data recovery plan (often called a research design). The plan should be designed to ensure that the operation addresses legitimate research questions, that it produces useful results, that it is conducted efficiently, and that it produces the maximum direct and indirect benefit to the public for the least cost. Generally speaking, a data recovery plan should include the following elements:
  - A. Specification of properties to be studied and not studied within the environmental impact area of the undertaking. A rationale should be provided if it is proposed not to study any property included in or eligible for inclusion in the National Register that is subject to adverse effect.

- B. Development of research questions, taking into account the identified research value of the property and other relevant research and general theory in the social and natural sciences and humanities. These are questions of scientific or humanistic concern which are expected to be answered, partially answered, or at least elucidated through the work proposed, such as
- (1) questions of recognizable importance to science (cf. Appendix A), and
  - (2) questions of humanistic interest, or interest to a local community, or of defined local historical value (cf. Appendix B).

In most areas of the United States, enough is known of history and prehistory to establish at least some basic research questions. Therefore, a plan that proposes data recovery because "little is known of the history or prehistory of the area," without setting forth more explicit research questions, should be treated with caution. Such undirected plans provide little basis for conducting research, may result only in the accumulation of useless, trivial, or repetitive information, and are sometimes only masks for the ignorance of the parties preparing the plan. There are, of course, some areas, and some time periods in history and prehistory, for which this is not the case.

- C. Establishment of study topics, springing from the research questions. These are the specific topics to be addressed in the study area. For example, if the research question is: "Why was agriculture adopted?" a study topic might be: "When, and in what cultural context, did agriculture appear in the study area?"
- D. Establishment of study priorities. It is not necessary, and is often counterproductive, to give the same level of effort to all study topics. The plan should consider all study topics but should establish and justify priorities for their investigation.
- E. Definition of data needs. The plan should identify the data needed to address each topic selected for study.
- F. Description of methods to be employed in fieldwork and analysis, in seeking the needed data. Methods should be justified in terms of the data sought or expected, but with recognition of the fact that unexpected important data may emerge during fieldwork or analysis and need to be addressed. As a rule, the fastest, least expensive available methods should be used, provided they are effective in recovering the data sought or expected, and provided they do not destroy properties or data that otherwise could be preserved in place.

2. The data recovery plan should be developed and reviewed by the agency, the SHPO, and where needed, the Council, Interagency Archeological Services, and others, before data recovery operations are begun.

V. Staff, Facilities, Equipment, and Consultants

1. A data recovery program should provide for adequate personnel, facilities, and equipment to implement fully the data recovery plan.
2. A data recovery program should provide for adequate consultation with scholars whose research interests or specialties would enable them to contribute to the program.

VI. Methods: Basic Standards

1. Regardless of the research topics being addressed, a data recovery program should employ methods that will ensure full, clear, and accurate descriptions of all field operations and observations. For example, excavation techniques, recording methods, stratigraphic and associational relationships, environmental relationships, and analytic techniques should be described, insofar as is feasible, in such a way as to allow future researchers to reconstruct what was done, what was observed, and why.
2. To the extent feasible, the methods should take into account the possibility that future researchers will need to use the recovered data to address problems not recognized at the time the data were recovered.
3. If portions or elements of the property under investigation can be preserved in place, the data recovery program should employ methods that will leave those portions or elements of the property in place. Destructive methods should not be applied to such portions or elements if nondestructive methods are practical.
4. Where architectural characteristics are recorded, such recording should be consistent with the standards published by the National Architectural and Engineering Record (NAER). Updated guidelines for recording architectural and engineering data may be obtained from the Director, Heritage Conservation and Recreation Service, or Executive Order Consultant for NAER.
5. To the extent feasible within the data recovery plan, data should be recorded in a manner compatible with those systems utilized by the State Historic Preservation Officer and by State and Federal agencies that store and utilize archeological data, so that they can have maximum applicability to future studies and planning efforts.

6. The data recovery program should include both field operations and post-fieldwork analysis sufficient to address the research topics.

#### VII. Public Participation

1. To the extent feasible, a data recovery program should provide for public participation, through arrangements for public inspection of the work in progress, the use of volunteers, cooperation with local educational programs, etc.
2. A data recovery program should provide a means by which the public can be informed of the program and its results, before, during, and/or at the conclusion of the program.

#### VIII. Cost Minimization

1. In developing a data recovery program, agencies should consider methods to minimize costs while ensuring that quality is not sacrificed. Examples of methods that may reduce costs include:
  - A. investment in full pre-fieldwork analysis of pertinent available data, to avoid spending time and money in the field gathering data to answer questions that are already answerable;
  - B. sharing of personnel and facilities among projects and agencies;
  - C. use of volunteers and trainees under appropriate supervision;
  - D. appropriate use of mechanized equipment and advanced technology (Experimentation with potentially cost-efficient methods of discovery, recovery, and processing of data is encouraged), and
  - E. use of methods to avoid late or accidental discoveries that could cause costly construction delays. (For example, where construction will destroy an archeological site, the last stage of data recovery should be to destroy the site under archeological supervision before construction begins).
2. Seeking to minimize costs by selecting contractors on the basis of bid is generally not encouraged; experience shows that this practice tends to produce substandard results. However, in cases where detailed data recovery plans have been developed in advance of soliciting proposals, and sufficient control is exercised to ensure receipt of technically comparable proposals, an agency might find this practice useful. Agencies should consider 36 CFR Part 66, Appendix D, when preparing to procure services for data recovery operations.

## IX. Reports and Data Management

1. In order for recovered data to be useful, they must be made available to scholars and planners in usable forms. Generally speaking, the following products (other than physical specimens) are expected from a data recovery operation:
  - A. a report or reports that describes the operation and its results, with reference to the research topics addressed by the operation;
  - B. digested data in the form of tables, charts, graphs, computer software, etc.;
  - C. raw data in the form of field notes, photographs, magnetic tapes, etc.; and,
  - D. scholarly and other articles utilizing the results of the work for analytic or public-interpretive purposes.
  
2. All data recovery projects should result in a report or reports containing the reasons for the project, the data recovery plan, the methods employed in both field work and analysis, the data recovered, observations made, insights gained, conclusions reached, and a presentation of pertinent data. The report should meet contemporary professional standards, and should be prepared in accordance with the format standards set forth in 36 CFR Part 66, Appendix A.
 

Provision should be made for disseminating the report. At a minimum, two copies of the report must be provided to the Department of the Interior pursuant to P.L. 93-291, Section 3(a), and 36 CFR Part 66.4. In addition, agencies are encouraged to disseminate reports to the widest possible audience. Appropriate methods of dissemination include, but are not limited to, publication in scholarly journals, monographs, popular articles, books, and the National Technical Information Service, and presentation of papers at scholarly Conference. Agencies should provide a copy of each report to the State Historic Preservation Officer and other appropriate archives and research libraries.
  
3. Digested data should be stored in a manner that makes them readily retrievable for further study and analysis. Use of modern systems of information storage and retrieval is encouraged. Such systems should be as compatible as possible with those used by the SHPO and other agencies and institutions with potential uses for the data.
  
4. Raw data should be stored in a manner that ensures their long-term maintenance and availability, usually in an appropriate research institution (cf. 36 CFR Part 66.3).

5. Although agencies are not necessarily responsible for developing or supporting the development of scholarly analytic articles, beyond those embodied in the report(s) on each data recovery operation itself, use of recovered data for such purposes should be encouraged.

#### X. Curation of Specimens

1. A data recovery program should include provision for curation (care, maintenance, and where applicable, duplication and disposition) of recovered specimens. In developing such provisions, the agency should give due consideration to the standards set forth in 36 CFR Part 66.3, and recognize any competing public and private interests. Care should be taken during conservation, curation, and handling of specimens and records to ensure that the material is not lost, inappropriately altered, or damaged.
2. In general, acceptable curation arrangements may include, but are not necessarily limited to:
  - A. permanent storage at a regional research center or appropriate public or private repository meeting the standards set forth at 36 CFR Part 66.3(a)(1), provided reasonable access is guaranteed for future study;
  - B. return to private owners where private property rights so require, after description, study, and analysis in accordance with the data recovery plan are complete;
  - C. loan or lease to public or private parties, after description, study, and analysis in accordance with the data recovery plan are complete, provided access for future study and proper care of the specimens can be expected; and,
  - D. return of specimens having religious or cultural significance to practitioners of the religion or cultural institutions in question, after description, study, and analysis in accordance with the data recovery plan are complete.
3. Curation of human remains (eg., skeletons, cremations, mummified bodies), requires careful balancing of the needs of science and a sensitivity to the concerns of genetic and cultural descendants of the dead. Where a demonstrable ethnic affinity exists between recovered human remains and living groups, a systematic effort should be made to seek out and consult with appropriate representatives of such groups to define acceptable methods of treatment. Where recovery of human remains is expected, prior consultation with such groups, and with cultural anthropologists or others capable of serving as sensitive intermediaries where needed, is strongly recommended. If reinterment, cremation, or other disposal is requested that will place the human remains out of the reach of future scientists, documentation of the remains in consultation with specialists in physical anthropology and other pertinent

fields should be completed before disposal. Where no association can be determined between recovered human remains and living groups, the remains should be documented in accordance with the data recovery plan, and curated in a manner appropriate to the dignity and respect befitting any deceased person.

## XI. Budgeting

1. At an appropriate stage in the process of developing a data recovery plan or procuring the necessary contractors or staff to execute it, the agency should develop or obtain a detailed budget, and subject it to careful analysis. Line items should refer clearly to elements of the data recovery plan, and should be justified. For example, if technical consultants are budgetted for, they should be those required to recover and analyze the data that are needed to address the research topics. Estimates of man-hours required for supervision, administration, fieldwork, analysis, specialist consultation, and other activities should be developed, together with fee schedules for the various types of personnel required. Time and fee schedules should be realistic in terms of project needs and local conditions. To minimize the danger of establishing budgetary "targets" not based on actual needs, the budget should be prepared without reference to the 1% limitation imposed by Sec. 7(a) of Public Law 93-291 on data recovery funds transferred to the Secretary of the Interior. Should the budget for a project to which Sec. 7(a) applies exceed 1% of the total cost of the undertaking, the Council will assist the agency as possible during the consultation process to find ways to reduce costs or to obtain additional funding.
2. Sufficient funds to support the data recovery program should be clearly identified by the agency. Should there be any uncertainty about the availability of funds, this should be revealed to the Council and SHPO so it can be taken into account during the consultation process. If the agency anticipates that the Secretary of the Interior will fund the program under the authority of Sec. 3(b), Sec. 4(a), or Sec. 7(c) of Public Law 93-291, the agency should document to the Council and the SHPO that the Secretary is aware of and has accepted this responsibility.

## XII. Treatment of Non-Archeological Concerns

1. A data recovery program should relate positively to non-archeological concerns with the area and its archeological properties. Such concerns include, but are not limited to:
  - A. Religious and other cultural concerns of Native Americans and/or other descendants of the historic and prehistoric people of the study area;
  - B. The interests of local communities or other groups in the history of the area;

- C. The educational interests of local museums, academic institutions, etc.;
- D. The interests of private property owners in maintaining the integrity of their property rights;
- E. Any architectural, artistic, or aesthetic values that may be present in the property;
- F. Any paleontological, geological, or related values that may be present in the property; and
- G. The environmental integrity of the property and its environs.

### XIII. Flexibility

1. Situations may arise or data may be encountered that were not anticipated in designing a data recovery program, particularly when it is conducted on a potentially complex property (e.g., a recent town site; a prehistoric site that may contain many occupation layers, cemeteries, or architectural remains). Adequate provision should be made for modification of the program to cope with unforeseen discoveries or other unexpected circumstances.
2. Innovative approaches to data recovery, which are constantly being developed, should be encouraged as long as the basic purposes of data recovery to preserve significant information are addressed.



**Appendix A: SOME EXAMPLES OF SCIENTIFIC ARCHEOLOGICAL RESEARCH QUESTIONS**

The following eight questions are examples only, and should not be taken as limiting. Archeology is the study of human behavior, beliefs, social institutions, and organization in the past, and it can and does address a very broad range of questions. The examples chosen illustrate something of the range of research questions addressed by archeology, and provide an idea of the kind of general value a research question should usually have to provide a legitimate rationale for expending public funds.

**Example 1: Pleistocene Extinctions**

At the end of the Ice Age, many species of large mammals in North America died out. Why did this happen? To what extent were people involved in these extinctions? One school of thought holds that the entry of people into North America so upset the balance among species living on the continent that many species could not survive. This question relates to more general questions in ecology about how species interact, and what happens when a new species or new technology is introduced into a stable environment. It also bears on general humanistic issues about the relationship of people to their environment. Addressing this question requires studies of human settlement patterns and lifeways at the end of the Ice Age, as well as the distribution of animal populations and the organization of the natural environment.

**Example 2: Forms of Political Organization**

Human populations, including North American Indian, Euro-American, and non-native minority groups, exhibit a broad array of types of political organization, ranging from small bands organized around family heads to Nation-States with powerful rulers, bureaucracies, complicated economic systems, and specialized industries. Determining how different forms of political organization came to be not only informs us about the culture-histories of particular groups, but provides a basis for generalization about how different forms of organization have developed elsewhere in the world, and what forms political organization may take in the future. Archeological studies of political organization, and change in political organization, usually focus on the organization of settlements, groups of settlements, particular features that reveal the organization of a given society, such as community planning, architecture, and the organization of cemeteries, and systems of trade and interaction. Information on the reasons for the development of different forms of political organization can be developed through the study of both prehistoric and historic archeological properties. Studies of contact and historical sites, utilizing both archeological studies and historical and documentary information, hold particularly fruitful potential for understanding development and change in political organization, especially in the face of environmental and social pressures.

**Example 3: Origins of Agriculture**

Throughout the world, the inception of agriculture seems to have been a major event in cultural evolution, related to the establishment of permanent settlements, elaboration of government and social control, and the beginning

of the population explosion. The reasons why people began to practice agriculture are by no means clear, however, and there are important unanswered questions about the relationship between the development of agriculture and changes in other aspects of human life. The map of prehistoric North America is a complex mosaic of agricultural, semi-agricultural, and non-agricultural groups; it is an ideal place to study why and how people began to practice agriculture, and what its effects were. Studies of agricultural origins typically involve seeking evidence of the initiation of agriculture in different areas, and seeking concurrent changes in settlement organization, local economics, trade, population size and distribution, and the nature of the local environment.

#### Example 4: Contacts between Cultures

Contacts between dissimilar cultures remain a source of problems for humanity today, and have been so in the past. Study of the effects of such contacts in the past, often involving relatively small groups, can allow us to generalize about the effects of such contacts involving much larger, more complex groups today and in the future. Culture-contact studies are particularly appropriate as bases for research in historic sites that reflect contact between American Indian groups and Euroamericans, between Euroamericans and non-native minority groups, or between differing non-native minority groups, and in earlier sites where pre-Columbian contacts are possible.

#### Example 5: Symbolism

Are there basic structures to the human mind, defining how we visualize, characterize, and categorize things in our environment? What role does culture play in defining what we perceive and do not perceive, and how we organize our universe? Such questions are difficult to address, but they are very basic to our understanding of what being human is, to our understanding of differences and similarities among people, and to improving communication among people. When people have purposely organized something, such as art, writing, the contents of a tomb, or the contents of a house, they have left something physical that reflects, to some extent, how they perceive the world around them. This evidence is potentially interpretable through archeology, and can be used to test predictions based on general theory.

#### Example 6: Climatic Change

Meteorologists make predictions about changes in the weather that are quite accurate over short periods of time, but they are limited in longer-term predictions by limited information on past trends. Geophysicists and other specialists can make statements about climatic change over tens of thousands of years, but their accuracy is limited because of the nature of their data base. Archeology can reveal information on the nature and extent of climate change in terms of decades and centuries, often with considerable accuracy.

Archeological sites may contain direct evidence of environmental change resulting from climate change (in the form of fossil pollen, preserved plant material, animal remains, or different types of soil), and they may also reflect such changes indirectly but with considerable accuracy. For example, a change in the organization of settlements in an area may reflect a change in methods of getting or growing food, which in turn may result from a change in the environment caused by a change in climate. Such evidence can be used to establish trends in climate change that serve as the bases for predictions about what will happen in various parts of the nation and the world over the next centuries. Although climate change can be easily reconstructed during the historic period, the possibility of checking the archeological record against archival records, including accounts of various people's reaction and responses to marked climatic change, affords great potential to generalize about human behavior in the face of climatic change.

#### Example 7: Disease

The history of a disease can tell much about its nature, how it responds to varying environments, and how susceptible different types of populations are living under different circumstances. Some diseases leave distinctive traces in the bones, which can be detected either visually or by physical and chemical analysis. Using the skeletal populations of ancient cemeteries, physical anthropologists and paleoepidemiologists can trace the spread of a disease, its effects on different populations, how it changed through time, and how it reacted with populations living under different social, economic, and environmental conditions, and in the face of different medical practices. This makes it possible to make predictions about how the disease, or similar diseases, may behave in the future.

#### Example 8: Diet and Nutrition

The study of a population's diet and nutrition can provide insight into the social, economic, and other human effects of environmental and population pressure, technological innovation, foreign trade and domestic exchange, etc. Comparative study of bones and other faunal remains, plant remains, and artifacts associated with food processing and storage can indicate the degree of dependence on wild versus domesticated and indigenous versus exotic plants and animals, relative nutritional intake and health conditions, methods of procurement, butchering, cooking and other preparation, and the development of new methods and assemblages of artifacts when new foods are introduced.

Appendix B: SOME EXAMPLES OF HUMANISTIC, HISTORICAL, AND LOCAL-INTEREST  
ARCHEOLOGICAL RESEARCH QUESTIONS

Humanistic

The study of the humanities is, of course, an extremely broad field, covering aspects of history, philosophy, architecture, and a variety of other disciplines. It overlaps substantially with the social sciences; hence most research questions of the type discussed in Appendix A would be of humanistic interest as well. Example of more strictly humanistic research questions that might form legitimate bases for data recovery include:

Example 1: Study of an architectural style:

A given high or vernacular architectural style might be poorly documented by surviving examples or written and drawn records, or the evolution of the style through time might be poorly known. Excavation or other documentation of structures, or sites where structures once stood that represented the style, might be directed toward elucidating the style and its evolution.

Example 2: Study of an art form:

A site containing prehistoric rock art might be studied by art historians to document the forms and modes of expression it represents in comparison with other types of artistic expression.

Example 3: Study of a philosophy:

Throughout the history of the United States, utopian communities have developed that have isolated themselves from the "mainstream" population to practice their chosen ways of life without contamination. Often elements of the community's philosophy have been expressed in its organization of space (eg., organization along sexual rather than family-unit lines) or in its choice of artifacts (eg., rejection of power tools). Archeological study of an extinct or extant utopian community could both indicate how these elements are expressed, and how and whether change has occurred in such elements over time.

Historical

Virtually any study of an archeological property deals with history in some sense, but some legitimate studies are directed specifically toward checking or correcting historical accounts, or toward broadening and deepening our understanding of history; for example:

Example 4: Early explorers

The lines of march, stopping places, and landfalls of early explorers of North America are often at issue among historians. Archeological studies can contribute to settling such disputes by showing that given locations were or were not occupied at the time the explorer-of-interest was in the vicinity, did or did not look like locations described by the

explorer or members of his or her party, do or do not contain artifacts attributable to the explorer, and so on.

#### Example 5: PreColumbian Transoceanic contacts

Historians and archeologists have argued for many years about whether there were contacts between Europe, Africa, and Asia and the Americas, before the voyages of Columbus. The pre-Columbian presence of Scandinavians along the Atlantic coast of Canada, and probably of the United States as well, has now been reasonably well demonstrated; some scholars argue for the presence of Sumerians, Egyptians, Lybians, Phoenicians, Hebrews, Basques, and Celts, and support their contentions with archeological evidence ranging from architectural similarities between certain European and American structures, through the identification (and sometimes, decipherment) of rock carvings thought to resemble European and African writing systems, to the discovery of artifacts and evidence of industrial and agricultural practices associatable with Europe, Africa, or Asia. Archeological studies are potentially the primary method for validating or disvalidating such arguments.

#### Example 6: Descriptions of little-documented social groups, activities, processes

Written history tends to document the activities of the affluent and influential. The contributions of those groups that wielded little economic power, and that were often illiterate, at least in English, to the history of the Nation and its regions are often poorly documented. Archeology can be used to fill in gaps in the historical records, to give a more balanced picture. Similarly, archeology can be used to flesh out the record of groups that have been well documented in certain aspects of their lives. For example, there is much documentary data on southern Plantation life in the early 19th century, but these data provide little besides stereotypes regarding the daily life of slaves, or often of slave/owner relationships. Archeology can fill out this record by revealing what slaves ate, what sorts of groups they lived in, what tools and weapons their owners entrusted them with, etc.; it also can reveal how the owner ate, what he or she imported or produced onsite, and how his or her way of life differed from those of the slaves. Archeology can also be used to elucidate otherwise little-known industrial or agricultural practices; the excavation and mapping of 19th century mill sites, for example, can provide information on how water resources were used and how milling systems operated--information that is often not available in useful form in written records.

#### Local Interest

A local community, neighborhood, or social group may have cultural interests in its past that can be satisfied or developed through archeology. These may provide an important basis for data recovery; for example:

#### Example 7: Traditional history

A local American Indian, Eskimo, Hawaiian, or other traditional cultural group may want to know how its traditional history relates to information in and on the ground. The group may have traditions about its origins,

the other groups it encountered in coming into its area, early leaders, wars, natural catastrophes, or other events that can be elucidated through archeology. Very ancient traditional history, which often involves supernatural events, is seldom subject to very detailed archeological study, but more recent historical events may be fixed precisely in time, and described in detail from the archeological record.

Example 8: "How our ancestors lived"

The residents of a community or neighborhood that has been long at the same location may simply be curious about how their ancestors lived. Particularly where the community or neighborhood represents a population that is poorly represented in written records, archeology may be the only way to satisfy this curiosity, which in turn is an expression of the identity and sense of place whose perceived imminent loss in large part stimulated enactment of the National Historic Preservation Act.

**APPENDIX 4**

**Department of the Interiors' Standards and Guidelines  
"Archeology and Historic Preservation"**

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# **federal register**

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**Thursday  
September 29, 1983**

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**Part IV**

**Department of the  
Interior**

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**National Park Service**

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**Archeology and Historic Preservation;  
Secretary of the Interior's Standards and  
Guidelines**



**DEPARTMENT OF THE INTERIOR****National Park Service****Archeology and Historic Preservation;  
Secretary of the Interior's Standards  
and Guidelines****AGENCY:** National Park Service, Interior.**ACTION:** Notice.

**SUMMARY:** This notice sets forth the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. These standards and guidelines are not regulatory and do not set or interpret agency policy. They are intended to provide technical advice about archeological and historic preservation activities and methods.

**DATE:** These Standards and Guidelines are effective on September 29, 1983.

**FOR FURTHER INFORMATION CONTACT:** Lawrence E. Aten, Chief, Interagency Resources Division, National Park Service, United States Department of the Interior, Washington, D.C. 20240 (202-343-8500). A Directory of Technical Information listing other sources of supporting information is available from the National Park Service.

**SUPPLEMENTARY INFORMATION:** The Standards and Guidelines are prepared under the authority of Sections 101(f), (g), and (h), and Section 110 of the National Historic Preservation Act of 1966, as amended. State Historic Preservation Officers; Federal Preservation Officers including those of the Department of Agriculture, Department of Defense, Smithsonian Institution and General Services Administration; the Advisory Council on Historic Preservation; the National Trust for Historic Preservation; and other interested parties were consulted during the development of the Standards and Guidelines; additional consultation with these agencies will occur as the Standards and Guidelines are tested during their first year of use.

**Purpose**

The proposed Standards and the philosophy on which they are based result from nearly twenty years of intensive preservation activities at the Federal, State, and local levels.

The purposes of the Standards are:

To organize the information gathered about preservation activities.

To describe results to be achieved by Federal agencies, States, and others when planning for the identification, evaluation, registration and treatment of historic properties.

To integrate the diverse efforts of many entities performing historic

preservation into a systematic effort to preserve our nation's cultural heritage.

**Uses of the Standards**

The following groups or individuals are encouraged to use these Standards: Federal agency personnel responsible for cultural resource management pursuant to Section 110 of the National Historic Preservation Act, as amended, in areas under Federal jurisdiction. A separate series of guidelines advising Federal agencies on their specific historic preservation activities under Section 110 is in preparation.

State Historic Preservation Offices responsible under the National Historic Preservation Act, as amended, for making decisions about the preservation of historic properties in their States in accordance with appropriate regulations and the Historic Preservation Fund Grants Management Manual. The State Historic Preservation Offices serve as the focal point for preservation planning and act as a central state-wide repository of collected information.

Local governments wishing to establish a comprehensive approach to the identification, evaluation, registration and treatment of historic properties within their jurisdictions.

Other individuals and organizations needing basic technical standards and guidelines for historic preservation activities.

**Organization**

This material is organized in three sections: Standards; Guidelines; and recommended technical sources, cited at the end of each set of guidelines. Users of this document are expected to consult the recommended technical sources to obtain guidance in specific cases.

**Review of the Standards and Guidelines**

The Secretary of the Interior's Standards for Rehabilitation have recently undergone extensive review and their guidelines made current after 5 years of field use. Users and other interested parties are encouraged to submit written comments on the utility of these Standards and Guidelines except for the Rehabilitation Standards mentioned above. This edition will be thoroughly reviewed by the National Park Service (including consultation with Federal and State agencies), after the end of its first full year of use and any necessary modifications will be made. Subsequent reviews are anticipated as needed. Comments should be sent to Chief, Interagency Resources Division, National Park Service, United States Department of the Interior, Washington, D.C. 20240.

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**Secretary of the Interior's Standards for Preservation Planning**

Preservation planning is a process that organizes preservation activities (identification, evaluation, registration and treatment of historic properties) in a logical sequence. The Standards for Planning discuss the relationship among these activities while the remaining activity standards consider how each activity should be carried out. The Professional Qualifications Standards discuss the education and experience required to carry out various activities.

The Standards for Planning outline a process that determines when an area should be examined for historic properties, whether an identified property is significant, and how a significant property should be treated.

Preservation planning is based on the following principles:

—Important historic properties cannot be replaced if they are destroyed. Preservation planning provides for conservative use of these properties, preserving them in place and avoiding harm when possible and altering or destroying properties only when necessary.

—If planning for the preservation of historic properties is to have positive effects, it must begin before the identification of all significant properties has been completed. To make responsible decisions about historic properties, existing information must be used to the maximum extent and new information must be acquired as needed.

—Preservation planning includes public participation. The planning process should provide a forum for open discussion of preservation issues. Public involvement is most meaningful when it is used to assist in defining values of properties and preservation planning issues, rather than when it is limited to review of decisions already made. Early

and continuing public participation is essential to the broad acceptance of preservation planning decisions.

Preservation planning can occur at several levels or scales: in a project area; in a community; in a State as a whole; or in the scattered or contiguous landholdings of a Federal agency. Depending on the scale, the planning process will involve different segments of the public and professional communities and the resulting plans will vary in detail. For example, a State preservation plan will likely have more general recommendations than a plan for a project area or a community. The planning process described in these Standards is flexible enough to be used at all levels while providing a common structure which promotes coordination and minimizes duplication of effort. The Guidelines for Preservation Planning contain additional information about how to integrate various levels of planning.

#### *Standard I. Preservation Planning Establishes Historic Contexts*

Decisions about the identification, evaluation, registration and treatment of historic properties are most reliably made when the relationship of individual properties to other similar properties is understood. Information about historic properties representing aspects of history, architecture, archeology, engineering and culture must be collected and organized to define these relationships. This organizational framework is called a "historic context." The historic context organizes information based on a cultural theme and its geographical and chronological limits. Contexts describe the significant broad patterns of development in an area that may be represented by historic properties. The development of historic contexts is the foundation for decisions about identification, evaluation, registration and treatment of historic properties.

#### *Standard II. Preservation Planning Uses Historic Contexts To Develop Goals and Priorities for the Identification, Evaluation, Registration and Treatment of Historic Properties*

A series of preservation goals is systematically developed for each historic context to ensure that the range of properties representing the important aspects of each historic context is identified, evaluated and treated. Then priorities are set for all goals identified for each historic context. The goals with assigned priorities established for each historic context are integrated to produce a comprehensive and consistent set of goals and priorities for all historic

contexts in the geographical area of a planning effort.

The goals for each historic context may change as new information becomes available. The overall set of goals and priorities are then altered in response to the changes in the goals and priorities for the individual historic contexts.

Activities undertaken to meet the goals must be designed to deliver a usable product within a reasonable period of time. The scope of the activity must be defined so the work can be completed with available budgeted program resources.

#### *Standard III. The Results of Preservation Planning Are Made Available for Integration Into Broader Planning Processes*

Preservation of historic properties is one element of larger planning processes. Planning results, including goals and priorities, information about historic properties, and any planning documents, must be transmitted in a usable form to those responsible for other planning activities. Federally mandated historic preservation planning is most successfully integrated into project management planning at an early stage. Elsewhere, this integration is achieved by making the results of preservation planning available to other governmental planning bodies and to private interests whose activities affect historic properties.

#### *Secretary of the Interior's Guidelines for Preservation Planning*

##### *Introduction*

These Guidelines link the Standards for Preservation Planning with more specific guidance and technical information. They describe one approach to meeting the Standards for Preservation Planning. Agencies, organizations or individuals proposing to approach planning differently may wish to review their approaches with the National Park Service.

The Guidelines are organized as follows:

Managing the Planning Process  
 Developing Historic Contexts  
 Developing Goals for a Historic Context  
 Integrating Individual Historic Contexts—  
 Creating the Preservation Plan  
 Coordinating with Management Frameworks  
 Recommended Sources of Technical Information

##### *Managing the Planning Process*

The preservation planning process must include an explicit approach to implementation, a provision for review and revision of all elements, and a mechanism for resolving conflicts within

the overall set of preservation goals and between this set of goals and other land use planning goals. It is recommended that the process and its products be described in public documents.

##### *Implementing the Process*

The planning process is a continuous cycle. To establish and maintain such a process, however, the process must be divided into manageable segments that can be performed within a defined period, such as a fiscal year or budget cycle. One means of achieving this is to define a period of time during which all the preliminary steps in the planning process will be completed. These preliminary steps would include setting a schedule for subsequent activities.

##### *Review and Revision*

Planning is a dynamic process. It is expected that the content of the historic contexts described in Standard I and the goals and priorities described in Standard II will be altered based on new information obtained as planning proceeds. The incorporation of this information is essential to improve the content of the plan and to keep it up-to-date and useful. New information must be reviewed regularly and systematically, and the plan revised accordingly.

##### *Public Participation*

The success of the preservation planning process depends on how well it solicits and integrates the views of various groups. The planning process is directed first toward resolving conflicts in goals for historic preservation, and second toward resolving conflicts between historic preservation goals and other land-use planning goals. Public participation is integral to this approach and includes at least the following actions:

1. Involving historians, architectural historians, archeologists, historical architects, folklorists and persons from related discipline to define, review and revise the historic contexts, goals and priorities;
2. Involving interested individuals, organizations and communities in the planning area in identifying the kinds of historic properties that may exist and suitable protective measures;
3. Involving prospective users of the preservation plan in defining issues, goals and priorities;
4. Providing for coordination with other planning efforts at local, state, regional and national levels, as appropriate; and

5. Creating mechanisms for identifying and resolving conflicts about historic preservation issues.

The development of historic contexts, for example, should be based on the professional input of all disciplines involved in preservation and not be limited to a single discipline. For prehistoric archeology, for example, data from fields such as geology, geomorphology and geography may also be needed. The individuals and organizations to be involved will depend, in part, on those present or interested in the planning area.

#### *Documents Resulting from the Planning Process*

In most cases, the planning process produces documents that explain how the process works and that discuss the historic contexts and related goals and priorities. While the process can operate in the absence of these documents, planning documents are important because they are the most effective means of communicating the process and its recommendations to others. Planning documents also record decisions about historic properties.

As various parts of the planning process are reviewed and revised to reflect current information, related documents must also be updated. Planning documents should be created in a form that can be easily revised. It is also recommended that the format, language and organization of any documents or other materials (visual aids, etc.) containing preservation planning information meet the needs of prospective users.

#### *Developing Historic Contexts*

##### *General Approach*

Available information about historic properties must be divided into manageable units before it can be useful for planning purposes. Major decisions about identifying, evaluating, registering and treating historic properties are most reliably made in the context of other related properties. A historic context is an organizational format that groups information about related historic properties, based on a theme, geographic limits and chronological period. A single historic context describes one or more aspects of the historic development of an area, considering history, architecture, archeology, engineering and culture; and identifies the significant patterns that individual historic properties represent, for example, Coal Mining in Northeastern Pennsylvania between 1800 and 1930. A set of historic contexts

is a comprehensive summary of all aspects of the history of the area.

The historic context is the cornerstone of the planning process. The goal of preservation planning is to identify, evaluate, register and treat the full range of properties representing each historic context, rather than only one or two types of properties. Identification activities are organized to ensure that research and survey activities include properties representing all aspects of the historic context. Evaluation uses the historic context as the framework within which to apply the criteria for evaluation to specific properties or property types. Decisions about treatment of properties are made with the goal of treating the range of properties in the context. The use of historic contexts in organizing major preservation activities ensures that those activities result in the preservation of the wide variety of properties that represent our history, rather than only a small, biased sample of properties.

Historic contexts, as theoretical constructs, are linked to actual historic properties through the concept of property type. Property types permit the development of plans for identification, evaluation and treatment even in the absence of complete knowledge of individual properties. Like the historic context, property types are artificial constructs which may be revised as necessary.

Historic contexts can be developed at a variety of scales appropriate for local, State and regional planning. Given the probability of historic contexts overlapping in an area, it is important to coordinate the development and use of contexts at all levels. Generally, the State Historic Preservation Office possesses the most complete body of information about historic properties and, in practice, is in the best position to perform this function.

The development of historic contexts generally results in documents that describe the prehistoric processes or patterns that define the context. Each of the contexts selected should be developed to the point of identifying important property types to be useful in later preservation decision-making. The amount of detail included in these summaries will vary depending on the level (local, state, regional, or national) at which the contexts are developed and on their intended uses. For most planning purposes, a synopsis of the written description of the historic context is sufficient.

##### *Creating a Historic Context*

Generally, historic contexts should not be constructed so broadly as to

include all property types under a single historic context or so narrowly as to contain only one property type per historic context. The following procedures should be followed in creating a historic context.

##### *1. Identify the concept, time period and geographical limits for the historic context*

Existing information, concepts, theories, models and descriptions should be used as the basis for defining historic contexts. Biases in primary and secondary sources should be identified and accounted for when existing information is used in defining historic contexts.

The identification and description of historic contexts should incorporate contributions from all disciplines involved in historic preservation. The chronological period and geographical area of each historic context should be defined after the conceptual basis is established. However, there may be exceptions, especially in defining prehistoric contexts where drainage systems or physiographic regions often are outlined first. The geographical boundaries for historic contexts should not be based upon contemporary political, project or other contemporary boundaries if those boundaries do not coincide with historical boundaries. For example, boundaries for prehistoric contexts will have little relationship to contemporary city, county or state boundaries.

##### *2. Assemble the existing information about the historic context*

*a. Collecting information:* Several kinds of information are needed to construct a preservation plan. Information about the history of the area encompassed by the historic context must be collected, including any information about historic properties that have already been identified. Existing survey or inventory entries are an important source of information about historic properties. Other sources may include literature on prehistory, history, architecture and the environment; social and environmental impact assessments; county and State land use plans; architectural and folklife studies and oral histories; ethnographic research; State historic inventories and registers; technical reports prepared for Section 106 or other assessments of historic properties; and direct consultation with individuals and organized groups.

In addition, organizations and groups that may have important roles in defining historic contexts and values

should be identified. In most cases a range of knowledgeable professionals drawn from the preservation, planning and academic communities will be available to assist in defining contexts and in identifying sources of information. In other cases, however, development of historic contexts may occur in areas whose history or prehistory has not been extensively studied. In these situations, broad general historic contexts should be initially identified using available literature and expertise, with the expectation that the contexts will be revised and subdivided in the future as primary source research and field survey are conducted. It is also important to identify such sources of information as existing planning data, which is needed to establish goals for identification, evaluation, and treatment, and to identify factors that will affect attainment of those goals.

The same approach for obtaining information is not necessarily desirable for all historic contexts. Information should not be gathered without first considering its relative importance to the historic context, the cost and time involved, and the expertise required to obtain it. In many cases, for example, published sources may be used in writing initial definitions of historic contexts; archival research or field work may be needed for subsequent activities.

**b. Assessing information:** All information should be reviewed to identify bias in historic perspective, methodological approach, or area of coverage. For example, field surveys for archeological sites may have ignored historic archeological sites, or county land use plans may have emphasized only development goals.

### 3. Synthesize information

The information collection and analysis results in a written narrative of the historic context. This narrative provides a detailed synthesis of the data that have been collected and analyzed. The narrative covers the history of the area from the chosen perspective and identifies important patterns, events, persons or cultural values. In the process of identifying the important patterns, one should consider:

a. Trends in area settlement and development, if relevant;

b. Aesthetic and artistic values embodied in architecture, construction technology or craftsmanship;

c. Research values or problems relevant to the historic context; social and physical sciences and humanities; and cultural interests of local communities; and

d. Intangible cultural values of ethnic groups and native American peoples.

### 4. Define property types

A property type is a grouping of individual properties based on shared physical or associative characteristics. Property types link the ideas incorporated in the theoretical historic context with actual historic properties that illustrate those ideas. Property types defined for each historic context should be directly related to the conceptual basis of the historic context. Property types defined for the historic context "Coal Mining in Northeastern Pennsylvania, 1800-1930" might include coal extraction and processing complexes; railroad and canal transportation systems; commercial districts; mine workers' housing; churches, social clubs and other community facilities reflecting the ethnic origins of workers; and residences and other properties associated with mine owners and other industrialists.

**a. Identify property types:** The narrative should discuss the kinds of properties expected within the geographical limits of the context and group them into those property types most useful in representing important historic trends.

Generally, property types should be defined after the historic context has been defined. Property types in common usage ("Queen Anne houses," "mill buildings," or "stratified sites") should not be adopted without first verifying their relevance to the historic contexts being used.

**b. Characterize the locational patterns of property types:** Generalizations about where particular types of properties are likely to be found can serve as a guide for identification and treatment. Generalizations about the distribution of archeological properties are frequently used. The distribution of other historic properties often can be estimated based on recognizable historical, environmental or cultural factors that determined their location. Locational patterns of property types should be based upon models that have an explicit theoretical or historical basis and can be tested in the field. The model may be the product of historical research and analysis ("Prior to widespread use of steam power, mills were located on rivers and streams able to produce water power" or "plantation houses in the Mississippi Black Belt were located on sandy clay knolls"), or it may result from sampling techniques. Often the results of statistically valid sample surveys can be used to describe the locational patterns of a representative portion of properties

belonging to a particular property type. Other surveys can also provide a basis for suggesting locational patterns if a diversity of historic properties was recorded and a variety of environmental zones was inspected. It is likely that the identification of locational patterns will come from a combination of these sources. Expected or predicted locational patterns of property types should be developed with a provision made for their verification.

**c. Characterize the current condition of property types:** The expected condition of property types should be evaluated to assist in the development of identification, evaluation and treatment strategies, and to help define physical integrity thresholds for various property types. The following should be assessed for each property type:

(1) Inherent characteristics of a property type that either contribute to or detract from its physical preservation. For example, a property type commonly constructed of fragile materials is more likely to be deteriorated than a property type constructed of durable materials; structures whose historic function or design limits the potential for alternative uses (water towers) are less likely to be reused than structures whose design allows a wide variety of other uses (commercial buildings or warehouses).

(2) Aspects of the social and natural environment that may affect the preservation or visibility of the property type. For example, community values placed on certain types of properties (churches, historic cemeteries) may result in their maintenance while the need to reuse valuable materials may stimulate the disappearance of properties like abandoned houses and barns.

It may be most efficient to estimate of the condition of property types based on professional knowledge of existing properties and field test these estimates using a small sample of properties representative of each type.

### 5. Identify information needs

Filling gaps in information is an important element of the preservation plan designed for each historic context. Statements of the information needed should be as specific as possible, focusing on the information needed, the historic context and property types it applies to, and why the information is needed to perform identification, evaluation, or treatment activities.

### Developing Goals for a Historic Context Developing Goals

A goal is a statement of preferred preservation activities, which is

generally stated in terms of property types.

The purpose of establishing preservation goals is to set forth a "best case" version of how properties in the historic context should be identified, evaluated, registered and treated.

Preservation goals should be oriented toward the greatest possible protection of properties in the historic context and should be based on the principle that properties should be preserved in place if possible, through affirmative treatments like rehabilitation, stabilization or restoration. Generally, goals will be specific to the historic context and will often be phrased in terms of property types. Some of these goals will be related to information needs previously identified for the historic context. Collectively, the goals for a historic context should be a coherent statement of program direction covering all aspects of the context.

For each goal, a statement should be prepared identifying:

1. The goal, including the context and property types to which the goal applies and the geographical area in which they are located;
2. The activities required to achieve the goal;
3. The most appropriate methods or strategies for carrying out the activities;
4. A schedule within which the activities should be completed; and
5. The amount of effort required to accomplish the goal, as well as a way to evaluate progress toward its accomplishment.

#### *Setting priorities for goals*

Once goals have been developed they need to be ranked in importance. Ranking involves examining each goal in light of a number of factors.

1. General social, economic, political and environmental conditions and trends affecting (positively and negatively) the identification, evaluation, registration and treatment of property types in the historic context.

Some property types in the historic context may be more directly threatened by deterioration, land development patterns, contemporary use patterns, or public perceptions of their value, and such property types should be given priority consideration.

2. Major cost or technical considerations affecting the identification, evaluation and treatment of property types in the historic context.

The identification or treatment of some property types may be technically possible but the cost prohibitive; or techniques may not currently be perfected (for example, the identification of submerged sites or objects, or the

evaluation of sites containing material for which dating techniques are still being developed).

3. Identification, evaluation, registration and treatment activities previously carried out for property types in the historic context.

If a number of properties representing one aspect of a historic context have been recorded or preserved, treatment of additional members of that property type may receive lower priority than treatment of a property type for which no examples have yet been recorded or preserved. This approach ensures that the focus of recording or preserving all elements of the historic context is retained, rather than limiting activities to preserving properties representing only some aspects of the context.

The result of considering the goals in light of these concerns will be a list of refined goals ranked in order of priority.

#### *Integrating Individual Contexts— Creating the Preservation Plan*

When historic contexts overlap geographically, competing goals and priorities must be integrated for effective preservation planning. The ranking of goals for each historic context must be reconciled to ensure that recommendations for one context do not contradict those for another. This important step results in an overall set of priorities for several historic contexts and a list of the activities to be performed to achieve the ranked goals. When applied to a specific geographical area, this is the preservation plan for that area.

It is expected that in many instances historic contexts will overlap geographically. Overlapping contexts are likely to occur in two combinations—those that were defined at the same scale (i.e., textile development in Smithtown 1850-1910 and Civil War in Smithtown 1855-1870) and those defined at different scales (i.e., Civil War in Smithtown and Civil War in the Shenandoah Valley). The contexts may share the same property types, although the shared property types will probably have different levels of importance, or they may group the same properties into different property types, reflecting either a different scale of analysis or a different historical perspective.

As previously noted, many of the goals that are formulated for a historic context will focus on the property types defined for that context. Thus it is critical that the integration of goals include the explicit consideration of the potential for shared property type membership by individual properties. For example, when the same-property

types are used by two contexts, reconciling the goals will require weighing the level of importance assigned to each property type. The degree to which integration of historic contexts must involve reconciling property types may be limited by the coordinated development of historic contexts used at various levels.

#### *Integration with Management Frameworks*

Preservation goals and priorities are adapted to land units through integration with other planning concerns. This integration must involve the resolution of conflicts that arise when competing resources occupy the same land base. Successful resolution of these conflicts can often be achieved through judicious combination of inventory, evaluation and treatment activities. Since historic properties are irreplaceable, these activities should be heavily weighted to discourage the destruction of significant properties and to be compatible with the primary land use.

#### *Recommended Sources of Technical Information*

*Resource Protection Planning Process.* State and Plans Grants Division, 1980. Washington, D.C. Available from Survey and Planning Branch, Interagency Resources Division, National Park Service, Department of the Interior, Washington, D.C. 20240. Outlines a step-by-step approach to implementing the resource protection planning process.

*Resource Protection Planning Process Case Studies.* Available from Survey and Planning Branch, Interagency Resources Division, National Park Service, Department of the Interior, Washington, D.C. 20240. Reports prepared by State Historic Preservation Offices and other using the planning process.

*Planning Theory.* Andreas Faludi, 1980. Oxford: Pergamon Press. Constructs a model of planning using concepts borrowed from general systems theory.

#### **SECRETARY OF THE INTERIOR'S STANDARDS FOR IDENTIFICATION**

Identification activities are undertaken to gather information about historic properties in an area. The scope of these activities will depend on: existing knowledge about properties; goals for survey activities developed in the planning process; and current management needs.

#### *Standard 1. Identification of Historic Properties Is Undertaken to the Degree Required To Make Decisions*

Archival research and survey activities should be designed to gather the information necessary to achieve defined preservation goals. The

objectives, chosen methods and techniques, and expected results of the identification activities are specified in a research design. These activities may include archival research and other techniques to develop historic contexts, sampling an area to gain a broad understanding of the kinds of properties it contains, or examining every property in an area as a basis for property specific decisions. Where possible, use of quantitative methods is important because it can produce an estimate, whose reliability may be assessed, of the kinds of historic properties that may be present in the studied area. Identification activities should use a search procedure consistent with the management needs for information and the character of the area to be investigated. Careful selection of methods, techniques and level of detail is necessary so that the gathered information will provide a sound basis for making decisions.

#### *Standard II. Results of Identification Activities are Integrated Into the Preservation Planning Process*

Results of identification activities are reviewed for their effects on previous planning data. Archival research or field survey may refine the understanding of one or more historic contexts and may alter the need for additional survey or study of particular property types. Incorporation of the results of these activities into the planning process is necessary to ensure that the planning process is always based on the best available information.

#### *Standard III. Identification Activities Include Explicit Procedures for Record-Keeping and Information Distribution*

Information gathered in identification activities is useful in other preservation planning activities only when it is systematically gathered and recorded, and made available to those responsible for preservation planning. The results of identification activities should be reported in a format that summarizes the design and methods of the survey, provides a basis for others to review the results, and states where information on identified properties is maintained. However, sensitive information, like the location of fragile resources, must be safeguarded from general public distribution.

#### *Secretary of the Interior's Guidelines for Identification*

##### *Introduction*

These Guidelines link the Standards for Identification with more specific guidance and technical information. The

Guidelines outline one approach to meet the Standards for Identification. Agencies, organizations and individuals proposing to approach identification differently may wish to review their approaches with the National Park Service.

The Guidelines are organized as follows:

*Role of Identification in the Planning Process*  
 Performing Identification  
 Integrating Identification Results  
 Reporting Identification Results  
 Recommended Sources of Technical Information

#### *Role of Identification in the Planning Process*

Identification is undertaken for the purpose of locating historic properties and is composed of a number of activities which include, but are not limited to archival research, informant interviews, field survey and analysis. Combinations of these activities may be selected and appropriate levels of effort assigned to produce a flexible series of options. Generally identification activities will have multiple objectives, reflecting complex management needs. Within a comprehensive planning process, identification is normally undertaken to acquire property-specific information needed to refine a particular historic context or to develop any new historic contexts. (See the Guidelines for Preservation Planning for discussion of information gathering to establish plans and to develop historic contexts.) The results of identification activities are then integrated into the planning process so that subsequent activities are based on the most up-to-date information. Identification activities are also undertaken in the absence of a comprehensive planning process, most frequently as part of a specific land-use or development project. Even lacking a formally developed preservation planning process, the benefits of efficient, goal-directed research may be obtained by the development of localized historic contexts, suitable in scale for the project area, as part of the background research which customarily occurs before field survey efforts.

#### *Performing Identification Research Design*

Identification activities are essentially research activities for which a statement of objectives or research design should be prepared before work is performed. Within the framework of a comprehensive planning process, the research design provides a vehicle for integrating the various activities performed during the identification

process and for linking those activities directly to the goals and the historic context(s) for which those goals were defined. The research design stipulates the logical integration of historic context(s) and field and laboratory methodology. Although these tasks may be performed individually, they will not contribute to the greatest extent possible in increasing information on the historic context unless they relate to the defined goals and to each other. Additionally, the research design provides a focus for the integration of interdisciplinary information. It ensures that the linkages between specialized activities are real, logical and address the defined research questions. Identification activities should be guided by the research design and the results discussed in those terms. (See Reporting Identification Results)

The research design should include the following:

1. *Objectives* of the identification activities. For example: to characterize the range of historic properties in a region; to identify the number of properties associated with a context; to gather information to determine which properties in an area are significant.

The statement of objectives should refer to current knowledge about the historic contexts or property types, based on background research or assessments of previous research. It should clearly define the physical extent of the area to be investigated and the amount and kinds of information to be gathered about properties in the area.

2. *Methods* to be used to obtain the information. For example: archival research or field survey. Research methods should be clearly and specifically related to research problems.

Archival research or survey methods should be carefully explained so that others using the gathered information can understand how the information was obtained and what its possible limitations or biases are.

The methods should be compatible with the past and present environmental character of the geographical area under study and the kinds of properties most likely to be present in the area.

3. *The expected results* and the reasons for those expectations.

Expectations about the kind, number, location, character and condition of historic properties are generally based on a combination of background research, proposed hypotheses, and analogy to the kinds of properties known to exist in areas of similar environment or history.

### Archival Research

Archival or background research is generally undertaken prior to any field survey. Where identification is undertaken as part of a comprehensive planning process, background research may have taken place as part of the development of the historic contexts (see the Guidelines for Preservation Planning). In the absence of previously developed historic contexts, archival research should address specific issues and topics. It should not duplicate previous work. Sources should include, but not be limited to, historical maps, atlases, tax records, photographs, ethnographies, folklife documentation, oral histories and other studies, as well as standard historical reference works, as appropriate for the research problem. (See the Guidelines for Historical Documentation for additional discussion.)

### Field Survey

The variety of field survey techniques available, in combination with the varying levels of effort that may be assigned, give great flexibility to implementing field surveys. It is important that the selection of field survey techniques and level of effort be responsive to the management needs and preservation goals that direct the survey effort.

Survey techniques may be loosely grouped into two categories, according to their results. First are the techniques that result in the characterization of a region's historic properties. Such techniques might include "windshield" or walk-over surveys, with perhaps a limited use of sub-surface survey. For purposes of these Guidelines, this kind of survey is termed a "reconnaissance." The second category of survey techniques is those that permit the identification and description of specific historic properties in an area; this kind of survey effort is termed "intensive." The terms "reconnaissance" and "intensive" are sometimes defined to mean particular survey techniques, generally with regard to prehistoric sites. The use of the terms here is general and is not intended to redefine the terms as they are used elsewhere.

*Reconnaissance survey* might be most profitably employed when gathering data to refine a developed historic context—such as checking on the presence or absence of expected property types, to define specific property types or to estimate the distribution of historic properties in an area. The results of regional characterization activities provide a general understanding of the historic

properties in a particular area and permit management decisions that consider the sensitivity of the area in terms of historic preservation concerns and the resulting implications for future land use planning. The data should allow the formulation of estimates of the necessity, type and cost of further identification work and the setting of priorities for the individual tasks involved. In most cases, areas surveyed in this way will require resurvey if more complete information is needed about specific properties.

A reconnaissance survey should document:

1. The kinds of properties looked for;
2. The boundaries of the area surveyed;
3. The method of survey, including the extent of survey coverage;
4. The kinds of historic properties present in the surveyed area;
5. Specific properties that were identified, and the categories of information collected; and
6. Places examined that did not contain historic properties.

*Intensive survey* is most useful when it is necessary to know precisely what historic properties exist in a given area or when information sufficient for later evaluation and treatment decisions is needed on individual historic properties. *Intensive survey* describes the distribution of properties in an area; determines the number, location, and condition of properties; determines the types of properties actually present within the area; permits classification of individual properties; and records the physical extent of specific properties.

An intensive survey should document:

1. The kinds of properties looked for;
2. The boundaries of the area surveyed;
3. The method of survey, including an estimate of the extent of survey coverage;
4. A record of the precise location of all properties identified; and
5. Information on the appearance, significance, integrity and boundaries of each property sufficient to permit an evaluation of its significance.

### Sampling

Reconnaissance or intensive survey methods may be employed according to a sampling procedure to examine less-than-the-total project or planning area.

Sampling can be effective when several locations are being considered for an undertaking or when it is desirable to estimate the cultural resources of an area. In many cases, especially where large land areas are involved, sampling can be done in stages. In this approach, the results of

the initial large area survey are used to structure successively smaller, more detailed surveys. This "nesting" approach is an efficient technique since it enables characterization of both large and small areas with reduced effort. As with all investigative techniques, such procedures should be designed to permit an independent assessment of results.

Various types of sample surveys can be conducted, including, but not limited to: random, stratified and systematic. Selection of sample type should be guided by the problem the survey is expected to solve, the nature of the expected properties and the nature of the area to be surveyed.

Sample surveys may provide data to estimate frequencies of properties and types of properties within a specified area at various confidence levels. Selection of confidence levels should be based upon the nature of the problem the sample survey is designed to address.

Predictive modeling is an application of basic sampling techniques that projects or extrapolates the number, classes and frequencies of properties in unsurveyed areas based on those found in surveyed areas. Predictive modeling can be an effective tool during the early stages of planning an undertaking, for targeting field survey and for other management purposes. However, the accuracy of the model must be verified; predictions should be confirmed through field testing and the model redesigned and retested if necessary.

### Special survey techniques

Special survey techniques may be needed in certain situations.

Remote sensing techniques may be the most effective way to gather background environmental data, plan more detailed field investigations, discover certain classes of properties, map sites, locate and confirm the presence of predicted sites, and define features within properties. Remote sensing techniques include aerial, subsurface and underwater techniques. Ordinarily the results of remote sensing should be verified through independent field inspection before making any evaluation or statement regarding frequencies or types of properties.

### Integrating Identification Results

The results of identification efforts must be integrated into the planning process so that planning decisions are based on the best available information. The new information is first assessed against the objectives of the identification effort to determine whether the gathered information meets



the defined identification goals for the historic context(s); then the goals are adjusted accordingly. In addition, the historic context narrative, the definition of property types and the planning goals for evaluation and treatment are all adjusted as necessary to accommodate the new data.

#### Reporting Identification Results

Reporting of the results of identification activities should begin with the statement of objectives prepared before undertaking the survey. The report should respond to each of the major points documenting:

1. Objectives;
2. Area researched or surveyed;
3. Research design or statement of objectives;
4. Methods used, including the intensity of coverage. If the methods differ from those outlined in the statement of objectives, the reasons should be explained.
5. Results: how the results met the objectives; result analysis, implications and recommendations; where the compiled information is located.

A summary of the survey results should be available for examination and distribution. Identified properties should then be evaluated for possible inclusion in appropriate inventories.

Protection of information about archeological sites or other properties that may be threatened by dissemination of that information is necessary. These may include fragile archeological properties or properties such as religious sites, structures, or objects, whose cultural value would be compromised by public knowledge of the property's location.

#### Recommended Sources of Technical Information

*The Archeological Survey: Methods and Uses.* Thomas F. King. Interagency Archeological Services, U.S. Department of the Interior, 1978. Washington, D.C. Available through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. GPO stock number 034-018-00091. Written primarily for the non-archeologist, this publication presents methods and objectives for archeological surveys.

*Cultural Resources Evaluation of the Northern Gulf of Mexico Continental Shelf.* National Park Service, U.S. Department of the Interior, 1977.

*Guidelines for Local Surveys: A Basis for Preservation Planning.* Anne Derry, H. Ward Jandl, Carol Shull and Jan Therman. National Register Division, U.S. Department of the Interior, 1978. Washington, D.C. Available through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. GPO stock number 034-018-0008-7. General guidance about

designing and carrying out community surveys.

*The Process of Field Research: Final Report on the Blue Ridge Parkway Folklife Project.* American Folklife Center, 1981.

*Regional Sampling in Archeology.* David Hurst Thomas. University of California. Archeological Survey Annual Report, 1982-8. 11:87-100.

*Remote Sensing: A Handbook for Archeologists and Cultural Resource Managers.* Thomas R. Lyons and Thomas Eugene Avery. Cultural Resources Management Division, National Park Service, U.S. Department of the Interior, 1977.

*Remote Sensing and Non-Destructive Archeology.* Thomas R. Lyons and James L. Ebert, editors. Remote Sensing Division, Southwest Cultural Resources Center, National Park Service, U.S. Department of the Interior and University of New Mexico, 1978.

*Remote Sensing Experiments in Cultural Resource Studies: Non-Destructive Methods of Archeological Exploration, Survey and Analysis.* Thomas R. Lyons, assembler. reports of the Chaco Center, Number One. National Park Service, U.S. Department of the Interior and University of New Mexico, 1978.

*Sampling in Archeology.* James W. Mueller, editor. University of Arizona Press, 1978. Tucson, Arizona.

*Scholars as Contractors.* William J. Mayer-Oakes and Alice W. Portnoy, editors. Cultural Resources Management Studies. U.S. Department of the Interior, 1978.

*Sedimentary Studies of Prehistoric Archeological Sites.* Eberwood Cagliano, Charles Pearson, Richard Weinstein, Dana Wiseman, and Christopher McClelland. Division of State Plans and Grants, National Park Service, U.S. Department of the Interior, 1982. Washington, D.C. Available from Coastal Environments Inc., 1200 Main Street, Baton Rouge, Louisiana 70802. Establishes and evaluates a method for employing sedimentological analysis in distinguishing site areas from non-site areas when identifying submerged archeological sites in the continental shelf.

*State Survey Forms.* Available from Interagency Resource Management Division, National Park Service, Department of the Interior, Washington, D.C. 20260. Characterizes cultural resource survey documentation methods in State Historic Preservation Offices.

*Trace Bridge Types: A Guide to Dating and Identifying.* Donald C. Jackson and T. Allen Comp. American Association for State and Local History, 1977. Nashville, Tennessee. Technical leaflet #98. Available from AASLH, 708 Berry Road, Nashville, Tennessee 37204. Information about performing surveys of historic bridges and identifying the types of properties encountered.

#### Secretary of the Interior's Standards for Evaluation

Evaluation is the process of determining whether identified properties meet defined criteria of significance and therefore should be included in an inventory of historic properties determined to meet the

criteria. The criteria employed vary depending on the inventory's use in resource management.

#### Standard I. Evaluation of the Significance of Historic Properties Uses Established Criteria

The evaluation of historic properties employs criteria to determine which properties are significant. Criteria should therefore focus on historical, architectural, archeological, engineering and cultural values, rather than on treatments. A statement of the minimum information necessary to evaluate properties against the criteria should be provided to direct information gathering activities.

Because the National Register of Historic Places is a major focus of preservation activities on the Federal, State and local levels, the National Register criteria have been widely adopted not only as required for Federal purposes, but for State and local inventories as well. The National Historic Landmark criteria and other criteria used for inclusion of properties in State historic site files are other examples of criteria with different management purposes.

#### Standard II. Evaluation of Significance Applies the Criteria Within Historic Contexts

Properties are evaluated using a historic context that identifies the significant patterns that properties represent and defines expected property types against which individual properties may be compared. Within this comparative framework, the criteria for evaluation take on particular meaning with regard to individual properties.

#### Standard III. Evaluation Results in A List or Inventory of Significant Properties That Is Consulted In Assigning Registration and Treatment Priorities

The evaluation process and the subsequent development of an inventory of significant properties is an on-going activity. Evaluation of the significance of a property should be completed before registration is considered and before preservation treatments are selected. The inventory entries should contain sufficient information for subsequent activities such as registration or treatment of properties, including an evaluation statement that makes clear the significance of the property within one or more historic contexts.



#### *Standard IV. Evaluation Results Are Made Available to the Public*

Evaluation is the basis of registration and treatment decisions. Information about evaluation decisions should be organized and available for use by the general public and by those who take part in decisions about registration and treatment. Use of appropriate computer-assisted data bases should be a part of the information dissemination effort. Sensitive information, however, must be safeguarded from general public distribution.

#### *Secretary of the Interior's Guidelines for Evaluation*

##### *Introduction*

These Guidelines link the Standards for Evaluation with more specific guidance and technical information. These Guidelines describe one approach to meeting the Standards for Evaluation. Agencies, organizations, or individuals proposing to approach evaluation differently may wish to review their approach with the National Park Service.

The Guidelines are organized as follows:

The Evaluation Process  
 Criteria  
 Application of Criteria within a Historic Context  
 Inventory  
 Recommended Sources of Technical Information

##### *The Evaluation Process*

These Guidelines describe principles for evaluating the significance of one or more historic properties with regard to a given set of criteria.

Groups of related properties should be evaluated at the same time whenever possible; for example, following completion of a theme study or community survey.

Evaluation should not be undertaken using documentation that may be out of date. Prior to proceeding with evaluation the current condition of the property should be determined and previous analyses evaluated in light of any new information.

Evaluation must be performed by persons qualified by education, training and experience in the application of the criteria. Where feasible, evaluation should be performed in consultation with other individuals experienced in applying the relevant criteria in the geographical area under consideration; for example, the State Historic Preservation Officer or local landmarks commission.

Evaluation is completed with a written determination that a property is

or is not significant based on provided information. This statement should be part of the record.

**Criteria:** The purposes of evaluation criteria should be made clear. For example, the criteria may be used "to evaluate properties for inclusion in the county landmarks list," or "to implement the National Register of Historic Places program."

For Federal cultural resource management purposes, criteria used to develop an inventory should be coordinated with the National Register criteria for evaluation as implemented in the approved State comprehensive historic preservation plan.

**Content of Criteria:** Criteria should be appropriate in scale to the purpose of the evaluation. For example, criteria designed to describe national significance should not be used as the basis for creating a county or State inventory. Criteria should be categorical and not attempt to describe in detail every property likely to qualify. Criteria should outline the disciplines or broad areas of concern (history, archeology, architectural history, engineering and culture, for example) included within the scope of the inventory; explain what kinds of properties, if any, are excluded and the reasons for exclusion; and define how levels of significance are measured, if such levels are incorporated into the criteria. If the criteria are to be used in situations where the National Register criteria are also widely used, it is valuable to include a statement explaining the relationship of the criteria used to the National Register criteria, including how the scope of the inventory differs from that defined by the National Register criteria and how the inventory could be used to identify properties that meet the National Register criteria.

**Information Needed to Evaluate Properties:** The criteria should be accompanied by a statement defining the minimum information necessary to evaluate properties to insure that this information is collected during identification activities intended to locate specific historic properties. Generally, at least the following will be needed:

1. Adequately developed historic contexts, including identified property types. (See the Guidelines for Preservation Planning for discussion of development of historic contexts.)

2. Sufficient information about the appearance, condition and associative values of the property to be evaluated to:

a. Classify it as to property type;

b. Compare its features or characteristics with those expected for its property type; and

c. Define the physical extent of the property and accurately locate the property.

To facilitate distinguishing between facts and analysis, the information should be divided into categories, including identification and description of pertinent historical contexts; description of the property and its significance in the historical context; and analysis of the integrity of the property relative to that needed to represent the context.

Usually documentation need not include such items as a complete title history or biography of every owner of a property, except where that information is important in evaluating its significance. Information on proposed or potential treatments or threats, such as destruction of a property through uncontrollable natural processes, is also not needed for evaluation, unless those effects are likely to occur prior to or during the evaluation, thereby altering the significant characteristic of the property. If archeological testing or structural analysis is needed for evaluation, it should not proceed beyond the point of providing the information necessary for evaluation and should not unnecessarily affect significant features or values of the property.

When more information is needed: Evaluation cannot be conducted unless all necessary information is available. (See Information Needed to Evaluate Properties.) Any missing information or analysis should be identified (e.g. development of context or information on the property) as well as the specific activities required to obtain the information (archival research, field survey and testing, or laboratory testing). When adequate information is not available, it is important to record that fact so that evaluation will not be undertaken until the information can be obtained. In some cases needed information is not obtainable, for example, where historical records have been destroyed or analytical techniques have not been developed to date materials in archeological sites. If an evaluation must be completed in these cases, it is important to acknowledge what information was not obtainable and how that missing information may affect the reliability of the evaluation.

##### *Application of the Criteria within a Historic Context*

The first step in evaluation is considering how the criteria apply to the

particular historic context. This is done by reviewing the previously developed narrative for the historic context and determining how the criteria would apply to properties in that context, based on the important patterns, events, persons and cultural values identified. (See the discussion of the historic context narrative in the Guidelines for Preservation Planning.) This step includes identification of which criteria each property type might meet and how integrity is to be evaluated for each property type under each criterion. Specific guidelines for evaluating the eligibility of individual properties should be established. These guidelines should outline and justify the specific physical characteristics or data requirements that an individual property must possess to retain integrity for the particular property type; and define the process by which revisions or additions can be made to the evaluation framework.

**Consideration of property type and integrity:** After considering how the criteria apply to the particular historic context, the evaluation process for a property generally includes the following steps:

1. A property is classified as to the appropriate historic context(s) and property type(s). If no existing property type is appropriate, a new property type is defined, its values identified, and the specific characteristics or data requirements are outlined and justified as an addition to the historic context. If necessary, a new historic context is defined for which values and property types and their integrity requirements are identified and justified.

2. A comparison is made between the existing information about the property and the integrity characteristics or data required for the property type.

a. If the comparison shows that the property possesses these characteristics, then it is evaluated as significant for that historic context. The evaluation includes a determination that the property retains integrity for its type.

b. If the comparison shows that the property does not meet the minimum requirements, one of several conclusions is reached:

(1) The property is determined not significant because it does not retain the integrity defined for the property type.

(2) The property has characteristics that may make it significant but these differ from those expected for that property type in that context. In this case, the historic context or property types should be reexamined and revised if necessary, based on subsequent research and survey.

The evaluation should state how the particular property meets the integrity

requirements for its type. When a property is disqualified for loss of integrity, the evaluation statement should focus on the kinds of integrity expected for the property type, those that are absent for the disqualified property, and the impact of that absence on the property's ability to exemplify architectural, historical or research values within a particular historic context.

The integrity of the property in its current condition, rather than its likely condition after a proposed treatment, should be evaluated. Factors such as structural problems, deterioration, or abandonment should be considered in the evaluation only if they have affected the integrity of the significant features or characteristics of the property.

#### *Inventory*

An inventory is a repository of information on specific properties evaluated as significant.

**Content:** The inventory should include:

1. Summaries of the important historic contexts. These may be in the form of an approved plan or analyses of historic contexts important in the history of the geographical area covered by the inventory.

2. Descriptions of significant property types of these contexts, whether or not any specific properties have been identified.

3. Results of reconnaissance surveys or other identification activities, even if the level of information on specific properties identified as part of those activities is not sufficient to evaluate individual properties.

4. Information on individual properties that was used in evaluation.

Historic contexts are identified by name, with reference to documents describing those contexts, or with a narrative statement about the context(s) where such documents do not exist.

A description of the property. Part of this description may be a photographic record.

A statement that justifies the significance of the property in relation to its context(s). This statement should include an analysis of the integrity of the property.

Boundaries of the property.

A record of when a property was evaluated and included in the inventory, and by whom.

Records on demolished or altered properties and properties evaluated as not significant should be retained, along with full description of areas surveyed, for the planning information these records provide about impacts to properties and about the location and

character of non-significant properties to prevent redundant identification work at a later time.

**Maintenance:** Inventory entries should be maintained so that they accurately represent what is known about historic properties in the area covered by the inventory. This will include new information gained from research and survey about the historic contexts, property types, and previously evaluated properties, as well as information about newly evaluated properties. For individual properties, addition of kinds of significance, change in the boundaries, or loss of significance through demolition or alteration should be recorded.

**Uses and Availability:** An inventory should be managed so that the information is accessible. Its usefulness depends on the organization of information and on its ability to incorporate new information. An inventory should be structured so that entries can be retrieved by locality or by historic context.

The availability of the inventory information should be announced or a summary should be distributed. This may be in the form of a list of properties evaluated as significant or a summary of the historic contexts and the kinds of properties in the inventory. Inventories should be available to managers, planners, and the general public at local, State, regional, and Federal agency levels.

It is necessary to protect information about archeological sites or other properties whose integrity may be damaged by widespread knowledge of their location. It may also be necessary to protect information on the location of properties such as religious sites, structures, or objects whose cultural value would be compromised by public knowledge of the property's location.

#### *Recommended Sources of Technical Information*

**How to Apply the National Register Criteria.** Available through the National Register Branch, Interagency Resources Division, National Park Service, U.S. Department of the Interior, Washington, D.C. 20240. Provides detailed technical information about interpretation of the significance and integrity criteria used by the National Register of Historic Places program.

**How To Series.** Available through the National Register Branch, Interagency Resources Division, National Park Service, U.S. Department of the Interior, Washington, D.C. 20240. Discusses application of the National Register criteria for evaluation. Titles include:

**How To Establish Boundaries for National Register Properties.****How To Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years.****How To Improve Quality of Photos for National Register Nominations.****How To Apply for Certification of Significance Under Section 2124 of the Tax Reform Act of 1976.****How To Apply for Certification of State and Local Statutes and Historic Districts.****How To Quality Historic Properties Under the New Federal Law Affective Easements.**

*Importance of Small, Surface, and Disturbed Sites as Sources of Significant Archeological Data.* Valerie Talmage and Olga Chesler. Interagency Archeological Service 1977. Washington, D.C. Available from the National Technical Information Service. NTIS Publication Number PB 270839/AS. Discusses the role of small, surface, and disturbed sites as sources of significant information about a variety of prehistoric activities. These types of sites are frequently ignored in the development of regional archeological research designs.

**Secretary of the Interior's Standards For Registration**

Registration is the formal recognition of properties evaluated as significant. Preservation benefits provided by various registration programs range from honorific recognition to prohibition of demolition or alteration of included properties. Some registration programs provide recognition and other broad benefits while other programs authorize more specific forms of protection.

**Standard I. Registration Is Conducted According To Stated Procedures**

Registration of historic properties in the National Register of Historic Places must be done in accordance with the National Register regulations published in the Code of Federal Regulations, 36 CFR 60. Registration for other lists or purposes follow an established process that is understood by the public, particularly by those interests that may be affected by registration.

**Standard II. Registration Information Locates, Describes and Justifies the Significance and Physical Integrity of a Historic Property**

Registers are used for planning, research and treatment. They must contain adequate information for users to locate a property and understand its significance. Additional information

may be appropriate depending on the intended use of the register.

**Standard III. Registration Information is Accessible to the Public**

Information should be readily available to the public and to government agencies responsible for the preservation of historic properties and for other planning needs.

**Secretary of the Interior's Guidelines for Registration****Introduction**

These Guidelines link the Standards for Registration with more specific guidance and technical information. They describe one approach to meeting the Standards for Registration. Agencies, organizations, or individuals proposing to approach registration differently may wish to review their approach with the National Park Service.

The Guidelines are organized as follows:

Purpose of Registration Programs  
Registration Procedures  
Documentation on Registered Properties  
Public Availability  
Recommended Sources of Technical Information

**Purpose of Registration Programs**

Registration of historic properties is the formal recognition of properties that have been evaluated as significant according to written criteria. Registration results in an official inventory or list that serves an administrative function. A variety of benefits or forms of protection accrue to a registered property, ranging from honorific recognition to prohibition of demolition or alteration.

Some registration programs provide recognition and other broad benefits or entitlements, while other registrations of properties may, in addition, authorize more specific forms of protection. The application of the registration process should be a logical outgrowth of the same planning goals and priorities that guided the identification and evaluation activities. All registration programs should establish priorities for recognition of their authorized range of properties; provide for confidentiality of sensitive information; and establish a means of appealing the registration or non-registration of a property.

**Registration Procedures**

Explicit procedures are essential because they are the means by which the public can understand and participate in the registration process. Procedures for registration programs should be developed by professionals in

the field of historic preservation, in consultation with those who will use or be affected by the program. Prior to taking effect, procedures should be published or circulated for comment at the governmental level at which they will be used. (Procedures for registration of properties in the National Register of Historic Places and the National Historic Landmarks list, for example, are published in the Federal Register.)

Any registration program should include:

1. A professional staff to prepare or assess the documentation;
2. A professional review, independent of the nominating source, to provide an impartial evaluation of the documented significance;
3. Adequate notice to property owners, elected officials and the public about proposed registrations and the effects of listing, if any; and
4. A means of public participation.

**Professional Review:** The registration process should include an independent evaluation of the significance of the property and of the quality and thoroughness of the documentation supporting that significance. Such evaluation ensures that significance is adequately justified and that registration documentation meets the technical requirements of the registration process.

State and local preservation programs, concerned with both public and private properties, generally use a review board, panel or commission. This level of professional review has proven to be effective in assessing the significance of properties considered for registration.

Review boards and other forms of independent review should include professionals in the fields or disciplines included in the criteria; representatives of other fields or disciplines may be desirable to reflect other values or aspects of the register. Key personnel must be qualified by education, training or experience to accomplish their designated duties. (See the Professional Qualifications Standards.)

The scope of the independent review should be clearly stated in the registration procedures and should not include issues outside the scope of the applicable criteria for evaluation and other areas specified in the procedures. Generally, independent reviewers should not be involved in any primary research or analysis related to properties under consideration; this information should be gathered and organized prior to review meetings. Documentation presented to the reviewers should be made available to

the public prior to review meetings or public hearings. Registration of properties should not take place until review of documentation has been completed.

**Public Notice:** Adequate notice allows property owners, officials and other interested parties to comment on proposed registrations prior to action by the independent reviewers. The degree of protection and control provided by a registration program may be a factor in determining what constitutes adequate notice. For example, adequate notice of proposed inclusion in honorific registers may be less complex than that for registration that results in local controls on alteration or demolition of registered properties.

Notice to elected officials and the public is necessary to distribute information about potential registrations of concern to planning and development interests.

Adequate notice to property owners may be accomplished through means ranging from individual notification by mail to publication of a public notice, depending on the nature of the registration program and the number and character of the properties involved.

Public notices and owner notification about proposed registrations should include the dates and times of public meetings and review meetings, the kinds of comments that are appropriate, and how comments will be considered in the evaluation process. The notice should also state where information can be obtained about the registration program, the criteria used to evaluate properties for inclusion, and the significance of specific properties under consideration.

The procedures should include a means of public participation in the form of submission of written comments or a review meeting open to the public or a public hearing.

The procedures should state time periods within which reviews, notices, comments, public hearings, review meetings and appeals will occur. The time periods should be short enough to allow for efficient recognition of historic properties but also allow adequate time for public comment and participation by those affected. Time periods may vary depending on whether activities are carried out at the local, State, or national level. These time schedules should be widely circulated so that the process is widely understood.

**Appeal Process:** A means of appeal should be included in the registration process to allow for reconsideration of a property's inclusion. Reasons for appeal may range from existence of additional information about the property supporting or refuting its significance to

administrative or procedural error. An appeal process should specify to whom an appeal may be made and how the information that is provided will be evaluated. The appeal procedures should also state the time limit, if any, on appealing a decision and on consideration of information and issuance of a decision by the appeal authority.

#### *Documentation on Registered Properties*

**Documentation requirements** should be carefully weighed to provide the information *actually* needed to reach a registration decision and should be made public. It should be made certain that identification and evaluation activities obtain and record the information necessary for registration. Documentation should be prepared in a standardized format and on materials that are archivally stable and easy to store and retrieve.

**Location:** The precise location of a historic property must be clearly identified.

Street address, town or vicinity, and county should be provided. Properties should also be located on maps; these may be USGS maps, county planning maps, or city base maps or real estate maps. A uniform system of noting location, such as UTM grid points or longitude and latitude, should supplement mapping. It is recommended that each registration process standardize the preferred choice of maps appropriate to the scope of the process.

**Description:** An accurate description of a property includes a description of both the current and historical physical appearance and condition of the property and notes the relevant property type(s) for the applicable historic context(s). Discussion should include alterations, deterioration, relocation and other changes to the property since its period of significance.

**Significance:** A statement of significance should explain why a property meets the criteria for inclusion in the register to which it has been nominated.

This statement should contain at least 3 elements:

1. Reference to the relevant historic context(s);
2. Identification of relevant property type within the context and their characteristics; and
3. Justification that the property under consideration has the characteristics required to qualify it.

Relevant historic contexts can be identified through reference to the preservation plan or other documents where the contexts have been

previously described or can be provided by a narrative discussion of the context. (The development of contexts and their use in evaluating properties are discussed in the Guidelines for Preservation Planning and the Guidelines for Evaluation.) A significant property type and its characteristics are identified either through reference to the historic context(s) or by a narrative in the documentation that describes historic contexts. Justification of a specific property is made by systematic comparison of its characteristics to those required for the property type.

**Boundaries:** The delineation and justification of boundaries for a registered property are important for future treatment activities. It is especially critical when legal restraints or restrictions may result from the registration of properties. Thus, boundaries should correspond as closely as possible to the actual extent and configuration of the property and should be carefully selected to encompass, but not exceed, the extent of the significant resource(s). The selection of boundaries should reflect the significant aspects of the property.

Arbitrary boundaries should not be chosen for ease of description since this can result in the inclusion of unrelated land or in exclusion of a portion of the historic property. Present property lines should not be chosen as property boundaries without careful analysis of whether they are appropriate to the historic property. A single uniform boundary description and acreage should not be applied to a group or class of properties (antebellum plantations, for example) without examination of the actual extent of each property. The selected boundaries should be justified as appropriate to the historic property.

Boundaries should be clearly and precisely described, using a verbal boundary description, legal description, accurate sketch map, or lines drawn on base maps, or a combination of these where needed to specify the limits of the property being registered. When used, maps should show the location of buildings, structures, sites or objects within the boundary.

**Updating Information on Registered Properties:** A change in the condition of the significant features of a property may require a change in the official registration record. Alteration of a significant architectural feature, for example, could mean that a property is no longer significant for its architectural design.

Additional significance of registered properties may be identified through development of new historic contexts.

Research may reveal that a property is significant in other historic contexts or is significant at a higher level. For example, a property previously recognized as of local significance could be found to be of national significance.

A change in location or condition of a registered property may mean that the property is no longer significant for the reasons for which it was registered and the property should be deleted from the registered list.

#### *Public Availability*

Lists of registered properties should be readily available for public use, and information on registered properties should be distributed on a regular basis. Lists of properties registered nationally are distributed through publication in the *Federal Register* and to Congressional Offices and State Historic Preservation Offices. Comprehensive information should be stored and maintained for public use at designated national, State and local authorities open to the public on a regular basis.

Information should be retrievable by the property name, and location, historic context or property type. The specific location of properties that may be threatened by dissemination of that information must be withheld. These may include fragile archeological properties or properties such as religious sites, structures, or objects whose cultural value would be compromised by public knowledge of the property location.

#### *Recommended Sources of Technical Information*

*How to Complete National Register Forms.* National Register Division, National Park Service, U.S. Department of the Interior, 1977. Washington, D.C. Available through the Superintendent of Documents, US Government Printing Office, Washington, D.C. 20402. GPO Stock Number 694-005-0088-4. This publication is the standard reference on the documentation requirements of the National Register of Historic Places program.

*How To Series.* Available through the National Register Branch, Interagency Resources Division, National Park Service, Department of the Interior 20240. These information sheets contain supplementary information about interpreting the National Register criteria for evaluation and documentation requirements of the National Register registration program. Title include: *How To Establish Boundaries for National Register Properties.*

*How To Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years.*

*How To Improve the Quality of Photographs for National Register Nominations.*

*How To Apply for Certification of Significance Under Section 2124 of the Tax Reform Act of 1976.*

*How To Apply for Certification of State and Local Statutes and Historic Districts.*

*How To Qualify Historic Properties Under the New Federal Law Affecting Easements.*

#### *Notes on Documentation and Treatment of Historic Properties*

Documentation and treatment of historic properties includes a variety of techniques to preserve or protect properties, or to document their historic values and information. While documentation activities may be applied to any potentially historic property, generally only those properties that first have been evaluated as significant against specified criteria (such as those of the National Register) are treated. Some commonly applied treatments are preservation in place, rehabilitation, restoration and stabilization; there are other types of treatments also. Documentation and treatment may be applied to the same property; for example, archeological, historical, and architectural documentation may be prepared before a structure is stabilized or before foundations or chimneys or other lost features are reconstructed.

Alternatives for treatment will usually be available, and care should be applied in choosing among them. Preservation in place is generally preferable to moving a property. Over time, the preferred treatment for a property may change; for example, an archeological site intended for preservation in place may begin to erode so that a combination of archeological documentation and stabilization may be required. If a decision is made that a particular property will not be preserved in place, the need for documentation must then be considered.

The three sets of documentation standards (i.e., the Standards for Historical Documentation, Standards for Architectural and Engineering Documentation, and Standards for Archeological Documentation) as well as the Standards for Historic Preservation Projects (Acquisition, Preservation, Stabilization, Protection, Rehabilitation, Restoration, and Reconstruction) describe the techniques of several disciplines to treat historic properties, and to document or preserve information about their historical values. The integration of planning for documentation and treatment with their execution is accomplished in a statement of objectives, or research design. Because both the goals and appropriate methodologies are likely to be interdisciplinary in nature, the relationship among these various

activities should be specified in the research design to ensure that the resulting documentation produces a comprehensive record of historic properties in an efficient manner.

#### *Secretary of the Interior's Standards for Historical Documentation*

Historical documentation provides important information related to the significance of a property for use by historians, researchers, preservationists, architects, and historical archeologists. Research is used early in planning to gather information needed to identify and evaluate properties. (These activities are discussed in the Standards and Guidelines for Preservation Planning and the Standards and Guidelines for Identification.) Historical documentation is also a treatment that can be applied in several ways to properties previously evaluated as significant; it may be used in conjunction with other treatment activities (as the basis for rehabilitation plans or interpretive programs, for example) or as a final treatment to preserve information in cases of threatened property destruction. These Standards concern the use of research and documentation as a treatment.

#### *Standard I. Historical Documentation Follows a Research Design That Responds to Needs Identified in the Planning Process*

Historical documentation is undertaken to make a detailed record of the significance of a property for research and interpretive purposes and for conservation of information in cases of threatened property destruction. Documentation must have defined objectives so that proposed work may be assessed to determine whether the resulting documentation will meet needs identified in the planning process. The research design or statement of objectives is a formal statement of how the needs identified in the plan are to be addressed in a specific documentation project. This is the framework that guides the selection of methods and evaluation of results, and specifies the relationship of the historical documentation efforts to other proposed treatment activities.

#### *Standards II. Historical Documentation Employs an Appropriate Methodology to Obtain the Information Required by The Research Design*

Methods and techniques of historical research should be chosen to obtain needed information in the most efficient way. Techniques should be carefully selected and the sources should be

recorded so that other researchers can verify or locate information discovered during the research.

*Standard III. The Results of Historical Documentation Are Assessed Against the Research Design and Integrated Into the Planning Process*

Documentation is one product of research; information gathered about the usefulness of the research design itself is another. The research results are assessed against the research design to determine how well they meet the objectives of the research. The results are integrated into the body of current knowledge and reviewed for their implications for the planning process. The research design is reviewed to determine how future research designs might be modified based on the activity conducted.

*Standard IV. The Results of Historical Documentation Are Reported and Made Available to the Public*

Research results must be accessible to prospective users. Results should be communicated to the professional community and the public in reports summarizing the documentation activity and identifying the repository of additional detailed information. The goal of disseminating information must be balanced, however, with the need to protect sensitive information whose disclosure might result in damage to properties.

*Secretary of the Interior's Guidelines for Historical Documentation*

*Introduction*

These Guidelines link the Standards for Historical Documentation with more specific guidance and technical information. They describe one approach to meeting the Standards for Historical Documentation. Agencies, organizations or individuals proposing to approach historical documentation differently may wish to review their approaches with the National Park Service.

The Guidelines are organized as follows:

- Historical Documentation Objectives
- Research Design
- Methods
- Integrating Results
- Reporting Results
- Recommended Sources of Technical Information

*Documentation Objectives*

Documentation is a detailed record, in the form of a report or other written document, of the historical context(s) and significance of a property. Historical research to create

documentation uses archival materials, oral history techniques, ethnohistories, prior research contained in secondary sources and other sources to make a detailed record of previously identified values or to investigate particular questions about the established significance of a property or properties. It is an investigative technique that may be employed to document associative, architectural, cultural or informational values of properties. It may be used as a component of structural recording or archeological investigation, to enable interpretation or to mitigate the anticipated loss of a property through conservation of information about its historical, architectural or archeological significance. Documentation generally results in both greater factual knowledge about the specific property and its values, and in better understanding of the property in its historical context. In addition to increasing factual knowledge about a property and its significance in one historical context, documentation may also serve to link the property to or define its importance in other known or yet-to-be defined historic contexts.

Documentation should incorporate, rather than duplicate, the findings of previous research. Research may be undertaken to identify how a particular property fits into the work of an architect or builder; to analyze the historical relationship among several properties; or to document in greater detail the historical contexts of properties. The kinds of questions investigated will generally depend on what is already known or understood and what information is needed. For example, documentation of a bridge whose technological significance is well understood, but whose role in local transportation history is not, would summarize the information on the former topic and focus research on the associative values of the property. The questions that research seeks to answer through deed, map or archival search, oral history and other techniques may also relate to issues addressed in structural documentation or archeological investigation; for example, the reasons for and history of modification of a building to be the subject of architectural or engineering documentation.

*Research Design*

Historical documentation is guided by a statement of objectives, research design or task directive prepared before research is performed. The research design is a useful statement of how proposed work will enhance existing archival data and permits comparison of

the proposed work with the results. The purpose of the research design is to define the proposed scope of the documentation work and to define a set of expectations based on the information available prior to the research. Generally, the research design also ensures that research methods are commensurate with the type, quality and source of expected information.

The research design for a property should identify:

1. Evaluated significance of the property(ies) to be investigated;
2. Historical, architectural, archeological or cultural issues relevant to the evaluated significance of the property;
3. Previous research on those issues and how the proposed work is related to existing knowledge;
4. The amount and kinds of information required to produce reliable historical analyses;
5. Methods to be used to obtain the information;
6. Types of sources to be investigated; types of personnel required;
7. Expected results or findings based on available knowledge about the property and its context; and
8. Relationship of the proposed historical documentation to other proposed treatment activities; for example, recommendations on the use of documentation in interpretive programs or other aspects of treatment such as anticipated architectural, engineering or archeological documentation).

*Research Methods*

Research methods should be chosen based on the information needs, be capable of replication and be recorded so that another researcher could follow the same research procedure. Sources should be recorded so that other researchers can locate or verify the information discovered during the search.

*Use of Sources:* The variety of available written and graphic materials and the number of individuals that can serve as sources, including but not limited to personal records, deed and title books, newspapers, plats, maps, atlases, photographs, vital records, censuses, historical narratives, interviews of individuals and secondary source materials, should be considered in developing the research design. Part of the development of the research design is deciding what kinds of source materials are most likely to contain needed information and at what point in the research process that information will be most valuable. For example,

often secondary sources are most valuable for gathering background information, while primary sources are more useful to gather or confirm specific facts. The documentation goals may not require exhaustive investigation of sources, such as deed records or building permits. Research may be kept cost-effective by making careful decisions about when to use particular sources, thereby limiting the use of time-consuming techniques to when absolutely necessary. Decisions about when to gather information may also affect the quality of information that can be gathered. When dealing with large project areas where loss of many properties is anticipated, it is important to gather information from local archival sources and oral histories before project activities destroy or disperse family or community records and residents.

Analysis of the accuracy and biases of source materials is critical in analyzing the information gathered from these sources. Maps, historical atlases and insurance maps should be assessed like written records for errors, biases and omissions; for example, some maps may omit structures of a temporary nature or may not fully depict ethnic or minority areas. Likewise, building plans and architectural renderings may not reflect a structure as it was actually built.

**Analysis:** Analysis should not only focus on the issues defined in the research design, but should also explore major new issues identified during the course of research or analysis. The documentation gathered may raise important issues not previously considered, and further investigation may be important, particularly when contradictory information has been gathered. It is important to examine the implications of these new issues to ensure that they are investigated in a balanced way.

Questions that should be considered in analyzing the information include:

1. Has enough information been gathered to answer the questions that were posed?
2. Do the answers contradict one another? If so, it may be necessary to search for more evidence. If no additional evidence is available, judgements must be based on the available sources, weighing their biases. Conflicts of source materials should be noted.

In general, the more the researcher knows about the general historical period and setting, and limitations of the source materials under investigation, the better the individual is prepared to

evaluate the information found in the documentary sources investigated. Peer review or consultation with other knowledgeable individuals about the information and the tentative conclusions can be an important part of the analysis.

#### *Integrating Results*

The results of documentation must be integrated into the planning process so that planning decisions are based on the best available information. The new information is first assessed against the research design to determine whether the gathered information meets the defined objectives of the research. Then the relevant historic contexts, property types, and treatment goals for those contexts are all adjusted, as necessary, based on the historical documentation results.

#### *Reporting Results*

Reports should contain:

1. Summaries of the purpose of the documentation, the research design and methods and techniques of investigation.
2. Sources of facts or analyses so that other researchers can locate the information in its original context. Notation of any conflicts in source materials and how the individual performing the documentation interpreted these conflicts.
3. Sources consulted, including those expected to contain useful information and those that contained no information about the property(s).
4. Assessment of the accuracy, biases and historical perspective of all sources. This information and that identified in No. 3 may be provided in an annotated bibliography.
5. Discussion of major analyses and results, including conclusions regarding all major research issues identified in the research design, as well as important issues raised in the course of research. The analysis should be summarized in terms of its impact on interpreting the property's significance and expanding or altering the knowledge about the property and its context.

6. Researchers' interpretation of historical events or trends. These interpretations should be clearly identified.

Primary results should be preserved and made accessible in some manner, although they need not necessarily be contained in the report. At a minimum, the report should reference the location of notes and analyses.

Results of historical documentation should be made available for use in

preservation planning and by the general public. Report formats may vary, depending on the audience and the anticipated uses of the documentation, but professionally accepted rules of report writing should be followed. If reports are of a technical nature, the format of the major scientific journal of the pertinent discipline may be the most appropriate format. Peer review of draft reports is one means of ensuring that state-of-the-art technical reports are produced.

#### *Recommended Sources of Technical Information*

*Folklife and Fieldwork: A Layman's Introduction to Field Techniques.* Peter Bertis. American Folklife Center, Washington, D.C., 1979.

*Ordinary People and Everyday Life: Perspectives on the New Social History.* James B. Gardner and George Roffe Adams, editors. American Association for State and Local History, Nashville, Tennessee, 1982.

*The Process of Field Research.* Carl Fleischhauer and Charles K. Wolfe. American Folklife Center, Washington, D.C., 1981.

*Researching Heritage Buildings.* Margaret Carter. Ministry of the Environment, Ottawa, Canada, 1983.

#### *Secretary of the Interior's Standards for Architectural and Engineering Documentation*

These standards concern the development of documentation for historic buildings, sites, structures and objects. This documentation, which usually consists of measured drawings, photographs and written data, provides important information on a property's significance for use by scholars, researchers, preservationists, architects, engineers and others interested in preserving and understanding historic properties. Documentation permits accurate repair or reconstruction of parts of a property, records existing conditions for easements, or may preserve information about a property that is to be demolished.

These Standards are intended for use in developing documentation to be included in the Historic American Building Survey (HABS) and the Historic American Engineering Record (HAER) Collections in the Library of Congress. HABS/HAER, in the National Park Service, have defined specific requirements for meeting these Standards for their collections. The HABS/HAER requirements include information important to development of documentation for other purposes such as State or local archives



**Standard I. Documentation Shall Adequately Explicate and Illustrate What is Significant or Valuable About the Historic Building, Site, Structure or Object Being Documented.**

The historic significance of the building, site, structure or object identified in the evaluation process should be conveyed by the drawings, photographs and other materials that comprise documentation. The historical, architectural, engineering or cultural values of the property together with the purpose of the documentation activity determine the level and methods of documentation. Documentation prepared for submission to the Library of Congress must meet the HABS/HAER Guidelines.

**Standard II. Documentation Shall be Prepared Accurately From Reliable Sources With Limitations Clearly Stated to Permit Independent Verification of the Information.**

The purpose of documentation is to preserve an accurate record of historic properties that can be used in research and other preservation activities. To serve these purposes, the documentation must include information that permits assessment of its reliability.

**Standard III. Documentation Shall be Prepared on Materials That are Readily Reproducible, Durable and in Standard Sizes.**

The size and quality of documentation materials are important factors in the preservation of information for future use. Selection of materials should be based on the length of time expected for storage, the anticipated frequency of use and a size convenient for storage.

**Standard IV. Documentation Shall be Clearly and Concisely Produced.**

In order for documentation to be useful for future research, written materials must be legible and understandable, and graphic materials must contain scale information and location references.

**Secretary of the Interior's Guidelines for Architectural and Engineering Documentation**

**Introduction**

These Guidelines link the Standards for Architectural and Engineering Documentation with more specific guidance and technical information. They describe one approach to meeting the Standards for Architectural Engineering Documentation. Agencies, organizations or individuals proposing to approach documentation differently

may wish to review their approaches with the National Park Service.

The Guidelines are organized as follows:

Definitions  
 Goal of Documentation  
 The HABS/HAER Collections  
 Standard I: Content  
 Standard II: Quality  
 Standard III: Materials  
 Standard IV: Presentation  
 Architectural and Engineering Documentation Prepared for Other Purposes  
 Recommended Sources of Technical Information

**Definitions**

These definitions are used in conjunction with these Guidelines:

**Architectural Data Form**—a one page HABS form intended to provide identifying information for accompanying HABS documentation.

**Documentation**—measured drawings, photographs, histories, inventory cards or other media that depict historic buildings, sites, structures or objects.

**Field Photography**—photography, other than large-format photography, intended for the purpose of producing documentation, usually 35mm.

**Field Records**—notes of measurements taken, field photographs and other recorded information intended for the purpose of producing documentation.

**Inventory Card**—a one page form which includes written data, a sketched site plan and a 35mm contact print dry-mounted on the form. The negative, with a separate contact sheet and index should be included with the inventory card.

**Large Format Photographs**—photographs taken of historic buildings, sites, structures or objects where the negative is a 4 X 5", 8 X 7" or 8 X 10" size and where the photograph is taken with appropriate means to correct perspective distortion.

**Measured Drawings**—drawings produced on HABS or HAER formats depicting existing conditions or other relevant features of historic buildings, sites, structures or objects. Measured drawings are usually produced in ink on archivally stable material, such as mylar.

**Photocopy**—A photograph, with large-format negative, of a photograph or drawing.

**Select Existing Drawings**—drawings of historic buildings, sites, structures or objects, whether original construction or later alteration drawings that portray or depict the historic value or significance.

**Sketch Plan**—a floor plan, generally not to exact scale although often drawn from measurements, where the features

are shown in proper relation and proportion to one another.

**Goal of Documentation**

The Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) are the national historical architectural and engineering documentation programs of the National Park Service that promote documentation incorporated into the HABS/HAER collections in the Library of Congress. The goal of the collections is to provide architects, engineers, scholars, and interested members of the public with comprehensive documentation of buildings, sites, structures and objects significant in American history and the growth and development of the built environment.

The HABS/HAER Collections: HABS/HAER documentation usually consists of measured drawings, photographs and written data that provide a detailed record which reflects a property's significance. Measured drawings and properly executed photographs act as a form of insurance against fires and natural disasters by permitting the repair and, if necessary, reconstruction of historic structures damaged by such disasters. Documentation is used to provide the basis for enforcing preservation easement. In addition, documentation is often the last means of preservation of a property; when a property is to be demolished, its documentation provides future researchers access to valuable information that otherwise would be lost.

HABS/HAER documentation is developed in a number of ways. First and most usually, the National Park Service employs summer teams of student architects, engineers, historians and architectural historians to develop HABS/HAER documentation under the supervision of National Park Service professionals. Second, the National Park Service produces HABS/HAER documentation, in conjunction with restoration or other preservation treatment, of historic buildings managed by the National Park Service. Third, Federal agencies, pursuant to Section 110(b) of the National Historic Preservation Act, as amended, record those historic properties to be demolished or substantially altered as a result of agency action or assisted action (referred to as mitigation projects). Fourth, individuals and organizations prepare documentation to HABS/HAER standards and donate that documentation to the HABS/HAER collections. For each of these programs,



different Documentation Levels will be set.

The Standards describe the fundamental principles of HABS/HAER documentation. They are supplemented by other material describing more specific guidelines, such as line weights for drawings, preferred techniques for architectural photography, and formats for written data. This technical information is found in the HABS/HAER Procedures Manual.

These Guidelines include important information about developing documentation for State or local archives. The State Historic Preservation Officer or the State library should be consulted regarding archival requirements if the documentation will become part of their collections. In establishing archives, the important questions of durability and reproducibility should be considered in relation to the purposes of the collection.

Documentation prepared for the purpose of inclusion in the HABS/HAER collections must meet the requirements below. The HABS/HAER office of the National Park Service retains the right to refuse to accept documentation for inclusion in the HABS/HAER collections when that documentation does not meet HABS/HAER requirements, as specified below.

#### Standard E: Content

1. *Requirement:* Documentation shall adequately explicate and illustrate what is significant or valuable about the historic building, site, structure or object being documented.

2. *Criteria:* Documentation shall meet one of the following documentation levels to be considered adequate for inclusion in the HABS/HAER collections.

##### a. Documentation Level I:

(1) Drawings: a full set of measured drawings depicting existing or historic conditions.

(2) Photographs: photographs with large-format negatives of exterior and interior views; photocopies with large format negatives of select existing drawings or historic views where available.

(3) Written data: history and description.

##### b. Documentation Level II:

(1) Drawings: select existing drawings, where available, should be photographed with large-format negatives or photographically reproduced on mylar.

(2) Photographs: photographs with large-format negatives of exterior and interior views, or historic views, where available.

(3) Written data: history and description.

##### c. Documentation Level III:

(1) Drawings: sketch plan.

(2) Photographs: photographs with large-format negatives of exterior and interior views.

(3) Written data: architectural data form.

##### d. Documentation Level IV: HABS/HAER inventory card.

3. *Test:* Inspection of the documentation by HABS/HAER staff.

4. *Commentary:* The HABS/HAER office retains the right to refuse to accept any documentation on buildings, site, structures or objects lacking historical significance. Generally, buildings, sites, structures or objects must be listed in, or eligible for listing in the National Register of Historic Places to be considered for inclusion in the HABS/HAER collections.

The kind and amount of documentation should be appropriate to the nature and significance of the buildings, site, structure or object being documented. For example,

Documentation Level I would be inappropriate for a building that is a minor element of a historic district, notable only for streetscape context and scale. A full set of measured drawings for such a minor building would be expensive and would add little, if any, information to the HABS/HAER collections. Large format photography (Documentation Level III) would usually be adequate to record the significance of this type of building.

Similarly, the aspect of the property that is being documented should reflect the nature and significance of the building, site, structure or object being documented. For example, measured drawings of Dankmar Adler and Louis Sullivan's Auditorium Building in Chicago should indicate not only facades, floor plans and sections, but also the innovative structural and mechanical systems that were incorporated in that building. Large format photography of Gunston Hall in Fairfax County, Virginia, to take another example, should clearly show William Buckland's hand-carved moldings in the Palladian Room, as well as other views.

HABS/HAER documentation is usually in the form of measured drawings, photographs, and written data. While the criteria in this section have addressed only these media, documentation need not be limited to them. Other media, such as films of industrial processes, can and have been used to document historic buildings, sites, structures or objects. If other media are to be used, the HABS/HAER

office should be contacted before recording.

The actual selection of the appropriate documentation level will vary, as discussed above. For mitigation documentation projects, this level will be selected by the National Park Service Regional Office and communicated to the agency responsible for completing the documentation. Generally, Level I documentation is required for nationally significant buildings and structures, defined as National Historic Landmarks and the primary historic units of the National Park Service.

On occasion, factors other than significance will dictate the selection of another level of documentation. For example, if a rehabilitation of a property is planned, the owner may wish to have a full set of as-built drawings, even though the significance may indicate Level II documentation.

HABS Level I measured drawings usually depict existing conditions through the use of a site plan, floor plans, elevations, sections and construction details. HAER Level I measured drawings will frequently depict original conditions where adequate historical material exists, so as to illustrate manufacturing or engineering processes.

Level II documentation differs from Level I by substituting copies of existing drawings, either original or alteration drawings, for recently executed measured drawings. If this is done, the drawings must meet HABS/HAER requirements outlined below. While existing drawings are rarely as suitable as as-built drawings, they are adequate in many cases for documentation purposes. Only when the desirability of having as-built drawings is clear are Level I measured drawings required in addition to existing drawings. If existing drawings are housed in an accessible collection and cared for archivally, their reproduction for HABS/HAER may not be necessary. In other cases, Level I measured drawings are required in the absence of existing drawings.

Level III documentation requires a sketch plan if it helps to explain the structure. The architectural data form should supplement the photographs by explaining what is not readily visible.

Level IV documentation consists of completed HABS/HAER inventory cards. This level of documentation, unlike the other three levels, is rarely considered adequate documentation for the HABS/HAER collections but is undertaken to identify historic resources in a given area prior to additional, more comprehensive documentation.

**Standard II: Quality**

1. *Requirement:* HABS and HAER documentation shall be prepared accurately from reliable sources with limitations clearly stated to permit independent verification of information.

2. *Criteria:* For all levels of documentation, the following quality standards shall be met:

a. *Measured drawings:* Measured drawings shall be produced from recorded, accurate measurements. Portions of the building that were not accessible for measurement should not be drawn on the measured drawings, but clearly labeled as not accessible or drawn from available construction drawings and other sources and so identified. No part of the measured drawings shall be produced from hypothesis or non-measurement related activities. Documentation Level I measured drawings shall be accompanied by a set of field notebooks in which the measurements were first recorded. Other drawings, prepared for Documentation Levels II and III, shall include a statement describing where the original drawings are located.

b. *Large format photographs:* Large format photographs shall clearly depict the appearance of the property and areas of significance of the recorded building, site, structure or object. Each view shall be perspective-corrected and fully captioned.

c. *Written history:* Written history and description for Documentation Levels I and II shall be based on primary sources to the greatest extent possible. For Levels III and IV, secondary sources may provide adequate information; if not, primary research will be necessary. A frank assessment of the reliability and limitations of sources shall be included. Within the written history, statements shall be footnoted as to their sources, where appropriate. The written data shall include a methodology section specifying name of researcher, date of research, sources searched, and limitations of the project.

3. *Test:* Inspection of the documentation by HABS/HAER staff.

4. *Commentary:* The reliability of the HABS/HAER collections depends on documentation of high quality. Quality is not something that can be easily prescribed or quantified, but it derives from a process in which thoroughness and accuracy play a large part. The principle of independent verification HABS/HAER documentation is critical to the HABS/HAER collections

**Standard III: Materials**

1. *Requirement:* HABS and HAER documentation shall be prepared on

materials that are readily reproducible for ease of access; durable for long storage; and in standard sizes for ease of handling.

2. *Criteria:* For all levels of documentation, the following material standards shall be met:

a. *Measured Drawings:*  
Readily Reproducible: Ink on translucent material.

Durable: Ink on archivally stable materials.

Standard Sizes: Two sizes: 18" x 24" or 24" x 36".

b. *Large Format Photographs:*  
Readily Reproducible: Prints shall accompany all negatives.

Durable: Photography must be archivally processed and stored. Negatives are required on safety film only. Resin-coated paper is not accepted. Color photography is not acceptable.

Standard Sizes: Three sizes: 4" x 5", 5" x 7", 8" x 10".

c. *Written History and Description:*  
Readily Reproducible: Clean copy for xeroxing.

Durable: Archival bond required.  
Standard Sizes: 8 1/2" x 11".

d. *Field Records:*  
Readily Reproducible: Field notebooks may be xeroxed. Photo identification sheet will accompany 35 mm negatives and contact sheets.

Durable: No requirement.  
Standard Sizes: Only requirement is that they can be made to fit into a 9 1/4" x 12" archival folding file.

3. *Test:* Inspection of the documentation by HABS/HAER staff.

4. *Commentary:* All HABS/HAER records are intended for reproduction; some 20,000 HABS/HAER records are reproduced each year by the Library of Congress. Although field records are not intended for quality reproduction, it is intended that they be used to supplement the formal documentation. The basic durability performance standard for HABS/HAER records is 500 years. Ink on mylar is believed to meet this standard, while color photography, for example, does not. Field records do not meet this archival standard, but are maintained in the HABS/HAER collections as a courtesy to the collection user.

**Standard IV: Presentation**

1. *Requirement:* HABS and HAER documentation shall be clearly and concisely produced.

2. *Criteria:* For levels of documentation as indicated below, the following standards for presentation will be used:

a. *Measured Drawings:* Level I measured drawings will be lettered

mechanically (i.e., Leroy or similar) or in a handprinted equivalent style. Adequate dimensions shall be included on all sheets. Level III sketch plans should be neat and orderly.

b. *Large format photographs:* Level I photographs shall include duplicate photographs that include a scale. Level II and III photographs shall include, at a minimum, at least one photograph with a scale, usually of the principal facade.

c. *Written history and description:*  
Data shall be typewritten on bond, following accepted rules of grammar.

3. *Test:* Inspection of the documentation by HABS/HAER staff.

**Architectural and Engineering Documentation Prepared for Other Purposes**

Where a preservation planning process is in use, architectural and engineering documentation, like other treatment activities, are undertaken to achieve the goals identified by the preservation planning process. Documentation is deliberately selected as a treatment for properties evaluated as significant, and the development of the documentation program for a property follows from the planning objectives. Documentation efforts focus on the significant characteristics of the property, as defined in the previously completed evaluation. The selection of a level of documentation and the documentation techniques (measured drawings, photography, etc.) is based on the significance of the property and the management needs for which the documentation is being performed. For example, the kind and level of documentation required to record a historic property for easement purposes may be less detailed than that required as mitigation prior to destruction of the property. In the former case, essential documentation might be limited to the portions of the property controlled by the easement, for example, exterior facades; while in the latter case, significant interior architectural features and non-visible structural details would also be documented.

The principles and content of the HABS/HAER criteria may be used for guidance in creating documentation requirements for other archives. Levels of documentation and the durability and sizes of documentation may vary depending on the intended use and the repository. Accuracy of documentation should be controlled by assessing the reliability of all sources and making that assessment available in the archival record; by describing the limitations of the information available from research and physical examination of the

property and by retaining the primary data (field measurements and notebooks) from which the archival record was produced. Usefulness of the documentation products depends on preparing the documentation on durable materials that are able to withstand handling and reproduction, and in sizes that can be stored and reproduced without damage.

*Recommended Sources of Technical Information*

*Recording Historic Buildings.* Harley J. McKee. Government Printing Office, 1970. Washington, D.C. Available through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. GPO number 024-005-0235-9.

*HABS/HAER Procedures Manual.* Historic American Buildings Survey/Historic American Engineering Record, National Park Service, 1980. Washington, D.C.

*Photogrammetric Recording of Cultural Resources.* Perry E. Borchers. Technical Preservation Services, U.S. Department of the Interior, 1977. Washington, D.C.

*Rectified Photography and Photo Drawings for Historic Preservation.* J. Henry Chambers. Technical Preservation Services, U.S. Department of the Interior, 1973. Washington, D.C.

**Secretary of the Interior's Standards for Archeological Documentation**

Archeological documentation is a series of actions applied to properties of archeological interest. Documentation of such properties may occur at any or all levels of planning, identification, evaluation or treatment. The nature and level of documentation is dictated by each specific set of circumstances. Archeological documentation consists of activities such as archival research, observation and recording of above-ground remains, and observation (directly, through excavation, or indirectly, through remote sensing) of below-ground remains. Archeological documentation is employed for the purpose of gathering information on individual historic properties or groups of properties. It is guided by a framework of objectives and methods derived from the planning process, and makes use of previous planning decisions, such as those on evaluation of significance. Archeological documentation may be undertaken as an aid to various treatment activities, including research, interpretation, reconstruction, stabilization and data recovery when mitigating archeological losses resulting from construction. Care should be taken to assure that documentation efforts do not duplicate previous efforts.

**Standard I. Archeological Documentation Activities Follow an Explicit Statement of Objectives and Methods That Responds to Needs Identified in the Planning Process**

Archeological research and documentation may be undertaken to fulfill a number of needs, such as overviews and background studies for planning, interpretation or data recovery to mitigate adverse effects. The planning needs are articulated in a statement of objectives to be accomplished by the archeological documentation activities. The statement of objectives guides the selection of methods and techniques of study and provides a comparative framework for evaluating and deciding the relative efficiency of alternatives. Satisfactory documentation involves the use of archeological and historical sources, as well as those of other disciplines. The statement of objectives usually takes the form of a formal and explicit research design which has evolved from the interrelation of planning needs, current knowledge, resource value and logistics.

**Standard II. The Methods and Techniques of Archeological Documentation are Selected To Obtain the Information Required by the Statement of Objectives**

The methods and techniques chosen for archeological documentation should be the most effective, least destructive, most efficient and economical means of obtaining the needed information. Methods and techniques should be selected so that the results may be verified if necessary. Non-destructive techniques should be used whenever appropriate. The focus on stated objectives should be maintained throughout the process of study and documentation.

**Standard III. The Results of Archeological Documentation are Assessed Against the Statement of Objectives and Integrated Into the Planning Process**

One product of archeological documentation is the recovered data; another is the information gathered about the usefulness of the statement of objectives itself. The recovered data are assessed against the objectives to determine how they meet the specified planning needs. Information related to archeological site types, distribution and density should be integrated in planning at the level of identification and evaluation. Information and data concerning intra-site structure may be needed for developing mitigation strategies and are appropriately

integrated at this level of planning. The results of the data analyses are integrated into the body of current knowledge. The utility of the method of approach and the particular techniques which were used in the investigation (i.e. the research design) should be assessed so that the objectives of future documentation efforts may be modified accordingly.

**Standard IV. The Results of Archeological Documentation are Reported and Made Available to the Public**

Results must be accessible to a broad range of users including appropriate agencies, the professional community and the general public. Results should be communicated in reports that summarize the objectives, methods, techniques and results of the documentation activity, and identify the repository of the materials and information so that additional detailed information can be obtained, if necessary. The public may also benefit from the knowledge obtained from archeological documentation through pamphlets, brochures, leaflets, displays and exhibits, or by slide, film or multi-media productions. The goal of disseminating information must be balanced, however, with the need to protect sensitive information whose disclosure might result in damage to properties. Curation arrangements sufficient to preserve artifacts, specimens and records generated by the investigation must be provided for to assure the availability of these materials for future use.

**Secretary of the Interior's Guidelines for Archeological Documentation**

*Introduction*

These Guidelines link the Standards for Archeological Documentation with more specific guidance and technical information. They describe one approach to meeting the Standards for Documentation. Agencies, organizations or individuals proposing to approach archeological documentation differently may wish to review their approach with the National Park Service.

The Guidelines are organized as follows:

Archeological Documentation Objectives  
Documentation Plan  
Methods  
Reporting Results  
Curation  
Recommended Sources of Technical Information

1. Collection of base-line data:

2. Problem-oriented research directed toward particular data gaps recognized in the historic context(s);

3. Preservation or illustration of significance which has been identified for treatment by the planning process; or

4. Testing of new investigative or conservation techniques, such as the effect of different actions such as forms of site burial (aqueous or non-aqueous).

Many properties having archeological components have associative values as well as research values. Examples include Native American sacred areas and historic sites such as battlefields. Archeological documentation may preserve information or data that are linked to the identified values that a particular property possesses. Depending on the property type and the range of values represented by the property, it may be necessary to recover information that relates to an aspect of the property's significance other than the specified research questions. It is possible that conflicts may arise between the optimal realizations of research goals and other issues such as the recognition/protection of other types of associative values. The research design for the archeological documentation should provide for methods and procedures to resolve such conflicts, and for the close coordination of the archeological research with the appropriate ethnographic, social or technological research.

#### *Archeological Documentation Objectives*

The term "archeological documentation" is used here to refer specifically to any operation that is performed using archeological techniques as a means to obtain and record evidence about past human activity that is of importance to documenting history and prehistory in the United States. Historic and prehistoric properties may be important for the data they contain, or because of their association with important persons, events, or processes, or because they represent architectural or artistic values, or for other reasons. Archeological documentation may be an appropriate option for application not only to archeological properties, but to above-ground structures as well, and may be used in collaboration with a wide range of other treatment activities.

If a property contains artifacts, features, and other materials that can be studied using archeological techniques, then archeological documentation may be selected to achieve particular goals of the planning process—such as to address a specified information need, or to illustrate significant associative

values. Within the overall goals and priorities established by the planning process, particular methods of investigation are chosen that best suit the types of study to be performed.

Relationship of archeological documentation to other types of documentation or other treatments: Archeological documentation is appropriate for achieving any of various goals, including:

#### *Documentation Plan*

**Research Design:** Archeological documentation can be carried out only after defining explicit goals and a methodology for reaching them. The goals of the documentation effort directly reflect the goals of the preservation plan and the specific needs identified for the relevant historic contexts. In the case of problem oriented archeological research, the plan usually takes the form of a formal research design, and includes, in addition to the items below, explicit statements of the problem to be addressed and the methods or tests to be applied. The purpose of the statement of objectives is to explain the rationale behind the documentation effort; to define the scope of the investigation; to identify the methods, techniques, and procedures to be used; to provide a schedule for the activities; and to permit comparison of the proposed research with the results. The research design for an archeological documentation effort follows the same guidelines as those for identification (see the Guidelines for Identification) but has a more property-specific orientation.

The research design should draw upon the preservation plan to identify:

1. Evaluated significance of the property(ies) to be studied;
  2. Research problems or other issues relevant to the significance of the property;
  3. Prior research on the topic and property type; and how the proposed documentation objectives are related to previous research and existing knowledge;
  4. The amount and kinds of information (data) required to address the documentation objectives and to make reliable statements, including at what point information is redundant and documentation efforts have reached a point of diminishing returns;
  5. Methods to be used to find the information; and
  6. Relationship of the proposed archeological investigation to anticipated historical or structural documentation, or other treatments.
- The primary focus of archeological documentation is on the data classes

that are required to address the specified documentation objectives. This may mean that other data classes are deliberately neglected. If so, the reasons for such a decision should be carefully justified in terms of the preservation plan.

Archeological investigations seldom are able to collect and record all possible data. It is essential to determine the point at which further data recovery and documentation fail to improve the usefulness of the archeological information being recovered. One purpose of the research design is to estimate those limits in advance and to suggest at what point information becomes duplicative. Investigation strategies should be selected based on these general principles, considering the following factors:

1. Specific data needs;
2. Time and funds available to secure the data; and
3. Relative cost efficiency of various strategies.

Responsiveness to the concerns of local groups (e.g., Native American groups with ties to specific properties) that was built into survey and evaluation phases of the preservation plan, should be maintained in archeological investigation, since such activity usually involves site disturbance. The research design, in addition to providing for appropriate ethnographic research and consultation, should consider concerns voiced in previous phases. In the absence of previous efforts to coordinate with local or other interested groups, the research design should anticipate the need to initiate appropriate contracts and provide a mechanism for responding to sensitive issues, such as the possible uncovering of human remains or discovery of sacred areas.

The research design facilitates an orderly, goal directed and economical project. However, the research design must be flexible enough to allow for examination of unanticipated but important research opportunities that arise during the investigation.

#### *Documentation Methods*

**Background Review:** Archeological documentation usually is preceded by, or integrated with historical research (i.e. that intensive background information gathering including identification of previous archeological work and inspection of museum collections; gathering relevant data on geology, botany, urban geography and other related disciplines; archival research; informant interviews, or recording of oral tradition, etc.).

Depending on the goals of the archeological documentation, the background historical and archeological research may exceed the level of research accomplished for development of the relevant historic contexts or for identification and evaluation, and focuses on the unique aspects of the property to be treated. This assists in directing the investigation and locates a broader base of information than that contained in the property itself for response to the documentation goals. This activity is particularly important for historic archeological properties where information sources other than the property itself may be critical to preserving the significant aspects of the property. (See the Secretary of the Interior's Standards and Guidelines for Historical Documentation for discussion of associated research activities.)

**Field Studies:** The implementation of the research design in the field must be flexible enough to accommodate the discovery of new or unexpected data classes or properties, or changing field conditions. A phased approach may be appropriated when dealing with large complex properties or groups of properties, allowing for changes in emphasis or field strategy, or termination of the program, based on analysis of recovered data at the end of each phase. Such an approach permits the confirmation of assumptions concerning property extent, content or organization which had been made based on data gathered from identification and evaluation efforts, or the adjustment of those expectations and resulting changes in procedure. In some cases a phased approach may be necessary to gather sufficient data to calculate the necessary sample size for a statistically valid sample. A phased documentation program may often be most cost-effective, in allowing for early termination of work if the desired objectives cannot be achieved.

Explicit descriptive statements of and justification for field study techniques are important to provide a means of evaluating results. In some cases, especially those employing a sampling strategy in earlier phases (such as identification or evaluation), it is possible to estimate parameters of certain classes of data in a fairly rigorous statistical manner. It is thus desirable to maintain some consistency in choice of sampling designs throughout multiple phases of work at the same property. Consistency with previously employed areal sampling frameworks also improves potential replication in terms of later locating sampled and unsampled areas. It often is desirable to

estimate the nature and frequency of data parameters based on existing information or analogy to other similar cases. These estimates may then be tested in field studies.

An important consideration in choosing methods to be used in the field studies should be assuring full, clear, and accurate descriptions of all field operations and observations, including excavation and recording techniques and stratigraphic or inter-site relationships.

To the extent feasible, chosen methodologies and techniques should take into account the possibility that future researchers will need to use the recovered data to address problems not recognized at the time the data were recovered. The field operation may recover data that may not be fully analyzed; this data, as well as the data analyzed, should be recorded and preserved in a way to facilitate future research.

A variety of methodologies may be used. Choices must be explained, including a measure of cost-effectiveness relative to other potential choices. Actual results can then be measured against expectations, and the information applied later in similar cases.

Destructive methods should not be applied to portions or elements of the property if nondestructive methods are practical. If portions or elements of the property being documented are to be preserved in place, the archeological investigation should employ methods that will leave the property as undisturbed as possible. However, in cases where the property will be destroyed by, for example, construction following the investigation, it may be most practical to gather the needed data in the most direct manner, even though that may involve use of destructive techniques.

Logistics in the field, including the deployment of personnel and materials and the execution of sampling strategies, should consider site significant, anticipated location of most important data, cost effectiveness, potential time limitations and possible adverse environmental conditions.

The choice of methods for recording data gathered in the field should be based on the research design. Based on that statement, it is known in advance of field work what kinds of information are needed for analysis; record-keeping techniques should focus on these data. Field records should be maintained in a manner that permits independent interpretation in so far as possible.

Record-keeping should be standardized in format and level of detail.

Archeological documentation should be conducted under the supervision of qualified professionals in the disciplines appropriate to the data that are to be recovered. When the general public is directly involved in archeological documentation activities, provision should be made for training and supervision by qualified professionals. (See the Professional Qualifications Standards.)

**Analysis:** Archeological documentation is not completed with field work; analysis of the collected information is an integral part of the documentation activity, and should be planned for in the research design. Analytical techniques should be selected that are relevant to the objectives of the investigation. Forms of analysis that may be appropriate, depending on the type of data recovered and the objectives of the investigation, include but are not limited to: studying artifact types and distribution; radiometric and other means of age determination; studies of soil stratigraphy; studies of organic matter such as human remains, pollen, animal bones, shells and seeds; study of the composition of soils and study of the natural environment in which the property appears.

#### *Reporting Results*

**Report Contents:** Archeological documentation concludes with written report(s) including minimally the following topics:

1. Description of the study area;
2. Relevant historical documentation/background research;
3. The research design;
4. The field studies as actually implemented, including any deviation from the research design and the reason for the changes;
5. All field observations;
6. Analyses and results, illustrated as appropriate with tables, charts, and graphs;
7. Evaluation of the investigation in terms of the goals and objectives of the investigation, including discussion of how well the needs dictated by the planning process were served;
8. Recommendations for updating the relevant historic contexts and planning goals and priorities, and generation of new or revised information needs;
9. Reference to related on-going or proposed treatment activities, such as structural documentation, stabilization, etc.; and

10. Information on the location of original data in the form of field notes, photographs, and other materials.

Some individual property information, such as specific locational data, may be highly sensitive to disclosure, because of the threat of vandalism. If the objectives of the documentation effort are such that a report containing confidential information such as specific site locations or information on religious practices is necessary, it may be appropriate to prepare a separate report for public distribution. The additional report should summarize that information that is not under restricted access in a format most useful to the expected groups of potential users. Peer review of draft reports is recommended to ensure that state-of-the-art technical reports are produced.

**Availability:** Results must be made available to the full range of potential users. This can be accomplished through a variety of means including publication of results in monographs and professional journals and distribution of the report to libraries or technical clearinghouses such as the National Technical Information Service in Springfield, Virginia.

#### Curation

Archaeological specimens and records are part of the documentary record of an archaeological site. They must be curated for future use in research, interpretation, preservation, and resource management activities. Curation of important archaeological specimens and records should be provided for in the development of any archaeological program or project.

Archaeological specimens and records that should be curated are those that embody the information important to history and prehistory. They include artifacts and their associated documents, photographs, maps, and field notes; materials of an environmental nature such as bones, shells, soil and sediment samples, wood, seeds, pollen, and their associated records; and the products and associated records of laboratory procedures such as thin sections, and sediment fractions that result from the analysis of archaeological data.

Satisfactory curation occurs when:

1. Curation facilities have adequate space, facilities, and professional personnel;
2. Archaeological specimens are maintained so that their information values are not lost through deterioration, and records are maintained to a professional archival standard;
3. Curated collections are accessible to qualified researchers within a

reasonable time of having been requested; and

4. Collections are available for interpretive purposes, subject to reasonable security precautions.

#### Recommended Sources of Technical Information

*Archeomagnetism: A Handbook for the Archeologist.* Jeffrey L. Bighay, U.S. Department of the Interior, Washington, D.C., 1980.

*The Curation and Management of Archeological Collections: A Pilot Study.* Cultural Resource Management Series, U.S. Department of the Interior, September 1980.

*Human Bones and Archeology.* Douglas H. Ubelaker, Interagency Archeological Services, Heritage Conservation and Recreation Service, U.S. Department of the Interior, Washington, D.C., 1980. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

*Manual for Museums.* Ralph H. Lewis, National Park Service, U.S. Department of the Interior, 1978.

*Treatment of Archeological Properties: A Handbook.* Advisory Council on Historic Preservation, Washington D.C., 1980.

Secretary of the Interior's Standards for Historic Preservation Projects

#### General Standards for Historic Preservation Projects

The following general standards apply to all treatments undertaken on historic properties listed in the National Register.

1. Every reasonable effort shall be made to provide a compatible use for a property that requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations which have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive architectural features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.

6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any acquisition, stabilization, preservation, rehabilitation, restoration, or reconstruction project.

#### Specific Standards for Historic Preservation Projects

The following specific standards for each treatment are to be used in conjunction with the eight general standards and, in each case, begin with number 9. For example, in evaluating acquisition projects, include the eight general standards plus the four specific standards listed under standards for Acquisition. The specific standards differ from those published for use in Historic Preservation Fund grant-in-aid projects (36 CFR Part 68) in that they discuss more fully the treatment of archeological properties.

#### Standards for Acquisition

9. Careful consideration shall be given to the type and extent of property rights which are required to assure the preservation of the historic resource. The preservation objectives shall determine the exact property rights to be acquired.
10. Properties shall be acquired in fee simple when absolute ownership is required to insure their preservation.
11. The purchase of less-than-fee-simple interests, such as open space or facade easements, shall be undertaken when a limited interest achieves the preservation objective.
12. Every reasonable effort shall be made to acquire sufficient property with the historic resource to protect its historical, archeological, architectural or cultural significance.

**Standard for Protection**

9. Before applying protective measures which are generally of a temporary nature and imply future historic preservation work, an analysis of the actual or anticipated threats to the property shall be made.

10. Protection shall safeguard the physical condition or environment of a property or archeological site from further deterioration or damage caused by weather or other natural, animal, or human intrusions.

11. If any historic material or architectural features are removed, they shall be properly recorded and, if possible, stored for future study or reuse.

**Standards for Stabilization**

9. Stabilization shall reestablish the structural stability of a property through the reinforcement of loadbearing members or by arresting deterioration leading to structural failure.

Stabilization shall also reestablish weather resistant conditions for a property.

10. Stabilization shall be accomplished in such a manner that it detracts as little as possible from the property's appearance and significance. When reinforcement is required to reestablish structural stability, such work shall be concealed wherever possible so as not to intrude upon or detract from the aesthetic and historical or archeological quality of the property, except where concealment would result in the alteration or destruction of historically or archeologically significant material or spaces. Accurate documentation of stabilization procedures shall be kept and made available for future needs.

11. Stabilization work that will result in ground disturbance shall be preceded by sufficient archeological investigation to determine whether significant subsurface features or artifacts will be affected. Recovery, curation and documentation of archeological features and specimens shall be undertaken in accordance with appropriate professional methods and techniques.

**Standards for Preservation**

9. Preservation shall maintain the existing form, integrity, and materials of a building, structure, or site.

Archeological sites shall be preserved undisturbed whenever feasible and practical. Substantial reconstruction or restoration of lost features generally are not included in a preservation undertaking.

10. Preservation shall include techniques of arresting or retarding the

deterioration of a property through a program of ongoing maintenance.

11. Use of destructive techniques, such as archeological excavation, shall be limited to providing sufficient information for research, interpretation and management needs.

**Standards for Rehabilitation**

9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historic, architectural, or cultural material and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.

10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

**Standards for Restoration**

9. Every reasonable effort shall be made to use a property for its originally intended purpose or to provide a compatible use that will require minimum alteration to the property and its environment.

10. Reinforcement required for structural stability or the installation of protective or code required mechanical systems shall be concealed wherever possible so as not to intrude or detract from the property's aesthetic and historical qualities, except where concealment would result in the alteration or destruction of historically significant materials or spaces.

11. Restoration work such as the demolition of non-contributing additions that will result in ground or structural disturbance shall be preceded by sufficient archeological investigation to determine whether significant subsurface or structural features or artifacts will be affected. Recovery, curation and documentation of archeological features and specimens shall be undertaken in accordance with appropriate professional methods and techniques.

**Standards for Reconstruction**

9. Reconstruction of a part or all of a property shall be undertaken only when such work is essential to reproduce a significant missing feature in a historic district or scene, and when a contemporary design solution is not acceptable. Reconstruction of archeological sites generally is not appropriate.

10. Reconstruction of all or a part of a historic property shall be appropriate when the reconstruction is essential for

understanding and interpreting the value of a historic district, or when no other building, structure, object, or landscape feature with the same associative value has survived and sufficient historical or archeological documentation exists to insure an accurate reproduction of the original.

11. The reproduction of missing elements accomplished with new materials shall duplicate the composition, design, color, texture, and other visual qualities of the missing element. Reconstruction of missing architectural or archeological features shall be based upon accurate duplication of original features substantiated by physical or documentary evidence rather than upon conjectural designs or the availability of different architectural features from other buildings.

12. Reconstruction of a building or structure on an original site shall be preceded by a thorough archeological investigation to locate and identify all subsurface features and artifacts. Recovery, curation and documentation of archeological features and specimens shall be undertaken in accordance with professional methods and techniques.

13. Reconstruction shall include measures to preserve any remaining original fabric, including foundations, subsurface, and ancillary elements. The reconstruction of missing elements and features shall be done in such a manner that the essential form and integrity of the original surviving features are unimpaired.

**Secretary of the Interior Guidelines for Historic Preservation Projects**

The guidelines for the Secretary of the Interior's Standards for Historic Preservation Projects, not included here because of their length, may be obtained separately from the National Park Service.

**Professional Qualifications Standards**

The following requirements are those used by the National Park Service, and have been previously published in the Code of Federal Regulations, 36 CFR Part 61. The qualifications define minimum education and experience required to perform identification, evaluation, registration, and treatment activities. In some cases, additional areas or levels of expertise may be needed, depending on the complexity of the task and the nature of the historic properties involved. In the following definitions, a year of full-time professional experience need not consist of a continuous year of fulltime work but



may be made up of discontinuous periods of full-time or part-time work adding up to the equivalent of a year of full-time experience.

#### History

The minimum professional qualifications in history are a graduate degree in history or closely related field; or a bachelor's degree in history or closely related field plus one of the following:

1. At least two years of full-time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historic organization or agency, museum, or other professional institution; or
2. Substantial contribution through research and publication to the body of scholarly knowledge in the field of history.

#### Archeology

The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus:

1. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management;
2. At least four months of supervised field and analytic experience in general North American archeology; and
3. Demonstrated ability to carry research to completion.

In addition to these minimum qualifications, a professional in prehistoric archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period.

#### Architectural History

The minimum professional qualifications in architectural history are a graduate degree in architectural history, art history, historic preservation, or closely related field, with coursework in American architectural history; or a bachelor's degree in architectural history, art history, historic preservation or closely related field plus one of the following:

1. At least two 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

2. Substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

#### Architecture

The minimum professional qualifications in architecture are a professional degree in architecture plus at least two years of full-time experience in architecture; or a State license to practice architecture.

#### Historic Architecture

The minimum professional qualifications historic in architecture are a professional degree in architecture or a State license to practice architecture, plus one of the following:

1. At least one year of graduate study in architectural preservation, American architectural history, preservation planning, or closely related field; or
2. At least one year of full-time professional experience on historic preservation projects.

Such graduate study or experience shall include detailed investigations of historic structures, preparation of historic structures research reports, and preparation of plans and specifications for preservation projects.

#### Preservation Terminology

**Acquisition**—the act or process of acquiring fee title or interest other than fee title of real property (including acquisition of development rights or remainder interest).

**Comprehensive Historic Preservation Planning**—the organization into a logical sequence of preservation information pertaining to identification, evaluation, registration and treatment of historic properties, and setting priorities for accomplishing preservation activities.

**Historic Context**—a unit created for planning purposes that groups information about historic properties based on a shared theme, specific time period and geographical area.

**Historic Property**—a district, site, building, structure or object significant in American history, architecture, engineering, archeology or culture at the national, State, or local level.

**Integrity**—the authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic or prehistoric period.

**Intensive Survey**—a systematic, detailed examination of an area designed to gather information about historic properties sufficient to evaluate them against predetermined criteria of

significance within specific historic contexts.

**Inventory**—a list of historic properties determined to meet specified criteria of significance.

**National Register Criteria**—the established criteria for evaluating the eligibility of properties for inclusion in the National Register of Historic Places.

**Preservation (treatment)**—the act or process of applying measures to sustain the existing form, integrity and material of a building or structure, and the existing form and vegetative cover of a site. It may include initial stabilization work, where necessary, as well as ongoing maintenance of the historic building materials.

**Property Type**—a grouping of individual properties based on a set of shared physical or associative characteristics.

**Protection (treatment)**—the act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, loss or attack, or to cover or shield the property from danger or injury. In the case of buildings and structures, such treatment is generally of a temporary nature and anticipates future historic preservation treatment; in the case of archeological sites, the protective measure may be temporary or permanent.

**Reconnaissance Survey**—an examination of all or part of an area accomplished in sufficient detail to make generalizations about the types and distributions of historic properties that may be present.

**Reconstruction (treatment)**—the act or process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or any part thereof, as it appeared at a specific period of time.

**Rehabilitation (treatment)**—the act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural and cultural values.

**Research design**—a statement of proposed identification, documentation, investigation, or other treatment of a historic property that identifies the project's goals, methods and techniques, expected results, and the relationship of the expected results to other proposed activities or treatments.

**Restoration**—the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time



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by means of the removal of later work or by the replacement of missing earlier work.

*Sample Survey*—survey of a representative sample of lands within a given area in order to generate or test predictions about the types and distributions of historic properties in the entire area.

*Stabilization (treatment)*—the act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

*Statement of objectives*—see Research design.

Dated: September 28, 1983.

Russell E. Dickenson,  
Director, National Park Service.

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## Errata Sheet

ARCHEOLOGY AND HISTORIC PRESERVATION; SECRETARY OF THE INTERIOR'S  
STANDARDS AND GUIDELINESFEDERAL REGISTER, Vol. 48, No. 190, Part IV.

In the Guidelines for Archeological Documentation, the section titled "Archeological Documentation Objectives" was published out of sequence. The correct order of the material on pages 44734 and 44735 is as follows:

Secretary of the Interior's Guidelines for  
Archeological Documentation*Introduction*

These Guidelines link the Standards for Archeological Documentation with more specific guidance and technical information. They describe one approach to meeting the Standards for Documentation. Agencies, organizations or individuals proposing to approach archeological documentation differently may wish to review their approach with the National Park Service.

The Guidelines are organized as follows:

Archeological Documentation Objectives  
Documentation Plan  
Methods  
Reporting Results  
Curation  
Recommended Sources of Technical  
Information

*Archeological Documentation  
Objectives*

The term "archeological documentation" is used here to refer specifically to any operation that is performed using archeological techniques as a means to obtain and record evidence about past human activity that is of importance to documenting history and prehistory in the United States. Historic and prehistoric properties may be important for the data they contain, or because of their association with important persons, events, or processes, or because they represent architectural or artistic values, or for other reasons. Archeological documentation may be an appropriate option for application not only to archeological properties, but to above-ground structures as well, and may be used in collaboration with a wide range of other treatment activities.

If a property contains artifacts, features, and other materials that can be studied using archeological techniques, then archeological documentation may be selected to achieve particular goals of the planning process—such as to address a specified information need, or to illustrate significant associative values. Within the overall goals and priorities established by the planning process, particular methods of investigation are chosen that best suit the types of study to be performed.

Relationship of archeological documentation to other types of documentation or other treatments: Archeological documentation is appropriate for achieving any of various goals, including:

1. Collection of base-line data;
  2. Problem-oriented research directed toward particular data gaps recognized in the historic context(s);
  3. Preservation or illustration of significance which has been identified for treatment by the planning process;
  4. Testing of new investigative or conservation techniques, such as the effect of different actions such as form of site burial (aqueous or non-aqueous).
- Many properties having archeological components have associative values as well as research values. Examples include Native American sacred areas and historic sites such as battlefields. Archeological documentation may preserve information or data that are linked to the identified values that a particular property possesses. Depending on the property type and the range of values represented by the property, it may be necessary to recover information that relates to an aspect of the property's significance other than the specified research questions. It is possible that conflicts may arise between the optimal realizations of research goals and other issues such as the recognition/protection of other types of associative values. The research design for the archeological documentation should provide for methods and procedures to resolve such conflicts, and for the close coordination of the archeological research with the appropriate ethnographic, social or technological research.

*Documentation Plan*

**APPENDIX 5**

**"Standards of Research Performance of the  
Society of Professional Archeologists"**

## STANDARDS OF RESEARCH PERFORMANCE

A research archaeologist has a responsibility to attempt to design and conduct projects which will add to our understanding of past cultures and/or that will develop better theories, codes, or techniques for interpreting the archaeological record, while causing minimal harm to the archaeological resource base. In the conduct of a research project, the following minimum standards should be followed:

I. The archaeologist has a responsibility to prepare adequately for any research project, whether or not in the field. The archaeologist must:

- 1.1 Assess the adequacy of his/her qualifications for the demands of the project, and minimize inadequacies by acquiring additional expertise, by bringing in associates with the needed qualifications, or by modifying the scope of the project;
- 1.2 Inform himself/herself of relevant previous research;
- 1.3 Develop a scientific plan of research which specifies the objectives of the project, takes into account previous relevant research, employs a suitable methodology, and provides for economical use of the resource base (whether such base consists of an excavation site or of specimens) consistent with the objectives of the project;
- 1.4 Ensure the availability of adequate staff and support facilities to carry the project to completion, and of adequate curatorial facilities for specimens and records;
- 1.5 Comply with all legal requirements, including, without limitation, obtaining all necessary governmental permits and necessary permission from landowners or other persons;
- 1.6 Determine whether the project is likely to interfere with the program or projects of other scholars and if there is such a likelihood, initiate negotiations to minimize such interference.

II. In conducting research, the archaeologist must follow her/his scientific plan of research, except to the extent that unforeseen circumstances warrant its modification.

III. Procedures for field survey or excavation must meet the following minimal standards:

- 3.1 If specimens are collected, a system for identifying and recording their proveniences must be maintained.
- 3.2 Uncollected entities such as environmental or cultural features, depositional strata, and the like, must be fully and accurately recorded by appropriate means, and their location recorded.
- 3.3 The methods employed in data collection must be fully and accurately described. Significant stratigraphic and/or associational relationships among artifacts, other specimens, and cultural and environmental features must be fully and accurately recorded.
- 3.4 All records should be intelligible to other archaeologists. If terms lacking commonly held referents are used, they should be clearly defined.
- 3.5 Insofar as possible, the interests of other researchers should be considered. For example, upper levels of a site should be scientifically excavated and recorded whenever feasible, even if the focus of the project is on underlying levels.

IV. During accessioning, analysis and storage of specimens and records in the laboratory, the archaeologist must take precautions to ensure that correlations between the specimens and the field records are maintained, so that provenience, contextual relationships and the like are not confused or obscured.

V. Specimens and research resulting from a project must be deposited at an institution with permanent curatorial facilities.

VI. The archaeologist has responsibility for appropriate dissemination of the results of his/her research to the appropriate constituencies with reasonable dispatch.

6.1 Results viewed as significant contributions to substantive knowledge of the past or advancements in theory, method or technique should be disseminated to colleagues and other interested persons by appropriate means, such as publications, reports at professional meetings or letters to colleagues.

6.2 Requests from qualified colleagues for information on research results directly should be honored, if consistent with the researcher's prior rights to publication and with her/his other professional responsibilities.

6.3 Failure to complete a full scholarly report within 10 years after completion of a field project shall be construed as a waiver of an archaeologist's right of primacy with respect to analysis and publication of data. Upon expiration of such 10 year period, or at such earlier time as the archaeologist shall determine not to publish the results, such data should be made fully accessible for analysis and publication to other archaeologists.

6.4 While contractual obligations in reporting must be respected, archaeologists should not enter into a contract which prohibits the archaeologist from including his or her own interpretations or conclusions in contractual reports, or from a continuing right to use the data after completion of the project.

6.5 Archaeologists have an obligation to accede to reasonable requests for information from the news media.

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Places, National Park Service, United States Department of the Interior, Washington, D.C. 20240.

**§§ 60.7 and 60.8 Reserved**

**§ 60.9 Nominations by Federal agencies.**

(a) The National Historic Preservation Act of 1966, as amended, requires that, with the advice of the Secretary and in cooperation with the State Historic Preservation Officer of the State involved, each Federal agency shall establish a program to locate, inventory and nominate to the Secretary all properties under the agency's ownership or control that appear to qualify for inclusion on the National Register. Section 2(a) of Executive Order 11580 provides that Federal agencies shall locate, inventory, and nominate to the Secretary of the Interior all sites, buildings, districts, and objects under their jurisdiction or control that appear to qualify for listing on the National Register of Historic Places. Additional responsibilities of Federal agencies are detailed in the National Historic Preservation Act of 1966, as amended, Executive Order 11580, the National Environmental Policy Act of 1969, the Archeological and Historic Preservation Act of 1974, and procedures developed pursuant to these authorities, and other related legislation.

(b) Nomination forms are prepared under the supervision of the Federal Preservation Officer designated by the head of a Federal agency to fulfill agency responsibilities under the National Historic Preservation Act of 1966, as amended, and

(c) Completed nominations are submitted to the appropriate State Historic Preservation Officer for review and comment regarding the adequacy of the nomination, the significance of the property and its eligibility for the National Register. The chief elected local officials of the county (or equivalent governmental unit) and municipal political jurisdiction in which the property is located are notified and given 45 days in which to comment. The State Historic Preservation Officer signs block 12 of the nomination form with his/her recommendation.

(d) After receiving the comments of the State Historic Preservation Officer, and chief elected local official, or if there has been no response within 45 days, the Federal Preservation Officer may approve the nomination and forward it to the Keeper of the National Register of Historic Places, National Park Service, United States Department of the Interior, Washington, D.C. 20240. The Federal Preservation Officer signs block 12 of the nomination form if in his

or her opinion the property meets the National Register criteria for evaluation. The Federal Preservation Officer's signature in block 12 certifies that

(1) All procedural requirements have been met;

(2) The nomination form is adequately documented;

(3) The nomination form is technically and professionally correct and sufficient;

(4) In the opinion of the Federal Preservation Officer, the property meets the National Register criteria for evaluation.

(e) When a Federal Preservation Officer submits a nomination form for a property that he or she does not believe meets the National Register criteria for evaluation, the Federal Preservation Officer signs a continuation sheet Form NPS 10-600a explaining his/her opinions on the eligibility of the property and certifying that

(1) All procedural requirements have been met;

(2) The nomination form is adequately documented;

(3) The nomination form is technically and professionally correct and sufficient.

(f) The comments of the State Historic Preservation Officer and chief local official are appended to the nomination, or, if there are no comments from the State Historic Preservation Officer an explanation is attached. Concurrent nominations (see § 60.10) cannot be submitted, however, until the nomination has been considered by the State in accord with Sec. 60.8, supra. Comments received by the State concerning concurrent nominations and notarized statements of objection must be submitted with the nomination.

(g) Notices will be provided in the Federal Register that the nominated property is being considered for listing in the National Register of Historic Places in accord with § 60.12.

(h) Nominations will be submitted in duplicate and a copy of every nomination submitted to the Keeper of the National Register of Historic Places. Nominations which are technically or professionally inadequate will be returned for correction and resubmission. When a property does not appear to meet the National Register criteria for evaluation, the nomination will be returned with an explanation as to why the property does not meet the National Register criteria for evaluation.

(i) Any person or organization which supports or opposes the nomination of a property by a Federal Preservation Officer may petition the Keeper during the nomination process either to accept

or reject a nomination. The petitioner must state the grounds of the petition and request in writing that the Keeper substantively review the nomination. Such petition received by the Keeper prior to the listing of a property in the National Register or a determination of its eligibility where the private owner(s) object to listing will be considered by the Keeper and the nomination will be substantively reviewed.

**§ 60.10 Concurrent State and Federal nominations.**

(a) State Historic Preservation Officers and Federal Preservation Officers are encouraged to cooperate in locating, inventorying, evaluating, and nominating all properties possessing historical, architectural, archeological, or cultural value. Federal agencies may nominate properties where a portion of the property is not under Federal ownership or control.

(b) When a portion of the area included in a Federal nomination is not located on land under the ownership or control of the Federal agency, but is an integral part of the cultural resource, the completed nomination form shall be sent to the State Historic Preservation Officer for notification to property owners, to give owners of private property an opportunity to concur in or object to the nomination, to solicit written comments and for submission to the State Review Board pursuant to the procedure in § 60.6.

(c) If the State Historic Preservation Officer and the State Review Board agree that the nomination meets the National Register criteria for evaluation, the nomination is signed by the State Historic Preservation Officer and returned to the Federal agency initiating the nomination. If the State Historic Preservation Officer and the State Review Board disagree, the nomination shall be returned to the Federal agency with the opinions of the State Historic Preservation Officer and the State Review Board concerning the adequacy of the nomination and whether or not the property meets the criteria for evaluation. The opinion of the State Review Board may be the minutes of the State Review Board meeting. The State Historic Preservation Officer's signed opinion and comments shall confirm to the Federal agency that the State nomination procedures have been fulfilled including notification requirements. Any comments received by the State shall be included with the letter so shall any notarized statements objecting to the listing of private property.

(d) If the owner of any privately owned property, (or a majority of the owners of such properties within a district or single property with multiple owners) objects to such inclusion by notarized statement(s) the Federal Historic Preservation Officer shall submit the nomination to the Keeper for review and a determination of eligibility. Comments, opinions, and notarized statements of objection shall be submitted with the nomination.

(e) The State Historic Preservation Officer shall notify the nonfederal owners when a concurrent nomination is listed or determined eligible for the National Register as required in § 60.11 and 60.12 (Reserved)

§ 60.11 and 60.12 (Reserved)

§ 60.13 Publication in the "Federal Register" and other NPS notification.

(a) When a nomination is accepted, NPS will publish notice in the Federal Register that the property is being considered for listing in the National Register. A 15-day disseminating period from date of publication will be required. When necessary to assist in the preservation of historic properties this 15-day period may be shortened or waived.

(b) NPS shall notify the appropriate State Historic Preservation Officer, Federal Preservation Officer, person or local government when there is no approved State program of the listing of the property in the National Register and will publish notice of the listing in the Federal Register.

(c) In nominations where the owner of any privately owned property (or a majority of the owners of such properties within a district or single property with multiple owners) has objected and the Keeper has determined the nomination eligible for the National Register, NPS shall notify the State Historic Preservation Officer, the Federal Preservation Officer (for Federal or concurrent nominations), the person or local government where there is no approved State Historic Preservation Program and the Advisory Council on Historic Preservation. NPS will publish notice of the determination of eligibility in the Federal Register.

(d) (Reserved)

§ 60.14 Changes and revisions to properties listed in the National Register

(a) Boundary changes. (1) A boundary alteration shall be considered as a new property nomination. All forms, criteria and procedures used in nominating a property to the National Register must be used. In the case of boundary enlargements only those owners in the newly nominated or yet unlisted areas need be notified and will be counted in

determining whether a majority of private owners object to listing. In the case of a diminution of a boundary, owners shall be notified as specified in § 60.13 concerning removing properties from the National Register. A professionally justified recommendation by the State Historic Preservation Officer, Federal Preservation Officer, or person or local government where there is no approved State Historic Preservation Program shall be presented to NPS. During this process, the property is not taken off the National Register. If the Keeper or his or her designee finds the recommendation in accordance with the National Register criteria for evaluation, the change will be accepted. If the boundary change is not accepted, the old boundaries will remain. Boundary revisions may be appealed as provided for in Sections 60.12 and 60.18.

(2) Four justifications exist for altering a boundary: Professional error in the initial nomination, loss of historic integrity, recognition of additional significance, additional research documenting that a larger or smaller area should be listed. No enlargement of a boundary should be recommended unless the additional area possesses previously unrecognized significance in American history, architecture, archeology, engineering or culture. No diminution of a boundary should be recommended unless the properties being removed do not meet the National Register criteria for evaluation. Any proposal to alter a boundary has to be documented in detail including photographing the historic resources falling between the existing boundary and the other proposed boundary.

(b) Relocating properties listed in the National Register. (1) Properties listed in the National Register should be moved only when there is no feasible alternative for preservation. When a property is moved, every effort should be made to reestablish its historic orientation, immediate setting, and general environment.

(2) If it is proposed that a property listed in the National Register be moved and the State Historic Preservation Officer, Federal agency for a property under Federal ownership or control, or person or local government where there is no approved State Historic Preservation Program, wishes the property to remain in the National Register during and after the move, the State Historic Preservation Officer or Federal Preservation Officer having ownership or control or person or local government where there is no approved State Historic Preservation Program, shall submit documentation to NPS prior to the move. The documentation shall

discuss: (i) the reasons for the move; (ii) the effect on the property's historical integrity; (iii) the new setting and general environment of the proposed site, including evidence that the proposed site does not possess historical or archeological significance that would be adversely affected by the intrusion of the property; and (iv) photographs showing the proposed location.

(3) Any such proposal with respect to the new location shall follow the required notification procedures, shall be approved by the State Review Board if it is a State nomination and shall continue to follow normal review procedures. The Keeper shall also follow the required notification procedures for nominations. The Keeper shall respond to a properly documented request within 45 days of receipt from the State Historic Preservation Officer or Federal Preservation Officer, or within 60 days of receipt from a person or local government where there is no approved State Historic Preservation Program, concerning whether or not the move is approved. Once the property is moved, the State Historic Preservation Officer, Federal Preservation Officer, or person or local government where there is no approved State Historic Preservation Program shall submit to the Keeper for review (i) a letter notifying him or her of the date the property was moved; (ii) photographs of the property on its new site; and (iii) revised maps, including a U.S.G.S. map, (iv) acreage, and (v) verbal boundary description. The Keeper shall respond to a properly documented submittal within 45 days of receipt with the final decision on whether the property will remain in the National Register. If the Keeper approves the move, the property will remain in the National Register during and after the move unless the integrity of the property is in some unforeseen manner destroyed. If the Keeper does not approve the move, the property will be automatically deleted from the National Register when moved. In cases of properties removed from the National Register, if the State, Federal agency, or person or local government where there is no approved State Historic Preservation Program has neglected to obtain prior approval for the move or has evidence that previously unrecognized significance exists, or has occurred, the State, Federal agency, person or local government may resubmit a nomination for the property.

(4) In the event that a property is moved, deletion from the National Register will be automatic unless the above procedures are followed prior to the move. If the property has already

been moved. It is the responsibility of the State, Federal agency or person or local government which nominated the property to notify the National Park Service. Assuming that the State, Federal agency or person or local government wishes to have the structure reentered in the National Register, it must be nominated again on new forms which should discuss: (i) the reasons for the move; (ii) the effect on the property's historical integrity; and (iii) the new setting and general environment, including evidence that the new site does not possess historical or archeological significance that would be adversely affected by intrusion of the property. In addition, new photographs, acreage, verbal boundary description and a U.S.G.S. map showing the structure at its new location must be sent along with the revised nomination. Any such nomination submitted by a State must be approved by the State Review Board.

(3) Properties moved in a manner consistent with the comments of the Advisory Council on Historic Preservation, in accord with its procedures (36 CFR Part 806), are granted as exception to § 60.12(b). Moving of properties in accord with the Advisory Council's procedures should be dealt with individually in each memorandum of agreement. In such cases, the State Historic Preservation Officer or the Federal Preservation Officer, for properties under Federal ownership or control, shall notify the Keeper of the new location after the move including new documentation as described above.

§ 60.15. Removing properties from the National Register.

(a) Grounds for removing properties from the National Register are as follows: (1) the property has ceased to meet the criteria for listing in the National Register because the qualities which caused it to be originally listed have been lost or destroyed, or such qualities were lost subsequent to nomination and prior to listing; (2) additional information shows that the property does not meet the National Register criteria for evaluation; (3) error in professional judgment as to whether the property meets the criteria for evaluation; or (4) procedural error in the nomination or listing process. Properties removed from the National Register for procedural error shall be reconsidered for listing by the Keeper after correction of the error or errors by the State Historic Preservation Officer, Federal Preservation Officer, person or local government which originally nominated the property, or by

the Keeper, as appropriate. The procedures set forth for nominations shall be followed in such reconsiderations. Any property or district removed from the National Register for procedural deficiencies in the nomination and/or listing process shall automatically be considered eligible for inclusion in the National Register without further action and will be published as such in the Federal Register.

(b) Properties listed in the National Register prior to December 12, 1980, may only be removed from the National Register on the grounds established in subsection (a)(1) of this section.

(c) Any person or organization may petition in writing for removal of a property from the National Register by setting forth the reasons the property should be removed on the grounds established in paragraph (a) of this section. With respect to nominations determined eligible for the National Register because the owners of private property object to listing, anyone may petition for reconsideration of whether or not the property meets the criteria for evaluation using these procedures. Petitions for removal are submitted to the Keeper by the State Historic Preservation Officer for State nominations, the Federal Preservation Officer for Federal nominations, and directly to the Keeper from persons or local governments where there is no approved State Historic Preservation Program.

(d) Petitions submitted by persons or local governments where there is no approved State Historic Preservation Program shall include a list of the owner(s). In such cases the Keeper shall notify the affected owner(s) and the chief elected local official and give them an opportunity to comment. For approved State programs, the State Historic Preservation Officer shall notify the affected owner(s) and chief elected local official and give them an opportunity to comment prior to submitting a petition for removal. The Federal Preservation Officer shall notify and obtain the comments of the appropriate State Historic Preservation Officer prior to forwarding an appeal to NPS. All comments and opinions shall be submitted with the petition.

(e) The State Historic Preservation Officer or Federal Preservation Officer shall respond in writing within 45 days of receipt to petitions for removal of property from the National Register. The response shall advise the petitioner of the State Historic Preservation Officer's or Federal Preservation Officer's views on the petition.

(f) A petitioner desiring to pursue his removal request must notify the State Historic Preservation Officer or the Federal Preservation Officer in writing within 45 days of receipt of the written views on the petition.

(g) The State Historic Preservation Officer may elect to have a property considered for removal according to the State's nomination procedures unless the petition is on procedural grounds and shall schedule it for consideration by the State Review Board as quickly as all notification requirements can be completed following procedures outlined in § 80.6 or the State Historic Preservation Officer may elect to forward the petition for removal to the Keeper with his or her comments without State Review Board consideration.

(h) Within 15 days after receipt of the petitioner's notification of intent to pursue his removal request, the State Historic Preservation Officer shall notify the petitioner in writing either that the State Review Board will consider the petition on a specified date or that the petition will be forwarded to the Keeper after notification requirements have been completed. The State Historic Preservation Officer shall forward the petitions to the Keeper for review within 15 days after notification requirements or Review Board consideration, if applicable, have been completed.

(i) Within 15 days after receipt of the petitioner's notification of intent to pursue his petition, the Federal Preservation Officer shall forward the petition with his or her comments and those of the State Historic Preservation Officer to the Keeper.

(j) The Keeper shall respond to a petition for removal within 45 days of receipt, except where the Keeper must notify the owners and the chief elected local official. In such cases the Keeper shall respond within 60 days of receipt. The Keeper shall notify the petitioner and the applicable State Historic Preservation Officer, Federal Preservation Officer, or person or local government where there is no approved State Historic Preservation Program, of his decision. The State Historic Preservation Officer or Federal Preservation Officer transmitting the petition shall notify the petitioner, the owner(s), and the chief elected local official in writing of the decision. The Keeper will provide such notice for petitions from persons or local governments where there is no approved State Historic Preservation Program. The general notice may be used for properties with more than 30 owners. If the general notice is used it shall be

APPENDIX 6

List of Sites Potentially Eligible to the  
National Register of Historic Places



Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area.

Site No.	NTS Area	Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26Hy954	25	Lithic Scatter	3700	7.07	Larrea-Coleogyne	Alluvium/Colluvium	Surface	Terrace (Aluv) side	2	140		Debitage Flaked Stone Artifact(s) Rosespring/Eastgate	Complete
26Hy955	25	Lithic Scatter	3660	329.07	Larrea-Ambrosia	Alluvium/Aeolian	0-20 cm	Terrace (Aluv) top	1	214		Debitage Flaked Stone Artifact(s) Great Basin Stemmed	Diagnostics
26Hy961A	29	Lithic Scatter	3700	1.57	Larrea-Coleogyne	Alluvium	Surface	Terrace (Aluv) top	1	146		Debitage Flaked Stone Artifact(s)	Complete
26Hy961B	29	Lithic Scatter	3720	13.66	Larrea-Coleogyne	Alluvium	0-20 cm	Terrace (Aluv) top	1	146		Debitage Flaked Stone Artifact(s) Rosespring/Eastgate Pinto Great Basin Stemmed	Complete
26Hy990	25	Isolated Artifact	3660	0.01	Larrea-Coleogyne	Alluvium	Surface	Valley side	3	90		Debitage	None
26Hy991	25	Isolated Artifact	3660	0.01	Larrea-Coleogyne	Alluvium	Surface	Fan interior	3	354		Debitage	None
26Hy992	25	Isolated Artifact	3680	0.01	Larrea-Coleogyne	Alluvium	Surface	Fan interior	2	25		Debitage	None
26Hy993	25	Isolated Artifact	3680	0.01	Larrea-Coleogyne	Alluvium	Surface	Fan interior	2	25		Debitage	None
26Hy994	25	Isolated Artifact	3680	0.01	Larrea-Coleogyne	Alluvium	Surface	Fan interior	2	25		Debitage	None
26Hy1009	25	Locality	4460	0.01	Artemisia	Colluvium/Alluvium	Surface	Terrace (Aluv) interior	6	130		Debitage Flaked Stone Artifact(s) Brownware Pottery	None
26Hy1011	25	Quarry	3720	78.54	Larrea-Ambrosia	Colluvium/Residual	0-20 cm	Knoll bottom	11	320		Debitage Flaked Stone Artifact(s) Elko Pinto Great Basin Stemmed	Diag/Samp
26Hy1959	25	Isolated Artifact	3810	0.01	Larrea-Ambrosia	Alluvium/Colluvium	Surface	Bajada interior	2	150		Debitage	Complete
26Hy1960	25	Lithic Scatter	3790	7.05	Larrea-Ambrosia	Alluvium/Colluvium	0-20 cm	Bajada interior	2	25		Debitage Flaked Stone Artifact(s) Elko	Complete
26Hy1961	25	Isolated Artifact	4690	0.01	Coleogyne	Aeolian/Colluvium	Surface	Ridge top	6	140		Debitage	Complete
26Hy1962	25	Isolated Artifact	4890	0.01	Coleogyne	Alluvium/Colluvium	Surface	Ridge top	5	140		Great Basin Stemmed	Complete

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	MTS Area	Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My1963	25	Isolated Artifact	5140	0.01	Coleogyne	Residual/Bedrock	Surface	Ridge top	4	130		Debitage	Complete
26My1964	25	Temporary Camp	4440	1004.96	Coleogyne	Alluvium/Bedrock	>100 cm	Knoll bottom	5	70	2 Rock Shelters	Debitage Groundstone Flaked Stone Artifact(s) Brownware Pottery Rosespring/Eastgate Pinto	Diag/Samp/Tested
26My1965	25	Knapping Station	5100	0.24	Coleogyne	Residual/Bedrock	0-20 cm	Ridge top	2	345	1 Rock Cairn	Debitage Flaked Stone Artifact(s)	Complete
26My1966	25	Locality	5100	0.00	Artemisia	Bedrock	Surface	Ridge top	1	360	1 Tinaja/Tank		None
26My1967	25	Temporary Camp	4000	0.75	Lycium-Grayia	Colluvium/Residual	20-100 cm	Slope interior	2	30	1 Rock Mound 1 Rock Shelter	Debitage Groundstone Brownware Pottery Desert Side Matched Elto	Diag/Samp/Tested
26My1968	25	Locality	4860	0.00	Artemisia	Alluvium/Colluvium	20-100 cm	Ridge bottom	2	60	1 Rock Shelter		None
26My1995	25	Billing Station	4425	0.20	Larrea-Coleogyne	Alluvium/Colluvium	Surface	Slope interior	7	195	1 Rock Shelter 1 Tinaja/Tank	Groundstone	None
26My1996	25	Lithic Scatter	3800	196.35	Artemisia	Alluvium	Surface	Valley bottom	3	225		Debitage	Diag/Samp
26My1997	25	Isolated Artifact	3910	0.01	Larrea-Coleogyne	Colluvium/Alluvium	Surface	Fan bottom	3	250		Flaked Stone Artifact	Complete
26My1998	25	Temporary Camp	4400	0.07	Larrea-Coleogyne	Residual/Bedrock	20-100 cm	Ridge top	25	120	1 Rock Shelter	Groundstone	Complete
26My2000	25	Historic Feature	3350	0.39	Larrea-Ambrosia	Alluvium	Surface	Ridge top	9	90	13 Rock Cairns		None
26My2001	29	Lithic Scatter	4040	0.00	Coleogyne	Colluv.	Surface	Beach bottom	3	250		Debitage	None
26My2001B	29	Lithic Scatter	4040	169.65	Coleogyne	Alluvium/Alluvium	0-20 cm	Terrace (Aluvi) top	3	220		Debitage Flaked Stone Artifact(s) Rosespring/Eastgate Pinto	Diagnostics
26My2002	29	Locality	3920	0.01	Larrea-Coleogyne	Alluvium	Surface	Terrace (Aluvi) side	1	270		Debitage	None
26My2003	29	Historic Isolate	3950	0.01	Coleogyne	Alluvium	Surface	Terrace (Aluvi) side	1	250		Historic Artifacts	None
26My2004	25	Isolated Artifact	3760	0.01	Larrea-Ambrosia	Colluvium/Bedrock	Surface	Ridge bottom	6	110		Historic Artifacts	None
26My2005	25	Lithic Scatter	3500	0.00	Larrea-Lycium-Grayia	Alluvium	Surface	Terrace (Aluvi) top	1	130		Debitage Rosespring/Eastgate	Diagnostics

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Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NPS Area	Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My2006	25	Locality	3720	0.01	Larrea-Coleogyne	Alluvium	Surface	Terrace (Aluv) side	2	180		Debitage	None
26My2009	25	Isolated Artifact	3765	0.01	Lycium-Grayia	Alluvium	Surface	Basada interior	6	110		Flaked Stone Artifact	Complete
26My2603	0	Lithic Scatter	2750	20.27	Larrea-Ambrosia	Alluvium	0-20 co	Terrace (Aluv) top	1	130		Debitage Flaked Stone Artifact(s) Pinto	Diagnostics
26My2604	0	Lithic Scatter	2750	106.03	Larrea-Ambrosia	Alluvium	>100 co	Terrace (Aluv) top	1	130		Debitage Flaked Stone Artifact(s) Hueboldt Pinto Great Basin Stopped	Diagnostics
26My2605	0	Isolated Artifact	3320	0.01	Larrea-Ambrosia	Colluvium/Alluvium	Surface	Knoll side	3	180		Flaked Stone Artifact	Complete
26My2956	25	Lithic Scatter	3480	6.87	Larrea-Coleogyne	Alluvium	Surface	Terrace (Aluv) side	0	225		Debitage	Complete
26My2957	25	Historic Feature	4340	0.01	Larrea-Coleogyne	Residual/Bedrock	Surface	Ridge top	2	90	1 Rock Cairn		None
26My2958	25	Historic Feature	4040	0.01	Lycium-Grayia	Bedrock	Surface	Ridge side	15	45	1 Rock Cairn		None
26My2959	25	Isolated Artifact	4600	0.01	Lycium-Grayia	Bedrock	Surface	Ridge top	5	150		Rosespring/Eastgate	Complete
26My2960	25	Temporary Camp	3320	23.56	Lycium-Grayia	Alluvium/Colluvium	0-20 co	Terrace (Aluv) top	1	180	8 Rock Circles 2 Rock Cairns	Debitage Groundstone Hueboldt Great Basin Stopped	Coop/Testing
26My2961	25	Isolated Artifact	4440	0.01	Artemisia	Bedrock	Surface	Ridge side	25	135		Great Basin Stopped	Complete
26My2962	25	Locality	4830	0.01	Coleogyne	Aeolian/Residual	0-20 co	Ridge top	8	45		Debitage	Complete
26My2963	25	Isolated Artifact	4850	0.01	Coleogyne	Colluvium/Aeolian	Surface	Ridge top	1	225		Debitage	Complete
26My2964	25	Isolated Artifact	4850	0.01	Lycium-Grayia	Aeolian/Colluvium	Surface	Ridge top	1	225		Debitage	Complete
26My2965	25	Historic Feature	4850	19.63	Coleogyne	Colluvium/Residual	Surface	Ridge top	8	315	5 Rock Cairns		None
26My2966	25	Isolated Artifact	4830	0.01	Lycium-Grayia	Colluvium/Aeolian	Surface	Ridge top	4	45		Debitage	Complete
26My2967	25	Historic Feature	4670	0.01	Artemisia	Bedrock	Surface	Cliff side	3	135	1 Rock Cairn	Historic Artifacts	None
26My2968	25	Locality	4440	0.01	Lycium-Grayia	Bedrock	Surface	Ridge top	0	90	1 Tinaja/Tank		None
26My2969	25	Temporary Camp	4000	70.34	Larrea-Ambrosia	Alluvium	0-20 co	Ridge bottom	2	135		Debitage Groundstone Elto	Coop/Testing

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area	Site Type	Elev. (ft)	Size (acres)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect features	Artifact Types	Collection Status
26My2970	25	Temporary Camp	3900	23.56	Larrea-Ambrosia	Alluvium	0-20 cm	Ridge bottom	4	135	Debitage Groundstone Elko	Comp/tested
26My2971	25	Isolated Artifact	4720	0.01	Lycium-Grayia	Bedrock	Surface	Ridge side	8	90	Flaked Stone Artifact	Complete
26My2972	25	Milling Station	4000	0.24	Lycium-Grayia	Alluvium	0-20 cm	Ridge bottom	5	90	Debitage Groundstone	Complete
26My2973	25	Locality	4040	2.36	Lycium-Grayia	Bedrock	Surface	Ridge top	0	360	1 Tinaja/Tank	Complete
26My2974	25	Isolated Artifact	4810	0.01	Coleogyne	Bedrock/A	Surface	Ridge top	4	45	Debitage	Complete
26My2975	25	Isolated Artifact	4810	0.01	Lycium-Grayia	Bedrock/A	Surface	Ridge top	3	45	Debitage	Complete
26My2976	25	Locality	4000	0.33	Lycium-Grayia	Colluvium/Alluvium	0-20 cm	Ridge top	4	45	Debitage Flaked Stone Artifact(s) Rosespring/Eastgate	Complete
26My2977	25	Lithic Scatter	4780	20.27	Coleogyne	Alluvium/Colluvium	0-20 cm	Ridge top	4	90	Debitage Flaked Stone Artifact(s)	Comp/tested
26My2978	25	Isolated Artifact	4820	0.01	Coleogyne	Bedrock/A	Surface	Ridge top	3	225	Debitage	Complete
26My2979	25	Isolated Artifact	4815	0.01	Coleogyne	Bedrock/A	Surface	Ridge top	3	135	Debitage	Complete
26My2980	25	Isolated Artifact	4000	0.01	Coleogyne	Alluvium/Colluvium	Surface	Ridge top	5	135	Debitage	Complete
26My2981	25	Isolated Artifact	4820	0.01	Coleogyne	Bedrock/A	Surface	Ridge top	10	90	Debitage	Complete
26My2982	25	Isolated Artifact	4850	0.01	Coleogyne	Alluvium/Bedrock	Surface	Ridge top	7	90	Debitage	Complete
26My2983	25	Historic Feature	4890	0.00	Coleogyne	Bedrock/A	Surface	Ridge top	5	0	13 Rock Cairns	None
26My2984	25	Locality	4910	0.00	Coleogyne	Bedrock	0-20 cm	Ridge top	0	340	1 Tinaja/Tank	None
26My2985	25	Isolated Artifact	4825	0.01	Coleogyne	Bedrock	Surface	Ridge top	0	340	Debitage	Complete
26My2986	25	Isolated Artifact	4000	0.01	Coleogyne	Bedrock	Surface	Ridge top	0	340	Debitage	Complete
26My2987	25	Locality	4850	0.00	Coleogyne	Bedrock	Surface	Ridge top	0	0	1 Tinajas/Tanks	None
26My2988	25	Isolated Artifact	3600	0.01	Coleogyne	Alluvium	Surface	Fan interior	3	135	Debitage	Complete
26My2989	0	Historic Isolate	4520	0.01	Coleogyne	Alluvium/Bedrock	Surface	Ridge bottom	5	225	Historic Artifacts	None
26My2990	25	Locality	3540	0.01	Coleogyne	Alluvium	Surface	Fan interior	3	45	Debitage	Complete
26My2991	25	Isolated Artifact	3540	0.01	Coleogyne	Alluvium	Surface	Fan interior	0	90	Debitage	Complete

Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTE Area	Site Type	Elev. (ft)	Size (acres)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My2992	25	Isolated Artifact	3560	0.01	Larrea-Ambrosia	Alluvium	Surface	Fan interior	3	90		Flaked Stone Artifact	Complete
26My2993	25	Temporary Camp	3840	471.24	Larrea-Ambrosia	Alluvium	0-20 cm	Ridge bottom	5	360		Debitage Groundstone Flaked Stone Artifact(s) Mound(s) Great Basin Stewpot	Comp/Testing
26My2994	0	Locality	4000	0.01	Larrea-Ambrosia	Bedrock	Surface	Ridge top	0	360	1 Tinaja/Tank		None
26My2995	0	Locality	4090	0.31	Larrea-Ambrosia	Bedrock	Surface	Ridge top	4	90	1 Tinaja/Tank	Flaked Stone Artifact(s)	Complete
26My2996	0	Isolated Artifact	4040	0.01	Lycium-Grayia	Colluvium/Bedrock	Surface	Ridge side	6	90		Debitage	Complete
26My2997	0	Milling Station	4900	0.01	Lycium-Grayia	Bedrock	Surface	Ridge top	3	70		Groundstone	Complete
26My2998	0	Locality	4850	0.01	Lycium-Grayia	Bedrock	Surface	Ridge top	0	360	1 Tinaja/Tank		None
26My2999	25	Lithic Scatter	3000	22.97	Larrea-Ambrosia	Alluvium	0-20 cm	Valley side	5	90		Debitage	Complete
26My3000	25	Isolated Artifact	3770	0.01	Larrea-Ambrosia	Alluvium	Surface	Valley side	3	90		Debitage	Complete
26My3001	25	Isolated Artifact	3000	0.01	Larrea-Ambrosia	Alluvium	Surface	Valley side	3	90		Flaked Stone Artifact	Complete
26My3002	25	Locality	3830	0.50	Larrea-Ambrosia	Alluvium	Surface	Valley side	3	45		Debitage	Complete
26My3003	25	Lithic Scatter	3815	0.79	Larrea-Ambrosia	Alluvium	0-20 cm	Valley side	3	45		Debitage	Complete
26My3004	25	Milling Station	3720	0.01	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluvi top)	2	135		Groundstone	None
26My3005	25	Temporary Camp	3830	37.76	Larrea-Lycium-Grayia	Aeolian/Colluvium	0-20 cm	Ridge top	5	45	1 Rock Circle	Debitage Groundstone Flaked Stone Artifact(s)	None/Testing
26My3006	0	Milling Station	4020	4.71	Lycium-Grayia	Colluvium/Aeolian	Surface	Ridge top	3	225		Debitage Groundstone Flaked Stone Artifact(s)	Complete
26My3007	0	Locality	4300	0.05	Lycium-Grayia	Colluvium/Bedrock	Surface	Ridge side	40	360	1 Rock Shelter	Flaked Stone Artifact(s)	Complete
26My3008	25	Milling Station	4250	0.07	Lycium-Grayia	Bedrock	0-20 cm	Ridge side	50	360	1 Rock Shelter	Groundstone	Sampled
26My3009	0	Locality	4350	0.07	Lycium-Grayia	Bedrock	Surface	Ridge side	0	360	1 Rock Mound 1 Rock Shelter		None
26My3010	0	Isolated Artifact	4150	0.01	Lycium-Grayia	Alluvium	Surface	Ridge bottom	15	155		Flaked Stone Artifact	Complete
26My3011	0	Milling Station	4050	0.20	Lycium-Grayia	Bedrock	Surface	Ridge side	0	225	1 Rock Shelter	Groundstone	Sampled

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Table \_\_\_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area	Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My3012	0	Isolated Artifact	4050	0.01	Coleogyne	Alluvium/Bedrock	Surface	Ridge top	8	90		Great Basin Stemmed	Complete
26My3013	0	Isolated Artifact	5180	0.01	Coleogyne	Bedrock	Surface	Ridge side	0	145		Flaked Stone Artifact	Complete
26My3014	0	Isolated Artifact	4870	0.01	Coleogyne	Bedrock	Surface	Ridge side	3	145		Debitage	Complete
26My3015	0	Milling Station	4580	0.05	Coleogyne	Bedrock	Surface	Ridge side	1	190	1 Rock Shelter	Groundstone	None
26My3016	0	Lithic Scatter	4450	0.20	Lycium-Grayia	Aeolian/Bedrock	0-20 cm	Ridge top	22	190	1 Rock Shelter	Debitage	Sample/Testing
26My3017	0	Milling Station	4400	0.07	Lycium-Grayia	Aeolian/Bedrock	0-20 cm	Ridge side	18	190	1 Rock Shelter	Groundstone	None
26My3018	25	Locality	4280	0.22	Lycium-Grayia	Bedrock	0-20 cm	Ridge top	18	180	1 Rock Shelter	Debitage	None
26My3019	25	Locality	4240	0.05	Lycium-Grayia	Bedrock	Surface	Ridge top	18	190	1 Rock Alignment 1 Rock Shelter		None
26My3020	25	Milling Station	4400	0.13	Lycium-Grayia	Aeolian/Bedrock	0-20 cm	Ridge side	35	190	1 Rock Mound 1 Rock Shelter	Debitage Groundstone Flaked Stone Artifact(s)	Sample/Testing
26My3021	0	Milling Station	4240	0.19	Lycium-Grayia	Aeolian/Bedrock	0-20 cm	Ridge side	20	225	1 Rock Alignment 1 Rock Shelter	Debitage Groundstone	Sample/Testing
26My3022	25	Milling Station	4200	0.39	Lycium-Grayia	Aeolian/Bedrock	0-20 cm	Ridge side	20	180	1 Rock Shelter	Debitage Groundstone	Sample/Diag/Testing
26My3023	25	Isolated Artifact	3590	0.01	Lycium-Grayia	Alluvium	Surface	Ridge bottom	2	45		Desert Side Notched	Complete
26My3024	25	Locality	3720	26.27	Coleogyne	Alluvium	0-20 cm	Valley side	3	270		Debitage Flaked Stone Artifact(s)	Complete
26My3025	25	Lithic Scatter	3720	7.07	Coleogyne	Alluvium	20-100 cm	Pinnacle interior	5	15		Debitage Rose Spring/Eastgate	Complete
26My3026	25	Locality	3710	0.39	Coleogyne	Alluvium	Surface	Foothill bottom	3	10		Debitage	Complete
26My3027	25	Quarry	3740	0.07	Larrea-Lycium-Grayia	Alluvium/Colluvium	Surface	Slope interior	4	225		Debitage Flaked Stone Artifact(s)	None
26My3028	25	Milling Station	3680	4.71	Larrea-Lycium-Grayia	Alluvium	0-20 cm	Fan top	4	315		Debitage Groundstone	Sample/Testing
26My3029	0	Isolated Artifact	4230	0.01	Larrea-Lycium-Grayia	Alluvium/Colluvium	Surface	Ridge bottom	2	110		Pinto	Complete
26My3030	0	Knapping Station	3700	0.19	Larrea-Lycium-Grayia	Alluvium/Colluvium	0-20 cm	Valley side	0	340	1 Rock Cairn 1 Rock Shelter	Debitage Flaked Stone Artifact(s)	None
26My3031	25	Isolated Artifact	3285	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Terrace (Aluv) top	3	210		Debitage	Complete

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Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area	Site Type	Elev. (ft)	Size (acres)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My3032	25	Isolated Artifact	3295	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Terrace (Aluv) top	3	00		Debitage	Complete
26My3033	25	Isolated Artifact	3340	0.01	Lycium-Grayia	Alluvium	Surface	Ridge bottom	2	00		Debitage	Complete
26My3034	25	Isolated Artifact	3470	0.01	Larrea-Ambrosia	Alluvium	Surface	Ridge bottom	2	130		Debitage	Complete
26My3035	25	Isolated Artifact	3400	0.01	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	2	90		Flaked Stone Artifact	Complete
26My3036	25	Isolated Artifact	3350	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Terrace (Aluv) top	3	105		Debitage	Complete
26My3037	25	Temporary Camp	3340	58.91	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) side	0	100	1 Hearth 1 Rock Mound 3 Rock Cairns	Debitage Pecked stone Flaked Stone Artifact(s) Elta Great Basin Stemmed	Sampled/Tested
26My3038	25	Temporary Camp	3300	94.25	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) side	5	170	2 FCR Concentrations	Debitage Groundstone	None
26My3039	25	Temporary Camp	3410	10210.19	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) side	4	160	1 Rock Circle	Debitage Groundstone Flaked Stone Artifact(s) Bonespring/Eastgate Great Basin Stemmed	Sampled/Brag/Tester Surface Collected
26My3040	25	Quarry	3320	0.07	Larrea-Lycium-Grayia	Alluvium	0-20 cm	Terrace (Aluv) side	4	90		Debitage	Complete
26My3041	25	Milling Station	3440	0.24	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	100		Debitage Groundstone	None
26My3042	25	Temporary Camp	3500	39.27	Larrea-Lycium-Grayia	Bedrock	0-20 cm	Ridge bottom	15	130	1 Rock Alignment 2 Rock Shelters 1 Wood Structure (Brush Lean-to)	Debitage Groundstone Flaked Stone Artifact(s) Brownsore Pottery	Sampled/Brag/Tester
26My3043	25	Lithic Scatter	3400	0.13	Larrea-Lycium-Grayia	Aeolian/Alluvium	0-20 cm	Ridge bottom	4	100		Debitage	Sampled/Tested
26My3044	25	Milling Station	3520	0.05	Larrea-Coleogyne	Bedrock/Residual	Surface	Ridge top	4	05		Groundstone	None
26My3045	25	Locality	3470	1.18	Larrea-Ambrosia	Alluvium	Surface	Fan top	2	95		Debitage Flaked Stone Artifact(s)	Complete
26My3046	25	Locality	3300	0.16	Lycium-Grayia	Alluvium	Surface	Terrace (Aluv) top	0	130		Flaked Stone Artifact(s)	Complete
26My3047	25	Lithic Scatter	3400	18.05	Lycium-Grayia	Alluvium	0-20 cm	Terrace (Aluv) top	0	120		Debitage Flaked Stone Artifact(s)	Sampled

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Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My3048	25 Locality	3430	0.20	Lycium-Grayia	Alluvium	Surface	Terrace (Aluvi) side	0	125		Debitage Rosespring/Eastgate	Complete
26My3049	25 Lithic Scatter	3430	44.18	Lycium-Grayia	Alluvium	0-20 cm	Terrace (Aluvi) top	2	90		Debitage Flaked Stone Artifact(s) Great Basin Stemmed	Diagnostics
26My3050	25 Temporary Camp	3380	0.25	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluvi) top	2	85	1 Rock Circle	Debitage Groundstone Flaked Stone Artifact(s) Elko	Diag/Tested
26My3051	25 Lithic Scatter	3350	196.33	Larrea-Ambrosia	Alluvium	20-100 cm	Terrace (Aluvi) top	2	110		Debitage Flaked Stone Artifact(s)	Sampled/Tested
26My3052	25 Locality	3790	2.36	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluvi) top	0	135		Debitage	Complete
26My3053	25 Locality	3500	3.53	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluvi) top	1	110		Debitage Flaked Stone Artifact(s)	Complete
26My3054	0 Temporary Camp	5020	23.56	Artemisia	Alluvium/Colluvium	20-100 cm	Pinnacle interior	4	180		Debitage Groundstone Historic Artifact(s) Flaked Stone Artifact(s) Historic Artifacts Pinto	Sampled/Diag/Tested
26My3055	0 Temporary Camp	5030	4.71	Artemisia	Alluvium/Colluvium	>100 cm	Cliff interior	20	10	1 Rock Round 2 Rock Shelters	Debitage Groundstone Wood Artifact(s) Historic Artifact(s) Flaked Stone Artifact(s) Historic Artifacts Brownware Pottery	Sampled/Diag/Tested
26My3056	0 Lithic Scatter	5230	18.83	Open Juniper	Aeolian/Residual	0-20 cm	Pinnacle interior	1	90	1 Rock Round	Debitage Flaked Stone Artifact(s)	Sampled/Diag/Tested
26My3057	0 Lithic Scatter	5310	3.14	Open Juniper	Colluvium/Aeolian	0-20 cm	Ridge top	1	90		Debitage Flaked Stone Artifact(s) Pinto	Sampled/Diag

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Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Bite No.	MTS Area Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My3058	0 Temporary Camp	5220	20.27	Artemisia	Residual/Colluvium	>100 cm	Ridge side	5	180	1 Rock Alignment 1 Rock Mound 4 Rock Shelters 2 Rock Art Panels	Debitage Groundstone Textiles Historic Artifact(s) Flaked Stone Artifact(s) Historic Artifacts Brownware Pottery	Snap/Diag
26My3059	25 Locality	3510	0.79	Larrea-Lycium-Grayia	Colluvium/Bedrock	Surface	Ridge bottom	1	90	1 Rock Alignment 2 Tinajas/Tanks	Debitage	None
26My3060	25 Locality	3740	0.01	Lycium-Grayia	Alluvium	Surface	Ridge bottom	0	135		Debitage	Complete
26My3061	25 Locality	3580	0.01	Lycium-Grayia	Residual/Bedrock	Surface	Ridge top	4	180		Debitage	Complete
26My3062	25 Temporary Camp	3660	37.70	Lycium-Grayia	Alluvium	20-100 cm	Fan bottom	4	225	1 Buried Hearth	Debitage Flaked Stone Artifact(s) Rose Spring/Eastgate	Snap/Diag/Intest
26My3063	25 Lithic Scatter	3620	12.37	Lycium-Grayia	Alluvium	0-20 cm	Fan bottom	3	310		Debitage Flaked Stone Artifact(s)	Complete
26My3064	25 Locality	3630	0.47	Lycium-Grayia	Alluvium	Surface	Fan interior	2	310		Debitage	Complete
26My3065	25 Lithic Scatter	3680	0.94	Lycium-Grayia	Alluvium	Surface	Fan interior	2	310		Debitage	Complete
26My3066	25 Temporary Camp	3700	314.16	Coleogyne	Alluvium	0-20 cm	Valley side	4	45		Debitage Groundstone Flaked Stone Artifact(s) Elko Galecliff	Snap/Diag/Intest
26My3067	25 Milling Station	3620	63.62	Coleogyne	Alluvium	Surface	Ridge side	3	270		Debitage Groundstone Flaked Stone Artifact(s)	Complete
26My3068	25 Historic Isolate	3575	0.01	Coleogyne	Colluvium/Alluvium	Surface	Ridge bottom	2	270		Historic Artifact	Complete
26My3069	25 Isolated Artifact	3640	0.01	Lycium-Grayia	Alluvium	Surface	Fan interior	2	310		Debitage	Complete
26My3070	25 Lithic Scatter	3610	14.14	Lycium-Grayia	Alluvium	0-20 cm	Fan interior	2	310		Debitage	None
26My3071	25 Isolated Artifact	3610	0.01	Lycium-Grayia	Alluvium	Surface	Fan interior	6	310		Flaked Stone Artifact	Complete
26My3072	25 Locality	3630	0.07	Lycium-Grayia	Alluvium	Surface	Terrace (Alluv) top	2	225	1 Rock Circle		None
26My3073	25 Isolated Artifact	3580	0.01	Lycium-Grayia	Alluvium	Surface	Terrace (Alluv) top	4	225		Debitage	Complete
26My3074	25 Locality	3720	0.03	Lycium-Grayia	Bedrock	Surface	Ridge side	3	90	1 Tinaja/Tank	Groundstone	None

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Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My3075	25 Quarry	3700	1507.97	Coleogyne	Colluvium/Residual	Surface	Ridge side	10	220		Debitage Flaked Stone Artifact(s)	Sampled
26My3076	25 Isolated Artifact	3530	0.01	Lycium-Grayia	Alluvium	Surface	Bajada interior	2	90		Rosesprng/Eastgate	Complete
26My3077	25 Isolated Artifact	3540	0.01	Larrea-Ambrosia	Alluvium	Surface	Valley side	2	150		Desert Side Notched	Complete
26My3078	25 Knapping Station	3400	0.20	Larrea-Ambrosia	Alluvium	Surface	Valley side	2	90		Debitage Flaked Stone Artifact(s)	Complete
26My3079	25 Historic Feature	3690	0.01	Larrea-Ambrosia	Alluvium	Surface	Bajada interior	2	150	1 Rock Cairn		None
26My3080	25 Quarry	3660	0.03	Larrea-Ambrosia	Alluvium	Surface	Valley side	2	150		Debitage	Complete
26My3081	25 Quarry	3810	0.03	Larrea-Ambrosia	Colluvium	Surface	Ridge side	0	100		Debitage	Complete
26My3082	25 Quarry	3810	0.20	Larrea-Ambrosia	Colluvium	0-20 cm	Ridge side	12	90	1 Cache	Debitage Flaked Stone Artifact(s)	None
26My3083	25 Locality	3000	0.20	Larrea-Lycium-Grayia	Alluvium/Colluvium	0-20 cm	Ridge side	1	270	1 Rock Round		Sample/Testing
(Flotation)												
(Flotation)												
26My3084	25 Milling Station	3720	0.01	Larrea-Lycium-Grayia	Alluvium/Colluvium	Surface	Valley side	5	270		Groundstone	None
26My3085	25 Isolated Artifact	3830	0.01	Larrea-Ambrosia	Residual/Bedrock	Surface	Ridge top	4	45		Flaked Stone Artifact	Complete
26My3086	25 Historic Isolate	3800	0.01	Larrea-Ambrosia	Colluvium/Residual	Surface	Slope interior	20	270		Historic Artifacts	Complete
26My3087	25 Isolated Artifact	3525	0.01	Lycium-Grayia	Alluvium	Surface	Terrace (Alluv) top	2	135		Debitage	Complete
26My3088	25 Isolated Artifact	3790	0.01	Larrea-Lycium-Grayia	Alluvium/Colluvium	Surface	Ridge side	5	270		Debitage	Complete
26My3089	0 Milling Station	4760	0.16	Lycium-Grayia	Aeolian/Residual	0-20 cm	Ridge side	14	225	1 Rock Shelter	Debitage Groundstone	None
26My3090	0 Milling Station	4420	0.03	Lycium-Grayia	Residual/Bedrock	Surface	Ridge side	20	135	1 Rock Shelter	Groundstone	None
26My3091	0 Milling Station	4810	3.93	Lycium-Grayia	Alluvium/Colluvium	0-20 cm	Ridge side	12	90	1 Rock Shelter	Groundstone Great Basin Stamped	Diagnostics
26My3092	0 Milling Station	4000	0.25	Lycium-Grayia	Aeolian/Residual	0-20 cm	Ridge side	25	270	1 Rock Shelter	Groundstone	None
26My3093	0 Milling Station	4790	0.16	Lycium-Grayia	Aeolian/Residual	0-20 cm	Ridge side	5	270	1 Rock Shelter	Groundstone	None
26My3094	0 Locality	4800	0.31	Lycium-Grayia	Aeolian/Residual	0-20 cm	Ridge side	2	270	1 Rock Shelter	Flaked Stone Artifact(s)	Complete
26My3095	0 Locality	4780	0.01	Lycium-Grayia	Bedrock	Surface	Ridge side	2	270	1 Tinaja/Tank		None

Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area	Site Type	Elev. (ft)	Size (acres)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My3096	0	Temporary Camp	4820	4.71	Lycium-Grayia	Aeolian/Alluvium	0-20 cm	Ridge side	2	270	1 Rock Alignment 1 Rock Shelter	Debitage Groundstone Desert Side Notched	Diag/Samp/Tested
26My3097	0	Locality	4620	0.07	Lycium-Grayia	Aeolian/Colluvium	0-20 cm	Ridge side	3	270	1 Rock Alignment 1 Rock Shelter		None
26My3098	0	Milling Station	4820	0.16	Artemisia	Aeolian/Residual	0-20 cm	Ridge side	2	360	1 Rock Shelter	Groundstone Pecked stone	None
26My3099	0	Milling Station	4600	0.13	Lycium-Grayia	Aeolian/Residual	0-20 cm	Slope interior	0	270	1 Rock Shelter	Groundstone	Samp/Diag/Tested
26My3100	0	Milling Station	4400	0.00	Lycium-Grayia	Residual/Aeolian	0-20 cm	Slope interior	3	270	1 Rock Shelter	Groundstone	None
26My3101	25	Isolated Artifact	3735	0.01	Larrea-Ambrosia	Alluvium	Surface	Bajada interior	3	135		Elko	Complete
26My3102	25	Isolated Artifact	3820	0.01	Larrea-Ambrosia	Colluvium/Residual	Surface	Ridge top	0	360		Debitage	Complete
26My3103	25	Isolated Artifact	3680	0.01	Larrea-Ambrosia	Colluvium/Residual	Surface	Ridge side	4	225		Rosesprong/Eastgate	Complete
26My3104	0	Isolated Artifact	4050	0.01	Larrea-Ambrosia	Alluvium/Colluvium	Surface	Fan interior	2	145		Flaked Stone Artifact	Complete
26My3105	25	Isolated Artifact	3700	0.01	Larrea-Ambrosia	Alluvium	Surface	Fan interior	1	135		Debitage	Complete
26My3106	0	Isolated Artifact	5290	0.01	Open Playa	Alluvium/Aeolian	Surface	Ridge top	2	135		Elko	Complete
26My3107	25	Lithic Scatter	3600	314.16	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) top	1	135		Debitage Elko	Diagnostics
26My3108	25	Lithic Scatter	3640	56.55	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) top	2	45		Debitage Flaked Stone Artifact(s)	Sampled
26My3109	25	Locality	3760	0.00	Lycium-Grayia	Alluvium/Aeolian	20-100 cm	Slope interior	1	225	1 Rock Alignment 1 Rock Shelter	Debitage	None
26My3110	25	Lithic Scatter	3700	28.27	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) top	2	90		Debitage	None
26My3111	25	Milling Station	4120	9.14	Lycium-Grayia	Aeolian	20-100 cm	Slope interior	50	90	1 Rock Shelter	Groundstone	None
26My3112	25	Lithic Scatter	3700	314.16	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) top	2	135		Debitage Flaked Stone Artifact(s)	None
26My3113	25	Lithic Scatter	3600	314.16	Larrea-Ambrosia	Alluvium	20-100 cm	Terrace (Aluv) top	2	135		Debitage	None
26My3114	25	Lithic Scatter	3320	56.55	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	135		Debitage	None
26My3115	25	Historic Isolate	3500	0.01	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	2	225		Historic Artifacts	None
26My3116	25	Lithic Scatter	3300	471.74	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) side	2	180		Debitage	None

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area	Site Type	Elev. (ft)	Size (acres)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My3117	25	Lithic Scatter	3100	235.62	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluvi) side	2	135		Debitage	None
26My3118	25	Quarry	4000	0.03	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluvi) top	2	135		Debitage Flaked Stone Artifact(s)	None
26My3119	25	Milling Station	4340	7.07	Larrea-Ambrosia	Colluvium	Surface	Ridge side	7	45		Groundstone Elko	Diagnostics
26My3127	25	Milling Station	3400	0.20	Larrea-Ambrosia	Aeolian/Residual	0-20 cm	Ridge top	30	135	1 Rock Shelter	Debitage Groundstone	Scap/Tester
26My3155	25	Isolated Artifact	3540	0.01	Larrea-Ambrosia	Alluvium	Surface	Bajada interior	2	190		Flaked Stone Artifact	Complete
26My3161	25	Historic Isolate	4940	0.01	Artemisia	Alluvium	Surface	Fan side	3	110		Historic Artifacts	None
26My3162	25	Locality	5740	0.02	Artemisia	Aeolian/Bedrock	Surface	Ridge top	5	120	1 Rock Circle		None
26My3163	25	Locality	5820	0.02	Juniper	Aeolian/Bedrock	Surface	Ridge top	5	120	1 Rock Circle		None
26My3164	25	Lithic Scatter	3500	27.49	Juniper	Alluvium	0-20 cm	Terrace (Aluvi) top	3	175		Debitage	Scap/Bag/Tester: Unidentified Pt.
26My3165	25	Isolated Artifact	4260	0.01	Larrea-Ambrosia	Colluvium/Bedrock	Surface	Ridge bottom	22	120		Unidentified Pt.	Complete
26My3190	29	Milling Station	4000	0.04	Artemisia	Residual/Bedrock	0-20 cm	Cliff interior	17	120	1 Rock Shelter	Groundstone	None
26My3191	29	Locality	4160	0.00	Lycium-Grayia	Residual/Bedrock	Surface	Cliff interior	31	90	1 Rock Shelter	Debitage Wood Artifact(s)	Scap/Tester
26My3192	29	Isolated Artifact	4010	0.01	Lycium-Grayia	Alluvium	Surface	Terrace (Aluvi) top	1	100		Elko	Complete
26My3193	25	Temporary Camp	3370	0.00	Coleogyne	Alluvium	20-100 cm	Terrace (Aluvi) top	1	100		Debitage Groundstone Flaked Stone Artifact(s) Elko Galecliff Muebeldt Great Basin Stopped Fluted (Clovis)	Complete
26My3345	25	Isolated Artifact	3310	0.01	Lycium-Grayia	Alluvium	Surface	Mesa bottom	4	135		Flaked Stone Artifact	Complete
26My3346	25	Locality	3400	0.20	Larrea-Ambrosia	Alluvium/Bedrock	Surface	Beach top	2	105	1 Rock Cairn 1 Tinaja/Tank		None
26My3347	25	Locality	3150	0.94	Larrea-Ambrosia	Alluvium	Surface	Fan interior	1	100		Debitage	Complete
26My3383	25	Locality	3505	0.01	Larrea-Ambrosia	Alluvium	0-20 cm	Bajada interior	2	210		Debitage Flaked Stone Artifact(s)	Complete

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
801283L0325	Lithic Scatter	3120	0.00	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Alluv) side	0	180		Debitage Flaked Stone Artifact(s)	None
801283L0223	Lithic Scatter	3120	0.00	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Alluv) side	0	180		Debitage Flaked Stone Artifact(s)	Sampled
26My3635	25 Locality	3740	0.07	Coleogyne	Alluvium	Surface	Terrace (Alluv) top	3	175		Debitage Flaked Stone Artifact(s)	None
26My3636	25 Lithic Scatter	4000	785.40	Lycium-Grayia	Alluvium	0-20 cm	Valley bottom	3	130		Debitage Flaked Stone Artifact(s)	None
26My3637	25 Isolated Artifact	4220	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Valley bottom	3	132		Debitage	None
26My3638	25 Isolated Artifact	3240	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Cliff bottom	1	170		Debitage	Complete
26My3639	25 Lithic Scatter	3700	3.93	Larrea-Ambrosia	Alluvium	0-20 cm	Ridge bottom	2	45		Debitage	Complete
26My3924	25 Temporary Camp	3970	353.43	Larrea-Coleogyne	Alluvium	Surface	Fan interior	2	160		Debitage Groundstone Flaked Stone Artifact(s) Elko	Complete
26My3925	25 Isolated Artifact	3690	0.01	Larrea-Ambrosia	Alluvium	Surface	Ridge bottom	4	115		Flaked Stone Artifact	Complete
26My4142	0 Isolated Artifact	3760	0.01	Larrea-Coleogyne	Alluvium	Surface	Bajada interior	2	200		Debitage	Complete
26My4143	25 Lithic Scatter	3150	0.00	Larrea-Coleogyne	Alluvium	0-20 cm	Bajada top	1	170		Debitage Historic Artifact(s) Historic Artifacts	Diagnostics
26My4144	25 Historic Feature	3150	6.28	Larrea-Coleogyne	Alluvium	Surface	Bajada top	3	130		Historic Artifacts	Complete
26My4145	0 Isolated Artifact	3660	0.01	Larrea-Coleogyne	Alluvium	Surface	Bajada interior	2	200		Historic Artifacts	Complete
26My4146	0 Isolated Artifact	3650	0.01	Larrea-Coleogyne	Alluvium	Surface	Bajada interior	2	200		Debitage	Complete
26My4147	0 Isolated Artifact	3460	0.01	Larrea-Ambrosia	Alluvium	Surface	Bajada interior	1	190		Debitage	Complete
26My4148	0 Locality	3600	7.07	Larrea-Coleogyne	Alluvium	Surface	Bajada interior	1	200		Debitage	Complete
26My4149	0 Isolated Artifact	3480	0.01	Larrea-Ambrosia	Alluvium	Surface	Bajada interior	1	180		Flaked Stone Artifact	Complete
26My4534	0 Locality	3750	0.00		Alluvium/Colluvium	Surface	Ridge end	3	105	1 Hearth		None
26My4621	0 Lithic Scatter	3727	78.54		Colluvium	Surface	Ridge top	0	360		Debitage Brownware Pottery	Diagnostics

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Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTE Area	Site Type	Elev. (ft)	Size (acres)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My4622	0	Temporary Camp	5240	2.36		Colluvium	>100 co	Slope interior	22	290	1 Rock Shelter	Debitage Groundstone Pegged stone Brownware Pottery Desert Side Notched	None
26My4623	0	Locality	5000	0.09	Artemisia	Colluvium/Residual	Surface	Ridge side	0	32		Debitage	Complete
26My4624	0	Locality	5000	19.63	Artemisia	Alluvium/Colluvium	Surface	Ridge side	3	136		Debitage Flaked Stone Artifact(s)	Complete
26My4625	0	Isolated Artifact	4940	0.01	Artemisia	Alluvium/Colluvium	Surface	Cliff bottom	5	160		Debitage	Complete
26My4626	0	Locality	4980	0.06	Artemisia	Colluvium/Residual	Surface	Ridge side	5	60		Debitage Flaked Stone Artifact(s)	Complete
26My4627	0	Lithic Scatter	4920	545.49	Artemisia	Alluvium	Surface	Terrace (Aluv) top	3	130		Debitage Flaked Stone Artifact(s)	Sampled
26My4628	0	Locality	4840	0.12	Coleogyne	Alluvium	Surface	Terrace (Aluv) side	5	100		Debitage	Complete
26My4629	0	Isolated Artifact	4840	0.01	Coleogyne	Alluvium	Surface	Terrace (Aluv) side	3	120		Debitage	Complete
26My4630	0	Locality	4840	0.22	Coleogyne	Alluvium	Surface	Terrace (Aluv) top	2	150		Debitage	Complete
26My4631	0	Lithic Scatter	4820	1178.10	Coleogyne	Alluvium	0-20 co	Fan top	1	155		Debitage Flaked Stone Artifact(s)	Sampled
26My4632	0	Quarry	4820	0.04	Coleogyne	Alluvium	0-20 co	Fan top	2	158		Debitage	None
26My4633	0	Lithic Scatter	4800	7.05	Coleogyne	Alluvium	0-20 co	Fan top	1	165		Debitage Flaked Stone Artifact(s) Elko	Diagnostics
26My4634	0	Quarry	4730	1767.15	Coleogyne	Alluvium	0-20 co	Fan top	2	150		Debitage Flaked Stone Artifact(s)	Sampled
26My4635	0	Lithic Scatter	5720	9.42	Artemisia	Alluvium	0-20 co	Pinnacle bottom	5	155		Debitage Flaked Stone Artifact(s) Desert Side Notched	Diagnostics
26My4636	0	Temporary Camp	5770	0.09	Artemisia	Bedrock/Colluvium	Surface	Pinnacle interior	10	240	1 Rock Shelter	Debitage Groundstone	None
26My4637	0	Locality	4540	2.36	Coleogyne	Alluvium/Aeolian	0-20 co	Fan interior	3	129		Debitage	None
26My4638	0	Isolated Artifact	4530	0.00	Coleogyne	Colluvium/Alluvium	Surface	Fan top	3	10		Elko	Complete

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NIS Area	Site Type	Elev. (ft)	Size (area)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My4639	0	Locality	4509	0.59	Coleogyne	Alluvium/Aeolian	0-20 cm	Fan side	30	130		Debitage Flaked Stone Artifact(s)	None
26My4640	0	Lithic Scatter	4520	3.93	Coleogyne	Alluvium/Aeolian	0-20 cm	Fan side	0	160		Debitage Flaked Stone Artifact(s)	None
26My4641	25	Isolated Artifact	4540	0.01	Coleogyne	Alluvium/Colluvium	Surface	Fan interior	3	180		Debitage	Complete
26My4642	25	Lithic Scatter	4590	37.70	Coleogyne	Alluvium/Colluvium	Surface	Fan interior	4	170		Debitage Flaked Stone Artifact(s) Elta	Brig/Samp
26My4643	25	Temporary Camp	4640	3.14	Coleogyne	Colluvium/Alluvium	0-20 cm	Ridge side	5	230	3 Rock Alignments 3 Rock Shelters 1 Cache	Debitage Groundstone Flaked Stone Artifact(s) Brownware Pottery	Brig/Samp
26My4644	25	Isolated Artifact	4630	0.01	Coleogyne	Alluvium/Colluvium	Surface	Fan interior	3	180		Debitage	Complete
26My4645	25	Isolated Artifact	4520	0.01	Coleogyne	Alluvium/Colluvium	Surface	Fan interior	3	182		Debitage	Complete
26My4646	25	Isolated Artifact	4600	0.01	Coleogyne	Alluvium/Colluvium	Surface	Fan interior	5	180		Debitage	Complete
26My4647	0	Milling Station	4420	0.39	Coleogyne	Residual/Alluvium	20-100 cm	Fan interior	3	270		Groundstone	None
26My4648	25	Isolated Artifact	4450	0.01	Coleogyne	Alluvium/Colluvium	Surface	Fan interior	3	190		Debitage	Complete
26My4649	25	Locality	4440	0.04	Coleogyne	Alluvium/Colluvium	Surface	Fan interior	5	180		Debitage	None
26My4650	25	Lithic Scatter	4420	0.98	Coleogyne	Alluvium	Surface	Terrace (Aluv) top	2	205		Debitage	None
26My4651	25	Isolated Artifact	4380	0.01	Coleogyne	Resi. -1/Bedrock	Surface	Knoll top	3	325		Debitage	Complete
26My4652	0	Lithic Scatter	4320	0.59	Coleogyne	Alluvium	0-20 cm	Terrace (Aluv) top	1	130		Debitage	None
26My4653	0	Locality	4318	0.20	Coleogyne	Alluvium	Surface	Terrace (Aluv) top	2	132		Debitage	None
26My4654	0	Locality	4321	0.08	Coleogyne	Alluvium	Surface	Terrace (Aluv) top	2	110		Debitage	None
26My4655	0	Lithic Scatter	4280	783.40	Coleogyne	Alluvium	0-20 cm	Terrace (Aluv) top	0	124		Debitage	Sampled
26My4656	25	Isolated Artifact	4480	0.01	Coleogyne	Residual/Bedrock	Surface	Ridge top	6	170		Elta	Complete
26My4657	25	Isolated Artifact	4230	0.01	Coleogyne	Alluvium/Residual	Surface	Ridge top	1	230		Debitage	Complete
26My4658	25	Milling Station	4220	0.14	Coleogyne	Alluvium	0-20 cm	Valley bottom	1	300	1 Rock Shelter	Debitage Groundstone	None

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My4659	25 Knapping Station	4100	0.05	Coleogyne	Alluvium/Aeolian	Surface	Terrace (Aluv) top	3	137		Debitage	None
26My4660	25 Quarry	4075	0.03	Coleogyne	Alluvium	Surface	Fan interior	5	118		Debitage	None
26My4661	25 Isolated Artifact	3970	0.01	Coleogyne	Alluvium/Aeolian	Surface	Terrace (Aluv) top	3	140		Debitage	Complete
26My4662	25 Locality	3960	0.20	Coleogyne	Alluvium	0-20 cm	Valley interior	1	125		Debitage Flaked Stone Artifact(s) Brownware Pottery Desert Side Notched	Diagnostics
26My4663	29 Lithic Scatter	4220	1.57	Coleogyne	Colluvium/Alluvium	0-20 cm	Ridge interior	70	135		Debitage Flaked Stone Artifact(s)	None
26My4664	29 Residential Base	3980	351.06	Coleogyne	Alluvium	0-20 cm	Spring/Seep side	0	150	3 Rock Mounds 4 Historic Features	Debitage Groundstone Peked stone Historic Artifact(s) Flaked Stone Artifact(s) Historic Artifacts Brownware Pottery Rosespring/Eastgate Elko	Diagnostics
26My4665	29 Temporary Camp	4040	0.16	Larrea-Ambrosia	Bedrock/Aeolian	0-20 cm	Cliff interior	2	95	1 Rock Shelter	Debitage Groundstone Flaked Stone Artifact(s)	None
26My4666	29 Lithic Scatter	4040	0.30	Larrea-Ambrosia	Bedrock/Aeolian	0-20 cm	Cliff interior	1	60	1 Rock Shelter	Debitage	None
26My4667	29 Temporary Camp	4000	0.11	Larrea-Ambrosia	Aeolian/Bedrock	0-20 cm	Ridge interior	15	230	3 Rock Shelters 3 Caches	Debitage Groundstone Flaked Stone Artifact(s)	None
26My4668	29 Temporary Camp	4000	70.54	Larrea-Ambrosia	Aeolian/Bedrock	0-20 cm	Valley interior	5	100	1 Hearth 4 Rock Alignments 5 Rock Shelters	Debitage Groundstone Flaked Stone Artifact(s) Brownware Pottery	Diag/Samp
26My4669	29 Locality	4120	0.79	Larrea-Ambrosia	Bedrock	Surface	Foothill side	0	65	12 Tinajas/Tanks		None
26My4670	29 Locality	4100	0.20	Larrea-Ambrosia	Bedrock/Residual	0-20 cm	Valley interior	2	20	1 Rock Shelter	Flaked Stone Artifact(s)	None
26My4671	29 Locality	4100	0.00	Larrea-Ambrosia	Bedrock	Surface	Valley bottom	0	140	1 Tinaja/Tank		None
26My4672	29 Lithic Scatter	4200	0.20	Larrea-Ambrosia	Residual/Bedrock	0-20 cm	Ridge side	0	76	2 Rock Shelters	Debitage Flaked Stone Artifact(s) Brownware Pottery	Diagnostics

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTB Area Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My4673	29 Milling Station	4030	0.16	Larrea-Ambrosia	Azolian/Residual	0-20 cm	Ridge interior	17	110	1 Rock Alignment 1 Rock Shelter	Debitage Groundstone Brownware Pottery	Diagnostics
26My4674	29 Lithic Scatter	3960	294.52	Coleogyne	Alluvium	0-20 cm	Terrace (Aluv) top	3	105		Debitage Flaked Stone Artifact(s) Pinto	Diagnostics
26My4675	29 Locality	3970	0.59	Coleogyne	Bedrock	20-100 cm	Ridge bottom	3	150	3 Tinajas/Tanks		None
26My4676	29 Isolated Artifact	3900	0.01	Coleogyne	Alluvium	Surface	Slope interior	4	92		Great Basin Stoned	Complete
26My4677	29 Lithic Scatter	4290	0.02	Coleogyne	Residual/Bedrock	20-100 cm	Ridge side	3	54	1 Rock Shelter	Debitage Historic Artifact(s) Flaked Stone Artifact(s) Historic Artifacts Fremont/Anasazi Pottery	Diagnostics
26My4678	29 Historic Feature	4100	0.69	Coleogyne	Bedrock/Residual	Surface	Cliff top	4	122	2 Historic Features		None
26My4679	29 Temporary Camp	4100	0.78	Coleogyne	Residual/Azolian	20-100 cm	Ridge side	10	292	1 Rock Shelter 1 Hearth (Historic)	Debitage Groundstone Historic Artifact(s) Brownware Pottery	Diag/Samp
26My4680	29 Temporary Camp	4200	19.63	Coleogyne	Residual/Colluvium	20-100 cm	Cliff bottom	0	94	4 Rock Shelters	Debitage Groundstone Flaked Stone Artifact(s) Brownware Pottery Rosespring/Eastgate	Diagnostics
26My4681	29 Isolated Artifact	4270	0.01	Coleogyne	Alluvium	Surface	Knoll interior	4	320		Debitage	Complete
26My4682	29 Milling Station	4200	0.19	Coleogyne	Colluvium/Bedrock	Surface	Ridge side	25	136	1 Rock Alignment 1 Rock Shelter	Groundstone	None
26My4683	29 Locality	4070	0.02	Coleogyne	Alluvium	Surface	Terrace (Aluv) top	3	132		Debitage	Complete
26My4684	29 Lithic Scatter	4050	28.27	Coleogyne	Residual/Colluvium	0-20 cm	Ridge side	7	90	1 Hearth 1 Rock Alignment 1 Rock Shelter 1 Other Structure	Debitage Brownware Pottery	Diagnostics
26My4685	29 Lithic Scatter	3940	7.07	Coleogyne	Alluvium	Surface	Terrace (Aluv) top	3	156		Debitage Flaked Stone Artifact(s)	None
26My4686	29 Lithic Scatter	4260	29.45	Coleogyne	Alluvium/Colluvium	0-20 cm	Knoll interior	6	160		Debitage Flaked Stone Artifact(s)	Sampled

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area Site Type	Elev. (ft)	Size (acres)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My4687	29 Lithic Scatter	4000	3.14	Coleogyne	Alluvium/Colluvium	0-20 cm	Terrace (Aluv) top	2	190		Debitage Flaked Stone Artifact(s) Pinto	Diagnostics
26My4688	29 Locality	4160	0.02	Coleogyne	Bedrock/Colluvium	Surface	Ridge top	22	260		Debitage	None
26My4689	29 Locality	3960	0.02	Coleogyne	Alluvium	Surface	Ridge top	3	215		Flaked Stone Artifact(s)	Complete
26My4690	29 Lithic Scatter	3920	197.92	Coleogyne	Alluvium	0-20 cm	Terrace (Aluv) top	2	130		Debitage Flaked Stone Artifact(s) Pinto	Diag/Samp
26My4691	25 Locality	3840	0.01	Larrea-Ambrosia	Alluvium	Surface	Ridge side	10	112		Debitage	Complete
26My4692	25 Isolated Artifact	3800	0.01	Larrea-Ambrosia	Alluvium	Surface	Beach bottom	1	160		Debitage	Complete
26My4693	25 Lithic Scatter	3840	1.57	Larrea-Ambrosia	Alluvium	Surface	Ridge side	5	80		Debitage	None
26My4694	25 Temporary Camp	3800	3.14	Larrea-Ambrosia	Bedrock/Colluvium	Surface	Ridge bottom	5	40	1 Rock Shelter	Debitage Groundstone	None
26My4695	25 Milling Station	3780	7.05	Coleogyne	Alluvium/Bedrock	Surface	Terrace (Aluv) top	4	90		Debitage Groundstone	None
26My4696	25 Milling Station	3740	0.44	Coleogyne	Residual/Alluvium	0-20 cm	Terrace (Aluv) side	45	20		Groundstone	None
26My4697	25 Locality	3800	0.20	Coleogyne	Alluvium/Colluvium	Surface	Fan interior	2	90		Debitage	None
26My4698	25 Temporary Camp	4300	176.72	Coleogyne	Colluvium/Bedrock	0-20 cm	Ridge interior	40	95	1 Rock Alignment 3 Rock Shelters	Debitage Groundstone Historic Artifact(s) Flaked Stone Artifact(s) Historic Artifacts	None
26My4699	25 Lithic Scatter	3760	3.58	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	4	240		Debitage	None
26My4700	25 Locality	3760	0.31	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	3	230		Debitage	None
26My4701	25 Locality	3700	0.05	Larrea-Ambrosia	Bedrock/Residual	Surface	Cliff side	0	230		Debitage	None
26My4702	25 Locality	3760	1.30	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) top	3	355		Debitage Flaked Stone Artifact(s)	None
26My4703	25 Lithic Scatter	3740	129.59	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	3	235		Debitage	Sampled Flaked Stone Artific
26My4704	25 Locality	3670	0.16	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	222		Debitage Flaked Stone Artifact(s)	None

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Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area Site Type	Elev. (ft)	Size (acres)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My4705	25 Milling Station	3640	0.01	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) bottom	1	282		Groundstone	None
26My4706	25 Locality	3700	0.71	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	4	235		Debitage	None
26My4708	25 Temporary Camp	3800	1.18	Coleogyne	Alluvium	20-100 cm	Terrace (Aluv) side	1	175		Debitage Groundstone	None
26My4709	25 Locality	3990	0.07	Coleogyne	Bedrock	Surface	Slope interior	9	145	1 Rock Shelter	2 Caches? 1 Rock Art Panel	None
26My4710	25 Quarry	4100	0.20	Coleogyne	Bedrock/Aeolian	Surface	Ridge top	1	176		Debitage	None
26My4711	25 Isolated Artifact	3680	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Terrace (Aluv) top	6	340		Flaked Stone Artifact	Complete
26My4712	25 Lithic Scatter	3670	15.14	Larrea-Lycium-Grayia	Alluvium	0-20 cm	Terrace (Aluv) top	2	290		Debitage Flaked Stone Artifact(s)	Sampled
26My4713	25 Quarry	3640	0.05	Larrea-Lycium-Grayia	Colluvium/Residual	Surface	Terrace (Aluv) side	19	275		Debitage	None
26My4714	25 Locality	3690	6.28	Lycium-Grayia	Alluvium	0-20 cm	Terrace (Aluv) top	0	140		Debitage	None
26My4715	29 Locality	4100	0.03	Coleogyne	Bedrock/Residual	Surface	Ridge end	1	290	1 Cache	Debitage	None
26My4716	29 Lithic Scatter	4160	0.72	Coleogyne	Residual/Aeolian	20-100 cm	Slope interior	1	225	1 Rock Shelter	Debitage	Sampled
26My4717	29 Temporary Camp	4300	62.83	Coleogyne	Colluvium/Bedrock	0-20 cm	Spring/Seep side	19	220	1 Rock Circle 5 Historic Features	Debitage Groundstone Historic Artifact(s) Flaked Stone Artifact(s) Historic Artifacts Bronze/Pottery Fremont/Anasazi Pottery Rosespring/Eastgate Elta	Bray/Saep
26My4718	29 Milling Station	4100	0.26	Coleogyne	Residual/Bedrock	0-20 cm	Ridge side	6	282	1 Rock Shelter	Groundstone	None
26My4719	29 Locality	4100	0.33	Coleogyne	Residual/Aeolian	0-20 cm	Ridge side	5	270	1 Rock Shelter	Fire Cracked Rock	Sampled
26My4720	29 Temporary Camp	4100	19.63	Coleogyne	Alluvium/Residual	20-100 cm	Ridge side	10	270	2 Hearths 2 Rock Alignments 2 Rock Shelters	Debitage Groundstone Flaked Stone Artifact(s) Bronze/Pottery Rosespring/Eastgate	Diagnostics
26My4721	29 Isolated Artifact	3940	0.01	Coleogyne	Alluvium/Colluvium	Surface	Ridge side	10	208		Debitage	Complete

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTS Area	Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My4722	29	Temporary Camp	4100	39.27	Coleogyne	Bedrock/Colluvium	>100 cm	Ridge side	10	140	5 Rock Shelters	Debitage Groundstone Wood Artifact(s) Flaked Stone Artifact(s) Historic Artifacts Brownware Pottery Desert Side Notched	Diag/Samp
26My4723	29	Lithic Scatter	4030	1.18	Coleogyne	Colluvium/Alluvium	0-20 cm	Ridge side	9	260		Debitage	None
26My4724	29	Temporary Camp	3940	0.20	Coleogyne	Colluvium/Bedrock	0-20 cm	Bench side	2	224	1 Rock Alignment 1 Rock Shelter	Debitage Groundstone	None
26My4725	29	Locality	3940	0.01	Coleogyne	Alluvium/Colluvium	Surface	Bench side	10	292		Debitage	Complete
26My4726	25	Lithic Scatter	3880	0.57	Coleogyne	Colluvium/Alluvium	0-20 cm	Fan side	5	270		Debitage	None
26My4727	29	Isolated Artifact	3940	0.01	Coleogyne	Alluvium/Aeolian	Surface	Slope interior	5	270		Elko	Complete
26My4728	25	Locality	3670	0.21	Lycium-Grayia	Alluvium	Surface	Terrace (Aluv) top	1	140		Debitage	None
26My4729	25	Lithic Scatter	3640	4.71	Lycium-Grayia	Alluvium	Surface	Terrace (Aluv) top	1	150		Debitage Flaked Stone Artifact(s)	None
26My4730	25	Temporary Camp	3600	714.71	Lycium-Grayia	Alluvium	0-20 cm	Terrace (Aluv) top	2	170		Debitage Groundstone Flaked Stone Artifact(s) Elko Great Basin Stenoed	Diagnostics
26My4731	25	Quarry	3640	0.39	Lycium-Grayia	Alluvium	0-20 cm	Terrace (Aluv) top	1	142		Debitage Flaked Stone Artifact(s)	None
26My4732	25	Temporary Camp	3860	18.85	Lycium-Grayia	Colluvium/Alluvium	0-20 cm	Ridge side	8	124	1 Rock Alignment 1 Rock Shelter	Debitage Groundstone Flaked Stone Artifact(s) Brownware Pottery	Diagnostics
26My4733	25	Locality	3600	4.63	Coleogyne	Alluvium	Surface	Terrace (Aluv) top	1	185		Debitage	None
26My4734	25	Quarry	3590	0.64	Coleogyne	Alluvium	0-20 cm	Terrace (Aluv) top	1	240		Debitage Flaked Stone Artifact(s)	None
26My4735	25	Locality	3680	0.11	Coleogyne	Residual/Colluvium	Surface	Ridge top	3	210		Debitage Flaked Stone Artifact(s)	Complete
26My4736	25	Locality	3640	0.01	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	150		Debitage	None

Table \_\_\_\_ Selected cultural and environmental attributes for the Tucua Mountain Project Area. (cont'd)

Site No.	NYS Area	Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26Hy4737	25	Lithic Scatter	3620	19.63	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) top	2	140		Debitage Flaked Stone Artifacts	None
26Hy4738	25	Quarry	3600	20.27	Larrea-Ambrosia	Alluvium	0-20 cm	Terrace (Aluv) top	1	122		Debitage Flaked Stone Artifacts	None
26Hy4739	25	Isolated Artifact	3630	0.01	Larrea-Ambrosia	Alluvium/Aeolian	Surface	Terrace (Aluv) top	1	134		Debitage	Complete
26Hy4740	25	Isolated Artifact	3600	0.01	Larrea-Ambrosia	Residual/Colluvium	Surface	Ridge end	3	150		Debitage	Complete
26Hy4741	25	Quarry	3640	0.13	Larrea-Ambrosia	Alluvium/Colluvium	Surface	Foothill side	5	170		Debitage Flaked Stone Artifacts	None
26Hy4742	25	Quarry	3590	0.09	Larrea-Ambrosia	Residual	Surface	Ridge top	1	78		Debitage Flaked Stone Artifacts	None
26Hy4743	25	Quarry	3540	23.56	Larrea-Ambrosia	Alluvium/Colluvium	Surface	Foothill side	3	150		Debitage Flaked Stone Artifacts	Complete
26Hy4744	25	Temporary Camp	3500	942.48	Coleogyne	Alluvium	0-20 cm	Terrace (Aluv) top	1	170		Debitage Groundstone Flaked Stone Artifacts	Sampled
26Hy4745	25	Locality	3400	0.03	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	250		Debitage	None
26Hy4746	25	Lithic Scatter	3485	3.93	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	170		Debitage Pinto	Diagnostics
26Hy4747	25	Lithic Scatter	3400	96.13	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	170		Debitage Flaked Stone Artifacts Great Basin Stemmed	Diag/Samp
26Hy4748	25	Lithic Scatter	3400	11.00	Larrea-Ambrosia	Alluv.	Surface	Terrace (Aluv) top	1	170		Debitage Flaked Stone Artifacts	None
26Hy4749	25	Locality	3400	0.24	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	170		Debitage	None
26Hy4750	25	Locality	3470	0.39	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	170		Debitage	Complete
26Hy4751	25	Lithic Scatter	3470	3.53	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	170		Debitage Flaked Stone Artifacts	Complete
26Hy4752	25	Lithic Scatter	3460	4.71	Larrea-Ambrosia	Alluvium	Surface	Terrace (Aluv) top	1	170		Debitage	None
26Hy4753	25	Temporary Camp	3650	620.32	Lycium-Grayia	Aeolian/Colluvium	20-100 cm	Ridge side	10	90	9 Rock Circles 2 Rock Alignments 2 Rock Hounds 2 Rock Shelters 7 Tinajas/Tanks	Debitage Groundstone Flaked Stone Artifacts Brownware Pottery	None

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Table \_\_\_\_ Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	NTE Area	Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope	Aspect	Features	Artifact Types	Collection Status
26My4754	0	Isolated Artifact	3600	0.01	Lycium-Grayia	Alluvium	Surface	Ridge side	5	350		Debitage	Complete
26My4755	25	Lithic Scatter	3130	0.79	Larrea-Ambrosia	Alluvium/Aeolian	0-20 cm	Bajada interior	4	150		Debitage	None
26My4756	25	Isolated Artifact	3140	0.01	Larrea-Ambrosia	Alluvium	Surface	Bajada interior	5	150		Historic Artifacts	Complete
26My4757	25	Locality	3240	0.16	Larrea-Ambrosia	Alluvium	Surface	Fan interior	5	170		Debitage	Complete
26My4759	25	Lithic Scatter	3750	60722.50	Coleogyne	Alluvium	0-20 cm	Fan interior	4	160		Debitage Flaked Stone Artifact(s)	Sampled
26My4760	25	Isolated Artifact	3840	0.01	Larrea-Ambrosia	Colluvium	Surface	Ridge top	12	20		Debitage	Complete
26My4761	25	Isolated Artifact	3840	0.01	Larrea-Ambrosia	Colluvium	0-20 cm	Ridge top	16	92		Debitage	Complete
26My4762	25	Knapping Station	3830	0.19	Larrea-Ambrosia	Colluvium/Aeolian	Surface	Ridge top	8	285		Debitage	Complete
26My4763	25	Locality	3840	0.09	Larrea-Ambrosia	Bedrock	Surface	Ridge top	30	90	1 Cache		None
26My4764	25	Isolated Artifact	3780	0.01	Larrea-Ambrosia	Colluvium/Bedrock	Surface	Ridge end	4	180		Flaked Stone Artifact	Complete
26My4765	25	Isolated Artifact	3620	0.01	Larrea-Lycium-Grayia	Alluvium/Aeolian	Surface	Bajada interior	2	160		Flaked Stone Artifact	Complete
26My4766	25	Locality	3660	0.79	Larrea-Ambrosia	Alluvium/Aeolian	0-20 cm	Fan interior	2	155		Debitage Great Basin Stemmed	Complete
26My4767	25	Quarry	3660	0.03	Larrea-Ambrosia	Alluvium/Aeolian	0-20 cm	Fan interior	2	230		Debitage Flaked Stone Artifact(s)	Complete
26My4768	25	Quarry	3660	0.50	Larrea-Ambrosia	Alluvium/Aeolian	0-20 cm	Fan interior	1	145		Debitage	None
26My4769	25	Knapping Station	3600	1.00	Larrea-Ambrosia	Alluvium/Aeolian	0-20 cm	Fan interior	2	130		Debitage	Complete
26My4770	25	Knapping Station	3600	0.02	Larrea-Lycium-Grayia	Alluvium/Aeolian	0-20 cm	Fan interior	1	135		Debitage	Complete
26My4771	25	Isolated Artifact	3580	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Fan interior	1	155		Flaked Stone Artifact	Complete
26My4772	25	Isolated Artifact	3560	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Fan interior	5	140		Debitage	Complete
26My4773	25	Isolated Artifact	3520	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Fan interior	9	110		Debitage	Complete
26My4774	25	Milling Station	3660	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Fan interior	3	35		Groundstone	Complete
26My4775	25	Milling Station	3690	0.01	Larrea-Lycium-Grayia	Alluvium	Surface	Fan interior	3	25		Groundstone	Complete
26My4776	25	Isolated Artifact	3600	0.01	Coleogyne	Alluvium/Colluvium	Surface	Floodplain interior	9	305		Debitage	Complete
26My4777	25	Isolated Artifact	4040	0.01	Coleogyne	Bedrock/Aeolian	Surface	Knoll top	3	20		Debitage	Complete

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Table \_\_. Selected cultural and environmental attributes for the Yucca Mountain Project Area. (cont'd)

Site No.	N18 Area Site Type	Elev. (ft)	Size (ares)	Dominant Vegetation	Substrate	Potential Depth	Primary Landform	Slope Aspect	Features	Artifact Types	Collection Status
26Ny4778	25 Isolated Artifact	3450	0.01	Coleogyne	Alluvium/Aeolian	Surface	Fan interior	2 160		Debitage	Complete
26Ny4779	25 Isolated Artifact	3460	0.01	Larrea-Ambrosia	Alluvium/Aeolian	Surface	Fan interior	2 140		Debitage	Complete

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## APPENDIX 7

January 4, 1979  
Memorandum of Understanding between the  
Nevada SHPO and the Nevada State Indian Commission



7 0 1 2 0 1 6 7 5

STATE OF NEVADA



ROBERT LIST  
GOVERNOR

ELWOOD A. M  
EXECUTIVE DIR.

JUN 27 '80

**BEST AVAILABLE  
COPY**

**INDIAN COMMISSION**  
1135 TERMINAL WAY, SUITE 109  
RENO, NEVADA 89502  
(702) 704-6248

MEMORANDUM

TO: All Interested Individuals and Agencies  
FROM: E. A. Mose, Executive Director  
SUBJECT: Antiquities Preservation Meetings  
DATE: 24 June 1980

Prior to the 1979 State Legislature's 60th Session, the Indian Commission undertook a study of protection of Indian burial and sacred sites.

The study resulted in commission staff developing legislation for protection of and treatment of the discovery of such sites. Key in the proposed legislation was the involvement of and approval by Indian tribes of any excavation or treatment of discovery of burial or sacred sites.

In December of 1979, at a meeting in Wells, Nevada, the Indian Commission heard testimony regarding the proposed legislation. The Commission agreed to suspend pursuit of legislation because:

- State legislation would have a limited impact, i.e., on state lands only.
- Modern day tribes archeological and documented ties to the past were non-existent to consent of the tribes for excavation to take place was impractical.
- More work had to be done with federal agencies to assure their co-operation in issuing permits for excavation.
- Difficulties would occur with the percentage of materials given to the Nevada State Museum.

Recommendations for the Commission include:

- No legislation be considered except maybe that dealing with burials and burial sites.
- The State Historical Preservation office notify the Nevada Indian Commission whenever excavation occurred and that this be written into the Nevada State Museum regulations.
- Agencies co-operate to expedite problems arising from the issuance of permits by federal agencies and that agencies assist each other in the federal excavation permit issuance process.
- Procedural avenues be taken by federal and state agencies to notify the Nevada Indian Commission whenever permits were issued.
- Existing procedures be modified by the State Historical Preservation office to incorporate changes reflecting the above and that the Nevada State Museum go through revision of permit language.
- NINCO implement policy to notify federal agencies of conditions of permits relating to burials.
- Any discovery of human remains involve notification of Indian tribes.

The commission is still concerned with the protection of Indian burial and sacred sites; and the possible inventory of such sites and is planning meetings to address these concerns.

We are pleased to invite your participation to discuss this subject. We are of the hope that initial meetings will provide for broadening of communications between and among concerned individuals and agencies. Two sessions have currently been scheduled - one in Reno for the convenience of those in western Nevada; and the other in Elko for the convenience of those in eastern Nevada. Dates and times are:

Thursday, 24 July 1980  
 9:30 A.M. - Noon  
 Holiday Inn Downtown  
 Sparks Room  
 1000 East Sixth Street  
 Reno, Nevada

Friday, 24 July 1980  
 9:30 A.M. - Noon  
 Holiday Inn of Elko  
 Cold Pan Room  
 East Elko Interchange  
 Elko, Nevada

For further information, please call the Nevada Indian Commission office at 1135 Terminal Way, Suite 109, Reno, Nevada 89502. (702) 734-6248

ENH:cj

File #062.40

January 4, 1979

In our recent conference call, I was requested to inform you of what occurred at the recent Nevada Indian Commission meeting in Wells, Nv.

Their proposed legislation modifying the Nevada State Museum statutes was brought up for discussion early in the afternoon. Norman Allen and Elwood Mose, both of the Nevada Indian Commission, spoke of the history and shortcomings of the proposed legislation. They then asked for any comments I had to present. As per our discussion, I recommended against continuance of the proposed legislation and presented our collective reasons as to why. I then presented our suggested procedural changes as an alternative.

After a minimum of discussion, it was moved, seconded and unanimously approved, that the proposed legislation be postponed. Continued postponement, or cancellation on their part, is dependent upon our presentation of written procedures showing how the concerns of the Indian community will be taken into consideration in the future.

Enclosed are three elements of that procedural package. Attachment "A" deals with the notification of agencies and groups when burials are located during archeological activities. This attachment will become a part of the Nevada State Historic Preservation Plans archeological element. Attachment "B" lists the new special conditions that will be added to all State Antiquities Permits. Attachment "C" involves the modification of the existing mailing list in order that the Nevada Indian Commission and the appropriate Tribal group will be notified on the issuance of a State Antiquities Permit.

Please contact me by phone, or in writing, within the next two weeks, if you have any comments on these proposals. I want to submit our proposed procedural alternative to the Nevada Indian Commission by the end of January.

Sincerely,

Charles D. Zeier  
Archeologist

CZ:j

Encls: Attachments A, B, & C

**BEST AVAILABLE  
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## ATTACHMENT "A"

WHEREAS, it is the responsibility of the State Historic Preservation Office to identify and preserve, when possible, the cultural resources of importance to the people of Nevada; and

WHEREAS, historic and prehistoric burials are cultural resources that have associative values that transcend the simple interment of an individual; and

WHEREAS, these burials and associative values are of significance to both the Indian and non-Indian populations of Nevada; and

WHEREAS, pursuant to Public Law 90-577, Title IV, Section 401, federal agencies shall provide for full consideration of the concurrent achievement of state and federal goals to recognize and protect areas of historical and scientific interest; and

WHEREAS, pursuant to Nevada Revised Statutes 383.121, state agencies shall cooperate with the Division in the preservation of cultural resources:

NOW, THEREFORE, in consideration of these facts, it is the policy of the Nevada Division of Historic Preservation and Archeology that primary consideration must be given to the in-place preservation of historic and prehistoric burials. In addition, it is essential that all appropriate individuals, agencies, and/or groups be contacted and be given the opportunity to comment on the management of this very sensitive class of cultural resource.

To implement this policy, the Nevada Division of Historic Preservation and Archeology has incorporated the following procedures into the Nevada State Historic Preservation plan.

1. Definitions:

- a. "Burial" means the extant remains of a human interment. For the purposes of this procedure, this includes the remains of a deceased person in any state of decomposition or completeness and any funerary artifacts or accoutrements.
- b. "Historic Burial" means a non-Indian burial dating to the historic period.
- c. "Indian Burial" means the interment of an Indian dating from either the historic or prehistoric period.

2. Procedures to be followed when burials are located during archeological survey activities.

- a. The location and condition of the burial will be recorded, and if possible, it shall be ascertained whether it is an Indian or non-Indian burial.
- b. No collection of human remains or artifacts associated with the burial shall be collected or otherwise disturbed unless in eminent threat of destruction.
- c. As soon as possible, but within 15 days, the principal investigator of the archeological survey project will notify, in writing, the agencies and groups identified below:
  - 1) For an Indian burial, the following agencies and groups will be notified of the burial's location and condition.

- a.) The Division of Historic Preservation and Archeology.
  - b.) The Nevada Indian Commission.
  - c.) The leadership of the tribe in whose ethnographically documented territory the burial was located.
  - d.) If the work is being done under the purview of a State Antiquity Permit, the Nevada State Museum.
- 2.) For a historic Burial, the following agencies and groups will be notified of the burial's location and condition.
- a.) The Division of Historic Preservation and Archeology.
  - b.) The appropriate County Coroner.
  - c.) If the work is being done under the purview of a State Antiquity Permit, the Nevada State Museum.
- d. Notified agencies and groups shall respond within 15 days to the principal investigator stating whether or not they have an interest in the burial situation, and if so, what that interest is.
- 1.) If the agencies and groups do not respond within the designated time frame, the principal investigator will so note, and may then proceed.

ATTACHMENT "A" (cont.)

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e. Evidence of this consultation must be included in the archeological survey report as prepared by the principal investigator. Consideration must be given the views of the agencies and groups in the development of professional recommendations.

3. Procedures to be followed when burials are located during archeological excavational activities.

a. Work will be discontinued that will disturb or destroy the burial or any aspect thereof.

b. As soon as possible, but within 15 days, the principal investigator of the archeological excavation project will notify, in writing, the agencies and groups specified in 2.c.(1) or 2.c.(2), as appropriate.

c. Notified agencies and groups shall respond within 15 days to the principal investigator stating whether or not they have an interest in the burial situation, and if so, what that interest is.

1.) If the agencies or groups do not respond within the designated time frame, the principal investigator will so note and may then proceed.

d. The principal investigator shall cooperate with the agencies and groups to the fullest extent practicable in arriving at a consensus opinion of how best to proceed.

ATTACHMENT "A" (cont.)

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- e. Evidence of this consultation must be included in the archeological excavation report as prepared by the principal investigator.
4. In accordance with NRS 451.050, the disinterment of any person that will be leaving the state must be approved by the County Commissioners. If in conjunction with either archeological survey or excavation activities, burials are located that leave the state for study, the commissioners for the county in which the burial is located will be contacted and the appropriate permit applied for.



## ATTACHMENT "B"

New "Special Conditions" to be included on all new Antiquities Permits issued by the State:

1. A copy of all archeological reports produced under the auspices of a State Antiquities Permit will be provided to the Nevada Indian Commission and the leadership of the tribal group in whose ethnographically documented territory the project was conducted.
2. The procedures established by the Division of Historic Preservation and Archeology pertaining to the location of burials during archeological survey and excavation activities, shall be followed by all holders of State Antiquity Permits.

ATTACHMENT "C"

The Nevada State Museum will, as a matter of course, notify the Nevada Indian Commission and the leadership of the tribal group in whose ethnographically documented territory the project will be conducted whenever a State Antiquities Permit is issued.

In order to bring this agency and the appropriate groups up to date, the Nevada State Museum will notify the Division of Historic Preservation and Archeology, the NIC and the tribal groups of all State Antiquity Permits currently in force.

**APPENDIX B**

**National Register of Historic Places (36 CFR Part 60)**

7 0 1 3 0 1 5 5  
**PART V: REGULATIONS**  
**J. 36 CFR Part 60: National Register for**  
**Historic Places, interim rules.**

Federal Register / Vol. 48, No. 220 / Monday, November 18, 1983 / Rules and Regulations 56183

**DEPARTMENT OF THE INTERIOR**  
**National Park Service**  
**36 CFR Part 60**

**National Register of Historic Places**  
**AGENCY: National Park Service, Interior.**  
**ACTION: Interim rules with request for**  
**comments.**

**SUMMARY:** These interim rules incorporate revisions required by the National Historic Preservation Act Amendments of 1980, Pub. L. 96-313, ("Amendments") and update and revise in minor respects the procedures for nominations to the National Register of Historic Places by States and Federal agencies as set forth in 36 CFR Part 60. 36 CFR Part 11<sup>2</sup> has been redesignated and transferred to 36 CFR Part 60 consistent with the transfer of the National Register of Historic Places to the National Park Service in accordance with Secretarial Order 3080 abolishing the Heritage Conservation and Recreation Service.

**DATE:** Interim rule effective November 18, 1983; comments must be received on or before January 13, 1984.

**ADDRESSE:** Send comments to: Keeper of the National Register, National Park Service, United States Department of the Interior, Washington, D.C. 20240 (202/272-3304).

**FOR FURTHER INFORMATION CONTACT:** Carol D. Shull, Acting Keeper of the National Register (202-272-3304).

**SUPPLEMENTARY INFORMATION:** Amended §§ 60.1, 2, 3, 4, 5, 6 (except subsections (i) and (m)), 8, 10, 13, 14, and 15 of 36 CFR Part 60 are published herein as interim rules effective immediately. Amended §§ 60.6(m), 8, 11 and 12 of 36 CFR Part 60 are published elsewhere in this same issue of the Federal Register as proposed rules. Except for the amended sections published as interim rules for immediate effect, 36 CFR Part 60 is revoked.

The National Park Service ("NPS") will be receiving comments on the interim rules and those proposed rules at the same time. They will be consolidated in final rules to be published after consideration of comments. The sections of 36 CFR Part 60 which are published as proposed

rules are shown as reserved in this publication. As a matter of usual practice, the Department publishes all agency rules for comment prior to making them effective. These rules are on an interim basis with a request for comment because the National Register listing program was required to be suspended as of December 12, 1980, due to the passage of the National Historic Preservation Act Amendments of 1980, Public Law 96-313 ("Amendments"). The essential feature of the Amendments which caused a suspension of the National Register listing program is the requirement that owners of private properties proposed to be listed in the National Register be given a reasonable opportunity to concur in or object to the listing. If the owner objects (or a majority of owners in the event of a distinct), the property is not to be listed in the National Register. These regulations incorporate this reasonable opportunity to concur or object requirement.

The suspension of the National Register listing program has had the following detrimental results:

1. Property owners are not able to get their properties listed and thus qualify for Federal income tax benefits under Section 2124 of the Tax Reform Act of 1976. This has caused delays in rehabilitation activities with consequent cost increases and the possibility that some historic properties may have to be demolished rather than rehabilitated.

2. State and local governments are unable in some instances to make decisions under State and local laws and requirements concerning applications to demolish or renovate historic properties, thereby delaying developing plans.

3. Property owners are not able to qualify their historic properties for receipt of historic preservation grant funds from the Department's Historic Preservation Fund.

These disruptions of ongoing activities at the State and local level which rise to the level of emergency with respect to preservation of certain historic properties, coupled with the fact that these regulations grant property owners the right to not have their property listed in the National Register, warrant the publication of these regulations on an interim basis effective immediately.

The National Register nomination and listing procedures are amended by these rules to do the following:

(1) Add "engineering significance" to the National Register criteria for evaluation, as required by the Amendments;

(2) Revise the notification procedures for nominations to provide an

opportunity for owners to concur in or object to National Register listing, as required by the Amendments;

(3) Strengthen and clarify the responsibilities of the State Historic Preservation Officer to establish priorities for nominating all eligible properties to the National Register, as intended by the Amendments;

(4) Make clear that when a State Review Board reviews and approves a nomination, if it is procedurally correct, the State Historic Preservation Officer shall submit the nomination to NPS unless the State Historic Preservation Officer believes the property does not meet National Register criteria, as required by the Amendments;

(5) Establish a process which allows the State Historic Preservation Officer or State Review Board to request the Keeper of the National Register ("Keeper") to make a final decision on a nomination upon which they disagree;

(6) Strengthen and clarify the responsibilities of Federal agencies and the Federal Preservation Officer in the nomination process, as intended by the Amendments; and delete the provision allowing the State Historic Preservation Officer to nominate properties under Federal ownership or control;

(7) Include a process with appropriate notification by which the Keeper will review and make determinations of eligibility on nominations where the private owners or a majority of such owners for historic districts object to listing in the National Register, as required by the Amendments;

(8) Amend the procedures by which nominations are reviewed and approved by the NPS, define when substantive reviews of nominations will occur, and establish time frames for the review process, as required by the Amendments;

(9) Include technical modifications of requirements for making changes and revisions to nominations for properties listed in the National Register;

(10) Adopt a new appeals process for removal of properties from the National Register, as required by the Amendments;

(11) Delete all references to the Office of Archeology and Historic Preservation, and replace them with National Park Service where appropriate.

A proposed rulemaking which included amendments to 36 CFR § 80.11(c), 80.15 (a)(1), (a)(4) and (a)(5) and b(3), 80.16(b)(2) and (3) and 80.17 and the addition of § 80.12, was published in the Federal Register for comment on August 5, 1980. On December 12, 1980, the National Historic Preservation Act Amendments of 1980 became law necessitating additional

major revisions in the nomination and listing process.

These interim regulations incorporate the revisions required by the Amendments as well as many of the changes published in the Federal Register for comment on August 5. These regulations have been written in consultation with State Historic Preservation Officers, Federal agencies, the National Trust for Historic Preservation, Congressional Committee staff and others with concerns about the program. The National Park Service will consult with these and other parties upon request during the comment period. The Amendments require or authorize the Secretary to promulgate or revise regulations relating to the nomination and listing process for the following:

(a) Establishing or revising criteria for properties to be included in the National Register in consultation with national historical and archeological associations;

(b) Nominating properties for inclusion in, and removal from, the National Register; and considering the recommendations of properties by certified local governments;

(c) Considering appeals from such recommendations, nominations, removals, and designations (or any failure or refusal by a nominating authority to nominate or designate);

(d) Making determinations of eligibility of properties for inclusion in the National Register;

(e) Notifying the owner of a property, any appropriate local governments, and the general public, when the property is being considered for inclusion in the National Register;

(f) Including a State or Federal nomination in the National Register forty-five days after receipt by the Secretary of the nomination and necessary documentation, unless the Secretary disapproves such nomination within such forty-five day period or unless an appeal is filed;

(g) Accepting a nomination directly from any person or local government for inclusion of a property in the National Register only if such property is located in a State where there is no approved State program and including that property in the National Register or making a determination of its eligibility within 60 days of the nomination unless the nomination is appealed;

(h) Providing a method whereby any person or local government may appeal to the Secretary a nomination of any historic property for inclusion in the National Register and may appeal to the Secretary the failure or refusal of a

nominating authority to nominate a property:

(i) Requiring that before any private property or district including private property may be included in the National Register, the owner or owners of such property, or a majority of the owners of the properties within the district in the case of an historic district, shall be given the opportunity (including a reasonable period of time) to concur in, or object to, the nomination of the property or district for such inclusion;

(j) Reviewing a nomination where the private owner or a majority of such owners object to listing to determine whether or not a property or district is eligible for inclusion in the National Register and informing the Advisory Council on Historic Preservation, the appropriate State Historic Preservation Officer, the appropriate chief elected local official and the owner or owners of such property, of such determination;

(k) Modifying the review process to allow the Keeper to approve nomination without substantive review if the procedures for making nominations have been properly followed, and documentation is adequate.

Implementation of the other provisions is in the proposed regulations published in this Federal Register, with the exception of the provisions regarding certification of local governments. Proposed rules for participation in the National Register program by certified local governments will be published separately after the requirements for certifying local governments are developed. 36 CFR 60.2(i) and 60.7 have been reserved for this purpose. The interim rules also include minor revisions published in the Federal Register on August 8 for comment as revised based on the Amendments and comments received from the States, Federal agencies, local governments, the National Trust for Historic Preservation, private companies and individuals.

**Commentary:**

The National Register is designed to be a comprehensive list of the Nation's significant cultural resources to be used as a planning tool by Federal, State and local governments, private groups and citizens. The nomination process in these regulations was designed to ensure high professional standards for evaluation to maintain the integrity of the National Register as the list of the Nation's significant cultural resources. The system was purposely created to assure use of multiple levels of expert professional opinion at the State level and by Federal agencies prior to the submittal of a nomination to the NPS.

States and Federal agencies first apply the National Register criteria for evaluation within each State or region. The National Register criteria are the standard for identifying historic properties to establish a comprehensive resource management and planning system. The identification of all cultural resources within a State is one aspect of this system. The State Historic Preservation Officer is responsible for establishing a systematic method for identifying cultural resources within a State and priorities for the nomination of all eligible properties to the National Register. Federal agencies are required to inventory and nominate all eligible properties under their ownership or control. The National Register criteria are worded so that they can apply to the wide variety of historic and cultural properties. The States and Federal agencies establish the context for evaluation of resources within State, regional and local preservation planning systems and apply the criteria to the specific types of resources in any given area.

For State nominations the State Historic Preservation Officer has the responsibility of making the first determination of which properties meet the criteria for evaluation. To ensure high professional standards the NPS requires that each State develop expertise in the disciplines of history, architectural history, archeology, and historical architecture on the State staff and State Review Board. Nominations are prepared under the supervision of the State Historic Preservation Officer and his or her professional staff in accordance with an approved State historic preservation plan, which is intended to be a comprehensive resource management and planning system. The State Historic Preservation Officer submits nominations to the State Review Board in accordance with established Statewide priorities for preparation and submittal of nominations for all properties meeting National Register criteria. The nomination is then reviewed and a recommendation concerning whether or not the property meets the National Register criteria for evaluation is made by a State Review Board with professional expertise in the disciplines described above. The State Historic Preservation Officer again reviews the nomination after its consideration by the Review Board, signs it and forwards it to NPS.

Federal agencies submitting nominations to the National Register are required to have a Federal Preservation Officer. Federal agencies obtain qualified personnel either by having

professional staffs or obtaining the services of professionals to prepare nominations. Federal nominations are sent to the State Historic Preservation Officer for review and comment regarding the adequacy of the nomination, the significance of the property and its eligibility for the National Register.

Generally, NPS relies on States and Federal agencies to identify historic properties for National Register listing. Because of the experience and ability of the States and Federal agencies in identifying and evaluating historic and cultural properties which Congress recognized in the Amendments, NPS will in most instances list nominations by Federal agencies and by States with approved State programs without substantive review, provided the Federal agency or State certifies that the procedures for making nominations have been properly followed, the documentation is sufficient, and the nomination meets the National Register criteria for evaluation. However, the Keeper or his or her designee will review particular nominations as part of a systematic process of monitoring State and Federal historic preservation programs, and as otherwise necessary, to insure the integrity of the program. This change in the review process places important additional responsibilities on State Historic Preservation Officers and Federal Preservation Officers to assure that nominations are sufficiently documented, technically and procedurally correct and in accord with National Register criteria for evaluation.

The Amendments codify the responsibilities of State Historic Preservation Officers and establish a process whereby the Secretary approves State programs. Any State Historic Preservation Program in effect under prior authority of law will be treated as an approved program until the date on which the Secretary approves a program submitted by the State or until three years after the date of the enactment of the Amendments unless the Secretary chooses to rescind such approval because of program deficiencies.

The revisions to 36 CFR Part 60 are intended to make the nomination and listing procedures a more open and comprehensible process. To assure better understanding by the public about the basis for decisions on listing of properties in the National Register, NPS is instituting a new policy. When the Keeper determines that a nomination presents questions that cannot be resolved on the basis of precedent or experience, he or she will resolve the

question in a written opinion. The written opinions of the Keeper will be published and will be available to the public in a consistent format. The purpose of the opinions of the Keeper will be to resolve the question at hand and to serve as guidance for subsequent applications of the National Register criteria and procedures.

The Department has given careful consideration to establishing the most reasonable and legally defensible method for carrying out the requirement that before any privately owned property or district including private property may be included in the National Register, the owner or owners of such property, or a majority of the owners of the properties within the district in the case of a historic district, shall be given the opportunity (including a reasonable period of time) to concur in, or object to, the nomination of the property or district. The statute refers only to owners. The language in the committee report acknowledges that there should be adequate flexibility to address the various situations which might arise. State Historic Preservation Officers are required to obtain the list of owners from the most current list of owners in either the tax or land recordation records, whichever is more appropriate. Only the names of those which appear on the list consulted will be notified. Each owner has a vote in determining whether a majority of owners in a historic district or single property with multiple owners object to listing. To protect the rights of property owners and to assure that the record is defensible, the regulations provide that an owner who wishes to object shall submit to the State Historic Preservation Officer a notarized statement certifying that the party is the sole or partial owner of the private property, as appropriate, and objects to the listing.

After consideration it was concluded that since Federal agencies are legally responsible for nominating historic properties under their ownership or control, the nomination of Federal properties by the State Historic Preservation Officer is duplicative and unnecessary. Therefore the regulations have been revised to delete the provisions (§§ 60.11(d) and 60.15(a)(2) in the current regulations) allowing the State Historic Preservation Officer to nominate properties under Federal ownership or control to the National Register. Section 60.8(y) of these regulations does provide that the State Historic Preservation Officer may submit completed nomination forms for such properties to the appropriate Federal Preservation Officer who may

approve the nomination and forward it to the National Park Service. As required by the 1980 Amendments the failure of a Federal agency to nominate an eligible property is subject to appeal. Provisions for appealing nominations are published for comment in this same issue of the Federal Register.

Comments and response to comments upon the August 3, 1980 proposed amendment:

The following summarizes the comments received and actions taken in these interim rules on the August 3 proposed amendments.

One comment recommended that the regulations should make clear that comments on National Register nominations should address only the property's historic significance. The most useful comments are those which address the historic significance of a property and therefore assist in its evaluation. However, the public may comment on any aspect of the matter, including procedural aspects. The regulations have been revised to be more consistent when they refer to comments.

One comment recommended that Federal agencies submitting nominations be required to meet the same professional qualification standards as States. While NPS has no authority to impose such a requirement, the Amendments do require that the head of each Federal agency shall, unless exempted, designate a qualified official to be known as the agency's "preservation officer" who shall be responsible for coordinating that agency's activities under this Act.

A recommendation was received that the regulations should be revised to allow for clear consent before processing a National Register nomination and expressing disagreement with the intent of the proposed revisions. The interim regulations now reflect the Amendments which state that if the owner or owners of any privately owned property, or a majority of the owners of such properties within the district in the case of an historic district, object to inclusion, such property shall not be included in the National Register until such objection is withdrawn.

**Section 60.13 Processing nominations (§§ 60.8 and 9 in these regulations).**

One comment addressed the requirement that nominations be submitted in accord with State priorities. That comment recommended that there be provision for regularly revised State priorities and for review and approval of the priorities by the NPS in accordance with national

priorities established by the Secretary. Another comment said that the regulations should make clear that the States should have some method in effect for determining priorities for nominations.

One comment recommended that the proposed amendments be dropped and suggested that factors other than significance could influence whether a property is nominated and listed in the National Register. Consistent with Federal law, except where private owners object, only the significance of a property should be the basis for the decision to list a property. These revisions reinforce that basis.

The National Conference of State Historic Preservation Officers recommended that the head of the local political subdivision be able to request that the State Historic Preservation Officer submit nominations on which the State Historic Preservation Officer and the State Review Board disagree. This provision has been added.

One comment recommended that all nominations be submitted to the National Register when the State Historic Preservation Officer and State Review Board disagree on the eligibility of a property. Comments also recommended that the State Historic Preservation Officer be given discretionary authority in the nomination process. The regulations give the State Historic Preservation Officer, as the authority responsible for nominations in the State, discretion not to submit nominations which the State Historic Preservation Officer does not believe meet the National Register criteria unless requested by the State Review Board, the head of the local political subdivision, or on appeal.

One comment questioned whether Federal nominations should be submitted to the NPS without State Historic Preservation Officer approval. The NPS considers that Federal agencies should retain authority to submit nominations to the National Register for control after consultation with the State.

Removing Properties from the National Register (published as § 60.7 on August 3, now § 60.13).

One comment suggested that another ground for removal be added to the regulations which would provide for removal of a property if additional information shows that the property does not possess sufficient significance to meet the National Register criteria for evaluation. Properties have previously been removed from the National Register for this reason but this ground

for removal has been made explicit in these regulations.

The National Conference of State Historic Preservation Officers' comments recommended that a 45-day time period be placed on petitioners for removal who wish to pursue the request further. They also recommended that the State be given 15 rather than 10 days to forward such petitions to the Keeper. These revisions have been added to the regulations.

The National Trust for Historic Preservation recommended that "prejudicial and substantial" procedural errors be further defined. The term "substantial" has been deleted.

Comments also recommended requiring the petitioner to provide some evidence on the established grounds to support the petition for removal. This requirement has been added. Concern was also expressed that this section might be abused. Others urged that notice be given and an opportunity to comment and that the State Review Board be allowed to reconsider proposals for removal, where appropriate, before a property is removed from the National Register. These recommendations are also incorporated into the regulations. They should assist in assuring that the removal process is a responsible one with adequate public participation.

(National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470 et seq., and Executive Order 11669)

The Department of the Interior has determined that this document is not a major rule under Executive Order 12291 and does not have a significant economic effect on a substantial number of small entities in accordance with the Regulatory Flexibility Act of 1980 (Pub. L. 96-354). These revisions are procedural not substantive. They tell the public how to nominate properties to the National Register and since they are procedural only they have no significant economic effect on small entities.

This regulation does not significantly impact the environment. Because the amendments have to do with procedural aspects of the National Register program and have no impact upon the environment, an environmental impact statement is not required.

The originator of these procedures is Carol Shull of the Division of the National Register of Historic Places (202/272-3504).

Dated: November 12, 1981.

Ira J. Hutchinson,

Acting Director, National Park Service.

The following sections of 36 CFR Part 60 are published herein for comment and

immediate interim effect. The reserved sections with the exception of § 60.8(i) and § 60.7 are published separately for comment in this same issue of the Federal Register. Except for the following amended sections, 36 CFR Part 60 is suspended.

Accordingly, 36 CFR Part 60 is revised to read as follows:

#### PART 60—NATIONAL REGISTER OF HISTORIC PLACES

- Sec.
- 60.1 Authorization and expansion of the National Register.
- 60.2 Effects of listing under Federal law.
- 60.3 Definitions.
- 60.4 Criteria for evaluation.
- 60.5 Nomination forms and information collection.
- 60.6 Nominations by the State historic preservation officer under approved State historic preservation programs.
- 60.7 [Reserved]
- 60.8 [Reserved]
- 60.9 Nominations by Federal agencies.
- 60.10 Concurrent State and Federal nominations.
- 60.11 [Reserved]
- 60.12 [Reserved]
- 60.13 Publication in the Federal Register and other National Park Service notification.
- 60.14 Changes and revisions to properties listed in the National Register.
- 60.15 Removing properties from the National Register.

Authority: National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470 et seq., and EO 11669.

§ 60.1 Authorization and expansion of the National Register.

(a) The National Historic Preservation Act of 1966, 80 Stat. 915, 16 U.S.C. 470 et seq., as amended, authorizes the Secretary of the Interior to expand and maintain a National Register of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering and culture. The regulations herein set forth the procedural requirements for listing properties on the National Register.

(b) Properties are added to the National Register through the following processes.

(1) Those Acts of Congress and Executive orders which create historic areas of the National Park System administered by the National Park Service, all or portions of which may be determined to be of historic significance consistent with the intent of Congress;

(2) Properties declared by the Secretary of the Interior to be of national significance and designated as National Historic Landmarks;

(3) Nominations prepared under approved State Historic Preservation

Programs, submitted by the State Historic Preservation Officer and approved by the NPS.

(4) Nominations from any person or local government (only if such property is located in a State with no approved State Historic Preservation Program) approved by the NPS and;

(5) Nominations of Federal properties prepared by Federal agencies, submitted by the Federal Preservation Officer and approved by NPS.

#### § 60.2 Effects of listing under Federal law.

The National Register is an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment. Listing of private property on the National Register does not prohibit under Federal law or regulation any actions which may otherwise be taken by the property owner with respect to the property.

(a) The National Register was designed to be a: d is administered as a planning tool. Federal agencies undertaking a project having an effect on a listed or eligible property must provide the Advisory Council on Historic Preservation a reasonable opportunity to comment pursuant to section 108 of the National Historic Preservation Act of 1966, as amended. The Council has adopted procedures concerning, *inter alia*, their commenting responsibility in 36 CFR Part 600. Having complied with this procedural requirement the Federal agency may adopt any course of action it believes is appropriate. While the Advisory Council comments must be taken into account and integrated into the decisionmaking process, program decisions rest with the agency implementing the undertaking.

(b) Listing in the National Register also makes property owners eligible to be considered for Federal grants-in-aid for historic preservation.

(c) If a property is listed in the National Register, certain provisions of the Tax Reform Act of 1978 as amended by the Revenue Act of 1978 and the Tax Treatment Extension Act of 1980 may apply. These provisions encourage the preservation of depreciable historic structures by allowing favorable tax treatments for rehabilitation, and discourage destruction of historic buildings by eliminating certain otherwise available Federal tax provisions both for demolition of historic structures and for new construction on the site of demolished historic buildings. Owners of historic



buildings may benefit from the investment tax credit provisions of the Revenue Act of 1978. The Economic Recovery Tax Act of 1981 generally replaces the rehabilitation tax incentives under these laws beginning January 1, 1982 with a 25% investment tax credit for rehabilitations of historic commercial, industrial and residential buildings. This can be combined with a 15-year cost recovery period for the adjusted basis of the historic building. Historic buildings with certified rehabilitations receive additional tax savings by their exemption from any requirement to reduce the basis of the building by the amount of the credit. The denial of accelerated depreciation for a building built on the site of a demolished historic building is repealed effective January 1, 1982. The Tax Treatment Extension Act of 1980 includes provisions regarding charitable contributions for conservation purposes of partial interests in historic or important land areas or structures.

(d) If a property contains surface coal resources and is listed in the National Register, certain provisions of the Surface Mining and Control Act of 1977 require consideration of a property's historic values in the determination on issuance of a surface coal mining permit.

**§ 60.3 Definitions.**

(a) **Building.** A building is a structure created to shelter any form of human activity, such as a house, barn, church, hotel, or similar structure. Building may refer to a historically related complex such as a courthouse and jail or a house and barn.

**Examples**

- Molly Brown House (Denver, CO)
- Moak Mansion and Carriage House (Hayward, CA)
- Huron County Courthouse and Jail (Newark, OH)
- Farmstead Plantation (Durham vicinity, NC)

(b) **Chief elected local official.** Chief elected local official means the mayor, county judge, county executive or otherwise titled chief elected administrative official who is the elected head of the local political jurisdiction in which the property is located.

(c) **Determination of eligibility.** A determination of eligibility is a decision by the Department of the Interior that a district, site, building, structure or object meets the National Register criteria for evaluation although the property is not formally listed in the National Register. A determination of eligibility does not make the property eligible for such benefits as grants, loans, or tax

incentives that have listing on the National Register as a prerequisite.

(d) **District.** A district is a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history.

**Examples**

- Georgetown Historic District (Washington, DC)
- Martin Luther King Historic District (Atlanta, GA)
- Durango-Silverton Narrow-Gauge Railroad (right-of-way between Durango and Silverton, CO)

(e) **Federal Preservation Officer.** The Federal Preservation Officer is the official designated by the head of each Federal agency responsible for coordinating that agency's activities under the National Historic Preservation Act of 1966, as amended, and Executive Order 11340 including nominating properties under that agency's ownership or control to the National Register.

(f) **Keeper of the National Register of Historic Places.** The Keeper is the individual who has been delegated the authority by NPS to list properties and determine their eligibility for the National Register. The Keeper may further delegate this authority as he or she deems appropriate.

(g) **Multiple Resource Format submission.** A Multiple Resource Format submission for nominating properties to the National Register is one which includes all or a defined portion of the cultural resources identified in a specified geographical area.

(h) **National Park Service (NPS).** The National Park Service is the bureau of the Department of Interior to which the Secretary of Interior has delegated the authority and responsibility for administering the National Register program.

(i) **National Register Nomination Form.** National Register Nomination Form means (1) National Register Nomination Form NPS 10-800, with accompanying continuation sheets (where necessary) Form NPS 10-800a, maps and photographs or (2) for Federal nominations, Form No. 10-308, with continuation sheets (where necessary) Form No. 10-308A, maps and photographs. Such nomination forms must be "adequately documented" and "technically and professionally correct and sufficient." To meet these requirements the forms and

accompanying maps and photographs must be completed in accord with requirements and guidance in the NPS publication, "How to Complete National Register Forms" and other NPS technical publications on this subject. Descriptions and statements of significance must be prepared in accord with standards generally accepted by academic historians, architectural historians and archeologists. The nomination form is a legal document and reference for historical, architectural, and archeological data upon which the protections for listed and eligible properties are founded. The nominating authority certifies that the nomination is adequately documented and technically and professionally correct and sufficient upon nomination.

(j) **Object.** An object is a material thing of functional, aesthetic, cultural, historical or scientific value that may be, by nature or design, movable yet related to a specific setting or environment.

**Examples**

- Delta Queen Steamboat (Cincinnati, OH)
- Adams Memorial (Rock Creek Cemetery, Washington, DC)
- Sumpter Valley Gold Dredge (Sumpter, OR)

(k) **Owner or owners.** The term owner or owners means those individuals, partnerships, corporations or public agencies holding fee simple title to property. Owner or owners does not include individuals, partnerships, corporations or public agencies holding easements or less than fee interests (including leaseholds) of any nature.

(l) **Site.** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself maintains historical or archeological value regardless of the value of any existing structure.

**Examples**

- Cabin Creek Battlefield (Pennsacola vicinity, OK)
- Mound Cemetery Mound (Chester vicinity, OH)
- Mad Springs Pony Express Station Site (Dahon vicinity, NE)

(m) **State Historic Preservation Officer.** The State Historic Preservation Officer is the person who has been designated by the Governor or chief executive or by State statute in each State to administer the State Historic Preservation Program, including identifying and nominating eligible properties to the National Register and otherwise administering applications for listing historic properties in the National Register.

(n) *State Historic Preservation Program.* The State Historic Preservation Program is the program established by each State and approved by the Secretary of Interior for the purpose of carrying out the provisions of the National Historic Preservation Act of 1966, as amended, and related laws and regulations. Such program shall be approved by the Secretary before the State may nominate properties to the National Register. Any State Historic Preservation Program in effect under prior authority of law before December 12, 1980, shall be treated as an approved program until the Secretary approves a program submitted by the State for purposes of this Amendment on December 12, 1983, unless the Secretary chooses to rescind such approval because of program deficiencies.

(o) *State Review Board.* The State Review Board is a body whose members represent the professional fields of American history, architectural history, historic architecture, prehistoric and historic archeology, and other professional disciplines and may include citizen members. In States with approved State historic preservation programs the State Review Board reviews and approves National Register nominations concerning whether or not they meet the criteria for evaluation prior to their submittal to the NPS.

(p) *Structure.* A structure is a work made up of interdependent and interrelated parts in a definite pattern of organization. Constructed by man, it is often an engineering project large in scale.

*Examples*

- Sweeney Covered Railroad Bridge (Swanton vicinity, VT)
- Old Point Loma Lighthouse (San Diego, CA)
- North Point Water Tower (Milwaukee, WI)
- Reber Radio Telescope (Green Bay vicinity, WI)

(q) *Thematic Group Format submission.* A Thematic Group Format submission for nominating properties to the National Register is one which includes a finite group of resources related to one another in a clearly distinguishable way. They may be related to a single historic person, event, or developmental force; of one building type or use, or designed by a single architect; of a single archeological site form, or related to a particular set of archeological research problems.

(r) *To nominate.* To nominate is to propose that a district, site, building, structure, or object be listed in the National Register of Historic Places by preparing a nomination form, with accompanying maps and photographs which adequately document the

property and are technically and professionally correct and sufficient.

**§ 60.4 Criteria for evaluation.**

The criteria applied to evaluate properties (other than areas of the National Park System and National Historic Landmarks) for the National Register are listed below. These criteria are worded in a manner to provide for a wide diversity of resources. The following criteria shall be used in evaluating properties for nomination to the National Register, by NPS in reviewing nominations, and for evaluating National Register eligibility of properties. Guidance in applying the criteria is further discussed in the "How To" publications. Standards & Guidelines sheets and Keeper's opinions of the National Register. Such materials are available upon request.

*National Register criteria for evaluation.*

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history.

*Criteria considerations.* Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria of if they fall within the following categories:

- (a) A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- (b) A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- (c) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or
- (d) A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from

distinctive design features, or from association with historic events; or

(e) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

(f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

(g) A property achieving significance within the past 50 years if it is of exceptional importance.

This exception is described further in NPS "How To" #2, entitled "How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years" which is available from the National Register of Historic Places Division, National Park Service, United States Department of the Interior, Washington, D.C. 20240.

**§ 60.5 Nomination forms and information collection.**

(a) All nominations to the National Register are to be made on standard National Register forms. These forms are provided upon request to the State Historic Preservation Officer, participating Federal agencies and others by the NPS. For archival reasons, no other forms, photocopied or otherwise, will be accepted.

(b) The information collection requirements contained in this part have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1024-0078. The information is being collected as part of the nomination of properties to the National Register. This information will be used to evaluate the eligibility of properties for inclusion in the National Register under established criteria. The obligation to respond is required to obtain a benefit.

**§ 60.6 Nominations by the State Historic Preservation Officer under approved State Historic Preservation programs.**

(a) The State Historic Preservation Officer is responsible for identifying and nominating eligible properties to the National Register. Nomination forms are prepared under the supervision of the State Historic Preservation Officer. The State Historic Preservation Officer establishes statewide priorities for preparation and submittal of nominations for all properties meeting National Register criteria for evaluation within the State. All nominations from the State shall be submitted in accord with the State priorities, which shall be consistent with an approved State historic preservation plan.

(b) The State shall consult with local authorities in the nomination process.

The State provides notice of the intent to nominate a property and solicits written comments especially on the significance of the property and whether or not it meets the National Register criteria for evaluation. The State notice also gives owners of private property an opportunity to concur in or object to listing. The notice is carried out as specified in the subsections below.

(c) As part of the nomination process, each State is required to notify in writing the property owner(s), except as specified in paragraph (d) of this section, of the State's intent to bring the nomination before the State Review Board. The list of owners shall be obtained from either official land recordation records or tax records, whichever is more appropriate, within 90 days prior to the notification of intent to nominate. If in any State the land recordation or tax records is not the most appropriate list from which to obtain owners that State shall notify the Keeper in writing and request approval that an alternative source of owners may be used.

The State is responsible for notifying only those owners whose names appear on the list consulted. Where there is more than one owner on the list, each separate owner shall be notified. The State shall send the written notification at least 30 but not more than 75 days before the State Review Board meeting. Required notices may vary in some details of wording as the States prefer, but the content of notices must be approved by the National Register. The notice shall give the owner(s) at least 30 but not more than 75 days to submit written comments and concur in or object in writing to the nomination of such property. At least 30 but not more than 75 days before the State Review Board meeting, the States are also required to notify by the above mentioned National Register approved notice the applicable chief elected official of the county (or equivalent governmental unit) and municipal political jurisdiction in which the property is located. The National Register nomination shall be on file with the State Historic Preservation Program during the comment period and a copy made available by mail when requested by the public, or made available at a location of reasonable access to all affected property owners, such as a local library courthouse, or other public place, prior to the State Review Board meeting so that written comments regarding the nomination can be prepared.

(d) For a nomination with more than 50 property owners, each State is

required to notify in writing at least 30 but not more than 75 days in advance of the State Review Board meeting the chief elected local officials of the county (or equivalent governmental unit) and municipal political jurisdiction in which the property or district is located. The State shall provide general notice to property owners concerning the State's intent to nominate. The general notice shall be published at least 30 days but not more than 75 days before the State Review Board meeting and provide an opportunity for the submission of written comments and provide the owners of private property or a majority of such owners for districts an opportunity to concur in or object in writing to the nomination. Such general notice must be published in one or more local newspapers of general circulation in the area of the nomination. The content of the notices shall be approved by the National Register. If such general notice is used to notify the property owners for a nomination containing more than 50 owners, it is suggested that a public information meeting be held in the immediate area prior to the State Review Board meeting. If the State wishes to individually notify all property owners, it may do so, pursuant to procedures specified in Subsection 60.4(c), in which case, the State need not publish a general notice.

(e) For Multiple Resource and Thematic Group Format submission, each district, site, building, structure and object included in the submission is treated as a separate nomination for the purpose of notification and to provide owners of private property the opportunity to concur in or object in writing to the nomination in accord with this section.

(f) The commenting period following notifications can be waived only when all property owners and the chief elected local official have advised the State in writing that they agree to the waiver.

(g) Upon notification, any owner or owners of a private property who wish to object shall submit to the State Historic Preservation Officer a notarized statement certifying that the party is the sole or partial owner of the private property, as appropriate, and objects to the listing. In nominations with multiple ownership of a single private property or of districts, the property will not be listed if a majority of the owners object to listing. Upon receipt of notarized objections respecting a district or single private property with multiple owners, it is the responsibility of the State Historic Preservation Officer to ascertain whether a majority of owners of private

property have objected. If an owner whose name did not appear on the list certifies in a written notarized statement that the party is the sole or partial owner of a nominated private property such owner shall be counted by the State Historic Preservation Officer in determining whether a majority of owners has objected. Each owner of private property in a district has one vote regardless of how many properties or what part of one property that party owns and regardless of whether the property contributes to the significance of the district.

(h) If a property has been submitted to and approved by the State Review Board for inclusion in the National Register prior to the effective date of this section, the State Historic Preservation Officer need not resubmit the property to the State Review Board; but before submitting the nomination to the NPS shall afford owners of private property the opportunity to concur in or object to the property's inclusion in the Register pursuant to applicable notification procedures described above.

(i) (Reserved)

(j) Completed nomination forms or the documentation proposed for submission on the nomination forms and comments concerning the significance of a property and its eligibility for the National Register are submitted to the State Review Board. The State Review Board shall review the nomination forms or documentation proposed for submission on the nomination forms and any comments concerning the property's significance and eligibility for the National Register. The State Review Board shall determine whether or not the property meets the National Register criteria for evaluation and make a recommendation to the State Historic Preservation Officer to approve or disapprove the nomination.

(k) Nominations approved by the State Review Board and comments received are then reviewed by the State Historic Preservation Officer and if he or she finds the nominations to be adequately documented and technically, professionally, and procedurally correct and sufficient and in conformance with National Register criteria for evaluation, the nominations are submitted to the Keeper of the National Register of Historic Places, National Park Service, United States Department of the Interior, Washington, D.C. 20240. All comments received by a State and notarized statements of objection to listing are submitted with a nomination.

(l) If the State Historic Preservation Officer and the State Review Board disagree on whether a property meets

the National Register criteria for evaluation, the State Historic Preservation Officer, if he or she chooses, may submit the nomination with his or her opinion concerning whether or not the property meets the criteria for evaluation and the opinion of the State Review Board to the Keeper of the National Register for a final decision on the listing of the property. The opinion of the State Review Board may be the minutes of the Review Board meeting. The State Historic Preservation Officer shall submit such disputed nominations if so requested within 45 days of the State Review Board meeting by the State Review Board or the chief elected local official of the local, county or municipal political subdivision in which the property is located but need not otherwise do so. Such nominations will be substantively reviewed by the Keeper.

(m) [Reserved]

(n) If the owner of a private property or the majority of such owners for a district or single property with multiple owners have objected to the nomination prior to the submittal of a nomination, the State Historic Preservation Officer shall submit the nomination to the Keeper only for a determination of eligibility pursuant to subsection (e) of this section.

(e) The State Historic Preservation Officer signs block 12 of the nomination form if in his or her opinion the property meets the National Register criteria for evaluation. The State Historic Preservation Officer's signature in block 12 certifies that:

- (1) All procedural requirements have been met;
- (2) The nomination form is adequately documented;
- (3) The nomination form is technically and professionally correct and sufficient;
- (4) In the opinion of the State Historic Preservation Officer, the property meets the National Register criteria for evaluation.

(p) When a State Historic Preservation Officer submits a nomination form for a property that he or she does not believe meets the National Register criteria for evaluation, the State Historic Preservation Officer signs a continuation sheet Form NPS 10-900a explaining his/her opinions on the eligibility of the property and certifying that:

- (1) All procedural requirements have been met;
- (2) The nomination form is adequately documented;
- (3) The nomination form is technically and professionally correct and sufficient.

(q) Notice will be provided in the Federal Register that the nominated property is being considered for listing in the National Register of Historic Places as specified in § 60.12.

(r) Nominations will be included in the National Register within 45 days of receipt by the Keeper or designee unless the Keeper disapproves a nomination, an appeal is filed, or the owner of private property (or the majority of such owners for a district or single property with multiple owners) objects by notarized statements received by the Keeper prior to listing. Nominations which are technically or professionally inadequate will be returned for correction and resubmission. When a property does not appear to meet the National Register criteria for evaluation, the nomination will be returned with an explanation as to why the property does not meet the National Register criteria for evaluation.

(s) If the owner of private property (or the majority of such owners for a district or single property with multiple owners) has objected to the nomination by notarized statements prior to listing, the Keeper shall review the nomination and make a determination of eligibility within 45 days of receipt, unless an appeal is filed. The Keeper shall list such properties determined eligible in the National Register upon receipt of notarized statements from the owner(s) of private property that the owner(s) no longer object to listing.

(t) Any person or organization which supports or opposes the nomination of a property by a State Historic Preservation Officer may petition the Keeper during the nomination process either to accept or reject a nomination. The petitioner must state the grounds of the petition and request in writing that the Keeper substantively review the nomination. Such petitions received by the Keeper prior to the listing of a property in the National Register or a determination of its eligibility where the private owners object to listing will be considered by the Keeper and the nomination will be substantively reviewed.

(u) State Historic Preservation Officers are required to inform the property owners and the chief elected local official when properties are listed in the National Register. In the case of a nomination where there are more than 50 property owners, they may be notified of the entry in the National Register by the same general notice stated in § 60.8(d). States which notify all property owners individually of entries in the National Register need not publish a general notice.

(v) In the case of nominations where the owner of private property (or the majority of such owners for a district or single property with multiple owners) has objected and the Keeper has determined the nomination eligible for the National Register, the State Historic Preservation Officer shall notify the appropriate chief elected local official and the owner(s) of such property of this determination. The general notice may be used for properties with more than 50 owners as described in § 60.8(d) or the State Historic Preservation Officer may notify the owners individually.

(w) If subsequent to nomination a State makes major revisions to a nomination or renominates a property rejected by the Keeper, the State Historic Preservation Officer shall notify the affected property owner(s) and the chief elected local official of the revisions or renomination in the same manner as the original notification for the nomination, but need not resubmit the nomination to the State Review Board. Comments received and notarized statements of objection must be forwarded to the Keeper along with the revisions or renomination. The State Historic Preservation Officer also certifies by the resubmittal that the affected property owner(s) and the chief elected local official have been notified. "Major revisions" as used herein means revisions of boundaries or important substantive revisions to the nomination which could be expected to change the ultimate outcome as to whether or not the property is listed in the National Register by the Keeper.

(x) Notwithstanding any provision hereof to the contrary, the State Historic Preservation Officer in the nomination notification process or otherwise need not make available to any person or entity (except a Federal agency planning a project, the property owner, the chief elected local official of the political jurisdiction in which the property is located, and the local historic preservation commission for certified local governments) specific information relating to the location of properties proposed to be nominated to, or listed in, the National Register if he or she determines that the disclosure of specific information would create a risk of destruction or harm to such properties.

(y) With regard to property under Federal ownership or control, completed nomination forms shall be submitted to the Federal Preservation Officer for review and comment. The Federal Preservation Officer may approve the nomination and forward it to the Keeper of the National Register of Historic

Places, National Park Service, United States Department of the Interior, Washington, D.C. 20240.

**§ 60.7 and 60.8 Reserved**

**§ 60.8 Nominations by Federal agencies.**

(a) The National Historic Preservation Act of 1966, as amended, requires that, with the advice of the Secretary and in cooperation with the State Historic Preservation Officer of the State involved, each Federal agency shall establish a program to locate, inventory and nominate to the Secretary all properties under the agency's ownership or control that appear to qualify for inclusion on the National Register. Section 2(a) of Executive Order 11593 provides that Federal agencies shall locate, inventory, and nominate to the Secretary of the Interior all sites, buildings, districts, and objects under their jurisdiction or control that appear to qualify for listing on the National Register of Historic Places. Additional responsibilities of Federal agencies are detailed in the National Historic Preservation Act of 1966, as amended, Executive Order 11563, the National Environmental Policy Act of 1969, the Archeological and Historic Preservation Act of 1974, and procedures developed pursuant to these authorities, and other related legislation.

(b) Nomination forms are prepared under the supervision of the Federal Preservation Officer designated by the head of a Federal agency to fulfill agency responsibilities under the National Historic Preservation Act of 1966, as amended, and

(c) Completed nominations are submitted to the appropriate State Historic Preservation Officer for review and comment regarding the adequacy of the nomination, the significance of the property and its eligibility for the National Register. The chief elected local officials of the county (or equivalent governmental unit) and municipal political jurisdiction in which the property is located are notified and given 45 days in which to comment. The State Historic Preservation Officer signs block 12 of the nomination form with his/her recommendation.

(d) After receiving the comments of the State Historic Preservation Officer, and chief elected local official, or if there has been no response within 45 days, the Federal Preservation Officer may approve the nomination and forward it to the Keeper of the National Register of Historic Places, National Park Service, United States Department of the Interior, Washington, D.C. 20240. The Federal Preservation Officer signs block 12 of the nomination form if in his

or her opinion the property meets the National Register criteria for evaluation. The Federal Preservation Officer's signature in block 12 certifies that

(1) All procedural requirements have been met;

(2) The nomination form is adequately documented;

(3) The nomination form is technically and professionally correct and sufficient;

(4) In the opinion of the Federal Preservation Officer, the property meets the National Register criteria for evaluation.

(e) When a Federal Preservation Officer submits a nomination form for a property that he or she does not believe meets the National Register criteria for evaluation, the Federal Preservation Officer signs a continuation sheet Form NPS 10-900a explaining his/her opinions on the eligibility of the property and certifying that

(1) All procedural requirements have been met;

(2) The nomination form is adequately documented;

(3) The nomination form is technically and professionally correct and sufficient.

(f) The comments of the State Historic Preservation Officer and chief local official are appended to the nomination, or, if there are no comments from the State Historic Preservation Officer an explanation is attached. Concurrent nominations (see § 60.10) cannot be submitted, however, until the nomination has been considered by the State in accord with Sec. 60.8, supra. Comments received by the State concerning concurrent nominations and notarized statements of objection must be submitted with the nomination.

(g) Notice will be provided in the Federal Register that the nominated property is being considered for listing in the National Register of Historic Places in accord with § 60.13.

(h) Nominations will be included in the National Register within 45 days of receipt by the Keeper or designee unless the Keeper disapproves such nomination or an appeal is filed. Nominations which are technically or professionally inadequate will be returned for correction and resubmission. When a property does not appear to meet the National Register criteria for evaluation, the nomination will be returned with an explanation as to why the property does not meet the National Register criteria for evaluation.

(i) Any person or organization which supports or opposes the nomination of a property by a Federal Preservation Officer may petition the Keeper during the nomination process either to accept

or reject a nomination. The petitioner must state the grounds of the petition and request in writing that the Keeper substantively review the nomination. Such petition received by the Keeper prior to the listing of a property in the National Register or a determination of its eligibility where the private owner(s) object to listing will be considered by the Keeper and the nomination will be substantively reviewed.

**§ 60.10 Concurrent State and Federal nominations.**

(a) State Historic Preservation Officers and Federal Preservation Officers are encouraged to cooperate in locating, inventorying, evaluating, and nominating all properties possessing historical, architectural, archeological, or cultural value. Federal agencies may nominate properties where a portion of the property is not under Federal ownership or control.

(b) When a portion of the area included in a Federal nomination is not located on land under the ownership or control of the Federal agency, but is an integral part of the cultural resource, the completed nomination form shall be sent to the State Historic Preservation Officer for notification to property owners, to give owners of private property an opportunity to comment or object to the nomination, to solicit written comments and for submission to the State Review Board pursuant to the procedures in § 60.8.

(c) If the State Historic Preservation Officer and the State Review Board agree that the nomination meets the National Register criteria for evaluation, the nomination is signed by the State Historic Preservation Officer and returned to the Federal agency initiating the nomination. If the State Historic Preservation Officer and the State Review Board disagree, the nomination shall be returned to the Federal agency with the opinions of the State Historic Preservation Officer and the State Review Board concerning the adequacy of the nomination and whether or not the property meets the criteria for evaluation. The opinion of the State Review Board may be the minutes of the State Review Board meeting. The State Historic Preservation Officer's signed opinion and comments shall confirm to the Federal agency that the State nomination procedures have been fulfilled including notification requirements. Any comments received by the State shall be included with the letter as shall any notarized statements objecting to the listing of private property.

(d) If the owner of any privately owned property, (or a majority of the owners of such properties within a district or single property with multiple owners) objects to such inclusion by notarized statement(s) the Federal Historic Preservation Officer shall submit the nomination to the Keeper for review and a determination of eligibility. Comments, opinions, and notarized statements of objection shall be submitted with the nomination.

(e) The State Historic Preservation Officer shall notify the nonfederal owners when a concurrent nomination is listed or determined eligible for the National Register as required in § 60.6.

§ 60.11 and 60.12 (Reserved)

§ 60.13 Publication in the "Federal Register" and other NPS notification.

(a) When a nomination is received, NPS will publish notice in the Federal Register that the property is being considered for listing in the National Register. A 15-day commenting period from date of publication will be provided. When necessary to assist in the preservation of historic properties this 15-day period may be extended or waived.

(b) NPS shall notify the appropriate State Historic Preservation Officer, Federal Preservation Officer, person or local government where there is no approved State program of the listing of the property in the National Register and will publish notice of the listing in the Federal Register.

(c) In nominations where the owner of any privately owned property (or a majority of the owners of such properties within a district or single property with multiple owners) has objected and the Keeper has determined the nomination eligible for the National Register, NPS shall notify the State Historic Preservation Officer, the Federal Preservation Officer (for Federal or concurrent nominations), the person or local government where there is no approved State Historic Preservation Program and the Advisory Council on Historic Preservation. NPS will publish notice of the determination of eligibility in the Federal Register.

(d) (Reserved)

§ 60.14 Changes and revisions to properties listed in the National Register

(a) *Boundary changes.* (1) A boundary alteration shall be considered as a new property nomination. All forms, criteria and procedures used in nominating a property to the National Register must be used. In the case of boundary enlargements only those owners in the newly nominated as yet unlisted area need be notified and will be counted in

determining whether a majority of private owners object to listing. In the case of a diminution of a boundary, owners shall be notified as specified in § 60.13 concerning removing properties from the National Register. A professionally justified recommendation by the State Historic Preservation Officer, Federal Preservation Officer, or person or local government where there is no approved State Historic Preservation Program shall be presented to NPS. During this process, the property is not taken off the National Register. If the Keeper or his or her designee finds the recommendation in accordance with the National Register criteria for evaluation, the change will be accepted. If the boundary change is not accepted, the old boundaries will remain.

Boundary revisions may be appealed as provided for in Sections 60.12 and 60.13.

(2) Four justifications exist for altering a boundary: Professional error in the initial nomination, loss of historic integrity, recognition of additional significance, additional research documenting that a larger or smaller area should be listed. No enlargement of a boundary should be recommended unless the additional area possesses previously unrecognized significance in American history, architecture, archeology, engineering or culture. No diminution of a boundary should be recommended unless the properties being removed do not meet the National Register criteria for evaluation. Any proposal to alter a boundary has to be documented in detail including photographing the historic resources falling between the existing boundary and the other proposed boundary.

(b) *Relocating properties listed in the National Register.* (1) Properties listed in the National Register should be moved only when there is no feasible alternative for preservation. When a property is moved, every effort should be made to reestablish its historic orientation, immediate setting, and general environment.

(2) If it is proposed that a property listed in the National Register be moved and the State Historic Preservation Officer, Federal agency for a property under Federal ownership or control, or person or local government where there is no approved State Historic Preservation Program, wishes the property to remain in the National Register during and after the move, the State Historic Preservation Officer or Federal Preservation Officer having ownership or control or person or local government where there is no approved State Historic Preservation Program, shall submit documentation to NPS prior to the move. The documentation shall

discuss: (i) the reasons for the move; (ii) the effect on the property's historical integrity; (iii) the new setting and general environment of the proposed site, including evidence that the proposed site does not possess historical or archeological significance that would be adversely affected by the intrusion of the property; and (iv) photographs showing the proposed location.

(3) Any such proposal with respect to the new location shall follow the required notification procedures, shall be approved by the State Review Board if it is a State nomination and shall continue to follow normal review procedures. The Keeper shall also follow the required notification procedures for nominations. The Keeper shall respond to a properly documented request within 45 days of receipt from the State Historic Preservation Officer or Federal Preservation Officer, or within 60 days of receipt from a person or local government where there is no approved State Historic Preservation Program, concerning whether or not the move is approved. Once the property is moved, the State Historic Preservation Officer, Federal Preservation Officer, or person or local government where there is no approved State Historic Preservation Program shall submit to the Keeper for review (i) a letter notifying him or her of the date the property was moved; (ii) photographs of the property or its new site; and (iii) revised maps, including a U.S.G.S. map, (iv) acreage, and (v) verbal boundary description. The Keeper shall respond to a properly documented submittal within 45 days of receipt with the final decision on whether the property will remain in the National Register. If the Keeper approves the move, the property will remain in the National Register during and after the move unless the integrity of the property is in some unforeseen manner destroyed. If the Keeper does not approve the move, the property will be automatically deleted from the National Register when moved. In cases of properties removed from the National Register, if the State, Federal agency, or person or local government where there is no approved State Historic Preservation Program has neglected to obtain prior approval for the move or has evidence that previously unrecognized significance exists, or has accrued, the State, Federal agency, person or local government may resubmit a nomination for the property.

(4) In the event that a property is moved, deletion from the National Register will be automatic unless the above procedures are followed prior to the move. If the property has already

been moved. It is the responsibility of the State, Federal agency or person or local government which nominated the property to notify the National Park Service. Assuming that the State, Federal agency or person or local government wishes to have the structure reentered in the National Register, it must be nominated again on new forms which should discuss: (i) the reasons for the move; (ii) the effect on the property's historical integrity; and (iii) the new setting and general environment, including evidence that the new site does not possess historical or archeological significance that would be adversely affected by intrusion of the property. In addition, new photographs, acreage, verbal boundary description and a U.S.G.S. map showing the structure at its new location must be sent along with the revised nomination. Any such nomination submitted by a State must be approved by the State Review Board.

(5) Properties moved in a manner consistent with the comments of the Advisory Council on Historic Preservation, in accord with its procedures (36 CFR Part 800), are granted an exception to § 80.12(b). Moving of properties in accord with the Advisory Council's procedures should be dealt with individually in each memorandum of agreement. In such cases, the State Historic Preservation Officer or the Federal Preservation Officer, for properties under Federal ownership or control, shall notify the Keeper of the new location after the move including new documentation as described above.

**§ 80.15. Removing properties from the National Register.**

(a) Grounds for removing properties from the National Register are as follows: (1) the property has ceased to meet the criteria for listing in the National Register because the qualities which caused it to be originally listed have been lost or destroyed, or such qualities were lost subsequent to nomination and prior to listing; (2) additional information shows that the property does not meet the National Register criteria for evaluation; (3) error in professional judgment as to whether the property meets the criteria for evaluation; or (4) prejudicial procedural error in the nomination or listing process. Properties removed from the National Register for procedural error shall be reconsidered for listing by the Keeper after correction of the error or errors by the State Historic Preservation Officer, Federal Preservation Officer, person or local government which originally nominated the property, or by

the Keeper, as appropriate. The procedures set forth for nominations shall be followed in such reconsiderations. Any property or district removed from the National Register for procedural deficiencies in the nomination and/or listing process shall automatically be considered eligible for inclusion in the National Register without further action and will be published as such in the Federal Register.

(b) Properties listed in the National Register prior to December 13, 1980, may only be removed from the National Register on the grounds established in subsection (a)(1) of this section.

(c) Any person or organization may petition in writing for removal of a property from the National Register by setting forth the reasons the property should be removed on the grounds established in paragraph (a) of this section. With respect to nominations determined eligible for the National Register because the owners of private property object to listing, anyone may petition for reconsideration of whether or not the property meets the criteria for evaluation using these procedures. Petitions for removal are submitted to the Keeper by the State Historic Preservation Officer for State nominations, the Federal Preservation Officer for Federal nominations, and directly to the Keeper from persons or local governments where there is no approved State Historic Preservation Program.

(d) Petitions submitted by persons or local governments where there is no approved State Historic Preservation Program shall include a list of the owner(s). In such cases the Keeper shall notify the affected owner(s) and the chief elected local official and give them an opportunity to comment. For approved State programs, the State Historic Preservation Officer shall notify the affected owner(s) and chief elected local official and give them an opportunity to comment prior to submitting a petition for removal. The Federal Preservation Officer shall notify and obtain the comments of the appropriate State Historic Preservation Officer prior to forwarding an appeal to NPS. All comments and opinions shall be submitted with the petition.

(e) The State Historic Preservation Officer or Federal Preservation Officer shall respond in writing within 45 days of receipt to petitions for removal of property from the National Register. The response shall advise the petitioner of the State Historic Preservation Officer's or Federal Preservation Officer's views on the petition.

(f) A petitioner desiring to pursue his removal request must notify the State Historic Preservation Officer or the Federal Preservation Officer in writing within 45 days of receipt of the written views on the petition.

(g) The State Historic Preservation Officer may elect to have a property considered for removal according to the State's nomination procedures unless the petition is on procedural grounds and shall schedule it for consideration by the State Review Board as quickly as all notification requirements can be completed following procedures outlined in § 80.8, or the State Historic Preservation Officer may elect to forward the petition for removal to the Keeper with his or her comments without State Review Board consideration.

(h) Within 15 days after receipt of the petitioner's notification of intent to pursue his removal request, the State Historic Preservation Officer shall notify the petitioner in writing either that the State Review Board will consider the petition on a specified date or that the petition will be forwarded to the Keeper after notification requirements have been completed. The State Historic Preservation Officer shall forward the petitions to the Keeper for review within 15 days after notification requirements or Review Board consideration, if applicable, have been completed.

(i) Within 15 days after receipt of the petitioner notification of intent to pursue his petition, the Federal Preservation Officer shall forward the petition with his or her comments and those of the State Historic Preservation Officer to the Keeper.

(j) The Keeper shall respond to a petition for removal within 45 days of receipt, except where the Keeper must notify the owners and the chief elected local official. In such cases the Keeper shall respond within 90 days of receipt. The Keeper shall notify the petitioner and the applicable State Historic Preservation Officer, Federal Preservation Officer, or person or local government where there is no approved State Historic Preservation Program, of his decision. The State Historic Preservation Officer or Federal Preservation Officer transmitting the petition shall notify the petitioner, the owner(s), and the chief elected local official in writing of the decision. The Keeper will provide such notice for petitions from persons or local governments where there is no approved State Historic Preservation Program. The general notice may be used for properties with more than 50 owners. If the general notice is used it shall be

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GUIDELINES FOR CONSIDERATION  
OF  
TRADITIONAL CULTURAL VALUES  
IN HISTORIC PRESERVATION REVIEW

Background to the Guidelines

Under Sections 106 and 211 of the National Historic Preservation Act, the Advisory Council on Historic Preservation has established a review process, commonly called "the Section 106 process," to ensure that historic properties are effectively considered in planning by Federal agencies. Over the years since 1968, when the process was put into place, the Council has reviewed an increasing number of projects in which cultural value was ascribed to the historic properties involved. Examples include the Gasquet-Orleans Road, a Forest Service undertaking in California affecting an area in which American Indian religious practitioners receive spiritual power, Murrell's Inlet in South Carolina, where a proposed marina development would damage the traditional lifeways of a small coastal community, and the deployment of the Peacekeeper Missile in Wyoming, which would affect unid-nified Lakota Indian burial places. Review of these cases has often been complicated and fought with difficulty, sometimes resulting in delays and litigation. It has become apparent that many of the problems surrounding these and other projects have resulted from failure to recognize traditional cultural values in project planning, and from lack of effective mechanisms for identifying and resolving conflicts between differing cultural value systems. The Council's experience in consultation on such projects has suggested that a concrete guidance document setting forth Council policy and recommended procedures would be in order.

Congress, meanwhile, has indicated its concern about the consideration of traditional cultural values. In 1978 Congress enacted the American Indian Religious Freedom Act (42 U.S.C. § 1996), which established as United States policy the protection and preservation of traditional American Indian religious, and directed Federal agencies, in consultation with American Indian groups and traditional leaders, to evaluate their policies and procedures to ensure that this policy was carried out. Two years later, Congress included Section 502 in the National Historic Preservation Act Amendments of 1980, directing the Secretary of the Interior and the American Folklife Center in the Library of Congress to:

"...submit a report to the President and the Congress on preserving and conserving the intangible elements of our cultural heritage such as arts, skills, folklife, and folkways....(including) recommendations for legislative and administrative actions by the Federal Government in order to preserve, conserve, and encourage the continuation of the diverse traditional prehistoric, historic, ethnic, and folk cultural traditions that underlie and are a living expression of our American heritage" (16 U.S.C. 470a note).



The resulting report, entitled Cultural Conservation and published in 1983, recommended that the Federal Government:

"Clarify national policy in statutes including the National Historic Preservation act of 1966, the National Environmental Policy Act of 1969, and the American Folklife Preservation Act of 1976 by means of Executive Order, Joint Resolution, amended legal definition, new legislative provisions, or comparable measures to indicate the full range of cultural resources included under the protection of law by defining cultural and historic resources to include historic properties, folklife, and related traditional lifeways; such action will strengthen and give coherence to policies related to cultural conservation and result in modification of appropriate agency guidelines..." (AFC/DOI 1983:74).

Cultural Conservation went on to recommend that the Government:

"(i)include in the work of the Advisory Council on Historic Preservation such efforts as ... clarifying its role as a mediating authority in the resolution of conflicts related to cultural conservation; increasing attention to its role in advising other elements of government on matters of preservation policy and agency undertakings related to cultural conservation; and effecting wider participation by appropriate community representatives in resolving conflicts related to cultural conservation" (AFC/DOI 1983:76).

Congress has not yet taken up the Cultural Conservation report's recommendations, but it is the Council's conclusion that progress can be made toward meeting the intent of the recommendations, and the policy articulated in the American Indian Religious Freedom Act, by ensuring that Section 106 review is sensitive to traditional cultural values. Accordingly, on July 16, 1984, the Council authorized preparation of these Guidelines, and on \_\_\_\_\_ approved them for publication.

### Definitions

Cultural value means the contribution made by an historic property to an ongoing society or cultural system. A traditional cultural value is a cultural value that has historical depth; a non-traditional cultural value is a cultural value that lacks such depth. In a sense, any historic property has cultural value; by inspiring or informing us about the past, by illustrating a form of architecture, or by serving a modern purpose through adaptive reuse, it contributes to our ongoing cultural life. The focus of attention in these Guidelines, however, is on those properties, normally though not necessarily non-architectural, whose primary value springs from the role they play in maintaining the cultural integrity of a particular social group, usually a relatively small segment of the total national society, usually though not necessarily localized, often though not necessarily of ethnic minority heritage.

Federal agency, for purposes of these guidelines, means any agency of the United States Government, any representative of such an agency, and any local government, recipient of Federal assistance, Federal permittee or licensee, or other party acting on behalf of or carrying out functions delegated to it by a Federal agency in connection with Section 106 review.

SHPO means the State Historic Preservation Officer designated by the Governor of a State pursuant to Section 101(b)(1)(A) of the National Historic Preservation Act.

### Policy

It is the policy of the Advisory Council on Historic Preservation to seek full consideration of traditional cultural values in the review of Federal projects under Section 106 of the National Historic Preservation Act.

### Guidelines

In carrying out the policy set forth above, the Council will encourage Federal agencies to use the following guidelines.

### Introduction

Section 106 of the National Historic Preservation Act requires that:

"The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the Head of any Federal department or independent agency having authority to license any undertaking shall prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure or object that is included in or eligible for inclusion in the National

Register (of Historic Places). The head of any such Federal agency shall afford the Advisory Council on Historic Preservation...a reasonable opportunity to comment with regard to such undertaking."

Federal agencies comply with Section 106 by following the regulations of the Advisory Council on Historic Preservation (36 CFR Part 800) or by following agency-developed counterpart regulations approved by the Council. Local governments carrying out environmental review responsibilities delegated to them by the Department of Housing and Urban Development in accordance with statute comply with special Council regulations tailored to their needs (36 CFR Part 80!).

#### The Purpose of Section 106

Section 106 was included in the National Historic Preservation Act to ensure that the values ascribed to historic properties by the public are not ignored by Federal agencies and those they assist or license when they plan projects that may affect such properties. Accordingly, the Council's regulations establish a process in which historic properties are identified during project planning, and in which agreement is sought through negotiation among concerned parties on ways to minimize adverse project effects on such properties.

The National Historic Preservation Act does not encourage the preservation of historic properties simply because "they are there," but in order that they can remain and become "living part(s) of our community life and development in order to give a sense of orientation to the American people" (NEPA Sec. 1(b)(2)), and in order for them to "fulfill the social, economic, and other requirements of present and future generations" (NEPA Sec. 2(1)). As a result, the process set forth in the Council's regulations is designed to identify what is valued about the historic qualities of each historic property subject to effect, and to seek ways to preserve or even enhance such qualities in the context of development. Where preservation and enhancement are not feasible, the process seeks to establish agreement among concerned parties on ways to minimize the damage done by development to those qualities that people value in the historic properties affected.

Actions undertaken, assisted, or permitted by Federal agencies can have profound impacts on places of traditional cultural value. Even where no direct demolition or other disturbance of such a location occurs, indirect effects of a project on traditional uses of the location, and on the fabric of traditional life in whose context the location has meaning, can be widespread. Where review of a project under Section 106 fails to consider these effects, it may miss the most serious impacts of the project on the values most meaningful to the most affected segments of the public.

#### Kinds of Historic Value

It is obviously necessary that the mechanisms agreed to for the reduction or mitigation of adverse effects be appropriate to the public values represented in the historic properties involved. A variety of values may be present in historic properties, including:

- \* Architectural value: the importance of a property as an example of an architectural type or period, the work of a particular architect or group, or the application of particular concepts, methods, or technology.
- \* Associative value: the importance of a property as a reminder of an event, a person, a process or trend affecting the history of the world, the nation, or a region, community or group.
- \* Use value: the potential of an historic property for continued productive use as a part of modern society.
- \* Information value: the potential of an historic property to provide information, through recordation or archeological research, that is useful to the study of important aspects of the past.
- \* Cultural value: the contribution made by an historic property to an ongoing society or cultural system. It is this sort of value that is the focus of these guidelines.

A given property may of course embody more than one of the above values.

The values that may be present in an historic property are not always fully recognized or documented when a property is nominated to or determined eligible for the National Register of Historic Places. The National Register Criteria (36 CFR Sec. 60.6) establish a threshold over which a property must pass in order to be recognized as historic by the Federal government, but they do not necessarily describe all the public values that may be embodied in a property that crosses the threshold, and that must be taken into account when considering the effects of an action on such a property. As a result, the fact that a given value may not be ascribed to a property in the documentation used in placing the property on the National Register or determining it eligible for the Register should not be taken to mean that the property may not have such a value.

#### The Cultural Value of Historic Properties

In a general sense, all historic properties have cultural value, since history is itself a cultural phenomenon. As used here, however, cultural value applies to the role played by a property in an ongoing, contemporary cultural system. A cultural system, in turn, is a group of people linked together by shared values, beliefs, and historical associations, together with such a group's social institutions and the physical objects necessary to the operation of the institutions.

As an example of a cultural system, consider the well-known Amish communities of central Pennsylvania and other parts of the eastern United States. The Amish constitute a group united by particular religious views and beliefs about the proper organization of society, education, and the use of technology. These beliefs structure their lives and create the distinctive cultural landscapes in which they live, featuring large, clean farms without powered facilities, special patterns of land use and

architecture, and such artifacts as horse-drawn buggies, particular clothing styles, and so on. An Amish community, while interesting to outsiders, is of fundamental value to its Amish residents as the physical embodiment of their society. Changing the cultural landscape of the community, for example by building a new highway through it, is likely to change the society itself, and will likely be of special concern to the community's residents and to Amish in general.

#### Cultural value and Section 106

The purpose of these guidelines is to assist in the consideration of cultural values in connection with the review of actions under Section 106. In order to be considered in the "Section 106 process" a cultural value must be related to a property or properties included in or eligible for inclusion in the National Register of Historic Places. Thus a cultural value without a property referent cannot be considered under Section 106. For example, a traditional dance form could not be the subject of review under Section 106 unless there were an historic property involved; perhaps the location of the dance's origin or the location where it is traditionally performed. Similarly, the cultural values of an Amish community could not be the subject of Section 106 review unless the community's buildings or cultural landscape were eligible for inclusion in the National Register.

In order to be considered under Section 106, an historic property must be subject to some kind of affect by a Federal, federally assisted, or federally licensed undertaking. In the example of the Amish community referred to above, assuming that the community was recognized as eligible for the National Register, it might be subject to Section 106 review if a highway were proposed through or near it. The highway would alter the cultural landscape of the community, and it might have further effects by introducing traffic patterns incompatible with the community's traditional modes of transportation and interaction, or by stimulating incompatible urban or suburban growth. Less obvious effects subject to review under Section 106 might arise from implementation of a Federal program providing assistance to certain kinds of farming, or regulating land use, such that it would become more difficult for the Amish community to maintain its traditional way of life and hence its valued cultural landscape.

It is important to recall that Section 106 does not require the preservation of historic properties or the values they represent, but only their consideration in planning. Thus the recognition of a cultural value in a property does not give the group to which the property is valuable a veto over its incompatible use.

Assume, for example, that hunting caribou in a particular range of mountains is of definitive cultural importance to a group of Eskimo communities, and that the range is on or eligible for the National Register and is proposed for designation as a caribou sanctuary. Section 106 would give the Eskimo communities no basis for halting the designation, provided the Council's regulations had been complied with. Consultation under the regulations would, however, provide opportunities for the communities to express their concerns, with the expectation that they would be addressed and, if possible, resolved.

### Traditional and Non - Traditional Values

A traditional cultural value is one that has historical depth; a value that has not historically been ascribed to a property is non-traditional. For example, a mountain viewed by an Indian tribe in antiquity as sacred, and viewed by elements of the tribe as sacred today, has traditional cultural value, but a mountain viewed as sacred by a recently established utopian religious community does not have traditional cultural value. Traditional cultural value is a legitimate specific concern under the National Historic Preservation Act; non-traditional cultural value is not. Although a non-traditional cultural value should be considered by an agency in making a public-interest decision, it is not the purpose of the National Historic Preservation Act to ensure that this is done.

A property need not have been in consistent use since antiquity by a cultural system in order to have traditional cultural value. The sacred mountain alluded to above, for example, might have gone out of use when the Indian group to which it is important was placed on a reservation and converted to Christianity, but have come back into use as part of a contemporary revitalization movement in the tribe; the value ascribed to it would be a traditional one. If the tribe no longer ascribed cultural value to the mountain, it might still have associational or information values sufficient to make it eligible for the National Register, but no cultural values would need to be considered under Section 106. If the tribe had simply picked a mountain to regard as sacred in connection with its revitalization, without connecting its modern use with a similar use in antiquity, the cultural value would not be traditional.

The level of cultural value ascribed to a property may change through time, however, without causing the property to lose value altogether. For example, assume that a given cultural group traditionally carried out ceremonies at four locations, two of which were much more important than the other two. Assume further that modern development has essentially destroyed the two most important locations, or at least made it impossible to carry on ceremonies there. Assume, then, that the group seeks to reestablish its ceremonies using the remaining two locations. The two locations now in use, while not particularly important in the past, now assume great cultural value because they are the only locations left on which the ceremony can be performed.

### Religious Considerations

Religion is a fundamental, often central, feature of many cultural systems; as a result, a consideration of cultural values often involves dealing with religious issues.

Federal agencies are often understandably reluctant to take religious considerations into account in their decisionmaking, recognizing the risk of transgressing the Constitutional prohibition on the establishment of religion. For the same reason, the National Register as a rule will not list properties having solely religious value (36 CFR § 60.6( )).

Religious issues with respect to historic properties have arisen most often with reference to Native American<sup>(1)</sup> religions, particularly since enactment of the American Indian Religious Freedom Act in 1978 (Pub. L. 95-341; 92 Stat. 469; 42 U.S.C. § 1966). The U.S. Commission on Civil Rights (CCR) has provided thorough discussion of the background issues involved (1983). The burden of the CCR's discussion is that ignorance of Native American religious concerns leads to government policies that are discriminatory and that inhibit the free exercise of religion in violation of the Constitution. The CCR specifically discusses a number of Federal construction and land use projects subject to Section 106 review as examples of conflicts between protection of Native American religion and other, competing public interests. It criticizes the Government for failing to strike a balance between such competing interests, and suggests that:

"...decisionmakers and legislators at various levels of both Federal and State governments must become aware of the basic tenets of Native American religion in order to recognize the potential discriminatory effect of their rules or regulations on the religious freedom of American Indians" (p. 30).

A similar conclusion was reached in 1979 by the Department of the Interior Task Force which recommended:

"(that) existing regulations, policies and practices (be revised) to provide for separate consideration of any Native American religious concerns prior to making any decision regarding the use of Federal lands and resources" (DOI 1979:62-3).

Three fundamental points must be recognized about American Indian (and to varying degrees, other Native American) religions in order to accommodate them in Section 106 review.

First, Native American societies tend not to segregate religion from other aspects of society. What Euro-American society separates out as explicitly "religious" is typically integrated into other aspects of Native American culture in such a way as to make virtually every cultural institution "religious" to some degree, and conversely to make "religion" virtually indistinguishable as a concept. Hunting may be a religious act, involving the supplication of animal spirits. House building may have a religious component, featuring the orientation of building components in sacred directions and the inclusion of religious architectural features. The gathering of plants may be of religious importance because of roles they play in traditional medicine or the conduct of rituals. The very organization of traditional Native American society typically involves the application of supernatural models.

Second, Native American religions, at least as practiced in recent times<sup>(2)</sup> tend not to involve the use of major physical constructions; places of worship and veneration instead are in effect cultural landscapes: mountains, lakes, rocks, trees, and other natural features. As the CCR has commented:

"Rivers, mountains, deserts, fields, stones, and running water, as well as plants and animals, are endowed with protective power in Native American religious belief" (CCR 1983:30) and

"Religious sites such as churches, mosques, the Vatican, and the Western (Wailing) Wall hold religious significance for Jews, Christians, and Moslems. Because non-Indians are more familiar with these structures, it is easier for them to understand the effect of a law that would forbid access to them or that would allow tourists to come in at any time during high mass, for example, and take photographs of the ceremony. However, it is more difficult for non-Indians to understand the burden on Native American religions of such laws governing access to Federal lands, for example, even though some lands, rivers, or mountains may hold as much religious significance for an American Indian as the church does for the Christian" (CCR 1983:30).

Third, practitioners of Native American religions may be unwilling to reveal much about their practices, or may do so only in indirect ways. There are several reasons for this, including the following:

- (1) Often religious knowledge is explicitly regarded as secret, to be shared only in prescribed ways with individuals having particular relationships to the practitioner (eg. specific members of his or her kin group). It is not uncommon for a holder of traditional lore to believe that he or she will die if the lore is shared with inappropriate parties.
- (2) Even if knowledge is not generally secret, it is often construed to be no one's business outside the native community.
- (3) Religious knowledge may be construed by a community to be the exclusive province of a particular practitioner, and others, though knowledgeable, may be hesitant to reveal what they know if the recognized authority has not spoken.
- (4) Practitioners are often not fluent speakers of English.
- (5) Some practitioners may fear ridicule from members of their community who have become acculturated to Euroamerican society.
- (6) Some practitioners may fear reprisals from the Government if they reveal their practices. It should be recalled that until 1937, the official policy of the U.S. Government was one of active discrimination against American Indian religions (cf. CCR 1983:28-29). This policy, and the fears it engendered, have not been eliminated overnight.
- (7) At the least, there is often a feeling in Native American communities that any effort to seek accommodation between their traditional cultural values and those of the Government is futile and will likely be misused by the Government.



The American Indian Religious Freedom Act (42 U.S.C. §1996) establishes that:

"It shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects and the freedom of worship through ceremonials and traditional rites" (42 U.S.C. §1996 [Supp. IV 1980]).

The Act gives Federal agencies the responsibilities to evaluate their policies and procedures with the aim of protecting Indian religious freedom, to consult with Indian groups, specifically including traditional leaders, in the course of this review, and to make such changes in policy and procedure as are necessary to preserve Indian religious cultural rights and practices.

The Council believes that its regulations provide adequate mechanisms for considering American Indian religious values as they pertain to historic properties and Federal undertakings, provided both the Council and the Federal program agencies, in the course of Section 106 review, give special attention to identifying and dealing sympathetically with Native American religious concerns. Consultation with traditional American Indian leaders and others with religious concerns about historic properties should be a fundamental part of such review.

Fairness suggests that a similar policy should be applied to non-Indian religious interests to the extent that such a policy does not conflict with the establishment clause of the Constitution. In other words, religion should be recognized as an important part of culture, that can result in the ascription of value to properties that should be considered in Section 106 review. Those who ascribe such value to a property should be consulted during the 106 review process to ascertain their concerns and determine whether they can be addressed. While the prohibitions embedded in the Constitution must be scrupulously observed, it should not be assumed that taking a religious cultural value into account in planning automatically violates the establishment clause.

Non - Religious Cultural Values

Although among Native American Communities it may be difficult to identify traditional cultural values that are not in some way religious, it should not be assumed that religious values are the only cultural concerns that should be taken into account in Section 106 review, or that Native American communities are the only ones who invest historic properties with traditional cultural value. Examples of more or less non-religious traditional cultural values include the following:

- \* An ethnic or other social group that has long been resident in an historic district may ascribe traditional cultural value to the District as its traditional home and the embodiment of its traditional organization.

- \* A community may ascribe cultural value to the landscape in which it exists, as in the case of the Amish community discussed above, as a physical manifestation of its values and social organization.
- \* A community that has traditionally carried out an economic activity using an historic property, for example stockraising or agriculture in a significant cultural landscape, or boat building using an historic construction facility, may ascribe traditional cultural value to the historic property not only as the basis of its livelihood but as a major factor in shaping its lifeways.
- \* A community or other group may ascribe traditional cultural value to a property that plays and has traditionally played an important role in the group's social cohesion and interaction, for example a meeting hall, a general school, or a church.
- \* A group may ascribe traditional cultural value to a property that is symbolic of the group's identity or history, for example a battlefield or massacre site, an Indian boarding school, a monument or a community center.

### Considering Cultural Values in Section 106 Review

#### I. Organization

Federal agencies should examine the organizational contexts in which they define and seek to reduce impacts on historic properties and sociocultural values during planning of their projects, to ensure that effective coordination occurs between historic preservation and sociocultural impact assessment. Traditional cultural values are of concern both from the standpoint of historic preservation and from that of an agency's general consideration of the social impacts of its undertakings. Although the requirements of Section 106 are independent of those placed upon Federal agencies by the National Environmental Policy Act and other authorities that require agencies to consider the social impacts of their actions, effective coordination between historic preservation and social impact assessment activities can maximize the efficiency with which traditional cultural values are dealt. Many of the methods used in social impact assessment are applicable to the identification and consideration of traditional cultural values in historic properties, and vice-versa, and professionals involved in social impact assessment and historic preservation often have overlapping or complementary skills and training. Federal agencies should ensure that they have access to appropriate professional expertise in such fields as cultural anthropology, sociology, and folklore to assess impacts on traditional cultural values.

#### II. Identification of Traditional Cultural Values.

During efforts to identify historic properties subject to effect by their activities, Federal agencies should seek to identify properties that have

traditional cultural value, and to define carefully the traditional cultural values that are ascribed to such properties.

- A. Communities, groups, and knowledgeable individuals who may ascribe, or be expert in the ascription of, traditional cultural value to properties in the area should be consulted.
- B. Expertise in traditional cultural values may not be found among contemporary community leaders. As a result, it is necessary to consult with traditional leaders and other knowledgeable parties, not simply to rely upon the community's contemporary political system to provide data on valued historic properties.
- C. Since knowledge of traditional cultural values may not be readily shared with outsiders, knowledgeable parties should be consulted in cultural contexts that are familiar and reasonable to them. This may require the use of languages other than English, the conduct of community meetings ways consistent with local traditional practice, and the conduct of ethnographic and ethnohistorical studies.

### III. Evaluation of Properties

In applying the National Register criteria for evaluation (36 CFR § 60.6) to determine the eligibility of properties for the National Register, Federal agencies should interpret the criteria with sensitivity to traditional cultural values. Properties having traditional cultural values are typically eligible for the National Register under 36 CFR § 60.6(a) because they are associated with people or events (including beings and events described in Native American traditions) important in a group's history and culture. Such properties may, of course, be eligible under other criteria as well. Properties that are solely of non-traditional cultural value are usually not eligible for the National Register.

### IV. Considering Effects

In considering the effects of a Federal agency action on historic properties, the responsible agency and SHPO should consider any effects the action may have on the traditional cultural values ascribed to such properties.

- A. Effects should be identified and considered in consultation with the communities and other groups that ascribe traditional cultural value to historic properties.
- B. Consultation should be undertaken in a manner that is understandable to the group being consulted, and consistent with their cultural practices and modes of expression and interaction.
- C. Mediation should be employed where necessary to clarify issues and seek consensus on effects and alternatives.

## V. Evaluating Alternatives and Establishing Treatment Measures

In evaluating alternatives to avoid or reduce adverse effects on historic properties, Federal agencies, SHPOs, and the Council should take cultural concerns systematically into account, in consultation with concerned groups. Groups ascribing traditional cultural value to historic properties should be afforded the opportunity to participate in the evaluation of alternatives, in a manner that is consistent with their cultural practices and modes of expression and interaction. Measures to avoid or mitigate project effects on properties with traditional cultural value, and decisions to accept such effects in the public interest, should be reached in consultation with the group or groups that ascribe traditional cultural value to the properties.

Agreement should be sought on alternatives to avoid or reduce adverse effects on the traditional cultural value of historic properties as perceived by concerned groups. It should be recognized that, particularly where a property is of highly charged emotional value to a traditional community, the community may have difficulty considering any alternative other than to eliminate the potentially damaging action altogether. Care should be taken to ascertain and discuss the relative effects of different alternatives in sufficient detail to ensure that they are fully understood, and to balance the deleterious effects of each alternative against its benefits. In weighing impacts against benefits, it should be recognized that often the benefits of a project flow to one group of people while the impacts are felt by another; often traditional communities do not feel that they benefit from development projects, and believe that they suffer the impacts of such projects disproportionately.

In evaluating alternatives and developing treatment measures, it is important to address with precision the kinds of values being affected. For example, if a traditional community values a location because of the medicinal plants that grow there, an alternative that proposes archeological excavation of the location will be irrelevant to the cultural concerns involved, but an alternative featuring avoidance of the location, or perhaps relocation of plants, may be acceptable. Similarly, if the cultural value of a mountain peak lies in its use for ceremonies conducted in the summer months, the alternative of logging in the area using helicopters during the summer may be inappropriate, but logging using ground vehicles during the winter may be acceptable.

## VII. General Considerations

A. Consultation with concerned groups should respect the social and cultural context in which each such group operates. The location, organization, and structure of consultation meetings should be designed in a way that is sensible and meaningful to the concerned groups. Where communities and groups are involved whose cultural traditions are different from those upon which Euroamerican law and social organization are based, it should not be assumed that public hearings and similar formal devices will be sufficient to reveal the concerns of such groups.

For example, in many traditional communities knowledge of the past is regarded as conferring special power upon the knowledgeable party, and it is socially inappropriate if not dangerous to expose such knowledge in public. It is also widely regarded as inappropriate for younger people to reveal such knowledge, if they possess it, in the presence of their elders. Elders may not be fluent English speakers, or may be otherwise constrained from speaking out in public. The result is that a public hearing can be conducted on a project having profound impacts on a property of cultural value to a community, without any information on the value involved being volunteered. Only by consulting knowledgeable people in their own cultural context can such information be elicited.

B. Identification of cultural values and consultation with concerned groups should be coordinated with environmental studies under 40 CFR Part 1500 et seq. Special attention should be given to coordination with the public participation required by 40 CFR § 1501.2(c)(2), § 1501.7, § 1502.19, and § 1506.6. Where traditional communities are involved, public participation efforts should be structured in culturally meaningful ways, in order to maximize knowledgeable participation.

C. It must be recognized that, in a given community or social group, some people and subgroups will assign greater traditional cultural value to historic properties than will others, and that often those who assign least value to such properties will be those who, because of their sympathetic relationships with the larger, non-traditional society with which the community or group must deal, are recognized by the larger society as the group's "official" spokespersons. As a result, the fact that the official spokespersons for a given group or community do not raise issues concerning the traditional cultural value of properties during consultation with a Federal agency cannot necessarily be taken to mean that such values do not exist, or that they are not important to significant segments of the community or group. A Federal agency should make a responsible, good-faith effort to identify and consult with traditional cultural leaders and others in a community who may ascribe traditional cultural value to properties, rather than relying solely upon the views of a community's or group's official spokespersons.

D. Where issues concerning a group's perceived economic use of an historic property or its environment are concerned, economic use should not be construed in narrow terms, but should recognize the extra-monetary social values that economic activities may have in maintaining a social system. For example, the fish caught by a community in a stream where a Federal dam is proposed may have minimal value as protein inputs or items of exchange in the community, but be important components in the community's ceremonial system.

E. The traditional religious values that may be ascribed to historic properties by Native American communities and other groups should be recognized as legitimate traditional cultural values, to be considered fully and sympathetically in planning.

F. Where treatment of human remains is an issue, balance should be sought between the cultural concerns of any genetic or cultural descendants of the

deceased and the interests of science, taking into account the special guidelines set forth in Appendix I.

G. To maximize efficiency, consideration of traditional cultural values under Section 106 should be carefully integrated with any programs of social impact analysis carried out by the agency, and should generally involve the same professional staff or consultants. Appendix II discusses professional participation in consideration of traditional cultural values, and offers suggestions about obtaining necessary expertise where such expertise is not available within the agency.

## APPENDIX I

### TREATMENT OF HUMAN REMAINS

#### Introduction

Archaeological sites that become the subjects of consultation under Section 106 often contain graves. When such sites are subjected to archeological excavation, the human remains contained in such graves may become the objects of dispute between the genetic or cultural descendants of the deceased and the physical anthropologists and others who may wish to retain the remains for study. To some extent, such disputes may be inevitable, reflecting fundamental philosophical differences between the disputants. Disputes can be minimized, however, through early, good-faith consultation among concerned parties. The purpose of this appendix is to discuss some of the issues surrounding treatment of human remains, and to provide guidelines for consultation to avoid conflict over such treatment.

#### Definitions

For purposes of this Appendix:

- (1) "Human remains" means the physical remains of human bodies, together with any artifacts or other materials interred with them.
- (2) "Genetic descendent" means any person known or reliably assumed to be a direct lineal descendent of a deceased person; for example, contemporary members of the Lakota Tribe can be assumed to be the genetic descendants of deceased Lakota persons whose human remains might be found in an archeological site.
- (3) "Cultural descendent" means any person who, although not necessarily a direct lineal descendent of a particular deceased person, is associated with a cultural tradition to which the

human remains of the deceased person has significance; for example, members of a national or regional American Indian organization concerned with preservation of human remains or revitalization of Indian religion might be considered the cultural descendants of deceased prehistoric or early historic Indian people.

(4) "American Indian community" means a localized American Indian group, whether or not officially recognized as an American Indian tribe by the United States Government.

#### Principles

(1) Human remains should be treated with respect for the wishes of the deceased individuals they represent. Presumably few if any people who died during prehistoric times and the early history of the United States hoped to have their bodies exhumed and subjected to scientific study at a later date. It follows that human remains should be left undisturbed wherever possible.

(2) Human remains often have deep emotional significance for those who view themselves as the genetic and/or cultural descendants of the deceased represented by the remains.

(3) Human remains are often the objects of religious veneration by the genetic and/or cultural descendants of the deceased; hence actions that adversely affect such remains, or adversely affect the ability of their descendants to practice their religion, may infringe upon the constitutionally protected free exercise of religion, and must be planned with great care.

(4) Human remains often have substantial scientific value, with the potential to contribute to research in archeology, physical, social and cultural anthropology, genetics, and medicine. The answers to research questions in such fields can help prolong life, improve the quality of life, and enrich our understanding of human history and society. Addressing such questions may require that human remains be subjected to substantial and extended study, and in some cases that they be destroyed in order to perform laboratory tests.

(5) Since it is impossible to predict with certainty the kinds of scientific research questions that may develop in the future, or the kinds of methods and techniques that may become available to help address them through the study of human remains, there is a strong tendency on the part of the scientific research community to seek to maintain human remains in laboratory settings in perpetuity.

(6) Some conflict is virtually inevitable between the interests of those concerned about the scientific study of human remains and those with emotional ties to the deceased. At a more theoretical level, some conflict is inevitable between the

interests of science and the undoubted desire of most people, at the time of death, to rest in peace.

(7) Proper treatment of human remains requires that respect for the wishes of the deceased, and for the feelings of the deceased's genetic and cultural descendants, be balanced responsibly against the interests of science.

(8) The major management tools that can be used to arrive at proper treatment of human remains are:

(a) Consultation: Identifying concerned parties and working with them to identify their interests and achieve balance among them;

(b) Justification: Assuring that proposed scientific studies requiring that human remains be subjected to protracted or destructive investigation, or not be reinterred, are fully justified as contributions to science in the public interest, and

(c) Funding: Assuring that adequate funds are available for the prompt conduct of justified scientific studies, and for reburial of human remains in a dignified manner consistent with the cultural traditions of the deceased and their genetic or cultural descendants.

Guidelines

(1) Human remains should not be disinterred unless it is necessary to do so. Generally speaking, such a necessity exists only when the remains are in danger of destruction as the result of land disturbance, inundation, erosion, vandalism, or similar phenomena.

(2) Where human remains are in danger, they should be disinterred carefully and respectfully, and as completely as possible, using the best available archeological methods. Although the needs of archeological research may not demand the exhumation of endangered human remains, or may require exhumation of only a sample of such remains, respect for the dead demands that to the extent possible, all such remains be recovered before the historic properties in which they lie are destroyed.

(3) Disinterred human remains should be reburied in safe locations, in a manner as consistent as possible with the likely wishes of the deceased. Locations and procedures for reburial should be developed through consultation with genetic and cultural descendants of the deceased. Where an American Indian community is involved, consultation should be carried out in a manner consistent with the cultural expectations and practices of the community, and should be responsive to the desires of traditional spiritual leaders.



(4) Before reburial occurs, human remains should be subjected to such scientific study as is necessary to satisfy justified research interests. Federal agencies responsible for treatment of human remains should be careful to ensure that proposed studies are fully justified: that is, that their likely results will contribute significantly to the resolution of scientific, humanistic, medical, or other questions whose resolution is clearly in the public interest.

(5) A definite, reasonable schedule should be established and adhered to for study and reinterment. Ideally this schedule should be part of the research design or study plan developed to guide the project in which it is expected that human remains will be found.

(6) Many permutations on the above rules of thumb may be appropriate in particular circumstances. For example:

(a) A wide range of justifiable historical, anthropological, and medical research questions make it generally appropriate to conduct basic examinations, similar to autopsies, on all disinterred human remains, to document the age, sex, and general physical condition of the deceased. Where close genetic and cultural descendents of the deceased feel strongly that such studies should not be conducted, however, if there is no pressing need to conduct such studies to answer research questions in the public interest, it may be appropriate to reinter human remains without any study at all, or with very attenuated study.

(b) Conversely, there may be instances in which it is so clearly in the public interest to conduct extensive study of a given set of human remains, to address clearly justified research questions, and to maintain such remains for future study, that the interests of science may override those of respect for the wishes of the dead and their descendents, and the remains should not be reinterred at all.

(c) In some cases it may be possible to arrange compromises between respect for the dead and their descendents and the interests of long-term research, for example by reintering human remains in such a way that they can be disinterred again if future research needs so demand and descendents approve.

(d) Where questions arise about whether and how to reinter human remains, the desires of close genetic or cultural descendents should usually be accorded greater respect than those of more distant descendents, and those claiming both genetic and cultural descent should be respected over those claiming only cultural affiliation. For example, if

the direct genetic descendents of a recently deceased American Indian community ask that the remains of the community's inhabitants be cremated, while a nationwide American Indian organization, claiming pan-Indian cultural affiliation with the deceased, requests that they be reinterred, the wishes of the genetic descendents should be given precedence.

(7) The precise arrangements for study and reinterment of human remains should be worked out through consultation between project sponsors, American Indian communities or other genetic and/or cultural descendents, and anthropologists or others having research interests in human remains. In some instances, such arrangements can be worked out on a regional basis, or with respect to all human remains found in the ancestral territory of, or representing the ancestors of, a given contemporary cultural group. In other instances consultation will be needed on a case-by-case basis.

(8) Where human remains are reinterred, the Federal agency or other party responsible for their reinterment should:

(a) ensure that the reinterred remains are reasonably secure against further disturbance;

(b) minimize the disturbance of intact archeological deposits during reinterment, and

(c) if the remains are reinterred in proximity to an archeological site, provide for the reinterred remains to be marked in some way to distinguish them from original, in-place constituents of the archeological site.

## APPENDIX II SOURCES OF PROFESSIONAL EXPERTISE

Studies to determine the location and value of properties having traditional cultural value, and efforts to mediate between parties having divergent interests in such properties, are best carried out by persons having substantial professional training and experience in cross-cultural research and consultation. The disciplines of sociocultural anthropology and sociology are most often those in which such training and experience are provided.

It is often important that those who carry out the necessary studies or mediation activities are fluent in the non-English language or languages spoken by those who ascribe traditional

cultural value to the properties in question. Even where language itself is not an issue, practitioners should be aware of cultural norms held by the group involved, to avoid inadvertent transgressions. This typically requires significant background knowledge of the group, gained through experience or prior study.

Qualified sociocultural anthropologists and sociologists are becoming increasingly available to agencies as the field of "Social Impact Assessment" grows as a part of general environmental impact evaluation. An increasing number of consulting firms maintain such expertise on staff, as do an increasing number of local, state, and Federal agencies and regulated industries. Most practicing sociocultural anthropologists and sociologists, however, are on the faculties of academic institutions. Accordingly, an agency setting out to obtain expert assistance in this field is probably best advised to contact the Departments of Anthropology and Sociology at a reasonably large university near the project location for advice.

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APPENDIX 10

Certification Requirements of the Society  
of Professional Archaeologists

# Membership Requirements

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Membership in the Society of Professional Archeologists requires certain minimal qualifications (below), and satisfaction of the requirements for at least one archeological emphasis. Also, all members must agree to abide by the Code of Ethics, Standards of Research Performance, and Institutional Standards.

An applicant must:

- (A) have designed and executed an archeological study as evidenced by a thesis or dissertation, and have been awarded an advanced degree, such as an M.A., M.S., Ph.D., D.Sc. or official A.B.D., from an accredited institution, in archeology, anthropology, history, classics or other germane discipline with a specialization in archeology. (A.B.D. applicants must submit a letter from the departmental chairperson attesting to the applicant's status.)
- (B) show 12 weeks of supervised field training in time blocks of at least two weeks duration. At least half of this experience must be excavation (rather than survey).
- (C) show four weeks of supervised laboratory analysis and/or curating experience. The requisite time may be accumulated as part-time work.
- (D) have signed and executed an archeological study as evidenced by an M.A. or M.S. thesis (or Ph.D. dissertation), or a report equivalent in scope and quality. It is recognized that in some cases an individual may have prepared several small reports that, cumulatively, are comparable to an M.A. or M.S. thesis. In such cases either abstracts and tables of contents or the reports themselves must be submitted (returned on request). If the applicant's name does not appear on a document she/he authored, a letter verifying the actual authorship must be solicited and submitted from the person, firm or agency which issued the report. In any case, the report(s) must indicate substantive analysis based on an explicit theoretical orientation. A long but purely descriptive report is not considered equivalent. Substitutions for this requirement are detailed in Archeological Emphases requirements for Theoretical or Archival Research, Cultural Resource Management, Museology and Teaching.

## ARCHEOLOGICAL EMPHASES

All members must document experience in one or more of the following archeological emphases. For all emphases except teaching, an applicant must document a full year's experience acquired in time blocks of at least four weeks duration. Users of this Directory seeking archeological expertise are strongly urged to take account of the emphases credited to individuals. For archeological endeavors requiring special skills, it should not be assumed that all SOPA members are equally qualified; job requirements should be matched with emphases recognized for the prospective consultants in this Directory.

### Field Research:

The applicant must document a minimum of one year of field experience. This must include 24 weeks of field work under the supervision of a professional archeologist, in-

cluding no more than 12 weeks of survey or reconnaissance work, and at least eight weeks of supervised laboratory experience. Twenty weeks of field work in a supervisory capacity must be documented and a report produced by the applicant on his field work must be cited.

#### **Collections Research:**

The applicant must show 15 weeks of experience or training in collections research under the supervision of a competent specialist as documented by a report, a course transcript, or letter of reference. The applicant must also document one year's independent experience in collections research. Such study must focus principally on the comparative treatment of the materials themselves rather than on their relationship to the general archeological context of a site or sites. A specific archeological method must be used, such as stylistic analysis, ethnographic analogy to post-sociocultural reconstructions, etc. The simple description and analysis of excavated materials that is found in any site report or thesis is NOT "collections research" since it is necessary and basic part of field research. Examples of studies which might be considered collections research include a study of rim sherds from Late Woodland sites in the Northeast to define ethnic boundaries; stylistic analysis of mollus using art history methods; microscopic analysis of edge-wear on utilized flakes to determine functions; comparative study of different ceramic ecologies, etc. For the area or areas where collections research expertise is claimed, a report must be published or otherwise generally available to the scientific community. This report must be equivalent in scope and quality to an M.A. thesis.

#### **Theoretical or Archival Research:**

The applicant must document 15 weeks of supervised experience or training in either primary archival research or in theoretical approaches in archeology under the supervision of a competent specialist as shown by a report, a course transcript, or a letter of reference. The applicant also must document one year's independent experience in archeological research on theoretical issues, or on substantive problems using archival sources. The simple literature review and document search that is found in any site report, cultural resource survey report or thesis is NOT theoretical or archival research since it is necessary and basic part of field research. For the area or areas where theoretical or archival expertise is claimed, a report must be published or otherwise generally available to the scientific community. This report must be equivalent in scope and quality to an M.A. thesis.

#### **Archeological Administration**

The applicant must document one year's experience in the administration of an archeological research unit, a governmental agency office, a museum, or some other entity with operations oriented toward archeological research. Administration of a field project or acting as a principal investigator does not normally qualify since it is a basic and routine part of directing field research. Service as the chairman of an academic department does not ordinarily qualify as an example since such work is not explicitly archeological. Examples of archeological administration are: service as Chief of a university archeological research unit, service as head of a state or regional office charged with archeological research or service as the primary administrative officer in such an office. It should be noted that the archeological administration emphasis is designed for archeologists directing a research program rather than a cultural resource management agency.

#### **Cultural Resource Management:**

The applicant must document one year's experience in the implementation of laws, regulations, policies, programs and political processes which conserve our non-renewable prehistoric and/or historic cultural resources. Cultural resource management begins with the earliest legal, fiscal, and political processes of ensuring the appropriate consideration through

the identification of such resources their evaluation of importance and legal standings, the calculation of project effect upon them, the development of options to resolve conflicts at all levels of concern, formulation of decision processes for resolution of resource conservation, and ends with successful execution of the resulting management plan.

The essence of this archeological emphasis is actual management. Thus the applicant must show one year's involvement by citing their personal or staff decision authority and use of their comprehensive knowledge of law and political process to successfully conserve or wisely use cultural resources in 5 major completed cases.

Recognition in this emphasis most clearly correlates with higher governmental positions which manage via legal, fiscal and political mechanisms. Recognition may be granted to directors of private foundations who arrange and execute CRM. Recognition may be granted to a contracting Principal Investigator whose CRM recommendations have been, in the majority, adopted by the decision makers (and so attested case-by-case) for major projects.

The conduct of archeological CRM surveys or the execution of a mitigation-of-impact effort do not normally qualify, since these are aspects of field research and do not involve management. The mere development of a regional or local management plan does not normally qualify, except where the applicant shows a repeated personal use of the plan as a management tool meeting the above criteria.

#### **Museology:**

The applicant must document one year's experience in the application of professional museological methods and techniques to archeological material and data. Service as a museum administrator or curator qualifies under the museology emphasis only if it involves the understanding and application of museological methods of techniques; otherwise such experience might qualify under other emphases — archeological administration, collections research, or field research. Examples of experience qualifying under museology are: design and preparation of displays and other presentations to the public; conservation of archeological specimens; organization or implementation of modern classification and cataloging systems. Since the title of "curator" is variously used in museums, applicants should describe their duties and responsibilities if they serve in this capacity. Preparation of a major archeological exhibit or other presentation for the public may also be used to satisfy the Education and Training requirements (D), provided the scope and quality of the research and execution are equivalent to those of an M.A. or M.S. thesis.

#### **Teaching:**

The applicant must document one academic year of full-time teaching or the equivalent accumulated within any five-year period. Full-time teaching is considered 12 semester hours per year; at least six hours must be on archeological topics. Direction of field schools is not admissible experience for this emphasis. High school teaching experience is admissible, but it is the responsibility of the applicant to provide an accurate estimate of the high school teaching experience in terms of college semester hours. A person qualifying under this emphasis may satisfy the Archeological Report requirement of Education and Training (D) by the production of a film on archeology, or publication of a report on archeology for use by students, colleagues, or the general public, provided the scope and quality of the film or publication are equivalent to those of an M.A. or M.S. thesis.

#### **Marine Survey:**

The applicant must document one year's experience in Marine Survey, including six months (25 weeks) in a supervisory or independent role. Six months must be in a super-

the operation of the remote sensing devices. The applicant must document his ability to set up, operate and interpret the output of underwater remote sensing devices (to include magnetometer, side-scanning sonar, sub-bottom profiler and bathymetric sounder). Also, the applicant must document training in navigation and a background knowledge of coastal geomorphology and marine geology as these related to cultural resources.

#### Historical Archeology:

Historical archeology is defined as the application of archaeological techniques to sites relating either directly or indirectly to a literature tradition. Historical archeology is most often devoted to the study of sites that date to the expansion of literate populations since the 15th century. An individual practicing historical archeology should be knowledgeable of the recovery and interpretation of both archaeological and archival data, and familiar with history of technology and its material remains including both artifactual and architectural components, their conservation and preservation. The applicant must document a minimum of one year of field and laboratory experience, including 24 weeks of field work and eight weeks of laboratory work under supervision of a professional historical archaeologist\* with sites and artifacts of a historical period, and 20 weeks in a supervisory or equally responsible capacity. A report on such field research, prepared wholly or in the majority by the applicant must show experience or training in primary-archival research under the supervision of a competent specialist as documented by a report, a course transcript, or letter of reference. Also, the applicant must show the design and execution of an historical archaeological study as evidenced by an M.A. thesis or a report equivalent in scope and quality.

#### Archeometric, and Physical and Natural Science Laboratory Research:

Professional archeologists now have at their disposal a vast range of analytical techniques and methods derived from physics, chemistry, geology, zoology, botany, and other physical and natural sciences. Work considered under this emphasis involves the study, as part of the solution of archeological problems, of generally non-cultural phenomena that were parts of cultural systems or ecological systems. The emphasis is particularly intended for work in studies such as geochronology (radiocarbon, thermoluminescence, amino-acid racemization, neutron activation, archaeo- and paleomagnetism, etc.); geoarcheology (including trace-element analyses, mammalogy, vertebrate evolution, etc.); human biology; and other similar analytical studies. In addition to the postgraduate degree with a emphasis in archeology or archeological studies, applicants should demonstrate at least one year of relevant laboratory training followed by at least six months in a supervisory or independent research capacity, and the publication of a report interpreting analytical data.

#### Underwater Archeology:

Underwater archeology can generally be divided into prehistoric or historic sites and nautical sites (ships and their related harbor structures). Underwater archeology is not so much as a separate kind of archeology as archeology in a different environment. Field techniques and artifact preservation differ from terrestrial sites; thus emphasis is placed on qualitative data retrieval and on preservation methods. For applicants specializing in prehistoric and historic underwater sites, experience and training similar to that specified for Archeological Field Research or Historic Archeology are expected with emphasis upon underwater sites, water-saturated artifacts, and preservation methods. Applicants specializing in nautical archeology should be knowledgeable of both archeological and archival data pertaining to ships. The applicant must document a minimum of one year of field and laboratory experience, including at least 2 weeks in underwater survey technique, 24 weeks of supervised underwater fieldwork and 20 weeks of supervisory underwater archeological fieldwork, 8 weeks supervised training in the application of stabilization and conservation methods as they pertain to waterlogged materials, and the design and execution of an underwater archeological study. Applications are also expected to provide documentation demonstrating diving competency.

APPENDIX 11

Secretary of the Interior's  
"Professional Qualifications Standards"



**Professional Qualifications Standards**

The following requirements are those used by the National Park Service, and have been previously published in the Code of Federal Regulations, 36 CFR Part 61. The qualifications define minimum education and experience required to perform identification, evaluation, registration, and treatment activities. In some cases, additional areas or levels of expertise may be needed, depending on the complexity of the task and the nature of the historic properties involved. In the following definitions, a year of full-time professional experience need not consist of a continuous year of fulltime work but

may be made up of discontinuous periods of full-time or part-time work adding up to the equivalent of a year of full-time experience.

#### *History*

The minimum professional qualifications in history are a graduate degree in history or closely related field; or a bachelor's degree in history or closely related field plus one of the following:

1. At least two years of full-time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historic organization or agency, museum, or other professional institution; or
2. Substantial contribution through research and publication to the body of scholarly knowledge in the field of history.

#### *Archeology*

The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus:

1. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management;
2. At least four months of supervised field and analytic experience in general North American archeology; and
3. Demonstrated ability to carry research to completion.

In addition to these minimum qualifications, a professional in prehistoric archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period.

#### *Architectural History*

The minimum professional qualifications in architectural history are a graduate degree in architectural history, art history, historic preservation, or closely related field, with coursework in American architectural history; or a bachelor's degree in architectural history, art history, historic preservation or closely related field plus one of the following:

1. At least two years of full-time experience in research, writing, or teaching in American architectural history or restoration architecture with academic institution, historic

organization or agency, museum, or other professional institution; or

2. Substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

#### *Architecture*

The minimum professional qualifications in architecture are a professional degree in architecture plus at least two years of full-time experience in architecture; or a State license to practice architecture.

#### *Historic Architecture*

The minimum professional qualifications historic in architecture are a professional degree in architecture or a State license to practice architecture, plus one of the following:

1. At least one year of graduate study in architectural preservation, American architectural history, preservation planning, or closely related field; or
2. At least one year of full-time professional experience on historic preservation projects.

Such graduate study or experience shall include detailed investigations of historic structures, preparation of historic structures research reports, and preparation of plans and specifications for preservation projects.