

## Summary of Updates to the Cultural Resources Guidelines

The Cultural Resources Guidelines have been updated to incorporate the 1999 revisions to the FERC's regulations at 18 CFR 380.12, 380.14, Appendix A to Part 380, and 385.2201, and the January 2001 revisions to the Advisory Council on Historic Preservation's regulations at 36 CFR 800. Additional material has been added regarding off-the-record communications and consulting with Indian tribes, however, the revisions are minor and do not change the overall process outlined in the previous version.

The changes may be found in paragraphs:

- I. Last paragraph
- II. B.1, B.4, and B.5.
- III. Lead-in, and B.5.
- IV. Lead-in, B, C.1.
- V. Lead-in, B.8, C.
- VI. Lead-in, B.4.c, B.5, and B.8; and Lead-in to C.
- VII. B.11, C.
- VIII. Lead-in, B.10, and D.



**Federal Energy  
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Commission**

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***GUIDELINES FOR REPORTING  
ON CULTURAL RESOURCES  
INVESTIGATIONS FOR PIPELINE  
PROJECTS***

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## I. INTRODUCTION

During the 20th century a patchwork of laws evolved to protect *cultural resources* on Federal lands. To take into account the effect of Federally funded and permitted *undertakings* on private lands, and to provide a comprehensive framework to protect and manage cultural resources on Federal lands, Congress passed the National Historic Preservation Act of 1966 (NHPA) (16 USC 470). Amendments to the NHPA were passed in 1976, 1980 and 1992.

The NHPA created the *National Register of Historic Places (National Register)* composed of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. The Act also established the *Advisory Council on Historic Preservation (Council)* and directed the states to appoint *State Historic Preservation Officers (SHPOs)*. The Council wrote regulations to implement section 106 of the Act, which are found at 36 CFR 800 (revised in January, 2001).

Section 106 of the NHPA requires all Federal agencies, including the Federal Energy Regulatory Commission (FERC or Commission), to take into account, prior to authorizing an undertaking, the effect of the undertaking on cultural resources listed or eligible for the National Register (*historic properties*). The agency must also afford the Council an opportunity to comment on the undertaking.

***Project sponsors (companies) proposing to construct projects under the Commission's jurisdiction assist the Commission in meeting its obligations under the NHPA.*** These guidelines are intended to assist project sponsors in streamlining preparation of report filings under section 106 of the NHPA.<sup>1</sup> A project sponsor requiring a FERC certificate under sections 3 and 7 of the Natural Gas Act (NGA), should follow the procedures at Part 380.12, 380.14 and Appendix A to Part 380, and all the steps in the guidelines to assist the FERC in complying with section 106. Projects constructed under the Natural Gas Policy Act (NGPA) or the NGA blanket certificate program must comply with the Commission's regulations found at 18 CFR 157.206 and Appendix II of Subpart F. However, the project sponsor should follow the relevant steps in these guidelines when conducting the studies and preparing the reports required under those regulations.

To the extent feasible, project sponsors should coordinate cultural resources investigations with other environmental studies done to assist the Commission in its obligations to comply with the National Environmental Policy Act of 1969 (NEPA). Project sponsors should submit the necessary cultural resources reports, together with the other environmental data, as early as possible so that the FERC staff can use the information in its environmental analysis of the proposed project. Failure to file the necessary information may cause delays in completing review of a project or result in the rejection of an application.

Off-the-record communications: FERC staff and applicants are bound by the regulations at 18 CFR 385.2201 governing off-the-record communications in all contested proceedings before the Commission. Staff cannot discuss issues relating to the merits of the case but can discuss procedural issues relating to NEPA analysis of the case. Contact the Office of External Affairs for further guidance: 1-866-208-3372.

Standards for all cultural resources investigations carried out to assist the Commission in complying with section 106 are provided in section II of these guidelines. These standards include requirements for: professional

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<sup>1</sup> These are Guidelines prepared by staff and do not necessarily reflect the views of the Commission.

qualifications; reports; sensitivity to landowner concerns; erosion control measures; and curation. Procedures for **Unanticipated Historic Properties and Human Remains** are detailed in section III.

To begin, the project sponsor consults with the *appropriate parties* to determine what work is necessary (see section IV of these guidelines). Based on the consultations, the project sponsor may need to prepare an **Overview Report** and/or **Survey Report** which indicates whether or not cultural resources exist in the project area (see sections V and VI). If the **Survey Report** indicates that cultural resources are present and recommends further work to assess their significance (eligibility for the National Register), the project sponsor prepares an **Evaluation Report**, according to the recommendations of the appropriate parties (see section VII).

The FERC prefers that projects avoid historic properties, wherever possible. However, if the project would affect historic properties, the project sponsor prepares a **Treatment Plan** to mitigate effects (see section VIII). The project sponsor implements the **Treatment Plan** after the FERC has consulted with all appropriate parties, executed a Memorandum of Agreement, if applicable, and the Office of Energy Projects (OEP) has issued written notification to proceed. A project sponsor may use **Directional Drilling** or **Boring** to avoid or mitigate the effects of a project on historic properties (see section IX). The project sponsor presents the results of any treatment in a **Management Summary** and/or a **Treatment Report** (see section X).

Section XI provides direction for **Dissemination of Data, Public Participation, and Education**.

## II. STANDARDS AND GENERAL REQUIREMENTS

- A. Professional Qualification Standards: Individuals who conduct and prepare reports on cultural resource investigations must meet the professional qualification standards at 36 CFR 61, section 112(a)(1) of the NHPA, (Secretary of the Interior's Draft Historic Preservation Professional Qualification Standards, 20 June 1997, Fed. Reg. Vol. 62, No. 119) and standards of the applicable SHPO(s) and *land-managing agencies*.
- B. Report Requirements
  - 1. All material filed with the Commission, either hard copy or electronically, containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering : "**CONTAINS PRIVILEGED INFORMATION--DO NOT RELEASE.**" The project sponsor may submit data in an electronic format to OEP staff *in addition* to filing the hard copy with the Secretary of the Commission.
  - 2. Submit all reports to the appropriate parties and *interested persons* meeting the approval of the FERC.
  - 3. File report(s), and reviewers' comments, with the Secretary of the Commission, and provide copies to the appropriate OEP staff.

4. Make reports consistent with guidelines of the SHPO/Tribal Historic Preservation Officer (THPO)(s) and applicable land-managing agencies, the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 Fed. Reg. 44716-42, Sept. 29, 1983), the National Register Bulletin Series of the National Park Service (NPS), the Council publication Consulting About Archeology Under Section 106 (September 1990), the Council's handbook, Treatment of Archeological Properties (November 1980). For more information see the NPS website at [www.cr.nps.gov](http://www.cr.nps.gov) and the Council's website at [www.achp.gov](http://www.achp.gov). There may be situations where the reporting guidelines of two appropriate parties conflict. In such cases the project sponsor should consult with the involved parties.
  5. The report should include a Management Summary or abstract that sums up the study's major findings and provides the acres covered by the survey.
  6. For reports dealing with federally managed underwater or offshore resources, follow the guidelines in Notices to Lessees and Operators of Federal Oil and Gas Leases in the Outer Continental Shelf, Gulf of Mexico OCS Region, NTL 98-06, August 10, 1998, Enclosures 1 and 2 (available from the Gulf of Mexico OCS Region, Minerals Management Service, U.S. Department of the Interior, P.O. Box 7944, Metairie, LA 70010), and the guidelines for the Abandoned Shipwreck Act (55 Fed. Reg. 50116-50145, Dec. 4, 1990). For reports dealing with state managed underwater or offshore resources, such as at river crossings, follow the guidelines of the appropriate SHPO or state agency.
  7. For format of reports use the style guide of American Antiquity (see October 1992 issue, Volume 57, Number 4, pages 749-770).
  8. Label all documents with the unique project name used in the application to the FERC, and the FERC docket number (if known). Indicate on the title page of each report the level of the investigation (Overview, Survey, Evaluation, or Treatment), the project sponsor, the company performing the work, and the date of publication. Also include the names of the main author and the *principal investigator*.
  9. Revise any report to address review comments from the appropriate parties and submit the report in final form.
- C. Investigations on Private Lands: Cultural resources investigations conducted on private lands should be sensitive to landowner concerns and existing land use, especially when carried out prior to the issuance of a FERC certificate. The project sponsor does not have a right to eminent domain under the NGA until a FERC certificate is issued.
- D. Erosion Control Measures: Conduct all archaeological excavations in accordance with the FERC's "Erosion Control, Revegetation, and Maintenance Plan" (Plan). In particular:

1. When *water screening* or de-watering archaeological excavations, install necessary erosion control devices to prevent erosional features from developing, or sediments from contaminating nearby water bodies.
  2. When using heavy equipment for stripping or trenching, install sediment control devices, segregate topsoil, repair drainage tiles and irrigation systems, restore original contours, and revegetate disturbed areas in accordance with the Plan.
- E. Impacts on Natural Resources: To the extent feasible, any cultural resources field studies should be coordinated with other project-related environmental studies, and conducted taking into account the appropriate environmental protection legislation, to prevent inadvertent impacts on natural resources.
- F. Curation.
1. Treat all materials collected and records produced during cultural resource investigations in a manner consistent with 36 CFR 79, particularly the standards at 36 CFR 79.9 and 79.10.
  2. Return material collected from private lands to the landowner after analysis is complete unless the landowner releases control to an approved repository, or state laws dictate otherwise.
  3. Provide the appropriate parties with documentation that all materials collected and records produced have been donated to an approved repository, or returned to their owner.

### III. PLAN FOR UNANTICIPATED HISTORIC PROPERTIES AND HUMAN REMAINS

If studies indicate that historic properties or human remains are likely to be encountered during the implementation of an undertaking, then project sponsors should prepare a plan. The plan should be prepared in consultation with the SHPO/THO and applicable land-managing agencies and describe measures to be taken in the event of the discovery during construction of human remains or cultural resources. **The plan should be developed early in project planning and included with the Application, documentation of consultation, Overview, or Survey report.** The plan is also included in project construction implementation plans and furnished to environmental inspectors and other appropriate construction personnel.

- A. To address cultural resources that may qualify as historic properties, the plan shall **specify the parties to be notified** and provide procedures for:
1. stopping work in the vicinity and protecting the discovery;
  2. notifying the appropriate parties immediately; and

3. evaluating and treating the discovery in consultation with the appropriate parties.

B. To deal with human remains the plan shall **specify the parties to be notified** and provide procedures for:

1. stopping work in the vicinity and protecting the discovery;
2. notifying the appropriate parties, including related *Indian tribes* or appropriate interested persons;
3. making a good faith effort to identify and consult with next-of-kin, the affiliated Indian tribe, lineal descendants or culturally affiliated persons (as defined in the Native American Graves Protection and Repatriation Act (NAGPRA, 25 USC 3001));
4. following state and local laws, policies, and procedures governing the discovery and treatment of human remains on state and private lands (the project sponsor should cite appropriate provisions),  
;
5. assisting the Federal land managing agencies or Indian tribes with compliance with NAGPRA, following any applicable agency/tribal guidance regarding the discovery and treatment of Native American human remains and related cultural items on Federal or tribal lands;
6. following any applicable guidance from Federal land-managing agencies for the discovery and treatment of non-Native American human remains on Federal lands; and
7. treating the remains, in consultation with the appropriate parties, lineal descendants or culturally affiliated persons.

#### IV. **INITIAL CULTURAL RESOURCES CONSULTATION and DOCUMENTATION**

As early as possible in the planning process, the project sponsor or its consultant should attempt to consult with the SHPO/THPO, Indian tribes, and applicable land-managing agencies.

Consultation may indicate that no cultural resources studies are required because the project is of limited scope, involves only previously disturbed areas, or would cause no ground disturbance.

Project-specific consultation may not be necessary if the project sponsor has a preexisting agreement with the SHPO/THPO or land-managing agencies which exempts specific activities because they would not affect historic properties.

If a SHPO/THPO or land-managing agency will not consult directly with the project sponsor or its consultant, then the project sponsor should document its attempt to consult, and provide the information listed in C below to the FERC and the FERC will consult with that party.

Documentation of consultation must be filed with the FERC application.

- A. When consulting with the SHPO/THPO and land-managing agencies, the project sponsor or its consultant should request comments regarding:
1. the need for cultural resources studies; and
  2. the identification of any Indian tribes or other interested persons to be contacted regarding the project.
- B. The project sponsor or its consultant should also conduct independent research into which Indian tribes historically used the project area and request the comments of those tribes regardless of where the tribes currently reside. Consultation with Indian tribes should be conducted in a manner sensitive to the needs and concerns of the tribes.
1. If no response is received from an Indian tribe within 30 days after the request for comments is sent, follow up with a telephone call, or other means, to attempt to verify that the tribe has received the information, and doesn't require any further information or has no comments. Document efforts to follow through.
  2. If a Federally recognized tribe wishes to consult directly with the FERC, notify OEP staff and OEP staff will consult directly with that tribe.
- C. Documentation of consultation includes:

1. The name of the project sponsor, the project name or description, the list of Federal agencies involved, and indication of what section of the NGA or NGPA under which the applicant seeks authority.
2. a description of the project, the area of potential effects (APE), and the location of all facilities;
3. the location of the project by milepost (MP) or station number on 7.5-minute-series U.S. Geological Survey (USGS) topographic quadrangle maps, and/or maps of larger scale; and
4. other information which the project sponsor possesses regarding the project, especially the results of any cultural resources studies conducted for contiguous segments of pipeline and rights-of-way or facilities located adjacent to the proposed project area.

If the appropriate parties agree that the proposed project would not affect any historic property, and no additional studies are necessary, then documentation of consultation is the only submittal required.

## V. OVERVIEW REPORT

The Overview Report is prepared for larger-scale projects, or when required by the appropriate parties. The Overview Report, if required, must be filed with the FERC application.

### A. An **Overview Report** addresses:

1. the location, character, and significance of known cultural resources in the project area based on existing sources and site information; and
2. the potential for the project to affect historic properties.

### B. The **Overview Report** includes:

1. a description of the project, with the locations of all facilities illustrated, by MP or station number, on 7.5-minute-series USGS topographic maps (for looping projects, include the relationship of the proposed project to the existing right-of-way and pipeline[s]);
2. a definition of the APE (note that the same project may have one APE for archaeological sites and a different APE for above ground resources subject to visual, audible or atmospheric effects);
3. the results of the review of the National Register, appropriate site files, and relevant literature;

4. a discussion of previous cultural resource investigations in the project area, and their adequacy;
  5. a description of all known cultural resources in the APE, and its immediate vicinity, with their locations illustrated by MP on 7.5-minute-series USGS topographic maps;
  6. an analysis of the potential for unrecorded cultural resources in the APE, based on environmental data, past and current land-use, and other factors;
  7. a historic context(s) which is/are organized by cultural themes, place, and time, that is specifically tailored to address the cultural resources known to exist, or likely to exist, within the APE (a generic summary is not sufficient) (see 48 FR 44716);
  8. an ethnographic analysis to identify any living Native American groups or other groups with ties to the project area to identify properties of traditional religious or cultural importance to Indian tribes, interested persons, and ethnic groups;
  9. status or results of consultation with any Indian tribes and interested persons which historically occupied or used the project area;
  10. identification of any historic viewsheds or rural historic areas that might be subject to alteration, or visual, audible or atmospheric effects;
  11. status or results of consultations with local museums, historic and archaeological societies, and other individuals and organizations with expertise relating to archaeological, historical and architectural resources in the project areas;
  12. the recommendations of the SHPO/THPO(s) and applicable land-managing agencies and any comments from interested persons; and
  13. recommendations for additional work.
- C. The project sponsor submits the Overview Report to the appropriate parties to review, provides the relevant information to interested persons who meet the approval of the FERC. The project sponsor files the comments of the SHPO/THPO and interested parties with the FERC.

If the appropriate parties agree that the Overview Report provides sufficient information to demonstrate that the project would not affect any historic property, no further work is required.
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## **VI. SURVEY REPORT**

The Overview and Survey reports can be combined into a single report, depending on the size of the project and the guidance of the appropriate parties. The Survey Report, if required, must be filed with the FERC application.

A. A **Survey Report** addresses:

1. the results of a field inventory of the APE to confirm the presence of known cultural resources, and to identify previously unrecorded cultural resources; and
2. the level of effort that was necessary to identify all cultural resources in the APE, based on consultation with the appropriate parties.

B. The **Survey Report** includes:

1. a summary of the Overview Report, unless the Overview Report is combined with the Survey Report (in which case, provide all of the data outlined in part B of section V of these guidelines);
2. the recommendations of the SHPO/THPO and applicable land-managing agencies, including documentation of their review of the Overview Report (unless the Overview Report is combined with the Survey Report) and an explanation of how the project sponsor addressed those comments;
3. comments received from any Indian tribes and interested persons and the status of any ongoing consultation;
4. the research design and a description of study methods. Note that the kinds of resources which are anticipated will dictate the research approach and methodology.
  - a. Discuss the surveyed area including corridor width, length and configuration (i.e., width surveyed on either side of the proposed centerline), *sampling design*, *pedestrian transect* intervals, resource definitions (for example, sites vs. *isolated finds*), subsurface archaeological testing (such as *auger* or *shovel tests*, formal excavation units, *deep trenching* in alluvial settings), and use of nondestructive *remote sensing*, such as aerial photography and *geophysical survey techniques*.
  - b. If several different survey techniques were used, indicate by milepost, milepost segment or station number where each was employed.
  - c. Indicate the size in acres and dimensions of the areas surveyed and unsurveyed.

Prehistoric and historic archaeological sites, architectural resources, traditional cultural properties, and viewsheds may require distinct research and methods sections as each of these resource types draws on different disciplines for approaches to their identification, evaluation and interpretation;

5. the locations, by milepost, milepost segment or station number, of all portions of the APE which have not been surveyed and an explanation of why survey of those areas was not completed;
6. the results of the survey illustrated on 7.5-minute-series USGS topographic maps and the locations of surveyed and unsurveyed areas;
7. the identification of any reroutes, relocated facilities including ancillary facilities, or relocated construction areas (including extra-work spaces, staging areas, storage yards, and new or to-be improved access roads, other areas), and the results of cultural resource surveys related to those areas;
8. the results of the cultural resources survey superimposed onto the project sponsor's construction alignment sheets (scale 1:500 or larger), to verify that the survey has covered all project areas, and so that the project sponsor may factor in the results of the cultural resources survey with other environmental and engineering considerations in designing the project.
9. an analysis of survey data, which:
  - a. describes the cultural resource types present;
  - b. provides interpretations of resource functions;
  - c. identifies the cultural affiliation of the resources, and their age (through absolute or relative dating), if possible;
  - d. discusses patterns and relationships within and among resources; and
  - e. interprets resources within the relevant historic contexts;
  - f. for archaeological sites:
    - i. identifies and describes, to the extent possible using data collected during the survey, the natural, cultural, and disturbed site *stratigraphy*, to the depth of culturally sterile subsoils (examples of disturbance may include cultivation, fill, animal burrowing [*bioturbation*], erosion, and construction); and

- ii. describes soils according to standards such as Natural Resources Conservation Service soil types, *Munsell color*, texture and composition, and characteristic horizons.
- 10. research conclusions and recommendations for any further work necessary to identify or evaluate cultural resources;
- 11. a list of key cultural resources personnel (with vitae, if not provided in a previous report for the same project) and their roles in collecting, analyzing, and reporting information in the report;
- 12. for **each** cultural resource the following information:
  - a. Location.
    - i. Identify the pipeline loop/segment or facility, with MP, and landowner.
    - ii. Show, by MP or station number, on a 7.5-minute-series USGS topographic maps, its relationship to the proposed project facilities.
    - iii. Provide a large-scale individual resource map (such as 1 inch = 200 feet) showing topography, areas surveyed or tested, *artifact* concentrations, *cultural features*, structures, resource boundaries, the pipeline centerline, construction right-of-way, and other project features.
    - iv. Describe the ecological setting and current land use.
  - b. Methods
    - i. Describe and justify the field methods and techniques used to define each resource's extent and integrity.
    - ii. Describe the location of the resource in relation to the APE. If possible, define the entire boundary of each cultural resource. If it is not possible to define the entire boundary, explain why (e.g. landowner denied access). If possible, provide information on the depth of the site's archaeological deposits.
  - c. Artifacts, Cultural Features and Other Remains
    - i. Describe the artifacts, cultural features, structures, and other remains identified or recovered in the course of the investigations.

- ii. Catalog and analyze all collected materials. Present information in the form of tables, graphs, figures, or charts, where possible. For archaeological sites, include information on which stratum individual artifacts and features were found in.
  - iii. Provide plan views, profiles, and photographs of all cultural features or structures.
  - iv. Illustrate diagnostic and important artifacts.
- d. Record cultural resources on forms specified by the SHPO/THPO(s) and/or the applicable land-managing agencies, and append the site forms to the survey report. Site forms must include Universal Transverse Mercator coordinates, environmental data, resource description, maps and photographs and, where visual effects are of concern, panoramic views.

- C. The project sponsor submits the Survey Report to the appropriate parties to review and provides the relevant information to interested persons who meet the approval of the FERC. The project sponsor files the comments of the SHPO/THPO and other parties with the FERC.

If the appropriate parties agree that the results in the Survey Report are sufficient to demonstrate that the project would not affect any historic property, no additional fieldwork is required. In that situation, the Survey Report represents the final report for the project.

## VII. EVALUATION REPORT

A project sponsor can combine all elements of Overview, Survey, and Evaluation reports into a single, synthetic project report, if the appropriate parties allow. In that case, the report also includes all of the data listed in sections V.B and VI.B.

### A. An **Evaluation Report**:

- 1. provides the results of limited archaeological excavations and analyses, or other investigations such as documentation of structures or traditional cultural properties, to assess the National Register eligibility of individual resources; and
- 2. assesses project effects on historic properties.

### B. The Evaluation Report includes:

1. a brief project description;
2. a summary of all previous cultural resource investigations for the project;
3. the recommendations of the appropriate parties, including their review of previous cultural resource investigations, and an explanation of how the project sponsor addressed those comments;
4. descriptions and locations (with appropriate maps) of the resources studied, and the reasons for the investigations conducted;
5. the research design, and a description of methods and analytical techniques;
6. the results of fieldwork and analyses, including evaluations of the physical integrity of each cultural resource, the data it contains, and the ability of those data to address important research questions;
  - a. Where archaeological sites are concerned:
    - i. provide the type, number, and location of all excavation units at each site; and
    - ii. provide the results of any special analyses (such as for *geomorphology*, *lithics*, *ceramics*, *pollen*, *macrobotany*, faunal collections, *radiocarbon dating*).
  - b. Where historic and architectural resources are concerned:
    - i. determine (if possible) the builder, age, occupants/users, and function of each structure through site-specific historical research (e.g., courthouse records search, informant interviews);
    - ii. interpret each structure within the proper historic context, in light of associations with patterns, events, or people of local, regional, or national significance; and
    - iii. analyze the architectural and engineering significance of each structure.
7. an analysis of the data (catalog collected artifacts, and present data, where possible, in tables and figures; describe and illustrate all formal excavation units [profiles of 1 x 1 m or larger blocks], cultural features, and *diagnostic artifacts*; provide photographs of all cultural features and structures);
8. an evaluation of the significance of each cultural resource studied or tested, in terms of any defined historic contexts, state plans, guidance from the SHPO/THPO(s) and applicable land-

managing agencies, standards presented by the NPS in its National Register Bulletin series, and the criteria for National Register eligibility found at 36 CFR 60.4; the criteria(ion) under which the resources is eligible;

9. an assessment of both the direct and *indirect effects* of the project on historic properties;
  10. recommendations for further work, including avoidance or treatment (if the project sponsor intends to avoid historic properties through reroutes or relocation of project facilities or construction areas, provide the results of cultural resource surveys of those reroutes or new project areas);
  11. a list of key cultural resources personnel (with vitae, if not previously provided in the same project) and their roles in collecting, analyzing, and reporting information in the report;
  12. updated site forms, if necessary, and other supporting documentation (if required by the appropriate parties, with landowners' consent, also include National Register nomination forms for historic properties); and
  13. a copy of the original scope of work for the investigations at this level of study.
- C. The project sponsor submits the Evaluation Report to the appropriate parties to review and provides the relevant information to interested persons who meet the approval of the FERC. The project sponsor files the comments of the SHPO/THPO and other interested parties with the FERC.

If the project avoids all historic properties, or the appropriate parties agree that none of the evaluated resources are eligible for the National Register, then no further fieldwork is necessary. In this case the Evaluation Report is the final report for the project. However, if monitoring is recommended for a historic property which has been avoided, a Management Summary or Treatment Report is required. See section XI.

## VIII. TREATMENT PLAN

If the project would affect any historic property that the appropriate parties agree requires treatment, then the project sponsor prepares a Treatment Plan. If a project would adversely affect a historic property, the FERC is responsible for executing an MOA with the SHPO/THPO unless another agreement document or alternative process is in force for the undertaking.

- A. A **Treatment Plan** provides a proposal for the mitigation of effects upon any historic property that a project would affect. It can include data recovery, documentation, restoration or other measures.

B. A Treatment Plan includes:

1. a summary of previous cultural resource investigations and a description of all historic properties in the APE (it should provide a clear statement[s] about the elements of each property that qualify it for the National Register, and the project's effects upon each of those elements);
2. the recommendations of the appropriate parties. Provide their opinions on the National Register eligibility of the historic properties and how those properties would be affected by the project. Also include the comments of any interested persons and Indian tribes;
3. a discussion of how the proposed treatment addresses the concerns of the appropriate parties;
4. the location of each historic property on 7.5-minute-series USGS topographic maps, and large-scale site-specific maps for all historic properties, which define each property's relationship to the APE (e.g., pipeline centerline, construction right-of-way, or project facility boundaries);
5. a discussion of how the proposed treatment measures reduce or eliminate effects on each element which contributes to the significance of each property;
6. an explanation of why it is not possible or practical to avoid the historic property concerned;
7. a plan for the incorporation of specific treatment efforts into project construction plans and contractor specifications, including inspector and construction workforce training, details on alignment sheets, and monitoring as needed.
8. site-specific treatment measures including, but not limited to:
  - a. reducing the width of the right-of-way;
  - b. preserving the historic property in place;
  - c. barricading, flagging, or fencing;
  - d. boring or drilling under the historic property (see section IX);
  - e. using matting or padding to protect the historic property;
  - f. monitoring or trench inspection;
  - g. restoring the right-of-way to mitigate effects on historic viewsheds;

- h. using long-term stabilization measures to prevent erosion of intact portions of historic properties within the APE;
  - i. repairing, rehabilitating, restoring, or relocating standing structures;
  - j. documenting structures and objects according to the standards of the Historic American Building Survey or the Historic American Engineering Record (HABS/HAER, see 48 FR 44716);
  - k. plans to reduce audible effects (e.g through construction of noise barriers); and
  - l. archaeological data recovery (see VIII.C below).
9. a schedule for completion of the following:
- a. fieldwork;
  - b. a Management Summary;
  - c. laboratory processing and analyses;
  - d. conservation and permanent curation of cultural materials and records;
  - e. research and ancillary studies; and
  - f. draft and final reports.
10. identification of personnel (with vitae if not previously provided in the same project) who will be involved in carrying out the treatment plan including:
- a. the Principal Investigator(s);
  - b. project managers or field directors;
  - c. specialists such as geomorphologists and historians;
  - d. crew chiefs/field and laboratory supervisors;
  - e. field and laboratory technicians; and
  - f. Indian tribal members or other interested persons who may assist in treatment measures, e.g., monitoring, excavation, where applicable.

- C. When data recovery is the proposed method of treatment, include:
1. a site-specific research design that explains how the proposed fieldwork and analyses will address the relevant research questions or hypotheses for each historic property to be treated;
  2. a scope-of-work for the data recovery which:
    - a. provides site-specific justifications for the level of effort and proposed fieldwork at each historic property being treated;
    - b. presents a quantitative description of the extent of the data recovery in terms of both the total site size, and the portion of the historic property within the APE;
    - c. indicates the site-specific location of excavation units, collection transects, or other studies (illustrated on a large-scale site map);
    - d. discusses field methods and techniques, including tools and equipment, and which estimates the time and number of people required to complete the fieldwork; and
    - e. provides a plan for the analysis of data, laboratory methods and techniques, and report preparation.
  3. to the extent feasible, ways and means to make the results of cultural resource investigations available to the general public, including dissemination of information, public participation and education programs (see section XII).
- D. The project sponsor submits the Treatment Plan to the appropriate parties for review and to those interested persons designated by the FERC. The project sponsor files comments of SHPO/THPO and other parties with the FERC.

If the plan is acceptable, and after the Certificate/Order is issued, the Director of OEP will notify the project sponsor in writing to implement the treatment. If the historic property is on Federal or tribal land the Indian tribe or land manager may need to issue a separate permit.

## IX. BORING/DIRECTIONAL DRILLING

- A. **Boring or Directional Drilling** may be a means to **avoid or mitigate** impacts on historic properties, depending on the circumstances. The FERC staff considers boring/drilling avoidance when:
1. the pipeline is at least 25 feet away from any portion of the historic property; and

2. the project sponsor can ensure that no construction, operation, or maintenance activities will occur within the boundaries of the historic property.

If these criteria cannot be met, the FERC staff considers boring/drilling mitigation, requiring a Treatment Plan (see section IX.C).

If boring/drilling is used for either avoidance or mitigation, the project sponsor may be required to allow access to the historic property for future research or data recovery (depending on the type of historic property), unless the landowner objects.

- B. When boring/drilling is used for avoidance, the project sponsor provides the following information, as appropriate:
  1. a description of the historic property being bored/drilled under, including its maximum depth, and a representative stratigraphic profile;
  2. a brief description (using non-technical language) of the proposed boring/drilling operation including, but not limited to, the location of bore pits, lay down areas, spoil piles, the depth (in relation to the surface and the deepest part of the historic property) and diameter of the borehole, and the time required to perform the boring/drilling;
  3. scaled plan and profile drawings which show relationship of the boring/drilling location and associated work areas to the boundaries of the historic property (highlight important features such as the final location of the pipeline, and landscape features);
  4. an explanation or illustration of how construction equipment will access the right-of-way on either side of the historic property to avoid it (none of the equipment may cross the historic property); and
  5. a summary of the results of pre-construction geotechnical studies such as core sampling with a description of the substrate, and an assessment of the likelihood of successfully boring/drilling through this substrate (including an explanation of how obstacles like rocks, features like sinkholes, and buried peat bogs, etc. could affect the boring/drilling).
- C. When boring/drilling is used for mitigation, the project sponsor provides the following information, as part of a Treatment Plan:
  1. a discussion of why it is not feasible to avoid the historic property (indicate if reroutes were examined, and why they were rejected);

2. a contingency plan to be used if the boring/drilling is unsuccessful (provide for stopping work, consulting with appropriate parties, and specify procedures if the historic property is affected);
3. a discussion of how aboveground features, such as earthworks, railroad grades, roads/trails, canals, or structural remains will be documented, mapped, and photographed prior to boring/drilling (consult with the appropriate parties for documentation standards);
4. a description of how access to the right-of-way and maintenance activities will affect the historic property over time, and measures necessary to protect the historic property after construction (such as monitoring, planting hedgerows across the right-of-way to prevent vehicular access, and measures to prevent archaeological looting);
5. a schedule for the boring/drilling; and
6. a contingency plan for treatment, with a schedule for its implementation, if the historic property is affected by a failed bore/drill, subsequent maintenance, or other activities.

## **X. MANAGEMENT SUMMARY AND TREATMENT REPORT**

A. A **Management Summary** is a preliminary field report for complex investigations, such as archaeological data recovery associated with a Treatment Plan. However, for historic properties subject to minor investigations, such as monitoring during boring/drilling, the Management Summary may be the last report for the project.

1. The Management Summary includes:
  - a. a summary of the treatment measures conducted at each historic property;
  - b. the location (by facility and MP) of each historic property;
  - c. dates of fieldwork and the names of the key personnel involved with the cultural resources investigations;
  - d. a description of the amount of excavation, if archaeological data recovery was done, indicating the number and location of the excavation units (illustrated on a large-scale site map);
  - e. the results of the treatment, including a summary description of the materials collected or other documentation prepared, and the effectiveness of the treatment;
  - f. the analyses conducted to date, and/or planned for the future; and

- g. conclusions, and a schedule for the draft Treatment Report, if necessary.
  - 2. The project sponsor submits the Management Summary to the appropriate parties within 30 days of completing fieldwork.
- B. A **Treatment Report** summarizes prior studies and describes the site-specific results of implementing the Treatment Plan. It is a technical report necessary to document activities such as archaeological data recovery, HABS/HAER recordation, or the restoration of structures, features, or historic viewsheds, and the effectiveness of the treatment.

The project sponsor submits a Treatment Report to the appropriate parties within one year of completion of fieldwork, unless another date was specified in the Treatment Plan.

## **XI. DISSEMINATION OF DATA, PUBLIC PARTICIPATION, AND EDUCATION**

- A. The project sponsor:
  - 1. excludes from the main body of the final report all precise site locational information, and<sup>1</sup> other proprietary or sensitive data (place these data in separate appendices whose distribution is limited to the appropriate parties); and
  - 2. distributes copies of the final versions of project reports (either Overview, Survey, Testing or Treatment), within one year after the appropriate parties accept the report (unless the parties agree to another schedule) to appropriate repositories such as, regional universities, colleges, and libraries.
- B. Project sponsors may want to consider:
  - 1. publishing articles in popular or technical journals documenting cultural resource investigations for FERC certificated projects;
  - 2. making the results of cultural resource investigations available to the general public, through the distribution of report summaries, internet publication, brochures, or other means (excluding specific site locations, proprietary, or other sensitive information); or
  - 3. implementing public education programs, such as inviting the public to view archaeological fieldwork, giving slide or video presentations, or creating interpretive exhibits.

## **XII. DEFINITIONS**

Unless otherwise defined, all terms in this document are used in accordance with 36 CFR § 800.16.

**Advisory Council on Historic Preservation** is an independent agency of the US Government whose members are charged with advising the President and the Congress on matters relating to historic preservation, recommending measures to coordinate activities of Federal, State, and local agencies and private institutions and individuals relating to historic preservation; and advising on the dissemination of information pertaining to such activities. The Council reviews the policies and programs of Federal agencies in regard to compliance with the National Historic Preservation Act. It is also responsible for commenting to the Agency on an undertaking that affects historic properties.

**Appropriate parties** means the FERC staff, applicable SHPO/THPO(s), land-managing agencies, and Indian tribes who own or manage land within the APE.

**Area of potential effects (APE)** means the geographic area within which the project may cause physical, visual or audible effects to the character or use of historic properties. This includes all areas of construction, such as rights-of-way (ROW), compressor stations, meter stations, staging areas, extra-work spaces, storage yards, communication sites, access roads, and other ancillary facilities.

**Artifacts** are objects which have been made, modified or used by humans.

**Auger testing** is the use of drill-rig-mounted or hand-held coring tool to provide a columnar sample of subsurface soils which may be examined for the presence of cultural remains.

**Bioturbation** is the disturbance of deposits by activity of rodents, worms, insects.

**Cultural features** are cultural remains such as hearths, walls, foundations, post molds, pits, etc.

**Cultural items** means human remains and associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony as defined in § 2(3) of the Native American Graves Protection and Repatriation Act.

**Cultural resources** means any prehistoric or historic site, district, object, cultural feature, building or structure, cultural landscape, or traditional cultural property (including artifacts, records and related material remains). The project sponsor identifies all cultural resources in the APE and the appropriate parties consult to determine if any qualify as historic properties.

**Deep trenching** is the use of heavy equipment (e.g. a backhoe) to excavate a sample of buried deposits which would not be accessible by manual excavation (often used to sample floodplain soils at river crossings).

**Diagnostic artifacts** are artifacts indicative of a particular time period or cultural tradition.

Ethnography is the systematic study and recording of human cultures.

**Faunal remains** are animal remains, usually bones.

**Geomorphology** is the study of landforms and the processes which produced them.

**Geophysical survey technique** is a type of remote sensing using devices such as proton magnetometers, ground penetrating radar, or side-scan sonar, to detect cultural remains.

**Historic property** means any cultural resource that is listed in or eligible for the NRHP, as well as properties listed as National Historic Landmarks (NHLs). All reports should specify if an historic property is an NHL. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet NRHP criteria.

**Indian tribe** means any Native American group recognized by the Federal government, as defined in section 301(4) of the NHPA. Native Americans who do not have tribal status can become involved as interested persons. Indian tribes which do not own or manage land within the APE would also become involved as interested persons.

**Indirect effects** are those effects on historic properties which are removed in time and/or space from their proximate causes (e.g. increased access to an archaeological site resulting in an increased potential for vandalism of that site).

**Interested persons** means those organizations and individuals that are concerned with the effects of an undertaking on historic properties.

**Isolated finds** may be single artifacts or a group of a few artifacts, or a single feature, which is (are) not associated with any other cultural features or landscapes, or large concentrations of artifacts, and may be out-of-context. Various SHPOs and land-managing agencies set different thresholds to distinguish isolates from small sites.

**Land-managing agency** means any Federal or state agency, or Indian tribe, which owns or manages lands affected by a project.

**Lithics** are stone tools and the "debitage" or debris created in the process of tool manufacture.

**Macrobotany** is the study of plant specimens such as nutshell fragments, seeds, twigs, etc. as distinct from pollen and phytoliths.

**Munsell color** is a color expressed in terms of its "value," "hue" and "chroma" determined by comparison with a standardized chart most often used in describing soils.

**National Register of Historic Places** is a listing of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture.

**Pedestrian transects** are systematic surface inspections of the APE by walking parallel linear paths spaced at regular intervals.

**Principal Investigator** is a qualified individual responsible for the design and implementation of a cultural resources study.

**Project sponsor** is a natural gas company proposing an activity under the jurisdiction of the FERC.

**Radiocarbon dating** is an absolute dating technique based on C-12 to C-14 isotope ratios in organic, i.e. once living, samples such as wood, charcoal, textiles.

**Remote Sensing** is a technique for discovering cultural remains without actual excavation using geophysical techniques, aerial photography, or satellite imagery.

**Sampling design** is a plan for recovering a statistically representative portion of the cultural resources within a survey area.

**Shovel testing** is the use of a shovel to probe into subsurface soils to determine the presence or absence of buried cultural resources.

**SHPO** means the State Historic Preservation Officer, or any alternative person duly designated by the state or pursuant to section 101(d) of the NHPA for affected tribal lands. If the SHPO declines to consult with the project sponsor, the project sponsor will consult the appropriate OEP staff

**Stratigraphy** is the sequence of layered deposits (strata) produced by either natural geological processes or sequential cultural activity.

THPO means the Tribal Historic Preservation Officer, who has assumed the responsibilities of the SHPO for the purposes of Section 106 compliance on tribal lands in accordance with section 101(d)(2) of the NHPA.

**Traditional Cultural Property** is a property that is eligible for the National Register because of its association with cultural practices or beliefs of a living community that are rooted in that community's history and that are important in maintaining the continuing cultural identity of the community.

**Tribal lands** means all lands within the exterior boundaries of any Indian reservation and all dependent Indian communities as defined in § 301(14) of the NHPA or section 2(15) of the NAGPRA.

**Undertaking** is a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including a) those carried out by or on behalf of the agency; b) those carried out with Federal financial assistance; c) those requiring a Federal permit, license, or approval; and d) those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency.

**Water screening** is the process of separating artifacts from soil using water sprayed through hardware cloth.

## APPENDIX

### RELEVANT LEGISLATION AND REGULATIONS

American Indian Religious Freedom Act of 1978 (AIRFA) is a policy statement pertaining to the protection of American Indian religious freedom. This act:

- ! encourages federal protection of sites considered sacred to Native Americans;
- ! requires the President to order agencies to review their policies and procedures in consultation with traditional native religious leaders; and
- ! directs federal agencies to evaluate their policies and procedures and to make changes where necessary to protect and preserve Native American religions and their practices.

Archeological Resources Protection Act of 1979 (ARPA), as amended. This act:

- ! protects cultural resources on Federal and Indian lands;
- ! provides for a process of issuing permits to excavate sites on Federal and Indian lands; and
- ! establishes criminal penalties for unauthorized or illegal excavation or vandalism of sites on Federal and Indian land.

The Department of the Interior issued regulations to implement ARPA and provided standards and procedures for following the Act in 43 CFR Part 7.

National Environmental Policy Act of 1969 (NEPA). Among the listed goals of the Act are to "preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible an environment which supports diversity and variety of individual choice." The FERC coordinates actions taken to fulfill its obligations under cultural resource preservation statutes with its NEPA obligations. NEPA required documents (Environmental Assessments and Environmental Impact Statements) provide a vehicle for documentation and review of FERC cultural resource compliance on a project by project basis.

The Council on Environmental Quality has regulations implementing the NEPA. These are found at 40 CFR 1500.

National Historic Preservation Act of 1966 (NHPA) (16 USC 470), as amended (1976, 1980 and 1992). The Act defines historic preservation to include "the protection, rehabilitation, restoration and reconstruction of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, or culture." The NHPA:

- ! created the National Register of Historic Places, a listing of historic properties of national, regional, state and local significance;
- ! established the Advisory Council on Historic Preservation, an independent Federal agency responsible for administering the protective provisions of the Act;
- ! directed the states to appoint State Historic Preservation Officers; and
- ! required Federal agencies to "take into account" the effects of their undertakings on properties on or eligible for the National Register of Historic Places and provides the Advisory Council on Historic Preservation an opportunity to comment on the undertaking under Section 106 of the Act.

The Advisory Council on Historic Preservation has regulations implementing Section 106 of the Act. These are found at 36 CFR 800 (see below).

Native American Graves Protection and Repatriation Act (25 USC 3001) (NAGPRA). Passed in 1990, NAGPRA requires that:

- ! an inventory be made of all Native American human remains and "cultural items" (as defined in Section 2(3) of the Act) in Federally funded museums and Federal collections, to be returned--repatriated--to the Native American group on whose land the material was found, or to the group with the closest cultural affiliation;
- ! remains may be removed from Federal or tribal land only after:
  - a permit under the Archaeological Resources Protection Act is issued;
  - ownership has been determined; and
  - consultation with (or consent of, if tribal lands are involved) the appropriate Native American group or Native Hawaiian organization with proof of consultation or consent is shown; and
- ! if there is an inadvertent discovery of Native American remains or "cultural items" on Federal or tribal lands (including in the course of a construction project), that the activity stop, the remains be protected, and the land-managing agency and the appropriate Native American group be notified in writing.

The Secretary of the Interior has issued regulations for NAGPRA at 43 CFR 10.

The Minerals Management Service (MMS) of the Department of the Interior regulations requiring Outer Continental Shelf operators of federal oil, gas, sulphur, and salt leases and pipeline right-of-way holders to conduct surveys and prepare reports. See also MMS Notice to Leaseholders NTL No. 98-06 (August 10, 1998) (30 CFR 250.126, 250.203(b)(15), 250.203(o), 250.204(b)(8)(v)(A), 250.204(s), and 250.1007(a)(5)).

36 CFR 60. National Register of Historic Places. These regulations describe:

- ! the criteria which make a property eligible for the National Register of Historic Places; and
- ! the process for nominating a property to the National Register.

36 CFR 61. Procedures for Approved State and Local Government Historic Preservation Programs. Appendix A describes the minimum qualifications for professionals in the fields of history, archaeology, architectural history, architecture, and historic architecture.

36 CFR 79. Curation of Federally-Owned and Administered Archeological Collections. These regulations establish definitions, standards, procedures, and guidelines to be followed by Federal agencies to preserve collections of prehistoric and historic material remains, and associated records, recovered under the authority of federal law, including the National Historic Preservation Act.

36 CFR 800. Procedures of the Advisory Council on Historic Preservation for the Protection of Historic Properties. These regulations define the process to be used by Federal agencies to meet their responsibilities under Section 106 of the National Historic Preservation Act. Among other things, they describe the process by which the Advisory Council renders its comments on a Federal undertaking to the responsible Federal agency.

Abandoned Shipwreck Act Guidelines (55 FR 50116-50145). The National Park Service issued this document in 1990 as a requirement of the Abandoned Shipwreck Act of 1987 (43 USC 2101-2106). The Guidelines provide advice to Federal and state agencies on shipwreck management programs and contain special guidance for dealing with "historic" shipwrecks.

Secretary of the Interior Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716-42). The National Park Service issued this guidance document in 1983. Among other things, it describes the results to be achieved by Federal agencies when planning for the identification, evaluation and treatment of historic properties.