

STOP, LOOK, LISTEN & PLAN



GUIDE
TO **NAVIGATING**
PROJECT DEVELOPMENT
AND **COMPLIANCE**
REVIEWS



NATIONAL PARK SERVICE

Preface

This guidebook was developed by Alesha Cerny, Athena Demetry, Hillary Robison, Joe Simkanin, and Amanda Stein as an action learning team project for the 2018 GOAL Academy. Our project vision is to leverage teamwork and understanding across disciplines to enhance the National Park Service culture of protecting resources through thoughtful compliance.

The **National Park Service** (NPS) was established by the **Organic Act**, which says:

“The service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations . . . by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

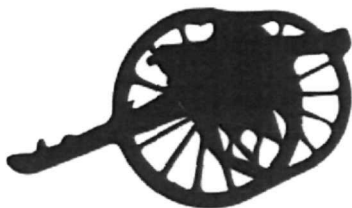
NPS Mission

The NPS preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations.

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Purpose of This Guide

The purpose of this guide is to help staff understand the compliance process and why it produces better projects and decisions. It is targeted to staff working to accomplish projects on the ground and provides examples relevant to the full range of work the NPS addresses. Successful application will aid in the development of good projects, protect and enhance our resources, and move projects efficiently through the environmental review process.

Some project proposals and their associated environmental reviews may be relatively simple, many are not. This guide provides a collection of resources including commonly used and misunderstood terminology, best practices, watch-out situations, *overview on regulations and policy*, compliance process flowcharts, and case studies that provide real-world perspectives.

The guide does not provide definitive solutions to the unlimited number of situations that can arise as you develop a proposal and move through the planning and review process, nor does it replace park-specific compliance procedures. However, it can point you in the right direction and help you develop informed questions to take to your compliance specialists.

Acronyms

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
BA	Biological Assessment
BMP	Best Management Practice
CatEx	Categorical Exclusion
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLI	Cultural Landscape Inventory
CLR	Cultural Landscape Report
CRM	Cultural Resources Management Team
CSI	Cultural Sites Inventory
CUA	Commercial Use Authorization
CWA	Clean Water Act
DAB	Development Advisory Board
DEIS	Draft Environmental Impact Statement
DO	Director's Order
DOE	Determination of Eligibility
EA	Environmental Assessment
EIS	Environmental Impact Statement

EQD	Environmental Quality Division
ERI	Ethnographic Resources Inventory
ESA	Endangered Species Act
ESF	Environmental Screening Form
FONSI	Finding of No Significant Impact
FR	Federal Register
GIS	Geographic Information System
GMP	General Management Plan
GPRA	Government Performance and Results Act
GPS	Global Positioning System
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscapes Survey
HRS	Historic Resource Study
IACUC	Institutional Animal Use and Care
IDT	Interdisciplinary Team
LCS	List of Classified Structures
MBTA	Migratory Bird Treaty Act
MOA	Memorandum of Agreement
NAE	No Adverse Effect
NAGPRA	Native American Graves Protection & Repatriation Act

NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOI	Notice of Intent
NRHP	National Register of Historic Places
PA	Programmatic Agreement
PCE	Programmatic Categorical Exclusion
PDQ	Project Development Questionnaire
PEPC	Planning, Environment, & Public Comment
ROD	Record of Decision
SCC	Servicewide Comprehensive Call
SHPO	State Historic Preservation Office
SOF	Statement of Findings
SRS	Special Resource Study
SUP	Special Use Permit
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Office
TIC	Technical Information Center
USC	United States Code
WSRA	Wild and Scenic River Act

Examples of Actions That Trigger Compliance Reviews

Facilities Management & Maintenance

- constructing a facility (campground, building, trail, road, utilities, kiosks, etc.)
- rehabilitating or maintaining a facility (replacing windows, clearing ditches, etc.)
- installing gates, signs, fences

Interpretation & Education

- developing and implementing interpretive plans (interpretive prospectuses, audio-visual plans, museum exhibit plans, wayside exhibit plans).
- developing new education programs
- installing wayside exhibits and visitor center exhibits
- volunteer activities such as trail maintenance and repair work

Visitor Protection & Management

- changes in the amounts or types of visitor use to ensure visitor safety or resource protection in accordance with regulations.
- designating trail side camping zones with no or minimal improvements.

- changing trailhead quotas or visitor carrying capacities
- writing a Fire Management Plan
- digging hand line

Special Uses & Commercial Uses

- proposing fees for services
- commercial use authorizations or special use permits;
- right of way, scientific research, easement permits
- permits for demonstrations, gathering, ceremonies, concerts, etc.
- upgrading or adding new overhead utility facilities to existing poles; adding new poles

Natural Resources Management

- revegetation, including digging and collecting native species propagules.
- aerial flights for surveys and logistical support, including sound disturbance and landing (Wilderness Act).
- collecting biological samples, including potential “take” of species (Endangered Species Act).

- installing plot markers in wilderness.
- animal research requiring IACUC review

Cultural Resources Management

- repairs to historic structures
- tribal gathering plan
- changes to cultural landscape features
- planning documents such as CLR, HSR, etc.



Designing a Good Project

Checklist

Involve others to help think through your idea.

Be able to communicate:

- What problem will your project solve?
- What are your goals and objectives?
- What is the scope?
- When will your proposed work take place?
- Where will your proposed action be located?
- What is the area of disturbance?
- What types of actions are you considering?
- Who will do the work?

Discuss your project idea with your Compliance Specialist:

- Does the project fit within an existing PCE?
- Does the project fit within an existing PA with SHPO?

Prepare descriptive documents:

- Area of Potential Effect
- Maps
- Photos
- Site Plans and Designs
- Complete ESF and Project Effects Questionnaire

Prepare studies: After discussion with your compliance specialist and natural and cultural resources representatives, they may identify studies, surveys, or consultation with other agencies that require lead times of 2 to 3 years, or such studies may already exist.

Examples include:

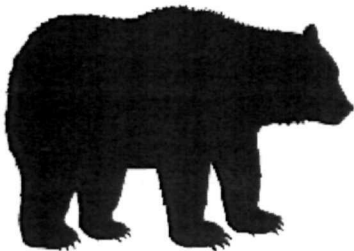
- archaeological inventory/survey
- Cultural Landscape Inventory (CLI)
- Cultural Landscape Report (CLR)
- cultural resources survey
- ethnographic resources study
- sensitive plant survey
- sensitive wildlife survey
- wetland delineation



Watch Out Triggers for Compliance Reviews

- Look at your proposed action. If any of these situations apply, a compliance review is typically warranted.
- takes place on federal lands or is funded with federal dollars
- is located in designated or proposed wilderness or wild and scenic river
- is located in a national monument, is a historic property, NHL or national natural landmark
- affects a cultural landscape or viewshed
- involves Native American resources, sacred sites, or tribal lands
- is precedent setting, requires permitting, or changes a use
- requires digging or excavation (soil disturbance) - could affect archeological and natural resources
- affects species listed or proposed for listing as endangered or threatened species, or has impacts on designated critical habitat for these species

- has controversial environmental effects
- is related to other actions with individually insignificant but cumulatively significant environmental effects
- contributes to the introduction or spread of nonnative invasive species
- an emergency situation threatening life, death, property (then an alternate compliance path is required)



What is NEPA and Why is it Important?

Passed by Congress in 1969, the National Environmental Policy Act (NEPA) established a national policy of encouraging productive and enjoyable harmony between human beings and the environment for present and future generations. To further this policy, NEPA requires federal agencies like the NPS to evaluate the environmental impacts of its actions and to involve the public in the decision-making process. Within the NPS, the NEPA process is an essential tool for ensuring informed decisions that conserve park resources and values.

NEPA guides project planning by establishing an umbrella to coordinate compliance with federal, state and local laws, while protecting natural and cultural resources such as:

- air quality
- wildlife
- archeological resources
- ethnographic resources
- historic structures
- geological features
- lightscapes



- soundscapes
- human health and safety
- land use
- visitor use
- waterbodies and wetlands
- water quality
- wilderness

Director's Order 12 (DO-12) and the accompanying NPS NEPA Handbook set forth the policies and procedures by which the NPS meets its NEPA requirements. DO-12 describes the NEPA-related roles and responsibilities of NPS staff and highlights the key instructions, requirements, and policies related to NEPA planning and compliance. The NPS NEPA Handbook, along with supplemental guidance that will be issued on an as-needed basis to address specific NEPA-related topics, serves as the "how-to manual" for NPS NEPA planning and compliance.

NEPA Best Practices That Produce the Best Projects

Project development practices that follow both the letter and spirit of NEPA do the following:

- **Integrate the NEPA process with other planning** at the earliest possible time to ensure that planning and decisions reflect environmental values.
- **Public Process:** Encourage and facilitate public involvement.
- **Interdisciplinary:** Integrate information from a variety of appropriate disciplines, including the natural and social sciences and cultural resources, into the analysis and decision-making process. Encourage the participation of specialists from a variety of backgrounds who can contribute their relevant expertise.
- **Inclusive:** In addition to evaluating the impacts of an action on natural and cultural resources, evaluate social and economic impacts of that action when they are inter-related with natural or physical environmental effects.
- **Focused and Concise:** NEPA reviews should focus on important environmental issues and avoid amassing needless detail. NEPA's purpose is not to generate paperwork—even excellent paperwork—but to

foster excellent action.

- **Objective and Science-Informed:** Agencies must ensure the professional and scientific integrity of information and analyses used in the NEPA process. If you rely on the professional judgment of a specialist or expert, this judgment should be based on data, education, or experience and should be substantiated with literature or other experts' opinions.
- **Ultimately Site-Specific:** Environmental effects must be analyzed in adequate detail so as to inform decision making. For site-specific actions, this means site-specific detail.

Actions Requiring NEPA Review

Approval of specific projects, such as construction or management activities, located in a defined geographic area. Projects include actions approved by permit as well as federal and federally assisted activities. *Examples: construction of a visitor contact station or trail system; issuance of special use permits.*

Adoption of programs, such as a group of concerted actions to implement a specific policy or plan. *Example: approval of National Heritage Area management plans*

Adoption of formal plans, whose implementation would result in environmental impacts. *Examples: general management plan, fire management plan, or wildlife management plan.*

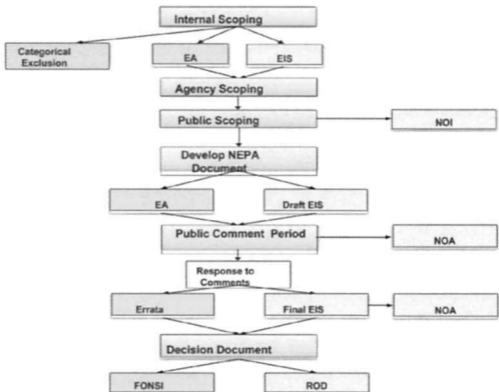
Adoption of official policy, such as rules, regulations, and formal documents establishing an agency's policies. *Example: promulgation of a special regulation.*

NEPA High Level Overview

NEPA starts with a “proposed action.”

Proposed action = an action proposed by the NPS or another entity to do something (i.e., to alter a natural resource). Think - dig, build, fly over, re-vegetate, survey, sample, etc.

Key Steps in a Typical NEPA Process



The path you choose depends on how serious or controversial the potential effects are: CE = Categorical Exclusion, EA = Environmental Assessment, EIS = Environmental Impact Statement.

Other paths: Memo to File, adopt another agency's NEPA, cooperate on another agency's NEPA.

NEPA Pathways

Internal scoping = An NPS interdisciplinary team (IDT) discusses “what action is being proposed?” “What impacts might occur to natural resources?”

CE = Categorical Exclusion: Do when scoping finds proposed action will not individually or cumulatively have the potential for significant impacts.

CE in List? Confirm the proposed action is described by the list of CEs (see NEPA Handbook 3.3).

Extraordinary Circumstances? Confirm no extraordinary circumstances apply (see NEPA Handbook 3.5 – there are 12 of them).

Document: Document the action fits in a CE and no extraordinary circumstances exist (see NEPA Handbook 3.2).

Signature: Obtain written approval from Superintendent and proceed with action.

Other Laws? Are other laws triggered?

Wilderness Act

Endangered Species Act

NAGPRA

NHPA

Clean Water Act

Other acts?

Beyond the CE?

Agency Scoping = Working with consulting, coordinating, and regulatory agencies for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. This typically takes place prior to public scoping.

Public Scoping = An early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

NOI = Notice of Intent (to do something). A notice for the Federal Register that an EIS will be prepared.

NOA = Notice of Availability (to act on...). A notice submitted to the Federal Register announcing that a draft EIS, final EIS, and in some cases a ROD, is available to the public.

EA = Environmental Assessment: Do this when:

proposed action doesn't fit in any CE categories,

an extraordinary circumstance is triggered,

potential effects are substantial or controversial,

there is a potential for significant effects that must be determined.

Decision Document = FONSI = Finding of No Significant Impact

EIS = Environmental Impact Statement: Do this when:

there is a likelihood of significant effects, required by regulation or policy.

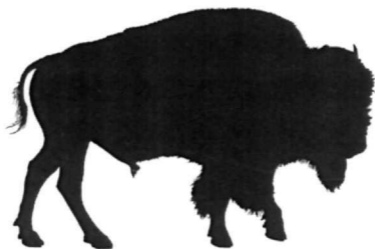
Decision Document = ROD = Record of Decision

Other pathways

Memo to File = A memo you write re: a proposed action where you document discussions or actions

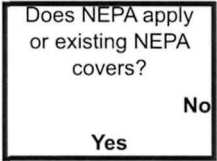
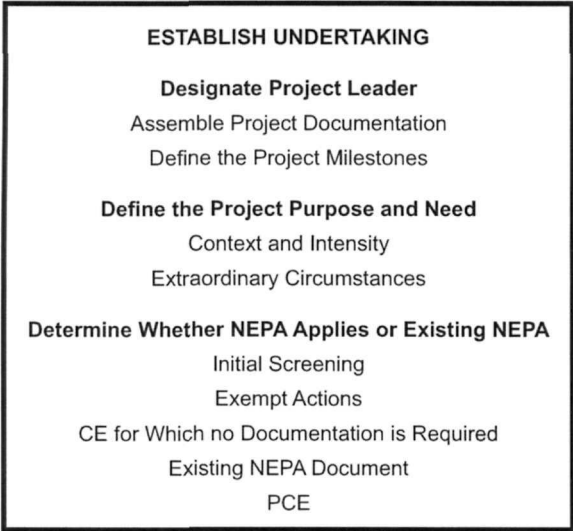
Adopt Another Agency's NEPA

Cooperate on Another Agency's NEPA



Project Development Steps Through NEPA Process

Step 1



No



MEMO /
PCE

Yes



Project Development Steps Through NEPA Process

Step 2

DEFINE PROPOSAL

Project Description

Establish in PEPC

Project Development Questions

Active Voice, Purpose and Need, Alternatives

Define the APE/Affected Environment

Locate Map and Project Area/APE Map

Internal Scoping

Standing IDT and Subject Experts

Literature Review

Complete ESF

Schedule Additional Surveys

Potential to cause
impact?

No

CE

Yes

Project Development Steps Through NEPA Process

Step 3

IDENTIFY ISSUES

IDT Project Review

Overall Project

T&E Species and Species of Concern

Wetlands

Floodplains and Stormwater

Water and Water Quality

Cultural Resources (CRM Team)

Hazardous Materials, Utilities, Night Sky

Conduct Additional Surveys

Archeological Survey

Biological Assessment

Wetland Delineation

Environmental Site Assessment

Significant re-
sources?

No

CE

Yes

Project Development Steps Through NEPA Process

Step 4

EVALUATE IMPACTS

Modify Project to Avoid Effects/Impacts

Consider Alternatives

Initiate Agency Consultation

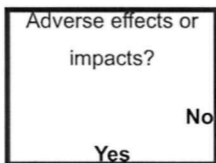
COE 404 Permits (NWP or Individual)

State 401 Permit

Erosion and Sediment (Soil and Water Cons.)

Section 106 (Streamlined or Standard)

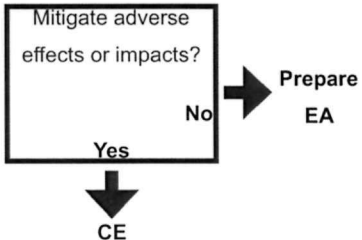
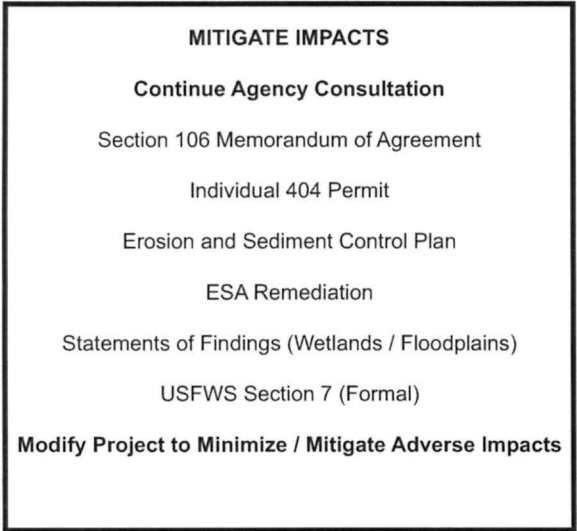
USFWS Section 7 (Informal)



CE

Project Development Steps Through NEPA Process

Step 5



What is NHPA and Why is it Important?

Passed by Congress in 1966, the National Historic Preservation Act (NHPA) established a national historic preservation policy encouraging responsible stewardship on state and private levels in addition to the national level. To further this policy, Section 106 of the NHPA requires federal agencies, like the NPS, to consider the effects of their proposed undertakings on historic resources that are listed or eligible for listing on the National Register of Historic Places and give all interested parties a reasonable opportunity to comment on the proposed undertaking. Within the NPS, the Section 106 process is an essential tool for recognizing historic park resources and promoting their preservation.

Director's Order 28 (DO-28) and its accompanying Cultural Resource Management Handbook offers guidance by which the NPS applies a variety of cultural resource policies and standards, including compliance with Section 106 of the NHPA. Chapter 5 of the handbook describes the Section 106 process related roles and responsibilities of NPS staff and highlights the regulatory Section 106 compliance process. The handbook, along with supplementary technical guidance, serves as the "tool kit" for NPS cultural resource management and compliance with Section 106 of the NHPA.

Section 106 Best Practices

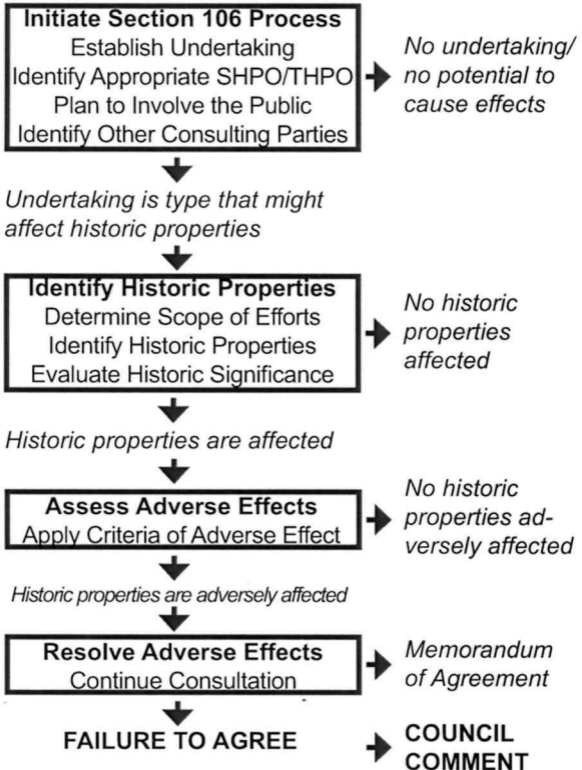
- Discuss proposed project prior to formulation to identify concerns early in the process.
- Ensure effective communication between the project managers and the Section 106 coordinator, especially during the planning stages and if project scopes change.
- Conduct consultations with SHPO, tribes, and others early in the process.
- Document the 106 process in PEPC.
- In addition to the biennial SHPO meeting required by the Nationwide Programmatic Agreement (PA), park staff should meet annually with SHPO to discuss projects for the upcoming year and determine how the 106 process can proceed in the most expeditious manner.
- Factor in the appropriate amount of time for the 106 process, especially if a project will require new inventory work (field work), intensive consultation with SHPO and tribes, or will result in a determination of adverse effect thus requiring an agreement document.
- Use the PA for eligible undertakings when,
 - the area of potential effect has been inventoried for historic properties

and evaluated for eligibility to the National Register of Historic Places (NRHP), and no historic properties are in the area or DOEs/NRHP are on file, and,

- there is a determination of no historic properties affected or no adverse effect. Undertakings using the PA do not need SHPO concurrence but require tribal consultation.
- Make a park-specific Programmatic Agreement with the SHPO and/or tribes for large, long-term projects. This streamlines the 106 process instead of reviewing every aspect of the project with the SHPO and/or tribes.
- Strategically plan to conduct inventory work (NHPA Section 110) in areas with high potential for future agency actions that will require the 106 process (e.g., high visitor use areas, development zones, or vulnerable to natural or human threats) and apply for SCC Cultural Resources funding.

NHPA High Level Overview

Section 106 Four Step Process



Section 106 Pathways

Streamlined Review Process

Streamlined Review offers an alternative to Standard Review if certain criteria are met. Use the Streamlined Review Process if all the following criteria are already met:

- All historic properties within the undertaking's APE are identified;
- Consultation took place with federally recognized tribes or NHOs, if the historic properties have religious or cultural significance to those groups;
- All Determinations of Eligibility to the National Register are complete for historic properties within the APE;
- The SHPO/THPO concurs with the determination of NR eligibility; and
- Preliminary planning indicates that the undertaking will have no adverse effect on a historic property on or eligible for the NR.

Nationwide Programmatic Agreement

This determination should be made by your Section 106 Coordinator or a cultural resource discipline specialist.

Undertakings Eligible for Streamlined Review

1. Preservation Maintenance and Repair of Historic Properties
2. Rehabilitation and/or Minor Relocation of Existing Trails, Walks, Paths, and Sidewalks
3. Repair/Resurfacing/Removal of Existing Roads, Trails, and Parking Areas
4. Health and Safety Activities
5. Routine Grounds Maintenance
6. Battlefield Preservation and Management
7. Hazardous Fuel and Fire Management
8. Installation of Environmental Monitoring Units
9. Maintenance or Replacement of Non-His-toric Utility Lines, Transmission Lines, and Fences
10. Erection of Signs, Wayside Exhibits, and Memorial Plaques
11. Culvert Replacement

12. Reburial of Human Remains and Other Cultural Items Subject to NAGPRA
13. Meeting Accessibility Standards in Historic Structures and Cultural Landscapes
14. Mechanical, Electrical and Plumbing Systems
15. Acquisition of Lands for Park Purposes
16. Leasing of Historic Properties



Standard Review Process

Projects that do not meet the criteria for Streamlined Review must comply with Section 106 through Standard Review:

- Superintendents are responsible for compliance with 36 CFR 800;
- Compliance may be done through park- or project-specific PAs;
- Park Section 106 Coordinator is responsible for carrying out the Standard Review Process in consultation with the CRM Team;
- Parks are encouraged to use PEPC to track and document compliance activities;
- If a project consultation results in MOA or a supplemental PA to resolve adverse effects, a copy of the document must be provided to the Regional Section 106 Coordinator.



Project Development Steps Through NHPA Process

Step 1

INITIATE SECTION 106 PROCESS

Establish Undertaking

A project, activity, or program funded by a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.

Identify Appropriate SHPO/THPO

On tribal lands where a tribe has assumed Section 106 responsibilities, consultation is with THPO in lieu of SHPO.

Plan to Involve the Public

The agency official shall seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking.

Identify Other Consulting Parties

Local government officials, applicants for Federal assistance, others with demonstrated interest, etc.

Is project an undertaking and the type of activity that has the potential to cause effects on historic properties?

No

Yes

No Further
Section 106
Obligations

Project Development Steps Through NHPA Process

Step 2

IDENTIFY HISTORIC PROPERTIES

In consultation with CRM Team

Determine Scope of Efforts

Determine APE, review existing information about historic properties, and seek information from parties with likely knowledge of concerns, including consulting with tribes and NHOs about properties to which they attach religious and cultural significance.

Identify Historic Properties

“Reasonable and good faith effort” may include background research, consultation, oral history interviews, sample field investigation, and field survey.

Evaluate Historic Significance

Apply the NR Criteria and make determinations of eligibility in consultation with the SHPO/THPO.

Historic properties
will be affected?

No

Yes

Streamlined-Document through PEPC, ensure CRM Team input, retain for annual report. Or Standard- Provide documentation to SHPO for concurrence. Both- Provide documentation to tribes.

Project Development Steps Through NHPA Process

Step 3

ASSESS ADVERSE EFFECTS

In consultation with CRM Team

Apply Criteria of Adverse Effect

Will undertaking alter characteristics of a historic property qualify it for inclusion in the Register?

May be direct or indirect.

Reasonably foreseeable effects that may occur later in time, be at a greater distance or cumulative must be considered.

Historic properties are adversely affected?

No

Yes

Streamlined-Document through PEPC, ensure CRM Team input, retain for annual report. Or Standard- Provide documentation to SHPO for concurrence. Both- Provide documentation to tribes.

Project Development Steps Through NHPA Process

Step 4

RESOLVE ADVERSE EFFECTS

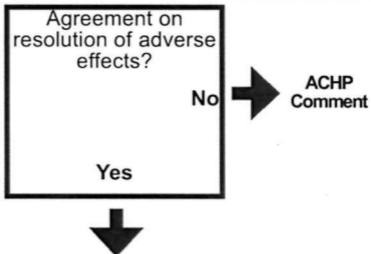
In consultation with CRM Team

Continue Consultation

Notify the Council when adverse effects are found and invite the Council to participate if required.

Provide project documentation to all consulting parties at the beginning of the consultation to resolve adverse effects.

The agency official shall consult with the SHPO/THPO and other consulting parties to seek ways to avoid, minimize or mitigate the adverse effects.



Compliance Terms

adverse effect—One of the three categories of effect under §106 compliance. An adverse effect diminishes the integrity of the characteristics that qualify a cultural resource for inclusion in the National Register of Historic Places. This includes: physical damage or destruction; alteration with the Secretary's Standards; relocation of the property; change in character of the properties' use or setting; introduction of incompatible visual, atmospheric or audible elements; neglect and deterioration; transfer, lease or sale of property out of federal control.

affected environment—Term used in the National Environmental Policy Act to denote surface or subsurface resources (including social and economic elements) within or adjacent to a geographic area that could potentially be affected by a proposed action; the environment of the area to be affected or created by the alternatives under consideration (40 CFR § 1502.15).

area of potential effect—The geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR § 800.16[d]). Term is specific to Section 106.

compliance—In general, compliance means conforming to a rule, such as a specification, policy, standard or law. Regulatory compliance describes the requirements that organizations need to address in their efforts to ensure that they are aware of and take steps to comply with relevant laws, policies, and regulations.

conservation—Limiting how much of a resource you use. Using responsibly so that enough remains for later.

consultation—The process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the Section 106

process. The Secretary's "Standards and Guidelines for Federal Agency Preservation Programs pursuant to the National Historic Preservation Act" provide further guidance on consultation.

cultural resources—Archeological, traditional, and built environment resources, including cultural landscapes. An aspect of a cultural system that is valued by or significantly representative of a culture or that contains significant information about a culture. A cultural resource may be a tangible entity or a cultural practice. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the NRHP and as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources for NPS management purposes.

cumulative impact—The incremental environmental impact of the an action, when added to the impacts of other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions (1508.7).

disturbance—*Disturbance of buried cultural resources:* The changing or alteration of a cultural or depositional context by the effects of unrelated activities at a later time than then it's initial deposit; the disturbance process can either be natural or man made. No matter what the origin of the disturbance the end result is usually a degradation of the integrity and context of the subject matter being studied making it possibly less valuable to the archeologist than if it were not. The integrity of soil horizons should be evaluated by qualified individuals before it is determined whether or not the buried resources are valuable data. Never make the assumption that disturbed soils are of little research value unless you are trained in geomorphology or pedology and even then always consult with an archeologist.

eligible for inclusion—In the National Register includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.

historic—Can be used to refer national register. A structure can be historic but not eligible for the NRHP.

historic district—A geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, landscapes, structures, or objects, united by past events or aesthetically by plan or physical developments. A district may also be composed of individual elements separated geographically but linked by association or history.

historic property—A district, site, structure, or landscape significant in American history, architecture, engineering, archeology, or culture; an umbrella term for properties listed on or eligible for listing in the NRHP.

impacts—The likely effects of an action upon specific natural, cultural, or socioeconomic resources. Impacts may be beneficial, or adverse and direct, indirect, and/or cumulative.

impairment—As defined in NPS Management Policies, "impairment" means an impact that, in the professional judgment of the responsible

NPS manager, would harm the integrity of park resources or values including the opportunities that otherwise would be present for the enjoyment of those park resources and values.

incidental take—According to the Endangered Species Act, 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. An incidental take is a take that results from activities that are otherwise lawful.

indirect impact—Reasonably foreseeable impacts that occur removed in time or space from the proposed action. These are "downstream" impacts, future impacts, or the impacts of reasonably expected connected actions (e.g., growth of an area after a highway to it is complete).

in-kind—In the same manner or with something equal in substance having a similar or identical effect.

integrity—The ability of a property to convey its significance, based on its location, design, setting, materials, workmanship, feeling, and association.

mitigation—"Mitigation" as defined in the National Environmental Policy Act (40 CFR § 1508.20), includes: avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its Implementation; rectifying the impact of repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; compensating for the impact by replacing or providing substitute resources or environments.

no-action alternative—Has two interpretations: (1) «no change» from a current management direction or level of management intensity (e.g., if no ground-disturbance is currently underway, no action means no ground-disturbance); or (2) "no project" in cases where a new project is proposed for implementation (46.30).

significance—The property is associated with events, activities, or developments that were important in the

past. It is associated with the lives of people who were historically important. Has distinctive architectural history, landscape history, or engineering achievements. It has the potential to yield important information through archeological investigation about our past.

significant—A subjective interpretation of the level of impact that will result to the human environment if an action is implemented, taking into account the context and intensity of an impact (1508.27). Significant is defined differently in a cultural/historic context.

undertaking—A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.

Additional Resources and Guidance

NPS Planning, Environmental & Public Comment Tools

<https://pepc.nps.gov/tools.cfm>

Webpage contains links to:

- PEPC Guide and Glossary
- Who to Contact
- Required Training Guidance
- Aids and Training Materials
- NEPA and NHPA Links
- Sample Forms

Advisory Council on Historic Preservation,
Working With Section 106

<http://www.achp.gov/work106.html>

NEPA NHPA Section 106 Handbook

<https://ceq.doe.gov/publications/nepa-hand-books.html>

NPS Director's Orders and Related Documents

<https://home.nps.gov/applications/npspolicy/DOrders.cfm>

NPS Management Policies 2006

https://www.nps.gov/policy/MP_2006.pdf

NPS Nationwide PA for Section 106 of the NHPA Toolkit
<https://www.nps.gov/history/howto/PAToolkit/index.htm>

NPS NEPA Handbook and Supplemental Guidance
<https://www.nps.gov/subjects/nepa/policy.htm>

US Fish and Wildlife Service iPac - Information for Planning and Consultation
<https://ecos.fws.gov/ipac/>



Facility Management and Maintenance Case Study

The National Park Service proposed to repair and rehabilitate the historic Canal Lock and Spillway, its floodgates, and the bridge carrying a trail over the spillway, a National Historic Landmark (NHL). The purpose of this project was to address the decay of the historic fabric revealed during the repairs, stabilize the historic resources, and restore the trail to its function as a multi use recreational trail. Project engineers developed this project in consultation with other Resource Management and Maintenance staff and designed the repair work to avoid any adverse effects to the historic resource.

The rehabilitation of the spillway involved the removal of damaged concrete, and replacement of in-kind materials with the addition of steel reinforcement, to an elevation and dimension necessary to contain the approach, sub-grade aggregate at both ends of the bridge. The rehabilitation project also entailed the repair of damaged wooden members of the spillway floodgate and reattachment of the vertical cast iron gear tooth to new white oak wooden vertical posts. Repairs to the spillway floodgate included replacement/ repair of wooden support members and gate frames. The work also included

repairs to the concrete abutment and wing walls of the gate bridge.

The NPS made concrete repairs to both abutments and both eastern wing walls. This work included the removal of any unsound, delaminated, or damaged concrete. Additional vertical dowels were drilled and epoxy anchored into the top face of the remaining concrete of the wing walls, and when necessary into the top face of the abutments. Additional steel reinforcement was added as directed by the engineer.

The work included the construction of formwork that reestablished the correct lines and elevation and placement and consolidation of structural concrete in keeping with the character of the original concrete pour. Upon completion of the work, the NPS reinstalled the stop logs at the south end of the Lock to retain the normal flow of water so it would again flow over the spillway and head gate at the old feed mill.

As the IDT worked through the NEPA analysis they determined that all of these actions fell within the categorical exclusion of landscape maintenance in previously disturbed or developed areas. The NHPA analysis determined that the proposed actions of emergency stabilization to prevent further loss of historic material and

correct unsafe conditions fell within a streamlined review under the park's Programmatic Agreement with the SHPO. Specific conditions, incorporated into the compliance approvals were that the Section 106 Coordinator and/or a professional Archeologist were to be on-site to monitor all excavations and repairs.



Visitor Protection and Management Case Study

In November ExtremeMudRace, Inc. applied for a special use permit to hold a triathlon in the park. The total number of race participants was expected to be 3,000, in addition to crew of the race organizers, security and emergency responders, a food concessionaire, and friends and family of the participants. The race was proposed to take place on a Saturday in June, with Friday and Sunday as prep and clean-up days. In order for the event to run smoothly the park's most popular boat access and swim beach would be closed to visitors and local canoe concessionaires. The event would also close the park's main southern access road. In addition, event organizers want to paint directional arrows on the park roads, install 4"x4" posts (*think Section 106...*) in the floodplain to hold banners at various entry and waypoints along the river (*think water resources...*), and place portable-johns along the race route.

The park's interdisciplinary team reviewed the proposal taking into consideration the park's purpose, operations, policies and laws. Some of the ground disturbance impacts of the proposed actions could be avoided or mitigated by adding to the permit conditions such as requiring tem-

porary road markings (non-toxic, water soluble paints) and temporary signs (no digging or nailing into trees). Also, placement of portable-johns would need to be placed on level, hardened surfaces, 300 feet away from waterbodies and wetlands.

The team determined that typical permit conditions and stipulations for smaller race events held at the park were not adequate to address all of the potential adverse impacts of this proposed triathlon event.

For instance, the size of this event would lead to numerous parking and traffic issues in the park and the surrounding gateway communities. The beach area does not have adequate parking to support the event. Allowing organizers to park on grassy areas by the beach would lead to substantial rutting and turf damage, since parking is only permitted on hardened surfaces. The option of busing in crews, participants, and observers will only contribute to local traffic issues on a busy summer weekend. Also, closing off the busiest beach and boat access would negatively impact local concessionaires and the visiting public (*think gateway communities and recreation resources...*). In addition, one leg of the running route lead participants directly under an active bald eagle nest (*think threatened and*

endangered species...) so the event organizers would need to select a different route but no suitable routes were available in this area of the park.

A thorough and timely review of the proposal by park IDT allowed for quick feedback to the applicant. After reviewing the park's concerns and conditions, the applicant decided to plan and hold the event at the local state park.

Most of the proposed actions would have likely fallen into a categorical exclusion, if the adverse impacts could be avoided or mitigated. However, in this instance, there were no alternatives available to mitigate impacts to protected wildlife and visitor use that were agreeable to the applicant.



Interpretation and Education Case Study

Ranger Jane had an idea for improving visitor services at the Foothills Visitor Center. She presents outdoor educational programs to the public, but there's not a good gathering area for it. The area she uses has a flagpole in the middle, and it's very hot and sunny in the summer. To present her programs, she has to peer around the flagpole, talk over the traffic noise, and hope that visitors don't wander away into the air-conditioned indoors.

Jane's idea is to create a shaded gathering area in a weedy patch adjacent to the visitor center. In the past, there had been sporadic attempts to convert this area into native plant landscaping, but the temporary irrigation system required a lot of time to repair and maintain. A walkway through the area had been damaged in a recent HVAC project.

Jane didn't know how to get started. She talked to her supervisor, who helped her get on the agenda to present her project to the Leadership Team.

The Leadership Team reviewed Jane's project idea and asked Jane to develop a comprehensive plan for improvements, including not only the interpretive gathering area but also realigning the trail, planting native landscaping, providing a low-maintenance and water-efficient irrigation system, and rehabilitating the decrepit picnic area. They asked Jane to form an Interdisciplinary group to gather more input and come up with a few alternatives.

Jane formed an IDT with the restoration ecologist, cultural resource specialist, utilities supervisor, trail foreman, subdistrict ranger, and environmental protection specialist. They consulted with a landscape architect, who designed several alternatives to meet the group's needs, with different locations and designs for the gathering area, trail, flag pole, picnic area, native plant landscaping, and irrigation system.

Jane organized a workshop for the IDT to evaluate the three alternatives using a "Choosing by Advantages" process. This decision-making system helped the team document and communicate their recommendation to the Leadership Team, who approved moving forward with their selected alternative.

Jane lined up her funding and got started refining the design of the selected alternative. She produced a site map showing the new locations of the trail, flagpole, native landscaping, simple amphitheater, and several shaded seating areas. She provided photos of proposed shade structure and a project schedule.

Subject matter experts reviewed the project, identified potential impacts to natural and cultural resources, and worked with Jane to find ways to minimize or mitigate them. Jane learned that the trail surface would need to meet accessibility standards, the retaining walls would need to fit the character of the Mission 66 Headquarters building, and the shade structure needed to avoid the path of a communication dish. The cultural resource specialist completed an archeological survey. The vegetation staff defined trees to protect

during construction and designed the irrigation system to avoid tree roots and archeological resources. The subdistrict ranger asked that work start after Labor Day to avoid the busy visitor season and that screening vegetation be added to buffer the Dispatch Center from noise disruption from the new amphitheater.

This site was in a previously disturbed area and a NEPA categorical exclusion applied. The compliance specialist sent a letter to the State Historic Preservation Office explaining no adverse effect. Jane received her compliance letter and worked with the trail foreman to get started!



Natural Resource Management Case Study

Whitefish that inhabit coastal lagoons and nearby fresh and saltwater are an important food resource for Native Alaskans. Little is known about whitefish habitat and ecology. NPS researchers and cooperators wanted to sample coastal lagoons for whitefish, invertebrates and water chemistry in a national park unit. To do this they need to land an 18' skiff on a beach in the park unit and drive ATVs (one with a trailer loaded with gear) down the beach or across the tundra to access the lagoons. They would be netting fish for species composition and performing gastric lavage (sampling stomach contents from harvested fish) on a sample of fish. Some fish were collected for laboratory analysis. The crew will be staying at NPS ranger cabins located on the coast in the unit.

The coastline has been used by Native Alaskans for thousands of years – house and grave sites occur along the coastline. Things that could be triggered are – Section 106 (ground disturbance by ATV use), NEPA, NAGPRA.



Notes:

Notes:

PLANS Park Plans, Contracts, Commercial
Use Licenses, Land Protection Plans

ROADS Road Work, Right of Way Permits,
Guardrails, Trail Work and Relocations

EARTH Digging, Ground Disturbance, Installation of Signs,
Waysides, Utility Poles, Underground Lines, Plantings

PERMITS Special Use Permits, Resource Studies,
Research Permits, Surveys

NEW CONSTRUCTION
New Buildings, Additional Structures, Replacement of Non-historic Buildings

OLD STRUCTURES
Repair Work, Material Replacements, Work in Historic Districts or Cultural
Landscapes, Adding to Historic Areas

WILDLIFE Removal of Species, Treatments, Man-
agement Actions, Fuel Reduction Projects,
Inventory & Monitoring

FOR **COMPLIANCE**

