for:

# Interpretation And Visitor Experience

PLEASE RETURN TO:

TECHNICAL INFORMATION CENTER DENVER SERVICE CENTER NATIONAL PARK SERVICE

# PLANNING FOR INTERPRETATION AND VISITOR EXPERIENCE

Prepared by the

Division of Interpretive Planning

Harpers Ferry Center

Harpers Ferry, West Virginia

1998



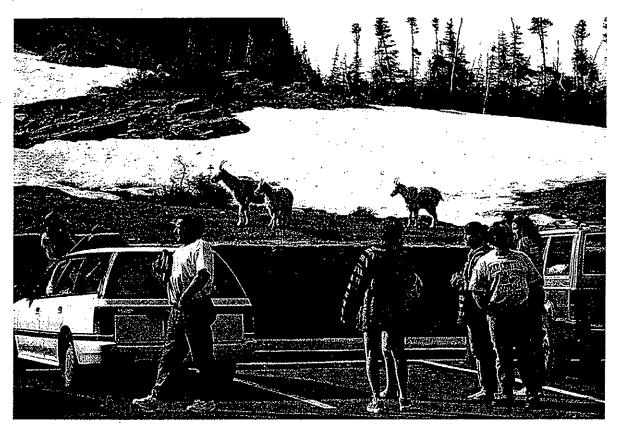
Good planning ensures that interpretive facilities, media, and programs work together.



Well-planned developments can protect resources and serve visitors.



Interpretive planning—visitor experience planning—identifies what experiences should be accessible to visitors.



Interpretive planning can recommend strategies for promoting positive visitor interactions with wildlife.

### **TABLE OF CONTENTS**

OVERVIEW	1
WHAT IS IT?	2
WHY DO INTERPRETIVE PLANNING?	•
WHO DOES IT?	5
WHAT SHOULD AN INTERPRETIVE PLAN INCLUDE?	6
Goal-Driven Planning	8
Purpose	
Significance	
Interpretive Themes	
Visitor Experience	
Goals and Objectives	
Visitors	<b>2</b> 3
Resources	
Subject Matter Knowledge	
Recommendations	
Interpretive Media	
Facilities	
Landscapes	
Evaluation	
ANSWERS TO FREQUENTLY-ASKED QUESTIONS	49
APPENDICES	53
Appendix A: Harpers Ferry Center Services	53
Annondix R: References	

#### **OVERVIEW**

This document describes current perspectives and approaches in interpretive planning by the Harpers Ferry Center, National Park Service. It discusses approaches, criteria, options, and philosophy. It is not a "how-to" manual or directive.

Interpretive planning comprises a spectrum from short-range through long-range planning. This document addresses mostly long-range planning.

#### Intended Audience

Although much is written from a National Park Service perspective, it is designed to be relevant for other agencies and organizations. It was written with several audiences in mind:

- > staff on planning teams considering visitor-related issues
- > interpretive planners
- > interpreters
- planning and design professionals such as architects, landscape architects, and media designers and producers
- > other partners—including the private sector—in the planning process



#### Goals

A reader will be able to:

be a productive member of an interpretive planning team, representing his/her specialty and contributing to the quality of the process and the products

describe a general outline of goal-driven interpretive planning, and modify that outline to best suit a specific project

discuss the general capabilities and limitations of different interpretive media, programs, and facilities

#### WHAT IS IT?

Interpretive planning is a process that identifies and describes significant visitor experiences in a park, forest. 200 or other resource-based recreation area; and recommends ways to provide, encourage, sustain, facilitate or otherwise assist those experiences.

Everything that visitors do, think, sense, and feel in a park constitutes their park experience. Interpretive planning describes desired experiences (outcomes) and recommends ways to encourage them. Some of these recommendations involve interpretive media or activities; some experiences are facilitated through facility design or by just getting out of the way.

Interpretive planning is nearly synonymous with visitor experience planning. To simplify, we'll use the term *interpretive planning* to include visitor experience planning.

Interpretive planning teams seek to answer many questions, which include:

Why is this area set aside and made accessible to the public?

What are the likely and desired visitor experiences? (What will visitors want to do, feel, learn, experience; and what does the agency hope they will do, learn, etc.?)

What are current conditions affecting visitor experience and interpretation? What are the essential stories and experiences to make available to area visitors and neighbors? What are the laws, mandates, policies or guidelines that affect this project? What information and resources are available, and what are needed?

What are significant relationships between resources and visitors? What are key issues?

How can the agency make desirable experiences more accessible to more visitors? (What are impediments to visitor enjoyment of significant area resources and values? Should the agency match or redirect visitor's motivations and expectations? How can the agency serve diverse audiences?)

**How** can the agency discourage activities that are detrimental to resources or other visitors'

Dave Dame

<sup>&</sup>quot;The Experience" is what visitors take from a park. Providing opportunities for visitors to interact with park resources in a manner that is both safe for visitors and leaves the resource unimpaired—what has been termed "visitor experience planning"—is the core of park planning and development.

experiences, and promote activities that enhance resource protection and visitor enjoyment?

**How** can the agency meet visitor experience goals in the most cost-effective manner, considering long-term costs and sustainable values?

Most interpretive planning teams go through some version of the following steps.

- 1. Prepare for planning: read or review legislation, other plans and guidelines, and key resource and audience information; solicit input from others who won't be in the planning group.
- 2. Identify and achieve consensus on the scope of the plan, and on overall goals and issues; include visitor experience, themes, resource, and management goals and issues.
- Collect information and assess current conditions; include information on visitors, cultural and natural environment, media, programs and other visitor activities, issues, goals, other plans, etc.
- Determine the best ways to achieve goals and provide desired experiences through interpretive media, facilities, activities, and contact with resources.

These phases may overlap, change, multiply or divide. Planning is both sequential and cyclic: a project has a beginning and an end, but earlier phases will often be revisited.

#### WHY DO INTERPRETIVE PLANNING?

Good interpretive planning ensures that essential park values and experiences are accessible to visitors, and that facilities and media are designed to accomplish visitor use and resource preservation goals. Interpretive planning will help park staff:

- > develop consensus on a long-range vision for interpretation and visitor experience
- > provide key visitor experiences while protecting resources and enhancing stewardship
- > develop the most cost-effective and sustainable solutions to visitor and resource issues
- > effectively use interpretation and education to meet management goals (outputs and outcomes)
- > fulfill mandates to serve the public AND protect resources

Good interpretive planning ensures that essential park values and experiences are accessible to visitors, and that facilities and media are designed to accomplish visitor use and resource preservation goals.

Planning should be a dynamic, continuing process—not only tied to development or solving the issue of the day, but a continuum that supports daily operations in the context of realizing a long-range vision for visitors and resources. On the other hand, planning is not an end in itself; good planning directs us to do smart, effective things, and helps us avoid doing ineffective or damaging things. Interpretive planning is needed because visitor enjoyment is part of the NPS mission, because there cannot be parks without visitors, and because resource preservation requires public understanding and support.

#### WHO DOES IT?

There are many ways to structure an effective interpretive planning team; it is doubtful that any one approach will prove superior in every situation. Team members should have the experience, knowledge, and time to do their assigned tasks.

The following groups may be involved to varying degrees in the planning effort:

- > park staff (preferably including management, field staff, various disciplines and divisions; consider including staff from another park)
- an experienced interpretive planner as team captain, leader, and/or facilitatior
- > media, facility, or landscape design specialists
- current and potential partners (especially Native Americans and/or other ethnic groups related to the park story)
- representatives of affected audiences, including park visitors and advocacy groups
- > subject matter experts
- > publication specialists (e.g., graphics, editing)

It may be wise to try to involve everyone who will play a role in designing or implementing the recommendations. The final call on involvement usually rests with the park superintendent.

Team captains must balance the values of including a wide variety of expertise with constraints of time, money and group dynamics. It is helpful to decide on the roster for the planning team and consultants early in the planning process; this may be recorded in a scope of work that is agreed to by all major participants.

While short-term savings may result from a park providing their own planning, quality (and long-term savings) usually will be enhanced by including outside perspectives and guidance from experienced interpretive planners. Such planners work at Harpers Ferry Center, many regional offices, some parks, other agencies, and in the private sector.

While short-term savings may result from a park providing their own planning, quality (and long-term savings) usually will be enhanced by including outside perspectives and guidance from experienced planners.

# WHAT SHOULD AN INTERPRETIVE PLAN INCLUDE?

Interpretive planning falls within a spectrum from general management planning through facility and media design. A plan should emphasize whichever parts of that spectrum that it needs to. Care should be taken to make sure that recommendations at the design end are based on sound, relevant and agreed-upon conclusions at the planning end.

There are several important general criteria for the form and content of interpretive plans. An interpretive plan should be the best possible representation of that particular planning process, that unique set of resources and visitors, that set of goals and recommendations, those contemporary conditions, and those assumptions about the future. An interpretive plan should also reflect relevant agency policies and guidelines.

More specifically, an interpretive plan should meet most of the following criteria:

- > represent an accurate and useful version of both the consensus and the diverse perspectives that emerged during the planning process
- > express significant, understandable, achievable, and appropriate goals
- > involve major stakeholders, including subject matter experts, those who will implement the plan, and those who will be affected by the actions recommended in the plan
- > recommend cost-effective, creative, sustainable, and achievable actions that meet visitor experience and resource protection goals, and conform to agency mission and park purpose and goals
- > provide understandable and useful guidance to program, media, and facility planners and designers
- > identify relationships and influences among related planning and management actions
- describe and picture significant resources and experiences sufficiently for readers who may not be familiar with the area
- > convey major messages to various readers, including those who skim, those interested only in the major points, and those looking for a detailed analysis

- > convey a sense of importance, significance, and passion for the resources, stories, and experiences
- > help move the planning process to the next stages (design and production)
- > be interesting, readable, and understandable

Depending on the needs of each project, sections in addition to those discussed in this document may be useful for an interpretive plan. These include cost estimates, implementation schedules and responsibilities, resource and activity inventories, staffing, partnerships, study collections, preliminary designs, value analysis, and research needs and results.

Interpretive planning falls within a spectrum from general management planning through facility and media design. A plan should emphasize whichever parts of that spectrum that it needs to. Care should be taken to make sure that recommendations at the design end are based on sound, relevant and agreed-upon conclusions at the planning end.

There are guidelines from which planners and parks can choose the best way to handle each project. The National Park Service has issued guidelines (NPS-6, Chapter 3, amended 1995) for comprehensive interpretive planning, which include a long-range interpretive plan that is a revision of the NPS Interpretive Prospectus.

In the balance of this chapter we introduce most of the elements commonly included in goal-driven interpretive plans. The overall goals—from mission through themes and objectives—are frequently defined in general management plans and strategic plans, and can be incorporated in the interpretive plan.



#### **GOAL-DRIVEN PLANNING**

One purpose of working within a goal-driven framework is to make sure that consensus has been reached on the results to be achieved. Then discussion can focus on the best ways to achieve those results. This approach helps avoid the trap of automatically designing one's favorite medium or program without considering desired outcomes.

Interpretive plans are goal-driven. They start with identifying the broadest goals relevant to the project or area. Within these broad guidelines, more specific goals and/or objectives are composed. The number and specificity of goal or objective statements will vary with each project. Relevant issues (problems) and assumptions (givens) are considered. Action elements may be associated with goals or issues.

One purpose of working within a goal-driven framework is to make sure that consensus has been reached on the results to be achieved. Then discussion can focus on the best ways to achieve those results. This approach helps avoid the trap of automatically designing one's favorite medium or program without considering desired outcomes.

Goal-driven planning matches approaches used by the Park Service to comply with the Government Performance and Results Act (GPRA), which requires setting goals and reporting results. Some terminology may differ (this document uses *goals* more than GPRA *outcomes*), and interpretive planning has less stringent requirements for reporting quantitative results. However, goals and recommendations developed in interpretive planning workshops will be compatible with park strategic plans developed under GPRA guidelines.

#### **PURPOSE**

Purpose statements describe why an area was set aside, and what are the purposes of the area today. Legislation, legislative history, public participation, articles of incorporation, and agency rulemaking can provide the basis for purpose statements. From these, the planning team derives clear, concise, and relevant purpose statements.

Purposes may have been developed for a general management or strategic plan; these may then be incorporated.

#### **Examples**

#### Park Purposes: Petroglyph National Monument

Preserve the integrity of the cultural and natural resources in the context that gives them meaning.

Provide opportunities for diverse groups to understand, appreciate, and experience the monument in ways that are compatible with the monument's significance.

Cooperate with affected American Indians and land grant heirs in perpetuation of their heritage.

Function as a focal point for collection, analysis, and dissemination of information relating to Rio Grande style and other forms of petroglyphs and pictographs.

The first two statements above elaborate on the traditional purposes of preservation and enjoyment. The third recognizes the necessity of involving the creators of the petroglyphs, their ancestors, and other traditional users of the area. The fourth expresses language in the enabling legislation.

It is important to note that additional purposes may have emerged since an area was originally set aside. Cabrillo National Monument is one example: the original purpose for the park was to commemorate the explorations of Cabrillo. Note the additional purpose statements below.



#### Park Purposes: Cabrillo National Monument

Protect an opportunity for visitors to experience, feel, and understand the complex and inspirational human and environmental interrelationships visible from Point Loma.

Commemorate Cabrillo as a representative of European exploration of the California coast.

Preserve a remnant of the southern California coastal environmental processes.

The first and third purposes were derived from the addition of lands and activities after the monument was created. These statements confirm that these resources and experiences are central to the current reason for the park to exist.

#### **SIGNIFICANCE**

Significance statements describe the importance or distinctiveness of the area. These statements are based on resource inventories, but are more than an inventory. Significance statements may exist in area legislation, legislative histories, scientific and historical studies, or general management or strategic plans; the planning team needs to revisit these and update or clarify them if necessary.

#### **Examples**

#### Park Significance: Petroglyph National Monument

The monument contains one of the largest concentrations of petroglyphs in North America and represents an extensive record of peoples for whom we have few written records.

The monument has outstanding research potential because the petroglyphs are numerous, have retained their integrity, are an outstanding example of Rio Grande style, and are close to other associated archeological resources.

Places in the monument have traditional and cultural importance to American Indians and Atrisco land grant heirs.

The Piedras Marcadas pueblo ruin is one of the largest pueblos of its time period in the Rio Grande valley.

The monument's natural and cultural landscape (escarpment, volcanic cones, and surrounding open space) and long vistas are major elements that define Albuquerque's western horizon and provide opportunities to experience contrasts with a growing urban environment.

#### Park Significance: Cabrillo National Monument

The park contains one of the very few accessible examples of intertidal communities and chaparral communities representative of the southern California coastal environment.

The views from the park contain natural and cultural resources in juxtaposition (military operations, wildlife, San Diego, landforms, remnant natural communities, harbor, and shipping)



that illustrate human and environmental interrelationships.

The park is located within view of the area where the first European landfall occurred on the California coast.

Note that significance statements resemble interpretive themes, but may be larger in scope. Significance statements can lead directly to themes.

#### INTERPRETIVE THEMES

Themes are often described as the key stories or concepts that visitors should understand after visiting a park. Themes provide the foundation for all interpretive programs and media developed in the park. They tell interpreters and designers what are the most important ideas or stories. They do not include everything we may wish to interpret, but they do cover those ideas that are critical to visitors' understanding of a park's significance.

There are many approaches to the mechanics of writing interpretive themes. Since visitors are seldom exposed to the themes exactly as written, it matters less which methods are used than whether they work. The goal is to produce themes that are understandable, concise, and complete thoughts, that are the most important ideas for that area. Equally knowledgeable readers ought to get roughly the same impressions from reading the themes (this standard is important when considering how much detail to provide). It is important that there is general consensus about the content and form of the themes—whether they be one sentence or one paragraph, or if they are hierarchical (themes and subthemes) or prioritized.

Themes can help organize media, facility, and visitor experience discussions by considering the question, "Where and how will we interpret these themes?" Since park visitors are usually engaged in recreational pursuits, interpretation of themes is most successful when supported by appropriate and enjoyable activities and settings.

Themes should be complete thoughts; it is helpful to write them in complete sentences. Their emotional or evocative content can vary. However, to be effective, themes need not be "grabbers". Themes tell us **what** to interpret, not **how**. It is more the task of interpreters and media designers to make them compelling.

Many planners have adopted "compelling stories" as substitutes or supplements to themes. For more on using compelling stories, see *An Introduction to Compelling Stories* (National Park Service, 1995).

Themes are often described as the key stories or concepts that visitors should understand after visiting a park. Themes provide the foundation for all interpretive programs and media developed in the park.

The goal is to produce themes that are understandable, concise, and complete thoughts, that are the most important ideas for that area.

Themes can help organize media, facility, and visitor experience discussions by considering the question, "Where and how will we interpret these themes?"

#### **Examples:**

# <u>Underground Railroad Special Resource Study</u> (1995)

An escape from slavery on the Underground Railroad was an individual effort as well as a cooperative effort transcending racial and cultural boundaries.

#### Zion National Park Interpretive Plan (1996)

Zion National Park: nowhere else on earth do the three processes of deposition, uplift, and erosion come together in such intimate and scenic fashion.

# Natchez National Historical Park Interpretive Plan (1994)

Based on a cotton economy and a slave labor system, Natchez served as the symbolic capital of the cotton kingdom.

The following example shows a hierarchical approach to themes.

#### Brown v. Board of Education NHS GMP/IP (1996)

#### The Effects

The 1955 Brown II decision, which directed states to implement the Brown decision "with all deliberate speed," was met with varying responses throughout the country; although progress has been made since then in many areas, racial inequality of educational opportunity continues today.

 Racial segregation as an official policy at any level of American education was to have ended soon after the Brown II decision, which in May 1955 implemented the May 17, 1954, Brown I decision.

Segregation did not end with the Brown II decision. Many states and localities, especially in the South, either evaded or refused to comply with the Supreme Court edict.

De facto segregation in education continues today in many areas, influenced by factors such as economics, settlement patterns, and racial prejudice. Current issues include corrective measures such as mandatory busing and magnet schools, neighborhood schools, the fairness of funding sources such as property taxes, the advisability of vouchers, and many issues relating to curricula. Racial discrimination, with all attendant issues, perspectives, and ramifications, also continues today.

#### Stories (Theme 2):

- Reactions by public officials to the Brown decision; examples of delays and subversion of the intent of the decision by public officials, mostly in the South (e.g., some schools in Virginia closed rather than integrate).
- Some results of the implementation of desegregation were, in the short term, negative. Integration sometimes negatively affected discipline in schools and lowered expectations of student performance.
- Current educational issues including busing, bilingual education, magnet schools, prayer, vouchers, and de facto segregation.

Note that there are **four levels** to Brown v. Board themes: a **topic** (*The Effects*), a **summary theme statement** (*The 1955 Brown II decision*, ...), **several related subthemes** (*Racial segregation as an official policy* ...), and **examples of interpretive stories**. Topics help a reader get a quick idea of the scope of the themes. The theme statement summarizes the concept. Subthemes zero in on specific aspects of the general concept, and can add texture, explanation, perspective, and detail. Interpretive stories are suggested for media designers and interpreters.

#### **VISITOR EXPERIENCE**

...few visitors come to parks just to learn information. Visitor experience goals describe opportunities for visitors to derive meanings and values from park resources and experiences.

Visitor Experience is a resource.

Noel Poe, Superintendent, Theodore Roosevelt NM Interpretive planning describes visitor experience opportunities. We cannot require that visitors engage in these activities, learn these facts, notice these feelings, or marvel at this vista. But we do identify the important experiences that should be available.

Important visitor experiences may deal with emotions, impressions, relationships, or other subjective elements that may be difficult to express in a linear or objective manner. They are nonetheless essential. Do not let perceived "fuzziness" or lack of specificity prevent you from describing important visitor experiences. But all experiences should relate to park purpose, significance, and desired outcomes.

There are many ways to describe key visitor experiences; here are two.

#### <u>Visitor Experience Goals</u>

The planning team lists the important experiences that should be available to visitors. Experiences include knowledge, attitudes, behavior, and sensory experiences. The knowledge portion is covered by interpretive themes. But don't stop there; few visitors come to parks just to learn information. Visitor experience goals describe opportunities for visitors to derive meanings and values from park resources and experiences.

#### **Examples**

#### Blue Ridge Music Center IP

The National Park Service will provide opportunities for visitors to:

learn information and stories associated with major interpretive themes, and other related information, to the depth that they choose, and through a variety of media

listen to a wide variety of traditional music of the Blue Ridge, including pieces of their choice, and including both live and recorded music

become acquainted with musicians from the region whose backgrounds, life histories and artistry

illustrate important themes in the history and/or perpetuation of music traditions in the Blue Ridge

participate in informal music and dance activities at the site

learn about and attend musical and related activities in the area

have an enjoyable recreational experience without impairing the natural and cultural values of the site

be oriented to and participate in recreational activities along the Blue Ridge Parkway.

#### Keweenaw NHP GMP/IP

Opportunities will be provided for visitors and area residents to

understand Keweenaw's natural, cultural, and industrial history, and be able to relate it to the broader scope of American experience

explore the diversity of Keweenaw's cultural resources and be inspired to participate in perpetuating the area's heritage

obtain information necessary to safely, enjoyably, and easily visit Keweenaw's cultural and natural features, visitor facilities, activities, and services

acknowledge Keweenaw National Historical Park as an important national park area preserving and interpreting nationally significant resources

understand the economic, environmental, and social effects of the Keweenaw copper industry and wisely use, develop, and preserve natural resources in the future

understand C&H's magnitude, complexity, and creativity, and appreciate the corporation's contributions to the community, the copper industry, and the nation

understand Quincy Mining Company's role as a typical example of the rural industrial setting of many copper country mines

experience current and historic lifestyles of the region to understand similarities and differences between contemporary and historic people

It is hard to see, however, how preservationists and environmentalists can expect to win the external threats battle without including visitor experience as one of the most important threatened park values.

John Freemuth (1991)

Goals lead directly to interpretive media, activities or facilities; they help planners decide among various options for activities and media; and they help designers craft specific approaches to media and facilities.

participate in a diversity of activities appropriate for audiences with differing levels of interest, understanding, and sophistication

receive current, accurate, and balanced information that presents all viewpoints and beliefs regarding the area's people, technology and resources

understand that Keweenaw's cultural landscape is the product of prehistoric, historic, and continuing changes in natural and cultural environments

participate in an integrated interpretive program developed cooperatively by the National Park Service and other visitor service providers to offer a complete, balanced Keweenaw visitor experience

Goals lead directly to interpretive media, activities or facilities; they help planners decide among various options for activities and media; and they help designers craft specific approaches to media and facilities.

Visitor experience goals are similar to GPRA longrange goals; in some cases they may be the same. Visitor experience goals describe opportunities and targets rather than achievement; they don't have to be measured to be useful.

#### Visitor Experience Statement

Another approach is to describe visitor experiences in a narrative format. This may allow more attention to shadings and nuances than the listing of goals as above. It may not be as clear and concise, however.

#### **Example**

#### Lakota Tatanka Heritage Park (Concept Plan)

"The Experience" is what visitors take from a park. Lakota Tatanka offers a multifaceted experience: cultural, educational and recreational. A crosscultural experience awaits both national and international travelers. European, Asiatic, and American tourists will mingle and share cultures with the Sioux Indians, in a forum designed to foster harmony and admiration between races and individuals. If you cannot know a man until you have walked in his shoes, then here is where the

path begins. Each visitor is allowed to seek his or her own level of intimacy with the prairie and the Lakota culture.

As the visitors travel through the park to the visitor center, they are exposed to the vastness of the prairie with an occasional but exciting glimpse of the buffalo, an elk, or even perhaps a band of Lakota people crossing the prairie. When they reach the visitor center, they are exposed to enjoyable learning experiences designed to enrich the minds of all age levels and cultural backgrounds. These learning experiences focus on the three elements that form the management objectives of the park. Viewed in their proper context, these three elements are seen as the interdependent legs of a foundation that supports and is the reason for the park. First is the prairie which nurtures a vast array of plants and animals. Second are the Sioux Indians, the Lakota people who lived and developed their culture as the beneficiaries of this landscape. And last is the park management program itself, a program which re-enacts the traditional Sioux culture and preserves the prairie, all as a self-sustaining natural, cultural, and economic system.

Combining the two approaches may be an effective way to describe desired visitor experiences in ways that are both specific and evocative.

Whatever approach is chosen, it is vital that an interpretive plan describe the visitor experience opportunities that should be provided. It is then the job of the planning team to recommend generally how and where those opportunities are to be provided.

... it is vital that an interpretive plan describe the visitor experience opportunities that should be provided. It is then the job of the planning team to recommend generally how and where those opportunities are to be provided.

#### **GOALS AND OBJECTIVES**

There are many methods and criteria for writing objectives; pick the approach that is most useful for identifying and achieving desirable outcomes.

An important criterion for measurability is specificity: we can measure the achievement of almost any goal or objective that is described in enough detail.

It may be helpful to first consider what are desired outcomes, then consider to assess their achievement. That way, important outcomes would not be left out due to the difficulty of measurement. If, on the other hand, the measurability criterion is used early as a "screen-out factor" for objectives, one can end up with objectives that are measurable but not too important.

Planners will find many uses for goals and objectives in addition to the visitor experience goals previously described. In this document goals are seen as long-range and general descriptions of desired outcomes, while objectives are more short range, measurable, and specific outcomes. Objectives are often useful when discussing desired outcomes for specific media, facilities, or programs. There are many methods and criteria for writing objectives; pick the approach that is most useful for identifying and achieving desirable outcomes.

You may have considered these questions:

## When should I write goals, and when to use objectives?

Generally, objectives are nested within goals. Planning teams should be able to articulate **both** goals and objectives. For example, the rehabilitation of an exhibit room may require consideration of overall interpretation and visitor experience goals for the park and for the visitor center. More specific goals could be prepared for the exhibits. Specific objectives would describe desired outcomes for each exhibit element.

#### Should they be measurable?

Objectives, sure. If you're writing GPRA goals, they had better be measurable. For visitor experience goals, assessing achievement may use less quantitative means (judgement, observation, impressions, examples) since the goals themselves are more general and long-term. Assessing achievement costs in time, money, and attention; more statistically rigorous methods tend to cost more. Benefits and costs of alternative assessment strategies should be weighed.

An important criterion for measurability is specificity: we can measure the achievement of almost any goal or objective that is described in enough detail.

It may be helpful to first consider what are desired outcomes, then consider how to assess their achievement. That way, important outcomes would not be left out due to the difficulty of measurement. If, on the other hand, the measurability criterion is used early as a "screen-out factor" for objectives, one can end up with objectives that are measurable but not too important.

# There are several methods for writing objectives; which is the best?

Once again, the best way is the one that works. To work, the writer and the team must be comfortable with the method, and the audiences (e.g., designers, park staff, partners, central office personnel) must understand what the writer means.

You can specify percentages (e.g., 50% of the visitors who drive to an overlook will get out of their cars and look at a wayside exhibit), follow GPRA specifications, or otherwise indicate expected achievement (e.g., most will stay to the end of the video program; vandalism will be rare). It may be useful to identify more specific amounts or degrees of achievement after having worked with a program, issue, or interpretive medium for awhile. For example a visitor center goal may start as "most visitors will go into the exhibit room," and become "at least 60% of visitors will spend at least five minutes in the exhibit room" as data is collected and baselines and patterns established.

#### What are some examples of goals and objectives? Seldom Seen Mine Special Study

After a trip to Seldom Seen Mine, visitors will be able to describe the differences and similarities between a family-run operation and a large-scale, corporate operation and to describe the physical characteristics of surface and underground mining.

#### Rocky Mountain NP SFI (1995)

#### Interpretive Goals

Visitors have the opportunity throughout the year to become oriented to park facilities, services, and resources.



Visitors have available a spectrum of programs, facilities, and media that collectively:

represent all park themes through the "compelling story"  $\,$ 

meet the interest and educational level of all segments of the visiting public.

#### Interpretive Objectives

... the best way is the one

that works.

Of the adult visitors leaving the park, 80% will confirm they received adequate information to permit safe, efficient, and enjoyable visits.

Of the adult visitors leaving the park, 75% can name three management measures used to reduce impacts to park resources.

#### **Hopewell Culture LRIP (1997)**

#### <u>Visitor Experience Objectives — Exhibits</u>

Interpret those stories best told with exhibits

Provide access to representative and significant types of artifacts, while protecting the integrity of the artifacts

Help visitors imagine, understand, and wonder about Hopewell life

Provide experiences that are interesting and accessible for diverse audiences, including children, visitors with disabilities, elderly, and international visitors

#### **VISITORS**

Planning for visitors includes identifying audience segments, considering motivations and expectations, and projecting and predicting trends. Visitors are individuals; but describing major visitor groups yields potentially useful approximations. Targeting groups such as elementary school students, family vacationers, interstate travelers, backcountry users, or beach users enables planners to better identify and serve primary audiences.

It is also important to identify those who aren't coming to the park, and ask if there are issues of access or opportunity. The planning team may consider ways to reach out to previously uninvolved audiences.

Planning has moved beyond constructing an average profile and labeling him "the visitor". Real park visitors differ in many ways: age, gender, ethnic backgrounds, expectations, types of groups, frequency of visits, socioeconomic status, education, and knowledge. Not all differences are significant. Time, money, and patience usually prevent audience analysis in exhaustive detail, but the major segments and relevant differences should be described. Planners and designers should try to match visitor diversity with experiences suited to the major groups represented (as well as matching experiences to resource conditions, fragility, and accessibility).

Think about addressing the following questions about visitors in your interpretive plan:

How many people visit the area? in what patterns (daily, weekly, seasonally, yearly, ...)? How long do they stay?

Where do they come from?

Why do they come? What are they interested in? What do they expect from their visit? What do they know about your area, resources, stories, regulations, opportunities, etc.?

How accessible is your area to different populations of potential visitors? How do

Planning has moved beyond constructing an average profile and labeling him "the visitor."

We know more about the bison in Yellowstone than we do about its visitors.

Participant in an NPS planning workshop.

Research costs are often directly proportionate to the confidence level of the results, so managers and planning teams need to decide how much accuracy you are willing to pay for.

different groups feel about visiting your area? Who is not coming, and why?

How do visitors feel and what do they think about your resources, experiences, facilities, and staff?

There are many practical considerations regarding information about visitors. For each interpretive plan, you need to decide:

What information do we need about visitors (see list above)? Which information is the most important? Why do we need it (how will it be used)?

How accurate does it need to be?

How will we get that information?

The second question—how accurate should the information be—should be addressed before determining how you will get that information. A useful concept here is the *confidence level: the probability that the conclusions represent reality.* A university researcher submitting a thesis or a paper to a professional journal might choose a 95% confidence level, whereas an agency decision maker might settle for somewhat less. Research costs are often directly proportionate to the confidence level of the results, so managers and planning teams need to decide how much accuracy you are willing to pay for.

We can often get valuable information about and from visitors at very little cost. Watch them. Count how long people look at an exhibit. Count how many go in the auditorium or stop at a wayside exhibit. Record license plates. Plot attendance patterns. Talk to visitors.

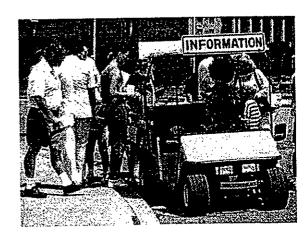
Approval by the Office of Management and Budget (OMB) may be required for federal agencies to use appropriated funds to formally interview or survey visitors. Approval generally will be granted for legitimate research that has some thought behind it and is intended for specific purposes.

Most discussions with visitors do not require OMB approval. You can—AND SHOULD—talk to your visitors. Asking "which exhibits did you like the best?" and "what was it that appealed to you?" can reveal patterns and indicate effectiveness, while being an enjoyable conversation for visitors and not

requiring approval. Perspectives on visitors by frontline staff are especially important to the planning process.

Federal agency planning teams should check with agency researchers for procedures and regulations governing visitor interviews and surveys. Social scientists can give valuable advice on setting up an area's research programs. OMB approval is not required if federal funds are not used in the survey; some parks have gotten good information in surveys conducted by cooperating associations or friends groups.

It is tempting for a planner or manager to make assumptions about visitors based on his/her personality and outlook. But managers, planners, and other resource professionals may be demographically (and psychographically: attitudes, beliefs, values, preferences, etc.) different from most Americans in several ways. We should learn about visitors by observing and conversing with them. We should study the social science research that has already been done. We should apply what we learn to planning decisions. Important questions should be addressed by professional researchers.



#### **RESOURCES**

Humans impact natural and cultural resources in many ways both positive and negative. Influencing visitor behavior requires more attention to attitude and behavior change than do more traditional interpretive efforts.

Most interpretive plans describe significant park resources, ways of experiencing those resources, and associated interpretive stories. The degree of detail will vary. Too little detail can lead to ambiguity and misinterpretation by readers; too much detail might obscure the main points of the plan and discourage some readers.

Resource descriptions should usually include assessments. These can summarize what we know about the health of park and regional ecosystems, habitats, species, and cultural, social, and recreational resources. Resource conditions can then be related to visitor experiences.

There are three aspects of resources that are especially important for interpretive planning teams:

- > What are the primary resources—and the stories and values associated with them—that we want to interpret, provide access to, and protect? What are the characteristics, conditions, changes, influences, and relationships?
- > What are desired future resource conditions?
- > What are the visitor behaviors that affect these resources, how do they affect them, and how can we influence behavior to help meet our mission and achieve our goals?

The first aspect stresses the importance of the planning team obtaining sufficient knowledge of the **present state of important area resources.** The planning team should know the resources that make the area significant and attractive. These resources include visitors; visitor safety should be a concern for every interpretive program.

It is important for the planning team to know the second aspect of resources in an interpretive plan—the desired resource conditions. These may come from other sources, such as resource management plans, or consulting with resource specialists. The team needs to describe how visitors can be involved in meeting those resource goals.

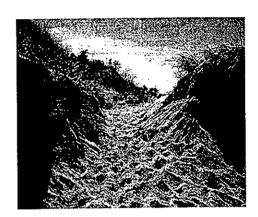
The third aspect, resource-related visitor behavior, describes how interpretation and visitor experience are involved in getting from the first aspect (present resource conditions) to the second aspect (future desired conditions). All three aspects of resource planning are becoming more important as populations grow, participation in recreational activities grows, habitats and corridors shrink, public budgets are stretched, and many natural and cultural resources become more rare. Because this involves some new approaches and skills, we shall devote some attention to the subject of resource-related visitor behavior.

Humans impact natural and cultural resources in many ways both positive and negative. Influencing visitor behavior requires more attention to attitude and behavior change than do more traditional interpretive efforts.

#### **Examples of resource-related behavior:**

- > hiking on or off trails
- > wildlife viewing, studying, feeding, disturbing, or poaching; plant viewing, studying, or collecting
- > vandalism or respectful enjoyment of resources
- > thoughtless and dangerous behavior, or careful and safe behavior
- public involvement (social, political, and economic), or lack of interest about or opposition to resource goals
- > sustainable or destructive visitor experiences
- land developments or habitat preservation outside protected areas
- compliance with or violations of regulations and policies

Influencing resource-related behaviors requires management and communication strategies that relate to the ways that people form their attitudes and beliefs, how those attitudes and beliefs relate to behaviors, and how decisions about behavior are made. Traditional interpretive approaches can be enhanced by understanding the salient attitudes and beliefs that support visitor behavior, employing



Influencing resourcerelated behaviors requires management and communication strategies that relate to the ways that people form their attitudes and beliefs, how those attitudes and beliefs relate to behaviors, and how decisions about behavior are made. targeted communication strategies, and providing specifically-designed recreational experiences.

Roggenbuck (in Manfredo, 1992) discusses three overlapping ways to manage resource impacts:

- > Applied behavior analysis: overt visitor behavior is linked with rewards or punishment; includes law enforcement, competitions and other incentives, area closures, activity restrictions
- Central route to persuasion: changes in beliefs, attitudes, and behavior are brought about through interpretive programs and media, personal contacts, and publicity, where the persuasive messages are direct and overt
- > Peripheral route to persuasion: the recipient is consciously unaware of the messages; which may be expressed through facility, media, and program design, social and environmental settings, and rhetorical devices such as cognitive dissonance or storytelling

Interpretive planning plays an essential role in all three approaches. A goal-driven approach commonly starts with developing, reviewing, or confirming resource goals (depending on how current and accurate they are). Then the planning team identifies which behaviors significantly impact resources—both positively and negatively. This is an important point because most discussion of visitor impacts on resources has emphasized negative impacts: walking off trails, feeding or disturbing wildlife, stealing or defacing cultural resources, disturbing the experiences of other visitors. However, positive impacts may be as powerful in protecting resources. Examples include political support, following regulations, volunteer activities, habitat enhancement outside protected areas, demonstrating safe and minimum-impact behaviors, and telling your neighbor about what a great time you had and how fragile are the petroglyphs or whorled pogonias.

Once resource-related behaviors and experiences are identified, the planning team can consider alternatives for encouraging or discouraging each behavior (you will not have time to deal with all behaviors; just tackle the important ones). Each

visitor-related resource protection issue may have at least two associated behaviors: most visitors do the right thing (and we want to encourage more of that) and other visitors do the wrong thing (and that we want to minimize). For example, walking off trails is an issue in many natural and cultural resource areas. The behavior we want to encourage is staying on the trail; the one to discourage is straying off the trail. Both deserve attention.

While addressing resource-related behavior issues, there are several important points to consider:

- Management and communication approaches will work better the more they are targeted to specific behaviors by specific audiences.
- > Treatments will often work best when placed at the time and place where behavior options are first considered. For trail shortcutting, that might mean a small sign or wayside exhibit and a roving ranger at the first shortcut. For wildlife feeding, that might mean pre-visit publicity when the group first thinks about bringing food to feed wildlife (which often means at home) and a wayside and roving ranger at the first point where freeloading wildlife can be found.
- Since audiences are diverse, a variety of approaches are needed to deal with the most significant behaviors.
- Management and communication programs can work: common methods such as wayside exhibits, roving rangers, area closures, and environmental education have shown positive results; skillful and targeted approaches (based on research) will give even more positive results than more general efforts.
- > Attitude change works best as a long-range strategy, and is especially effective with 8-12 year old visitors in structured environmental education programs.
- Most visitors will comply with visitor use guidelines and restrictions if they are clearly articulated and justified, and if there are alternatives available that meet their objectives or motivations.
- Much more research is needed. We also need to use existing research and make it more accessible.

Management and communication approaches will work better the more they are targeted to specific behaviors by specific audiences.

Since audiences are diverse, a variety of approaches are needed to deal with the most significant behaviors.

#### SUBJECT MATTER KNOWLEDGE

Interpretation helps visitors move from tangible experiences to understanding systems, relationships, processes, and meanings.

Insuring that our interpretation is relevant and contemporary requires frequent reevaluation of existing facts, identification of new sources, consideration for different of points view, and reconsideration of past themes.

Planners work on a variety of projects which involve many types of resources, stories, and subject matter areas. No one can be an expert in all areas; but planners must be willing to learn what is important for each project. This involves learning not only important facts, but procedures, methodologies, and rules of evidence as well.

Resources can include: beams and bricks from an old Wesleyan Chapel in Seneca Falls; geysers, hot springs and fumeroles in Wyoming; an apple orchard in Zion Canyon; petroglyphs at Saguaro; tide pool denizens at Acadia; a Navajo rug and its creator at Hubbell Trading Post; a tall grass prairie in Kansas; a cornfield at Antietam; solitude in the Mojave desert; words to an old spiritual, "Follow the Drinking Gourd"; recollections of a brass band drummer who played with Sidney Bechet in New Orleans; and a cracked bell in Philadelphia.

Interpretation helps visitors move from tangible experiences to understanding systems, relationships, processes, and meanings. An interpretive plan may suggest how history can be narrated to show multiple perspectives and the relationships of events, and encourage visitors to derive personal meanings. A plan may provide guidance on how science is explained to allow visitors to understand causal and functional relationships, alternative hypotheses, and the nature of evidence. Gaining these insights involves research, critical examination of evidence, selection of facts, and synthesis of these facts into meaningful interpretive narratives.

Interpretation is not just a collection of static facts; rather it seeks to provide visitors with a better appreciation and understanding of resources and experiences. Insuring that our interpretation is relevant and contemporary requires frequent reevaluation of existing facts, identification of new sources, consideration for different points of view, and reconsideration of past themes. Cultural resource specialists attempt to answer the classical questions of who, what, why, when, and how, by organizing known facts into illuminating or provocative patterns.

Scientists ask questions about processes, relationships, causes, and effects. Through these examinations and the acquisition of new knowledge every generation has refined research methodology and subsequently changed the interpretation of our natural and cultural resources.

Humans decide what is worth knowing about our world and our past. One way to determine what is worth knowing is to follow Freeman Tilden's principle of presenting interpretation that relates to visitors' experiences. How did today's society develop? How did a natural landscape develop? What are the human roles in the "natural" world? What in our past holds meaning for us individually? as children? as women? as men? as Americans? as American Indians? as descendants of immigrants or of the enslaved? as laborers? as business owners?

Many national park visitors hope to learn something about themselves and the world they live in. Some visitors seek to affirm or supplement what they learned in school. Some are looking for confirmation of some part of their heritage or spirit. Equipped with accurate facts, subject matter experts, interpreters, and visitors can openly discuss the significance and diverse meanings of the petroglyphs, tide pool denizens, log cabins, geysers, and words to the old spiritual. Good interpretation can expand our collective sense of ourselves and our world by exploring the values of our cultural and natural resources from different perspectives.

In planning for the interpretation of our parks we must challenge ourselves to gain the knowledge of visitors and other resources that will allow us to facilitate links among them.

Sound research methodology can help planners:

- > present accurate messages
- > present balanced and complete messages
- > present single objects (e.g., organism, place, person, event) within larger contexts (e.g., ecosystem, landscape, community, period)

Ideally, interpretation helps us gain not just knowledge but that rare and more precious commodity, wisdom. Interpretation does not just inform us but pushes us to a deeper and more subtle understanding of some aspect of the world around us.

- Kenneth Ames (1992)

- provide an understanding for the evolution of thought as it relates to a specific place, organism, object, or event
- > present multiple perspectives, voices, and interpretations
- > select and analyze evidence
- > deal with contradictory evidence
- > deal with controversial issues and themes
- > use different models or methodologies for interpreting evidence
- > identify connections among processes and events
- > find original and secondary sources

Resource specialists, interpreters, and planners have valuable roles to play in offering the public high quality interpretation through personal services and media. Interpreters and planners who develop and present messages with solid scholarship can be confident of their ability to interpret our natural and cultural resources in all of their dynamic, enlightening, inspirational, liberating, contradictory, empowering, and humanizing forms.

## RECOMMENDATIONS

Interpretive planning teams recommend ways to meet park goals through interpretive media, facilities, and activities, and through direct experiences with resources. These are not prescriptions; many recommendations are likely to be modified in the design process. All modifications should meet the original goals. Goals may be modified, but this should be a formal process and incorporate all stakeholders.

Recommendations should constitute the most cost effective means of achieving desired outcomes. Whether or not a formal value analysis is conducted, alternatives should be considered, choices should be based on comparisons of benefits and costs, and decisions and rationales should be documented.

Interpretive Media

Interpretive media selection is as much art as science. There is rarely only one way to achieve a goal. Involving specialists in key media is highly recommended. Each situation has its own particular mix of factors to consider. Some of the most important elements in a media decision are: message, audience, and resources.

## Message

What is to be communicated affects the method of communication, and vice-versa. Is the message simple or complex? Is it an abstract concept that can only be presented verbally or are there graphic components? Does the concept require a specific sequence or chronology to be understood? Is it helpful or necessary to involve many senses? How can we make the messages attractive? compelling? relevant? What priority does this information have in relation to the overall interpretive program? Should the message be experienced in addition to—or rather than—learned didactically? What are the desired outcomes of this communication?

#### Audience

The audience must be able to access and comprehend the information. What knowledge and expectations are they likely to have when they arrive at the site? How much time do they have? When would this Recommendations should constitute the most cost effective means of achieving desired outcomes.

What is to be communicated affects the method of communication, and vice-versa.

The audience must be able to access and comprehend the information. The more detailed the audience profile, the easier it is to select appropriate media. The quality and quantity of resources available to support media development will not only affect the kind of media selected, but may determine the feasibility and cost of production.

information be most useful: before, during, or after experiencing the resource? What primary languages? literacy patterns? ages? group types? What are their motivations for coming to the site? Are there cultural differences to take into account? What physical abilities do they have? The more detailed the audience profile, the easier it is to select appropriate media.

#### Resources

The quality and quantity of resources available to support media development will not only affect the kind of media selected, but may determine the feasibility and cost of production. Are there landscape elements to support the message? Are they accessible? How much information is available on the selected subject? Has the accuracy of the information been certified? Are there additional perspectives that should be interpreted? Are quality photographs and other graphic elements available and can the proper use rights be obtained? Does the message rely heavily on the use of artifacts and are these artifacts extant and available? Can the artifacts be adequately protected while on display? What kind of budget can be projected?

Common types of media used to deliver interpretive messages include audiovisual products, museum exhibits, wayside exhibits, publications, and personal services. Each has qualities which make it more or less suitable for a given application. Some of the recognized strengths and limitations of each medium are listed below. Note that these are generalizations; exceptions can usually be found.

## **Audiovisual Media**

## Advantages

- > well suited to the presentation of chronological and sequential material
- > can capture realism and provide emotional impact
- > provide opportunities for dramatization
- > can be portable for off-site use
- > provide views of places, animals, plants, and seasons otherwise unavailable or inaccessible

- > can create a mood or atmosphere
- > can reach many visitors at one time
- can be adapted to serve physically impaired visitors
- > can illustrate before and after effects
- > can be produced in different languages

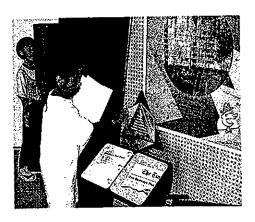
### Limitations

- > cannot be used everywhere
- require back-up equipment, periodic maintenance, and regular monitoring
- > may be perceived as sterile or impersonal
- > may offer little opportunity for visitors to browse or study an item in depth or at their own pace
- > repetitious sound tracks can annoy visitor center staff
- > may be a visual or auditory intrusion
- > production and maintenance costs can be expensive
- people usually have high expectations of audiovisual media; low-budget products can fall short of expectations

## **Exhibits**

## **Advantages**

- > can be viewed at visitors' own paces
- > can be designed in all shapes, sizes, colors, and textures
- > can display objects associated with the site
- can incorporate artifacts, artwork, or mixed media to produce desired atmosphere and effects
- > can transcend language and cultural barriers
- > can promote the use of the senses to aid the perception of the able-bodied and handicapped visitor alike
- > can promote visitor participation
- > can be designed for both indoor and outdoor use



- > are well suited for ideas which can be illustrated graphically
- > permanent exhibits can be grouped with rotating, seasonal, or temporary displays to provide a sense of change
- > can provide experiences of varying complexity, allowing visitors to select the depth they choose

### Limitations

- > are sensitive to agents of deterioration
- > require security and maintenance
- > must be housed in adequate facilities
- > do not work well to tell largely verbal, complex, or sequential stories
- > exhibit materials may have high commercial value, making them targets for theft
- > can be very expensive
- > inexpensive exhibits may look amateurish, and are usually less effective than higher-quality (and more expensive) productions
- > technology and materials can overwhelm the message

#### Personal Services

## **Advantages**

- direct human to human communication is often more enjoyable to visitors than communication by impersonal media
- > can easily be customized to meet visitor needs or changing conditions
- > can use group/visitor reactions to stimulate interest
- > can be interactive
- > may be monitored and changed accordingly
- > tap diverse skills of interpreters
- versatile, effective, and relatively easy to implement
- > can be cost effective, especially in the short term



 can convey complex messages, and help visitors connect tangibles and intangibles to universal concepts

### Limitations

- > require well-trained interpreters
- > may not give consistent messages
- require close supervision and management
- > can be difficult and expensive to maintain year round
- > high recurring costs
- > can be difficult to critique properly

### **Publications**

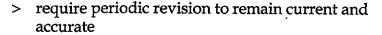
## **Advantages**

- > are portable
- > can treat a subject in-depth
- > provide a source of detailed reference information
- > can be produced in different languages
- > suited to presenting sequential or complex material
- > can be read at visitors' own pace
- > can produce income
- > can often be revised at a reasonable cost
- > can be produced at various levels of detail
- have value as a souvenir, something to take home
- > can be used before going to a site, during the visit, or after returning home
- > can be produced to treat the same subject for different audiences
- may be appropriate for stories lacking in artifacts or photographs

### Limitations

- > can discourage potential readers with lengthy and/or complex texts
- can be a source of litter





> may require facilities and maintenance (such as brochure dispensers)

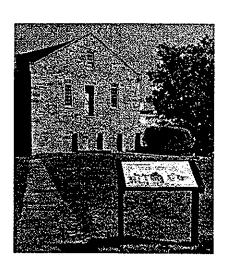
## **Wayside Exhibits**

## **Advantages**

- > can be available 24 hours a day
- > use real objects and features in their own setting as objects of interpretation
- > are relatively inexpensive
- > can be designed to blend with site environment
- > provide onsite interpretation of specific sites and stories
- > can depict a place as it appeared many years before
- > can show a feature from a view unattainable by visitors
- > can illustrate phenomena that are invisibly affecting a resource
- > establish a park identity at remote, unstaffed locations
- > alert visitors to safety or resource management issues at the point of danger, decision, or environmental impact
- > can be replaced relatively quickly and inexpensively

#### Limitations

- > limited amount of text and graphics per panel
- > don't work well for complicated subject matter
- > focus attention on tangible resources; less effective with intangibles and universal concepts
- > may intrude on a park's visual landscape
- > may not be practical at sites with climatic or environmental extremes
- > susceptible to vandalism

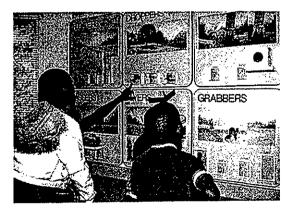


> expensive site preparation may be needed at some location

These general attributes provide initial guidance in the selection of appropriate interpretive media and should be used only as a guideline to begin the discussion of which media to select. With all media, resilience is an important criterion: a state-of-the-art interactive gizmo is worthless when broken.

Newly-developed digital media such as CD-ROMs and the Internet offer different advantages and limitations, which will become more apparent over the next few years. Advantages may include interactivity, ability to zero in on specific interests, greater graphic interest and "special effects," ability to relate to audiences such as teenagers, and ability to update information. Limitations may include high cost, low resilience of hardware and/or software, need for trained or informed users, and otherwise limited audiences.

Media development in today's rapidly changing technological environment requires the involvement of professional media planners and designers to ensure solutions which efficiently use the available resources, respond to visitors' media expectations and provide a quality experience. The planning team should ensure that objectives for media and programs are careful described; park staff and other reviewers should ensure that media and program proposals are likely to meet the objectives.



## **FACILITIES**

Sound interpretive planning is essential for visitor facilities such as visitor centers, contact or information stations, environmental education centers or camps, trails, wayside kiosks, and scenic overlooks.

It is especially important to establish the goals and functions, and the criteria for variables such as location and appearance, before options or solutions are considered. Sound interpretive planning is essential for visitor facilities such as visitor centers, contact or information stations, environmental education centers or camps, trails, wayside kiosks, and scenic overlooks. Interpretive planners should be involved in planning and schematic phases of facility development, and work closely with designers and park staff in fitting facilities to the needs of visitors and resources.

It is especially important to establish the goals and functions, and the criteria for variables such as location and appearance, before options or solutions are considered.

Many questions can be asked:

What is the facility going to do? (generally and specifically)

What is its role in visitor experience?

What functions, relationships, contiguities, messages are there? What activities need to be next to or close to each other?

What are expected audience patterns and visitation? How many people should the facility accommodate?

What are expected staffing levels?

Do forms support functions?

How much money is available? What kinds of other assistance? What are cost effectiveness relationships?

How (and how well) do existing facilities work?

What support functions or spaces are needed?

Plans for new or renovated buildings may incorporate assessments or evaluations of existing facilities. These assessments at a minimum should show how well goals are being met.

Answers to these and other questions become part of the building program. This does not mean interpretive planners prescribe design solutions; it does mean that goals are agreed upon before design solutions are worked out. There are many ways to describe goals and functions (or outcomes) for interpretive facilities; the scope and detail will vary as well. Examples below show some of the different ways to describe facility goals, functions, and other criteria.

# **Examples**

New Orleans Jazz National Historical Park; preliminary drafts for general management planning

### **Visitor Center Functions**

Orient visitors to park and area resources, services, and attractions

Interpret the park story, as described by interpretive themes, providing an overview of the park story, and emphasizing those story elements that are best told by indoor interpretive media

Provide, along with other locations, jazz education classes, and programs

Provide needed visitor services, such as rest rooms, emergency services, and information

Provide a focus, point of contact, and spatial and visual identity for New Orleans Jazz NHP.

#### **Visitor Center Location Criteria**

#### **Visitor Access**

Close to or within primary tourist activity areas

Easy to find

Accessible via public transportation

Accessible to people with disabilities

### Structural soundness

Needed repairs are feasible

Needed repairs are affordable

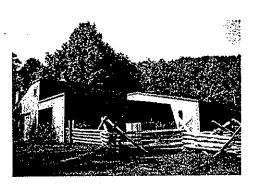
## Sufficient and suitable space

The right amount of space is available

The space is arranged in a desirable layout

#### **Outdoor characteristics**

Sufficient parking can be developed nearby



The neighborhood is relatively safe

The appearance of the building, grounds, and neighborhood fits with the park theme and agency identity

#### Visitor experience

Visitor reactions to the built environment are consistent with visitor experience goals

### Sustainability, Cost

It would be cost effective to purchase/lease, renovate, operate, and maintain the building according to sustainability guidelines

### Support other goals

This building would support other initiatives such as historic preservation, neighborhood revitalization, partnerships

### Hagerman Fossil Beds Research Center/Museum

The research center/museum will contribute significantly to visitors' experiences for the following reasons:

Due to the fragility of the resource, the research center/museum will be a moderate drive from the monument itself. There will, however, be a panoramic view to the monument and the historic Horse Quarry from the center.

The center may be most or all of what the visitor remembers of Hagerman Fossil Beds;

Hagerman's resources include fragile, inaccessible, and often extremely small fossils which need interpretation to be elevated to the level of interest, relevance, and significance to the visitor;

Paleontology, a science frequently involving tedious measurements and arcane terminology, also requires interpretation to become relevant and accessible to visitors.

### **Building Goals**

#### Museum:

Orient visitors to site significance, resources, and area attractions

Create an inviting mood, to encourage visitors to stay longer

Support the environmental significance of the paleontological story, rather than fixing on isolated specimens

Provide visitor services (rest rooms, information, assistance)

Communicate interpretive stories

Protect resources through effective interpretation

Provide educational programs to schools

Provide visitor access to paleontology research

#### **Research Center:**

Prepare fossils

Store fossils

House and facilitate research by resident and visiting professionals, with important assistance by volunteers

Interpret work to public

Promote research and publications dealing with Hagerman

Facilitate interaction with other paleontological and educational institutions

Promote the protection of paleontological resources and information

## **Building Program**

Research functions at the center would consist of field collection, preparation, and curation of Hagerman specimens; paleontological resource management support; collections management; and support of other research endeavors. Activities would include fossil locality inventory and clarification and documentation of the stratigraphic record.

The major components of the research center would be a preparation laboratory, a general purpose laboratory, curatorial storage, field specimen and equipment storage, casting room, library, collections management area, and lecture and meeting rooms. In addition, there would be office spaces for a staff paleontologist/curator, a collections manager, a preparator, and independent researchers.

Specimen collections from the monument would be housed in the research center/museum and would be available for loan. Hagerman specimens in existing collections would be sought as necessary as donation, on a loan basis, or as castings. The National Park Service would not recall specimens from existing collections; however, a data base of all Hagerman specimens would be compiled at the research center.

Research endeavors conducted by independent paleontologists or volunteer support would be managed by a professional paleontologist on the monument staff.

Educational functions would consist of offering educational support activities at the center for all grades, use of classrooms in conjunction with research and preparation lab activities, field trips to the research center/museum and monument as part of the local school science curriculum and in support of special events, college credit workshops and seminars for continuing education, and graduate level research projects and programs.

Major components of the educational function would consist of paleontology exhibits, audiovisual programs (shown in an auditorium, a video alcove, and throughout the exhibit area), a preparation lab viewing area, and environmental education classrooms.

## **LANDSCAPES**

There are landscapes that are so recognized as having special qualities that their mention conjures images in the mind's eye: Maine's rugged coastline, cornfields in the Midwest, Florida's Everglades, the red rock country of Arizona and Utah. Other landscapes, associated with historic events or people, are just as recognizable: New York City's Central Park, the streets of Harlem, the plaza in Santa Fe, New Orleans' Bourbon Street, the White House south lawn.

What are the special qualities associated with these landscapes? Why and how do we connect with certain landscapes?

Landscapes, whether Yosemite Valley or the neighborhood where we played as children, have qualities that can be identified, documented, protected, and interpreted. The challenge for interpreters and planners is to help visitors experience landscapes in beneficial, enjoyable, and sustainable ways, and help them relate experiences to more intangible values, meanings, and traditions.

Historic preservation traditionally has focused on buildings. A holistic approach to preservation, involving both cultural and natural resources, has been practiced only recently. Cultural landscapes include: historic sites (associated with important events, activities, or persons), historic designed landscapes (deliberate creations reflecting recognized styles), historic vernacular landscapes (illustrating values and attitudes toward the land and reflecting patterns of settlement, use and development over time), and ethnographic landscapes (associated with contemporary groups and typically used or valued in traditional ways). Landscapes illustrate human adaptation and use of natural resources, and provide a setting for past and present human activity.

A cultural landscape can be "read" on many levels: as nature, habitat, artifact, system, problem, wealth, ideology, history, place, and aesthetic. Few of us have learned to recognize historic land use or settlement patterns, or to identify constructed elements of a landscape, let alone realize that change is an important aspect in considering landscape character. Interpreters and planners give visitors tools for

We all react, consciously and unconsciously, to the places where we live and work, in ways we scarcely notice or that are only now becoming known to us. . . . These places have an impact on our sense of self, our sense of safety, the kind of work we get done, the ways we interact with other people, even our ability to function as citizens in a democracy. In short, the places where we spend our time affect the people we are and can become.

Tony Hiss (1990)

The challenge for interpreters and planners is to help visitors experience landscapes in beneficial, enjoyable, and sustainable ways, and help them relate experiences to more intangible values, meanings, and traditions.

Interpreters and planners should consider landscapes when addressing resource significance, visitor experience goals, and interpretive themes. appreciating landscapes by explaining broad historical, social, and physical contexts; by describing lost character-defining features; and by explaining historic themes and associations.

Interpreters and planners should consider landscapes when addressing resource significance, visitor experience goals, and interpretive themes. Interpretation can be linked to the landscape's ability to convey the past through its character and defining features. The level of integrity (i.e., the degree of visual change over time or the similarity to an earlier era) may affect the types of media chosen to interpret the landscape. For example, wayside exhibits may intrude upon a high-integrity landscape, whereas they may work in landscapes with lower integrity, in one with missing elements.

Decisions on how to best interpret cultural landscapes should be based upon careful planning, research, documentation of existing conditions and relationships, preservation approaches (e.g., preservation, rehabilitation, restoration, reconstruction), projected maintenance needs, and management goals.

The social, recreational, and educational benefits can lead to understanding, as well as enhance an "experience of place."

## **EVALUATION**

Evaluation is an essential part of planning. Nearly everyone on planning teams has ideas about how different media, programs, or facilities work, about how important are various visitor experiences; yet these are too seldom based on empirical research. The planning team should ask questions such as "How well has that worked in similar situations?" and "How do visitors evaluate their experiences here?" and "How well do we know?"

Evaluation asks whether goals were met; it can also identify and quantify both causes and results. Planners then recommend a certain location for a new contact station because they know the present one does not capture many visitors. Planners can recommend using roving rangers and small signs or wayside exhibits to cut down on trail shortcutting because evaluations showed them to be more effective than other options. Planners can recommend using color photographs rather than abstract designs in a marketing brochure, because evaluations show them to work better with the public.

Like most other aspects of planning, evaluation should be an ongoing process, the form of which is tailored to the tasks and questions to be answered. The planning team may commission studies be done as part of the planning process; the team should be knowledgeable of previous research that relates to planning issues; it should recommend further studies that are needed to tell us more about visitor experience, and interpretive themes, media, programs, and facilities.

Evaluations done during a process are called **formative**; evaluations performed at the end of a process are called **summative**. Summative evaluations have been more common in government agencies: performance is measured and assessed at the end of a fiscal year; achievement of media objectives is determined after the media are installed for a period of time; achievement of short-term educational goals is measured at the conclusion of a program.

Formative evaluations are increasing in the Park Service, especially with the implementation of Evaluation asks whether goals were met; it can also identify and quantify both causes and results.

Like most other aspects of planning, evaluation should be an ongoing process, the form of which is tailored to the tasks and questions to be answered.

GPRA and value analysis. Benefits are seen as the degree to which alternatives support long-range and mission goals; costs include long-term costs, and are estimated to the accuracy possible at each stage of planning or design. Cost effectiveness of projects is then evaluated in various ways at major decision points.

NPS evaluation programs include:

- Visitor Services Project, which assesses visitor backgrounds, preferences, activities, and opinions through surveys; about ten parks a year are studied; the program is coordinated by the Cooperative Park Study Unit (CPSU) at the University of Idaho.
- Many park-initiated evaluations are conducted or contracted by parks with assistance from regional offices, service centers, and the Washington Office of Interpretation and Visitor Services. Funding frequently includes support from partners, especially the private sector.
- Sovernment Performance and Results Act (GPRA); which holds offices and areas accountable for defining and assessing desired outcomes.
- > The Value Analysis Program, which assesses the cost effectiveness of design/construction projects in excess of \$500,000.
- > Post Occupancy Evaluation (POE); which assesses the effectiveness of interpretive facilities and media largely through observation and interviews; the program is coordinated by the Denver Service Center (DSC) and Harpers Ferry Center.
- Post Construction Evaluation; which looks at the quality of construction of facilities built by DSC; the program is coordinated by DSC.

Interpretive plans usually include evaluations of present conditions; these may include narrative and graphic descriptions, data, summaries of studies, and recommended actions to correct deficiencies. They may also recommend needed studies.

## ANSWERS TO FREQUENTLY-ASKED QUESTIONS

We're about to get \$20,000 from a foundation to improve the media in our visitor center. Our interpretive plan is obsolete. What should we do?

You'll need to do some planning. How much and what types depend on many things, including your budget, what you mean specifically by "obsolete," the state of other planning (management, strategic, and resources planning), how persuasive you are, how anxious your donors are to cut a ribbon, etc. Work to get matching funds, use creative financing, make calls. Do not let limited funds preclude doing at least some planning.

Many grants require adequate planning and evaluation. We should plan and evaluate even if it is not required.

It may not be necessary to formally write a new long-range interpretive plan. An interim document can be produced that may be a bit weak on background information and production values, but develops consensus on themes and goals, describes desired visitor experiences, and analyzes choices for media, programs, and activities. But when you've finished those elements, it doesn't take too much to produce a formal long-range plan.

Our interpretive plan is pretty outdated. We have no plans to make major changes in our interpretive media or visitor facilities, but would like to improve our personal programs. Do we need a new interpretive plan?

Again, it depends partly on what you mean by "outdated". You probably want to do some planning to decide the best niches for personal programs, assess their effectiveness, describe audiences, review themes and goals, etc. You may have higher immediate priorities than producing a formal plan, since media or facility changes are not likely.

You probably want some outside perspectives. These do not have to be packaged in a formal interpretive plan, but why not spend the extra effort? A formal plan can help solicit funding for needed improvements to your program.

We should plan and evaluate even if it is not required To get consensus usually requires agreement first on goals. Disagreements frequently occur at the "how" level. By stepping back and "why" discussing "what," consensus often be reached at a level. higher discussions can focus on best ways accomplish agreed goals.

### How much should an interpretive plan cost?

That depends on the scope of the project and the plan. It should cost the least amount necessary to do it right.

In 1998, an HFC-produced long-range interpretive plan for a moderately large and complex park could cost \$15,000 to \$30,000. More comprehensive or larger plans will usually cost more.

I want to re-do our exhibits and make them all "hands-on," but I can't talk some of the rest of the staff into it. How can I get us all pulling the same direction?

To get consensus usually requires agreement first on goals. Disagreements frequently occur at the "how" level. By stepping back and discussing "why" and "what," consensus can often be reached at a higher level. Then discussions can focus on the best ways to accomplish agreed goals.

Be prepared to initiate a discussion on goals with an open mind. Interactive or "hands-on" exhibits aren't always the best choice for visitor center exhibits. They tend to work well with children and kinesthetic learners, but they also have limitations: they can break down, and they may encourage "hands-on" but not "minds-on" interaction. Be willing to go where the discussion leads, and consider all options.

Whenever I suggest a wayside exhibit to interpret some resource issue like walking off trails, my boss says something like, "We don't want to have a sea of signs in the park; this place should be natural. Besides, they won't read or obey them anyway."

What can I say to her?

This argument is an example of stating the question in exaggerated terms, then criticizing that exaggeration. Nobody advocates a sea of signs. But some parks expect visitors to obey regulations of which they are not adequately informed. That generally does not work.

Wayside exhibits can be intrusive on the landscape. There should be reasons for each wayside, a carefully executed planning effort that begins with comprehensive goals, and narrows to identifying the best ways to accomplish these goals. In the case of waysides, a wayside exhibit proposal will identify the rationale, locations, and topics for exhibits.

A common question is whether to use waysides or a publication (brochure, site bulletin) to interpret outdoor attractions. Brochures are often better for stops that are part of an integrated story, whereas waysides might be better at interpreting separate stories. Waysides usually cost more, yet they might encourage more attention from visitors. Waysides can be more easily vandalized. Site bulletins can be updated more easily and cheaply. Brochures and site bulletins require a dispenser and staff to re-stock them.

You may wish to interpret a site initially using a site bulletin; that will allow flexibility in determining the best stops and messages. When you have evaluated the results, and are sure you have the story right, you can then opt for wayside exhibits or a more expensive and effective publication.

### How do I decide the best way to get our interpretive planning done? It would be cheaper to do it ourselves.

There is no standard answer. Harpers Ferry Center is mostly project funded; parks and regional offices are mostly base funded, so costs may appear lower. If a park or regional office has people with the needed experience, time, and capabilities, an excellent team can be assembled. It is highly recommended that you include team members from outside the park. An outside perspective is very helpful and often results in ideas that may not be voiced by park staff.

There is also a real difference between interpretation and interpretive planning. If a park interpreter is expected to function as an interpretive planner on a project, s/he should have some experience and expertise in planning. Many regional interpretive specialists are also experienced planners.

Parks have many options on how to meet their planning needs. The HFC division of interpretive planning will be glad to discuss needs and options with you. HFC involvement can range from full participation to consulting.



Prepared by the staff of the Division of Interpretive Planning, Harpers Ferry Center, National Park Service. For more information, contact Division Chief Andy Kardos, (304) 535-6056.

Photo credits: National Park Service, Indiana Dunes National Lakeshore, Tom Gray, Bill Witmer, Jack Spinnler, Sam Vaughn

# **APPENDICES**

# **APPENDIX A: Harpers Ferry Center Services**

The Harpers Ferry Interpretive Design Center is the office established to plan, design, and produce interpretive media for all national parks.

### Its mission is to:

- Prepare interpretive plans for parks to guide their interpretive developments.
- Plan and produce museum and wayside exhibits, audiovisual presentations, and interpretive publications.
- Perform preservation work on historic furnishings, and develop and evaluate new interpretive techniques and technology.

### **Manager's Office**

Gary Cummins, Manager (304)535-6211

#### Division of Audiovisual Arts

- Produce films, videos, and audios from concept to installed programs.
- Act as technical consultant by reviewing requests for proposals and contracts and in providing technical specifications.
- Review scopes of work and scripts.
- Recommend appropriate audiovisual format to convey interpretive theme of park.
- Assess new technology to determine applicability to NPS needs.
- Recommend equipment and format to parks for upgrades and new programs.
- Retain and provide access to master tapes of video and audio programs.

### **Division of Conservation**

Martin Burke, Chief......(304)535-6228

- Provide professional conservation services, ensuring the long-term preservation of museum objects in park collections.
- Treat and mount objects for exhibition.

- Provide technical review of exhibit plans.
- Photograph objects received by the Center, documenting them at various stages of treatment.
- Provide full records on all treatments performed on museum objects.
- Conduct collection condition surveys.
- Provide preservation and conservation advice to parks, Denver Service Center, the Washington Office, and to individuals and institutions outside the Service
- Develop standards for the conservation and treatment of museum objects for the National Park Service.
- Provide curatorial training courses and individualized instruction in parks.
- Conduct research on topics related to NPS collections.
- Conduct or coordinate analysis of artifact materials.
- Provide interpretive reports on objects treated.

### **Division of Exhibits**

Mary Herber, Chief	(304)535-6097
Cynthia Darr, Assistant Chief	(304)535-6097

#### **Exhibit Planners**

- Work with the exhibit designer, producer, and park staff to produce media content packages which contain the exhibit graphics and text, as well as descriptions of objects and artifacts.
- Collaborate with the park staff to develop exhibit themes and interpretive stories.
- Provide information used in interpretive plans and other long-range planning documents.
- Provide technical advice to the parks and other government agencies regarding exhibit planning.
- Supervise production of art, models, mannequins, reproductions, and other exhibit-related elements.

### **Exhibit Designers**

 Work with the exhibit planner, producer and park staff to produce conceptual and final designs which include the exhibit drawings, graphic layouts, and material specifications.

- Work closely with the park staff, planners, producers, and other designers to ensure that interpretive needs of the parks are met.
- Coordinate architectural issues with Denver Service Center and the parks as they relate to interpretive media.
- Supervise production of art, models, mannequins, reproductions, and other exhibit-related elements.

#### **Exhibit Producers**

- Work with the exhibit designer and planner to prepare exhibit fabrication bid packages, manage exhibit fabrications contracts, and supervise installations.
- Purchase sculpture, art, models, mannequins, dioramas and other exhibit-related media.
- Provide technical advice and assistance regarding exhibit fabrication.

### **Technical Assistance Program**

Project funding for this program comes from the requesting organization through sources such as donations, special park accounts, and user fees.

- The Program Manager responds to requests for unprogrammed projects and oversees the indefinite quantity contracts for planning and design, and for fabrication.
- The Senior Designer provides design consultation and quick-response exhibit designs.
- The Program Liaison responds to requests from parks and provides advice and assistance in solving problems and coordinating work requests.

## **Division of Historic Furnishings**

John Brucksch, Chief......(304)535-6119

- Provide research and prepare Historic Furnishings Reports for furnished historic structures throughout the Service. Implement furnishings plans and produce furnishings exhibits.
- Provide technical assistance to parks in planning and operation of furnished historic structure museums.
- Acquire and provide sources for period artifacts and reproductions used in exhibits and furnished historic structures.
- Implement furnishings plans and produce complete furnishings installations. Provide post-installation orientation and support for park staff.

- Provide technical assistance to parks in planning and operating furnished historic structure museums.
- Assist the Division of Interpretive Planning and parks in feasibility studies for interpretation and historic furnishings.
- Provide expertise and assistance in the fields of military history, furnishings, and accessories.
- Participate in servicewide training.

### The Division of Interpretive Planning

Andy Kardos, Chief ......(304)535-6058 Sam Vaughn, Lead Interpretive Planner (DSC) ......(303)987-6984

- Provide long- and short-range interpretive planning for NPS areas.
- Provide an interpretive planning standard for the NPS and quality control for the planning of interpretive media products.
- Involve park, Harpers Ferry Center, and others in defining a park's interpretive vision.
- Provide justification for interpretive actions and funding.
- Involve interpretive media experts in determining the efficient, innovative, and creative interpretive package, to enhance visitor awareness, understanding, and appreciation of park resources.
- Assist park management in assessing the park's interpretive future to meet the challenges that lie ahead in a way which best serves park resources and the needs of park visitors.
- Coordinate interpretive planning in General Management Plans and Development Concept Plans among parks, regions, Denver Service Center, and Harpers Ferry Center.

## **Division of Wayside Exhibits**

Phil Musselwhite, Chief ......(304)535-6049

- Plan, design, and produce outdoor interpretive exhibits.
- Provide technical information and professional support directly to parks that wish to develop wayside exhibits themselves.
- Establish and maintain editorial, design, and production standards for NPS wayside exhibits.

- Maintain duplicate wayside panels, mechanical art, computer files, hardware, and paints, necessary for the repair or replacement of aged or damaged wayside exhibit panels or bases.
- Research and develop new wayside exhibit concepts, materials, and technologies.
- Offer assistance to other federal agencies, and to agencies of state and foreign governments, in their efforts to develop wayside exhibits.

## The Division's products include:

- Exhibit panels, in a range of standard and custom sizes, imaged as screenprinted paper (embedded in fiberglass), porcelain enamel on steel, or digital prints on aluminum.
- Aluminum bases, custom fabricated to hold the exhibit panels, and painted in NPS standard colors.
- A wayside base designed to accommodate 6" x 12" screen-printed or ceramic panels. The new exhibit style, much smaller and lower than the typical wayside, is intended to serve as a trailside plant identifier.
- Bulletin cases, in standard or custom sizes, including a hinged and lockable clear acrylic front and cork backpanel intended for the posting of park informational materials.
- Detailed plans and all hardware necessary for the construction of kiosks to support and protect three 36" x 48" exhibit panels and/or bulletin cases.

## The Division of Publications

Melissa Cronyn, Chief .......(304)535-6425

- Prepare and publish official NPS information and interpretive publications.
- Reprint 73% of the park folders on an annual basis.
- Produce more than 400 free folders, handbooks, maps, posters, and charts used throughout the National Park System.
- Printed 28.5 million copies of park folders in FY97.
- Reprint and provide folders to more than 320 parks, in consultation with park staff.
- Maintain 85 handbooks, posters, and charts available for sale through the U.S. Government Printing Office and sold by the cooperating associations.
- Provide advice and assistance to parks on producing site bulletins, administrative publications, and miscellaneous one-time projects.

 Provide new designs and maps in a digital format which can be modified for use in other NPS projects. Out of an inventory of approximately 500 maps, two-thirds are either digitized or in the process of being digitized.

Several administrative offices, which primarily provide support to Harpers Ferry Center media divisions, also provide services to the parks within the System. These offices include:

# OFFICE OF HUMAN RESOURCES AND QUALITY MANAGEMENT

Shirley Caniford, Chief.....(304)535-6489

## OFFICE OF INFORMATION RESOURCES MANAGEMENT

Dan Sohn, Chief.....(304)535-2915

 Provide support to NPS standard procedures and software and maintain integration of several generations of LAN/WAN switching/routing technologies to assure continuum of connectivity into the future.

## OFFICE OF LIBRARY AND ARCHIVAL SERVICES

David Nathanson, Chief ......(304)535-6262

- Operate the Center's research library, providing reference and interlibrary loan services.
- Operate the National Park Service History Collection.
- Maintain a comprehensive collection of NPS technical reports, including the Cultural Resources Bibliography Collection.

#### OFFICE OF PROCUREMENT

JoAnne Grove, Chief.....(304)535-6236

 Manage the Center's Task Order Assistance Program that allows parks to work directly with indefinite quantity contractors retained by the Center.

### OFFICE OF PROGRAMS AND BUDGET

Fonda Jackson, Chief......(304)535-6280

- Oversee the formulation and execution of HFC's fiscal, operating, and project programs for the provision of servicewide interpretive media products and services.
- Maintain the servicewide Interpretive Media Priority List.

#### OFFICE OF SUPPORT SERVICES

Michael Alvarez, Chief .......(304)535-6124

### **Facilities Management**

Sharon Young, Support Services Specialist ......535-6084

 Responsible for communications, building maintenance, HVAC systems, security, safety, energy, space management, office movers, and office equipment.

### **Graphics Management**

Bryce Workman, Technical Information Specialist ......535-6263

- Conduct image research and acquisition, including use rights.
- Manage the NPS Historic and Interpretive Photograph Collection.

## **Art Resources Management**

Wade Myers, Technical Information Specialist......535-6441

• Manage a central repository of staff and commissioned HFC art for accessibility by staff.

### **Property Management & Depot**

Carolyn West, Support Services Specialist......535-6197

• Manage an Audiovisual Depot repair service for standard audiovisual equipment and components in park interpretive programs.

### Registrar's Office

Alice Newton, Museum Specialist......535-6716

- Receive and document all museum objects and artwork coming into the Center.
- Record the source, status, and disposition of objects received at Harpers Ferry Center for treatment and installation in museums.
- Pack and transfer objects between the Center and parks.

### **APPENDIX B: References**

Ames, Kenneth L., Barbara Franco, and L. Thomas Frye (1992) *Ideas and Images: Developing Interpretive History Exhibits*. Nashville, Tennessee: American Association for State and Local History.

Freemuth, John (1991) Islands Under Siege: National Parks and the Politics of External Threats. Manhatten, KS: University Press of Kansas.

Ham, Sam H. (1992) Environmental Interpretation: A Practical Guide for People with Big Ideas and Small Budgets. Golden, Colorado: North American Press.

Hiss, Tony (1990) The Experience of Place. New York City: Knopf.

Lewis, William J. (1980) Interpreting for Park Visitors Philadelphia: Eastern Acorn Press.

Lime, David W., ed. (1996) Congestion and Crowding in the National Park System. St. Paul, Minnesota: Minnesota Agricultural Experiment System. Miscellaneous Publication 86-1996.

Manfredo, M., ed. (1992) Influencing Human Behavior. Champaign, IL: Sagamore Pub. Co.

Meinig, D.W., "The Beholding Eye: Ten Versions of the Same Scene," 33-48, in Meinig, D.W., ed. (1979) *The Interpretation of Ordinary Landscapes Geographical Essays*. New York: Oxford University Press.

National Park Service (1996) NPS-6, Interpretation and Visitor Services Guideline, Chapter III.

National Park Service (1994) NPS-28, Cultural Resource Management Guideline.

National Park Service (1995) An Introduction to Compelling Stories.

Tilden, Freeman (1957) *Interpreting Our Heritage*. Chapel Hill, North Carolina: The University of North Carolina Press.

Trapp, Suzanne, Michael Gross, and Ron Zimmerman (1991) Signs, Trails, and Wayside Exhibits: Connecting People and Places. Stevens Point, Wisconsin: UW-SP Foundation Press.

Vande Kamp, Mark. Social Science Literature Pertinent to Deterrence of Noncompliant Visitor Behavior in Natural Areas: A Working Annotated Bibliography. Seattle, WA: Cooperative Park Studies Unit, University of Washington.

Vande Kamp, Mark; Johnson, Darryll; Swearingen, Thomas (1994) Deterring Minor Acts of Noncompliance: A Literature Review. Seattle, WA: Cooperative Park Studies Unit, University of Washington.

Veverka, John A. (1994) Interpretive Master Planning. Helena, Montana: Falcon Press.

Wright, Brett and Marcella Wells (1990) A Field Guide for Evaluating National Park Service Interpretation. Washington, D.C.: National Park Service, Division of Interpretation.