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CRM Planning

Perspectives on CRM Planning

Ronald W. Johnson

I am pleased to introduce the first I in a series of *CRM Bulletins* featuring cultural resources management planning. When I accepted the job of guest-editor, I expected one entire issue to be devoted to this subject. But my solicitation of articles netted us more than could be published at one time. So, the editors decided to serialize the articles rather than to overload one issue. Other articles are scheduled to appear in the bulletin over the next year.

Cultural resources planning has grown rapidly in the 1980s. This work is conducted by professionals responsible for National Park Service cultural resources planning, many of whom possess training and education in history, architecture, archeology, outdoor recreation planning and landscape architecture in the parks, regional offices, Denver Service Center, Harpers Ferry Center, and the Washington Office. These professionals ground their work in NPS management policies and guidelines, such as the Planning Process Guideline, the Environmental Assessments and Statements Guidelines, Resource Management Plan Guidelines, and the Secretary of the Interior's Standards for Preservation Planning. These guidelines provide specific direction for CRM planning and illustrate fundamental linkages to environmental and cultural resource compliance mandated by the National Environmental Policy Act, the National Historic Preservation Act, and other pertinent legislation.

This special planning series is intended to offer readers of the *CRM Bulletin* a diverse perspective of the subject, and to illustrate the thriving partnership among various internal NPS entities and between the NPS and the State Historic Preservation Offices, certified local governments, and the private sector. I hope that as readers peruse the articles they will gain an understanding of the importance of the relationship between state historic preservation planning and park cultural resources management planning. Obviously, this significant responsibility is not all NPS-managed and directed, but a cooperative melding of various organizational missions. It is through a spirit of sharing and cooperation that great strides can be made in the future management of the Nation's cultural resource base.

This relationship demonstrates that professionals interested in cultural resources planning must work together to effectively accomplish the mission of preserving the Nation's cultural resources no matter who has management or proprietary responsibility. More and more, there is an exchange of information between the NPS planners and their opposite numbers in other Federal agencies, State Preservation Offices and the private sector as several of the contributors illustrate, and the success of many of the projects depends on the working relationship between various parties. These joint efforts toward effective cultural resources planning can take existing parks and possible new areas well into the twenty-first century.

The articles included in this issue, and those in future issues, should give students, as well as practitioners, a clear idea of the eclectic nature and scope of this salient topic. This edition can also serve as an introduction to those Service employees, and state, local, and

private sector professionals who are interested in pursuing an assignment or a possible career in cultural resource planning.

Readers may discover that their favorite planning topic has not been addressed in this series, or may have questions about articles. If that is the case, opportunity exists for future communication in this outlet as well as others.

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Making Better Planning Decisions

Jerry L. Rogers

For several years now, it has been a clearly stated objective of National Park Service Directors to create an effective, mutually supportive relationship between NPS cultural resource management planning and state and local historic preservation planning. As I remember from my days at Fort Davis National Historic Site, we knew the location of the historic army dump—an important archeological resource situated just outside the park boundary. Similarly, the site of the sawmill used by soldiers to obtain lumber for fort structures was located on private land. The site of one important battle between Apaches and Fort Davis troops was on private land and this was believed to be in another unit, Big Bend National Park. Fort Leaton, now a Texas state park unit, was an integral part of the Fort Davis story. Although our management responsibilities concerning these resources were different than our responsibilities for resources inside the park, we clearly had an interest in their preservation and our interpretation and management decisions could not be comprehensive without knowledge of them. As I have stated on numerous occasions, park interests do not stop at the boundaries of our National Park System units.

Because the NPS is also the leader of state and local historic preservation, we have interests in other National Register quality properties, whether they are located inside a park or outside, and whether they are or are not related to the statutory purpose of the park. An effective relationship between park, state, and local preservation planning does not necessarily mean more work or expense for the parks. In fact, it will sometimes lead to a well-justified decision *not* to spend NPS time money on certain National Register quality resources that are located inside park boundaries. What it does mean is that better decisions will be made all around.

Standard III of the Secretary of the Interior's "Standards for Preservation Planning" emphasizes an important aspect of cultural resource management planning— that all planning and management activities are part of larger planning processes. This idea is central to the articles in this series on cultural resource management planning. Only by managing our cultural resources in an active and planned manner—which includes encouraging and making use of the contributions of community, regional, statewide, and national preservation organizations—can NPS decisionmaking gain sufficient acceptance by those whom it affects or who have interest in its outcome. In addition, we make better decisions because we have access to broader bases of information. I applaud the efforts described in these articles, and others that will be published later.

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Systemwide Cultural Resources Summary and Action Program

Sandra S. Weber

In 1985, NPS Director Mott presented a 12-Point Plan for improving the protection, preservation, and management of all units of the National Park System. Point I of the plan identified the need for "a long-range strategy to protect our natural, cultural, and recreational resources." To meet this need, natural and cultural resource managers have been developing a program to improve the Service's ability to identify resource issues and formulate coordinated management strategies at the park, region, and systemwide levels.

The first step in the program was the preparation in Fiscal Year 1986 of natural and cultural resource summaries and action programs by the ten regional offices. Each of the reports included (1) a summary of the type, significance, condition, and documentation level of all known resources, and adverse impacts affecting them; (2) the identification of major resource needs and issues; and (3) an action program identifying priority resource projects. The information compiled by the regions was synthesized into systemwide natural and cultural resource summaries and action programs which provide information on the general status of the resources, major needs and issues, and action programs for directing coordinated natural and cultural resource management activities systemwide.

The following narrative summarizes the information contained in the Systemwide Cultural Resources Summary and Action Program (RSAP), and discusses what role the regional and systemwide RSAP reports are expected to play in the development of improved resource management strategies.

Resource Assessment Data

The resource assessments compiled by the regional offices provided for the first time in many years a uniform body of data on the number, type, and status of the cultural resources administered by the National Park Service. Although these figures represent a first time effort to count resources in this way, and may require some adjustment, they nevertheless provide a general picture of overall resource status, and enable managers to identify and distinguish areas of greater from lesser need.

Approximately 36,700 cultural sites have been identified in the twenty percent of park lands that have been systematically surveyed for their presence. Most of the recorded sites are prehistoric and historic archeological sites; however, they also include battlefields, trails, and contemporary ethnographic sites. Approximately 15,300 historic and prehistoric structures have been recorded, and NPS collections are estimated to contain 25.6 million museum objects. Thirty-eight percent of the known sites and fifty-two percent of the structures are nationally significant or contribute to the national significance of areas or districts in which they occur according to the criteria of the National Register of Historic Places.

The regional assessments reported some serious deficiencies in documentation needed for the effective identification, evaluation, and treatment of these resources. Documentation for one-half of the identified sites and about one-third of the structures is poor. Many parks do not have required documents such as Collection Management Plans, Archeological Overviews and Assessments, or Historic Resource Studies. Only twelve percent of the objects in museum collections have been fully cataloged.

Approximately one-third of the sites, three-fourths of the structures, and two-thirds of the objects are in good or fair condition but nearly two-thirds of the sites, one-fourth of structures and one-third of objects are in poor or unknown condition. Of the seven types of

museum collections, paleontology and geology collections are in the best condition, while archeological collections need the greatest attention.

Although eighty percent of the nationally significant sites and structures are not experiencing any significant adverse impacts, there are approximately 1,400 nationally significant resources currently facing serious negative impacts. The sources of the most severe impacts are erosion, vandalism and looting, and insufficient monitoring and maintenance of resource status. About sixteen percent of the object collections are being adversely affected by inadequate curatorial storage, expertise, and handling.

Major Resource Issues and Needs

The regional RSAP reports clearly showed that there are several cultural resources issues which are systemwide problems. The following situations were cited by nearly all regions as major cultural resource management issues:

- The condition of many sites, structures, and objects is insufficiently monitored and maintained.
- Erosion is severely affecting many sites and structures.
- Museum collection storage and environmental controls often are inadequate.
- Sites, structures, and collections are being significantly vandalized and looted.
- Uncontrolled vegetation growth is damaging many sites and structures.
- There is a serious backlog in the number of required resource studies and reports.
- There is insufficient inventory data on many sites, structures, objects, and ethnographic resources.
- Some resources are inadvertently damaged because sufficient evaluation and planning does not always occur before park operations and development activities are carried out.
- Specialized studies are needed for a variety of unique management issues.

Action Program

The resource problems listed by the regions should not be read as a failure of past resources management strategies. It is important to remember that while there are indeed some major resource issues which need to be addressed, great progress has already been made in many of these areas. Most nationally significant resources are in stable condition and are being appropriately maintained and preserved. And even though there is a large cataloging backlog, over three million objects have already been documented to curatorial standards.

In order to ensure that such progress continues, an action program of systemwide cultural resources goals and objectives was developed as part of the RSAP project.

The action program IS designed to provide a general framework of NPS cultural resource management goals within which regional and park managers can set their own priorities. It provides an overall direction and thrust for resource activities to ensure that priority needs are sufficiently addressed systemwide.

The present cultural resources action program is a 13-year program organized around four major goals. These goals state in broad terms the cultural resource management priorities the National Park Service would like to emphasize through Fiscal Year 2000. Supporting each of the four goals is a series of objectives and associated actions designed to further the goal. Responsibility for overseeing the objectives and actions has been assigned to appropriate regional and WASO staff. The goals and a summary of the actions related to them are listed below.

Sufficiently increase the amount of inventory data on each park unit to support adequate resource management planning. Three objectives and twenty-four individual actions have been formulated to advance this goal of ensuring that all parks

have sufficient resource inventories to provide reliable estimates of resource status and needs. (1) Guidelines will be improved for establishing survey priorities; (2) uniform automated resource inventories will be updated and/or implemented; and (3) efforts will be made to complete required resource management documents such as Resource Management Plans, Collection Management Plans, and Archeological Overviews and Assessments. The guidelines on how to prepare park Resource Management Plans will be modified to improve coordination between park, regional and systemwide actions and to facilitate tracking of expenditures and completion of projects.

Provide routine monitoring and maintenance of cultural resources. The principal focus of this goal is to bring nationally significant resources to a preservation maintenance status. The first objective is to immediately stabilize severely threatened resources. Those with complex or unique stabilization and preservation problems such as the historic ship collection will require special efforts and funding. Display and storage areas meeting curation standards need to be designed and constructed for many museum collections.

Threatened resources will also be maintained better by emphasizing efforts to establish specific management and maintenance standards for all categories of cultural resources; integrating the Historic Structure Preservation Guide format with the Systemwide Maintenance Management program; completing required planning documents such as Vegetation Management Plans and Collection Storage Plans; and installing environmental monitoring and control equipment in museum storage and display areas.

Interpret the cultural resources of parks as part of the broader national, regional or local context with which they are associated. The three objectives and thirteen actions under this goal are designed to improve interpretation of park resources and increase public understanding of their significance and special status. Guidelines for park Resource Management Plans will be revised to include references to the historic and prehistoric contexts of cultural resources; efforts will be made to initiate at least one new thematic study per year to identify and evaluate related cultural resources; and several pilot programs and projects will be undertaken with State Historic Preservation Offices, tribal governments, and other non-NPS groups to improve coordination of preservation activities.

Priority will be given to developing a multi-year training plan to address park-level training needs including curatorial methods, preservation maintenance, identification and evaluation of ethnographic resources, and interpretation of cultural resources.

Protect cultural resources better to reduce looting, vandalism, fire, and theft. The Service will attempt to minimize opportunities for accidental and purposeful damage to cultural resources through three objectives and ten specific actions. Some of the proposed actions include correcting deficiencies in intrusion alarm and fire detection/suppression systems; providing training for park staff on how to obtain successful convictions under the Archaeological Resources Protection Act; publicizing successful convictions for their deterrent effect; expanding Park Watch programs; and actively promoting cooperation and support from adjacent law enforcement jurisdictions.

Implementing the Systemwide Action Program

The RSAP action program for cultural resources is an ambitious one, but even if funding levels do not allow for the completion of every action enumerated by Fiscal Year 2000, it provides a clear statement of systemwide cultural resources priorities and the general direction in which the NPS cultural resources programs are hoping to advance. Certainly, there are other priorities not included in the systemwide action program—ones related to specific regions and parks—but the existence of the action program establishes

the overall framework of the NPS cultural resource program within which other priorities can be accommodated. It ensures that efforts are being coordinated and directed against certain priority needs and issues.

The action program will be revised periodically as situations change and priorities shift. The current intent is to review it every 2-3 years to determine what progress has been made, to update resource status information, and to revise the action program as needed. Activity has already begun on implementing the current action program:

- All regional offices have developed cultural resource action programs based on park and regional needs, and have been directed to include appropriate systemwide priorities in these programs if they are not already incorporated.
- In December 1987, the Director transmitted a memorandum to all regional directors assigning responsibility for certain items in the action program.
- Revenues from park entrance and user fees have been obligated toward priority projects and issues identified in the regional and systemwide action programs.
- Special appropriations of $410,000 for the documentation and preservation of cultural resources, and $2.9 million for object cataloging have been made available in FY88 to meet critical resource needs identified in the action programs.
- The guidelines for preparing park Resource Management Plans are being revised to include resource status information and a tracking mechanism to monitor expenditures and project completions.

Conclusion

The regional and systemwide RSAP reports are only the initial steps in the efforts to meet the goals of the 12-Point Plan. While the assessment data has provided some good information about the status and needs of cultural resources, further refinements must be made to the process to ensure that this information is accurately and efficiently gathered and that it is kept up-to-date. The integration of identified needs with policy, budget, and operations processes must also be strengthened to facilitate the formulation of coordinated resource management strategies. In the increasingly complex environment in which resource decisions must be made, clear, well-defined priorities and strategies are a must if the NPS is to continue to fulfill its mandate to preserve and protect the resources under its care.

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Planning for Wisconsin's Cultural Resources:

A SHPO's Perspective

Jeff Dean
Barbara Wyatt

The states have a unique perspective on historic and prehistoric properties. Unlike Federal landmanaging agencies, state offices must deal with properties and districts owned by state and local governments and private individuals and corporations. Taken together, the roles of state offices produce a complex array of responsibilities, each of which may or may not be related to the other within the daily operations of a state's program. Planning at the state level offers two major advantages to state historic preservation offices:

• It can integrate the disparate activities of a state office so that National Register nominations, historic and prehistoric surveys, compliance with Section 106 of the National Historic Preservation Act, certification of Federal 20 percent investment tax credits, and public education programs have logical relationships each with the other.

• It can provide appropriate historic and prehistoric contexts that drive research into, and evaluations of, the significance of individual properties and districts.

In Wisconsin, the state's historic and prehistoric survey program is administered by the Division of Historic Preservation of the State Historical Society, and has identified some 80,000 properties since 1972. Long ago we realized that all the data generated needed to be rendered comprehensible through (1) automation and (2) planning.

The first ingredient was begun in the early 1980s, with technical assistance from University of Wisconsin data processing professionals and using U.W. hardware and software. The second element—planning—is now well under way.

The Planning Process

Wisconsin's cultural resource management plan for historic properties provides the state's historic preservation community with a framework for planning for the identification of types of cultural properties that occur and guidelines for evaluating these properties. It suggests which properties should be of highest concern to preservationists. The plan initially was developed as a requirement made by the National Park Service when the Resource Protection Planning Process was handed to the states. We realized that the Federal requirement would provide excellent opportunity to develop a framework for Wisconsin's historic preservation program and to standardize procedures in all program areas.

We published in 1986 a three-volume, 1,500-page plan for cultural resources associated with Wisconsin's historic period. A separate, preliminary plan for prehistoric resources was developed for an archeological publication, "Background for Cultural Resource Planning," and was published jointly by the Division of Historic Preservation and the Wisconsin Archeological Society late in 1986. This report, however, deals exclusively with the planning process for historic properties.

Although the plan was designed primarily for use with the National Register of Historic Places program, its usefulness to local, state, and Federal programs is considerable. Local historic preservation commissions can use the information for local evaluations, for setting priorities for accomplishing work within their municipalities, and to augment comprehensive plans. State and Federal agencies can use the information to plan

strategies for preservation and development, and for nominating properties and districts to the National Register of Historic Places.

The cultural resources management plan is not intended as a static document. The priority lists and other information in the plan will be used each year for the following activities:

- establishing criteria for selecting subgrant projects;
- determining staff survey, registration, and research projects;
- determining limited term employee projects; and
- deciding to what extent compliance surveys are necessary.

Information in the plan can also contribute to important decisionmaking concerning expenditures. Conducting fruitful surveys and nominating numerous properties to the National Register are necessary concerns of the Division of Historic Preservation so that it can maintain its competitive standing among other states in the race for Federal historic preservation grant funds. Even though budgeting must take into consideration such competitive factors, our major concern is to work efficiently to protect as many Wisconsin properties as possible. The information in this plan should be useful in striking the necessary balance between practical considerations concerning the products that we must produce and the work that is needed to fulfill our preservation goals, as defined by the priorities listed in this report.

Conceptual Framework

The Wisconsin cultural resource management plan for historic properties was designed to influence several programs operated by the Division of Historic Preservation, State Historical Society of Wisconsin, and to assist public and private participants in those programs. Our overriding concerns were to improve the identification and evaluation of historic properties, to develop a basis for establishing priorities for staff work and subgrant awards, and to improve our ability and the ability of state, Federal, and local agencies to comply with Section 106 of the National Historic Preservation Act of 1966. To those ends, we wanted specific information on every important aspect of the history of Wisconsin that could be used in the evaluation of specific properties or districts. Further, this information would be most useful if it was presented in a format that related to the National Register areas of significance and the state intensive survey program.

Since the late 1970s, intensive surveys in Wisconsin have been conducted on a thematic basis, with survey reports structured around thirteen standard themes such as agriculture, commerce, etc. For the body of information already accumulated in the intensive survey program to be most useful, development and implementation of a thematically-based plan was considered essential. Thus, we selected an approach based on themes of history, rather than chronology or geography. Within each theme, however, temporal and geographic limits—creating study units—have been established. Examples of a couple of Wisconsin study units:

- **Wheat cultivation.** This was an agricultural enterprise (theme) that occurred from 1830 to 1870 (time) in the southern third of the state (place). There are resources types associated with it, and once this study unit has been researched, determinations of significance can be made readily.

- **Lead and zinc mining.** This was a specific commercial industry (theme) that occurred from 1690 to 1930 (time) in Grant, Iowa, Lafayette, Dane, and Green counties (space).

In the process of researching the plan, we identified over 150 study units that specifically revealed elements of Wisconsin's history. Over two-thirds of these were published in 1986 in the three-volume plan, and they now serve as the foundation for all activities that relate to the significance of historic properties.

Throughout the three-year preparation stage of this plan, we evaluated the effectiveness of the approach in our survey and registration programs. Intensive survey reports have continued to be structured around the themes of history, in some cases resulting in National Register nominations that were prepared from the thematic chapters prepared for the survey report. The survey reports also proved useful when individual properties or districts were nominated after the survey was completed.

Surveyors have used draft versions of the study units to familiarize themselves with subjects and as an aid in developing historical contexts. Based on the experience of surveyors, study units have been added, deleted, and combined to cover better Wisconsin history and to take advantage of available research. The list of study units finally decided upon is likely to be incomplete, but it covers the major aspects of Wisconsin history and provides preservationists with the major historical contexts necessary for evaluation purposes.

We used study units, in their draft form, to evaluate properties that were the subject of National Register nominations and properties involved in review and compliance cases. The historical information in the study units sometimes alerted us to potential areas of significance. Descriptions of property types also were useful. Before the study units were available, in some cases we had to conduct lengthy searches for information, request such information from constituents or, for lack of time and resources, ignore the potential historical significance of properties.

Evaluation Process

Information in the plan is useful now in the several steps that comprise the process of evaluating the state's historic resources. Resources are evaluated to determine their significance according to the criteria of the National Register of Historic Places or some other criteria that may have been adopted for local historic preservation programs. This cultural resource management plan is based on the National Register criteria, although the planning method and historical information will be applicable to other evaluation criteria in use in Wisconsin. The National Register recognizes cultural resources that are buildings, structures, sites, objects, and districts. It acknowledges the local, state, and national significance of properties, and requires retention of the integrity of location, design, setting, materials, workmanship, feeling, and association.

In addition to the general criteria, there are also seven specific exceptions that ordinarily preclude the nomination to the National Register of certain types of properties. The criteria are fully described in the National Park Service publication, "How to Apply the National Register Criteria for Evaluation" (NPS, 1982). It makes an excellent companion to *Cultural Resource Management in Wisconsin,* and is consulted for guidance in applying the criteria to different situations.

The evaluation of resources for significance is basically a three-step procedure: (1) identification, (2) research, and (3) evaluation according to National Register criteria. These three steps apply to the evaluation of all types of resources and at all scales of evaluation. The evaluation of an individual building or a district, or of an entire community's resources, would each involve these three steps. Similarly, they apply if resources are evaluated in a local, state, or national context.

The Future

A lot of lip service is paid to planning by intellectual theoreticians. On occasion, officials also think fondly of planning when they bump up against the results of failure to plan: lack of direction, management by crisis, scatter-gun activities, and inadequate intra- or interagency coordination. Cooking up theories and making them work in what we in the states call "the real world" are, however, two distinctly different things.

The Wisconsin planning process and initial plan publication, originally inspired by National Park Service requirements and guidelines, is an attempt to make a theoretical concept work. We have found to date that planning does work, however, by providing us a better window into the state's cultural heritage and by providing us a sound basis for decisionmaking in all areas of the Division of Historic Preservation's work.

In an unexpected spin-off, we were surprised to find that our plan will also be useful in other State Historical Society programs. The Museum Division, for example, is in the process of designing an interpretive program for its new state museum. The plan, prepared for historic preservation purposes, is equally useful to museum curators responsible for interpreting to the public the major themes of Wisconsin's history. It could also be used to analyze the artifact holdings of the Museum to determine gaps in the collection's coverage.

It is too early to know how sweeping the plan's impact will be on the Division of Historic Preservation's overall activities. It could become the basis for divisionwide action plans, or it could remain—as it currently is—the basis for cultural surveys and nomination programs. Either way, the plan will be important to our future.

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Historian as Planner in the DSC

Sharon A. Brown
John Paige

Denver Service Center (DSC) historians perform in many capacities in the service's planning process. Prior to the commencement of any major planning effort such as a new area study or General Management Plan (GMP), a historian is scheduled to complete studies for the planning team's research base. This may be as fundamental as collecting and evaluating previously completed studies to researching and writ Historic Resource Study (HRS).

The complex planning process for the America's Industrial Heritage Project (AIHP), which is evaluating cultural resources related to the American Industrial Revolution in a nine-county area in western Pennsylvania, is in its second year (see separate article). As part of this process, historians have had to research and write HRSs for the Cambria Iron Company in Johnstown and the Altoona Works of the Pennsylvania Railroad in Altoona as well as begin HRSs for the entire nine counties. The first two studies discuss the Cambria Iron Company's accomplishments within the context of the American iron and steel industry, and the Altoona Works within the context of American railroading and provide the basic data required for the planning process. Also, the historians serve as consultants to the AIHP planning team since through their research they become extremely knowledgeable about the cultural resources. They assist the planning team in determining significance and possible future use and management of the sites.

The recently completed Man In Space Study of Alternatives (see *CRM Bulletin, Vol.* 10, No. 6) required the services of historians, both as researchers and planners. This study was crucial to evaluating resources which must be preserved and interpreted. It further provided the planning team with documentation to support the various proposals offered to Congress in a study of alternatives.

A GMP requires a HRS or the basic components of one as part of the planning database while planning efforts for a new area study requires that portion of a HRS necessary for completing the study. Studies developed for these planning projects differ only from the standard HRS in that the historian may be asked to concentrate on specific areas of planning team interest. When the HRS is for a proposed NPS area, the historian must define the boundaries of the study and carefully evaluate the cultural resources of the area for integrity and significance. The definition of study boundaries is sometimes done in consultation with the State Historic Preservation Officer (SHPO). The SHPO on occasion acts both as a consultant and evaluator of the work done by the NPS. The HRS or equivalent provides the planning team with a cultural resources database to work from in formulating a park plan. In a political climate where new park areas may be designated by congressional action prior to any NPS evaluation, the historian may also find it necessary to complete a HRS simultaneously with a study of alternatives or a GMP. In such cases, the historian gives the raw data directly to the planning team for analysis. Evaluation and analysis of the data is integral in the planning process. In all these activities, the historian's primary responsibility is to designate the significance and types of tangible and intangible cultural resources that the planning team should consider in any park plan.

Planning efforts for new area studies sometimes require research of very specialized topics. For example, one former DSC historian undertook a study of places and events related to the life of the infamous Gulf Coast buccaneer, Jean Lafitte—prior to the establishment of Jean Lafitte National Historical Park and Preserve—to determine if any of these sites had integrity enough to become part of the park system. This study, "A Brief History of Jean Laffite and the Baratarians and an Identification of Historic and Archeological Sites of the Planners," by Erwin Thompson, is used by the park in interpreting Jean Lafitte and his activities. Thus, the historian's primary responsibility is to

determine the type, interpretation, and significance of cultural resources that the planning team should consider in any park plan.

Compliance

The historian also participates in the planning process as a cultural resources specialist. Here, one carefully follows legislation and Federal regulations, especially Section 106 of the 1966 Historic Preservation Act. This may involve consultation and memorandums of agreement with individual SHPOs and the Advisory Council on Historic Preservation (ACHP). A number of guidelines are available from the ACHP to assist with the legal process. Many projects require unique solutions based on the need to balance natural and cultural resource protection within available park funding and anticipated funding. This work required careful consideration of both historical and archeological resources which can entail a close working relationship between historian and archeologist. In some cases, National Register of Historic Places nomination forms, Determination of Eligibility forms, and List of Classified Structure forms and other written documents are prepared during this work. Also, the historian may develop criteria for ranking cultural resource needs. One example of this occurred in the GMP for the Virgin Islands National Park, where the historian developed criteria for evaluating the significance and preservation needs of over 40 historic sugar plantations. This resulted in development of a preservation maintenance schedule for the most important plantation sites and the designation of those plantations to be preserved by a local historical society. Still other plantation sites were to be recorded and allowed to be neglected. This provided a practical solution for maintaining cultural resources within the park's budget.

Groundwork for the Man In Space Study of Alternatives required much use of the historian's knowledge of compliance. Sites relating to the space effort are owned by the United States Army, United States Air Force, and National Aeronautics and Space Administration and these agencies' local managers had questions about the legal requirements of having their sites designated as National Historic Landmarks and listed in the National Register.

Design and Construction

At the DSC, the concern for cultural resources goes beyond planning to design and construction. The historian is again called on to evaluate a project's impact on cultural resources and to guide the designers through the compliance requirement. This often necessitates working with DSC professionals, regional cultural resources specialists, SHPOs, and the ACHP to adequately protect natural and cultural resources.

An example of a designer's reliance on research provided by historians is the recent national design competition for the Wesleyan Chapel Block in Women's Rights National Historical Park, Seneca Falls, New York. Sponsored by the NPS and the National Endowment for the Arts, the competition brought together the various research components required to determine the historical configuration of the chapel, including history, architecture, and archeology.

The historical data, gathered initially for a Historic Structure Report, was included in the competition program for the use of the competitors in developing a conceptual design to preserve the 1848 architectural remains of the Wesleyan Chapel, to create a sense of the 1848 women's rights convention, and to create a physical focus for the park. The competitors were required to retain and preserve all original *in situ* fabric of the Wesleyan Chapel and their designs were to be sensitive to the importance of the chapel to the women's rights movement. An additional requirement was for the chapel remnants to function as a gathering place for people and for the expression of free speech. Sensitivity to the history of the 1848 women's rights convention held in the chapel, and to the historic struggle of women for equal rights, was obviously required in the conceptual designs. All

of this necessary background data was researched and written by a DSC historian. The final design, chosen in October 1987, reflects the input of this historical context.

Interpretation

The historian also contributes to the planning process as an interpretive planner. This requires the evaluation of existing park themes to determine if they need modification or expansion for an established park. In the case of new areas, this necessitates the development of appropriate historical themes following NPS guidelines as outlined in the 1987 *History and Prehistory in the National Park System and National Historic Landmarks Program.* Also, as a member of the planning team, the historian can suggest appropriate types and ways of interpretation for a particular park. The historian's research is the basis for a park's interpretive program; therefore, the historian can serve as the link between the raw data and interpretation to the visitor.

In many projects, the historian participates fully as planner. Here, historians use their research and evaluative skills in gathering and analyzing information for the team. The same analytical ability that historians bring to researching topics can be brought to bear on the data used for planning to scrutinize, sift, and summarize the vast amount of material gathered in the planning process. By taking an active part in the planning process, historians not only contribute to better planning, but they are prepared to more fully meet planners' needs.

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Cultural Resources Planning: A Case Study

Randall D. Cooley

America's Industrial Heritage Project (AIHP) is an NPS planning project whose congressional mandate is to identify significant industrial sites in a nine-county region, plan for their preservation, use the sites to promote tourism, and integrate the planning with existing local, state and Federal economic development. NPS sites included in the project area are Fort Necessity National Battlefield, Friendship Hill National Historic Site, Johnstown Flood National Memorial and Allegheny Portage Railroad National Historic Site. A coalition of five Congressmen, led by John Murtha-D. of Johnstown, PA and Austin Murphy-D. of Uniontown, PA, has provided much of the funding support for this effort. The study centers on the NPS-identified nationally significant resource of the Cambria Iron Works in Johnstown, with extant structures dating to the earliest period of steel development in the United States, and the nationally significant Pennsylvania Railroad locomotive works in Altoona. These sites are complex industrial sites with active manufacturing operations interspersed with historically significant buildings related to early steelmaking and railroading. These and other industrial heritage sites are located within valley settings amidst the Allegheny Mountains, which contain outstanding scenic, recreational, natural and historic sites of interest to visitors. Our challenge is to integrate sound cultural resource planning with the urgent need for development of the region's tourism potential as part of an overall strategy for economic diversification and development. The challenge is being met through a partnership of local, state, and Federal individuals and private sector organizations applying cultural resource planning principles to an action-oriented program.

The essential elements of this project include:

- Planning coordination by parks with direction from an on-site planner from the Denver Service Center.
- Creation of a local citizens group designated by Congressman Murtha as the "Heritage Preservation Committee" with staff support from the NPS Mid-Atlantic Regional Office, Division of Planning and Development, to assist in the conduct of public involvement activities by the commission and other activities.
- Interpretive planning integrated into all work using Harpers Ferry Center interpretive and wayside exhibit planning.
- Early identification of future archeological needs with Eastern Archeological Center archeologists.
- Documentation of major threatened resources by HABS/HAER teams.
- Specific planning, historical research, and site design activities involving over forty historians, architects, engineers, landscape architects, and planners from the DSC.
- Active participation by the State Historic Preservation Office and several Commonwealth of Pennsylvania agencies, including the Pennsylvania Historical and Museum Commission, Department of Transportation, Department of Community Affairs, Department of Commerce, Department of Environmental Resources (state parks) and the Heritage Affairs Commission.
- Communication, communication, communication.

Planning Coordination

It became clear early that we were dealing with a complex planning process which required a thorough knowledge of local politics, resources, and programs, coupled with an extensive planning background. This led to a partnership between the parks, region and DSC; the parks and region providing local insights, an operational base of resource expertise, and program direction; and DSC providing planning and design expertise and project direction from Keith Dunbar, DSC community planner temporarily assigned to this project.

As part of their responsibilities with the AIHP project region, the park superintendents provide valuable contacts with local groups and congressional delegations and insure that the project carefully considers the overall visitor experience. The DSC planning coordinator insures that all planning efforts point toward specific actions identified by the Heritage Preservation Committee while sound NPS planning principles and a national perspective are maintained. The DSC planning coordinator is also responsible for seeing that professional quality of the DSC planning product is upheld and that the product meets AIHP objectives and needs.

Local Involvement

In order to secure local commitment to the project, Congressman Murtha sought active participation in the planning process by locally prominent individuals. He appointed a "Heritage Preservation Committee" comprised of volunteers from private industry, local government and interested citizens. This committee was charged with development of an action plan to guide initial project planning and development efforts. The committee was divided into the functional areas of cultural resources, transportation, economic development and tourism promotion. Their action plan was to be a consensus of opinion from the nine-county region as to what directions the Federal and state agencies should take in implementation of the "America's Industrial Heritage Project." To coordinate this public involvement and to serve as staff to the committee, Mid-Atlantic Regional Director Jim Coleman assigned Scott Hall from the regional office. Scott effectively synthesized the discussions from many public and committee meetings to insure that the action plan incorporated local consensus and NPS planning and cultural resource management guidelines.

Interpretive Planning

Harpers Ferry Center interpretive planner Cliff Soubier provided interpretive insights to the planning effort at key sites such as Cambria Iron Works, Horseshoe Curve National Historic Landmark, Saltsburg (a canal town on the Pennsylvania Canal), Allegheny Portage Railroad Summit Level and other specific plans. Cliff's input has guided planning in its initial phases and has prevented plans from heading in directions incompatible with sound interpretive concepts. In addition, Cliff has had several opportunities to instill NPS interpretive values into locally-initiated, visitor attraction development projects.

Archeology Planning

All planning activities which appear likely to result in development projects must necessarily consider the impacts on potential archeological resources. To ensure minimum impact on these resources, Paula Zitzler, an archeologist from the Eastern Archeology Center's American University Cooperative Study Unit, has done several scoping reports which will guide planning direction for mitigation work. In addition, Doug Comer from DSC's Center for Applied Archeology, has developed an interesting proposal for taking an anthropological approach to future research efforts related to the development of the steel industry at Cambria Iron Works. Doug has also led a national effort within the professional

industrial archeology community to assist in policy formulation relating to industrial artifacts.

Critical Resource Documentation

Recognizing the threat to many of these industrial sites which exists from the wrecking ball, the planning effort places a high priority on documentation of threatened, nationally significant resources. This documentation is being accomplished by the Historic American Buildings Survey/Historic American Engineering Record through teams led by Gray Fitzsimons and Kim Hoagland. In addition to this documentation, they are engaged in a three-year program of resource identification in the project region which will allow planning to focus on significant extant industrial resources not already identified. Knowing which resources are significant and which ones are less significant helps the park and planning personnel respond to local and congressional pressures for NPS involvement in projects which may be more appropriately handled by others.

DSC Support

The technical issues involved in a project of this type span all professional disciplines. Very few architectural and engineering consulting firms in the country are capable of handling such work. Fortunately, the NPS Denver Service Center employs outdoor recreation planners, community planners, historians, architects, historic architects, compliance specialists, mechanical and electrical engineers, structural engineers and archeologists, and this project has used the services of each of these disciplines. It was necessary to prioritize, assign and review the work product of this group and insure consistent application of NPS-2 and NPS-28.

State Participation

A key ingredient in the partnership of this project has been the role of the state in augmenting project work. Several of the projects require non-Federal match of funds or in-kind services, and the state has been very creative in using the mission of several agencies to match funds and maximize project impact.

The Department of Community Affairs has been active in funding community projects of a historic preservation nature. The Pennsylvania Historical and Museum Commission has agreed to fund an intensive program for National Register nominations of properties identified by the NPS research work. The Heritage Affairs Commission of Pennsylvania has requested additional assistance from the legislature for a folk-life specialist to research and assist communities in Western Pennsylvania in interpreting the social history of the region. The Department of Transportation has worked closely with NPS to identify tour routes through the area and has agreed to fund needed road improvements for specific attractions.

All these projects and many others that are occurring every day have resulted in a commitment by the state of over four million dollars thus far, not counting the time and salaries of countless state employees.

Communication

The key to such a major project is effective communication, and over the past year a process has developed which has as its component three key elements:

- Weekly Summary of Events. This is a summary, by project, of all activities occurring during the week.

- Project review meetings. These meetings are held quarterly at the parks and semi-annually at DSC so that we are proceeding in appropriate directions with all project work.
- Public meetings. Literally hundreds of hours have been devoted to this critical phase in the communication process to be certain that all planning efforts incorporate local consideration of priorities and at the same time begin to instill pride in the local citizens regarding their resources while introducing the NPS ethic for preservation into local planning.

Finally, of course, we have significant time spent on the phone by all persons associated with the projects.

We believe that the success of America's Industrial Heritage Project will be proportional to our ability to consolidate the various elements of CRM planning for the accomplishment of locally-initiated NPS assisted projects. The coordinated application of the planning process will demonstrate the NPS commitment to product—visitor enjoyment and resource preservation—while transmitting the planning ethic to our park neighbors, thus assuring their active cooperation in support of the NPS mission.

Randall Cooley is the former superintendent at Allegheny Portage Railroad National Historic Site and Johnstown Flood National Memorial and was recently appointed as Project Director for America's Industrial Heritage Project.

Light Levels Lowered in Exhibit Cases

Gregory A. Mertz

As a result of a meeting in April 1987, our staff was asked to experiment with a project designed to reduce the light levels inside of our Mission 66-style exhibit cases to a tolerable level for the artifacts. Fonda Thomsen instructed us on the use of a light meter and indicated proper light levels for each type of material displayed. The light meter measured light intensity by foot-candles. Our target level was five foot-candles for paper and textile objects, twenty foot-candles for wood and leather objects, while metals and ceramics are not affected by any intensity.

The light source for our exhibits consists of two fluorescent tubes located on top of the exhibit case. A piece of translucent white glass on top of the exhibit case diffuses the light throughout the display. We started out by taking fiber glass mesh, cutting it into appropriately-sized pieces and laying it on top of the opaque glass to block out excessive light on the sensitive objects only. Layers of fiber glass screen were placed on top of one another until we reached the desired light levels. Sensitive light objects had the greatest amount of screening placed over their light source. This caused varying light intensities throughout the case. Because of the possible fire hazard created by the fiber glass screen, Donald Cumberland of the Curatorial Services Division sent the park a roll of dark solar-control film, Number TG-21-XSR by Madico in Woburn, Massachusetts, suggesting that it might work better than the fiber glass mesh, and would in addition provide ultraviolet filtering. We performed a rather simple test comparing the effect of the two materials. Using a fluorescent desk lamp, we took light meter readings on the desk top noting the difference between the bare bulb, the light through one layer of fiber glass screen, and the light through one layer of solar-control film. This chart demonstrates the levels indicated by the visible light meter and the ultraviolet (UV) monitor.

While the fiber glass screen did nothing to reduce ultraviolet levels, the solar-control film reduced the level enough to bring the reading within acceptable museum standards. The solar-control film not only reduced the ultraviolet levels, it also did a better job of lowering visible light levels than the fiber glass mesh. Since not as many layers of solar-control film were needed to achieve the equivalent light level using fiber glass screen, it was also easier to work with and took fewer work hours to obtain the desired effect. The general feeling is that the solar-control film appears more pleasing aesthetically as well. While we had used the fiber glass screen initially, we eventually went back to those first exhibit cases, replacing the screen with the film. We highly recommend the solar-control film as the type of material to use. Other parks that wish to undertake this project may request solar-control film from the Curatorial Services Division, Harpers Ferry office.

The project requires a few tools to measure the exhibits and cut the solar-control film: a tape measure, large square, utility knife and some type of cutting board.

The only piece of relatively expensive equipment required for the project is the light meter. The meter is continually useful to the park museum curator and also is a good addition to a park's collection of photographic equipment. Our park obtained a Panlux electronic 2 light meter from the Gossen Division of Berkey Marketing Companies, which has consumer service centers in Greenwich, CT, and Burbank, CA. The light meter sold under Federal Supply Schedule Contract GS-OOF-91873 for $285 in June 1987.

We also had an ultraviolet monitor Crawford Type 76°, borrowed from our regional curator. Since the fluorescent tubes already had UV filtering sleeves placed around them, we encountered no problems in our UV levels. As will be explained later, we felt a need to continue using the filtering sleeves, even though the solar-control film has UV-reducing qualities.

Recommendations

We recommend the following helpful hints to any park which may decide to duplicate our procedures. Before beginning the project, thoroughly clean the tops of the exhibit cases and the light fixtures. We found that the dust which had accumulated on top of our exhibits blocked out a great deal of light, giving us false readings.

Staff should be alert to sources of light from outside the exhibit case. Consider light from windows or other lights that may not be on at the time the project is being done. We thought that we had completed our light-reduction project, when a decision was made to turn on some hall lights in the exhibit area which had before that time been left off during hours of operation. The light levels inside the exhibits were changed by this indirect light and we must now redo all the work in that exhibit area. Be aware that reducing the lights inside the exhibit will affect the amount of light in the viewing area and vice versa. Because of the interrelationship of the lighting decisions, they cannot be made independently, and we encourage other parks to make conscious efforts to coordinate changes in lighting. When taking light meter readings during the project, the park staff should be alert to where they stand in relation to any light sources, so their own bodies do not block out some of the light.

A technique that worked well for us was to draw sketches of each exhibit and then make a chart showing the light levels at some locations under different conditions. For our Union soldier exhibit in the Fredericksburg Battlefield Visitor Center we drew a sketch showing the items within that exhibit which contain materials sensitive to light. After making a preliminary survey with the light meter, we determined the locations on each object which received the highest intensity of light, and then we numbered those points on the sketch. The sketch shows 13 light meter reading locations on 10 of the objects within that exhibit.

The following chart demonstrates our findings and the steps taken to achieve acceptable light levels. The first column of the chart contains numbers indicating the points where light meter readings were taken. The second column shows the existing light levels before the project began. The fourth column shows the effect of placing a sheet of solar-control film across the entire top of the exhibit (18"x68"). Since the readings in column four did not lower the light levels to a point equal to or less than the standards in column two, an additional piece of solar-control film was required. The fifth column indicates the light levels after that additional strip of solar-control film (13" x 60") was put in place. The park currently displays the objects at these light levels.

The Union soldier exhibit had textiles located throughout, so we in essence had to reduce the light in the entire display to a level appropriate for those particularly sensitive objects. In other displays, however, paper or textile objects were confined to one particular portion of the exhibit; by cutting contour pieces of solar film we were able to provide extra "shading" to only those areas that needed it.

The first size of solar-control film we initially tried in each exhibit was a sheet completely covering the top of the exhibit case, but this reduced light levels by too much in some exhibits. We eventually installed smaller pieces instead. Since these pieces only filtered a portion of the light passing into the exhibit, and would not offer the same ultraviolet protection as the full-size sheet of solar-control film, we decided to continue to use ultraviolet filter sleeves around the fluorescent tubes.

While in many instances we drastically reduced the light levels in the display cases, the project did not interfere with the objects' visibility to visitors. An important factor in determining the ease or difficulty in viewing is the color of the interior of the exhibit case. Our exhibit currently featuring the biggest visibility problem contains dark brown leather objects displayed on a panel painted dark brown. Even this, however, is tolerable and we do not anticipate making any changes to compensate. We encountered the fewest problems with visibility when light background colors predominate in the exhibits.

The project was relatively easy to carry out, but it was somewhat time consuming. To be done efficiently it requires two people, because it works very well to have one person

shifting solar-control film into different positions on top of the exhibit while another with the light meter inside of the display judges the effect of the film positioning. All in all, this is a fairly simple, inexpensive effective way of bringing the light intensity down to levels which will contribute to the preservation of our wood, leather, paper and textile artifacts.

Gregory Mertz is a historian/curator at Fredericksburg and Spotsylvania National Military Park.

The HSPD—An Update

David Battle

Editor's Note: An article describing the Historic Structure Preservation Database appeared in the August 1987 issue of the CRM Bulletin *(Vol. 10, No. 4). The system has now been installed in several offices within and outside NPS. The following article provides the present status of this database.*

The Historic Structure Preservation Database (HSPD) is a computerized database of technical information about historic and prehistoric structures preservation. It is an outgrowth of NPS efforts to produce Historic Structure Preservation Guides (HSPGs). When the National Park Service began to write HSPGs in the mid-1970s, not much information was available about preservation maintenance. Over the years, a lot of information had been researched and developed, but was often difficult to find. Consequently, the same information has been researched more than once.

This concern was reflected in a 1982 decision to review existing HSPGs. The purpose of the review was to determine on a servicewide basis what types of preservation activities were being prescribed, to insure conformance with the Secretary of the Interior's standards, and to begin a central repository for existing information, available to everyone. It was determined the most effective way to establish a repository would be computerization. The HSPD is the outcome of that decision.

The HSPD has two primary functions. First, it is an information tool for preservationists. As a central repository of technical preservation information, it will be a primary source of information to NPS historical architects, architectural conservators and preservation specialists. The information contained will have undergone peer review for technical soundness and compliance with applicable standards, policies and laws. As it grows, and because it is an information system in the public domain, the HSPD has the potential to achieve national and international significance as a major computerized repository of technical preservation information available to all preservationists.

Secondly, and of more interest to park managers, is the concept of using the HSPD in the development of computerized HSPGs for individual structures or groups of structures within a given park. Based on an inventory of structural features, data can be extracted from the HSPD to form a new (HSPG) database of information pertinent only to those features and materials actually contained in the structure—a much smaller and compact database than the entire HSPD. While the information in the HSPD must, by its very nature, be somewhat generic, the HSPG database would be customized to relate specifically to the structures covered by the HSPG.

The Computerized HSPG

Although computerized, the essential components of the HSPG remain unchanged. An inventory of a structure's features must be made. Each feature must be assessed in terms of materials, method of construction, condition, and historical integrity. Based on this inventory and assessment, appropriate instructions for maintaining and preserving the structure are provided.

The major difference is that computer technology enables the HSPG to be produced more quickly by automating much of the production, and will provide the maintenance and preservation instructions in the "work procedures" format used by the Maintenance Management program. It will also produce other reports, such as "planning guidelines" and "planning work sheets."

Using input from the inventory and condition assessment module, the HSPG program will extract general preservation information from the HSPD, customize it for a particular

structure, and store it in the HSPG database. Information can then be extracted from the HSPG database to produce the above reports. The HSPG database can also be used by commercial software packages for added flexibility.

Managing the HSPD

At the present time, the HSPD is "kept" (i.e., the data is entered and edited) by Dave Battle, Senior Historical Architect at the Denver Service Center (DSC), who developed it. Although it is the keeper's responsibility to edit and enter data placed in the HSPD, the data itself will be produced and reviewed by both NPS and non-NPS preservationists.

Because there is much data yet to be developed, and new techniques and materials will become available and others no longer suitable, the entering and editing of data must be an ongoing process as long as the HSPD is in use.

The HSPD is currently being installed and tested in the offices of the regional historical architects, Washington Office divisions, the Williamsport Preservation Training Center, the National Trust for Historic Preservation, the Pennsylvania Historical and Museum Commission, and the Denver Service Center. These installations are supported and updated by the keeper's office by periodic issuance of revised or additional data diskettes.

In turn, these offices may support park or other offices as they wish. It is anticipated that if the HSPD proves successful and demand for access to it increases, future access will be provided from a central microcomputer in the keeper's office via telephone and modem. Occasional users could then access the data directly from this computer while heavy users could download the data to their own computers for more immediate access. Eventually, the HSPD could be put on a servicewide system such as COMMON.

Availability

The data in the HSPD will continue to be expanded and edited. The HSPD software and data format will be tested through use during the remainder of Fiscal Year 1988, and appropriate modifications will be made based on the results of those tests. Funding to begin development of the HSPG program is available and a contract is expected to be let by the end of Fiscal Year 1988. It is hoped that a system could be installed for testing in late Fiscal Year 1989 or early Fiscal Year 1990, and servicewide implementation could conceivably be in Fiscal Year 1991. By that time, the amount of data in the HSPD should be sufficient to make computerized HSPGs a reality.

Dave Battle is senior historical architect, Denver Service Center.