Acknowledging Landscapes:
Presentations from the National Register Landscape Initiative
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Longfellow National Historic Site, Cambridge, Massachusetts.
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Debbie Dietrich-Smith of the NPS National Center for Preservation Technology and Training (NCPTT) had the vision to compile these valuable presentations into an online publication. Thanks are extended to Kirk Cordell, Deputy Associate Director for Science, Technology and Training/NCPTT Executive Director for allowing Debbie to take on this project, with the assistance of interns Ryan Ware and Heather Lockwood. Special thanks to consultant David Driapsa who summarized the presentations included in this publication. The efforts of all participants have yielded a record and a tool that should encourage greater recognition of both significant and ordinary landscapes by the National Register.

Barbara Wyatt, ASLA
National Register Landscape Initiative
Introduction to the National Register Landscape Initiative
Barbara Wyatt

In 2013, the National Park Service initiated a series of conversations about the types of landscapes listed in the National Register, the National Register’s guidance on nominating landscapes, and the issues that its partners in federal, state, and tribal agencies have with landscape documentation and evaluation. The conversations, held via webinars, were the essence of the National Register Landscape Initiative (NRLI). There was early consensus among participants that the conversations should result in a strategy for revising, updating, and augmenting the existing National Register landscape guidance.

Who were the participants? Before launching the NRLI, staff of federal, state, and tribal preservation offices were invited to take part in the webinar discussions. The interest expressed was gratifying. As the sessions were held over the next several months, attendance ranged from roughly 15 to 50.

Topics were selected by participants who volunteered to discuss one or more nominations that featured a particular type of landscape. For certain categories of landscapes, knowledgeable individuals were recruited to present. The first couple of sessions featured presentations by National Register staff, who explained current practices and existing guidance that pertain to the nomination of landscapes. They also reviewed a history of the inclusion of landscapes in the National Register program since it was established in 1966.

Subsequent sessions featured topics such as trails and corridors, tribal landscapes, maritime cultural landscapes, evocative landscapes, and more. Several sessions focused on processes, including a discussion of the landscape inventory and treatment programs used by NPS and a session on viewsheds, which reviewed the techniques and usefulness of viewshed studies.

During the webinar series, participants delved into conceptual and practical considerations about describing and classifying landscapes. Topics included the term “cultural landscapes” and its use by the National Register, terminology used to classify landscapes, including the prototypes used by UNESCO, and public appreciation for landscapes as an aspect of historic preservation.

Discussions also focused on promoting the inclusion of landscape descriptions and evaluations in all nominations, whether or not the landscape is considered significant. A “landscape approach” to describing heritage resources is used widely by other countries, and is gaining acceptance in the United States. Particular federal agencies, including the National Oceanic and Atmospheric Administration, have

The landscapes of Guam’s west coast were described by John Mark Joseph, State Archaeologist with the Guam State Historic Preservation Office. One of the NRLI sessions focused on Pacific Island Landscapes.
fully adopted this approach. Although perhaps unrecognized by some as such, the National Register Bulletin: Guidelines for Evaluating and Documenting Rural Historic Landscapes is actually a good model of the landscape approach. This bulletin can be considered a roadmap for including landscape considerations in the documentation of many kinds of resources. It reinforces landscapes as inseparable components of all resources.

This publication provides a brief introduction to each topic; as available, a recording and transcript of each presentation are provided. To the extent possible, links are provided to the nominations mentioned in the presentations—both National Register and National Historic Landmark nominations. Those that are works in progress were not included in their draft form.

The work of the National Register Landscape Initiative is not complete. There is more to discuss and revised guidelines to draft. Please check the National Register website for periodic updates on progress being made. If you have any questions or concerns, please contact Barbara Wyatt.

Cultural landscapes are geographic areas with meaning for people, explained Jill Cowley during her discussion of evocative landscapes. She noted that some evocative landscapes show no evidence of human manipulation, but are eligible for the National Register. Traditional Cultural Properties (TCPs) that are meaningful to American Indian tribes may fit this description.

Betsy Igleheart, who recently helped draft the National Register multiple property documentation form for the Appalachian Trail, discussed the challenges of establishing registration standards for a cultural landscape that spans the majority of states on the eastern seaboard.
Park Cultural Landscapes

Introduction

The Organic Act of 1916 created the National Park Service (NPS) that now has jurisdiction over more than 84 million acres of American land in 413 units. Every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands all include at least one NPS unit. Besides the national parks, units are national battlefields, monuments, historic sites and historic parks, lakeshores, seashores, recreation areas, and trails.

The Organic Act compels the NPS to “conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” This conservation mandate is applied to natural and cultural landscapes, and to aboveground, belowground, and underwater resources associated with them. Many NPS units that were not brought into the system as historic units have become historic with the passage of time or are now recognized as historic with the realization that the majestic scenery initially preserved also encompasses sites of archeological and historical significance.

By law, the NPS is the steward of the places under its jurisdiction, but it is also compelled to follow the environmental laws that pertain to all federal agencies. Section 106 of the National Historic Preservation Act requires an evaluation of the effect of federal undertakings on properties that are listed in or are eligible for the National Register of Historic Places. Section 110 of the Act compels federal agencies to nominate eligible properties to the National Register. Thus, the NPS has an obligation to understand its cultural landscapes and their significance.

Because of its extraordinary stewardship responsibilities, as well as its role in the national historic preservation program, the NPS has been at the forefront of cultural landscape identification, documentation, evaluation, and registration. In this section of the publication, diverse NPS cultural landscapes are discussed, and NPS processes for surveying and documenting them are explained. Six presentation summaries are included.

Susan Dolan, the Historical Landscape Architect Program Manager with the Park Cultural Landscapes Program, explains the history of the Park Cultural Landscapes Program, describes current initiatives, explains the role of cultural landscape inventories (CLIs) and cultural landscape reports (CLRIs), and describes how integrity is evaluated using specific landscape characteristics.

Betsy Igleheart, National Register Coordinator for the History Program in the NPS Northeast Regional Office (now retired), discusses the nomination for the Saint-Gaudens...
National Historic Site and demonstrates how the NPS List of Classified Structures (LCS) and the Cultural Landscape Inventory (CLI) work effectively with National Register documentation guidelines.

Jill Cowley, Lead for the Park Cultural Landscape Program in the NPS Intermountain Region in Santa Fe, New Mexico (now retired), discusses challenges she has encountered when there are multiple historic themes, when the site’s vegetation is significant, and in considering the landscape a “site.”

Jill Cowley and Susan Dolan discuss ethnographic landscapes, using Mount St. Helens in Washington State, Mount Taylor in New Mexico, and the Washita Battlefield National Historic Site in Oklahoma as examples.

Kelly Spradley-Kurowski, a historian with the Park History Program, reviews National Register nominations prepared by or for NPS units. She describes how nominations flow from the parks to her review and mentions some of the key problems parks encounter in the nomination process, such as counting landscape resources, submitting Additional Documentation and Boundary Changes for previously listed resources, and nominating highly complex park resources.

These excellent NRLI webinar presentations, summarized here, provide an overall perspective of cultural landscape considerations in national park units and the systems in place for documenting them. The presenters provide candid comments on National Register issues and how NPS staff has reconciled differences between National Register and Park Cultural Landscape programs.
This presentation reflects on the progress of the National Park Service (NPS) since the 1980s in making the paradigm shift towards recognition of cultural landscapes as a cultural resource.

It was fifteen years after the National Historic Preservation Act was established in 1966 that cultural landscapes were first recognized by the NPS. Since then, NPS management policies and Director’s Order #28: Cultural Resource Management Guideline have evolved through initiatives leading to the understanding that landscapes are more than just the setting for historic buildings and structures.

The two primary tools for managing cultural landscape resources in the NPS are Cultural Landscape Reports (CLR) and Cultural Landscape Inventories (CLI). The CLR focuses on the future objectives for managing and preserving landscape resources. It is a vision document prepared to preserve a desired future historic character and condition through a treatment plan to facilitate Section 110 and the National Environmental Policy Act (NEPA) undertakings.

The Cultural Landscape Inventory (CLI) is baseline documentation that records what exists, what is known about a particular landscape, and what is precious to preserve. It is prepared for every landscape eligible or potentially eligible for the National Register and includes details about the character and integrity, existing conditions, sources of instability and impacts upon it, and stabilization needs to halt deterioration of the landscape, fulfilling responsibilities for Section 110 and 106/NEPA as directed by National Park Service Management Policies and Guidelines. Every CLI requires a SHPO consensus determination and is not considered complete without it. The SHPO is asked to concur with the statement of significance, level of significance, type of significance, period of significance, and the characteristics and features that retain integrity. Park superintendent concurrence is also mandatory for completion.

At the core of the cultural landscape methodology is an analysis and evaluation of the interwoven characteristics and features that existed historically and exist today. What matters is consistency in evaluating, documenting, describing, and cap-
turing all that retains integrity. This is the heart of the paradigm of the Park Cultural Landscapes Program.

Integrity is perceived as the matrix of landscape characteristics and associated features held together as a system. The Cultural Landscapes Program has fostered a change in thinking about cultural landscapes: a shift in the paradigm that all parts of a landscape are recognized as inextricably connected, and that the landscape is more than just a setting for a building.

One example provided is the Buckner Homestead Historic District in the Stehekin Valley in North Cascades National Park in Washington State. This historic district had been a family run commercial orchard operation from the early twentieth century onward. Integrity is expressed through the cluster of buildings and structures, the circulation system, the system of fruit trees, the system of hand dug irrigation channels and sluice gates, the big open area that pastured the horses that were used to plow the land, the natural systems and features that give rise to this flat glacially carved valley bottom, and the river system that flows through it and feeds the irrigation ditches that supported the agriculture and watered the orchard.

The Buckner Homestead is much more than the cluster of buildings; it is the integrated system of interwoven characteristics, all of which work together and are equally a part of the cultural resource that constitutes the cultural landscape. Here, landscape is the cultural resource of the historic district in its own right, not just the setting for the cluster of historic buildings and structures.
LANDSCAPE NOMINATION CHALLENGES

This presentation addresses challenges of documenting cultural landscapes resources and values in National Register nominations: 1) Multiple historic themes; 2) Identifying landscape as “Site;” 3) Identifying vegetation as contributing; and 4) Describing landscape characteristics and features under “Setting”. The likelihood of preserving integrity is increased by including specific lists and descriptions of landscape characteristics and features as contributing resources in section 7 of the nomination. National Register Bulletin 30: Guidelines for Evaluating and Documenting Rural Historic Landscapes defines landscape characteristics and features and how to document and represent them. Not many nominations actually do this, and most describe landscapes in very general terms.

Identifying a cultural landscape as a “Site” ensures that landscape is listed as a contributing resource. The term “Site” is ambiguous, lacking sufficient information and open to variable interpretation to what needs to be preserved. The Visitor and Operations Complex cultural landscape at Casa Grande Ruins National Monument (New Mexico) was identified as a “Site,” leaving pathways without adequate description as contributing or non-contributing. Listing and describing each “historic associated feature,” which the National Register staff recommends, would remedy this. It could also help to list the property with many contributing components as a district.

Historic vegetation may be a determinant of landscape character representing a historic theme. For example, the allées of live oak trees help define the character of Oakland Plantation within Cane River Creole National Heritage Area, while the lack of vegetation defines the character of Rainbow Forest Historic District at Petrified Forest National Park. Not listing specific plants and overall patterns of vegetation as contributing resources risks incremental change if the National Register document is used as the basis for a management plan (recommended). A lack of description can lead to an alteration of character and a loss of integrity - even with Section 106 compliance.

While native vegetation and introduced plants contribute to landscape character at Casa Grande Ruins, NM, some introduced plants around the visitor center/museum are non-contributing. The draft nomination narrative lists “native vegetation” and “historic introduced vegetation” as contributing.
resources but is silent as to what specific plants are contributing. Historic character can be preserved only by listing specific plants.

Cultural Landscape Inventories (CLI) list and identify vegetation as a contributing resource, such as “Cottonwood trees planted on a grid pattern” at Grant-Kohrs Ranch National Historic Site, Ranch House CLI. Listing and identifying “what” trees and “where/how” they are arranged clarifies the preservation intent.

It also is necessary to adequately describe landscape patterns and processes. The nomination for Fruita Rural Historic District in Capitol Reef National Park lists orchards and fields as contributing but stops short of describing the characteristic active/fallow patterns of crop rotations. Section 106 compliance preserves orchards, but the reduction of rotations between active and fallow orchards impairs the integrity. In contrast, the listing and description of the historic “Mail Tree” has helped preserve the tree.

Identifying specific landscape characteristics and features as contributing resources in the nomination under “Setting” implies greater importance for these individual elements as opposed to including just a general description. Washita Battle-field National Historic Site, a National Historic Landmark (NHL) in Oklahoma, nominated in 1976, identified the area to be preserved but lacks specificity of what to preserve. The site now faces threats of oil/gas and wind turbine development within the viewshed and potentially within the NHL boundary. The nomination would be a stronger preservation tool if it detailed landscape characteristics and features.
The National Park Service (NPS) Northeast Region presents the Saint-Gaudens National Historic Site (NHS) as a case study for including landscape resources in National Register documentation. The Saint-Gaudens National Historic Site is primarily significant for its association with sculptor Augustus Saint-Gaudens and the Cornish New Hampshire Art Colony. The site is also significant in the history of historic preservation in New Hampshire for the establishment of the Saint-Gaudens Memorial Association. Additionally, the site possesses significance in the area of landscape architecture, architecture, and historic archaeology.

This presentation discusses the way in which National Register documentation for parks in the Northeast Region recognizes landscapes and small scale features not typically included in National Register listings. Sometimes referred to as the “Northeast Region convention,” the term “historic associated feature” is used to enumerate and describe component or small scale features of a landscape, or a system of features that are not individually countable according to National Register guidelines but that collectively comprise a single countable resource. The term also serves to reconcile the requirements of the NPS List of Classified Structures (LCS) and Cultural Landscapes Inventory (CLI) with National Register documentation.

All documentation, except for small projects, are performed under contract and specify that professional qualifications of all key personnel meet educational and experience requirements.

The contractor for the Saint-Gaudens NHS documentation project had a successful record of completing documentation that resulted in listing in the National Register. The project team included personnel experienced in researching buildings, structures, objects, cultural landscapes, and archaeology. The contract required the documentation of all resources and features whether or not they are countable for purposes of the National Register. Often these key landscape features are enumerated in CLIs. If a CLI is not available, the contractor will conduct an inventory. Facility Management Software Sys-
tem (FMSS) data also helps to define the universe of resources.

The Saint-Gaudens NHS documentation includes a site plan accurately depicting the buildings, vegetation, and landscape space. It follows National Register Bulletin 16 guidelines to describe the setting, buildings, outbuildings, other major resources, surface and subsurface remains, and landscape features. Fifteen historic associated landscape features are listed, including spatial organization, unlike many nominations that document the landscape as a single site without enumerating individual landscape features.

In the Saint-Gaudens NHS example, spatial organization is included in section 7 under setting with full descriptions of the relationships of the significant resources to one another. Data sheets are developed for countable resources with the Saint-Gaudens site “Aspet” designed landscape at top and all associated features and resources indented and bulleted below with full descriptions of each included. For example, the Birch Allee includes vegetation, and the path is captured as a historic associated feature. Both have full descriptions and are included as a countable resource. Resources included in Section 7 are included in Section 8 and on the data sheet attributing significance of the resources and their associated features.

There are a number of challenges to including landscape features in National Register documentation in full accord with buildings, structures, and objects. There is a perception the inclusion of landscape resources is not required in National Register documentation for listing. Accounting for sites within the larger landscape is another challenge. A garden site in a larger landscape setting will have a footprint and volumetric presence, but unlike a building, structure, or object, given National Register Bulletin guidance and nearly fifty years of practice, it is difficult to include in the property count. (Note: for management reasons, NPS ascribes more significance to the property count for NPS units than other NR property stewards.) Lumping landscape resources into “site” as a single resource may not adequately convey the significance of this resource type, nor provide equal standing with buildings, structures, and objects. Thus, the NPS uses “historic associated feature” to document all resources that convey National Register significance and to fulfill the List of Classified Structures and Cultural Landscapes Inventory requirements.

MORE INFORMATION

- Presentation Video & Transcript
- Saint-Gaudens National Historic Site Historic District
  NR Nomination

Bob Page is the Director of the Olmsted Center for Landscape Preservation in the National Park Service Northeast Regional Office in Boston, Massachusetts.
NOMINATIONS FOR ETHNOGRAPHIC LANDSCAPES

Ethnographic landscapes are associated with both historic and current uses inextricably related to the cultural identity of the traditionally associated group. Traditionally associated people, a term used by the National Park Service in its ethnography program, means the people that were historically or pre-historically and are contemporarily associated with a landscape inextricably related to the cultural identity of the group, their life ways, cultural traditions, and practices.

This presentation discusses an ethnographic landscape listed in the National Register as a traditional cultural property. The identity is withheld because the nomination is confidential. The National Register format is not an impediment to listing of traditional cultural properties, but the process of ethnographic landscape research, identification, documentation, and management is made difficult because much information is sensitive and not shared. This was the case in a study encompassing 676 acres within a period of significance from creation to the present. This traditional cultural property is an ethnographic landscape associated with seven tribes that collaborated on the nomination. The nomination counts two contributing resources, but to the seven tribes that collaborated on the nomination it is one entity artificially divided and documented as two. The resources are an entire canyon and entire mountain which are significant to traditional cultural beliefs for thousands of years.

The Section 7 narrative states there are character-defining features within the property that “do not lend themselves to the formal process of counting contributing features” as defined by the National Register. These features are a hot springs area, two ceremonial clearings, one lithic site, one petroglyph, doctor rocks, medicine rocks, big horn sheep, native plants, whiptail lizards, clay, quartz, turquoise, caves, and rock shelters. All are recognized in Section 7, but they are not countable and as such potentially could be overlooked.

The traditional cultural property resources are very generically identified. All things considered character-defining and valuable are bundled into the two counted sites. No biotic and

Mount Taylor, New Mexico.

Jill Cowley is the former Park Cultural Landscape Program Lead in the National Park Service Intermountain Regional Office in Santa Fe, New Mexico.
abiotic character-defining features are identified as contributing. The result is insufficient resource information for future planning and land management, leaving some items subject to being overlooked and/or misinterpreted in 106 actions.

Many units of the National Park System in the Intermountain Region contain ethnographic landscapes and traditional cultural properties. One example is the Washita Battlefield National Historic Site in Oklahoma. Washita Battlefield is the site of the 1868 massacre of Cheyenne and Arapaho tribal people by the U.S. Cavalry. This combination of an ethnographic landscape and historic landscape was listed in 1976 as a National Historic Landmark (NHL). Today, the nomination is outdated and does not meet present standards in describing the landscape in detail and in terms of contributing and countable cultural resources.

The boundary of the National Historic Landmark is larger than the area included in the National Historic Site. The NHL nomination supported preservation of the battlefield site but does not provide an adequate description of the landscape that can be used as a tool for cultural landscape preservation.

Oil, gas, and other potential developments are being proposed outside of the National Park Service unit boundary, and potentially, within the NHL boundary, some which already have been constructed, and they are visible from the Park Service unit. A stronger, more detailed nomination would be useful in helping to address potential external threats within the viewshed.

The Washita legislation, rather than the National Register documentation, directed the restoration of an agricultural landscape back to the prairie landscape similar to the time of the massacre. Meanwhile, the park has a new cultural landscape inventory and a cultural landscape report that were developed in close coordination with the tribes as background information needed to develop cultural landscape management treatments.

Susan Dolan is the Program Manager of the National Park Service, Park Cultural Landscapes Program.
The Park History Program and Office of the Chief Historian serves as Deputy Federal Preservation Office for the National Park Service, reviewing all park nominations, and as a liaison between the National Register Program and the national parks.

This presentation provides an overview of park nominations, focusing on resource counting, and it includes examples of recent successes, challenges, and examples of solutions that refine processes and effectively use landscape information within the current National Register form and structure.

In fiscal year 2013, forty-four park National Register nominations were processed. Roughly two-thirds were for entire parks. Nearly half of those used a landscape based approach or were heavily influenced by a recent cultural landscape inventory or a cultural landscape report. It is increasingly rare for a park nomination not to reference the development of the landscape, or have a landscape component of some sort, particularly if documentation is for an entire park.

Resource counting is discussed in related presentations and Saint-Gaudens is a good example. The existing guidelines for counting resources encourage lumping groups and small scale items as one contributing resource. Another guideline discourages counting plants unless they have significant cultural value. Section 5 of the nomination, where the resource count is recorded, can be treated a bit differently from Section 7 where the narrative is discussed. The resource can either be generally defined in a footnote or more thoroughly in the text of Section 7.

The Federal Preservation Office takes a part normally played by the SHPO in non-federal nominations, serving as the nominating authority. The SHPO remains involved in a review and comment role and is relied upon for knowledge of state resources. In all cases, the Park History Program works closely with the National Register Program, the preparer, the park, and the region to overcome challenges.

Kelly Spradley-Kurowski is an Historian with the National Park Service, Park History Program in Washington, DC. She reviews all National Register nominations prepared for the parks.
Additional documentation for boundary changes is common to park units. By law these changes are entered into the National Register upon authorization. The new document will incorporate the old material and include discussions of new landscapes that need to be added. The new documentation must clarify what is being added and what was previously listed. The new resources might include a single cultural landscape that previously was counted as one site. Varied component landscapes may have been identified and each counted as one site. Within those sites will be countable resources, such as buildings and structures, and historic associated features. It is necessary to clearly list and address each equally.

Complexity is an issue that overlaps with additional documentation and boundary changes. The complexity increases with park-wide documentation primarily due to guidance in Appendix Q of the Cultural Resource Management Guideline. For historic and cultural units, this advises parks to complete one National Register form for the entire park, taking into account all areas, periods, and levels of significance, whether related to each other or not. In this way, the National Register form becomes a more efficient management tool.

A good recent example of a complex site that made use of the cultural landscape approach is the Herbert Hoover National Historic Site in Iowa. It was administratively listed in 1966 and the first National Register documentation was completed in 1978. In 1995 a cultural landscape report identified six landscape character areas that dealt with multiple periods within Hoover’s life, the commemorative period after his death, and potential prehistoric resources. These were used to structure the format of the recently updated nomination and, within each area countable resources, the spatial organization, land use, circulation, and vistas were each discussed.

Some resources listed in 1978 have been lost and a few have changed status, making this an extraordinarily complex document. The use of landscape character areas framed the nomination and structured a complex site into manageable pieces leading to a clear understanding of the site development over time.
SHPO APPROACHES TO LANDSCAPE NOMINATIONS

Introduction

In December 2013 and January 2014, National Register staff from State Historic Preservation Offices (SHPOs) were invited to discuss nominations that focused on significant landscapes. This topic was addressed twice, because the December webinar was not recorded. Although there were some speaker substitutions, this chapter reflects the total participation in both programs.

The speakers discussed issues that needed to be worked out as the nominations were developed, but generally they were considered successful examples of nominated landscapes. Each nomination exhibits a thoughtful way of implementing the guidance available in the National Register landscape bulletins. That said, most participants considered updated National Register guidance for landscape nominations to be a priority. This session focused on case studies involving sample nominations.

Mary Hopkins described Wyoming’s innovative nomination for the Green River Drift, a cattle drive trail nominated as a cultural landscape and a traditional cultural property. The drift is 58 miles long with some 40 miles of associated spurs. It encompasses federal, state, and private land, and the involvement and support of all stakeholders was a key to the successful listing of this property. Mary also discussed the Medicine Wheel Mountain traditional cultural property (a National Historic Landmark) and the JO Ranch, nominated as a rural historic district.

Astrid Liverman spoke about Colorado’s efforts to increase landscape appreciation and to provide technical training. She described the Colorado cultural landscape survey form and landscape training sessions to help consultants and others better document, evaluate, and understand landscapes. She described other important landscape initiatives, including state funding allocated to survey and nominate ranching, homesteading, and transportation rural historic landscapes. Astrid mentioned recent Colorado landscape nominations, including the Tarryall Road nomination—encompassing more than 29,000 acres in its 41-mile length.

Lorna Meidinger broached new issues with her discussion of Theodore Roosevelt’s Elkhorn Ranch, the Denbigh Experimental Forest, the Custer Military Trail, and the Whites tone Battlefield. Linear resources, like trails and battlefields, present unique issues regarding boundary definition, how terrain is addressed, and how cultural values are understood.

Chrissy Curran shared a number of listed, designed landscapes in Oregon as well as ranches and a segment of the Oregon Trail. Designed landscapes included an IOOF cemetery in Coos Bay, the Open Space Sequence in Portland—designed by Lawrence Halprin, and the spectacular Oregon State University campus, originally designed by the Olmsted Brothers in 1909. Chrissy also mentioned the charmingly vernacular Peterson Rock Garden in Redmond and Laurelhurst Park in Portland.

April Frantz of the Pennsylvania SHPO explained Pennsylvania’s development of agricultural contexts for various regions of the state intended to be used to nominate individual farms and districts. The contexts include registration requirements and other aids to evaluation. April also discussed the challenges of other nominations in progress, such as the Appalachian Trail multiple property documentation form.

Christi Mitchell of the Maine SHPO discussed some of Maine’s unique and significant landscapes, including the Bok Amphitheatre at the Camden Public Library, designed by Fletcher Steele and recently designated a National Historic Landmark; carriage paths and other landscape features at Acadia National Park; golf courses; the Eastman Hill Rural Historic District in Lovell; and various town commons. Particularly intact are the Middle Intervale Meeting House and Common in Bethel and the Common at Union, Maine. Christi also broached the dilemma large water features can pose using a work-in-progress case study at Clary Lake.

The two SHPO NRLI webinars provided important dialogue about the issues confronted in identifying, documenting, and evaluating landscape resources. SHPO staff members shared important case studies and expressed a general consensus about prevailing problems.
This presentation discusses issues related to listing historic landscapes in the National Register in Oregon. Most landscapes listed in the state are publicly-owned properties.

Dorris Ranch is owned by the Willamakabe Park District in the Willamette Valley south of Portland. The ranch includes a couple houses and a barn, but the primary feature is a hazelnut orchard. Several years ago it was feared that the trees would need to be removed because of insect damage. The vulnerability of the vegetation is one of the differences between preserving historic landscapes versus buildings.

Designed and rural historic landscapes are evaluated differently. There are different issues with each type. With designed landscapes, vegetation is more of an issue. How is integrity evaluated when historic vegetation is constantly changing? Boundaries are an issue with rural historic landscapes where natural features and viewsheds are important. The vast viewsheds along the Oregon Trail have been a perplexing issue.

In Oregon, cemeteries are increasingly viewed for their landscape values. Nominations have addressed cultural values and physical attributes and their influence on the cemetery layout. An example is the Marshfield IOOF Cemetery in southern Oregon, which has responded to steep topography through the construction of terraces and retaining walls.

Historic boundaries of the Cant Ranch, a spectacular ranch in Grant County, includes orchards and hay fields, but the original nomination did not include them as contributing features. The National Park Service completed a Cultural Landscape Inventory (CLI) that identified these additional features that were then added to the nomination.

The Lawrence Halprin designed Open-Space Sequence in Portland was an innovative system of city parks when built in the 1960s. Owned by the City of Portland, they are geographically connected but experienced as a discontinuous series of spaces. Halprin’s modernistic landscapes across the country are increasingly being listed in the Na-
The Petersen Rock Garden is one of the few privately owned gardens listed in the National Register in Oregon. The landscape was developed by a Danish immigrant beginning in the mid-1930s and opened as a roadside tourist attraction.

Laurelhurst Park in Portland reflects the City Beautiful movement. It was designed by John C. Olmsted as a series of garden rooms. The rooms were very deliberate in the design, and each is listed as a contributing feature. The City has been replacing exotic plantings specified by Olmsted with native vegetation, with which the SHPO takes issue.

Ruts worn by wagon wheels are still visible in segments of the Oregon Trail. Three publicly-owned segments were nominated under a multiple property documentation form. At this time, these segments will remain discontinuous because neighboring portions of the trail are in private ownership, and unfortunately, the owners do not want them listed in the National Register.

The P Ranch is owned by the U.S. Fish and Wildlife Service and located in the center of the Malheur National Wildlife Refuge. It is a very early Oregon landscape listed in the National Register. Although the ranch house burned down in the 1950s, there are a number of extant landscape features including the barn and cattle wheels. The biggest threats to this landscape are forest fires and flooding.

One of the biggest issues is our lack of expertise in listing rural historic landscapes with regards to its cultural, spiritual, and/or religious value. There are nine federally-recognized tribes in Oregon; seven are very active THPOs. The ceremonial religious realm is complicated and listing sacred sites and cultural value does not fit very well in the National Register of Historic Places.
Pennsylvania is varied with forests, mountain ridges, agricultural lands, and industrial landscapes of coal mining and oil drilling. This presentation discusses Pennsylvania rural landscapes as historic resources, what has been done to preserve them, and what hopes there are for their future.

Pennsylvania farms are diverse by region, making it a challenge to assess National Register eligibility. The Historic Agricultural Resources of Pennsylvania 1700 to 1960-A NR Multiple Property Documentation Form (MPDF), an initiative that took years to complete, included separate chapters for each of sixteen agricultural regions ranging from subsistence farms to small farms specializing in fruit trees or potatoes to large diversified farms. The goal was to provide consistency and predictability in evaluations and to provide guidance about typical farms in each region and their buildings and landscape features. The context begins with a general overview and history of settlement when all farms were largely alike and continues with details of typical landscape features, field patterns and sizes, orchards, windbreaks, and regional building types.

Larger districts that include other resources, like villages, cemeteries, grange or VFW buildings, small businesses, schools, etc., are troublesome in some aspects of guidance. For example, what is the context guidance for evaluating woodlots and various topographic features?

Limitations of the MPDF have been discovered with its use. For example, to justify the boundary in Pier Still Run, the preparer referred to the guidance in National Register Bulletin 30. The MPDF has been a great tool for individual properties, but guidance needs to be clarified for boundaries of larger districts. The MPDF includes strictly agricultural resources and does not address larger, more complex landscapes. This confuses some preparers about how to treat non-farm properties that complete a rural landscape. It concerns some to include land not definitely connected to farming or cultural use. This is a recurring conversation. What should be the boundary for a large agricultural district? Should it be the edge of a well-defined field; low on the slope; or high on the ridge? The MPDF does not ad-
dress this or a new subdivision when considering integrity of the larger landscape.

Three examples are given of landscape-related projects. Allegheny National Forest is the state's only national forest. There are few natural places remaining in Pennsylvania. Most of the state was cleared at least once for industrial purposes. There is a need to better understand and assess the eligibility of cultural resources found in these wooded lands. State agencies need to understand the potential of rural landscapes as historic districts and provide specific guidance to assess which reforested area might be eligible for their industrial past, for conservation efforts to reclaim them, for WPA/CCC works, etc.

The Appalachian Trail is eligible, but what is the boundary? The National Park Service is addressing this issue on the trail in its entirety with development of a MPDF applicable to the entire trail.

Fairmount Park in Philadelphia was an early conservation effort to protect the city water supply from industrial pollution. That grew to include the watershed. The park listing did not address the watershed, so now, thanks to a phased approach to mitigation, earlier documentation is being updated to evaluate all parks in the watershed for eligibility and listing in the National Register.

Large rural landscapes have not been addressed adequately in Pennsylvania. There have been no statewide systematic surveys to consider what state parks, forests, and game lands might be eligible for the National Register, nor have reasons been outlined why private lands might be important for pre-history, settlement era, industrial use, conservation, or reclamation efforts.

Some large rural tracts of land are facing a return to heavy industrial use due to shale drilling and associated pipeline construction. Not all projects trigger Section 106 review and only basic survey guidance has been provided to consultants for pipeline projects that may raise a number of landscape issues.
BEYOND PARKS AND CEMETERIES: NATIONAL REGISTER LANDSCAPE LISTINGS IN MAINE

Maine history has been greatly shaped by its scenery and summer climate attracting well-to-do people. Its cultural landscapes, in a variety of contexts, are important historic resources in the state and a priority for National Register nominations of the SHPO. This presentation describes thorny issues, such as boundaries, integrity, property types for landscapes (sites and districts), and the special problems attached to nominating landscape resources.

Bok Amphitheatre in Camden, the Carriage Paths of Acadia National Park, and historic golf courses are designed landscapes. Rural agriculture landscapes, called organic landscapes using terminology similar to that of the World Heritage program, include farms, traditional town commons, and rural historic districts of various types.

The Camden Public Library amphitheater is associated with the career of Fletcher Steele. He was a prominent landscape architect in the early 20th century who was trained at Harvard and exposed, through European travel, to Beaux Arts design and classical roots. He was one of the first to interpret French Modernist landscape design to American audiences, including students Dan Kiley and Garett Eckbo. Steele integrated classical principles as a forerunner of Modernism in a regional context that echoed the rockbound coast of Maine and the native vegetation.

The linear carriage paths at Acadia National Park are connected with traditional resources that, in the past, would have been recognized on their own merit, but now are recognized as part of the continuous trail that Rockefeller built before Cadillac Mountain became a national park.

Cape Arundel Golf Club, near Kennebunkport, was designed by Walter Travis at the end of the 19th century. This course conveys a narrow period of design based on major movements in golf course design in Great Britain at the time. Poland Spring Resort Golf Course has evolved through a number of designs over a long period. To understand the work of Walter Travis in the 1913-1916 peri-
od, it is necessary to understand the evolution of the landscape and its significance.

Maine farms are a rich tapestry of pastures, fields, hedge rows, forests, and woodlots. The spacious quality is a contributing character. One issue is the encroaching vegetation on what was formerly pasture, now forested. The historic agricultural pattern is still conveyed on operating farms that have not gone through modern changes and consolidation. Boundary demarcations of former fields are nested throughout the Maine woodlands. Despite the change in the character of the setting from pasture to woodland, farms may be eligible under Criteria A and D if past agricultural activities are clearly conveyed in an archeological sense.

Town commons are a highly important property type in Maine. Commons often originated as unadorned, open land evolving from common use for grazing sheep and cattle to other community-oriented purposes, such as town meetings, mid-19th century urban parks, and places for memorials. Each evolving use added a new layer of life and meaning. Many early commons existed in conjunction with cemeteries and the meeting house, which often doubled as a church. Church and government in New England towns were inseparable before 1820.

The different periods of significance make boundaries difficult to define. A mill and mill pond, for example, have varying edges of significance. The pond was drained and integrity of the water feature lost, but the 19th century landscape character of the mill persists.

The linear landscape features of Revolutionary War era trails often are characterless elements. The integrity is in the setting of the surrounding landscape through which they pass.

Sterns Hill Farm is a classic Maine hill farm with an orchard, sugar bush, connected farm complex, and an extensive field system and several cattle roads both defined by stone walls. (Courtesy of Maine Historic Preservation Commission)

MORE INFORMATION

- Presentation Video & Transcript
- York Historic District NR Nomination
- Highstreet Historic District NR Nomination
- Arundel Golf Club NR Nomination
- Eastman Hill Rural Historic District NR Nomination
- The Carriage Paths, Bridges, and Gatehouses, Acadia National Park NR Nomination
- Poland Spring Historic District NR Nomination
This presentation discusses how the North Dakota SHPO recognizes cultural values in natural landscapes for National Register nominations.

Denbigh Experimental Forest is both a designed and natural landscape. Both are valid to the cultural importance of the site.

Custer Military Trail is four discontinuous pieces. It is wider than a single trail because it includes the paths of soldier scouts looking for Native Americans, potential attacks, animals, better routes, etc. There was a confrontation called the “Battle of the Badlands.” The nomination encompasses military movements of the main conflict from the trail portion.

Theodore Roosevelt’s Elkhorn Ranch and Greater Elkhorn Ranchlands include the archeological remains of the ranch buildings where Roosevelt lived. He didn’t own all of the property, making the boundary definition complicated. Originally, the boundary was drawn to include all of the ranchlands that Theodore Roosevelt would have used. The boundary included federal land, state-owned land, and land from one private individual willing to be part of the nomination. This is in the heart of oil country, and land and mineral rights owners contested the nomination.

For most of the year, ranching in the badlands involved turning the cattle loose to graze and then finding them at round-up time. In the Badlands, river access and ravines that provide shelter for cattle during storms are important. Developing a systematic way to look at these features and getting agreement between political entities, consultants, and the SHPO is often a challenge. Ultimately, the boundary reflected land that influenced Theodore Roosevelt’s conservation-minded laws and his perspective. A viewshed analysis was conducted based on the location of Roosevelt’s home and accessory buildings.
The Native American monument at Whitestone Hill with the flagpole, WPA overlook shelter, and Soldiers’ monument in the background. (ND SHPO photograph)

and where he was active on his ranch, based on his writing. The viewshed covered what he would have seen the most and what could be seen from his home. Boundaries were drawn to include that viewshed.

Whitestone Hill State Historic Site includes monuments, an area constructed by the WPA, a lake, and the area where the Battle of Whitestone Hill took place. There are numerous ranches within this vicinity, and all owners cooperated and chose to allow both surveys on and listing of their property. The importance of terrain varies based on the cultural purpose. The lake was one of the reasons the tribes were there, but it was an obstacle for the military to get around. In differing ways, it was important to both sides. A ravine in this area of rolling hills played a key part in the conflict, splitting the troops around both sides. The Native Americans attempted to flee and use the ravine for concealment from the cross-fire.

The nomination covered both sides of the engagement known as the Minnesota Uprising. General Alfred Sully traveled from Fort Pierre to find the encampment of the Santee Sioux responsible for an uprising in 1862. From the Native American perspective, they were at a traditional fall gathering ground for hunting and ceremony; thus, the tribes wanted to rename the conflict a massacre. However, the nomination was named Whitestone Hill in deference to what it was called on the day of the engagement before shots were fired.

MORE INFORMATION

- Presentation Video & Transcript
- Custer Military Trail Historic Archeological District NR Nomination
- Elkhorn Ranch Historic District NR Nomination
- White Stone Hill NR Nomination
Historic landscapes are among the most threatened cultural resources in Colorado due to development pressure, as identified in the statewide preservation plan. This presentation discusses initiatives in Colorado relating to identifying and nominating historic landscapes to the National Register.

The Colorado 2020 Action Plan was approved in 2010 with goals including preserving places that matter. The visioning indicated that by 2020 “an aggressive survey effort will have yielded a greater understanding of the cultural landscape of our state.” SHPO staff pursued additional training in cultural landscape understanding, such as participating in the National Preservation Institute landscape preservation courses.

The Colorado Historic Preservation Review Board gained landscape expertise via board membership appointments. Training sessions highlighting landscape architecture as an area of significance were provided. Board members routinely request landscape context for all National Register nominations.

Grants from the History Colorado State Historical Fund have been awarded to projects focused on survey and select nominations of large-scale rural historic landscapes and transportation corridors. Surveys have been conducted that are tantamount to countywide reconnaissance surveys. Some will result in the preparation of National Register cover documentation and the nomination of homesteading and agricultural rural historic landscapes that highlight a holistic understanding of the complex functions of the working landscape.

Colorado also benefits from several approved contexts under a variety of themes that assist nomination, such as the Mining Industry in Colorado, Denver Mountain Parks, the Denver Park and Parkway System Thematic Resource nomination, Agricultural Resources of Boulder County, and Historic Residential Subdivisions of Metropolitan Denver, 1940-1965.
A challenging and complex resource is the Reiling Dredge and its associated intact mining landscape. The dredge operated from 1908 to 1922 and is believed to be nationally significant. The mining landscape includes the dredge, dredge pond, archaeological remnants of a residential complex, bucket line housing and superstructure frame remnants, refuse scatter, privy pits, and extensive dredge tailings.

Purchased for open space, the property is currently the subject of preservation master planning. Initially the boundary was identified as the dredge pond itself, while the larger boundary includes the tailing piles. Management considerations include gravel extraction from the tailings, which could provide funding for stream and habitat restoration for cutthroat trout. Dredge piles are also an irreplaceable resource in terms of the historic landscape. Competing management considerations include the natural resource and recreation interests of the city, county, and public and are complicated by the extent of the landscape.

Tarryall Road Rural Historic District is a forty-one mile corridor. The 29,000 acre district is significant in the areas of Agriculture, Architecture, Exploration/Settlement, Recreation/Tourism, Transportation, and Historic Non-aboriginal Archeology for the period 1862 to 1964. Additional information was necessary to address the full extent of landscape characteristics, such as an expanded discussion on the operation of the ranches and how that was reflected in the landscape. The context included how many acres are required to raise cattle, the average size of herds, where the cattle grazed, the identification of irrigation ditches and hay meadows, how hay was stored, how much pasture land was owned by the ranchers, how much open range land was required, the use of grazing allotments and the role of the federal government, the location of summer pasture, the relationship between sheep and cattle ranchers, the primary markets, and the various shipping methods. These activities are reflected in the buildings and landscape, such as where ranch headquarters are located in relation to other portions of ranches and how the use of circulation networks demonstrated the movement and shipment of cattle.

Of note, the Colorado state legislation governs the nomination of water-related structures and requires notification to all owners of water rights. Nominations that include a ditch or other water feature must provide owners the opportunity to object and can impact the nomination effort.
This presentation discusses initiatives in Wyoming related to listing historic landscapes in the National Register. The uniqueness of Wyoming is evident in the cultural landscapes nominated for the National Register, such as the Green River Drift Trail Traditional Cultural Property. The short growing season of thirty to forty days contrasts with the extremely harsh winters. This property was established in the 1890s by the Green River Cattlemen Association and is still used by the same families that homesteaded.

An umbrella multiple property documentation form on ranching covered the period of 1860 to 1960. Contributing landscape features include stock drive trails, corrals, and bridges. Ranchers drive cattle to grazing allotments in the spring. The cattle drift back in the autumn along a trail called the drift. The drift is fifty-eight miles long with miles of spur lines. It is popular for people to watch the cattle divided into allotments and branded. The trail was divided into seventeen segments based on the distance covered by cattle in a day. Segments end at named places known by local ranchers. Resources along the drift include bridges and the very well defined trail, gates, and intact World War I era barbed wire fencing. Boundaries are the width of the drift trail and demarked by man-made and natural features. A programmatic agreement is being developed to cover changes to the part of the drift that goes through the largest oil and gas production area in the lower forty-eight states.

The JO Ranch Rural Historic Landscape is owned by the Bureau of Land Management. Originally a private ranch, it is truly in the middle of nowhere. There are seventeen contributing resources and its period of significance is 1885 to 1964. The site, which retains excellent integrity, contains 353 acres between small ridges that define the landscape and property boundary. The original fencing that remains helps identify the boundary. Hay meadows irrigated for pasture are identified by the edges of irrigated areas. The ranching complex includes buildings of various constructions and uses, including a log building and several stone buildings typical of a Wyoming sheep ranching operation. At one time, ten thousand sheep grazed this ranch. Shearing sheep is a labor intensive activity that takes a tremendous amount of coordination. Sheep were gathered in the...
spring. The lambs and ewes were separated from each other and sheared, and the lambs' tails were docked. The shearing complex facilities used for those activities and fence lines are still original to the period of significance.

Medicine Wheel/Medicine Mountain National Historic Landmark is a traditional cultural property that was listed in 1970. When revised in 2011, the boundary was expanded from 110 to 4080 acres. The district has twenty-three contributing resources associated with twenty-eight northern plains and plains tribes. Tribes from all over North America visit this property every year. It was nominated under religion, landscape, transportation, and domestic use. However, the property includes an FAA weather facility installed on the mountain over fifty years ago. It is the one non-contributing feature included in the property boundary.

The boundary includes archeological remains, trails, plant gathering areas, and ceremonial areas. Medicine Mountain is recognized as a sacred property. There are many tipi rings, vision quest structures, effigies, cairns, and prayer and ceremonial locations. A programmatic agreement monitors how the property is managed by the U.S. Forest Service. The boundaries were controversial and compromised between tribes, county commissioners, and the Forest Service. The local politics were controversial and required an understanding Native Americans religious beliefs.

MORE INFORMATION

- Presentation Video & Transcript
- JO Ranch Rural Historic Landscape NR Nomination
- Green River Drift Trail Traditional Cultural Property NR Nomination

Bridge along Green River Drift, Wyoming.

Brian Beadles is the National Register Coordinator for the Wyoming State Historic Preservation Office.
FEDERAL AGENCIES AND CULTURAL LANDSCAPES

Introduction

The federal government is the largest single landowner in the United States. Its property takes many forms. Its stewardship concerns a great variety of issues, and the development of large expanses of federal land is pressured increasingly by various energy development projects. Responsibility for federal lands is split among many agencies, with the largest landowners the U.S. Forest Service (approx. 193 million acres), the National Park Service (approx. 80 million acres), the Bureau of Land Management (approx. 248 million acres), and the Fish and Wildlife Service (approx. 89 million acres). The Department of Defense owns some 20 million acres used for military bases and other operations.¹ The Government Services Administration owns about 9,600 buildings in more than 2,200 communities, which reflects substantial land ownership, but raises different issues than the largely undeveloped land owned by the departments of Interior and Agriculture². Stewardship issues among federal agencies concern the breadth of preservation issues that impact cultural landscapes. Virtually any issue discussed in the National Register Landscape Initiative webinars could involve federal land.

Section 106 of the National Historic Preservation Act (NHPA) requires evaluation of the effect of any undertaking involving federal funding, licensing, or permitting on any property eligible for or listed in the National Register. Section 110 of the Act requires federal agencies to identify historic properties under their jurisdiction, nominate them to the National Register, and assure their preservation. Increasingly, federal agencies recognize that their responsibilities under Sections 106 and 110 do not simply concern buildings and archeological sites, but that small and vast pieces of land also require evaluation. The land may be significant designed spaces, historic ranch land, trails and roads, maritime places, or traditional cultural places and tribal cultural landscapes.

Because of their enormous responsibilities under the NHPA, federal agencies have been innovative in implementing cul-

tural landscape identification and evaluation strategies. Representatives of three federal agencies share some of their approaches to landscape issues in this session. Steve DelSordo is the retired Federal Preservation Officer for the Federal Communications Commission (FCC), an agency that has grappled with the impact of communication towers on many types of cultural landscapes, including designed landscapes and rural landscapes with a variety of scenic, historic, and tribal significance. Jennifer Hirsch is the Federal Preservation Officer for the National Capital Planning Commission (NCPC), which reviews federal development in the region to ensure compliance with design standards and the comprehensive plan. The commission is working to upgrade deficiencies in landscape descriptions and evaluations apparent in early National Register documentation so the significance of building grounds and other open spaces is recognized. Valerie Hauser and Nancy Brown work for the Advisory Council on Historic Preservation (ACHP). Valerie is director of the Office of Native American Affairs and Nancy is the ACHP Liaison to the Bureau of Land Management (BLM). The ACHP is on the forefront of evaluating the impact of energy development on cultural landscapes, and Nancy and Valerie have been particularly active in evaluating projects that impact large western landscapes.
COMMUNICATION TOWERS AND LANDSCAPES

The Federal Communications Commission (FCC) regulates towers for radio, television, satellite, and cable including cell towers, broadcast towers, and public safety towers. All tend to be located on high places for maximum coverage, and, while they are not compatible with many landscapes, towers are necessary in the modern world. Industries are erecting towers in rural places and close to tribal and federal land as customers demand communication access.

Of the more than ten thousand communication tower projects the FCC reviews in a year, about one percent have an adverse effect on a historic property. Commercial licensees, such as AT&T, Verizon, and T-Mobile, have a nationwide geographic license to site a tower pretty much wherever needed. The industry tries to avoid adverse effects, and greater associated licensing costs that may be required through Section 106, NEPA, or the Endangered Species Act.

The FCC’s review of tower project proposals relies on existing documentation under a nationwide programmatic agreement with the Advisory Council on Historic Preservation, requiring no additional survey. This applies to properties that have already been determined to be either eligible for listing in the National Register or listed in the National Register. Military battlefields identified by the American Battlefield Protection Program are often documented with no more than lines on a map and a brief history of the battle that occurred there. If nominations are not carefully written to identify landscape characteristics and features, as many are not, the FCC has to negotiate for tower licensees to recognize the impact and effect of their projects on cultural landscapes.

In another case, lights on a tower would impact night views from Upton Chamber, a traditional cultural property (TCP) important to a local tribe and located across the valley from the proposed tower. The TCP extends into the hillside from where, at certain times of year, the movement

Steve DelSordo is the former Federal Preservation Officer, Wireless Telecommunications Bureau, for the Federal Communications Commission.

Communication tower shaped as a silo.
of stars that inform yearly rhythms for planting may be observed. The tribe was concerned the tower would be visible from the TCP, so it asked the FCC to move the tower. As is often the case, the tribe was not asked for elaborate details and there is no National Register nomination. A consensus determination was made from the limited information provided.

Two tribes in South Dakota objected to a tower installed about fifty years ago on Medicine Butte in Wyoming. After the tower fell over in a storm, the licensee wanted to erect it again. The tribes objected and the FCC worked with the parties to move the tower and return the butte to the tribes. It helped that tribal elders explained the importance of this traditional cultural landscape.

In another example, a company proposed to erect a tower near a national park and the park recommended moving it to a distant ridgeline. The tower company liked the alternative, however tribes objected because it would be located within a tribal cultural landscape that included prayer circles and burials.

El Santuario de Chimayo is the destination of annual Easter pilgrimages. The community was concerned that sunshine reflecting off the tower on a nearby ridgeline would mar the pilgrimage route crossing desert badlands. The FCC worked with the community to select a paint color that did not reflect light and blended with the surrounding landscape.

Two old towers marred the view of the Hudson River Valley from Olana, the historic home of Frederic Church. The view made famous in his paintings included his land and land not his but certainly within his viewshed. When the towers needed to be replaced, the FCC worked with the licensee and various friends of Olana to mitigate the appearance of the towers within the viewshed.

These projects portray the dual roles of the FCC as a licensing agency and advocate of cultural landscape preservation.
This presentation describes the context in which the National Capitol Planning Commission (NCPC) assesses effects on historic landscapes through Section 106 review using National Register nominations and cultural landscape inventories for eligibility determinations to permit projects.

NCPC is the planning agency for the federal government mandated to protect cultural and natural resources in Washington, D.C. Congress passed the National Capital Planning Act in the 1920s that created and assigned responsibilities to NCPC related to urban planning and historic preservation.

This presentation focuses on Section 106 review of three projects describing the NCPC process of assessing effects of projects on historic landscapes. The Museum of African American History and Culture, the Pharmacy Building, and Mount Vernon Square present examples of problems encountered in the review process, methodology used, observations, results, conclusions, and recommendations drawn.

The review of effects on historic landscapes is difficult to assess, in part because spatial organization in landscapes is less tangible than buildings, but also the older nominations relied on for review often focus on buildings and lack clearly articulated details of character-defining landscape features at the same level of consideration as buildings.

Projects are assessed as to how they affect individual buildings and landscapes and how they impact the L’Enfant and McMillan Plans for Washington, D.C. Listed in the National Register, the L’Enfant Plan emphasizes the importance of topography, open space, views, and vistas as important characteristics of the cultural landscape of the monumental core, making it almost impossible to have a project in Washington that does not affect some part of it.
area of potential effect. There was great effort to minimize impacts on the pastoral nature and surrounding views of the Washington Monument. A programmatic agreement addresses mitigation measures, including completion of the tree planting plan and updating the National Register nomination for the Washington Monument to focus on the landscape.

The main issues with the American Pharmacist Association building were the adverse effects of a perimeter security project to the historic site and views and vistas of the L'Enfant Plan. The landscape is an integral part of the Beaux-Arts building designed by architect John Russell Pope. The project, which involved construction of bollards and fences, vehicular barriers and guard booths, and a retaining wall necessary to construct a sidewalk, required removal of trees and other changes that affected the cultural landscape. To mitigate adverse effects, a Memorandum of Agreement called for a report comparing the original planting plan with current conditions to determine the best design for the landscape.

Mount Vernon Square occupies one of the original L'Enfant reservations in the city. The Carnegie Library takes up only a small part of the square, leaving an important historic open space in the city. A proposed project includes renovation of the library, an addition to the building, construction of underground exhibit space, and extensive renovation of the historic square. The National Register nomination defined the square and its viewshed and vistas as character defining landscape features of the L'Enfant Plan. The L'Enfant Plan was understood as being historic, but it was not as easily accepted by some consulting parties that the viewshed and vistas can be negatively impacted by a project like this, making it a struggle for NCPC to explain, to minimize the effects, and to mitigate the impacts on the cultural landscape.
The Advisory Council on Historic Preservation (ACHP) adopted the Native American Traditional Cultural Landscapes Action Plan in 2011 because of a growing number of cases involving large-scale historic properties under Section 106 of the National Historic Preservation Act. The ACHP was hearing from Indian tribes and Native Hawaiians that landscapes were not being adequately acknowledged or understood in the consultation process.

The plan also grew out of ongoing discussions about landscapes between Valerie Hauser, director of the ACHP’s Office of Native American Affairs, and Nancy Brown, ACHP’s liaison to the Bureau of Land Management (BLM) and historical landscape architect. Available on ACHP’s website, the plan’s intent was to raise awareness about landscapes and promote their protection. It also began to address the challenges in the Section 106 process when considering these kinds of places.

The plan identifies a number of tasks undertaken by ACHP. For instance, the agency created a webpage pulling together information about traditional cultural landscapes. It also developed guidance in a question and answer format about how landscapes fit in the Section 106 review process. More work needs to be done to address landscapes; the National Park Service is working on much that will help resolve issues and provide guidance and advice needed by practitioners. ACHP has contributed to revisions of Bulletin 38, because NPS received many comments about how the bulletin relates to Section 106. The ACHP website includes a page on Energy, Transmission, and Historic Preservation. The documentation does not specifically address cultural landscapes, but many documents address the challenges of dealing with large sites.

From her work with BLM, Brown points to case examples about energy development affecting cultural landscapes and sees visual effects as one of the biggest challenges. She notes two transmission lines, Sigurd to Red Butte and Boardman to Hemingway, for which methodologies have been developed to assess visual effects to cultural landscapes.
In consultations about the Ocotillo Wind Project, BLM recognized a traditional cultural property (TCP) and assumed it was eligible for the National Register. Mitigation for effects from the project included ethnographic research and continuation of a prehistoric trail study to further inform the eligibility issue, as well as videotaping some traditional areas and related songs.

Another energy example is Imperial Valley Solar. The congressionally designated Juan Bautista de Anza National Historic Trail was within the area of potential effect of the project, but no physical evidence was evident on the ground. After much consultation, it was acknowledged that there would be no effects to the trail from this project based on the lack of any physical evidence.

An example not related to energy issues is the Topock Remediation case. This was a Superfund cleanup site, but also a TCP with cultural and religious significance for various Tribes. It was determined eligible for the National Register with boundaries that fall outside of the project area that were not defined as part of this project.

Hauser also noted the Cape Wind Project, a complicated Section 106 case that involved a large traditional cultural property that extended well into Nantucket Sound! The project concerned development of an offshore wind farm. Ultimately, the decision was made to acknowledge the TCP and the project’s effect on it without defining boundaries. The project highlights the challenges of working with large places with time, funding, and jurisdictional constraints.
TRIBAL PERSPECTIVES ON CULTURAL LANDSCAPES

Introduction

America’s Indian tribes and Pacific Island, Native Hawaiian, and Native Alaskan groups may consider the National Register an unwieldy vehicle for recognizing the significance of their deeply held reverence for the land. None would consider the land a mere “landscape” or simply a setting for other constructions. Their feelings for the land are inseparable from their cultural and spiritual beliefs, and the land and water are difficult to define by boundaries. It may be challenging to fully articulate the significance of a place that is steeped into the spirit, heart, soul, and history of a people and even more difficult to speak of its importance in terms of criteria. Even so, many native groups have made the National Register work as a tool for recognizing special places and have benefited from the designation, at the same time understanding its limitations. They are frequently involved in questions of eligibility: as consulting parties in Section 106 cases, as stewards of places that are vital to the history of all Americans (but particularly Native Americans), and as protectors of places that reflect cultural values, history, and beliefs.

This session only includes presentations from tribes of the lower 48 states. The Pacific Islands are covered elsewhere in this publication, and Native Alaskans will be a future topic. Tribal representatives who participated in the NRLI webinars discussed their efforts on behalf of special places and federal recognition programs, including the National Register. They shared stories of discovery, re-discovery, recognition, and education. Their stories concern places that have long been imbedded in the traditions and spiritual beliefs of tribal nations such as those revered by the Mandan, Hidatsa and Arikara Nation in North Dakota, the Narragansett of the Northeast, the Confederated Tribes of Grand Ronde in the Northwest, and several tribes of the Chesapeake Bay.

With the land they own and cherish threatened by gas and coal ventures, the Mandan, Hidatsa and Arikara Nation negotiated mitigations that are helping preserve the affiliated tribes’ cultures and languages and transfer them to the Nation’s youth. The Narragansett Indians similarly saw cherished lands compromised by development and a lack of sensitivity to important sites—including ceremonial rock clusters. These rocks, deliberately and meaningfully placed, have been revered for generations, but they are achieving new meaning with tribal studies confirming important celestial connections and a relationship to long submerged places offshore. The story of native people in and around the Chesapeake Bay highlights their use of this remarkably big and rich estuary as a source for food, transportation, community, and beliefs. “These landscapes comprise the cultural and natural resources that would have supported the
historic lifestyles and settlement patterns of an Indian group in their totality,” said presenter Deanna Beacham. She was inspired to call them “indigenous cultural landscapes.”

The Grand Ronde also sought definition of their lands, as they carried out scientific and cultural studies along the Oregon coast. Eirik Thorsgard explained they found tribal cultural landscapes to be “any place in which a relationship, past or present, exists between a spatial area, resources, and an associated group of indigenous people whose cultural practices, beliefs or identity connects them to that place.”

The four stories that unfolded in this session provide remarkable and innovative testimonies to the power and persistence of tribal reverence for the land. These lands have not been widely discussed in the National Register program as a genre of landscape, but they should be seriously considered as historic districts and sites. Traditional Cultural Properties (TCPs) are well known by tribes and others, but many additional areas of significance can be considered in terms of tribal applications. For example, forested or cultivated lands may be evaluated for tribal agricultural significance; other lands important for fish and wildlife may be evaluated for significant contributions as food sources and laboratories for wise conservation practices.

The speakers in the Tribal Perspectives session were Doug Harris, Deputy Tribal Historic Preservation Officer for the Narragansett Indian Tribe of Rhode Island; Eric Thorsgard, Tribal Historic Preservation Officer for the Confederated Tribes of Grand Ronde Community of Oregon; Calvin Grinnell, Historian for the Mandan, Hidatsa and Arikara Nation (North Dakota); and Deanna Beacham, American Indian Program Manager for the National Park Service in the Chesapeake Bay region (Maryland and Virginia).
CEREMONIAL STONE LANDSCAPES

Tribal oral histories reveal the cultural contexts of ancient ceremonial landscape features. Understanding the contexts enhances perceptions of the cultural values of landscapes shared by Native Americans from the Atlantic to the Pacific. An elder medicine man said not to rely on tribal oral history or tribal lore alone. What you must do is let the landscape speak for itself and let the tribal oral history and lore stand as witness.

This presentation introduces Native American ceremonial stone landscapes and their significance, particularly for tribal medicine people who utilize them for religious and ceremonial purposes.

The turtle effigy reminds us of our responsibilities as a cooperative resident of this continent, Turtle Island. The serpentine effigy meanders across the landscape, starting with the tail in a spring and ending with the head pointing to water. A human effigy is representative of the spirit of the humans who used the site. An effigy ceremonial stone grouping characterized as a crow points to the west where the departing spirit goes. The Narragansett oral history articulated the story of a crow bringing seeds of corn, beans, and squash to initiate the agrarian period of life for northeastern tribes.

Turner Falls Ceremonial Hill is related to the Perseid meteor shower. A triangular stone platform at a break in one section of stone wall faces west toward Mount Pawtuckaway where, at a notch in the hill, the sun will set at the time of the highest concentration of the Perseid meteor shower. Standing stones in the notch align in a ceremonial calendar used by ancient people to know the appropriate time to prepare for and conduct ceremonies.

In tribal oral history, Upton Chamber was an ancient ceremonial site. A mile away on Pratt Hill are stone
groupings and the key element in a FCC determination of eligibility for a cell tower project challenged by the tribes based on these cultural resources that would be adversely impacted by the tower. It was discovered through GPS mapping that the summer solstice sunset aligns across the viewshed from the throat of Upton Chamber through the stones on Pratt Hill.

An effigy face on the Narragansett Indian Reservation would be impaired by a proposed tribal clinic. Mapping revealed a ceremonial stone landscape, but not the details. Elders had not shared that information, which is a frequent occurrence, because much tribal knowledge is considered confidential. After clearing the land, the observation point of the effigy face was revealed where tribal people, for thousands of years, had sat for celestial observations. Offsetting the building sixty feet preserved the viewshed of the celestial alignments and the functionality of this observation point. The device continues to teach tribal people astronomy with tools used by ancestors.

Black Plain Hill is a bear effigy and observation seat. The effigy bear stands on hind legs, and, behind it, another bear stands on all fours. Looking very closely reveals the big dipper in the sky. The effigy depicts the evening sky and relates to the big dipper in the form of what is referred to regionally as the bear’s tail touching the earth. It is believed that this is a part of ceremonial practices dealing with the deceased.

The National Historic Preservation Act is a great tool and, in some instances, a wonderful weapon to preserve ceremonial stone landscapes, yet many archeologists are not willing to accept that tribal people believe these landscape features retain the prayers of medicine people that harmonize the precarious balance with earth mother.
TRADITIONAL CULTURAL LANDSCAPE PROJECT: CONFEDERATED TRIBES OF GRAND RONDE

The Confederate Tribes of Grand Ronde Community of Oregon is a confederation of over thirty different tribes and bands. The confederation got involved in a BOEM initiative looking at off-shore energy development on the outer continental shelf with concerns that studies being done were solely focused on archeology and not adequately addressing landscape-level issues.

This presentation focuses on a methodology used with the Grand Ronde Community to meet eligibility requirements of the National Register to define its tribal cultural landscapes.

The main part of the work defines a tribal cultural landscape. Consistent themes include place, widened or expansive space, cultural connections, the intersection of cultural and natural of places, and linked activities.

This defines any place in which a relationship, past or present, exists between a spatial area, resource, and an associated group of indigenous people whose cultural practices, beliefs, or identity connects them with that place, determined by and known to the people.

Traditional tribal oral stories, like how the world came to be, were broken down to try to create a broad understanding of four basic categories: places, fauna, flora, and other. It was asked if these four categories can be geo-referenced and interpreted through statistical analysis.
A density chart was mapped showing the highest areas of cultural diversity and areas of concern where there might be cumulative impact from climatic change, such as sea level rise. An intern from NASA, who is a tribal member, re-mapped the ocean floor and coastline from twenty-five thousand years ago to the present. He also mapped projected sea level rise over the next two hundred years and where impacts will likely occur.

Oral histories mention Lake Allison on the interior of Oregon and tribal people trying to escape from floods synonymous with Coyote Stories, but for Tillamook folks it is South Wind. The coming of South Wind coincides with the Paleo landform, which is not something looked for but certainly interesting when found.

Sea level rise will displace a lot of identified resources for gathering, hunting, and traditional food. Climate change may adversely impact some viewsheds, including rock complexes built for specific views during ceremonial activities.

Sea level rise on Tillamook Bay will inundate some fishing sites, and the primary fishing locations will be completely lost. It is the same with plant resources that grow in marshy areas on the margin of the bay where traditional foods, basketry material, and medicine may be lost.

What does it mean? For tribal people, the published data and oral histories create a methodology to clearly understand and articulate an indigenous model of landscape and show tenure on the landscape. It is a model to predict the impacts on known gathering places and spiritual places.

The question, then, becomes, can this process be replicated to understand the connection of tribal people to a given landscape? It is hard for the non-Native American public to understand indigenous perspectives from a landscape level. The oral histories may seem amorphous and the unwritten tribal stories contained within the landscape that depict epic-creating figures like South Wind may not resonate. However, the disappearance of these landscapes can break the continuity with the next generation.

It is hoped that projects such as this will produce a good methodology to document tribal cultural landscapes eligible for the National Register.

MORE INFORMATION

- Presentation Video & Transcript
- Tillamook Bay Coast Guard Station NR Nomination
MANDAN, HIDATSA AND ARIKARA CULTURAL EDUCATION FOUNDATION:
AN INNOVATIVE METHOD OF CULTURAL LANDSCAPE IMPACT MITIGATION

This presentation discusses innovative initiatives in resource impact mitigation pioneered by the Mandan, Hidatsa and Arikara Nation and relating to preserving cultural traditions and knowledge.

The Mandan, Hidatsa and Arikara Nation reservation encompasses the lower middle half of Lake Sakakawea in North Dakota. The reservation is experiencing an oil boom and massive lignite coal beds that feed seven major coal gasification plants, lay beneath the ancestral homeland.

The reservation has benefited through cultural resource impact mitigation. The permitting process to strip mine 17,000 acres of coal beds required an archeological and cultural resource inventory of the land. Two hundred and fifty significant cultural sites were identified. The coal bed is under aboriginal territory, an ancestral village managed by the National Park Service called the Knife River Indian Village and National Historic Site. The coal is owned by the federal government, requiring the mining company to consult with tribes having an ancestral claim.

Cultural sites of the ancestral homeland would be destroyed by the mining activity, but funds would be set aside to enhance and revitalize tribal cultural knowledge for future generations. It was suggested by tribal representatives of the Mandan, Hidatsa and Arikara Nation to invest funds in cultural education as an innovative cultural resource impact mitigation method. The mitigation revitalized tribal knowledge, language, and cultural heritage that had been lost over time.

It is customary for a strip mining company to hire an archeological firm to recover data from cultural sites. The recovered material is studied, inventoried, and stored in a repository. The archeologists write a findings report, which have no value to tribal members.

As an innovative alternative mitigation, a trust fund was established with direct benefits to enhance and preserve tribal culture. Income from pasture leasing will be put into

A recently constructed wall pad sits at the foot of Thunder Nest Butte, which is important in Tribal origin stories.

Calvin Grinnell is the Historian for the Tribal Historic Preservation Office of the Mandan, Hidatsa and Arikara Nation, also known as the Three Affiliated Tribes.
the trust after the strip mined land is reclaimed. The fund also allows contributions from other enterprises exploiting natural resources on tribal lands under federal jurisdiction. In addition, certain culturally important sites will be avoided and preserved, such as a turtle effigy and burial sites under rock cairns.

The primary purpose of the trust will be the preservation of Mandan, Hidatsa and Arikara Nation languages and culture. This will be accomplished by translation of stories and histories into the original language and dialect and preservation of the culture through the teaching of songs, crafts, and other techniques.

A group of high school girls from the reservation gave presentations based on Native women, like Sakakawea. They made traditional dresses and memorized the words of the historical woman. These young women show initiative and interest in their history. Educational scholarships in the fields of anthropology and archeology made available through the trust will help these young people make a difference on the reservation. Very few of young tribal people are in these fields of study and more are needed. These fields make a logical fit with preserving tribal culture and traditional knowledge of the elders and their ancestors.

Tribal people believe they are still on ancestral homelands today because they honor traditions and pray in traditional ways. Tribal people take care of their clan bundles and carry on annual ceremonies. They thank the Creator for blessing the people with opportunity and good fortune and hope for insight to make positive change happen.

**Scholarships awarded to prospective anthropology or archaeology students.**

**MORE INFORMATION**

- Presentation Video & Transcript
Indigenous cultural landscapes (ICLs) in the Chesapeake Bay watershed demonstrate aspects of the natural and cultural resources that supported American Indian lifeways and settlements in the early 17th century. Considered trail-related resources of the Captain John Smith Chesapeake National Historic Trail (NHT), these evocative places may be important to descendant communities today, as well as to conservation strategies in the Chesapeake watershed. Ongoing research is helping to define and identify these large landscapes.

The concept of indigenous cultural landscapes originated during conversations organized in response to the Chesapeake Bay Executive Order of 2009 during attempts to explain an indigenous perspective of large landscapes. This indigenous perspective reveals that American Indian places in the Chesapeake Bay watershed were not confined to the sites of houses, towns, or settlements. It also demonstrates how the American Indian view of one’s homeland is holistic rather than compartmentalized into the discrete site elements typically utilized in popular accounts today, such as “hunting grounds,” “villages,” or “sacred sites.”

The original paper that was referenced in the 2010 comprehensive management plan for the Captain John Smith Chesapeake NHT includes the criteria posited by the initial advisory team.

The paper, originally authored in 2011, describes examples of indigenous cultural landscapes along proposed segments of the Captain John Smith Chesapeake NHT in Virginia. This paper was updated in 2015. Each ICL example includes lists of which criteria apply and information on how the sites can be interpreted as indigenous cultural landscapes.

ICL research began in 2012, and by 2013, a team from the University of Maryland had completed a prototype methodology summary with recommendations for further research and a pilot study of the Nanticoke River watershed using this prototype methodology.

During that same time period, a team working on the implementation of the Captain John Smith Chesapeake NHT Lower Susquehanna segment also produced a report on their ICL findings, but, lacking an extant descendant community, there was no tribal input to include.

Building on the prototype methodology for documenting ICLs and earlier studies, researchers from St. Mary’s College of Maryland completed a thorough study of the Nanjemoy and Mattawoman Creek watersheds in November 2015. This study added the dimension of predictive modelling, which was field tested with excellent results.
Using similar predictive modelling on a much larger scale, the same team of researchers also completed an ICL priorities report for the entire tidal Chesapeake Bay watershed in February 2016. This report was commissioned to help the National Park Service prioritize ICL research areas over the coming years.

Currently, researchers are working on identifying the indigenous cultural landscapes on a segment of the Rappahannock River in Virginia. Information from the priorities report indicates that the York River (including the Mattaponi and Pamunkey rivers) and the James River (including the Nansemond and Chickahominy rivers) are likely candidates for future research. All research reports will be published by NPS when they are final.

The NPS envisions indigenous cultural landscape research being informative and useful for future National Register of Historic Places eligibility determinations of historic districts that are part of the Captain John Smith Chesapeake NHT.
ARCHEOLOGY AND CULTURAL LANDSCAPES

Introduction

Studies of the land and culture-nature interactions are a fundamental aspect of archeological investigation and interpretation. “As long as archaeologists have studied (the) human past, they have been interested in space, and consequently in landscape,” wrote Knapp and Ashmore.1 Any discipline that considers landscape a fundamental consideration acknowledges the role of soil, geology, water, vegetation, and topography in shaping the visual image of the land over time. Archeologists, however, study these characteristics from the perspectives of discrete periods of time and long-term change over time seeking clues to an evolution or consistency of use, indications of cultural imprint, and the subsurface and aboveground information potential.

In the National Register Landscape Initiative webinar about archeology and landscapes, projects in which landscape and archeology were critically aligned were described by three presenters. In their discussion of specific projects, participants learned how archeologists’ perspectives of the landscape often differ from those who are predominantly focused on its visual arrangement. Participants also achieved a better understanding of how archeologists read the landscape to address research questions.

Damita Engel, with her colleagues at Metcalf Archaeological Consultants, Inc., has extensively investigated the Knife River Flint Quarry area in North Dakota. As a result of these studies, they developed a predictive model of Knife River flint natural deposits and site locational/spatial distribution.2 Predictive modeling is used by archeologists to predict archeological site locations in a particular region through an understanding of patterns on the landscape and knowledge of cultural behavior or preferences. It is particularly applicable on public lands as a management tool, although this is not its only usefulness.3 Damita Engel’s work was focused in central North Dakota where Knife River flint occurs. The stone is important because it was “possibly one of the most, if not the most, widely traded lithic material in precontact North America.”4

The second presenter was Rick McClure, who discussed the distinctive “berryfield” landscapes in the Pacific Northwest and, particularly, those in the Pinchot National Forest that are important to Klikitat Indians. He explained that if foods are sacred, like Sawtooth huckleberries, the land where they are found is also sacred. Although still a vital part of Klikitat foodways, ceremony, and agricultural practice, berryfields are also important for their potential relationship to archeological sites. Preservation of the berryfields requires particular management practices and, without such practices in place, the berryfields are threatened. The

1 Wendy Ashmore and A. Bernard Knapp, Archaeologies of Landscape: Contemporary Perspectives (Wiley-Blackmore, 1999)
2 Damita Engel, “A Hole is More than the Sum of its Parts: Recent Investigations in the Knife River Flint Quarry Area,” manuscript submitted for the NRLI 1-16-14 webinar, p. 2.
4 Engel, Ibid. p. 2.
Klikitat people are dismayed about this potential loss. McClure and others are engaged in identifying the berryfields, recognizing them as significant cultural landscapes, and implementing management practices that will enhance their preservation.

The third presenter was Abigail Christman of the University of Colorado, Denver, who described a preservation initiative in the Purgatoire River region of Southeastern Colorado that was generated by the proposed expansion of the Piñon Canyon Maneuver Site. State and local preservationists, with members of the local ranching community, supported an inventory of cultural resources, preparation of historic contexts, and National Register evaluations. Historic and prehistoric properties were identified in this effort, including homesteads, ranch headquarters, rock art sites, industrial sites, churches, and Tipi ring sites—to name a few of the resource types studied. The cultural landscape related to ranching was recognized as an important cultural resource indispensable to understanding the region’s history. Archeological resources, including ruins, were understood to be vital components of the cultural landscape and important sources of historical information about the region and its past and present occupants.

This session helps demonstrate how the disciplines of history and archeology merge in the study of human influences on and modifications to the natural landscape. For further information about landscapes and archeology, the following sources may be useful:


Handbook of Landscape Archaeology, by Bruno David and Julian Thomas, eds. (Left Coast Press, 2008)
Increased demands related to the energy boom have spurred large numbers of archaeological surveys in western North Dakota. Metcalf Archaeological Consultants, Inc., has conducted numerous inventories within the primary source area for Knife River Flint, a highly sought-after tool stone for prehistoric groups. In 2012, The Lynch Knife River Flint Quarry became a National Historic Landmark. This presentation summarizes the investigations and focuses on landscape challenges and avenues of research used to view the landmark in a wider context.

Knife River Flint (KRF) was a prized lithic material traded by native populations in precontact North America surpassed, only in distribution, by obsidian from Yellowstone. This dark brown tool stone occurs as pebbles, cobbles, and boulders in the Killdeer Mountains and in the Spring Creek and Knife River drainages providing the ideal focal point for studying and monitoring 10,000 years of cultural trade and material exploitation.

The area was intensively exploited during two peak extractive periods: Paleoindian and Middle Plains Woodland. Initially, individual groups freely acquired materials for personal use, but later access was controlled. The high quality raw material served as trade goods dispersed along the Missouri River villages and throughout central North America.

In 2005, Metcalf Archaeological Consultants, Inc., contracted to develop three predictive models to assess possible impacts to cultural resources from highway construction. The first model addressed the distribution of KRF and the influence of KRF in shaping settlement patterns. The second model attempted to predict settings likely to contain buried archeological materials. The third model examined the geographic extent of quarriable KRF.

The study reviewed records and conducted intensive fieldwork using geoarchaeological investigation to address archeological questions. The first model identified seven site types: camps, quarries, lithic procurement areas, workshops, lithic scatters, cairns, and other. Camps contained stone...
circles or remnants of domestic activities. Quarry and lithic procurement areas relate to material acquisition and reduction identified by numerous unmodified or tested cobbles distinguished from each other by the extraction method. Extraction deeper than 20 centimeters required more time and energy; hence, they are identified as quarries. Quarries have distinct pits, waste piles, and nearby workshops. A workshop is defined as a concentrated lithic reduction area associated with early stage reduction. Lithic scatters are defined by a lack of features or evidence of quarry or procurement activities. Cairns, rock piles having a variety of use but not associated with lithic production, and the catchall “other” category (unusual sites) were too infrequent for modeling.

The site burial model was next, assigning probability of locations on two assumptions: one, that locations were attractive to prehistoric people, relying on markers such as proximity to water, good viewshed, close to food resources, etc., and two, site conditions favored the accumulation of sediments. The site burial model was developed using landscape modeling tools including digital elevation models and SSURGO soil series maps.

The model focuses on humans targeting material sources along Pleistocene tributaries where KRF eroded out of the ground during the glaciation recession. Sources of raw KRF include lag deposits on eroded uplands, glacial till, alluvial gravel deposits in meltwater channels, and gravel bars within streambeds. These data laid the groundwork for GIS layer modeling of the relationship of KRF distribution.

Predictive models are dynamic perpetual works in progress that are revisited and refined. Implementation of the mapping program through Arc GIS program Model Builder will make future model updates easier.

Energy development allows for new sites to be discovered and studied but threatens their preservation too. Ultimately, the KRF model’s holistic approach ensures that significant resources are assessed in the wide context of land and resource use through time.

**MORE INFORMATION**

- [Presentation Video & Transcript](#)
- [Lynch Knife River Flint Quarry NHL Nomination](#)

*Quarry pits dotting the landscape. (Photo courtesy of Archaeology and Preservation Division, State Historical Society of North Dakota)*
Berryfields are a cultural landscape resource on the 1.6-million-acre Mount St. Helens National Volcanic Monument in the Southern Cascades of Washington. The monument, known by the Yakama Cowlitz name Lawetlat’la which means “the smoker,” was listed in the National Register for significance as a site (landscape) important to tribal identity. The nominated property has no historic buildings and the landscape relates to tradition rather than archeological resources.

This presentation focuses in the National Register eligible Sawtooth Berryfield, which is located on a crest of the Cascade Mountains. Significance is tied to traditional use on a seasonal basis for harvesting, processing, and preserving huckleberries, one of five foods sacred to the local Tribal people.

Huckleberries grow in understory thickets of forest clearings. Successional growth decreases berryfield productivity as trees encroach into clearings. Native people routinely suppressed forest vegetation through fire to maintain clearings for huckleberry fields. Historic photographs from the 1930s preserve a record of this traditional practice.

Change from clearing to forest is the result of fire suppression. A comparison of historic images with current views reveals the effect of succession on the berryfields. Historic photos show evidence of a major wildfire in the mid-19th century. Evidence includes tree snags, light successional vegetation, and a dominant understory of huckleberry. The National Archives contains a record of the last maintenance fire set by tribal people 100 years ago. The U.S. Forest Service extinguished that fire and brought an end to fire maintenance of clearings. The suppression of maintenance fires and extinguishing wild fires reduced the extent of berryfields.

Native people asked the U. S. Forest Service to intervene to maintain these cultural landscapes for exclusive use by descendant populations of tribal people, especially the Yakama Nation, who ceded their lands under the treaty of

Traditional method of berry drying. (Ray Filloon, U.S. Forest Service, 1937)
1855 but retained interest in the continuing maintenance of
the berryfields. In 2011, fire was reintroduced into the
area, with the help of the Yakama Nation Fire Crew.

Archeological resources related to processing huckleberries
are found within the monument boundaries. Of 350 archeo-
logical features identified scattered in 35 to 40 distinct
sites (both within and outside the National Register eligible
property), only one has been excavated. The project evalu-
ated the physical structure of a berry processing feature.
Radiocarbon dating placed the origin to late prehistoric age
with use continuing to about 1937, when traditional berry
processing shifted to canning and freezing berries.

Many sites have evidence of residential structures (com-
monly termed tipis) on flat compact areas with a central
fire hearth and associated artifact material and lithic scatter
located close to berry processing features. A multiple prop-
erty evaluation of twenty-two processing sites was made in
2013 from the standpoint of a shift from prehistoric collect-
ing evolving into the historic pattern associated with sea-
sonal berry processing used by descendant populations to-
day.

MORE INFORMATION

- Presentation Video & Transcript
- Lawetlat’la (Mount St. Helens) NR Nomination
This presentation describes the survey to designate rural historic landscapes in the Purgatoire River region of Southeast Colorado. The project was initiated in opposition to expansion of the Army Piñon Canon Maneuver Site. Colorado Preservation surveyed private land with limited access to record the resources of this little known landscape. A team of archeologists and architectural historians worked as a team to conduct the survey and evaluation.

Phase one recorded more than 450 prehistoric and historic sites at the reconnaissance level. Fifty-eight sites were recorded at the intensive level, of which fifty-six were determined eligible for listing in the National Register. The properties included working ranches, 200 homesteads, and small rural communities with schools, commercial buildings, and churches.

Phase two recorded intact homesteads and ranching history, focusing on National Register nominations, interpretation, and public awareness. The scope was expanded to the broader landscape, instead of individual sites, to see how the cultural landscape shaped how things were built, how agriculture was practiced, and who settled where and why.

Working on large ranches made the methodology reliant on ranchers, who shared information about livestock operations, family histories, and stories about the sites. Archeologists documented ruins and focused on material culture and artifacts, evidence of previous building, locations, land uses, and what the site told about settlement patterns. Historians identified building types, construction methods and trends, and vernacular adaptations of intact buildings rather than ruins. This collaboration encouraged lively debate over significance that led to the broader understanding of homesteading in the region.

Homesteading occurred in the Purgatoire River region after most of Colorado had been homesteaded. Homesteaders in
this region arrived in Model T automobiles instead of covered wagons. Federal land policy for homesteading this region expanded the Homestead Act in 1909 to 320 acres and again in 1916 to 640 acres. In a dramatic reversal in the 1930s, the Resettlement Administration bought homesteads realizing the area was not suitable for farming. The semi-arid climate creates a scarcity of water and cycles of drought lead to periods of boom and bust. Open range ranching existed before farming homesteaders came to the region. Homesteaders trying dry land farming found the short-grass prairie best suited for livestock grazing. With dry land farming efforts unsuccessful, homesteaders, hard hit by drought, left in the 1930s. When homesteads failed, ranchers took back the land.

Homesteaders from New Mexico who settled in the region left a heritage of adobe construction, corner fireplaces, and community buildings. Construction with stone and adobe changed little from the 1860s to the 1920s, making it difficult to establish a date of construction based on architectural style. Analysis of material culture was a key to determining the period of occupation, land use, and cultural affiliation. Cattle grazing resulted in minimal disturbance of surface artifacts, leaving scattered automobiles, bed sets, and complete stoves in place. Sometimes remains of these artifacts were the only way to tell a barn from a house.

Determining nomination boundaries was a challenge. Would it be the homestead patent or natural boundaries of the land? There was debate about the ideal scale, viewsheds, and how many acres make a rural historic landscape.

Most challenging was combining archeology and architecture in the final written document, because the disciplines have distinctive terminology and writing styles.

Finally, there was the challenge of looking at the layers of history equally, taking into consideration how homesteads, cattle ranches, and landscape are individually significant and jointly contributing historic resources.

Building ruin in the homesteading landscape of Southeast Colorado’s Purgatoire River Region.

MORE INFORMATION

- Presentation Video & Transcript
- Cultural Resources Survey of the Purgatoire River Region
MARITIME CULTURAL LANDSCAPES

Introduction

Maritime Cultural Landscapes have not been addressed by the National Register program very extensively. In fact, there may not be a site or district listed in the National Register that was nominated under the term “Maritime Cultural Landscape”—which we’ll call MCLs. Our presenters hope that will change.

MCLs are among our most interesting and diverse landscapes. They represent that wonderful intersection of land and water, often encompassing both land and water resources. MCLs can also be completely submerged resources, such as shipwrecks, or resources near a body of water, such as a lighthouse, quarry, village, or ceremonial stone structure.

Why have MCLs not been listed in the National Register? Perhaps maritime resources simply have not been considered resources within a fuller context—within the landscape. However, the lighthouse perched on the shore can be better understood if we consider how it is viewed from the water, how it is reached by land, and how the terrain, viewshed, and ancillary buildings and structures create a fuller picture of the purpose and history of the lighthouse. It becomes evident that they should be included within the boundaries.

Underwater, it may be evident that a single shipwreck only tells part of the story of an underwater landscape that is replete with other shipwrecks. We may understand that physical conditions, weather patterns, and other variables have created a constellation of shipwrecks—large or small vessels—that tell a bigger story than one lone ship lost below. Such shipwrecks, related by conditions, may be strewn in a meaningful pattern that also compels a sense of “landscape.”

A striking example of the relationship between land and water and the inextricable tie between them that ancient people realized may be found in shoreline areas more recently inundated. “Recent,” depending on the people, may refer to 30 years or 300 years, or more or less. In these areas, underwater structures, however simply constructed, may have a meaningful celestial link to a shoreline location, and the entire sweep of water and land linked by the past may constitute the cultural resource. Some Pacific Is-
land cultures have such a strong tie to the water that it may be difficult for these Americans to isolate land and water resources.

Brad Barr mentions Christer Westerdahl, the Norwegian scholar generally credited with developing and promoting the concept of MCLs. Thanks to his scholarship and his reasonable explanations of MCLs, scholars around the world have embraced the MCL concept. Americans are no exception, including our speakers today.

As we explore these varied resources, remember that “maritime” has many faces; that water is revealed in oceans, lakes, or other bodies of water; and that “maritime” can encompass any culture, period, or activity. Remember too that water has tremendous cultural and spiritual meaning in most cultures and, some cultural resources can only be understood within their maritime component. The speakers in the MCL webinar include people who have done pioneering work with MCLs from their positions with the National Oceanic and Atmospheric Administration (NOAA), the Bureau of Ocean Energy Management (BOEM), and the National Park Service (NPS). We’re also fortunate to have a tribal perspective on MCLs.

This session begins with Brian Jordan, the Federal Preservation Officer for BOEM. He’s also the headquarters archeologist and the tribal liaison officer and is housed in the Office of Environmental Programs. Brian will give us an overview of BOEM’s involvement with maritime cultural landscapes.

Next, we’ll hear from Brad Barr, a senior policy advisor with NOAA’s Office of National Marine Sanctuaries. He will describe some of the innovative studies of maritime cultural landscapes NOAA is undertaking and provide us with a better understanding of the varieties of MCLs that interest his agency and other scholars.

Doug Harris, a loyal participant in the National Register Landscape Initiative, will discuss the Submerged Paleo-cultural Landscapes Project. Doug is with the Narragansett Indian Tribal Historic Preservation Office, and he is the co-principal investigator of the project. He’s joined by David Robinson, Senior Marine Research Specialist at the University of Rhode Island Graduate School of Oceanography and co-principal investigator of the project. They’re joined by John King, Professor of Oceanography at the University of Rhode Island Graduate School of Oceanography. Dr. King is the lead principal investigator.
BOEM'S ROLE IN STUDYING MARITIME HERITAGE AND EVALUATING MARITIME CULTURAL LANDSCAPES

This presentation describes past work in developing a cultural landscape approach to study maritime heritage in the U.S. and recent efforts by the Bureau of Ocean Energy Management (BOEM) in applying the maritime cultural landscape approach on the Outer Continental Shelf (OCS).

The Marine Protected Areas Federal Advisory Committee (MPA-FAC) was established in 2003 to make recommendations to the Department of the Interior and the Department of Commerce on how to develop a national system of marine protected areas similar to national parks and national marine sanctuaries. An external working group was established by the MPA-FAC in 2009, composed of indigenous peoples, archeologists from federal and state governments, and cultural resource managers. The working group developed a white paper called “The Recommendations for Integrated Management Using a Cultural Landscape Approach in the National Marine Protected Area System,” which was adopted by the MPA-FAC and delivered as part of a recommendation to the Secretary of the Interior and the Secretary of Commerce. This paper looked at codifying a cultural landscape approach in a theoretical way to help marine protected area managers identify and adopt policies and practices to manage both cultural and natural resources at ecosystem and landscape levels.

Past cultural resource management paradigms approached cultural and natural resources individually. BOEM, previously the Minerals Management Service, made regional scale cultural heritage assessments focused on shipwreck locations, but there was no understanding in a landscape sense of how these sites were connected or the context and its significance.

An administrative divide often separates protection of cultural heritage resources in marine areas from protection of natural resources. The National Ocean Policy called for an effective ecosystem-based management, recognizing that connections between the natural environment and heritage resources are often multifaceted and inseparable. Missing from that approach was an understanding of how people have used the environment in places over time. An ecosystem-based approach requires the simultaneous understanding of natural and cultural factors and resources. It has been known by many indigenous cultures for millennia that humans are an important part of the ecosystem.

Human impacts on the environment have to be considered when implementing an ecosystem-based management approach. The cultural landscape approach to studying maritime resources includes development of an analytical framework to understand places and associated resources as relationships among living and non-living resources and their environment. This approach emphasizes cultural relationships to the environment and highlights connections between human behavior and the condition of the marine ecosystem over time.

Brian Jordan is the Federal Preservation Officer and Chief, Branch of Environmental Consultation for the Bureau of Ocean Energy Management.
BOEM has funded studies that apply the cultural landscape approach to the protection of cultural heritage resources in marine areas. “Characterizing Tribal Cultural Landscapes for Resource Preservation and Protection” is a project partnership between BOEM, NOAA, tribal facilitators, and Tribal Historic Preservation Officers of the Confederated Tribes of Grand Ronde in Oregon, the Yurok Tribe in California, and the Makah Tribe in Washington. The project is using this holistic cultural landscape approach to integrate science with historical, archeological, and traditional knowledge to identify and communicate areas of significance. This effort is intended to provide a transferable, transparent, and cost-effective method to document tribal places and resources, past and present, significant to the communities and outside agencies, thus enhancing their capability for consultation.

This changes the traditional paradigm for cultural resource managers that maintained that everything underwater or off the coast is separate and disconnected from the land. The study reveals continuity from upland areas through rivers, to the coast, and to the outer continental shelf, now underwater, where people lived in past periods.

Another study focuses on submerged paleo-cultural landscapes and working with Native American tribes to incorporate oral traditions to better understand where ancient tribes lived on the Outer Continental Shelf before sea level rise.

These studies look at the broad regional contexts that tie together people, places, and resources over time to understand impacts on natural and cultural environments and ecosystems.

MORE INFORMATION

- Presentation Video & Transcript
- Recommendations for Integrated Management Using a Cultural Landscape Approach in the National MPA System
- A Guidance Document for Characterizing Tribal Cultural Landscapes
The US National Marine Sanctuaries are not simply marine protected areas established to preserve and protect their resources and qualities of national significance. They are places to which people are often deeply attached, places people imbue with meaning, places that have been influenced by the people who have lived there throughout history, and places that have, in turn, helped form and influence the social, cultural, and personal identity of these people. In recognition of this importance of “place,” the National Marine Sanctuary System has begun to rethink its mission and mandate to more effectively integrate the maritime cultural landscapes that define and influence these sites that we, as a nation, have decided are “nationally significant” and to be protected and preserved in perpetuity for future generations.

Throughout the nearly fifty-year history of the National Marine Sanctuary System, these places have always been thought of as landscapes, but largely as “ecological landscapes,” managed accordingly using ecosystem approaches to that stewardship. However, these places are also cultural landscapes, changing over time, influenced by the people who use and value the exceptional resources they support and being drawn to them for the quality of life they support and continue to offer. It is, therefore, not too great a leap to embrace the idea that the maritime cultural landscapes of these places also should be better understood and protected. To this end, the NOAA Office of National Marine Sanctuaries has embarked on an initiative to define “maritime cultural landscapes” and identify management strategies that more effectively integrate the preservation of the sanctuaries’ ecological and maritime cultural landscapes.

Maritime historians and archeologists John Jensen, Rod Mather, and Jeff Gray provide an eloquent articulation of what a “maritime cultural landscape” approach to managing marine protected areas might involve. “Cultural landscapes capture the living past that surrounds us and give us a better understanding of the links between the natural history and human history of a place. They illustrate how we have shaped the world, and how the world’s natural environments have shaped us. Perhaps most importantly, cultural landscapes can also provide us with valuable insights into the future, such as the relationship between the health of natural resources and human well-being and prosperity.” They go on to say, “Retaining the intangible as well as the tangible parts of human culture, cultural landscapes can do what the natural sciences alone cannot. They convey the human meaning of places.” Through maritime cultural landscapes, we acknowledge, not only our collective contributions to sustaining and improving these places we have given meaning, but we also better understand how we have contributed, what we have learned along the way, and how we can use that knowledge to continue to make these places special for the generations to come.
While fully implementing such an approach throughout the entire National Marine Sanctuary System will take time and involve considerable effort, there is a growing acknowledgement of the potential benefits of this integration of ecological and cultural landscape preservation. Protected areas are established to preserve areas people care about, both for the benefit of sustaining and improving the ecological resources of that place and, perhaps more importantly, for the people who appreciate and value these places. Acquiring a deeper understanding of the maritime cultural landscapes of our national marine sanctuaries offers important insights into why these places are valued and what people feel is “special” about these places. Understanding what is perceived as “special” can help to focus the management of these protected areas on the most important qualities and attributes, and more effectively engage the public in guiding and supporting the management strategies required to preserve these resources and qualities. If we are to have any chance of effectively addressing the “wicked problems,” we must confront them when managing marine protected areas. Therefore, an integrated approach is essential. Through this more effective integration of heritage and ecological landscape management, perhaps we can avoid the perils of Burke’s oft-quoted warning, “Those who don’t know history are doomed to repeat it.”
SUBMERGED PALEO-CULTURAL LANDSCAPES PROJECT

Dr. Ella Sekatau, an ethnohistorian and medicine woman of the Narragansett Indian Tribe, received an oral history saying that ancient villages of the Narragansett people are submerged below the ocean. This raises the question, with federal undertakings on the continental shelf, of how the presence of ancient sites will be determined. This presentation discusses research protocols that are being established to answer that question.

Tribal histories are influencing scientific processes to protect ancient ceremonial sites in the terrestrial landscape. These processes are being transferred to research on submerged land beneath the ocean to comply with the National Historic Preservation Act.

Among artifacts dredged up from the continental shelf by fishing vessels is a bifacial rhyolite blade. Radiocarbon dating found it 23,600 years old. It is believed to have come from an ancient mining area 200 miles up the Susquehanna River. Evidence indicates that the blade came from an ancient butchering site, now submerged in the ocean, forty-seven miles from the coast.

A well-studied archeological site containing several hundred stone tools was found in Narragansett Bay. It was occupied from 12,000 years ago until inundated by the ocean about 1,000 years ago. Archeologists are working to develop predictive models to find related submerged sites on the continental shelf. The research operates on the principle of connectivity between sites along inland waterways to offshore sites located along ancient drainages that crossed the continental shelf before it was submerged. The paleo-cultural landscape, including ceremonial landscapes consisting of stones, some quite large, may be preserved offshore.

Part of understanding the interaction between humans and the landscape is to reconstruct the paleo environment. Studies seek evidence of human activities in conjunction with datable materials like large skeletons of marine or terrestrial mammals. The number of artifacts of mastodons and mammoths recovered by fishermen is quite large along the eastern seaboard. This study is trying to zero in on areas of high sensitivity where these activities were likely to have occurred.

The interaction between culture and landscape types evolved over time. There were family groups of hunter-foragers during the paleo-Indian period. About 4,500 years ago cultures became more complex as both hunter-foragers and forager-horticulturist groups. Over the last millennia, chiefdoms and agriculturists evolved. As culture becomes more complex, social behavior dictates the importance of location for cultural resources like ceremonial stone landscapes. This sort of ceremonial site is not randomly distributed on the landscape.

Doug Harris is the Deputy Tribal Historic Preservation Officer for the Narragansett Indian Tribe.
Theory suggests that the distribution of ceremonial sites is related to astronomical events, and, on land, these sites tend to be aligned, which provides a guide to look for similar sites offshore. Clues ten miles offshore at Block Island narrow the search, where submerged ceremonial stone landscapes appear to align with ceremonial stone landscapes on the mainland.

The study area follows submerged river drainages from Narragansett Bay, extending offshore over what was once an inland plain. The streams provided freshwater and marine environments. They were places were people settled to use the environment for food procurement, communication with other people, and ceremonial purposes.

The initial focus of the study was Greenwich Bay, where hundreds of stone artifacts dating from the paleo-Indian period and into the European contact period were found at low tide. The artifacts, which came from a near offshore site, may be from a preserved, intact landform of the paleo-cultural landscape. These indicators suggest that elements of the paleo-cultural landscape, now inundated, may still exist. The research is taking what is known from archeology on the land and using geophysical survey techniques to define what may be preserved offshore.

The tribal perspective is that archeology is an inherently destructive process, disrespectful and dehumanizing, particularly when studying sites that have been occupied by ancient humans. This research is designed to be sensitive to those concerns.

MORE INFORMATION

- Presentation Video & Transcript

David Robison is a Senior Marine Research Specialist at the University of Rhode Island Graduate School of Oceanography.

John King is a Professor of Oceanography at the University of Rhode Island Graduate School of Oceanography.
TRAILS AND OTHER CORRIDORS

Introduction

The National Register recognizes a variety of corridors—waterways and land routes—as individually eligible resources. Examples of corridors that have been listed in the National Register include trails, highways, boulevards, parkways, and canals. In recent years a cattle “drift” used to herd cattle to summer grazing was listed. Presenters in the trails and corridors webinar raised several issues that require careful consideration in regard to the identification and evaluation of these long, linear resources. Of particular concern are the establishment of boundaries, evaluating integrity, the inclusion of adjacent properties associated with trails and corridors, and the consideration of viewsheds.

The multiple property documentation form (MPDF) has been widely used for corridors, reflecting the need and convenience of nominating corridors in discrete, often discontinuous, sections. In October 2014 when the trails and corridors webinar took place, there were twenty-six different railroad MPDFs, seventeen MPDFs that pertain to trails, fifteen for roads, and eleven for “routes” (with several concerned with Route 66). Another eleven MPDFs were for highways (plus an MPDF for an Interstate), and four were for waterways or canals. Several MPDFs pertained to park and boulevard systems. A count of the number of nominations related to the MPDFs could not be obtained at that time. All of the presenters in the Trails and Corridors webinar worked for the National Park Service, which has administrative jurisdiction over many of the nation’s historic land routes and waterways.

Gretchen Ward presented on the National Historic Trails Program. Ward is the Chief of Planning for the National Trails Intermountain Region (NTIR) of the National Park Service (NPS), which administers nine National Historic Trails and the Route 66 Corridor Preservation Program. The presentation focused on management and preservation issues and the relevance of cultural landscapes to both. Issues of particular management concern are related to energy development and unregulated recreational uses. Preservation issues include interfacing with private property owners, finding professional expertise to document trails, and precisely locating trails (ground-truthing). Cultural landscape issues with trails and corridors are complex, including difficulty in applying existing guidance, an uneven understanding of cultural landscapes by federal agencies, multiple layers of history (and periods of significance), and boundary definition, particularly considering the mutable nature of many trails.

Betsy Igleheart of the NPS Northeast Regional Office (now retired) gave a presentation about the multiple property documentation form for the Appalachian National Scenic Trail (ANST), a 1,000-foot-wide protected corridor located on state and federal lands that extends nearly 2,200 miles through fourteen states, from Maine to Georgia. There are a number of Determinations of Eligibility decisions regarding portions of the trail; however, this is the first attempt to provide comprehensive evaluation guidance for the entire trail. Eventually there will be fourteen related listings, one for each state, completed as funds become available. Evaluation challenges include establishing integrity for moved portions of the trail and justifying periods of significance for recently acquired components. The MPDF allows for an over-arching period of significance that begins in 1922 and extends to the present. The MPDF addresses two Associated Historic Contexts:
Recreation and Entertainment, and Conservation. The primary Associated Property Type is the footpath.

Concluding this session is Suzanne Copping’s presentation about the challenges of identifying and evaluating cultural resources associated with the historic water route that extends for some 3,000 miles along the Chesapeake Bay and its tributaries. The route traces the 1607-1609 voyages of Captain John Smith to chart the land and waterways of the Chesapeake Bay. Particularly valued along the route are the indigenous cultural landscapes, which, according to Suzanne, “comprise the cultural and natural resources that would have supported the historic lifestyles and settlement patterns” of the Indian groups in the region. The evocative landscapes along the James River were noted as a significant aspect of the trail. Suzanne Copping is the Chief of Resource Protection and Partnerships in the NPS Chesapeake Bay Office.

Trails and corridors are important cultural resources that are particularly amenable to the multiple property documentation form. Those mentioned in these presentations may provide good models for other MPDFs that concern corridors. As with all MPDFs, with use, strengths and deficiencies can become evident, so checking with the office that has used the MPDF most would be prudent.

Register Cliff, Wyoming is a key landmark along the Oregon, California, and Mormon Pioneer National Historic Trails.
The National Trails System works administratively with partners in planning a wide variety of preservation, recreational, and heritage-related activities for thirty Congressionally-designated national trails.

This presentation discusses the National Trails System Act, the role of National Park Service (NPS) as administrators versus managers of trails, and concluding thoughts on cultural landscape preservation.

The National Trails System Act pays particular attention to “high potential sites and segments” of trails with very important resources that provide the greatest potential for education, recreation, and preservation. The Act was passed in 1968 to include national trails that are not scenic but have historical values. The Act was amended in 1978 to include scenic trails, historic trails, and recreational trails. The designation of a National Historic Trail is based on an evaluation of national significance using the National Historic Landmark (NHL) criteria. To be designated, trails must meet one of the six NHL criteria.

The National Park Service only has jurisdiction over trails that cross NPS units. Various government and private entities own and manage each national trail, with NPS providing coordination.

The preservation of cultural landscapes along National Historic Trails is threatened by energy development from large-scale wind farms, solar arrays, and pipelines that cross these long distance resources and impact viewsheds. Unregulated recreational use is another issue. NPS works with managing agencies to lessen or control the impact of this use.

National Historic Trails are archeological sites. Subtle historic landscape resources such as ruts and swells and intact settings are often unrecognized and overlooked by the untrained eye. Artifact collecting threatens the “throw-zone” to either side of a trail. There is no obligation of private land owners to preserve the trail. They often fear that feasibility studies to establish a new trail will condemn and take their land. In all the years that the National Trails System has been in place, not once was any land condemned or taken.
National Historic Trails often have several periods of significance representing multiple uses and multiple cultural values. Legal property boundaries seldom match the cultural landscape and, often, the horizon is the only clear boundary seen in any direction.

Landscape characteristics, such as spatial organization, boundaries, buildings, structures, and objects, are difficult to apply to a trail where environmental factors, such as vegetation, climate, topography, and soils, across landscapes of varying width dominate.

Recent work on visual analysis emphasizes the importance of what was seen by the traveler. Should preservation efforts be directed to the viewshed or limited to a designated corridor? NPS does not have a standardized way of making these determinations and works with the land manager cooperatively and collaboratively to meet management objectives and follow preservation law.

Most National Register nominations for trails have focused on limited segments or discontinuous segments, not more than a few miles long, even though viewsheds may be thirty miles or further. Focusing cultural landscape inventories or cultural landscape reports on panoramic landscape viewsheds, important to significance and integrity in National Register nominations, could be used to recognize the larger setting.
Conversations about listing the Appalachian National Scenic Trail in the National Register began in late 2011 when the trail became administratively housed in the National Park Service Northeast Region. Such a nomination had been talked about for many years, largely because of the increasing number of threats that the trail faces with energy, power lines, wind turbines, construction, and activities. It was determined that a Multiple Property Document Form (MPDF) was the most practical approach.

This presentation describes challenges confronted and how they were addressed in developing a National Register MPDF for the Appalachian Trail.

The idea of the Appalachian Trail began in 1921 and the first section was laid out in 1922 in Harriman State Park and Bear Mountain State Park in New York. The last section completed was in Maine. Benton MacKaye wrote an article that appeared in the AIA Journal about the Appalachian Trail, articulating his vision for a recreational trail as a great social experiment of rural living along the trail. The larger social movement envisioned fell away as Myron Avery focused on recreational aspects of the trail.

The trail stretches 2,185 miles from the northern terminus at Katahdin, Maine, to the southern terminus at Springer Mountain, Georgia, crossing fourteen states, three National Park Service regions, and a variety of federal, state, and privately owned lands. The sheer scale of the trail made MPDF format the most efficient option for nominating trail segments. Thus, as each state segment is nominated, the continuity of the entire trail length is maintained.

A number of states had made prior determinations of eligibility about specific components or aspects of the trail. New Jersey is the only state that evaluated the whole trail as eligible, but Section 106 correspondence provided little justification. Justification for preserving the historic resource was tied to the trail enabling legislation, primarily the 1978 language that provided money for purchasing property to protect the trail. There were also Executive Orders on protecting the trail that “anchored the significance with legislation” or “to legislation.”

Another challenge addressed location as an aspect of integrity: the trail has rerouted in places because of encroachment.
or development, resulting in shifting sections from along roadways and off private property. Trail sections will continue to be relocated, making the mutable nature of the trail something to address in the documentation.

It is a ridgeline trail passing through a corridor about 1,000 feet wide with many side trails to viewpoints and vistas. Defining a boundary was a difficult issue. Hundreds of side trails lead off the main spine. Documentation describes the side trails included, segments most likely not to be included, and abandoned segments. The many different kinds of views one would likely encounter had to be articulated in the nomination. This vast expanse makes describing the viewing locations a challenge.

The guidance in Section F recommends significance under Criterion A in the area of Recreation, which is documented in the Section E context. The history of the enabling legislation and executive orders is anchored to the registration requirements.

The period of significance begins in 1922, for the first section in New York. Individual listings begin when construction started and extended to acquiring the last section of trail in the state or when moved onto protected land. There is a very broad possibility for a period of significance, but each state listing will be specific. Establishing exceptional importance for sections less than 50 years old is tied to the legislation. Trails rerouted as a result of the 1978 legislation help define the end date of significance. The legislation enables the acquisition of land to protect sections of the trail threatened by development.
The National Park Service Chesapeake Office coordinates the agency’s participation in restoration of the Chesapeake Bay Watershed. The 64,000 acre watershed crosses six states, includes the cities of Washington, Richmond, Baltimore, and Harrisburg, and is home to 17,000,000 people.

This presentation discusses the conservation strategy of managing the Captain John Smith Chesapeake National Historic Trail and issues and opportunities associated with implementing that strategy in partnership with states, local governments, and private non-profits. The 3,000-mile Captain John Smith Chesapeake Trail extends from the mouth of the bay to Cooperstown, New York, and is one of 30 historic and scenic trails in the National Trails System.

The National Trails System Act of 1966 stipulates that in order to be designated the route of a proposed National Scenic or Historic trail must be substantively known, retain sufficient integrity, and meet the significance criteria developed under the Historic Sites Act of 1935.

The trail’s comprehensive management plan articulates three themes associated with the trail’s significance: Captain John Smith’s journeys, the historic and contemporary American Indian experience, and the Chesapeake watershed ecosystem. Activities that support recreation along the trail must also enhance the visitor experience and support resource protection.

Captain John Smith traveled the Chesapeake Bay between 1607 and 1609. The lines of rivers on his four-hundred-year old map almost exactly overlay a satellite map of today and provide the basis for speculating how this landscape has been used and changed over the past four centuries.

The trail’s conservation strategy suggests a methodology for prioritizing conservation. Three criteria—setting, integrity, and opportunities for interpretation—are used to assess conservation importance and potential at a river segment scale. The locations of archeological sites, approximate locations where
Members of the Rappahannock Tribe of Virginia pose during a site visit to one of several shoreline locations where an indigenous cultural landscape survey will point to opportunities for public interpretation and/or conservation.

John Smith interacted with American Indians, and viewsheds from the river help inform priorities.

The indigenous cultural landscape concept combines natural and cultural elements that supported the lifestyles and settlement patterns of an Indian group in its entirety. These landscapes blur the line between cultural and natural resources. Landscape characteristics include soil types, geology, and geography, overlaid with geospatial analysis to model the probability and potential concentration of archeological evidence.

Known archeological evidence suggests that the site of Werowocomoco was the seat of Powhatan’s power when John Smith went up the York River. This place is one example of an intact landscape currently the subject of protection efforts and a potential model for resource protection that could occur elsewhere along the trail.

The Captain John Smith Chesapeake Trail is a primary driver for cultural heritage-based land protection efforts in the watershed. Integral to that effort is mapping where the trail overlaps other protection efforts. LandScope Chesapeake is a publicly accessible mapping tool that can inform priorities for land protection based on multiple conservation values.

A third strategy for conservation is targeting viewsheds and landscapes along the trail through Land and Water Conservation Fund collaborative funding.

A number of linear infrastructure projects along the 3,000-mile trail threaten intact landscapes. Finding creative ways to protect these landscapes in partnership with others is necessary to protect their historic character and natural features. As of 2016, a process was underway to develop a Multiple Property Documentation Form for all or portions of the trail, and at least one National Register nomination, in an effort to develop consensus about when initiation of the Section 106 process is appropriate. Simultaneously, efforts continue to map the most important landscapes and continually improve upon geospatial viewshed analysis from the river, with the aim of recognizing their eligibility for listing in the National Register.
EVOCATIVE LANDSCAPES

Introduction

Evocative landscapes are those special places that have qualities capable of evoking a certain time or event in history, or powerful spiritual or emotional perceptions associated with past events, traditions, or beliefs. The integrity of evocative landscapes is most strongly defined by their powerful attributes of location, feeling, and association.

The concept of evocative landscapes is not new, and other countries have incorporated such landscapes more directly into preservation programs than we have in the United States. The World Heritage Convention acknowledges three types of cultural landscapes, including associative cultural landscapes, which have “powerful religious, artistic, or cultural associations of the natural element, rather than material cultural evidence, which may be insignificant or even absent” (see http://whc.unesco.org/en/culturallandscape/). Associative cultural landscapes are parallel to those we are calling evocative landscapes.

The presentations in this webinar were intended to help participants achieve an understanding of these often poorly understood landscapes. Additional goals were to help participants understand why and how evocative landscapes may be eligible for the National Register and to encourage them to apply the essential components of the National Register identification, documentation, and evaluation process to evocative landscapes. The presenters’ case studies were particularly valuable in demonstrating how evocative landscapes can be powerful reminders of past events and experiences, even when associated structures and material artifacts are no longer present.

The Japanese American World War II confinement or internment camps provide excellent examples of evocative landscapes. Today, the sites of these camps often have few aboveground resources, but they powerfully evoke that period in the 1940s when Americans imprisoned their innocent compatriots. The camps were sited in remote areas, usually with stark landscapes and grueling climates. These factors remain punctuated by an occasional building, a network of streets, foundations, and perhaps garden and agricultural remnants. The power of these landscapes to evoke is profound; several have been designated National Historic Landmarks: Granada (Amache), Heart Mountain, Manzanar, Rohwer, Topaz, and Tule Lake.
Jill Cowley, historical landscape architect with the NPS Intermountain Region (retired) provided an interesting, informative introduction to evocative landscapes. Alexa Roberts, superintendent of Bent’s Old Fort/Sand Creek Massacre National Historic Site, discussed the powerful meanings associated with the Sand Creek Massacre site, serving as a reminder that, like the Japanese American internment camps, evocative landscapes can be particularly relevant in conveying the complex meanings associated with negative aspects of history. Astrid Liverman, the National and State Register Coordinator for the Colorado State Historic Preservation Office, focused on the Multiple Property Documentation Form (MPDF) for the Santa Fe Trail, which was signed by the Keeper of the National Register in 2012. This MPDF includes cultural landscapes as resources that can be nominated as districts or sites and addresses the evocative qualities that define the trail today.

Several issues were raised by presenters, including the impact of visual intrusions on evocative landscapes, such as high power lines’ impact on landscape integrity; the value of biotic resources in evocative landscapes; and the quantity and quality of remnants from historic periods necessary for establishing historic integrity. The challenging issues associated with defining boundaries were discussed. Jill Cowley pointed out that part of the identification/evaluation process is to discover what is needed to tell the story of the site, and determine if that can be accomplished with a larger or smaller parcel of land.

A preliminary discussion document—such as a white paper—about the cultural meaning and significance of evocative landscapes could help a wider audience understand the relevance of these landscapes to the National Register program. Ultimately, revised National Register guidance could provide an explanation of the concept and set forth some practical approaches to documentation and registration. The discussion that accompanied this webinar demonstrated a strong interest among participants in better understanding evocative landscapes and having guidance available to explain their cultural significance to their agencies, constituents, and review boards.

*Tsankawi unit of Bandelier National Monument.*
EVOCATIVE LANDSCAPES AND THE NATIONAL REGISTER

What is an evocative landscape? It is a landscape that retains sufficient integrity of physical elements and overall character and ongoing use and living associations to be able to tell the story of that landscape, to be able to evoke the meaning, and to be able to embed memories of that place. The goal of preservation is to retain qualities that can be documented and preserved, and to maintain integrity, meaning, and association to evoke meaning and memory. This presentation focuses on adequate representation in National Register nominations of evocative landscape qualities and values, focusing on landscapes that have little evidence of human manipulation or material culture. How well are evocative landscape values represented within existing National Register documentation? How could these values be better represented?

Ground zero of the Trinity Site National Historic Landmark is an evocative place with associations drawing strong emotional responses. An obelisk marks the place where the atomic test bomb nicknamed Fat Man was detonated on July 16, 1945. The 1975 nomination describes resources as the site and structural remains of bunkers, a ranch, and a camp involved in this test. The nomination describes the obelisk, the eight feet deep depression, and the surrounding trinitite fused into glass by the explosion. The “Site” is described as semi-arid flat terrain with no substantial intrusions and is windy. The nomination would describe the resource differently today. The drive to the monument passes through a fenced, heavily monitored security station, vast undeveloped open views, and the unrestored dirt tracks that evoke the sense of isolation and quiet and gives the experience of being there its certain quality.

Ghost Ranch is a privately owned property of several thousand acres in northern New Mexico closely associated with the life and work of artist Georgia O’Keeffe. For most visitors, the landscape looks natural but has strong cultural associations including those with O’Keeffe. A number of sites still exist, much the same as when she painted there, and good evocative quality relates to integrity.

The landscape where Custer’s 7th Cavalry attacked southern Cheyenne Chief Black Kettle’s village in 1868 is commemorated by Washita Battlefield National Historic Site. Since the
Tsankawi is a detached unit of Bandelier National Monument in northern New Mexico. This traditional homeland of San Ildefonso Pueblo encompasses archeological sites and a cultural landscape of mesas, drainage areas, crop land used in precontact times, and circulation paths incised in the rock. The Cultural Landscape Inventory includes detailed descriptions of the history and ecology, precontact and historic features, vegetation patterns, and landscape character during the time that Puebloan people lived there. This combination of integrity, extant physical features, and experience of walking the incised trails helps to evoke memory, history, and an emotional response.

It is appropriate, within National Register documentation, to describe the experiences and emotions evoked from landscape values. These qualities and associated landscape features, to some degree, are being included in National Register documentation to provide justification for preservation. However, currently no National Register bulletin addresses evocative landscapes.

At the time of the battle, this landscape has changed from the prairie village to Euro-American agricultural landscape to a National Park Service preserved landscape. Legislation called for removing 20th century structures and restoring a natural appearing landscape to help evoke the time of the battle. The 1970s nomination describes six miles of the landscape along the Washita River, the plains at the bend of the river, Black Kettle’s village, the area of primary military maneuvers, ridgelines and mountains, and a verdant valley sheltered between surrounding hills. Better representation of natural landscape character, history of use since the event and how it relates to compatible uses and integrity could enhance the likelihood of preservation.

Unknown Sioux marker on Wooden Leg Hill at the Little Bighorn National Battlefield, 2003, John Doerner.

MORE INFORMATION

- Presentation Video & Transcript
- Trinity Site NR Nomination
- Washita Battlefield NR Nomination
This presentation discusses the contemporary meaning of the cultural landscape of a Traditional Cultural Property. Sand Creek Massacre National Historic Site commemorates the Sand Creek Massacre. On November 29, 1864, the United States Army carried out a surprise attack on a non-combatant encampment of 600 to 700 Cheyenne and Arapaho people within the boundaries of a reservation established for them. More than 200 innocent people were killed; two-thirds were women and children. Federal investigations identified the attack as a massacre and the United States accepted responsibility. Tribal history never forgot the massacre and where it occurred. The memory remains a painful element of tribal identity; members have returned to the spot over the years and continue to do so today.

In time, the site where the attack occurred became privately owned. A small marker was erected in 1950 by a local civic organization and the Colorado Historical Society on a hill overlooking Sand Creek. It was the only marker denoting the Sand Creek massacre until the national historic site was established in 2007.

In 1998, Congress directed the National Park Service to work with Cheyenne and Arapaho tribal members and the Colorado Historical Society to locate the massacre site. Tribal oral histories aided by archeology and geomorphology, historical documentation, and aerial photography identified the location of the site. More importantly, oral histories revealed that the Sand Creek massacre never disappeared from Cheyenne and Arapaho memory.

Studies concluded that the massacre occurred over an area five miles in length and two miles in width. Subsequent research indicated a larger area where people fled from mounted troops. Congress authorized acquisition of a sufficient amount of the site to adequately protect, interpret, and memorialize the massacre.

Legislation in 2000 authorizing the establishment of the Sand Creek Massacre National Historic Site specifically mentions the landscape and states the site should be managed to protect significant topographical features and preserve physical
remains of the cultural landscape as it appeared at the time of the massacre. The purpose, as stated in the legislation, is to interpret associated natural and cultural values for public understanding and to assist in minimizing the chances of a similar incidence in the future.

The site evokes contemplation and reflection, and seeks an understanding of culture and history and the enduring impact of the massacre on the Cheyenne and Arapaho people. From the tribal standpoint, the site evokes their history and identity today. Descendants and tribal members point out that the massacre resulted in social and economic impacts that continue to affect them as tribal people, yet their tribal cultures are strong and vibrant. Sand Creek Massacre National Historic Site is a sacred place, a living place connecting tribal members with their ancestors through the land. There is emphasis, today, on healing and prayer, primarily to put spirits of the ancestors to rest, but also to heal trauma felt for generations.

The land and elements within it have special meanings inseparable from the people and their history. Cottonwood trees along the creek bed are one example. Oral history reveals children were saved from the massacre by hiding in hollow trees, likely driftwood, along the creek. Dendrochronology studies found trees that may have been saplings at the time of the massacre. They are considered sacred, like the creek bed where the massacre took place. The whole site is sacred and everything in it: the plants, the animals, the landforms, the creek, and the springs. Significance emanates from the landscape and from the history embedded within the land.
The Santa Fe Trail in Colorado

This presentation focuses on National Register nominations and visual resource management analysis for segments along the Santa Fe Trail. The trail through Colorado is comprised of two routes: the Cimarron Cutoff and the more predominant Mountain Branch that passes through Prowers, Bent, and Las Animas counties.

Only one segment (Raton Pass National Historic Landmark), at the time of presentation, had been listed in the National Register. About twenty years ago, a Multiple Property Documentation Form (MPDF) and several individual nominations were submitted but failed in Colorado, lacking state-specific and archeological information in the context. However, the Keeper of the National Register did accept the cover documentation for use in the other four trail states: Missouri, Kansas, Oklahoma, and New Mexico.

The amended MPDF for all five trail states, approved in 2012, included cultural landscapes as a significant type of site or district, specifically acknowledging the evocative landscape setting as a fundamental element of the Santa Fe Trail.

The cultural landscape site or district represents the fullest extent of trail-related resources in their historic setting. As a rural historic district, several periods and areas of significance may be applicable. This holistic approach to evaluating significance is based on an understanding of the cultural and natural forces that shaped the landscape, including the landscape as a contributing resource.

The cultural landscape should be intact from the significant period, including topography, waterways, vegetation, and cultural resources. Districts are reserved for the most intact, complex, and continuous segments in highly intact, cohesive, and evocative settings.

The term evocative is described as “providing the traveler with an experience as far removed as possible from contemporary intrusion,” as published in the Federal Register in 2013 in the presidential proclamation for the establishment of the Harriet Tubman Underground Railroad National Monument. UNESCO first identified the category in 1992 and defined types of cultural landscapes in 2008.

Astrid Liverman, Ph.D., is the National and State Register Coordinator/Preservation Planning Unit Director with History Colorado’s Office of Archaeology and Historic Preservation.
Per UNESCO, an organically evolved landscape results from its association with and response to the natural environment. One subtype is a relict, or fossil landscape, in which an evolutionary process came to an end, either abruptly or over time, but its distinguishing features remain visible. Its significant distinguishing features remain visible in material form; segments of the Santa Fe Trail fit this definition as examples of expansive landscapes with few, if any, modern alterations.

Three recent nominations in Colorado were for the Delhi segments in Las Animas County (now listed in the National Register). Landscape characteristics include an alluvial setting of loose silty clay and sandy soil, a variety of native vegetation, and topography somewhat impacted by erosion, cattle grazing, and disturbances associated with modern ranching. Overall, the setting remains intact, such that the trail is apparent to careful observation. Full views along the travel corridor are not included within the 100-meter-wide boundary, but are acknowledged as critical to the integrity of setting, etc.

The Delhi segments contrast to Iron Spring on the Comanche National Grassland, arguably one of the best examples of an evocative landscape among Trail sites in Colorado. The description is particularly apt given the exceedingly intact nature of the broader landscape.

There are no modern intrusions, and, in terms of educational and experiential value, one can truly sense the openness and vulnerability of trail travel, the immense distances covered, paucity of water, lack of shelter, harshness of a landscape devoid of shade and populated by inhospitable plants, and the importance of geographic landmarks identifying the route. One can easily imagine travelling the trail. This landscape retains exceptionally high integrity of location, feeling, setting, and association; to experience it can be moving and even transformational.
PACIFIC ISLAND LANDSCAPES

Introduction

The NRLI session on Pacific island landscapes gave participants an opportunity to learn about the relationship between Pacific island cultures and landscapes. Both presenters were archeologists, so the emphasis was on landscapes with archeological and ethnographic significance. Guam and the Hawaiian Islands were discussed.

In addition to the state of Hawai‘i, the Pacific islands affiliated with the United States are the territories (Guam, Commonwealth of the Northern Mariana Islands, American Samoa), unincorporated territories (several, without permanent inhabitants), and sovereign states in free association with the U.S. (Republic of the Marshall Islands, Federated States of Micronesia, and the Republic of Palau). The Commonwealth of the Northern Mariana Islands is in political union with the U.S. The territories and sovereign states in free association have historic preservation offices that function as the 51 state historic preservation offices—with conducting surveys, maintaining inventories, and nominating properties to the National Register.

Pacific island landscapes reflect the maritime cultures of native people and outsiders who invaded or peaceably settled on the islands. There was great fluidity of movement among the people of Asia, Southeast Asia, and the Pacific islands, in part because of the excellent and pioneering navigational skills of Pacific Islanders. The Pacific islands were considered strategically desirable by Asians, Europeans, and Americans, resulting in a great shifting of control over the past few centuries. The mingling of cultures created new cultures while old cultures persisted.

The first presenter in this session was John Mark Joseph, the State Archeologist for the Guam State Historic Preservation Office. The presentation, created by Guam archae-
ologist Richard Olmo, focused on the “landscape iterations of Guam’s West Coast,” an area whose archeology suggests a number of cultural overlays. The indigenous people of Guam are Micronesians and this discussion explored how the island’s distinct soils, geology, hydrology, and vegetation were reflected in the island’s foodways, material culture, and cultural practices. These traditions gradually shifted with the introduction of foreign animals and plants that degraded the native ecosystem. For example, the introduction of the brown tree snake resulted in a severe loss of bird populations and the introduction of the tangan-tangan shrub resulted in the decimation of much of Guam’s dense forest growth. Coral reefs were also impacted, with losses due to the weight and bluster of twentieth century military equipment. The enormity of the changes pressed on the island by outsiders provides added significance to the archeological legacy.

The second presenter was David Tuggle, retired from teaching anthropology at the University of Hawai‘i, from his work as an archeologist for the Navy, and from archeology consulting. He works seasonally as a volunteer for the Hawai‘i Volcanoes National Park. The background material in this presentation provides perspectives on the history and culture of Hawai‘i. Recalling discussions from the NRLI session on tribal landscapes, Dr. Tuggle emphasized that Hawaiian people feel to be one with the physical world, including the landscape, making a discussion of the landscape almost an artificial construct. Nevertheless, he presented two models for interpreting landscapes in Hawai‘i and used a number of examples to illustrate them. His talk interspersed Hawaiian history with spiritual beliefs and the surrounding world of water, earth, sky, and those things about them that give them particular meaning.

In the discussion that followed the presentations, there was agreement that the National Register program needs to be more encompassing of Pacific cultures in considering the significance of landscapes, which are intertwined with the region’s stories, ways of life, and island people’s unity with nature.
This presentation discusses the cultural landscape on the island of Guam where, in the fullness of the natural heritage that includes geology, soils, vegetation, and hydrology, is found the cultural overlay.

Guam is two strikingly different landscapes. The northern half is limestone uplift. The southern is volcanic. The island was populated during prehistory and again 1,000 years ago, resembling the Neolithic period in Europe. Early settlement was along bays, where fishing was practiced. The population later moved onto the plateau and remained there through the prehistoric period. The volcanic landscape contains many rivers, but there are none on the limestone uplift. Very short rivers indicate steep areas not conducive to habitation. More habitation sites are found along the longer rivers. Badlands are located where the lava reached the coast.

Prehistoric Chamarros would use rock shelters under former sea stacks as workshops to create fishing hooks and for storage. Vegetation also provided for their needs. Pandanus spp. was used for weaving mats, baskets, walls, and sails of the proa, a type of boat. Taro spp. was a main food staple. It was processed to remove the toxin. Barringtonia spp., known as fish kill tree, bore seeds that released a neurotoxin when crushed. Put into a basket and lowered into the water, it paralyzed the fish, which float to the top to be gathered. Bamboo was used for floors of houses, roof poles, and for water containers.

Different social spaces paralleled the beach. This is where work stations and midden deposits of artifact scatters are found close to wells and sinkholes where breadfruit would have been processed in mortars called lusongs.

Houses were set above the ground on Latte stones that range in size up to 16 feet tall and 8 feet in diameter, arranged in sets of 4, 6, 8, and 10. The occasional large house stood on a set of 20 Latte stones.

John Mark Joseph is the Guam State Archaeologist.
Naccon Beach on Tumon Bay was cleared during excavations to construct bungalows. The first survey indicated there were no historic properties, but as excavations got underway 370 remains were uncovered. Numerous others were left in place but apparently not recorded with accuracy. It is unknown how many burials were taken out.

There was a leper colony on Tumon Bay from 1902 to 1912. It was later transformed into a penal colony for female prisoners and juvenile delinquents, and now is a recreation area. Ground penetrating radar indicates numerous anomalies, indicating both historic and prehistoric burials.

At one time, the Agana River ran further into the bay. The little headland is man-made. It lies in front of Agana Marsh, and beyond is a Chamorro village. Behind the village are numerous caves dug into the cliff by the Japanese during World War II, some of which are listed in the National Register.

Agana Bridge was recently replaced using federal highway funding. One hundred ninety-eight remains were uncovered and sixty-eight burials were removed during construction. At the turn of the century, the Japanese had to excavate Chamorro burials during construction of the Agana Bridge, and were asked to reinter the remains as close to the original site as possible. This is a practice that is upheld today.
This presentation discusses cultural landscapes in Hawai‘i and the need for broader National Register terminology and guidance to nominate traditional landscapes where cultural worldviews are manifested in the material realm embodied in deities, demigods, spiritual power, and ancestors. Traditional interpretation of landscape character and features connects archaeological site, to local terrain, to geographic locations, and to the world. Two examples are presented.

The first site, known as Pu‘uloa, is on the slopes of the Kilauea Volcano, within the boundaries of Hawai‘i Volcanoes National Park. An old trail parallels the coast and crosses a barren lava plain. A low hummock of rock marks an enormous petroglyph field of more than 20,000 images. Dominant ones are simple circles with small holes called cupules where parents place umbilical cords of their children to ensure a long life for the child. The place name is translated as “the hill of long life.”

“Aumakua” refers to deified, protective ancestral spirits. Of many forms, the most common is a shark. Surviving physical dangers and evil sorcery is called “life from the aumakua.” In a complex ritual, a deceased individual is transformed into a shark aumakua. The place name Pu‘uloa is a version of aumakua shark. The location is not simply named for the aumakua shark; it is the physical manifestation of the protective shark.

Placement of an umbilical cord at the petroglyph field represents placement of the child’s essence on the physical landscape and body of the aumakua shark, ensuring a lifetime of protection and in larger sense, placing the child under oversight of the volcano goddess and earth mother.

Ka-ehu-iki-mano-o-pu‘uloa was an offspring of humans. Transformed into an aumakua shark, he became a protective an-
censal spirit considered a demigod. He traveled to the end of the island chain into a lagoon at the portal of the setting sun. Petroglyphs represent that archetypal journey and the process of his deification. The coastline is a physical representation of his body.

The second example is in Kaloko-Honokohau National Park and involves historical events, not just mythopoetic ones. It focuses on a Hawaiian fish pond known as Kaloko.

Hawaiians mastered coastal aquaculture and associated engineering constructing hundreds of fish ponds throughout the island chain that were controlled by land managers serving as high chiefs and kings. The efforts required for construction, maintenance, and productivity were symbols of great power.

The most important individual in the history of early Hawai‘i is King Kamehameha, who died in 1819. Tradition says his bones were placed in a secret cave below the waters of Kaloko.

Kaloko resides on the boundary between the agriculturally-rich Kona region and an extensive waterless, barren place associated with dark sorcery and spiritual forces of wandering spirits of the dead. These were people who had no aumakua—no ancestral protective deity. The royalty of Hawai‘i had means to control such forces and to render them protective. This region is unique in the spiritual powers of threat that are present and because they are controlled, not under a kingly line, but a line of priests. This dangerous landscape is protective of those who are buried there. The two most powerful genealogical lines in Hawaiian history are buried in this place—one is King Kamehameha.

These special landscapes emphasize the importance of understanding the multiple layers and meaning of place. Kaloko focuses on the ideological as a major element of landscape character, where the smallest scale feature of fishpond expands to traditional land unit and further to the region. Pu‘uloa began with a large petroglyph field and expanded to the coastal water home of aumakua, to adjacent cliffs, and to the volcanic body of which the shark Ka-ehu-iki-mano was a part.

MORE INFORMATION

- Illustrated Presentation Narrative
INSTITUTIONAL LANDSCAPES

Introduction

Institutions are generically known as places where people are gathered—by choice or not—to be taught, reformed, punished, or simply cared for. Typically, an institution is a collection of buildings in a planned setting—often known as a campus. Institutions can be divided into two broad categories: educational institutions and therapeutic institutions. Although there is clearly some overlap, educational institutions are typically campuses of colleges, secondary schools, and religious schools. Schools for the deaf, blind and intellectually disabled also function as educational institutions. Therapeutic institutions include facilities that encourage health and social welfare, such as hospitals, orphanages, mental institutions, and prisons. Some are quite specialized. Historically, there were facilities dedicated to the treatment of tuberculosis, leprosy, and other contagious or incapacitating illnesses. Prisons as institutions may be specialized by gender, age, severity of crimes, or political jurisdiction.

The landscapes of institutional facilities are critical components of the historic property. More than just a setting for buildings, the landscapes often had specific healing, teaching, or occupational functions. The landscapes of such facilities may be related to a certain design tradition or may have evolved for a particular therapeutic effect. Some were designed by prominent landscape architects.

“Institutional landscape” is not a term that has been used to group types of landscapes for National Register identification, evaluation, or registration purposes, but it is a term that is particularly logical for addressing properties that have the common purpose of offering help, healing, learning, or shelter for particular populations. Although search capabilities were limited, by April 2015 the National Register is known to have included the following categories and numbers of individual institutional listings:

- Correctional facilities: 408
- Hospitals: 232
- Facilities for the deaf and blind: 11
- Orphanages: 28
- Sanatorium (for example, Home for the Friendless, Tuberculosis Sanitarium, Home for the Aged, Home for Aged and Incurables, Home for the Aged Deaf, etc.): 138

Often, the landscapes of these listed properties are barely mentioned in the nomination, despite the critical role they may have played in site selection and healing. At some institutions, the land was used to provide food, income, and work and training opportunities. For many of these facilities, a rural or semi-rural location was an important consideration. This was particularly true of prisons, hospitals that treated contagious diseases, and mental hospitals that sought the calming influence of nature. Theories of the
positive effects of certain designs or site layouts were developed by physicians and reformers. Because of the significance of these landscapes historically, National Register nominations need to include thorough descriptions and contexts for the landscape that once existed and that remain. Assessing the integrity of the landscape should be part of the evaluation process.

The National Register Landscape Initiative webinar devoted to the discussion of institutional landscapes focused on therapeutic institutional landscapes. Jim Bertolini of the Nevada State Historic Preservation Office discussed the landscape of the Nevada State Prison. He framed his presentation, in part, in terms of major nineteenth and twentieth century prison reform movements. His discussion included issues confronted in the evaluation of the landscape and in preparing a National Register nomination for the prison complex. Challenges included the layers of prison history evident, addressing subsurface and surface archeological components, and integrity in light of site accommodation to an expanding population and modern amenities.

Jenny Stromberg and Kathryn Smith of the National Park Service/National Capital Region discussed Camp Greentop, a camp for disabled children in Maryland. The camp is located in the historic Catoctin Recreational Demonstration Area (now Catoctin Mountain Park) and was developed by the Works Progress Administration (WPA) in 1938. It was intended for children with disabilities and diseases considered incurable, such as polio and bone tuberculosis. Camp Greentop was originally listed in the National Register in 1989, but the landscape was neglected in the nomination. The presenters used the Camp Greentop nomination as a means of explaining how the National Park Service conducts cultural landscape inventories and strives to update nominations to address significant landscapes. They described standard practices used by NPS to inventory, describe, and evaluate cultural landscapes.

Finally, Kathleen LaFrank of the New York State Historic Preservation Office discussed the campus of the Buffalo State Asylum for the Insane. Her presentation included a description of the work of Thomas Kirkbride, who advocated for the “insane” and developed innovative approaches to facility design including the layout of buildings and the design of associated landscapes. The Buffalo facility combined the skills of Frederick Law Olmsted and H.H. Richardson. Rehabilitation plans for this important collaboration are cognizant of the interplay between architecture and landscape, despite major losses of the property’s original acreage.
This webinar discusses the National Register nomination of the Buffalo State Asylum for the Insane in the context of evaluation, documentation, and treatment of a landscape originally designed by Frederick Law Olmsted and Calvert Vaux.

The 1973 National Register nomination focuses on the hospital architecture, designed by Henry Hobson Richardson and built between 1870-1872. The Olmsted and Vaux landscape is mentioned in the nomination. However, the landscape was neither described, evaluated, nor analyzed, nor is Landscape Architecture listed as an area of significance. The nomination included 93 acres, but the boundary was not identified or justified.

In 1986, the hospital was designated a National Historic Landmark. No outbuildings were described or evaluated. The nomination mentioned the “Kirkbride Plan” and the Olmsted and Vaux landscape, but no adequate description was recorded. The adjustment of area to 59 acres did not identify or justify the boundary.

The 1990s nomination of the Sheldon-Owens Farm in Willsboro, New York, debated whether architecture mattered most. The farmhouse was assumed the important feature, and it had been altered. This nomination began to turn the tide of addressing landscapes when it was determined that the farm historic district consisted of a farmhouse, barns, agricultural outbuildings, fields, pastures, woodlots, and a readable plan.

The asylum had fallen into disrepair by the 1960s and outermost wards were demolished. The last patients moved out in 1974, leaving the complex languishing without use. In 2006, the Richardson Olmsted Corporation was formed to save and find a use for the three main buildings. A tax credit application to develop a hotel, conference center and architecture center required documentation of the landscape.
New research revealed that Dr. James White, a prominent Buffalo physician, received approval to provide a hospital for the mentally ill. In 1870, H.H. Richardson, then relatively unknown, was chosen as architect. Olmsted and Vaux were chosen as landscape architects. Olmsted picked both the site and H.H. Richardson as the architect.

Dr. Thomas Kirkbride, an important figure advocating for “moral treatment” of insanity placed requirements on the design of the 201-acre landscape, much in line with Olmsted’s views towards designs that promote health and sanitation. Kirkbride viewed landscape as a sanctuary where healing could take place, believing that care facilities should be designed environments employed in the science of healing. The “Kirkbride Plan” provided sunlight, ventilation and views of landscape.

Richardson’s plan was classic Kirkbride. A surviving drawing outlines divisions of private enclosed spaces close to the building, general pastoral character, broad views, and extensive walks and drives. The working farm behind the hospital was intended both for therapy and to support the institution.

In 1927, the city asked for return of half the original property to develop a Normal School. Loss of acreage compromised the lawn, and the addition of outpatient buildings, drives and parking lots after WWII seriously compromised the landscape design.

In 2013, Andropogon Associates rehabilitated the south lawn using the guiding words, “What would Olmsted do?” This was referential to Olmsted and Vaux but was intended to meet contemporary needs and executed to high environmental standards. Some historic trees were preserved, others removed to shape spaces, and new trees added to frame views. A wooded buffer was reestablished along the street, and the original fence was repaired. Nearly an acre of parking was removed, a formal entry plaza was constructed, and curvilinear roads were looped around the lawn.

Andropogon Associates 2013 rehabilitation plan for the asylum’s south lawn.
CAMP GREENTOP: A WPA-BUILT CAMP FOR DISABLED CHILDREN

Cultural Landscapes Inventories (CLIs) and National Register nominations are widely accepted tools for the evaluation of cultural landscapes. However, there are concerns with older, outdated nominations because many of them focus primarily on architecture, many times excluding landscape features or characteristics that may have historical value. This presentation focuses on how CLIs can inform and expand upon existing National Register listings. It presents the findings of one CLI completed in 2015: Camp Greentop cultural landscape in Catoctin Mountain Park. Set within a heavily forested, mountain setting, and constructed during the New Deal-era in 1938 by Works Progress Administration (WPA) labor, Camp Greentop was built to function as an organized group camp for children with disabilities—primarily polio and bone tuberculosis. The camp was used as an Office of Strategic Services (OSS) training camp during World War II, but otherwise, it has remained functioning as a camp for children with disabilities.

A 1989 National Register nomination for Camp Greentop and a 2014 Catoctin Mountain Park National Register nomination both acknowledge Camp Greentop as having significance under National Register Criteria A and C, but only for the WPA constructed structures. A lack of data regarding the landscape’s significance prompted completion of a CLI for Camp Greentop.

Completing a CLI is a multi-step process. Documenting Camp Greentop’s landscape history through research, completing fieldwork and existing condition documentation, and analysis and evaluation of the landscape’s characteristics and features all work toward determining the historical significance and the integrity of the landscape today. Guidelines, in particular National Register Bulletin 16A, and specialized bulletins from the National Register also provide direction for evaluating and documenting historic landscapes.

Results from the completed CLI for Camp Greentop show a broad range of characteristics and features in the cultural landscape that are considered contributing to the historical significance.
significance of the landscape. They allow us to reveal the connections between natural systems and cultural communities and, ultimately, the evolution of the land through its layered uses. The CLI expanded our understanding of the camp’s function and design features, while revealing an additional area of significance related to the camp’s design for use by a specific population.

These results show a need to amend the 2014 Catoctin Mountain Park National Register Nomination to incorporate this growing awareness of the contributions of landscape studies to a site’s significance. Smith demonstrated some examples and argued that the method of evaluating landscapes greatly enriches the definitions of significance and can help refine periods and areas of significance in nominations. Smith also explained unique challenges related to nominating and managing National Park Service properties and NPS attempts to customize elements of its National Register nominations to address these challenges.

Main gravel loop road, Camp Greentop (2015).

MORE INFORMATION

- Illustrated Presentation Narrative
- Camp Greentop Historic District NR Nomination
- Catoctin Mountain Park NR Nomination

Kathryn Smith is an historian and the National Historic Landmarks & National Register Coordinator with the National Capital Region of the National Park Service.
NEVADA STATE PRISON AS A REFORMATORY LANDSCAPE

This presentation focuses on documenting the historic landscape of the Nevada State Prison (NSP) for nomination to the National Register. Challenges discussed include adequately defining the historic landscape and period of significance, taking into account the evolution of the prison and evaluating integrity considering the ongoing use of the prison through 2012.

The prison was established in 1862 on the side of a hill at the geographic center of Carson City, Nevada. Various natural systems and topographical features define the patterns of development. The warm springs are the primary reason the Warm Springs Hotel and, later, the prison were located on this site. The hillside provided the stone quarry that served as the primary focus of rehabilitative labor for prisoners. The quarry stone and prisoner labor helped create the character of land use patterns, features of buildings and structures, cluster arrangements, and circulation that define this historic landscape.

Mid-nineteenth century prisons sought to punish offenders through hard labor. Corrections practices from the American Civil War to the mid-1960s adopted the “Reformatory system” in which prisons became treatment centers and prisoners engaged as patients in rehabilitative labor.

The east-west line of buildings, constructed by the prisoners of sandstone from the quarry, created Fifth Street as the defining landscape feature and established the initial spatial organization of NSP. The refinement of the Reformatory strategy during the Progressive Era in the 1920s led to the redesign of the prison and demolition of nearly all of the earliest buildings and landscape.

Fifth Street, with its ornamental landscape, still defines the northern edge of the prison campus. New buildings were constructed around a rectangular prison yard built into the quarry bottom, and continue to define the campus landscape.

Jim Bertolini is the National Register Coordinator at the Nevada State Historic Preservation Office.
The emphasis on mental health in rehabilitation produced shifts in campus architecture and the landscape. Contracted construction companies used concrete and steel to construct the last historically significant buildings on the campus. Gardening became rehabilitative work at this time, and prisoners made ornamental additions of quarried stone to the landscape including decorative bridges, a fountain, and walls.

The concentration of buildings and structures constructed in the quarry by prisoners between the 1920s and 1960s create the spatial organization within the prison yard. This cluster arrangement of modest stone buildings is the center of the primary landscape. The arrangement is described in the nomination as contributing to the integrity of the setting.

Constructed water features of the reservoir and tributary stream to Mexican Ditch (a canal) that define landscape organization along the western edge of the historic district are described as sites in the nomination.

Circulation is defined by the controlled access features of fences, gates, and guard towers, and three areas of control defined as open public areas, controlled public areas, and areas limited to prisoners and guards. Circulation patterns are described in the nomination as contributing to the integrity of design, setting, feeling, and association.

The historic district includes ornamental features that contribute to landscape character, including the decorative flower beds in the prison yard, the grotto, a fountain, and bridges in the west lawn and garden.

The 150 years of activity on the campus have made archeology a part of the historic landscape. The Nevada State Historic Preservation Office expects that further research may recommend amending the nomination.

The historic district excludes the adjacent, still-active, Warm Springs Correctional Center, the 1980s cell-block buildings, and Modernist buildings and landscape features that were added during the 1950s and 60s.

Archival records and photographs and evaluation of the existing character and features contributed to this successful nomination of the historic Nevada State Prison.
VIEWSHED ANALYSIS
Introduction

The NRLI webinar series ended with a session on viewshed analysis. Because viewsheds were a recurring topic throughout the webinar series, it was particularly fitting to end the series with a topic of such relevance. The presenters for this webinar were all National Park Service staff representing different programs but all dedicated to carrying out the mandate in the Organic Act that compels the NPS to "conserve the scenery and the natural and historic objects and wild life therein . . .". The "scenery" in the Organic Act was considered the "viewshed" in this series of NRLI presentations.

Generally, viewshed is intended to refer to the field of vision evident from a given vantage point and extending to the horizon, to a set of high points (such as mountain peaks), or to a feature that blocks further visual access (such as a forest). In a landscape with particular cultural and historic references, the viewshed and the cultural landscape may be the same; in a National Register nomination, the viewshed may extend beyond the defined boundaries of a cultural landscape.

National Register guidance has been interpreted as discouraging the inclusion of "viewsheds" that are not explicitly part of a resource. "The area to be registered should be large enough to include all historic features of the property, but should not include ‘buffer zones’ or acreage not directly contributing to the significance of the property" (National Register Bulletin, How to Complete the National Register Registration Form, p. 56). On the other hand, a nominated property is intended to have a setting that helps establish and define its character. The setting of trails, for example, may encompass a large swatch of the viewshed if it helped travelers find the route. "Setting" is one of the seven aspects used to evaluate the integrity of a property and its consideration in determining significance, integrity, and boundaries is important.

The point of the NRLI viewshed webinar was to discuss viewshed analysis. As applied to cultural landscapes, viewshed analysis is intended to identify views that are an important component of the historic landscape, vital to protecting the scenic or historical integrity of a cultural resource, or meaningful to the experience of being in the resource. The presentations in this session explain how an analysis is achieved, with examples demonstrating how viewshed analysis—known as Visual Resource Management or VRM by NPS and other agencies—was an important factor in making management decisions about the properties discussed.

Mark Meyer, a Renewable Energy Visual Resource Specialist for the National Park Service, described the progress the agency is making in assessing viewshed quality.
to identify important scenic views that should be preserved. He described the NPS viewshed rating system, which is considerate of scenic and historic factors. Ultimately, views and visibility are mapped in GIS. This presentation provided insights about NPS policies and technical applications related to visual inventories.

Danny Schaible, a landscape architect for the NPS National Capital Parks East, discussed a VRM project for the George Washington National Parkway in Washington, DC. The visual resource assessments ultimately resulted in a Scenic Vista Management Plan. His case study involved the impact of proposed new guard-walls along the parkway, which had the potential to block important views. The presentation provided background on the use of VRM by the NPS and an explanation of its application.

Kristen McMasters, an archeologist and grants manager for the American Battlefield Protection Program (ABPP), discussed the ABPP survey and mapping methodology. The first step of the process applies the concepts of Military Terrain Analysis to achieve an understanding of how the landscape, including viewshed, influenced a battle. NPS considers battlefields cultural landscapes of conflict and engagement, where fire (shots) were given or exchanged. This presentation shows battlefields as cultural landscapes of complexity, unusual because their significance may be defined by the short duration of a battle—sometimes lasting just a day or a few hours.

Viewshed analysis has become a critical component of management studies, and these presentations reveal how important it can be to achieving an understanding of landscapes recognized for their significant history.
NPS VISUAL RESOURCE PROTECTION

This presentation focuses on the National Park Service (NPS) visual resource inventory. Visual resources include land forms, vegetation, cultural resources and other elements of the visual landscape.

The process envolves inventories of views in a park to identify baseline conditions and help identify potential management strategies to maintain the visitor experience. The inventory is used to identify where views are and why they are important. This information also helps parks understand the value of views to the visitor experience.

NPS has made previous efforts to protect important views. Blue Ridge Parkway developed an inventory system that works well for the view-based parkway. Grant-Kohrs National Historic Site obtained a scenic easement to maintain the historic setting of the ranch while allowing development to occur on adjacent property.

 Agencies, including the US Forest Service and Bureau of Land Management (BLM), manage visual resources on federal land. Their processes provide a baseline of existing conditions from which to assess the impact of a proposed project, such as a clear cut in the forest or a pipeline that crosses the landscape.

NPS developed its method to provide a baseline inventory of scenic values, and the system considers those values in the context of the park. Views in historic landscapes can have just as high a scenic value as natural scenery in a park such as Yellowstone. In this way, NPS evaluates the scenic or visual component of the visitor experience according to how it relates the natural, historic, and cultural resources.

In the NPS system, the inventory unit is the view from the visitor perspective. The scene taken in by the visitor is inventoried in a two-step process: scenic quality and view importance.

The scenic quality assessment is a field exercise that includes a view description and the scenic quality rating.
The view description includes visual elements, such as landforms, land cover and land use, as well as design elements of form, line, color, and texture. Scenic quality is rated using three components: landscape character integrity, vividness, and visual harmony.

Landscape character integrity refers to how intact the selected landscape character is and to what extent it is in good condition and free from intrusions. An energy transmission line running across a pristine landscape impairs the character of the scene much the same as vandalism impairs a historic building.

Vividness refers to the memorability of the view and the extent to which it has focal points and bold forms and colors.

Visual harmony refers to the spatial, scale, and color relationships that create a scene and how well they fit together.

Evaluation of view importance is the second step in the process and is conducted in an office setting. The ratings and scores parallel the scenic quality process with three factors that are rated: viewpoint importance, viewed landscape importance, and viewer concern.

Viewpoint importance evaluates the publicity and management of the viewpoint and its relationship to park interpretive services.

Viewed landscape importance also considers the publicity and interpretive themes of the park but relates to the elements in the view.

Viewer concern assesses the level of visitation, duration of a visitor’s view, and how sensitive they might be to changes in the view.

Scenic Quality and View Importance are equally weighted and combine to create a scenic inventory value. Where views overlap, the individual values combine to create a composite value.

Inventory information can assist in guiding management to protect scenery, as well as in developing mitigation to reduce the potential impacts of projects.

The inventory process is part of the visual resources program that provides technical support to parks, assists parks in incorporating visual resources into planning documents, and develops service-wide policy for visual resources.
This presentation discusses visual resources and why they matter, a methodical approach for the assessment of views as landscape features for listing in the National Register, and the development of an assessment template for various property types and situations encountered.

The parkway dates to the 1920s as a scenic road intended to connect Mount Vernon with the Great Falls of the Potomac. Presented here is a case study that includes the northern seven miles of the George Washington Memorial Parkway, built in the 1950s and 1960s between Spout Run and the terminus at the Capital Beltway.

The genesis of this project started with a plan to repave this section of the parkway and to assess the safety of historic stone masonry guard walls along the road. The walls are historic roadside features and a designed element within the visual resource of vistas, but not specifically the topic of this discussion.

The focus of this presentation is scenery, emphasizing both the importance of scenery and the preservation of scenery. Among other actions, the Organic Act states the purpose of the National Park Service is to conserve scenery. The enabling legislation for the George Washington Memorial Parkway further reinforces the preservation of scenery.

The process for assessing visual resources is still in beta testing mode. It borrows on vista management for Yosemite National Park and other park units that try to assess the intangible qualities of scenery.

Visual resource assessment must be a transparent, objective process not driven by any predetermined management objectives and must be replicable with similar results.

The Blue Ridge Parkway was cutting edge work for visual resource assessment in the 1990s. Assessing vistas from a road is a different process than an assessment from a stationary viewpoint.

Danny Schaible is a project manager for the National Capital Parks East.
An interdisciplinary team from the National Park Service and the Federal Highways Administration conducted the analysis of the George Washington Memorial Parkway. Along the parkway, thirty-eight vistas were identified, and all were close to the Potomac River. Open vistas are identified as those seen during summer even when trees are in leaf. Filtered vistas are those seen in winter only after leaves have dropped. The highest scoring vistas were rated superior. The next 20% rated high quality, and the remaining were rated medium, low, and very low.

Superior vistas overlook the Potomac River and include a feature of visual interest, such as the Georgetown University clock tower. High category vistas do not include a focal point. Scenic quality rating diminishes as connectivity to the river diminishes. Superior and high scenic class vistas received treatment recommendations that assessed impacts to individual trees and the need for pruning or removal.

The uniqueness of viewpoint as assessed from one location is another scoring category. The first glimpse in the capacity of uniqueness is important. The view of the Washington Monument is an important view. The uniqueness of second, third, and later views are diminished.

Although challenging, an important component of the project was view assessment using historic maps and photographs. The composite aggregate of all sources overlain on contemporary aerial photography helped to locate historic vistas. The assessment process tries to meld the issue between historic and aesthetic qualities.
This presentation discusses the American Battlefield Protection Program tasked with preserving and protecting battlefield landscapes.

Battlefields are places where gun fire was given, or exchanged. They are places of contest, of conflict, and of engagement. Battlefield protection is limited to places of engagement. Each battlefield has a unique history and unique resources that have been treated differently over time. Battlefields may exist in all time periods, in all states, and U.S. territories or U.S. controlled soils, such as World War II sites.

The basic steps to save a battlefield begin with historical research, survey, and inventory using National Register criteria. Battlefields are protected through Section 106 of the National Historic Preservation Act. All attributes of archeology, landscape, and multiple layers of history are looked at in total, beginning with the existing landscape and working backwards, acknowledging layers of time and the terrain. The focus is the battlefield layer. The time period of the focus is the battle. The program goal is to preserve the character-defining features in perpetuity.

KOCOA provides a methodology to record, document, analyze, evaluate, and nominate battlefields as cultural landscapes for listing in the National Register of Historic Places. KOCOA is an acronym for Key Terrain, Observation and Fields of Fire, Cover and Concealment, Obstacles, and Avenues of Approach. The methodology defines the role played by terrain in battle and is founded on the principle that landscape has direct impact on selecting military battlefield tactics.

The organizing approach of KOCOA defines landscape features within study and core areas and associates them with the battlefield engagement. The boundary of the battlefield is termed the "study area" and includes the full extent of the battle. Battlefield features are only inside the battlefield.

Parts of the battlefield in the study area no longer holding integrity will not be included within the National Register boundary, such as pieces obliterated by development. Only areas of integrity are saved. Core areas are places of the heaviest engagement, bloodiest hours, or fiercest fighting.
The repeatedly referenced battlefield places in primary and secondary sources highlight key defining features on the ground. That fence, that road, that fork in the path, that rock where an officer stood and commanded are key defining features. There will be a dozen or more places on the battlefield that fall within the five attributes of key terrain, observation or fields of fire, concealment and cover, obstacles, or avenues of approach.

Key terrain is a distinguishing feature of relief such as high ground that dominates or controls the surroundings. It could be a transportation choke point that controlled the engagement.

Observation or field of fire overlooks the dead ground and is a point from where to judge enemy strength, prevent surprise, and respond to threats to make the engagement successful. The dead ground might present a lot of artifacts, but that may not correlate with significance. The understanding of the field of fire is clearer when viewed as a working landscape having a function under battle.

Concealment protects from observation, but does not stop bullets. Cover limits the field of fire, and that is the descriptor difference. Obstacles impede military movement across the landscape. Avenues of approach dictate the mobility, size, and speed of an attacking army as it moves towards engagement, engages in battle, and retreats.

The American Battlefield Protection Program uses two grant programs to preserve and protect battlefield landscapes. One purchases land; the other supports the development of planning documents. Grants are not available to NPS units, but technical assistance is offered to the units to help with land preservation adjacent to battlefields.