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The National Park Service Visual Resource Program: Supporting Parks in Scenery Conservation

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Abstract

Through the National Park Service (NPS) Organic Act, Congress established NPS to manage park and monument areas to". . . conserve the scenery and the natural and historic objects and the wild life therein . . . by such means as will leave them unimpaired for the enjoyment of future generations." With this central mission NPS has been entrusted with some of the most spectacular and historically significant landscapes throughout the country, and visitors typically rank scenic views as one of the top five reasons for visiting a National Park. The concept of planning and managing the visual landscape as a resource has been in place in the United States since the 1970's. The U.S. Forest Service and the Bureau of Land Management are two federal agencies that developed visual resource programs for managing the scenic values of the large areas of land they manage. In each case, the systems were developed to meet the management needs of their respective agency missions. The NPS has also successfully addressed visual resource issues and management at multiple park units, but each park unit had to develop its own approach because until now, there has not been a service-wide program to support parks for visual resources. The Air Resources Division in the Natural Resource Stewardship and Science (NRSS) directorate has developed a Visual Resource Program that will begin to establish service-wide support to parks for managing this important resource within the context of the NPS mission. The program includes the inventory of visual resources in and near park units; provision of guidance on assessing the potential visual impacts of projects; assistance to parks in the inclusion of visual resources in park planning documents; and development of policy and guidance documents to help assure consistency of visual resource management across the NPS. This session will provide an overview of the program elements and highlight activities to date that have supported the growth of the program and its support for parks.

Introduction

The National Park Service (NPS) Organic Act states that the purpose of establishing the NPS is to "…conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." With this central mission the NPS has been entrusted with some of the most spectacular and historically significant landscapes throughout the country. Each area in the national park system has special visual characteristics that are often central to the park area's management and visitor experience, and visitors consistently identify scenic views as major reason for visiting parks. In a review of nearly 100 surveys performed at a wide variety of parks from 1998-2011, scenic views were identified as important or extremely important by 90% of visitors (Kulesza et al. 2013).

The concept of visual landscape inventory—and subsequent management as a resource—has been in place in the United States since the 1970's. The U.S. Forest Service and the Bureau of Land Management (BLM) are two federal agencies that developed visual resource programs for managing the scenic values of the large areas of land the agencies manage (USFS 1974 and 1996, BLM 1984 and 1986). Other agencies, such as the U.S. Army Corps of Engineers and the Federal Highway Administration, also have their own systems for assessing the value of the visual landscape and the potential impacts of projects to those values. In each case, the systems were developed to meet the management needs of their respective agency missions.

Recent years have seen the rapid development of energy facilities, especially utility-scale renewable energy projects, electric transmission lines and oil and gas facilities, adjacent to or crossing parks national trails, wild and scenic rivers and other NPS areas. The growth of communities and other types of development are likewise pushing ever closer to NPS-administered lands and waters. These developments are changing sometimes previously undisturbed views from park areas. It is in the context of these changing landscapes that NPS recognized the need to develop a comprehensive approach for assessing visual landscape qualities in and near park areas, understanding their value to the visitor experience, and determining how best to protect them as a resource for future generations.

The Air Resources Division of the Natural Resource Stewardship and Science Directorate is developing a Visual Resource Program (VRP) to help address visual resource issues throughout the National Park Service. The VRP is a comprehensive inventory, planning and park assistance program covering visual resource management. There are four major components to the program and while each has its own distinct purpose and tasks they present an integrated approach to addressing visual resources. The program helps parks identify and understand their visual resources to better enable them to develop conservation strategies through best management practices and collaboration efforts with stakeholders such as federal, state, and local agencies and private landowners. The VRP components are:

- **Inventory** – A systematic method to describe views, assess scenic quality and other view values, and understand the risks to changes in the views
- **Planning** – Provide support to parks for incorporating visual resources into NPS planning framework documents including Foundation Plans, State of the Park reports and Resource Stewardship Strategies.
- **Technical Assistance** – Provide assistance to parks in understanding the potential visual impacts of proposed projects and land management actions, develop comments on environmental documents, and identify mitigation measures that may help reduce impacts.

- **Policy and Guidance** – Develop policy to help assure consistency across the NPS in addressing visual resource management, and guidance to aid park resource managers implement a visual resource management program in their parks and to proactively engage with others to preserve important park scenery for the enjoyment of current and future generations.

Visual Resource Inventory

The Visual Resource Inventory (VRI) system is the primary tool in the VRP that helps parks areas understand their visual resources and communicate the visual resource values to partners and stakeholders in a consistent and credible way. The inventory process is a systematic description of the visual elements of important views inside and outside National Park System areas (NPS areas), their scenic quality, and the importance to NPS visitor experience and interpretive goals.

While the NPS inventory system is based on the fundamentals of visual resource inventory developed by the BLM and USFS as well as systems developed for specific NPS units such as the Draft Scenery Conservation System for Blue Ridge Parkway, the system has been developed specifically to meet the mission of NPS. It has been designed to work for many types of NPS areas, and in multiple types of landscapes and visual settings. Park areas often encompass specific scenic places or historic settings, and are also part of the broader landscape, that includes areas outside park area boundaries. The inventory considers the context of a park area's visual setting and provides a framework for understanding and protecting the scenic values within that context.

NPS areas range from nearly pristine wild landscapes to intensely developed urban areas, and park landscapes often have cultural and historic values in addition to scenic quality. Any or all of these values can be diminished if a park is subject to management or development activities that affect the condition of its scenic resources and the quality of the visitors' scenic experience. While NPS does not own or manage adjacent lands in shared viewsheds, that does not diminish the value of the adjacent lands for the park visitor or the park area. Numerous park resources including air quality, water quality, night skies, soundscapes, wildlife corridors, and cultural landscapes have documented cross-boundary impacts, and scenic resources may be impacted as well. The inventory approach of assessing the overall landscape both within and beyond park boundaries helps conserve scenic values for park areas and their visitors while retaining NPS support for the economic health of nearby communities, and for the responsible development of energy and other resources.

Goal and Guiding Principles

The NPS VRI was developed to enable the NPS, its partners and other stakeholders to better understand and protect NPS scenic resources inside and within view of NPS areas. The VRI capitalizes on elements of existing visual resource inventory and management systems developed by other agencies and park areas, but includes procedures and guiding principles suited to the unique mission of the NPS. The following principles serve as a frame of reference for the overall VRI process as well as the individual inventory components, and approaches to collaboration.

- The system of scenic resource inventory should help parks answer four key questions:
    - Where are the important views?
    - What are visitors looking at and what are the characteristics of the view?
    - Why is the view important?

    - From an NPS perspective, what is an appropriate visual resource management objective?
    - How could NPS promote protection of important views, especially on lands it does not own, manage or administer?
- The NPS approach should be able to include inventory of the viewsheds of the entire park area, regardless of whether the viewed lands are inside or outside park boundaries.
- Scenic resource inventories and conservation strategies should incorporate cultural and historic values.
- The scenic values of a park area should be considered in the context of the park area and its immediate surroundings and landscapes; park areas should not be compared to one another.
- The approach should be suitable for wide application in NPS without the need to rely solely on visual resource specialists for implementation. With proper training, the system be implementable at the park level using available staff and volunteers.

VRI and Planning Overview

Determining the scenic value of important views and identifying views at risk for loss of scenic values are core components of developing protection strategies that preserve the views' valued characteristics. Scenic values of views are based not only on the aesthetic qualities of the scenery, but also its value to the visitor experience and the NPS mission. When the VRI is combined with the planning component of VRP, the two become integrated into an overall process for understanding and protecting scenic views.

In the NPS approach to visual resource inventory, the unit of inventory is a *view*. A view consists of a viewpoint, viewed landscape, and the viewers. The inventory identifies key information about scenic views of a park area including a description of the visible components of the viewed landscape, its aesthetic values (scenic quality), and the importance of the view to NPS and its visitors. The inventory process leads to the determination of *Scenic Inventory Values* (SIVs) for views that are used to evaluate risks and develop protection strategies. The information gathered in the inventory process is stored in a geospatial database available to parks within Integrated Resource Management Applications (IRMA).

The planning component of the VRP includes developing visual resource management goals and incorporating the results of the inventory into park planning documents to identify management strategies to achieve the goals. While the results of the inventory is envisioned to form the foundation for developing strategies for protecting scenic views in park planning documents, they can also be a valuable tool in working with park resource management and local partners and stakeholder with credible information. Park areas that use the inventory methodology gain a systematic and defensible inventory of scenic values.

For engaging with partners and stakeholder the scenic resource inventory can identify viewsheds outside park areas that are visible from popular visitation areas or viewpoints that have historic or cultural values that are important to the park area's key interpretive themes. Using the information in planning activities can help determine effective strategies for working with other stakeholders to conserve important views.

More information about the NPS VRI process is available in the following publications: Sullivan and Meyer, (2016) and Sullivan and Meyer (2015).

Planning

The Planning component of the VRP includes assisting parks by helping them recognize and understand their unique visual resources so that they can incorporate visual resource concerns into their planning documents. The NPS planning framework provides a systematic way for parks to develop park planning with a series of documents that begin with identifying a park's fundamental resources and followed by an assessment and understanding of resource conditions and then developing specific implementation strategies to manage park resources. With inventory information in hand, parks will have critical information needed to guide management of the visual landscape in conjunction with other park resources and values.

NPS Planning Framework

Foundation Documents

Foundation plans identify the fundamental resources for which a park is established along with other important resources the park protects. The VRP provides general overview information about the visual setting in and around park areas for consideration during preparation of the park's Foundation Plans. The overview is in the form of a "fact sheet" or brief that describes the values of scenic views to the visitor experience and identifies, in a very broad sense, potential threats to scenic views.

State of the Park Reports

The State of the Parks assessment tool incorporates the major components of the inventory process as well as consideration of current planning and collaborative with regard to scenic views. The tool relies on the expertise of park staff and asks them to consider park visual resources as a whole to provide a high level snapshot of how the park views the current status of the scenery in and around the park area.

Natural Resource Condition Assessments (NRCA)

The NRCA provides an indication of the status of a NPS area's natural resources and provides additional baseline information that can be used throughout the development of other planning documents. NRCAs are based primarily on existing data to give an indication of not only the current status of a resource but also a trend as to whether the condition of the resource is stable, improving or deteriorating. VRP guidance for NRCAs aligns with the scenic quality, importance values VRP inventory methodology, though at a more park-wide summary level.

Resource Stewardship Strategies

Resource Stewardship Strategies (RSS) identify the detailed actions the park will take to manage natural and cultural resources. A revised approach to developing database system for RSSs is under way as a Service-wide initiative. The VRP is engaged in the development process to assure that visual resources can be included in the new approach, and specific strategies can be incorporated in the management of the overall resources for a park.

Visual Resource Management Plan

Future VRP efforts include development of a standardized approach for preparing Visual Resource Management Plan that will assist parks in visual resource management and collaborative efforts tp protect important scenic, historic and cultural views. The Visual Resource management Plan will take a park-wide perspective that considers the park's visual resources and visitor's scenic experience needs holistically.

Stakeholder Collaboration

While the Organic Act directs the NPS to manage and protect parks areas so as to "leave them unimpaired for current and future generations", many aspects of NPS policy and guidance speak to the value of developing integrated, collaborative approaches to accomplishing this goal. The NPS mission specifically states that the

agency “cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout the country and the world.”

Often, the protection of important views might require the conservation of the visual landscape that is beyond a park’s boundary, and collaboration will be a key component to achieving that goal. As directed by the NPS mission and driven by the desire to be an integral part of their community, many parks are already engaged with multiple partners and stakeholders to cooperatively address a wide variety of issues concerning protection of park resources. In these cases, developing a collaborative group that focuses on protecting important park views within these existing relationships may be the best way to integrate this aspect of resource protection into the ongoing management of the park. The VRP introduces basic collaboration concepts and facilitates preliminary discussions of stakeholder identification at visual resource inventory training workshops held at parks as part of the inventory process. The results of the inventory are then one of the primary tools that can be used to engage partners and stakeholders in collaborative efforts.

Technical Assistance

The VRP began with a central focus on assisting parks to address concerns for potential visual impacts of large scale renewable energy projects on nearby park areas. Currently, the VRP continues to provide support to park areas to assess the potential visual impacts from a wide variety of threats beyond a unit’s boundaries. This support can range from document review and preparation of comments to participating in multi-agency meetings and conference calls at the park, regional or national level. Examples of support efforts include:

- Review environmental documents, prepare comments, and assist with agency coordination for potential renewable or conventional energy development, mining, transportation and other land use changes or projects near parks near parks.

- Review visual simulations of offshore wind development, on-shore wind development, utility scale solar facilities, conventional power plants, transmission lines and other facilities that could affect the visual setting of NPS areas.

- Review and comment on visual resource aspects of programmatic or regional planning documents such as the Desert Renewable Energy Conservation Plan (DRECP), Arizona Restoration Design Energy Plan (AZRDEP) and Hawaii Renewable Energy Programmatic Environmental Impact Statement.

- Prepare draft Scopes of Work for parks to use in requesting visual impact assessments, simulations and other analysis of proposed projects.

Policy and Guidance

NPS has a long history of working to protect important scenic views, but previous efforts have been on a case-by-case basis, with each park unit developing its own approach. Through the VRP, ARD is participating in efforts to develop consistency across the NPS and among other agencies with respect to visual resource management. For example, NPS and BLM are leading an effort to implement a landscape scale approach to visual resource impact mitigation in support of Secretarial Order 3330, “Improving Mitigation Policies and Practices of the Department of the Interior,” issued by Secretary of the Interior Sally Jewell in October 2013. As directed in the final strategy report for implementing the order, NPS and BLM have organized a group that includes the visual resource leads of almost a dozen federal agencies to develop consistent ways for assessing impacts to the visual landscape and

mitigate those impacts at a landscape scale rather than the current agency-by-agency approach. The planned outcome will be a set of strategies and approaches that each agency can consider for incorporation into their management policies and programs to advance the mitigation of impacts to visual resources across the landscape.

As part of the effort develop consistency across the Service in addressing visual resource issues, the VRP also develops guidance documents to assist NPS in understanding the visual landscape as a resource to be protected. In response to the extensive development of large renewable energy projects in the last few years, the first VRP guidance document that has been prepared is the *Guide to Evaluating Visual Impact Assessments for Renewable Energy Projects* (The Guide). The Guide was authored by Argonne National Laboratory and NPS, and can be found at https://irma.nps.gov/App/Reference/Profile/2214258//. The Guide presents detailed information to assist park and regional resource managers in evaluating the adequacy of visual impact assessments (VIAs) covering proposed utility-scale renewable energy projects and to help NPS managers identify and understand the potential impacts those projects may have on nearby scenic views.

Future topics and guidance documents will be developed based on feedback from parks and other NPS resource areas.

Conclusion

Visitors identify that scenic views are one of the major reasons for visiting national park units and NPS has successfully worked to protect important visual resources in multiple situations. Because the NPS has not had a comprehensive approach to managing visual resources, individual parks have had to develop their own approach to assessing the scenery and potential impacts. The Visual Resource Program developed by the Air Resources Division of NPS provides a comprehensive and consistent approach to supporting NPS managers in protecting their parks' important scenic views through inventorying, planning, and engagement with stakeholders. As a result, park managers will be better able to conserve important park scenery for the enjoyment of current and future generations.

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