INTRODUCTION

The Bureau of Land Management, National Oceanic and Atmospheric Administration, National Park Service, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and U.S. Forest Service participate in the Interagency Visitor Use Management Council (the council). The council was formed in 2011 to provide recommendations to help member agencies consistently interpret and practice the major elements of visitor use management within their independent legal authorities. This paper documents the council's position on and recommendations for addressing visitor capacity generally, and specifically in accordance with the visitor capacity requirements found in the Wild and Scenic Rivers Act, National Trails System Act, and National Parks and Recreation Act. The council will develop a visitor use management framework and a subsequent guidebook on visitor capacity to provide more specific guidance on how to identify and implement visitor capacities (see http://visitorusemanagement.nps.gov/).

BACKGROUND

Managers of federal lands and waters strive to maximize benefits for visitors while achieving and maintaining desired conditions. Managing visitor access and use for recreational benefits and resource protection is inherently complex. Managers must analyze not only the number of visitors but where and when they go, what they do, and the impacts they leave behind. Managers should acknowledge the dynamic nature of visitor use, the vulnerabilities of natural and cultural resources, and the need to understand changing conditions and evolving visitor expectations.

The Wild and Scenic Rivers Act, National Trails System Act, and National Parks and Recreation Act direct agencies that manage federal lands and waters to address visitor capacity (also known as carrying capacity, user capacity, and recreational capacity).
In addition, identifying visitor capacities is an important tool for achieving and maintaining desired conditions. However, visitor capacity is only one of many tools available to managers. Recreation planners, managers, and research scientists have long debated the relative importance and role of visitor capacity within the broader practice of visitor use management.

The general concept of capacity has a history of application in wildlife and range management. Visitor capacity was initially applied to recreation as a means to manage visitor use in parks and protected areas in the 1930s. Since visitation can sometimes lead to negative impacts on resources and visitor experiences, it was assumed that the key to achieving and maintaining desired conditions was to ensure that visitor use levels were kept below a specified visitor capacity. Managers of federal lands and waters have faced increasing challenges in managing visitor use as use has continued to increase and demand for visitor access and activities has changed. In response, managers have intensified their study and understanding of the complex issue of visitor capacity over several decades and have identified numerous best management practices for simultaneously achieving and maintaining desired conditions.

Extensive research and federal land management experience during the last 40 years have led to a reevaluation of the importance of visitor capacity. Specifically, research and managerial experience have revealed that managing the number of visitors in an area is only one tool within a suite of strategies that can be used to achieve and maintain desired conditions. Effective visitor use management is often more about managing factors such as the types, timing, and location of visitor activities and associated visitor behaviors. Site design and the types of recreation facilities are also important factors in managing visitor use to be consistent with desired conditions.

GENERAL RECOMMENDATIONS

Visitor use levels vary widely across the diverse portfolio of lands and waters managed by federal agencies. In some places, current visitor use levels are threatening desired conditions. In other areas, current use levels are far from threatening desired conditions and may never pose such a threat. The council’s recommendations are designed to provide managers with flexibility to identify, interpret, and implement visitor capacities based on site-specific conditions. The major tenets of the council’s recommendations are:

- Managers should identify and implement visitor capacities when managing the number of visitors directly relates to effectively achieving and maintaining desired conditions.
- Managers must identify and implement visitor capacities when legally required.³
- Decisions on visitor capacity should be based on the desired conditions for a specific area and should be directed by pertinent laws and agency policies.

Visitor capacities may vary across time (e.g., season, day of week) and from site to site and segment to segment (in the case of rivers and trails), depending on the desired conditions and issues of the specific area. Research, monitoring, professional judgment, and analytical

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³ A detailed discussion of how to identify visitor capacities when required by law is beyond the scope of this paper. The council will address this topic in guidebooks of best management practices.
tools such as computer modeling can be used to inform the identification of visitor capacities. The amount of effort and resources invested in identifying visitor capacities should be commensurate with the significance of the issue and the degree of threat to desired conditions. In all cases, visitor capacity decisions should be made through a participatory public process. If visitor capacities are adopted as a management tool, managers should commit to appropriate monitoring protocols to assess the effectiveness of visitor capacities over time.

Project teams should acknowledge the adaptive nature of addressing visitor capacity and should describe the process to use to adjust visitor capacities. Plans should describe (1) the criteria and rationale for identifying visitor capacities; (2) the relationship between the level of visitor use, management actions, and the desired conditions (and assumptions about factors that influence that relationship, including other possible management actions); (3) the types of new information that would trigger reevaluation and adjustment of visitor capacities; and (4) the procedures for public notification of and participation in visitor capacity decisions.

**ACT-SPECIFIC RECOMMENDATIONS**

Council members collaborated with experienced agency planners, managers, members of other interagency councils, and legal counsel to develop these specific recommendations to meet applicable legal requirements and provide the flexibility needed by agency managers.

**Recommendations for Addressing User Capacity under the Wild and Scenic Rivers Act**

The council developed its recommendation for addressing user capacity\(^4\) under the Wild and Scenic Rivers Act in collaboration with the Interagency Wild and Scenic Rivers Coordinating Council.\(^5\) Section 3(d)(1) of the Wild and Scenic Rivers Act states:

\[\ldots\text{the Federal agency charged with the administration of each component of the National Wild and Scenic Rivers System shall prepare a comprehensive management plan for such river segment to provide for the protection of the river values. The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act.}\] \(^6\)

\(^4\) The term “user capacity” is used here, rather than the term “visitor capacity,” based on the Wild and Scenic Rivers Act’s reference to user capacities. The Interagency Wild and Scenic Rivers Coordinating Council defines “user capacity” to include the maximum amounts and kinds of visitor use as well as administrative use specific to the wild and scenic river in question. Administrative use specific to a wild and scenic river can be substantial and may affect the types and amounts of visitor use that may be allowed without adversely affecting river values.

\(^5\) For more information on addressing user capacity for wild and scenic rivers, please see the Interagency Wild and Scenic Rivers Coordinating Council’s technical paper titled “Addressing User Capacities on Wild and Scenic Rivers.”

\(^6\) 16 U.S.C. 1274(d)(1) (emphasis added)
Federal courts have defined the phrase “address…user capacities” to mean the maximum number of people that can be received in a designated river area without adversely impacting river values. Based on this finding, courts have required the inclusion of user capacities in comprehensive river management plans (CRMPs) for each river area and protocols for managing use according to established capacities.7

The federal river-administering agencies have also interpreted Section 10(a) of the Wild and Scenic Rivers Act8 as establishing a “nondegradation and enhancement policy” so that “[e]ach component will be managed to protect and enhance the values for which the river was designated, while providing for public recreation and resource uses which do not adversely impact or degrade those values.”9 As a result of these judicial and agency interpretations of the act, managers should understand that user capacities adopted in a CRMP function as management decisions to prevent degradation of river values.

For wild and scenic rivers in which use levels adversely affect or threaten river values, managers should promptly take action to prevent degradation by adopting or adjusting user capacities. Managers may also take other measures to reverse these conditions. Decisions about user capacities or other management measures in these circumstances may have immediate and important consequences for both access to and protection of river values. Therefore, substantial investment in terms of data collection, monitoring, and analysis is warranted to identify appropriate user capacities and management strategies for the protection of river values. Decisions about user capacities and other management measures should be informed by the level of public engagement that is appropriate to the decision being made.

If use levels do not threaten wild and scenic river values and the established desired conditions for the river values, user capacities should still be identified in CRMPs. However, the same degree of investment in data collection, monitoring, and analysis to support decisions about user capacity is not necessary in these circumstances if it has been determined that use levels in the river area are not near the point of threatening river values or established desired conditions. CRMPs for these rivers should recognize the possibility that user capacity decisions may need to be reviewed and revised as use levels change. If changes in use levels threaten river values, an increased investment in planning would be needed to provide for an appropriate level of data collection, monitoring, and analysis to support the user capacity decision.

7 See, for example, Friends of Yosemite Valley v. Kempthorne, 520 F.3d 1024, 1028-30 (9th Cir. 2008), and American Whitewater v. Tidwell, 2013 U.S. Dist. LEXIS 71135 at *36 (D.S.C. 2013).
8 16 U.S.C. 1281
The council developed its recommendation to identify and plan for implementation of visitor capacity in the context of the National Trails System Act (NTSA, 16 U.S.C. 1241-1251) in coordination with representatives from the Federal Interagency Council on Trails.

Congressionally designated National Scenic and National Historic Trails (national trails) tend to be long distance; most are hundreds or thousands of miles in length. National trails cross multiple federal, state, tribal, regional, and local jurisdictions, as well as private lands.

To promote trailwide consistency, the NTSA addresses the overall administration of national trails. National trail administration focuses on the implementation of relevant authorities, requirements, and responsibilities in the NTSA for a national trail at the trailwide level. The appropriate Secretary assigns the national trail administering agency based on the enabling legislation for the national trail. The NTSA requires the national trail administering agency to consult with all affected federal and state agencies (NTSA, Sec. 7(a)(1)(A), 16 U.S.C. 1246(a)(1)(A)). The NTSA does not affect any management responsibilities established under any other law for federally administered lands that are components of the National Trails System (NTSA, Sec. 7(a)(1)(A), 16 U.S.C. 1246(a)(1)(A)). The Secretary charged with administering a national trail may transfer management of any trail segment to the other Secretary by agreement (NTSA, Sec. 7(a)(1)(B), 16 U.S.C. 1246(a)(1)(B)).

Section 5(e)(1) and (f)(1) of the NTSA, 16 U.S.C. 1244(e)(1)-(f)(1), directs the national trail administering agency to prepare a comprehensive plan (CP) for each national trail. The NTSA states that a CP shall include but not be limited to:

specific objectives and practices to be observed in the management of the trail, including...an identified carrying capacity of the trail and a plan for its implementation.\(^{10}\)

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\(^{10}\) 16 U.S.C. 1244(e)(1) and (f)(1) (emphasis added).
National trail management responsibilities at the local level are conducted by local agency managers in cooperation with national trail administrators under the authorities provided in the NTSA, agency organic acts, and other federal statutes. National trail management responsibilities at the local level include maintaining national trail inventories, monitoring national trail resource values and conditions, conducting local national trail planning, and addressing national trail maintenance and management issues, such as visitor use management.

Thus, visitor use management, including visitor capacity, is relevant to both national and local management of national trails under the NTSA and other federal laws. The following recommendations reflect the respective legal authorities and responsibilities for national and local management of national trails in connection with decisionmaking, implementation, and enforcement of visitor capacity requirements for national trails.

Given the different authorities, requirements, and responsibilities of the national trail administering agency and local agency managers and the inherent complexity of administering and managing long-distance national trails, the council recommends the following approach to implementing NTSA visitor capacity provisions:

(1) During development of a CP for a national trail, the national trail administering agency, local agency managers, and planning teams should coordinate closely to determine and address visitor use management issues and other applicable requirements in the NTSA. The CP should include current levels of visitor use of the national trail when available. In addition, the CP shall identify specific visitor use management objectives and practices that are related to desired conditions for the national trail, including the general visitor capacity for the national trail (i.e., an approximation of the appropriate types and levels of visitor use that can be accommodated generally by the national trail) and, if applicable, visitor capacities by site, segment, or area, without adversely affecting the nature and purposes of the trail. The general visitor capacity will be an approximation, given that national trails are hundreds or thousands of miles in length and cross multiple jurisdictions. Additionally, the CP should include an implementation plan for addressing the identified visitor capacities.

(2) In accordance with applicable laws, regulations, and agency policies, including sections 5(e), 5(f), 7(a), 7(b), and 7(c) of the NTSA, 16 U.S.C. 1244(e)-(f) and 1246(a)-(c), local agency managers should incorporate or incorporate by reference CP visitor use management provisions (including visitor use management objectives and practices; the general visitor capacity for the national trail; any visitor capacities by site, segment, or area; and the implementation plan for identified visitor capacities) into local programmatic agency land use plans, as appropriate.

Where the national trail administering agency, in consultation with the local agency manager, determines that current visitor use levels are threatening resource values and desired conditions for a specific national trail site, segment, or area, the national trail administering agency, in consultation with the local agency manager, should encourage the local agency manager to promptly adopt or adjust visitor capacities for that site, segment, or area or take other measures to reverse these conditions, and should provide assistance in that effort as needed, so that the activity or use will not be incompatible or
substantially interfere with the nature and purposes of the trail. Decisions about visitor
capacities or other management measures in these circumstances may have immediate
and important consequences for both access to and protection of the nature and purposes
of the national trail. Therefore, in these cases, substantial investment in terms of data
collection, monitoring, and analysis is warranted to identify appropriate user capacities
and management strategies to protect the nature and purposes for which the national trail
was designated. Decisions about visitor capacities and other management actions should
be informed by the level of public engagement that is appropriate for the decision being
made. The visitor capacity determined for that site, segment, or area and the associated
visitor use management plan should be included in the CP or incorporated by reference.

Recommendations for Addressing Visitor Capacity under the National Parks
and Recreation Act

The following recommendation regarding visitor capacity in the context of the National
Parks and Recreation Act of 1978 (1978 Act) was developed in collaboration with the
National Park Service’s Park Planning and Special Studies Division. The 1978 Act requires
units of the National Park System to complete General Management Plans (GMPs)
that include:

identification of and implementation commitments
for visitor carrying capacities for all areas of the

The planning framework used by the National Park Service for meeting management needs
under the act begins with broad-scale planning (e.g., foundations, GMPs) and proceeds
through progressively more specific implementation planning (e.g., visitor use management
plans, wilderness stewardship plans). In 2012, the National Park Service revised the park
planning framework to implement a “planning portfolio,” a responsive and flexible
approach for meeting the needs of park planning. Under the new framework, not all
required elements of a GMP, including the requirement to identify visitor capacities, will
necessarily be found in a single plan.

A GMP establishes broad policy decisions and a long-term vision (e.g., 30 or more years) for
the National Park System unit but generally does not include detailed, site-specific analyses
or decisions. As stated in the National Park Service’s Park Planning Program Standards,
the purpose of a GMP is to “ensure that park managers and stakeholders share a clearly
defined understanding of the resource conditions, opportunities for visitor experiences, and
general kinds of management, access, and development that will best achieve the park’s
purpose and conserve its resources unimpaired for the enjoyment of future generations.”
Implementation plans cover various geographic sites and management programs in
National Park System units and describe in detail the actions that will be taken to achieve
the park’s purpose and desired conditions. Implementation plans include site- or topic-specific analyses and decisions that build on the general direction provided in the GMP or other completed portfolio plans. In the new planning portfolio, these implementation plans may supplement or amend the park’s GMP.

In a GMP, the requirement to identify visitor capacities is initially addressed by understanding current levels of visitor use and baseline conditions for resources and visitor experiences. Then, the planning team develops qualitative statements about the types and levels of visitor use that could be accommodated while achieving and maintaining desired conditions consistent with the purposes of the area. The GMP also addresses other major elements of visitor use management, including indicators and thresholds to assess desired conditions. Given the general nature of GMPs, planning teams typically stop short of identifying visitor capacities for all areas of a National Park System unit.

If it is determined during the GMP planning process that current visitor use levels are threatening desired conditions for specific planning areas, managers should complete the visitor capacity process and identify capacities as part of the GMP. Otherwise, GMPs should include a commitment to complete the process for addressing visitor capacity within a reasonable timeframe and as part of a subsequent implementation plan that has a significant focus on visitor use (e.g., visitor use management plans, wilderness stewardship plans, or trail management plans). The more detailed direction on visitor capacity in implementation plans should be consistent with the general guidance for the types and levels of visitor use in the GMP or other completed portfolio plans, or it may amend the GMP or other plans, if necessary. However, if the National Park Service cannot initiate a subsequent implementation plan within 3 years after completing the GMP, the agency should complete a separate visitor capacity assessment to identify interim visitor capacities until implementation plans are complete.

CONCLUSION

Federal managers need to address visitor capacity in many situations when required by law or when visitor use levels threaten the desired conditions of an area. This paper documents the council’s general position on when agencies that manage federal lands and waters should implement visitor capacity, including situations where there are specific legal requirements to address visitor capacity. The council is developing a visitor capacity guidebook that builds on this position paper and highlights case studies and lessons learned. For more information on visitor use management and visitor capacity, please visit the council’s website at http://visitorusemanagement.nps.gov/.
GLOSSARY OF KEY TERMS

**Characteristics of visitor use** include the amount, type, timing, and distribution of visitor activities and behaviors.

**Desired conditions** are statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area.

**Indicators** are specific resource or experiential attributes that can be measured to track changes in conditions so that progress toward achieving and maintaining desired conditions can be assessed.

**Thresholds** are minimally acceptable conditions associated with each indicator.

**Visitor capacity** is a component of visitor use management and is the maximum amounts and types of visitor use that an area can accommodate while achieving and maintaining the desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established.

**Visitor experience** is the perceptions, feelings, and reactions that a visitor has before, during, and after a visit to an area.

The **visitor use management framework** provides the analytical elements necessary to address visitor use management opportunities and issues, consistent with applicable law, within existing agency management processes.

**Visitor use management** is the proactive and adaptive process for managing characteristics of visitor use and the natural and managerial setting using a variety of strategies and tools to achieve and maintain desired resource conditions and visitor experiences.

**Visitor use** refers to human presence in an area for recreational purposes, including education, interpretation, inspiration, and physical and mental health.