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**VISITOR USE MANAGEMENT**  
COUNCIL

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# Desired Conditions Guidebook

The Heart of Visitor Use Management

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Primary contributors to the development of this guidebook include members of the Interagency Visitor Use Management Council and technical advisors listed alphabetically: Kerri Cahill (National Park Service), Adam Beeco (National Park Service), Mary Ellen Emerick (US Forest Service), Maureen Finnerty (National Park Service), Kelly Horvath (National Park Service), Sharon Kim (National Park Service), Elizabeth Oliphant (National Park Service), Aleksandra Pitt (National Park Service), Sam Rider (US Forest Service), Sarah Stein (National Oceanic and Atmospheric Administration), and Andrew White (National Park Service). And a special thanks to Rachel Franchina, previously with the US Forest Service, “who was a primary contributor to the early drafts of the guidebook. We wish to extend our thanks to those who contributed to the publication of this guidebook, including the graphic designers and editors. We are also grateful for the thoughtful reviewers that improved the guidebook, including council members, council agency staff, and representatives of educational institutions.

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The Interagency Visitor use Management Council consists of the following agencies:

| DEPARTMENT                 | AGENCY  |
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| Department of Agriculture  | U.S. Forest Service                             |
| Department of Commerce     | National Oceanic and Atmospheric Administration |
| Department of Defense      | U.S. Army Corps of Engineers                    |
| Department of the Interior | Bureau of Land Management                       |
| Department of the Interior | National Park Service                           |
| Department of the Interior | U.S. Fish and Wildlife Service                  |

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# Introduction

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# Chapter 1: Introduction

Every year, people seek federal lands and waters for recreation, physical wellbeing, reflection, rest, and respite, to be in nature, to spend time with friends and family, to challenge themselves, to connect with the land, and for countless other reasons. While some motivations for accessing federal lands have remained constant for decades, many have changed. The number of visitors who seek a destination, visitor activity types, visitor needs and desires, and the technologies that visitors use change over time and vary from place to place. These changes may be sudden or they may occur gradually over years or decades. As visitors' motivations, circumstances, and preferences change, so do behaviors, activities, and needs. Managers of federal lands and waters ("managers") have learned to adjust, often quickly, to changing visitor use dynamics. Amid these changes, it may be useful to check in with managers, Indigenous people and Tribal Nations, the public, and other interested groups and communities on what makes an area distinctive and valued: a steadfast vision, rooted in the past but with an eye to the future.

Engaging with the public is an important component of desired conditions development and is covered in detail in [chapter 5](#). Throughout this guidebook<sup>1</sup>, the phrase "interested groups and communities" is frequently used. Some groups and communities have legal authority, some conduct business with federal agencies, and others have vested interests. Tribal Nations are often considered interested groups and communities, yet they

***Interested groups and communities include any group that has an interest in an issue, project, system, or management unit.***

typically have a government-to-government relationship that requires a higher level of collaboration and potentially co-stewardship. These relationships are often set forth in the U.S. Constitution, treaties, statutes, executive directives, and court decisions. Collaboration with Tribal Nations that are not federally recognized is also important, just as with any other interested groups and communities. All interested groups and communities are important to consider and engage when defining desired conditions. Remember: If you want to go fast, go alone; but if you want to go far, go together. Managers cannot and should not do this process alone if they are thinking in the long term.

Desired conditions are defined as statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services for a particular area (IVUMC 2016). They are further defined in [chapter 3](#). This guidebook uses the term "desired conditions" throughout. Variations of this term include "desired future conditions," "management direction," and "recreation objectives."

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<sup>1</sup> Previous visitor use management guidance uses the term "stakeholder." Stakeholder has been carried forward in this guidebook when the sliding scale of analysis is referenced.

“Desired conditions” may not be a term that resonates with all groups. The more that can be done to listen and acknowledge the connection that people have to an area will help determine the most appropriate terminology for different interested groups and communities (Armatas et al. 2023).

Desired conditions statements allow managers to navigate changing visitor use, values, and financial, operational, and environmental dynamics while remaining true to a project area’s ultimate vision or direction. Desired conditions statements also allow visitors to understand the vision for an area and to make choices about where and how to recreate to fulfill goals and motivations for visiting an area.

This guidebook references **visitor experiences**.

While it is not possible to manage for “experiences,” the term is used here to mean the opportunities an area might provide or how an area might look, feel, and sound.



Desired conditions statements are a critical component of the VUM decision-making process because they guide other aspects of management (Haas 2001)—a fact that has led many to call desired conditions statements the heart of VUM. Decades of managing recreation have shown that effective long-term VUM requires clear descriptions of desired natural and cultural resource conditions, visitor experiences, and visitor services and supporting facilities (Interagency Visitor Use Management Council [the council] 2019b).

**Desired conditions statements are statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services for a particular area.**

As the great baseball player and coach Yogi Berra once said, “If you don’t know where you’re going, you’ll end up someplace else.” In other words, it is important to know the final destination before you begin a journey. Without clear and meaningful desired conditions statements, changes may occur to resource conditions and visitor

experiences before there is a chance to respond (Hendee et al. 1990). Defining desired conditions gives managers and interested groups and communities goals, guides positive change, and allows managers to better understand change. Defining desired conditions also helps make value judgments explicit and encourages shared understanding and consensus-building (Krumpe 2000; Krumpe and McCool 1997).

### Guidebook Purpose:

**As an addendum to the council’s visitor use management framework (“the framework”), this guidebook provides a deeper understanding of the importance and value of defining desired conditions. It also outlines a process to define desired conditions statements for resources and visitor experience within the framework, along with defining appropriate<sup>2</sup> visitor activities, facilities, and services. It provides**

<sup>2</sup> “Appropriate” may be defined differently depending on your role, your background, and your agency.



**general guidance for all council member agencies for defining desired conditions at various scales. For agency-specific guidance to developing desired conditions, readers should consult experts in each agency.**

This guidebook answers the following questions:

- Why define desired conditions?
- What are desired conditions?
- How and when do you draft desired conditions statements?
- What are appropriate visitor activities, facilities, and services consistent with a given set of desired conditions?

To answer these questions, this guidebook offers guidelines and implementation considerations as well as examples of desired conditions statements for different resource types, visitor activities, and visitor experiences.

## RELATIONSHIP TO THE FRAMEWORK

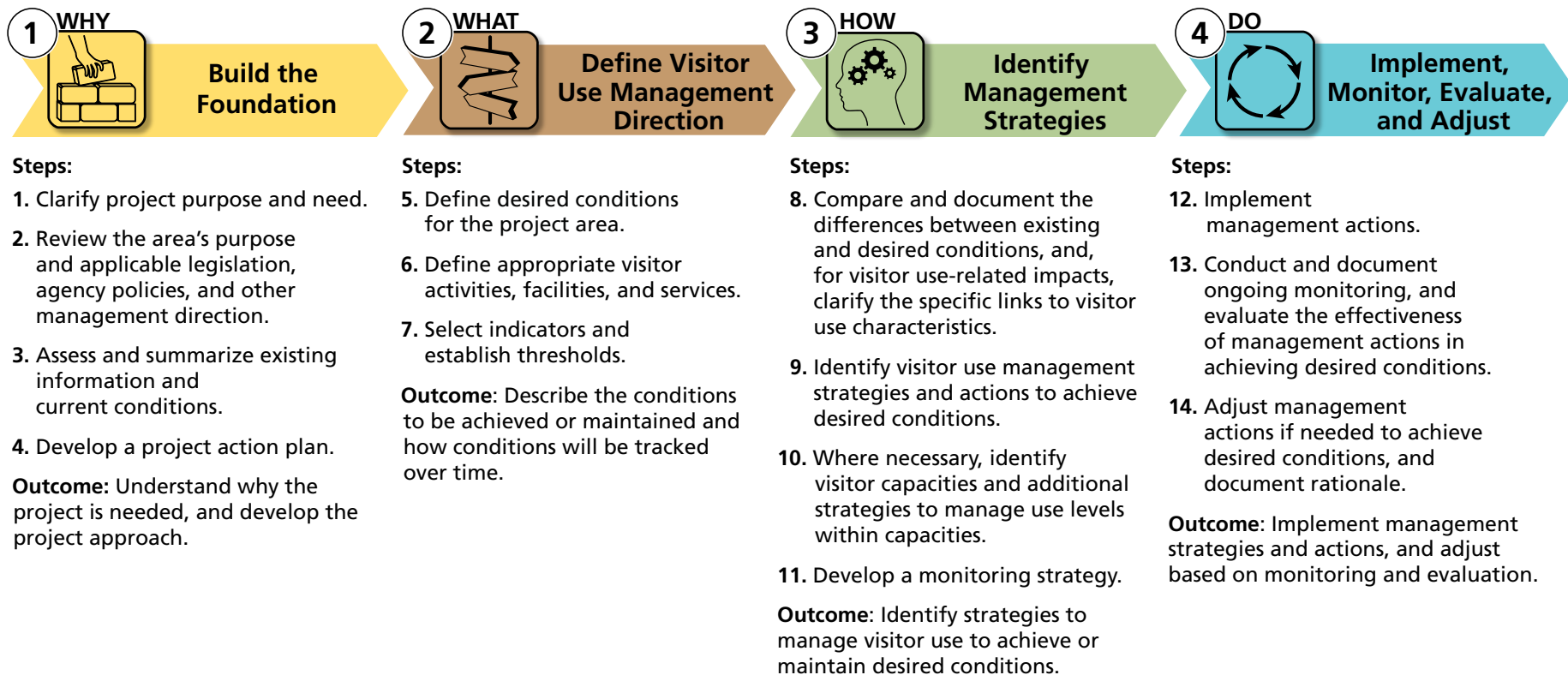
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The framework provides cohesive guidance for managers to address a complex array of visitor needs and opportunities. Defining desired conditions fits into the larger framework, which comprises four elements and fourteen steps spread across those elements (figure 1). As described in Element 1: Build the Foundation (IVUMC 2016, pp. 23–28), building the foundation provides information for project teams to understand how to organize projects and the resources needed to complete them in preparation for defining desired conditions. A project team should be assembled at an early stage of the planning process. Interdisciplinary participation is encouraged to include varying perspectives.

More specifically, the information gathered in element 1, steps 2 and 3, is essential in defining project-level desired conditions. Element 1, step 2 often provides information or guidance for defining desired conditions. The enabling legislation for a national park unit often provides guidance on broad values and resources to be protected. For example, in 2019, legislation to change the designation of White Sands National Monument to White Sands National Park stated, “To protect, preserve, and restore its scenic, scientific, educational, natural, geological, historical, cultural, archaeological, paleontological, hydrological, fish, wildlife, and recreational values and to enhance visitor experiences, there is established in the State of New Mexico the White Sands National Park as a unit of the National Park System.” These broad values form the basis for defining desired conditions. The US Forest Service, the National Oceanic and Atmospheric Administration, and other relevant agencies have similar legislative language.

Element 1, step 3, focuses on compiling relevant information about existing conditions and trends related to resource conditions, existing use (such as visitor, tribal, and community use and values), and climate change. Simply put, knowing current conditions and trends can help inform the definition of future conditions.

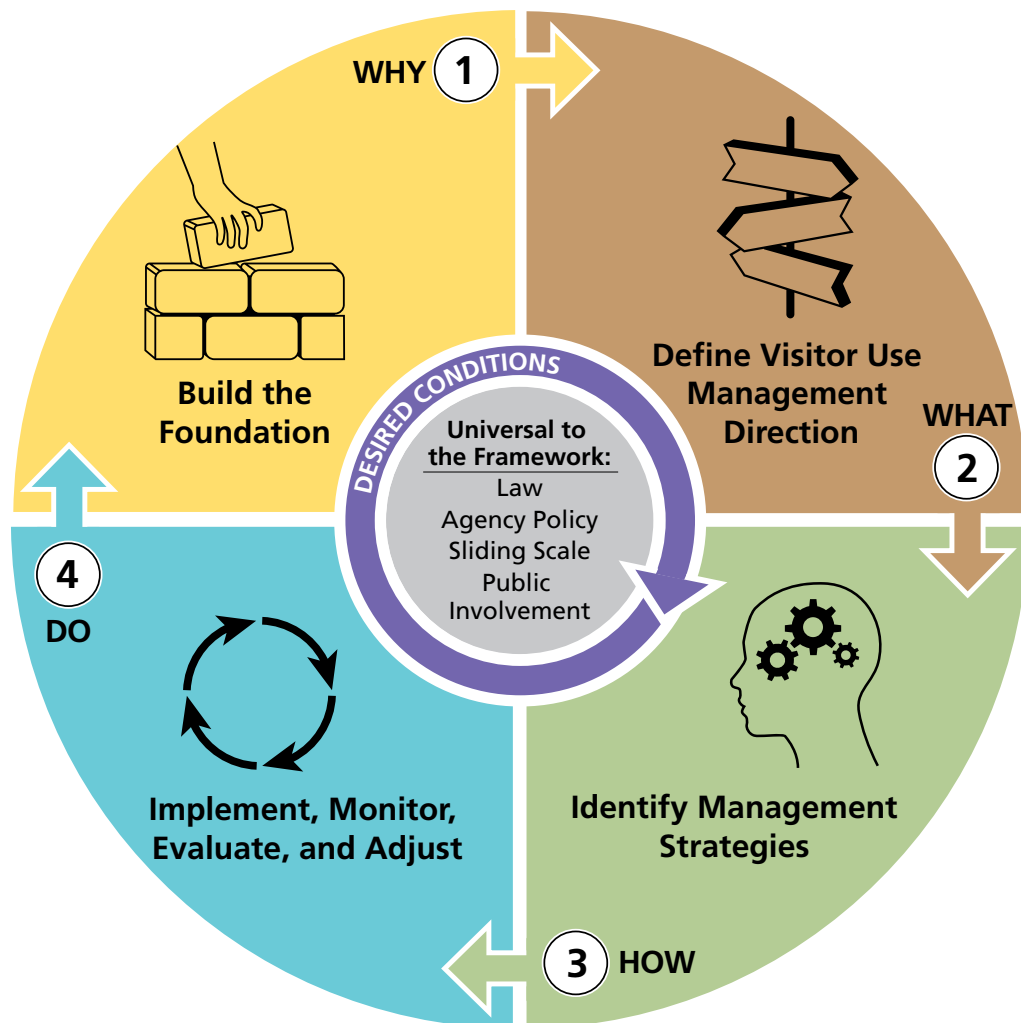
Figure 1. Elements and steps of the Visitor Use Management Framework



This guidebook includes two steps from element 2: “Define desired conditions for the project area” (step 5) and “Define appropriate visitor activities, facilities, and services” (step 6). As described in element 2 (IVUMC 2016, pp. 29–42), defining the VUM direction enables managers and interested groups and communities to identify shared goals.

The steps in elements 3 and 4 directly tie back to desired conditions statements. Well-defined VUM direction communicates a clear vision for the future, provides an explicit link to future management actions, and guards against incremental or haphazard change (IVUMC 2016, p. 30). Desired conditions statements touch every step of the VUM framework, often directly informing the development of other steps, and should be considered critical to the success of any VUM project (see figure 2).

**Figure 2. Desired conditions integrated within the framework**



## THE SLIDING SCALE OF ANALYSIS

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Throughout this guidebook, the framework's sliding scale of analysis is emphasized to ensure that the investment of time, money, and other resources is commensurate with project complexity and decision consequences.

A variety of factors influence the appropriate level of investment in determining desired conditions for an area. The sliding scale of analysis focuses on the following criteria:

- level of uncertainty about the issue
- level of risk to resources and visitor experiences
- degree of stakeholder involvement
- level of controversy/potential for litigation

The sliding scale of analysis helps match the appropriate investment in defining desired conditions with potential decision consequences. For example, if a decision would substantially affect one particular type of use or change how visitors access an area, a higher level of effort (analysis, time, and public engagement) in determining desired conditions may be more appropriate than if a decision would result in little change or if it would only slightly modify visitor use. However, even in less complex situations, desired conditions should be documented and condition trends should be tracked. Since desired conditions statements are aspirational statements, projects that are more complex may require relatively more effort, time, and public involvement and may contain desired conditions statements for numerous resources, visitor experiences, and services provided. Also, the level of detail for desired conditions statements may be much higher for complex or controversial projects.



*Opportunities to fish and raft on a river.*

## IMPORTANCE OF VALUES

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When defining desired conditions, an area's purpose and history play a large role. However, federal land designations give considerable discretion in how an area is managed, including determining desired conditions. This broad discretion is influenced by the values—the enduring sentiments of how people connect to a place and that visitors, interested groups and communities place on an area. For instance, Gettysburg National Military Park visitors connect with the place by reflecting on our country's history, so these values and connections can be used to inform the development of desired conditions. Likewise, for the Bob Marshall Wilderness Area, visitors may value the opportunity to be immersed in a rugged, natural, and vast environment with opportunities for solitude. These public values and related connections to a place should influence the development of desired conditions for each area.

**Values** are the enduring sentiments of how people connect to a place.



To expand on these examples, a desired conditions statement for the Bob Marshall Wilderness Area (a 1 million-acre designated wilderness area in western Montana), might read, “The landscape is dominated by natural processes and shows little evidence of modern human influence.” If this language were applied to Gettysburg National Military Park, a hardwood forest might now dominate fields on which the battle was fought. Therefore, a more appropriate desired conditions statement for the historic battlefield might read, “The landscape is protected and maintained in a condition similar to how it appeared on July 1, 1863.”

The language included in desired conditions statements will influence management actions on countless decisions that include diverse processes such as road development, management of natural processes, and provision of interpretive opportunities.

Incorporation of an area's purpose and, in some cases, legislative mandates, along with an area's history and potentially diverse values, can make defining desired conditions challenging. This can bring up a number of questions, such as:

- What if current values differ from the area's purpose and reason for establishment?
- Should our decisions be based on scientific evidence, shifting values, or some combination of the two?
- How can we adequately capture Tribal Nations' and Indigenous peoples' values and traditional knowledge of a project area?
- If we base our decisions on shifting values, will our desired conditions change in the future?
- We all have different values, so how can we agree on desired conditions?



Distilling multiple values into one—or a set of—desired conditions statements takes time and considerable thought. To start, it's important to recognize that an area's purpose and reason for establishment were likely driven by shared values. A recent example is the designation of Browns Canyon National Monument in Colorado. Citizens used the power of shared values to propose monument designation for lands already managed by the Bureau of Land Management and the US Forest Service. The area was designated as a monument using the Antiquities Act. Legislative mandates and other guidance establish an area's purpose and form a foundation for defining desired conditions.



*A scuba diver studies a kelp forest.*

Values represent socially acceptable norms and conditions, and values shift over time. By using values to define desired conditions, managers establish agreements with interested groups and communities about management directions for a certain place and time. Management for desired

conditions is not intended to be static across multiple generations. Environmental and social changes in desired conditions can occur in short timelines, so considering plausible future conditions can help ensure that desired conditions management is robust, even in the face of rapid, irreversible ecological transformation.

One of the most challenging aspects of determining desired conditions is understanding the multiple and sometimes competing values that individuals and groups have for a place, including the legal responsibilities for tribal consultation. Visitors, non-visitors, and other interested groups and communities have diverse backgrounds, interests, and motivations that often lead to different preferences and expectations. Determining desired conditions is an opportunity to build alignment with interested groups and communities for resource conditions and visitor experiences. It is also an opportunity to consider a broader representation of perspectives and values. While reaching alignment may be difficult via civic engagement, this approach ensures that varying voices and perspectives are heard and that interested groups and communities understand the process of defining desired conditions. Deliberative processes can help identify and articulate shared values. And, as Yogi Berra observed, there is no way to assess your success if you have not identified your goals.

Scientific evidence such as types of animal and plant species observed in an area or presence of cultural resources can help identify shared values. Social science data about visitor preferences, use levels, and attitudes and beliefs about management actions may also be available. Scientifically verifiable information on surrounding communities, such as economics, demographics, and health, are widely available from local and federal agencies and should be considered.



*A group of utility vehicles travel through a dune area.*

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## Why Define Desired Conditions?

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## Chapter 2: Why Define Desired Conditions?

Imagine that you are setting out on your ultimate road trip. You have a map and there are thousands of destinations from which to choose. You could start driving each day and choose your turns and stops based on how you feel. That would be exciting—new places! new food!—but it could be somewhat overwhelming. What if you don't eat at the best restaurant in each town? What if you miss a chance to see that famous roadside attraction? At the end of the trip, you might feel like you had experienced the ultimate road trip (focused on spontaneity), or you might feel that you had experienced a stressful road trip and that you missed out on sights and experiences that you really wanted to have. You left it up to chance.

On the other hand, you could decide what your goals are—for example, see the Pacific and Atlantic oceans and visit your long-lost relatives—and plan your road trip to make sure you accomplish what's most important to you. You may make a few unexpected or wrong turns, but you'll know how to get back on track. At the end of the trip, you'll feel fulfilled because you accomplished what you set out to accomplish. This happens because you have a clear definition of your desired outcome. For you, "the ultimate road trip" means seeing the Pacific and Atlantic oceans and visiting your relatives, and you didn't leave it up to chance. This is the approach we take when defining desired conditions in VUM: They provide a clearly defined outcome for visitor experiences and natural and cultural resource conditions based on an area's purpose, shared values, and other factors.

A key element in defining or redefining desired conditions is identifying a clear vision of what success means for an area. This is an opportunity to visualize the desired scenario for resource conditions and visitor experiences and then capture that vision via desired conditions statements. Developing a clear vision creates common understanding of why a place is important and what kinds of conditions

### Why Define Desired Conditions?

- look to the future
- allow for comparison
- create a forum for dialogue
- clarify relationships between purpose, resources, and experiences
- integrate resource conditions with visitor opportunities where appropriate
- form the basis for visitor capacity identification where necessary
- guide management action
- help focus monitoring
- provide accountability, defensibility, and transparency





are desirable. This vision will highlight what the team ultimately is working toward and support development of management strategies and actions to achieve them. Defining the vision can be done with the interdisciplinary project team, staff, visitors, and other groups interested in supporting visitor use and resource protection in the project area. Working with the public creates a common understanding of project goals and motivations and can build community support for future management actions.

For example, imagine a federally managed land area in the eastern United States with strong connection to cultural resources. Desired conditions for an area in this unit may read:

*This area preserves historic sites, structures, and landscapes that evoke their period of significance. Visitors have opportunities to be immersed in the historic setting to explore history with direct contact with cultural resources and rich interpretation of past stories and events.*

For more examples and case studies of desired conditions, please see [appendices A](#) and [B](#).

It is tempting to immediately jump into management strategies and actions without considering desired conditions first, but experience shows that this approach often fails in the long run, as proposed solutions developed in this way lack clear direction. While desired conditions statements help inform and guide what management actions may ultimately be taken, project teams will also consider other factors when making decisions about what course of action to pursue. These other considerations include consistency with law and policy requirements, affordability and feasibility of investments and operations, and environmental sustainability. Desired conditions statements are among many important considerations when deciding how to best manage an area for visitor use and resource preservation.



*Visitors join a celebration at a historic site.*

Following are nine reasons why defining desired conditions is important:

- 1. They guide planning for the future.** Desired conditions statements identify aspirations for a particular area by answering the question: “What are we trying to achieve?” Answering this question is imperative for proactive rather than reactive management. Desired conditions statements provide direction for management of resources and opportunities for experiences; they can be thought of as proactive, strategic, and purposeful goals. They consider not only the current uses of an area, but what could exist and who could use the area.
- 2. They clarify relationships between purpose, resources, and experiences.** Desired conditions statements connect the dots between law and policy and goals for resource conditions and visitor experiences. Desired conditions statements often are built on the foundational language (when available) that legally established an area (IVUMC 2016). Defining desired conditions builds on and provides further meaning to foundational (statutory) language, when available, in terms of purpose, niche, mission, and related law and policy. Desired conditions statements provide clarity and specificity that guide future management actions.
- 3. They integrate resource conditions with visitor opportunities where appropriate.** The process of defining desired conditions allows the project team to consider and negotiate various connections and relationships between managing natural and cultural resources and overlaying appropriate recreation opportunities with associated desired experiences. It is an opportunity to evaluate important questions for long-term management, including clarifying the connection of visitor experiences to key resources and values, identifying the diversity of opportunities that are desirable and appropriate, considering resource sensitivity in relation to amounts and types of use, determining the kinds and amounts of visitor services and facilities that support the achievement of desired conditions, evaluating an area or unit's ability to operate and maintain facilities that support the achievement of desired conditions, and assessing future climate conditions and their implications for long term management of resources and opportunities for visitor experiences.
- 4. They allow for comparison.** A clearly defined end-goal helps to articulate the difference between where you are and where you want to be. By having a clear understanding of desired opportunities and resource conditions to be provided, current conditions can be compared to desired conditions. This is also important because certain management actions may prioritize some resources or values. The practice of comparing current and desired conditions has a long history as a cornerstone of rational planning theory. The practice also is accepted widely as an intuitive means of monitoring and evaluating changes in resource conditions and can be communicated easily to the public (Bennetts and Bingham 2007).

- 5. They create a forum for dialogue.** Developing desired conditions is a great opportunity for managers and visitors to collaborate on their vision for the future. The process of defining desired statements provides an opportunity for visitors from different backgrounds and perspectives to articulate the types of experiences they are seeking and the benefits they hope to realize. For Indigenous peoples and Tribal Nations, the area may be within their traditional homeland and they may have very different perspectives that should also contribute toward the desired conditions statements.
- 6. They inform visitor capacity identification, as necessary.** When visitor capacity identification is needed or required, desired conditions statements lay the groundwork for often complex and important decisions about the types and amounts of use that an area can accommodate. They are integral in defining indicators and thresholds and provide rationales for visitor capacity identification. Desired conditions statements form a logical and defensible basis to identify visitor capacities, in that limiting attributes are based on indicators and thresholds that directly support achievement and preservation of desired conditions. For more information on visitor capacity, please see: [Visitor Capacity Guidebook, Managing the Amounts and Types of Visitor Use](https://visitorusemanagement.nps.gov/Content/documents/lowres_Visitor%20Capacity%20Guidebook_Edition%201_IVUMC.pdf) ([https://visitorusemanagement.nps.gov/Content/documents/lowres\\_Visitor%20Capacity%20Guidebook\\_Edition%201\\_IVUMC.pdf](https://visitorusemanagement.nps.gov/Content/documents/lowres_Visitor%20Capacity%20Guidebook_Edition%201_IVUMC.pdf)).



*A trail crew sets up camp in a forest clearing.*



**7. They guide management action.**

Desired conditions statements establish the vision that future management actions are designed to move toward or maintain. Clear, purposeful desired conditions statements focus action and guard against incremental or haphazard changes that may occur when managers react only to current issues. Many managers have learned that, once undesirable change has occurred and use has become established, it is difficult to alter visitor use patterns. Desired conditions statements also help determine the types of management actions that could be appropriate. For instance, would developing a paved parking lot in a certain location be in line with desired facility, resource, and visitor experience conditions in that area? Desired conditions statements are part of clear management direction, ensuring management by design rather than by default (IVUMC 2016).



*US Army Corps of Engineers staff providing a kayak tour.*

**8. They help focus monitoring.** Desired conditions statements focus monitoring strategies that allow managers to objectively evaluate whether management actions are effective (IVUMC 2019b). Comparing the resulting conditions to desired conditions is critical: This comparison is the foundation on which the VUM framework (IVUMC 2016) and concepts such as adaptive management are based (Bennetts and Bingham 2007).

**9. They provide accountability, defensibility, and transparency.** Ensuring that visitor use decisions are based on sufficient information and clearly defined desired conditions results in a higher degree of transparency, accountability, and defensibility. Further, data collected systematically via monitoring helps measure effectiveness of current management strategies and identify the need for management strategy changes over time. In this type of iterative management framework, desired conditions statements help correct potential misperceptions about the need for adjustments in management actions (IVUMC 2019b; Manning 2010). Desired conditions statements also help managers prioritize and justify financial and human capital expenditures.

## ADDITIONAL GUIDANCE ON DEFINING DESIRED CONDITIONS

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The importance of defining desired conditions is reflected in management agencies' planning guidance. While the term "desired conditions" is not always used, there is an emphasis on future-oriented goals and objectives, and often comparing existing conditions to goals. Project teams are encouraged to reference this guidance throughout the planning process and while defining desired conditions. Each of the specific areas mentioned (such as wilderness areas and wild and scenic rivers) may also have individualized management plans such as a comprehensive river management plan that include desired conditions and that would also inform more detailed desired conditions in subsequent or tiered plans. Following is additional guidance from various federal laws. There are also a number of other laws pertaining to each agency specifically. These include the Refuge Recreation Act of 1962 (US Fish and Wildlife Service), the National Forest Management Act of 1976 (USDA Forest Service), the Federal Land Policy and Management Act of 1976 (Bureau of Land Management), and the National Parks and Recreation Act of 1978 (National Park Service). (For more agency-specific resources, [see appendix C.](#))

**Wilderness Act.** The Wilderness Act establishes a National Wilderness Preservation System for the permanent good of the whole people and for other purposes. The enabling legislation for a wilderness area may provide insight into why the area was designated. Desired conditions statements should align with the qualities of wilderness that are established in this legislation. They should describe and refine these broad qualities (untrammelled, natural, undeveloped, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and other features of value) to those qualities that are relevant and valued in the project area. In other words, desired conditions statements for the project area must tie to and complement those conditions established in legislation and align with wilderness character. There are also current efforts to help make wilderness more welcoming (Ronald et al. 2023).

**Wild and Scenic Rivers Act.** Under this Act, with exceptions, agencies are required to identify and describe river values for which a river was designated, particularly outstandingly remarkable values (ORVs) that contribute to the river's national significance as part of the National Wild and Scenic Rivers System. Outstandingly remarkable values are unique, rare, or exemplary characteristics of a particular river that fall within seven categories: scenery, recreation, geology, fish, wildlife, cultural, and other. Descriptive river value characteristics help planners articulate desired river conditions. Similar to desired conditions descriptions in other contexts, river value descriptions also serve as a jumping-off point for developing indicators and standards (thresholds) for maintenance and enhancement of these values. In addition, the river value descriptions inform the identification of visitor capacities for the river, which are legally required for all wild and scenic rivers and may be addressed via comprehensive river management plans.



**National Trails System Act.** Congressionally designated national scenic and national historic trails tend to be long-distance trails; most are hundreds or even thousands of miles long. National trails often cross federal, state, tribal, regional, and local jurisdictions as well as private lands. To promote trail-wide consistency, the National Trails System Act addresses the overall administration of national trails and directs completion of a comprehensive plan for the acquisition, management, development, and use of a trail. These plans must include specific objectives and practices for management of the trail, including identification of all significant natural, historical, and cultural resources to be preserved, along with high-potential historic sites and high-potential route segments, in the case of national historic



*A visitor backpacks through a subalpine meadow surrounded by lupine.*

trails. These objectives and practices should tier to desired conditions descriptions for trail-wide management, all of which should be developed in collaboration with partners and the public. Furthermore, objectives and practices should support the National Trails System Act requirement of identifying general visitor capacity for the trail.

**National Marine Sanctuaries Act of 1972.**

This Act dictates that establishing areas of the marine environment that have special conservation, recreational, ecological, historical, cultural, archeological, scientific, educational, or aesthetic qualities as national marine sanctuaries managed as the National Marine Sanctuary System will: 1) improve the conservation, understanding, management, and wise and

sustainable use of marine resources; 2) enhance public awareness, understanding, and appreciation of the marine environment; and 3) maintain for future generations the habitat and ecological services of the natural assemblage of living resources that inhabit these areas. Defining desired conditions specific to national marine sanctuaries promotes recreational experiences and conservation of nationally significant marine and Great Lakes places.

## Conclusion

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According to agencies' planning policies, the most essential planning element that guides agencies in initially addressing these legal requirements is establishing desired conditions for resources and visitor experiences and maintaining them in each particular management area. Typically, potential management zone descriptions should describe compatible combinations of desired resource conditions, associated opportunities for visitor experiences, and the kinds and levels of management, access, and development to achieve desired conditions for resources and experiences. Zoning allows managers to evaluate each area for specific needs and opportunities while considering integrated resources and visitor use connections among all areas (see [chapter 4](#) for more zoning information). Desired conditions and zoning descriptions typically are found in general plans such as general management plans and forest plans but also may be developed or updated in other types of implementation plans.



*Four people swim in a lake near shore while a young person jumps into the water and another remains on shore.*



## What are Desired Conditions?

# 3



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## Chapter 3: What are Desired Conditions?

Desired conditions statements 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. They describe how a particular area should look, feel, sound, and function. An area may already be meeting these conditions or conditions can be future-oriented (IVUMC 2016). Desired conditions statements are commitments that should reflect financial and operational feasibility for an agency or unit. They often are operationalized via an implementation document that may be subject to National Environment Policy Act or other compliance requirements.

Defining desired conditions provides an opportunity to visualize the desired scenario for resource conditions and visitor experiences, further defining and describing the sights, sounds, feeling, and function of an area. Desired conditions describe why a place is important by detailing the following desired characteristics:

- **sights**, such as key viewscales and potential to see wildlife or other key resources
- **sounds**, which can be natural, cultural, unique to an area (such as canons firing at a battlefield), or that are expected based on use types; for example, sounds of people or shuttles
- **feelings**, which can vary based on area types and might include those associated with fun and recreation, health and communion with nature, remembrance of people or events, or cultural and spiritual connections
- **functions**, including important natural resources and ecological services that support habitats and ecosystems in an area



*A mountain biker cruises by a turquoise lake.*



These statements highlight what the team is working toward, support development of management strategies and actions, and indicate if and when desired conditions are achieved. Some examples of desired conditions are presented below that capture sights, sounds, feelings, and/or functions. For more information, please see [appendices A and B](#).

The area appears natural, with park-like stands of longleaf pine throughout, interspersed with low-growing palmetto stands. Water and elevation dictate what grows here; rain floods the area in the wet season and prevents most visitor travel. Natural processes occur freely, including low-intensity fire and occasional landslides. There are no trails; visitors disperse freely through the area, pursuing nonmotorized activities in a challenging environment.

The Tenmile River provides opportunities for adventure and challenge. Generally, the river bends and turns mask sights and sounds of other visitors. Natural vegetation dominates the view and facilities are unobtrusive. Campers are surrounded by natural sounds and dark, starry nights.

Desired conditions statements are descriptive statements that answer the question, “What are we trying to achieve?” Specificity for desired conditions statements can vary and should match the project and complexity as described on the sliding scale of analysis and management capability. Desired conditions statements also should incorporate and consider tribal traditional and cultural values, uses, and activities. In general, generic goal statements that do not apply to an area’s specific resources and values or that merely repeat language from applicable laws or policy are not helpful.

It may be helpful to consider desired conditions statements in a more personal way. For example, think about defining desired conditions for your health. A desired conditions statement for this purpose might read, “I’m in top physical health.” To ensure that you achieve or maintain this desired condition, you may establish an indicator, such as one based on monitoring your blood pressure. While you may have a threshold for that indicator of no greater than 150/90, you also could establish an objective that you will “achieve a blood pressure of 130/80 or below by the end of the year.” Examples of desired conditions statements that follow best practices are found in [appendix B](#).

While each desired conditions statement will be unique, there are seven common elements of quality desired conditions statements, listed below. These elements are related closely to the reasons to define desired conditions, as outlined in [chapter 2](#).

- 1. Describe results or outcomes.** Desired conditions statements address conditions rather than specific management actions: in other words, *what is desired*, rather than how it will be achieved. Desired conditions statements should reflect desired outcomes or results that inform and guide future actions. Therefore, multiple actions or approaches could be considered to achieve desired conditions. Typically, desired conditions statements are qualitative. For example, a statement could describe results of management

to provide a highly social, developed experience for visitors of all ages and abilities at a trailhead. This desired conditions statement could support management actions such as expanding a parking area or providing a shuttle system.

**2. Focus on visitor opportunities and resource conditions.** Desired conditions statements clearly describe visitor opportunities and resource conditions that are relevant to and valued for the project area. They typically should not include background, history, or context, though these resources (as identified in element 1 of the framework) should inform their development.

**3. Consider the whole system.** Desired conditions statements integrate experiential and resource attributes. They describe resource conditions and visitor opportunities that contribute to ecological, social, and economic health, and sustainability, including agency and unit financial and operational sustainability. If possible, desired conditions statements should include available information from research—from within and outside your agency, from local and indigenous knowledge, and from best management practices.

**4. Look to the future.** Desired conditions statements provide a long-term vision for an area. They describe future conditions—not necessarily what exists today (IVUMC 2016)—and they are not necessarily time-bound nor do they include completion dates. Desired conditions statements consider potential changes to conditions due to climate change.



*Visitors enjoy a swim beneath a waterfall.*

- 5. Connect to the purpose or reason that an area was designated as a protected area.** Desired conditions statements should align with the purpose or reason that an area was designated. They highlight the things that are valued or unique for that area. When an area has no enabling legislation, desired conditions statements typically are developed as part of broader-scale planning decisions such as those included in land or resource management plans. Subsequent implementation-level desired conditions statements would tier to these broader plans. It is also important to consider an area's historical context related to past social or political circumstances or controversies. Desired conditions statements also can be developed to tier to and complement broader-scale planning efforts.
- 6. Reflect shared values.** Desired conditions statements reflect visitor, interested groups, and communities' values, needs, and desires. Desired conditions statements should consider nearby community interests, adjacent land areas and their desired conditions, and existing and potential visitor uses. They typically reflect tradeoffs, discussed with many interested parties, that can be achieved. They also respond to conditions in the broader landscape.
- 7. Guide management action.** Desired conditions statements are clearly worded and are detailed enough to guide management action. They provide a means to determine whether projects are consistent with management plans. Managers, interested groups, and communities should use desired conditions considerations to develop strategies, actions, and related monitoring. Management actions can be site-specific or area-wide and can be short- or long-term, and should always move the project area toward desired conditions. Desired conditions statements also should contain enough detail to provide long-term direction about resource conditions and visitor opportunities to be achieved or maintained (IVUMC 2016).



**How to Draft Desired Conditions?**

**4**



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## Chapter 4: Preparing to Develop Desired Conditions

The previous chapter introduced the concept of desired conditions statements as aspirational statements that describe resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area. This chapter expands on the framework guidance for getting started with defining desired conditions statements (IVUMC 2016, p. 33).

When defining desired conditions, the following considerations are intended to build on each other; however, it is important to remember the iterative nature of defining desired conditions. These guidelines are consistent with the content shared in the VUM framework.

- review foundational information from element 1 of the VUM framework
- determine the project's path for defining desired conditions
- use the sliding scale of analysis to determine the specificity and complexity of the desired conditions statements (including consideration of the project scope and appropriate level of detail in the desired conditions statement)
- determine if desired conditions statements are needed for different areas or zones
- incorporate values, beliefs, and preferences into desired conditions statements
- paint the picture and be creative: seek inspiration for desired conditions statements

The following chapters provides more specific direction on common pitfalls and using desired conditions to identify the types of visitor activities, facilities, and visitor services that are appropriate.



*US Army Corps of Engineers staff providing opportunities and resources to learn to safely swim and float.*



## REVIEW FOUNDATIONAL INFORMATION FROM ELEMENT 1 OF THE FRAMEWORK

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Desired conditions descriptions build off the work done when implementing element 1 of the framework, particularly: step 1: Clarify the project purpose and need, step 2: Review the area's purpose(s) and applicable legislation, agency policies, and other management direction, and step 3: Assess and summarize existing information and current conditions. This section describes how these steps inform defining desired conditions. Having a clear understanding of the project's purpose and need (element 1, step 1) provides direction related to the project scope, which can focus and inform defining desired conditions. The scope of the project should inform the specificity needed in the desired conditions. A broad-level scope for a project suggests a comprehensive approach for the desired conditions. For example, a comprehensive river management plan may include desired conditions statements for the entire length of the river corridor, whereas a project focused on a boat launch may include desired conditions statements for one river section, one specific facility, or even just the launch itself. Depending on project complexity, it may



*Visitors gather around towering giant sequoias.*

also be appropriate to have desired conditions statements for individual sections, especially for a wild and scenic river with varying ORVs and perhaps multiple classifications for different segments. If the scope of the plan is small in scale or site-specific, the desired conditions should be as well. Where possible, they should tier from comprehensive plans with broad desired conditions. It is not useful

to plan in more detail than can be realistically managed. Identifying the purpose and need for a project and understanding the scope will guide how desired conditions will be defined for the project.

**Reviewing the area's purpose and applicable legislation, agency policies, and other management direction** (element 1, step 2) guides defining desired conditions by providing insight into key resources and values for an area. In some instances, the purpose of an area may be included in legislation designating the area or in planning documents. In other instances, the purpose of an area may be stated as part of an area's vision or mission. By using information related to an area's purpose and associated values, including applicable legislation, agency policies, or other management direction, defining desired conditions helps to build a foundational understanding of how an area should look, feel, sound, and function.



*A group looks at the map of a US Forest Service area before starting their trip.*

A review of an area's enabling legislation and planning history can increase understanding of the area's significance and the important resources and values that make it unique. Broader-scale plans such as land or resource management plans, general management plans, and comprehensive conservation plans often have broad

desired conditions that apply to the project area. If this is the case, more refined desired conditions may need to tier from this broader scale and be more specific to particular areas. Absent an applicable broader-scale plan, enabling legislation or other planning documents may provide language that can form the basis of desired conditions. For example, NPS foundation documents include descriptions of unit purpose, fundamental resources and values, and interpretative themes. Similarly, national forest system land management plans describe an overall vision for sustainable forest management and often describe broad-scale desired conditions for plan area resources such as recreation, scenery, wildlife, and air and water quality. Many national forests also have forest-wide statements that describe recreation opportunities that the unit is uniquely situated to offer. Another example is reviewing congressional testimony that may specify the ORVs for which a river was included in the wild and scenic river system. In general, subsequent project-level desired conditions should tier to these broader-scale plans or reference documents. In addition, agencies have different tools and guidance that should be referenced and followed in defining desired conditions (see [appendix C.](#))

When reviewing an area's enabling legislation and planning history, it is important to remember that some statements may sound like desired conditions statements but actually describe current conditions or management objectives (see table 1 for examples). Current-conditions statements address the current state or trend of a resource or experience. Management objectives are action-oriented statements that provide insight into how area managers might address a current condition. Desired conditions statements are aspirational statements about conditions that should be maintained or achieved. There may be some situations in which current conditions closely match desired conditions, and management actions would be taken to maintain those conditions. It is also possible current conditions at the time that the enabling legislation was written are no longer accurate or were never achieved; managers may need to address gaps between past and current conditions.



**Table 1: Examples of current conditions statements, management objectives statements, and desired conditions statements from prior planning documents**

| DESIRED CONDITIONS STATEMENT  | CURRENT CONDITIONS STATEMENT   | MANAGEMENT OBJECTIVE STATEMENT   |
|---|--|--|
| Visitors can enjoy the experience of natural sounds, dark night skies, scenic vistas, and untrammelled nature while exploring the backcountry and immerse themselves in high-elevation experiences at places such as Mt. Le Conte, Mt. Cammerer, Charlies Bunion, and Mt. Sterling. | Trail signs and parking area lights have proliferated to improve trailhead access. Decades of increased development outside the park have degraded historic viewsheds, night skies, and soundscapes. | Develop a dark-sky management plan to address demand for increased lighting, particularly associated with rising visitation along road corridors. Consider a sign-management plan to avoid proliferation of unnecessary signs. |
| The area provides opportunities for an increasingly urban population to experience sanctuary, wilderness, solitude, and respite from the technological aspects of modern society.   | Development and associated noise, artificial light, scenic intrusion, and habitat fragmentation are within a half-mile of the boundary.  | Closely manage core wilderness areas to protect night skies, scenic views, and wildlife habitat, and promote visitor understanding of these resources.   |
| South Mountain offers refuge from everyday life challenges for the mind and body and the rejuvenation, relaxation, and renewal fostered by immersion in an ancient mountain landscape via roads, trails, and waterways.   | At South Mountain, natural sounds and dark night skies have been documented to be the most pristine in a 300-mile radius.  | Continue to reduce noise and light pollution by installing night-sky-sensitive light fixtures and working with partners to limit night-time overflights.   |

**Assessing and summarizing existing information and current conditions** (element 1, step 3) is a valuable step in defining desired conditions. This information provides the foundation for developing desired conditions for an area's resources and experiences. Examples of this type of information, which can come from studies, interested groups and communities, subject matter experts, and employees, include:

- **Visitor use** information such as the status and trends of characteristics of visitor use. Potential related questions include:
  - » How much use is occurring?
  - » Where are people going?
  - » What time of year are people visiting?
  - » In what activities are people engaged?
  - » How frequently do people return?
  - » How are people getting to and around the area?

- **Visitor demographics** trends and information related to factors such as age, gender, ethnicity, and residence. Potential related questions include:

- » How do visitor demographics compare to surrounding communities?
- » What are the barriers to access and use?
- » What are the status and trends for demographics and economic development in the surrounding communities?

- **Visitor expectations and preferences.** Potential related questions include:

- » What attributes draw people to visit or reside in the area and what are the conditions of those resources?
- » How are people using the area?
- » What information sources are people using to find out about visitor opportunities?
- » Who is not visiting this area, and why?
- » How much do area recreation opportunities and experiences contribute to quality of life for individuals, communities, and businesses?
- » To what degree do current opportunities serve all people?

- **Indigenous sacred sites or traditional use.** Potential related questions include:

- » How does visitor use affect indigenous sacred sites or traditional use?
- » How do indigenous sacred sites and traditional use influence visitor use patterns and experiences?

- **Natural resources information.** Potential related questions include:

- » What is the status of natural resources in the area?
- » Are native populations of plants and wildlife increasing or decreasing, and what threats do they face?
- » Are invasive species a concern?
- » Do areas of high visitor use intersect with sensitive natural resources?
- » Are any resources known to be particularly vulnerable to visitor use activities, use levels, or timing of use?



*A hunter surveys the landscape in the Uncompahgre National Forest.*

- **Cultural resources information.** Potential related questions include:
  - » How are cultural resources in the area faring?
  - » Is their integrity being maintained?
  - » How do visitors interact with historic or archeological sites?
  - » Is visitor use having a negative impact on sensitive cultural resources?
- **Health concerns.** Potential related questions include:
  - » Are there community health conditions such as disease prevalence or community health goals that the project team should consider to serve the health needs of visitors and surrounding communities?
  - » Would access to public lands help address community health concerns in the area?
- **Spending considerations.** Potential related questions include:
  - » How much money are people spending on their trips to the area?
  - » How is visitor use contributing to the local or regional economy?
- **External factors.** Potential related questions include:
  - » How are external factors such as marketing campaigns, development, gasoline prices, and weather influencing recreation opportunities and visitor experiences?
- **Financial and operational sustainability information.** Potential related questions include:
  - » What investments are financially and operationally sustainable in the long term, assuming no increase to base budget and stable or decreasing staffing?
- **Climate change and environmental hazard information.** Potential related questions include:
  - » How is climate change already affecting this area, and how might it affect the area in the future?
  - » What natural and cultural resources, facilities, and/or visitor experiences are vulnerable to impacts from climate change?
  - » What investments could address effects of climate change and environmental hazards, and conserve or protect against related threats to resources?

**When summarizing existing information and current conditions,** it is important to consider all of the information in the list above to differentiate a project area from other areas in terms of natural and cultural resource values, traditional use, visitor experiences, and unique opportunities. This process can help determine the attributes that make an area special. It is also important to evaluate reliability, timeliness, certainty level, and information source quality when assessing and summarizing existing information and current conditions. When possible, consider the differences between desired conditions for other areas and what is desirable for the project area, asking questions such as:

- How are conditions similar to surrounding areas?
- How are they different?
- Are any resource conditions and experiences in the broader landscape continuous and possibly contingent on those in the project area?

Understanding these broader landscape considerations can and often should include adjacent federal, state, and/or local lands. For questions and guidance on particular resource topics, see [appendix A](#).

If data about current conditions are limited, this should be recognized and documented. Depending on the sliding scale of analysis and issue complexity, desired conditions statements may include this caveat and/or be revisited when more information is available. Climate change and its impacts on resources, visitor opportunities, and natural hazards can complicate the summary of existing information and current conditions. The type and severity of climate change impacts are often uncertain and desired conditions related to resources and opportunities that may be influenced by climate change need to be sufficiently broad to accommodate the range of foreseeable climate scenarios while still providing useful guidance. Following are some examples of desired conditions statements related to climate change:

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**“Changing ecological patterns due to climate change, including wildlife hibernation and migration or lengthened growing seasons, are accommodated.”**

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**“Available visitor opportunities account for climate impacts such as lower water levels, decreasing snowpack, and increased temperatures.”**

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These desired conditions statements acknowledge climate change and help support environmental resources during uncertain changes. Specific agency guidelines related to climate change should be considered in defining desired conditions.

With ongoing research and monitoring, some managers may have more specific understanding of expected climate change impacts and can account for those impacts in their desired conditions. For example, in an area where glaciers are a key resource and a visitor viewing opportunity, a desired conditions statement may consider likely glacial retreat or disappearance.

Managers have little control over those changes and thus should consider what they can still manage for and how best to adapt. A desired conditions statement for this example could be, “Visitors have the opportunity to gain an understanding of the history, importance, and ecological impact of glaciers on the environment and culture of the area.” This desired condition could be realized even if there is no longer a glacier in the area. Another desired conditions statement could be, “Wildlife populations dependent on the

**Desired conditions statements describe what conditions, outcomes, and opportunities are to be achieved and maintained in the future, not necessarily what exists today (IVUMC 2016).**



Arctic water ecosystem continue to thrive.” This statement, while not directly related to glacial conditions, clarifies the importance of the broader Arctic ecosystem.

Developing a project action plan (element 1, step 4) is the last step of element 1: build the foundation. The project action plan should identify members of the project team, often referred to as an interdisciplinary team, who will determine and describe desired conditions. Consider the project team composition and whether additional expertise could be useful. The team composition may affect the strength and comprehensiveness of desired conditions descriptions. Including people with diverse expertise and evaluating project placement on the sliding scale of analysis are important considerations when developing comprehensive and useful desired conditions statements.

Moving through the steps in element 1 of the framework: Build the Foundation may occur in several ways. It may occur via collaboration of a project team consisting



*A ranger walks with visitors along a trail.*

of the area’s staff, perhaps including key interested groups and communities or broader agency regional or district support, via an internal project lead or specialist, or via an outside contractor. The project action plan also should include a public involvement strategy that outlines the extent of public engagement needed to

fully define desired conditions. Outlining shared values from the area’s establishment documentation and understanding if any key views were not incorporated at that time also should be included in public engagement. Being clear about project scope is important, along with understanding timeframes, funding, and resource availability. (See framework step 4: Develop a Project Action Plan for additional guidance.)

Revisiting purpose and need is also valuable (element 1, step 1), as reviewing all pertinent background information and current knowledge and developing the project action plan will help to better scope the project’s focus and needs. Ensuring that the project has a strong purpose and need will help define desired conditions and ensure consistency with existing desired conditions. If there are no existing desired conditions, then a solid, refined purpose and need will still be valuable in determining the resources that desired conditions should cover.



## DETERMINE THE PROJECT'S PATH FOR DEFINING DESIRED CONDITIONS

Analysis completed in element 1 steps should provide a strong basis for understanding the area's purpose, key resources, and values, and in developing a unified vision for the area. Element 1 information should be considered when determining a path for defining desired conditions.

Table 2 shows the three paths that a project could take for defining desired conditions.

**Table 2: How to determine a project's path for defining desired conditions**

| IF THE PROJECT AREA:   | THEN:   |
|--|---|
| Has no existing desired conditions   | New desired conditions statements must be drafted.  |
| Has some desired conditions that already were defined (likely in a broader plan) and that provide adequate direction for the project   | The desired conditions can or must be carried forward, depending on the situation.                                  |
| Has some desired conditions that already were defined (likely in a broader plan) and that provide inadequate direction for the project | The existing desired conditions can be refined or more detail added to match the current project's scope and needs. |

It is important to understand any National Environmental Policy Act (NEPA) implications if desired conditions statements are changed. For example, such changes could be indicated in plan amendments and in new compliance documents such as environmental assessments or environmental impact statements. In defining all desired conditions, consider grouping or categorizing desired conditions descriptions by topics such as physical, biological, social, or managerial for ease of understanding and comparison across zones. Also, regardless of the path to defining desired conditions, it is still important to address all of the steps in element 1.

A designated wild and scenic river will have ORVs and specific desired conditions requirements that should be considered in defining desired conditions. Agency unit plans may have required desired conditions (for example, a national forest land and resource management plan must contain desired conditions using the recreation opportunity spectrum). Wilderness area desired conditions and requirements at a local level should be considered as well. In cases where an area has no desired conditions requirements but has broad national guidance on area management, the area will likely follow path 1, with national guidance serving as a foundation to define desired conditions. Generally, if it is unclear which path to follow, path 3 is appropriate. In other cases, desired conditions may be adequate in one geographic area and require refinement in another.

The next section offers guidance for defining desired conditions related to the three potential paths.

## PATH 1: DEFINING NEW DESIRED CONDITIONS

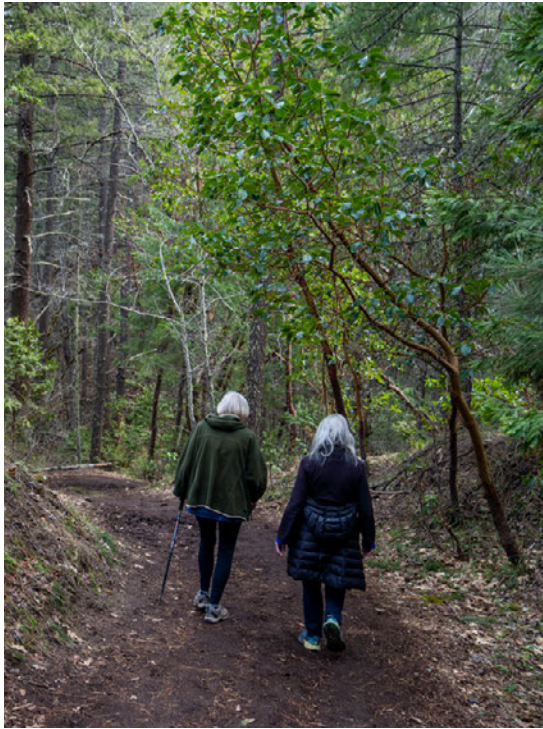
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If you are defining new desired conditions, review any relevant background information such as an area's purpose and applicable legislation, agency policies, and other management directions (element 1, step 2). The project area likely will have a unique purpose or special value already identified. Also, consider how much public involvement is needed for defining new desired conditions. These steps will help in drafting new desired conditions statements, as will the remainder of this chapter.

## PATHS 2 AND 3: WORKING FROM EXISTING DECISIONS OR GUIDANCE

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For project areas with desired conditions in previous planning or guidance documents, it is important that the project team review them, ensure good



*Visitors travel a wide dirt path through a forested area.*

understanding of their intent, and evaluate their value for the current project. Many existing desired conditions will be useful for the current project and can be leveraged for future planning. To the extent possible, it is best to use existing desired conditions and build on them as needed.

If the team determines that existing desired conditions represent what they are trying to achieve in an area and are sufficient to guide future management, then they should be used for the project. It is important to ensure that the project team is familiar with existing desired conditions, as they are critical to many steps in the VUM framework.

There are also key differences for desired conditions for a programmatic plan compared to a project. For example, if the project involves revising a forest

plan, then the existing desired conditions likely will be changed or revised. If the project is more site-specific, it may require a team discussion on what the team hopes to achieve for the specific area. These refined desired conditions likely will be documented in the project record or plan itself, and will complement (not alter) the existing broader desired conditions unless the site-specific desired conditions are significantly inconsistent with broader-level desired conditions. It may be necessary to make changes or improvements to address current issues, concerns, opportunities, inconsistencies in previous planning or guidance, and changes in management direction. The amount and type of changes will determine if a plan amendment or other compliance with other requirements is needed.

Adjustments to desired conditions may also be necessary if there have been major changes to the landscape, resource conditions, or area designation or policy changes, such as due to natural disasters, a newly listed species, increased visitor-related impacts, and significant changes in visitation or uses. Further awareness of social, cultural, and broader environmental change also could result in the need for internal and external discussions to refine desired conditions.

The project team should not change established desired conditions simply because they are not currently being achieved (see the section below titled Reasons to Change Desired Conditions). The amount of time and investment needed to update or refine existing desired conditions will vary by project. Again, consider the sliding scale of analysis and consider how much public involvement is needed for revising existing desired conditions.

Adjustments may include a variety of things, such as clarifying concepts and terminology, addressing differences in seasons (such as differences between summer and winter desired conditions), or adding details to reflect the current body of knowledge on a resource condition to be consistent with the latest scientific information and land management methods (for example, a change in acceptable conditions related to perceptions of crowding). The project team may also decide to add desired conditions for resources that may not have been defined for the project area in previous planning (for example, soundscape or night-sky quality) or that need additional emphasis. The intent is to ensure that desired conditions reflect those resources and values that are important to the project area and that guide future management strategies and actions. If it is determined that existing desired conditions need to be revisited, updated, further defined, or strengthened to better reflect what managers are trying to achieve in an area, the rest of this chapter supports this process.



*A tranquil lakeside provides a restful camping spot.*

## USE THE SLIDING SCALE TO DETERMINE SPECIFICITY AND COMPLEXITY OF DESIRED CONDITIONS STATEMENTS

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As noted in the framework and introduction of this guidebook, the sliding scale of analysis affects the process of defining desired conditions. Regardless of where the project falls on the sliding scale of analysis, there should be some level of investment of time, money, and effort on defining desired conditions, since they are at the heart of the framework and inform all subsequent steps, decisions, and implementation efforts.

The sliding scale of analysis focuses on four criteria:

1. Level of uncertainty about the issue
2. Resource and visitor experience risk impact levels
3. stakeholder involvement levels
4. Level of controversy or potential for litigation

Each of these criteria should be considered when defining desired conditions. See [appendix C](#) of the framework or the [IVUMC website for a blank decision-support tool \(https://visitorusemanagement.nps.gov/Content/documents/TableC1\\_Blank\\_Decision\\_support\\_Tool\\_2020-0710\\_508v2.pdf\)](https://visitorusemanagement.nps.gov/Content/documents/TableC1_Blank_Decision_support_Tool_2020-0710_508v2.pdf) to help your team determine where your project lands on the sliding scale of analysis. For relatively simple situations or for small geographic areas, a single desired conditions description may be enough to guide visitor use management. In contrast, highly complex or controversial situations may need multiple desired conditions that address multiple resource or visitor opportunity considerations. Following are considerations for using sliding scale criteria to inform defining desired conditions, along with related questions to ask.

- **Issue uncertainty**

- » Are we reasonably confident that we know enough about the area to determine what is important to maintain or achieve in the future?
- » Do additional subject area experts need to be involved?
- » Are more data and information needed on resources present in the area and their condition?

- **Risk of impacts**

- » Are there significant threats to the resource conditions and visitor experiences that should be considered during the process of defining desired conditions?
- » Could any changes to use or resources, including those related to climate change, hinder the process of achieving desired conditions or pose significant threats to resource conditions and visitor experiences? (In areas that are more susceptible to visitor impacts where there may be features of interest or threatened or endangered species, relevant research may be integrated into the desired conditions statement.)



- **Stakeholder involvement**

- » How much interest from various groups, communities, and Tribal Nations is anticipated in defining desired conditions?
- » Who systematically has been excluded from these conversations and why were they excluded? (Consider ways to engage with interested groups and communities, particularly those that have been excluded previously.)

- **Level of controversy/potential for litigation**

- » Is the process of defining desired conditions for the area likely to be controversial to the point of potentially being litigated?

**Figure 3. Hypothetical example of the sliding scale of analysis**

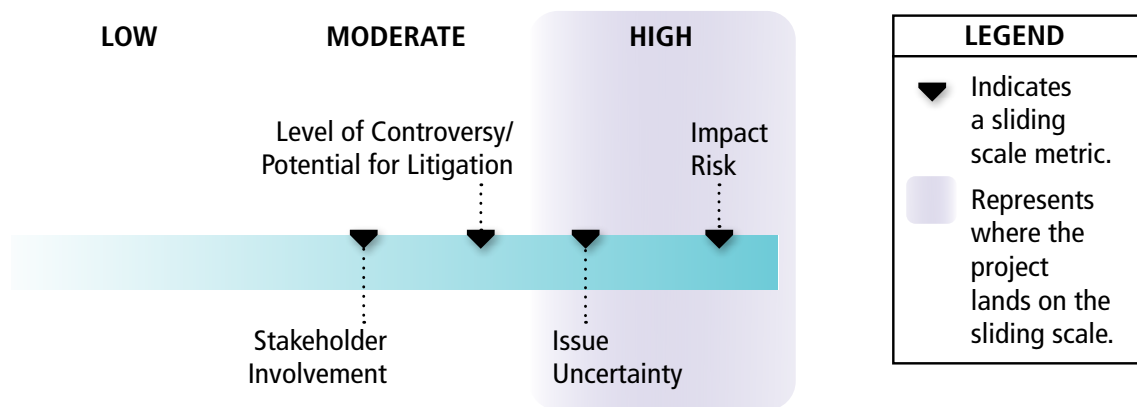


Figure 3 shows a hypothetical example of the sliding scale of analysis. In this example, the project team identifies the impact risk and issue uncertainty as high; the controversy level is moderate to high; and stakeholder involvement is moderate. This example suggests that the project is complex and that it requires substantial resources to achieve desired conditions. There should be ample communication with interested groups and communities and the project team should consider including significant detail in desired conditions statements.

Another consideration when using the sliding scale is public involvement in the planning process specifically related to defining desired conditions. Public involvement is encouraged in defining desired conditions (see the section below titled [Incorporating Values, Beliefs, and Preferences into Desired Conditions Goals](#)). However, in certain situations, such as tight planning timelines or proceeding with existing desired conditions, public involvement may be more limited. The public engagement process of the overall planning effort may also be affected by NEPA requirements.

## DETERMINE IF DESIRED CONDITIONS ARE NEEDED FOR DIFFERENT AREAS/ZONES

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Desired conditions may vary across a unit landscape depending on resource types and desired visitor experiences. A project area (which also can be considered as a recreation area or as a resource management area) typically will be divided into management areas, zones, or other geographic, topographic, or temporal areas that delineate management differences. Each of these areas should include a description of distinct desired conditions that may be arranged along a continuum or spectrum of visitor opportunities, resource conditions, and realistic levels of management and infrastructure to be provided.

A spectrum of areas is developed within the bounds of the area's fundamental purpose, such as different zones that address the requirement to preserve wilderness character or to protect and enhance ORVs in a wild and scenic river corridor.

While defining desired conditions for different areas can make implementation more complex, an advantage is that managers can offer a spectrum of opportunities to meet the needs of diverse public interests (Haas et al. 1987; Wagar 1964; Outdoor Recreation Resources Review Commission 1962). It allows for full consideration and accommodation of a range of opportunities and related activities that support diverse visitor interests and preferences. There may also be opportunities to recognize areas that can be protected for indigenous use, and it allows for more targeted direction for resource protection for specific areas. Similarly, the types of facilities and services needed to support diverse opportunities and activities can be identified clearly with consideration of the area's specific resource vulnerabilities and visitors' skill levels required to ensure resource protection and to support visitor's safety. Also, area-specific desired conditions allow meaningful guidance on appropriate use types and levels and how that use generally may be managed, including informing identification of visitor capacities where needed.

Desired conditions that often are described in visitor-use-related plans and that may be most helpful for informing identification of visitor capacity where needed include expectations for encountering other visitors, required skill levels for navigating an area, emphasis on contemplative experiences versus more social and interactive experiences, and the degree of structure and support for visitation via facilities and services. The clearer and more tailored that desired conditions statements are for an area, the more meaningful the guidance will be for informing all aspects of providing for and managing use, including identification and implementation of visitor capacity.

When considering this step of defining desired conditions by area for a new project, there may be two situations:

1. Zoning may already exist for an area and need to be updated, or
2. The project is in an area that has not been zoned and, therefore, area-specific desired conditions do not exist and may need to be drafted.

### Area is Already Zoned

When a project is initiated, previous planning direction, including desired conditions, should be reviewed for useful guidance on the project and where revision is needed. Current information may prompt updates or clarifications in zone descriptions.



*A visitor paddleboarding on a beautiful day.*

Sometimes these updates may take the form of minor adjustments in desired conditions descriptions in an existing zone. Other times the zone that is applied to the area may need to be changed. When working on a project that may be more site-specific and intended to build on previously defined desired conditions, it may be appropriate

to add additional detail to the guidance that is consistent with the existing zone description. Depending on the agency's planning framework, it may be appropriate to refer to them as refined desired conditions or as desired conditions that build on existing desired conditions.

### Area Has Not Been Zoned

As noted, zoning stems from the reality that not all areas have the same ecological sensitivity (some places require more protection than others), not all areas have the same cultural significance or historical value, not all areas have the same attractiveness, and people are not all seeking the same opportunities (thus, providing diverse settings offers more choices). The key is to develop a zoning scheme that recognizes the desired diversity across the landscape while avoiding zoning that is more complex than can be realistically managed on the ground. (See the IVUMC framework for additional information or Clark and Stankey 1979, and Nash 1973, for Recreation Opportunity Spectrum resources).

## Zoning considerations:

- Each area should be included in only one zone because no area can be managed more than one way at a time. However, if the team decides that an area should be managed differently in different seasons, the area could be placed in different seasonal zones.
- There is no minimum area a zone can cover; however, in general, separate zones for tiny portions of a unit or for a single feature should not be created (although there may be exceptions, such as specific areas of coral reefs in a national marine sanctuary). Doing so can create a complex management scenario that is too hard to implement. It may also raise concerns related to revealing the location of sensitive cultural or ecological resources. Rather, a team is encouraged to apply zones that are consistent with the management needs of the smaller area or that have specific desired conditions for a small area identified within the larger zone.

Zone types and concepts such as recreation setting characteristics, or the setting from the Recreation Opportunity Spectrum, can provide a robust starting point for defining desired conditions. If the project area includes multiple zones, consider walking through the topics provided in [appendix A](#). It is most helpful to do this for each zone in determining how those conditions for those topics might differ between zones. Desired conditions statements can help define how zones differ in terms of resource conditions, visitor experiences, and appropriate facilities and services.

Furthermore, access modes such as shuttles, roadways, and multimodal access may vary in the project area. Consider the desired visitor experience for those transportation systems and how the desired conditions of transportation systems may interact with other experiences and resources. Other factors to consider include safety (engineering, enforcement, and emergency response), infrastructure (how much, what kind, and in which locations), signage and navigation, and operations



*Groups of two in kayaks paddle through a forested area.*



(entry, level of service, parking turnover, and transit). Depending on project area size, it may be appropriate to draft a zoning scheme before drafting desired conditions statements. Table 3 shows an example of zoning a hypothetical area.

**Table 3: Desired conditions statements by zone for a hypothetical area**

| DESIRED CONDITIONS TOPIC | BACKCOUNTRY   | DEVELOPED   | MOTORIZED SIGHTSEEING  |
|--------------------------|---|---|--|
| Visitor experience       | Visitors have opportunities for primitive recreation such as backpacking with some solitude; adventure; self-discovery; and self-directed learning. | Visitors have access to amenities and services available to welcome and orient them to the area and support day-use activities.<br>Visitors have formal, structured, educational opportunities. | Visitors have opportunities to enjoy a slow, safe, relaxing, meandering tour route for vehicles and bicycles. There are opportunities to stop along the route for sightseeing, wildlife viewing, picnicking, and interpretive opportunities. |

## REASONS TO CHANGE DESIRED CONDITIONS

It is often important to consider if desired conditions are no longer serving a public land unit and if they should therefore be changed. Desired conditions statements are meant to last, so they should not be changed casually or simply because they are not being met; rather, changes should be accompanied by solid justification and documentation. This allows flexibility over time. Reasons to change desired conditions statements include:

- monitoring or new science
- changes in visitor use, experience, or values
- desired conditions are inadequate for guiding management
- desired conditions are inconsistent with previous planning, direction, or legislation
- unexpected or dynamic incidents occur

### Monitoring or New Science (Monitoring Data, New Scientific Research, New Perspectives)

Monitoring resources to evaluate whether desired conditions are being met or if conditions are changing is an important part of VUM. Monitoring data and outcomes could provide new information or understanding about resources that would require updating desired conditions statements. For example, discovery of a new species or a new cultural site could affect goals and management actions. Relatedly, increased awareness and new science continue to expand our understanding of natural and cultural resources as well as visitor motivations, preferences, and behaviors. New climate change modeling, for example, could change our understanding of the fragility of natural resources and necessitate changes to desired conditions statements. Such studies may provide new information on desirable resource conditions.

## Changes in Visitor Use, Experience, and Values

Changing desired conditions statements based on changes in visitor use or experience should be approached with caution and consideration, but updates may be warranted. Awareness of new trends related to user groups (such as different age or income groups, or more families visiting), use types (for example, more water-based activities such as standup paddleboarding), or changes in policy or access (such as the use of e-bikes on unit roads) that ultimately change types of use, access or accommodations, and experiences for which the area is being managed would likely require updated desired conditions statements. User preferences are important and should inform desired conditions statements when appropriate. Desired conditions statements that reflect user preferences and available opportunities will better guide management actions than desired conditions that do not.

Managers should provide opportunities for all users who wish to use the area, to the extent feasible and appropriate. It is possible that previous desired conditions were defined too narrowly, excluding certain groups of people or types of uses. Updating desired conditions statements can ensure that these groups and uses are considered in the decision-making process. Also, if desired conditions statements lack a shared vision of the interested groups and communities that an area serves, management should reach out to these groups and get input.

## Desired Conditions are Inadequate for Guiding Management

Sometimes desired conditions statements are not clear or may not be specific enough to guide management actions. If this occurs, it can be difficult for managers and the public to understand goals. For example, desired conditions statements may focus on how the agency plans to achieve the condition rather than on what it is trying to achieve. Desired conditions statements may also be too vague to guide management (for example, "Visitors have a great time!"). Such statements should be reassessed by engaging the public (depending on where the project area falls on the sliding scale of analysis) and discussing how to make statements more meaningful to guide management. Changes should be reflected in planning documents. If existing desired conditions statements do not address all resources in the area or do not address important aspects of goals for management, new desired conditions statements are appropriate.

## Desired Conditions are Inconsistent Previous Planning, Direction, or Legislation

If desired conditions are inconsistent with previous planning, direction, or legislation for an area, they need to be changed to better align with existing information, or it should be noted why they differ and which one supersedes the other. New legislation that affects the area would likewise require updates to desired conditions to ensure consistency.

## Unexpected or Dynamic Incidents Occur

Unexpected or dynamic situations may affect management of an area and require revisions to desired conditions statements. These situations include wildfires, floods, pandemics, hurricanes, oil spills, rockfalls, downed tree hazards, naturally occurring ecological changes, and other unexpected or dynamic events. When such events occur, new guidance may be needed rapidly and managers may conduct a rapid assessment to quickly determine how best to manage visitor use, even if it requires reframing desired conditions. This may be as simple as reviewing desired conditions



*A firefighter observes a forest fire.*

with a project team, verifying that desired conditions statements are still valid, or incorporating minor updates. In other cases, changes may be less dynamic, but responses may be more measured and comprehensive.

For example, consider desired conditions for a popular glacier-

viewing area. As temperatures rise due to climate change and the glacier recedes, desired conditions statements that previously described opportunities to touch glacial ice may be revised to describe opportunities to see glacial ice or to learn about past glaciation and landscape impacts. Changes to desired conditions could occur gradually as resources change. Conversely, changing conditions due to dynamic events such as a fire, flood, or a pandemic may require rapid temporary adjustments.

Before adjusting desired conditions statements, critically analyze the following questions with the project team:

Do we need to manage to existing desired conditions statements by adjusting current management strategies (such as exploring other education, engineering, or enforcement strategies)? Or do desired conditions statements need to be updated, and if so, for a short time or permanently?

## Considerations When Changing Desired Conditions Statements

Before adjusting desired conditions statements, strive to identify the issue's probable cause. If monitoring indicates insufficient progress toward desired conditions, this alone is an inadequate reason to change desired conditions statements. Often, with different management actions, desired conditions can still be met. Managers must be ready to employ different strategies and actions (via the three e's: educating, engineering, and enforcing) to achieve desired conditions. Often, it helps to outline potential management options to achieve desired conditions. Therefore, if one management action has limited success, an alternative already has been thought through by the project team (see chapter 3, element 3, of the IVUMC framework for additional information on how to identify management strategies).

Determine the level of action required to strengthen or improve desired conditions based on where the project falls on the sliding scale of analysis. For example, is additional public, interested groups and communities engagement needed? If there have been extensive changes to resource conditions or visitor experience, this may be essential. Also, consider if current or future desired conditions are being influenced by broader processes such as climate change. If so, make sure to consider the implications and include the proper experts. Finally, consider other resources and monitoring efforts and consult other federal, state, or local land managers to ensure that nothing is being overlooked.



*A paddle boarder and her dog enjoy time on water.*



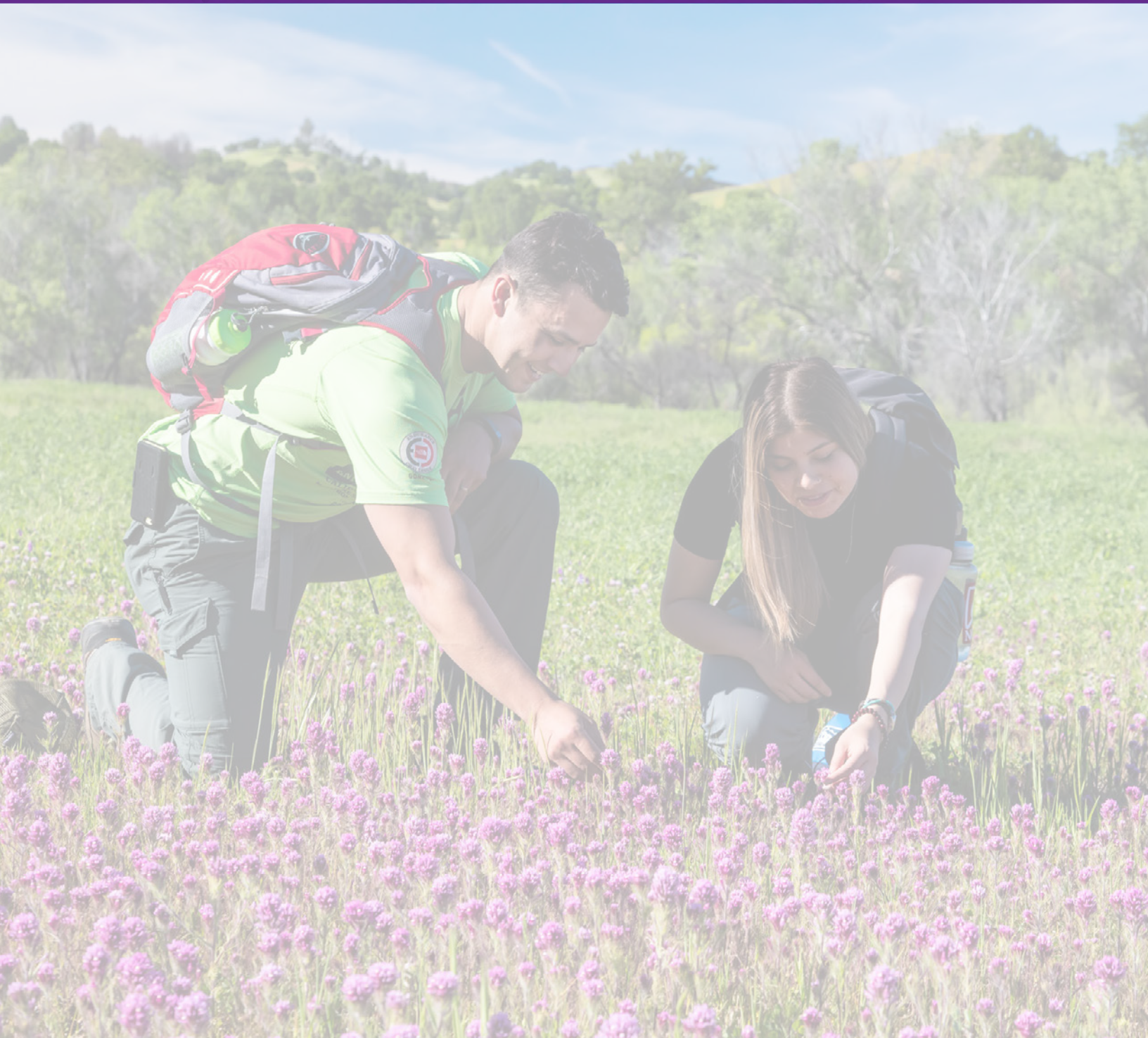
**Table 4: Examples of weak versus strong desired conditions statements**

| WEAK DESIRED CONDITIONS STATEMENT  | WHY IT'S WEAK    | STRONG DESIRED CONDITIONS STATEMENT  |
|--|------------------|--|
| Visitors experience interpretation of the historic site via guided orientation from park staff, volunteers, or commercial use partners.  | Focused on "how" | Visitors can access and connect with the area's rich Native American heritage, with opportunities to view intact pueblos, potsherds scattered across the landscape, wall art, herds of pronghorn traversing the area, the painted desert, and unobstructed views of the peaks.   |
| Vegetation management strategies such as manual pulling and chemical sprays control exotic species, protect native habitats and wildlife, and maintain the cultural landscape. | Focused on "how" | Mountain goats continue to roam the high country while native cutthroat trout thrive in the area's rivers, streams, and lakes.   |
| Steep trail segments are eliminated by improved grades and alignments to decrease erosion, improve sustainability, and provide a pleasant hiking experience.                   | Focused on "how" | Trails are sustainably built from renewable resources, with slopes that support drainage and do not contribute to erosion. Trails provide access for emergency vehicles and operational needs. Visitors can view the rugged limestone canyons from overlooks and trails.   |
| Remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded.  | Vague            | Visitors experience a sense of being immersed in a natural landscape punctuated by rocky ridges, canyons, fins, towers, monoliths, pinnacles, and more than 2,000 arches. Use of this area requires a relatively long time commitment and a high level of physical exertion. The environment offers a moderate to high degree of challenge and adventure. Opportunities for independence, closeness to nature, tranquility, and the application of outdoor skills are moderate to high. The probability of encountering other visitors and staff is low. |

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# Using Desired Conditions to Identify Visitor Activities, Facilities, and Services

# 5



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# Chapter 5: Drafting Desired Conditions Incorporating Values, Beliefs, and Preferences In Desired Conditions

## INCORPORATING VALUES, BELIEFS, AND PREFERENCES IN DESIRED CONDITIONS

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Understanding the underlying values, beliefs, and preferences for an area and its resources (such as cultural significance, scenery, and experience) is essential to crafting compelling and meaningful desired conditions statements.

### Engagement with Partners, Interested Groups, Communities, and the Public

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Understanding values, beliefs, and preferences is best accomplished in the context of a long-term relationship rather than in a discrete or short-term “engagement” period. Relationship-building is at the core of shared visioning and goes beyond public participation for specific events and projects. Therefore, relationship-building should occur prior to engagement for defining desired conditions. It is also important to allow ample time for relationship-building with Tribal Nations, interested groups, communities, partners, and the public.

It is important to include the public in early stages of defining desired conditions.

Several resources provide guidance for reaching out, communicating, and developing relationships with interested groups and communities. For example, the North American Bird Conservation Initiative’s Field Guide to Developing Partnerships (2021) describes three key requirements to forming and maintaining relationships: building on common goals, identifying value to all partners, and developing trust. This guidebook and related IVUMC work on public engagement emphasize the importance of building and nurturing relationships when managing visitor use on federally managed lands and waters.

When the time comes to engage with interested groups and communities, including visitors, in defining desired conditions, the spectrum of public participation, developed by the [International Association for Public Participation \(IAP2, \[https://cdn.ymaws.com/www.iap2.org/resource/resmgr/Communications/A3\\\_P2\\\_Pillars\\\_brochure.pdf\]\(https://cdn.ymaws.com/www.iap2.org/resource/resmgr/Communications/A3\_P2\_Pillars\_brochure.pdf\)\)](https://cdn.ymaws.com/www.iap2.org/resource/resmgr/Communications/A3_P2_Pillars_brochure.pdf), can assist in understanding the roles that the public and others can play. These roles, from those having the least influence to the most influence on the decision, include informing, consulting, involving, collaborating, and empowering. The IAP2 spectrum of public participation defines empowering as: “To place final decision-making in the hands of the public.” This is not legally possible for a federal lands or waters management agency, but understanding what it means to empower the public can be useful in designing a robust public engagement process for defining desired conditions.

Utilizing roles that are higher on the impact scale builds relationships and creates a forum for discussion and learning about values, beliefs, and preferences. On the higher end of the scale, the public has more opportunities to provide input regarding their values, beliefs, and preferences, and



*A group of people visiting a US Forest Service site receive instructions.*

being part of the process requires much stronger relationships than simply informing them of the outcome. A key element of this engagement level is ensuring that no single form of knowledge takes precedence. This engagement level in defining desired conditions is distinct from traditional collaboration because it consciously engages all participants in understanding and sharing the process of defining desired conditions. Increasing the level of engagement and opportunities for input is an overall benefit to developing desired conditions by considering a fuller range of perspectives and values. It is important to also consider the guidelines in the Federal Advisory Committee Act; however, this Act should not be considered a barrier to public engagement.

The project team needs to consider an area's history of public engagement, the status of relationship-building among interested groups and communities, where the project lies on the sliding scale of analysis, and how engagement will proceed related to the defining desired conditions portion of the VUM process. It is important early on to understand and honestly assess all partnerships and relationships: future, current, past, and absent. A simple analysis of interested groups supports engagement planning that is strategic, intentional, and opportunistic.

Engagement during preparation of desired conditions statements should be as broad as is practical to fully understand an area's importance. Outreach should be intentional, documented as part of the planning process, and, if possible, reciprocal (with dialogue and feedback). Engagement also should include follow-ups to maintain relationships, with transactional approaches. Considerations for key interested groups and communities to engage include:



*Two people travel on horseback through prairie.*

- **Tribal Nations, Native, and Indigenous populations.** Engaging early and regularly with Tribal Nations, Native, and Indigenous populations is essential. Tribal input and support for desired conditions are valuable throughout the planning process to ensure support, understanding, and sensitivity to Tribal concerns, values, traditions, uses, and interests. Agencies also have government-to-government consultation requirements with Tribal Nations that may occur only between agency and tribal leaders.
- **Recreation users and visitors.** Consider behaviors, perceptions, and experiences of people enjoying a particular area as essential ingredients in element 2 of the framework: Define Visitor Use Management Direction (IVUMC 2016). Practitioners may need to take their engagement work into the field to reach users who care about an area's future but are unaware of the project or unwilling to attend a public meeting.
- **Non-visiting public.** Consider the needs and wants of potential future visitors. Think critically about communities and groups that could use the area and how to interest them in using it in the future.
- **Advocates and organizations.** Organized and motivated conservation and recreation advocates often come prepared to articulate underlying values that make a recreation destination special. Consider direct outreach to these groups and find time for dialogue. Beyond traditional conservation and recreation interest groups, these organizations can come from a broad community network that includes local and state tourism offices, chambers of commerce, and economic development organizations.
- **Local communities and neighbors.** VUM decisions can have a direct effect on local communities. Crafting desired conditions statements is a perfect opportunity to better understand and advance shared visions for the future. Existing community forums can help bring a project to a broader audience.

- **Service providers.** Guides, outfitters, concession operators, and others who provide visitor services can have unique and valuable on-the-ground perspectives. Connect with them to learn what is and is not working and where action may need to be directed. There are opportunities with service providers to provide additional connections for expanded access to new visitors.
- **Other land and water management agencies.** While boundaries between agency lands and waters sites often are defined clearly, migratory animals, plant communities, cultural landscapes, and visitors cross those boundaries regularly. It is important to build strong relationships and conduct regular consultation with neighboring or partner agencies to ensure common understanding and goals. While other agencies do not necessarily need to be involved directly in defining desired conditions, it is important to ensure that the statements are consistent with common goals.
- **Health organizations.** Local -interested groups and communities can contribute valuable insights as to how the project area can enhance community health and achieve community health goals. Potential interested groups and communities include healthcare providers; health departments; hospitals; mental health clinics; health insurance companies; social service agencies; homeless shelters; university health programs; police and emergency medical services; places of faith or worship; health nonprofits; environmental or social-centered organizations; and organizations that serve seniors, veterans, or people with disabilities. Youth groups, nearby universities and researchers, and many other groups can also be engaged to incorporate their concerns, values, and use preferences. Consider if compensation or other appropriate forms of appreciation for participation are possible and appropriate. Also, consider ways to reduce participation barriers such as by providing childcare, and scheduling a range of times to accommodate different work schedules.

## Methods for Understanding Values, Beliefs, and Preferences

Given the many preferences and constraints that can affect how people participate, project teams should use one or more techniques and methods—such as the “paint the picture” exercise described below—to help make an unfamiliar and technical-sounding process understandable, enjoyable, and efficient. These methods also should be accessible, such as by using “alt text” for images. [Appendix D](#) provides examples and detailed information on the types of methods that can be used for public engagement and to better understand values, beliefs, and preferences. The contributed paper found on the [Council’s webpage](#), “Embracing the Public Participation Process for Developing Desired Conditions: Building Relationships for Actionable Knowledge,” provides additional guidance on public participation (Armatas et al. 2023). Regardless of the methods used, the following questions can help in delving beyond the overall vision:





- What will be achieved when an issue identified in the project area is resolved or the action is implemented?
- What does success look like?
- What makes this area particularly special or distinctive compared with other areas?
- What changes could occur that would cause you or others to stop visiting this area?
- What changes could occur that would cause you or others to want to visit the area more?
- What facilities, trails, amenities, or visitor services would help provide a meaningful visitor experience?
- What activities or facilities could conflict with desired resource conditions and visitor experiences?
- What is most important about the way things are now that you want to see preserved or enhanced?
- What are outcomes that you would like to see benefit future visitors?
- What facilities, trails, amenities, or visitor services would make you feel more welcome and supported on your visit?
- What has worked well here?
- What could be improved?
- What new opportunities should be explored here?
- What changes to the area may planners and visitors anticipate in the next ten years?
- What values have changed in the past ten years?
- In what ways have public values or interests changed since the area was established?
- What may future generations value most about this area?
- How do you think climate change will affect this area?
- Who is not a part of this discussion and should be included?
- Who influences who to include in the discussion?

Consider where the project lies on the sliding scale of analysis when determining the method or technique for understanding values, beliefs, and preferences. On the low end of the scale, revisiting existing visitor survey data, public comment cards, or past public engagement from related planning processes may be adequate. On the high end, there may be opportunities for surveys, listening sessions, or a formal comment period. Also consider existing relationships and how they inform the position on the sliding scale of analysis. See [appendix D](#) for methods and techniques for understanding values, beliefs, and preferences.

Integrating the public in defining desired conditions via any of these methods is a great way to invite additional voices into the process. Be sure to check in with participating groups and share a summary of their collective input and how it informed the process so they can continue to participate beyond the desired conditions discussion. These methods can be used repeatedly throughout the project and combined with other community programming to gather input and provide engagement or learning opportunities. It is also worth considering long-term engagement methods such as leadership programs and community science projects to identify community representatives and to spur ongoing engagement on various project components.

## PAINT THE PICTURE AND BE CREATIVE: SEEK INSPIRATION FOR DESIRED CONDITIONS

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Defining desired conditions is an opportunity to be creative and intentional and to engage staff, interested groups and communities, including visitors, to paint a picture for an area's future. The more compelling and meaningful the desired conditions description, the easier it will be to identify and mobilize efforts to implement on-the-ground actions.

This section includes exercises and approaches to define desired conditions. These can be used with the interdisciplinary project team and the public. Also, consider gathering at the project area with interested groups and communities, including other agencies, to experience current conditions and describe desired conditions.

A first approach to creating desired conditions is to facilitate a brainstorming process. In particular, visioning-type exercises like the “paint the picture” exercise in the callout box, asking the project team or other interested groups and communities to write the “headlines” of the future or share a photo of their desired experience, or considering the sensory elements of a visit to a particular place can all yield creative desired conditions that paint a clear picture. See [appendix D](#) for more examples of creative methods to solicit desired conditions.

## EXERCISE

### PAINT-THE-PICTURE

Close your eyes and think about the project area: its natural resources, vegetation and animals, birds and bugs, sights and sounds. Think of any cultural resources, including the landscapes that may have supported inhabitants hundreds or thousands of years ago, and the stories and experiences of those people. Now imagine visitors in this place and the opportunities they will have: What could they see, hear, and smell? What could they learn and take with them when they leave? Think about the desired version of these opportunities and resources. This is what desired conditions statements should express.

Brainstorming questions may include:

- When you recommend this area to friends or family, what do you say about it?
- Why do you choose to visit this area instead of another place?
- What resources need improvement?
- What do you wish was different?
- In the future (for example, twelve, twenty, or fifty years from now),
  - » what do you hope this area will look like and feel like?
  - » what types of experience will you have?
  - » what key values will need to be protected?
  - » what are key experiences that should be present?
  - » what is special or meaningful about this place?
  - » what would be the one word that sums up your experience?

A second approach to developing desired conditions is to consider repurposing or revising language from the documents discussed in element 1, and adding detail, specificity, and creativity. Examples from other plans or areas also can be valuable resources to inspire ideas and visions for your project area. However, remember that while examples are valuable references, each area has unique resource conditions and experiences that should be highlighted and defined. Examples of desired conditions statements can be found in [appendix B](#).



*Mountains rise over the jungle below.*

Another useful approach when creating desired conditions is to consider what resource conditions may need to improve. For example, if invasive species are negatively affecting native animal or plant species, a desired condition may be an area where native species dominate. A vision

could include, “Native species [specify species if possible] flourish in the project area and in connected landscapes.” While this is not the current condition, it is what the project team and unit staff will work toward and is consistent with what the area can support. Another example is if the current trail system needs repair due to erosion of soil into streams and hazardous hiking conditions, the desired conditions statement may be, “The trail network facilitates safe visitor access and exploration of the project area while contributing to healthy, resilient riparian areas.” The desired conditions statement provides an overall understanding of what is trying to be achieved.

Lastly, giving consideration to the different phases of the visitor experience cycle (see figure 4) may be a useful way to approach desired conditions development. A unit may have various goals for each of these phases that can inform desired conditions development. An example is an island unit that requires a boat or seaplane to access. The visitor experience includes planning for and making a reservation with a ferry or seaplane commercial operator; the trip on the ferry or plane, which may include some interpretation and orientation; the arrival, where there will likely be further agency orientation and direction; the experience on the island, with activities, education, and interpretation; the departure on the ferry or plane and travel home; and finally, the recollections, experiences, and learning the visitors take with them and remember.



Following are descriptions of select phases of the visitor experience:

- **Pre-trip/travel planning.** Visitors have clear expectations and advanced understanding about what the trip may entail and are prepared for weather and related challenges, including the potential for seasickness and the need to pack appropriate clothing.
- **At the ferry (travel to the area).** The ferry ride is an enjoyable experience that provides information about the island's resources and values. Visitors understand the island's role in the larger landscape and the rich human history and cultural resources that are integral to the area's mission.
- **Onsite (in-area) opportunities and experience.** Visitors have diverse opportunities for safe, convenient, and sustainable access to the area's resources and experiences, including a variety of tours that enhance their experience. Visitors maximize their time onsite and find opportunities to fulfill their experiences. Their experiences can include programmed and unprogrammed time.
- **Return travel and post-trip memories (departure and recollection).** Return travel offers opportunities and environments that allow visitors to relax and reflect on their experiences in a variety of ways. Examples include quiet spaces for reflection and social spaces for storytelling.

Considering these phases will help the project team consider the entire visitor experience from start to finish. This should help develop robust desired conditions that will guide project planning processes. It may be appropriate to merge phases to describe overall visitor experiences.

**Figure 4. Visitor experience cycle**

Source: NPS Public Use Statistics Office; Clawson, M., & Knetsch, J. (1966). Economics of Outdoor Recreation. Baltimore, Maryland. Johns Hopkins University Press



The different approaches to developing desired conditions are likely to yield partial phrases that describe key opportunities, experiences, and conditions that can inform desired conditions statements. The following phrases are a good representation of what you might expect from a visioning brainstorming session such as the “paint the picture” exercise, considering previous plans, or considering different elements of the visitor experience cycle.

- uninterrupted views of mountains and desert
- the smell of pinyon pines
- a flourishing aspen colony
- diverse, healthy wetlands
- a sense of remoteness
- a sense of togetherness and social experiences and places to gather with a group
- sounds of wildlife in the evening
- undisturbed ethnographic and archaeological artifacts scattered throughout the landscape
- battlefield reenactments and interpretation
- trails connect with local communities, provide access, and promote a healthy lifestyle
- opportunities to be immersed in a clean, natural environment
- facilities can be accessed on foot from my community
- public transit accesses the site
- recreation information is provided in multiple languages
- opportunities to find solitude in nature
- The area accommodates concentrated use and highly social conditions
- opportunities to be with family and friends for the day and/or overnight
- surrounded by an undeveloped landscape
- opportunities for family recreation on the river
- intact habitat for endangered species
- trails and roads are safe and well-designed
- connected, multimodal paths and trail networks
- a high level of facilities and services that support a wide range of accessibility needs and group activities
- a space to heal, rejuvenate, reduce stress, gain mental wellbeing and physical strength
- opportunities to get exercise or maintain physical fitness
- opportunities for spontaneous and relatively unstructured recreation
- recreation features are accessible to visitors with different ability levels
- cultural and historic interpretation is broader than Native American and settler narratives
- Visitors should expect to encounter others during their visit

After the project team has gone through the exercises and considerations and established key words and phrases, it is often necessary to build a structure to organize these loose ideas into fully developed desired conditions statements. For example, after working through the “paint the picture” exercise, a project team may have a list of desired conditions phrases that includes:

- the smell of pinyon pines
- trails and community connections
- Native American and settler narratives
- sounds of wildlife in the evening
- highly social conditions
- accessible

This project team may find it helpful to make a table to organize these ideas:

### Desired Conditions

**Figure 5. Example Desired Conditions**

| ATTRIBUTE                             | DESIRED CONDITIONS  |
|---------------------------------------|---|
| Visitor experiences and opportunities | Visitors should expect concentrated use and highly social conditions.<br>Visitors should be able to relax and enjoy the smell of pinyon pines in the area.  |
| Resource conditions                   | Cultural and historic interpretation incorporates a range of perspectives, highlighting contemporary Native American, historic settler, and other narratives to tell a cohesive story.<br>The sounds of wildlife, including birds and reptiles, can be clearly heard every evening. |
| Facilities and services               | Recreation features including trails, pathways, and boat launches are accessible to visitors with different ability levels.<br>Trails connect with local communities, provide access to all, and promote a healthy lifestyle for local and non-local visitors alike.                |

A table like the one above can be tailored to the project’s needs. Additional rows could be added to include specific attributes described in [appendix A](#). Additional columns could be added to provide desired conditions for different areas or zones of the unit. Using a table like this provides structure, ensures that desired conditions statements for each area cover all the attributes that need to be included, and allows for easy comparison between different areas, if applicable.

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# Common Pitfalls When Drafting Desired Conditions Statements

# 6



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# Chapter 6: Common Pitfalls When Drafting Desired Conditions Statements

This chapter discusses common pitfalls when defining desired conditions and some ways to address them.

## TOO MUCH OF THE *HOW* AND NOT THE *WHAT*

One of the most common mistakes in desired conditions statements is to focus on how to achieve something (in other words, the management action) rather than what to achieve in the area (in other words, how it looks and feels; see table 4 in the previous chapter for examples). For example, noting that vegetation management will be used to maintain native vegetation and deter invasive species would be the how of managing the area to support the desired conditions. This desired conditions statement should instead focus more on the what, such as



*A visitor walks through a muskeg and under a rainbow while berry picking.*

“healthy native plant populations are predominant in the area” as the desired condition, and the management actions for how to achieve those conditions would be defined more specifically in other planning components, such as strategies, objectives, and standards. Focusing on what we are trying to achieve ensures that many future management actions could be used to achieve and maintain desired conditions. Focusing on how the desired conditions will be achieved by listing specific actions may narrow the approach future managers could take.

This may need to be evaluated repeatedly throughout the process. Ask yourself, “Is this really what we are managing for or is it how we will manage?” If you find that your desired conditions statements are too focused on the how, the project team can adjust the

language to better describe desired outcomes. For example, if your statement is, “Rangers patrol the area regularly to evaluate cleanliness and security of facilities,” think about the goal of such an action and build your desired conditions statements around it: “Facilities are clean and operational, providing visitors with the services they need.” Consider reframing or using the brainstorming questions from the [“paint the picture”](#) section of this chapter to adjust the statement.



## NOT ENOUGH DETAIL TO GUIDE NEXT STEPS AND FUTURE MANAGEMENT

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Desired conditions statements also can take the appearance of a string of adjectives to describe the future conditions of an area. This approach may provide insufficient guidance for future management. For example, the word “scenic” does not necessarily describe area goals and may be interpreted differently by various project teams. In these instances, dig deeper to better describe conditions so as to provide the detail and guidance needed for future management decisions and actions. For example, instead of “scenic,” include language that describes what is seen, such as, “sweeping vistas of the White Cliff mountains and intimate views of pinyon pine forests and the Crater River dominate the scenery.” If you struggle with descriptions, use the questions in the [“paint the picture”](#) section or [Incorporating Values, Beliefs, and Preferences Into Desired Conditions](#). Also, remember that desired conditions must be described in terms that are specific enough to measure progress toward their achievement.

## HAVING INADEQUATE REPRESENTATION

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For defining desired conditions, remember to include diverse expertise, experience, perspectives, and backgrounds. Consider whose input and expertise would be useful in defining desired conditions. Gaps in a project team’s composition can lead to omissions. For example, a team that lacks ecological or biological expertise may have weak desired conditions for vegetation and wildlife. If you are leveraging or updating existing desired conditions, consider who may have been consulted when they were defined. For example, a team lacking ADA expertise may have weak desired conditions for access information or opportunities in parking areas or at trailheads. See the sections [Review Foundational Information](#) and [Incorporating Values, Beliefs, and Preferences to Inform Desired conditions Goals](#) to ensure that desired conditions statements reflect tribal values and diverse perspectives.

## LACK OF A SHARED VISION

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With inadequate representation, desired conditions statements sometimes reflect the beliefs of only a few people on the project team. To develop a shared vision, the views of Tribal Nations and other interested groups, communities, partners, and the public, should be incorporated. This may be done by bringing Tribal Nations and community members together in a neutral setting to talk about the project, issues, and possible solutions. These facilitated conversations encourage people to hear others’ perspectives, challenge their own assumptions, and understand different viewpoints. This exchange can have a leveling effect where all parties hear directly from each other rather than just from the land management agency. If communications with interested groups and communities (such as focus groups, meeting notes, and public comments) indicate that some groups or voices have been excluded, then desired conditions statements should be reassessed and efforts should be made to include those interested groups and communities in subsequent discussions, while recognizing that it may not be possible to accommodate all visions.





*People watch and rest alongside a river while others scout the whitewater opportunities.*

## LIMITED PAST PLANNING

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The project area planning background also may affect the strength and comprehensiveness of desired conditions statements. After completing step 2 of the VUM framework (“review the area’s purpose and applicable legislation, agency policies, and other management direction”), there may be limited information or limited direction for what past plans envisioned for the future. For example, if the project is for a wilderness area with extensive planning and regulation, it will likely already have strong, descriptive desired conditions statements. However, if there are areas not within legislative boundaries or ones that lack previous planning direction, there may be insufficient guidance for future management in those areas. If this is the case, remember that most areas have at least one unique and differentiating purpose or special value that can be highlighted (IVUMC 2016, p. 24). For projects with minimal past planning or documentation, follow path 1 and define new desired conditions.

## LANGUAGE FROM PREVIOUS DOCUMENTS IS REPEATED

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It is important to weave relevant planning or legislation into desired conditions statements and not simply repeat them. For example, the enabling legislation for an area could say, “Preserve extraordinary examples of wind erosion in the shapes of gigantic arches, natural bridges, windows, spires, balanced rocks, and other unique wind-worn sandstone formations, the preservation of which is desirable because of their educational and scenic value.” Incorporating this information in a desired conditions statement could relate to visitors having opportunities to experience quiet and solitude in the remote, natural landscape and the extraordinary geology created by eons of wind erosion. Again, the intent of desired conditions statements is to clearly state the conditions you are trying to achieve. Using previous planning or legislation to inspire and start those conversations is a great method, but probing more deeply and including more current information is also important.

## LACK OF DETAIL ON TRANSPORTATION AND FACILITIES

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Another common pitfall is excluding project area transportation and other infrastructure elements. As noted, being comprehensive in defining desired conditions and including all relevant resources and elements in the project scope and area are important for future management. This also helps ensure that desired conditions statements are grounded in financial and operational realities. Further, as also noted, it is important to consider project scale and scope to guide an appropriate level of detail on desired conditions for transportation and facilities. Project area resources can be interrelated, and neglecting to incorporate relevant aspects can lead to incomplete desired conditions and eventual challenges for decision-makers. As noted in the [paint the picture](#) section, consider the full visitor experience cycle on- and off-site, and all resources with which visitors will come into contact. For many visitors, especially in frontcountry areas, this means roadways or transportation systems, trails, restrooms, visitor centers, trails, and other facilities.

## DESIRED CONDITIONS STATEMENTS ARE UNABLE TO STAND ALONE

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Desired conditions statements should be able to stand alone. Desired conditions statements typically are embedded in planning processes, but not always. For example, a project may warrant focusing on desired conditions for a specific area or resource type. Because individual desired conditions may be referred to separately from the suite of initially defined desired conditions, it is important that each desired conditions statement can stand alone and minimally rely on comparisons to other statements to convey its meaning. For example, imagine that three different areas for a comprehensive management plan—areas A, B, and C—each has specific desired conditions statements for natural resources. If area C's desired conditions statement uses comparative language (for example, "Area C may have more human disturbances to vegetation than area B"), and if area B details are removed, the meaning becomes unclear. Phrasing each desired conditions statement so that it can be clearly understood without reference to other statements will allow statements to be used more easily in other planning contexts. Ideally, someone with minimal knowledge of an area or resource should be able to look at a desired conditions statement and understand that place's or resource's vision.

## RUBBER-STAMPING CURRENT CONDITIONS

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When assessing current conditions to help define desired conditions, it can be tempting to label existing conditions as desired conditions. It can be challenging for a team to imagine that any strategy could achieve a desired condition, so they may make the current conditions and desired conditions statements identical. To avoid this, current conditions statements that describe "what is" should be used as a jumping-off point to describe "what could be."

## DESIRED CONDITIONS STATEMENTS LOOK TOO MUCH LIKE SMART GOALS

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The process of defining desired conditions statements can be confused with goal-setting. Goals often are developed based on principles that state that goals should be specific, measurable, attainable, relevant, and time-bound (SMART) (Poister 2003 and Drucker 1954). The framework and the council's monitoring guidebook suggest using SMART principles when developing objectives for an indicator (See VUM framework page 39 and monitoring guidebook page 32). While desired conditions statements have similarities to SMART goals, mainly that they focus on the future, there are also key distinctions.

One such difference is in terms of specificity. Unlike SMART goals, desired conditions can be broad and need not be overly specific, especially at the low end of the sliding scale of analysis. In terms of measurability, SMART principles suggest quantitative goals while desired conditions statements are typically qualitative and describe an area's desired look, feel, sound, and function. While SMART goals are timebound, desired conditions statements describe the aspiration of what will be achieved, with a more long-term focus. Both should be relevant, which in the case of desired conditions means having a close connection to the area's purpose, context, and values.

When thinking about the distinction between SMART goals and desired conditions statements, remember that desired conditions statements set the overarching vision for an area. Indicators translate those desired conditions into measurable attributes. Objectives for measurable indicators reflect SMART principles and inform the positive direction that should be achieved in relationship to the indicator.



*Basketball players enjoy the urban court.*

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# Using Desired Conditions to Identify Visitor Activities, Facilities, and Services

# 7



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# Chapter 7: Using Desired Conditions to Identify Visitor Activities, Facilities, and Services

After desired conditions are defined for a project area, the next step involves defining specific activities, facilities, and services that are consistent with desired conditions (element 2, step 6). The process of identifying visitor activities, facilities, and services is intertwined with desired conditions and is a key component for planners and area managers to identify what they are trying to achieve.

For instance, imagine managing a national wildlife refuge that includes designated wilderness. When evaluating potential visitor activities, facilities, and services for the project area, you would likely consult the Wilderness Act, review previous planning and direction, and consider current wilderness policies. This information was likely reviewed and informed by element 1, step 3: “assess and summarize existing information and current conditions” and element 2, step 5: “define desired conditions for the project area.” During the planning effort, the interdisciplinary project team might consider removing a bathroom with running water because it is inconsistent with desired wilderness conditions for visitors to experience solitude, self-reliance, and immersion in a natural setting.

While the VUM framework includes the word “appropriate” to describe activities, facilities, and services, the terminology and application of this word vary across council agencies due to different laws and policies. Please refer to your agency’s laws and policies for guidance on use of the word “appropriate.” In addition, “appropriate” may be defined differently depending on your role, your background, and your agency. Therefore, the term “appropriate” is not used further in this chapter, which updates step 6 of the framework.

The term “appropriate” is defined and used differently by different agencies, sometimes with legal implications. In the context of desired conditions, there is an art to identifying the activities, facilities, and services that will help to achieve or maintain desired conditions.

Key terms for this step include:

- **Activities.** Activities include actions that an individual may participate in alone or with others and that may provide recreational, educational, mental, spiritual, or physical stimulus to participants. Examples include walking, picnicking, rock climbing, off-highway vehicle-riding, kayaking, snorkeling, snowboarding, forest bathing, biking, contemplation, running, and birdwatching.
- **Facilities.** Facilities are developed features that enable access to activities or services, including for individuals with disabilities. This chapter focuses on visitor facilities and not on management facilities such as employee housing or



maintenance shops. Visitor facilities may be developed amenities that provide interpretive information via signs, visitor centers, and wayside exhibits, or they may be facilities that support activities, such as picnic tables, boat docks, trails, and overnight accommodations such as campgrounds, backcountry campsites, and hotels.

- **Services.** Visitor activities, facilities, and services are intertwined. Often, facilities provide services that support visitor activities. For example, directional and other informational or interpretive signs along a trail can provide educational and directional services to visitors who are hiking or walking. Facilities may also provide services such as food and drink, restrooms, and safety. Services can take the form of programming such as ranger talks, youth programs, and fitness challenges. Commercial services provide opportunities for visitors to participate in activities that generally are provided by a third party. These services may support experiences of visitors who are less familiar or less skilled with an activity and may provide additional educational, scientific, and recreational information and support. However, commercial services are not provided across all federally managed lands and waters and they must be consistent with agency legislation, policy, and guidance. [Appendix F](#) provides an overview of legislation, policy, and guidance that each agency uses to evaluate commercial visitor services.



*A visitor peers through a viewer at the Minaret Vista in the Inyo National Forest.*

When identifying visitor activities, facilities, and services to help achieve desired conditions, the project team should ask if there is anything about a certain activity, facility, or service that does not align with an area's desired conditions. Visitor activities, facilities, and services may

change over time, so this step may be revisited throughout the planning process and in the future.

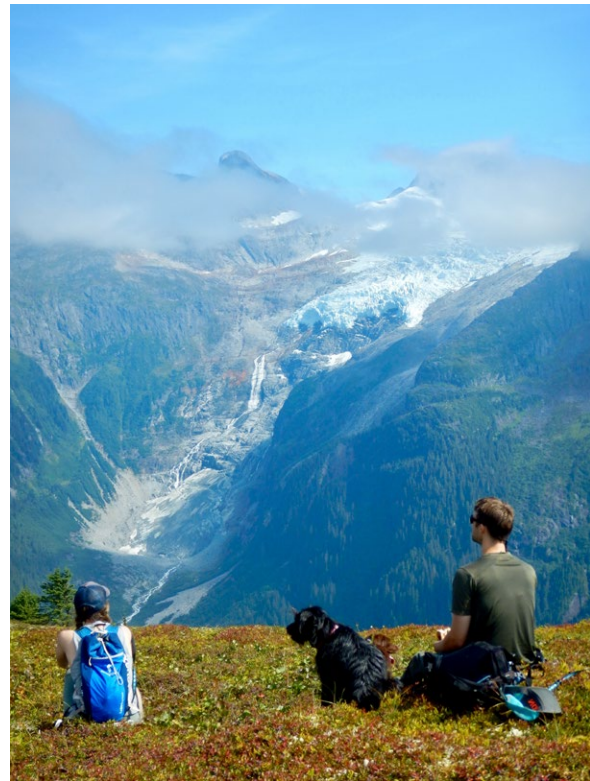
Since outdoor recreation provides mental and physical health benefits, it is imperative that planning efforts seek to provide access to recreational opportunities. Managers should consider diverse backgrounds, perspectives, physical, or cognitive challenges and think about how certain visitor activities, facilities, and services may prevent or encourage different populations from accessing recreation. When doing this, note that all aspects of a person's experiences and identities will inform their perceptions of outdoor recreation: a concept often referred to as "intersectionality"



(Oluo 2019, p. 74). In other words, in many cases no single factor will determine whether or how a person prefers to recreate.

For example, familiarity with or interest in particular visitor activities, facilities, and services may differ depending on an individual's background. Consider two hypothetical people and how the intersections of their identities and lived experiences may contribute to their understanding and familiarity with outdoor recreation:

- **Person A** has more familiarity with outdoor recreation due to family trips to national forests as a child. During these trips, they participated in activities such as hiking, biking, and camping. A few times per year, this person explored national parks in their home state, which resulted in an affinity for the outdoors. Now, person A continues to engage in recreational activities as an adult primarily on their own.
- **Person B** grew up playing outside with friends as a child, but began working during high school to help support their family. As a result, this person was unable to participate in school-sponsored trips to local natural areas, though they were active in team sports. Due to a busy schedule, person B did not develop a strong affinity for the outdoors, but currently enjoys outdoor activities, especially with their partner and children.



*Two visitors and their dog enjoy the view of a mountain glacier.*

Given these two scenarios, consider the following questions:

- How might person A's and person B's willingness to participate in outdoor recreation activities differ?
- How might their perceptions of, interest in, and demand for visitor activities, facilities, and services vary?
- How might their ability to access outdoor recreation or their perception of safety affect their willingness to participate in activities on federal lands and waters?

Scenarios like these should be considered during this step of the process to ensure that managers work to provide access to recreational opportunities and address barriers to outdoor recreation participation for local and nonlocal populations.

## WHY SHOULD YOU IDENTIFY VISITOR ACTIVITIES, FACILITIES, AND SERVICES?

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As noted, step 6 of the framework allows the project team to consider visitor activities, facilities, and services to help achieve or maintain desired conditions. Let's first evaluate a real-world example of this step and think back to the dream vacation mentioned in [chapter 2: Why Define Desired Conditions](#). To have a fulfilling road trip, you set goals to see the Pacific and Atlantic oceans and meet to with relatives. What are the potential activities, facilities, and services that would help you achieve these goals?

- Visitor activities could include driving, sightseeing, and swimming. An activity that could conflict with the desire for a road-trip vacation is flying.
- Facilities could include a car, roads, and overnight accommodations such as houses, a recreational vehicle, a tent for camping, or hotels.
- Services could include gas stations, accommodations, tolls, and automobile maintenance.

While this step of the framework may seem daunting, identifying potential visitor activities, facilities, and services that help achieve desired conditions is



*An employee cleans a vault toilet.*

critical to the planning effort. As desired conditions can vary by area, recreational opportunities can vary across zones or even within a project area. For some projects, you may find that activities, facilities, and services already have been identified in previous planning and guidance.

This step allows managers to better understand how new and emerging uses may help achieve desired conditions. As new and emerging uses develop, or if the project area becomes more popular, there may be requests for new facilities and services to accommodate changes in visitor use, patterns, timing, or distribution. Ideally, the time and effort spent to identify potential visitor activities, facilities, and services will lead to thoughtful and defensible decision-making.

When considering impacts of activities, facilities, and services, project teams should acknowledge how these impacts may affect communities and interested groups. As highlighted in this chapter's [Best Practices and Considerations](#) section, the project team should engage with the public throughout the process to ensure that all voices are being heard and that potential effects to the larger landscape—including natural

resources, cultural resources, visitor experiences, and socioeconomics—are considered. This step also allows managers to evaluate commercial visitor services offered. Consider whether providing commercial services for activities will help to achieve desired conditions as defined in step 5. Also consider if commercial services can provide opportunities for visitors who previously have had little or no access to federal lands and waters or who may feel uncomfortable recreating without guided support.

Each agency has laws, regulations, policy, and guidance for evaluating commercial visitor services and special events and uses ([see appendix F](#)). Desired conditions may specifically highlight the commercial visitor services that an area offers, or



*A group of people enjoy a fun day of rafting.*

they may use a more general approach that considers new services. Commercial services may rely on facilities to be provided such as a loading dock for guided river-running. Therefore, evaluating commercial services is important in defining appropriate uses and facilities.

Identification of activities, facilities, and services consistent with desired conditions also is tied closely to

identification of visitor capacity (see the [IVUMC Visitor Capacity Guidebook \(https://visitorusemanagement.nps.gov/Content/documents/lowres\\_Visitor%20Capacity%20Guidebook\\_Edition%201\\_IVUMC.pdf\)](https://visitorusemanagement.nps.gov/Content/documents/lowres_Visitor%20Capacity%20Guidebook_Edition%201_IVUMC.pdf) for more information). How different visitor groups and activities interact in a space, along with the level of facilities and services that are provided to support those uses, can affect the amounts and types of visitor use that an area can accommodate while meeting desired conditions. For example, based on desired conditions, during step 6, managers initially may determine that mountain-biking on natural-surface singletrack trails will be allowed in an area. This decision would inform later discussions about visitor capacity when managers reach step 10 and identify the amounts and types of use that an area can accommodate while achieving and maintaining desired conditions. If the area's desired conditions were for free-flowing trail-based experiences in an uncrowded setting with limited soil erosion, managers would need to consider the area's ability to accommodate use on natural-surface singletrack trails that would ensure quality experiences, limit conflict with other visitors, and maintain resources. This analysis may look different if multi-lane paved pathways had been determined during step 6 to be consistent with desired conditions. Further, while discussing visitor capacity, managers may



learn that rock armoring is needed in some locations to address erosion concerns tied to use levels, so managers may revisit step 6 and further define “natural surface” to clarify that some rock armoring would be allowed. This highlights the framework’s iterative nature.

Steps 6 and 10 also are related due to their connections with commercial services. If commercial services are provided in a project area, a project team may allocate a portion of the area’s overall visitor capacity to be dedicated for commercial use to balance public and private use to achieve desired conditions.

Identifying potential activities, facilities, and services is also a consideration for special events or uses. For example, during the 2017 total solar eclipse, a special weekend event was held in Ruby Park of Big Spruce National Forest to allow visitors to view the eclipse. Large group activities typically are prohibited in the project area, so this was a planned exception. Desired conditions, activities, facilities, and services for this event varied from those typically deemed applicable in order to accommodate the recreational use of eclipse viewing and increased visitation (see [appendix E](#) for more information).

## WHAT TO EVALUATE WHEN IDENTIFYING VISITOR ACTIVITIES, FACILITIES, AND SERVICES

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While potential visitor activities, facilities, and services differ across federal lands and waters and often across zones, several documents provide guidance for this step of the framework. Answers to the question “What visitor activities, facilities, and services help achieve desired conditions?” will vary depending on the agency, unit, and zone. However, what managers should evaluate when identifying visitor activities, facilities, and services is more consistent.

The following legislation, policy, and guidance documents should be considered during this step of the framework:

- applicable legislation of the project unit
- previous planning and guidance documents
- compliance documents (NEPA, National Historic Preservation Act, compatibility or consistency determinations, etc.).

The financial and operational sustainability of activities, facilities, and services also should be considered. Consider the following scenario as an example of what a planning team would be considering and weighing.



## RETRO RECREATION AREA



*Many visitors in a transit area and parking lot.*

Consider a hypothetical recreation area called Retro Recreation Area that is undergoing challenges related to visitor congestion and changing visitor use patterns. A plan is needed to diversify and upgrade facilities to meet a broader range of visitor interests and to adapt to recreation trends, as consistent with desired conditions.

The project team reviewed existing planning efforts and enabling legislation for the area to identify previous desired conditions and to determine the path forward. The team then gathered public input to help update desired conditions for visitors to enjoy high-quality recreation experiences that align with diverse interests and abilities and facilities and services that meet universal design principles and federal accessibility standards.

To define appropriate facilities and services that reflect desired conditions and that comply with applicable legislation, the team referred to the Architectural Barriers Act of 1968 and Sections 504 and 508 of the Rehabilitation Act of 1973. The Architectural Barriers Act requires that buildings or facilities that are altered, built, or designed with federal funding be made accessible. Section 504 prohibits agencies from excluding or denying individuals with disabilities an equal opportunity to participate in and have access to program benefits and services. Section 508 requires federal agencies to make electronic and information technology accessible to people with disabilities. The team also reviewed agency-specific accessibility guidelines.

Guided by desired conditions and accessibility laws, the project team evaluated facilities and services that are physically and programmatically accessible and that provide diverse visitor experiences:

- **Accessible facilities** such as parking areas, paths of travel, outdoor recreation routes, camping areas, and restrooms.
- **Accessible information** such as kiosks, bulletin boards, interpretive panels, and wayside exhibits that have adequate font size and contrast and alternate formats of Braille, open captioning, and/or audio.
- **Accessible formats** such as large print transcripts, audio description tours, virtual tours, and guided and self-guided tours with assistive listening devices, sign language interpreter, T-coil hearing loops, and live audio description.

## HOW TO IDENTIFY VISITOR ACTIVITIES, FACILITIES, AND SERVICES

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After desired conditions are defined for a project area, a project team should conduct gap analysis to understand differences between existing and desired conditions (element 3, step 8). If activities, facilities, and services already exist, the project team may evaluate whether these are helping to achieve and maintain desired conditions. If not, the project team may identify activities, facilities, and services that no longer apply to the project area. Alternatively, the team may include new and emerging opportunities, facilities, and services as relevant uses. Often, depending on unit size, factors such as activities, facilities, and services may



*A storage area near water to hold a variety of vessels and water craft.*

be defined across planning documents. For a particularly large unit, a comprehensive management plan can provide overall guidance while a site-level implementation plan defines potential uses to achieve desired conditions.

In general, managers should identify examples of activities, facilities, and services that convey a broad, more complete

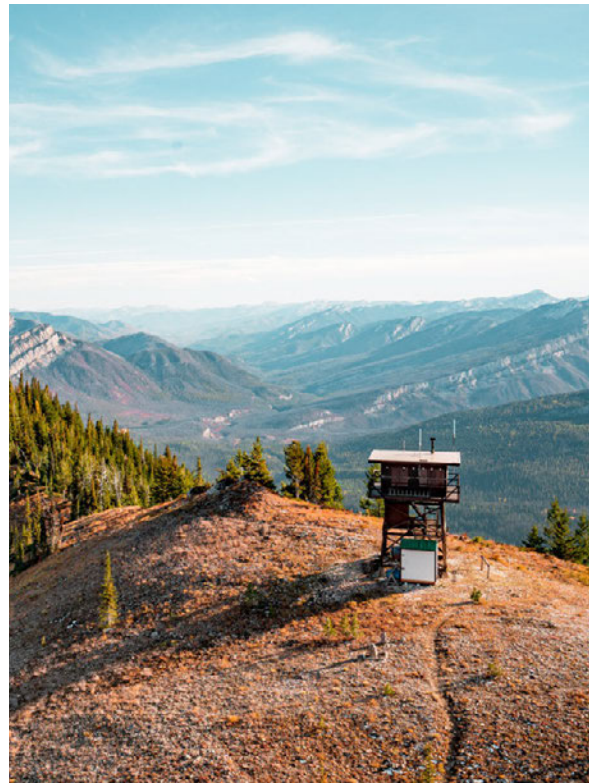
picture of desired conditions rather than developing an exhaustive list. Creating an exhaustive list can require time, effort, and money that may not always be commensurate with project complexity (see the [sliding scale of analysis](#)). In addition, an exhaustive list can restrict adaptability if conditions change. This framework step should provide flexibility for managers to evaluate new and emerging uses in relation to desired conditions. As visitors diversify and recreation habits change, new and emerging uses may arise that planners did not consider in previous planning efforts; this is inevitable, and it is also a good reminder that planning is an iterative process. As described in [chapter 5](#), planners may use public engagement opportunities to interact with the public to better understand changes in values, beliefs, and perceptions. This information may be used to evaluate and define visitor activities, facilities, and services.

When exploring potential visitor activities, facilities, and services, it helps to provide a rationale for decisions so that managers who did not participate in the decision-making process understand the thought process. Similarly, if an activity, facility, or service is deemed applicable, the project team should provide the rationale, as conditions may change. For instance, a project team may conclude that visitors

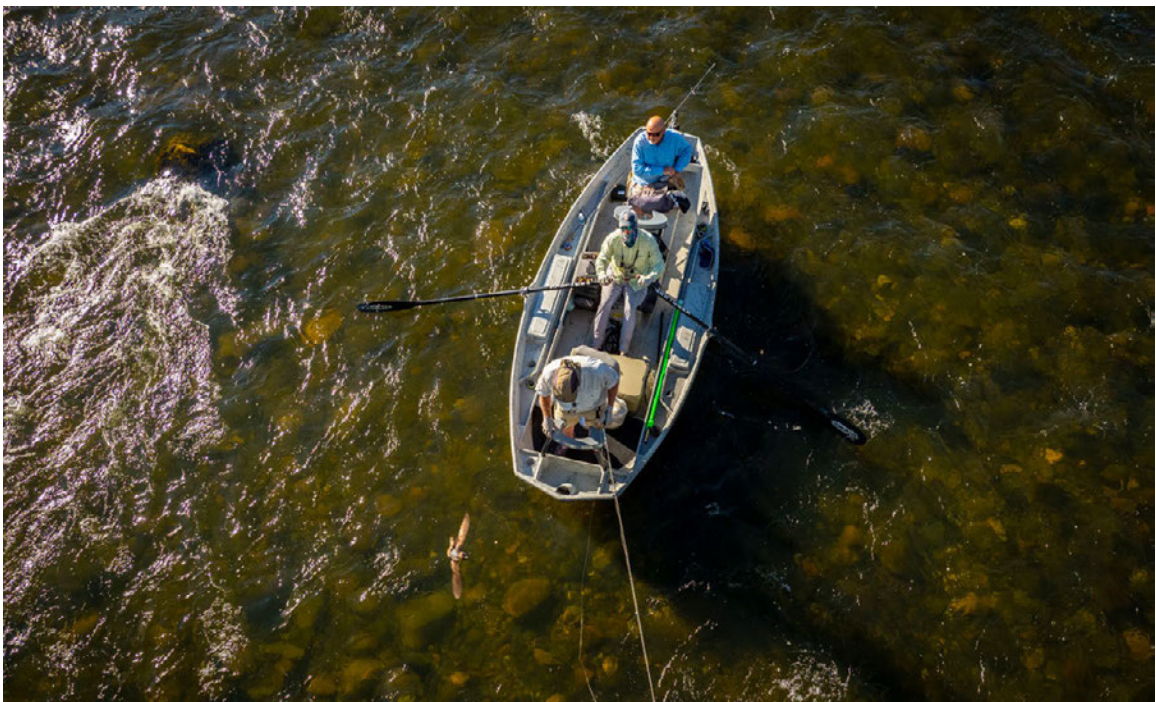


should not fish in a river because of impacts to natural resources such as the riparian ecosystem and because an endangered fish species can be found in the project area. However, ecosystem conditions may improve, and the species may be replenished and removed from the endangered species list. A future project team then may determine that the rationale no longer applies, and that the activity may help achieve and maintain desired conditions.

Projects also may call for identifying activities, facilities, and services by zone. For example, if a planning effort is large and includes a spectrum of zones such as wilderness, backcountry, cultural resources, and developed areas, a project team may define uses in each zone rather than for the entire project area. In the example in the introduction of this chapter, a bathroom with running water was identified as misaligned with desired conditions for a designated wilderness, but it might be considered useful at a developed-zone trailhead.



*A remote lookout has a vast mountain view.*



*Three people on a boat travel a stream to fish.*

## Best Practices and Considerations

Examples of best practices and considerations for identifying visitor activities, facilities, and services include:

- **Provide quality access.** It is important for managers to provide high-quality access to people with varying backgrounds, experiences, and identities. All visitors should have the opportunity to benefit from recreation, time in nature, and to learn about natural and cultural resources. When identifying activities, facilities, and services for a project area, consider how varying levels of familiarity or socioeconomic backgrounds may hinder local and nonlocal visitors from accessing federal lands and waters. Before dismissing an activity, facility, or service that seems incompatible with the area's purpose, consider how management values and biases may influence the decision. Seeking input from interested groups and communities can help ensure that managers view the area from different perspectives that mitigate bias.
- **Be flexible.** Developing an exhaustive list of activities, facilities, and services is often counterproductive, time-consuming, and hinders adaptability of future management. However, planning documents should provide enough specificity that managers can address public inquiries about activities.
- **Provide rationale.** Consider how new and emerging uses, as well as changes in visitor use patterns, visitor values, and the environment, may influence future planning efforts. Explaining how activities, facilities, and services align with achieving or maintaining desired conditions allows managers who did not participate in the planning process to better understand issues and thought processes and address emerging issues. Also, the environment is consistently changing, and a rationale that holds true at one point may not apply years later. In these scenarios, a project team could update the rationale and reevaluate if an activity, facility, or service helps achieve and maintain desired conditions.



Visitors check out a historic site.



- **Conduct gap analysis.** Desired conditions and visitor activities, facilities, and services heavily influence each other. If previous desired conditions exist, they likely affected determination of proposed activities, facilities, and services during a past planning effort. If the project team elects to refine desired conditions, the team should consider how these changes would be reflected in the determination. As noted in previous chapters, the project team may need to conduct gap analysis to identify differences between existing and desired conditions if previous desired conditions for a project area are undefined. In this scenario, the team should evaluate existing activities, facilities, and services and whether they help maintain or achieve desired conditions.
- **Engage the public.** During this step of the planning process and depending on project complexity, consider engaging with interested groups and communities, including the public. Local businesses operators, commercial service providers, community-based organizations, and the public can bring new perspectives to planning efforts, particularly related to emerging recreational interests and related visitor uses. Public engagement may be done in conjunction with outreach to define desired conditions or later in the planning stage (see [chapter 5](#) for potential groups to engage with during the planning process and [appendix D](#) for possible engagement methods).
- **Consider partners.** In many cases, cooperating associations, commercial service providers, volunteers, and friends groups can help managers achieve desired conditions for a project area by providing interpretive messaging or other services. These organizations may benefit from certain facilities or services in the project area; therefore, open and frequent communication with these groups can help maintain strong relationships and ongoing collaborations.



*A park ranger provides a park orientation to the public at a visitor center.*

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# Appendices



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# Appendix A: Ideas for Identifying and Defining Desired Conditions

The following tables describe considerations that may be appropriate to identifying and describing desired conditions: resource conditions; opportunities for visitor experiences; and appropriate kinds and levels of management, development, and access for different zones and areas. Once the approach to defining desired conditions has been determined, discussions can focus on important resources and values in different areas, elaborating on them as appropriate to provide management direction.

**Table 5: Examples of natural resource conditions**

| RESOURCE                          | CONSIDERATIONS   |
|-----------------------------------|--|
| Ecological communities            | <ul style="list-style-type: none"> <li>• habitat attributes such as structural complexity, diversity, and connectivity with other habitats in and near the project area</li> <li>• biological processes such as nutrient cycling and purification services</li> <li>• biotic interactions such as predator/prey relationships and native/exotic species interactions</li> <li>• natural disturbance regimes such as fires, floods, earthquakes, outbreaks of native pests or diseases, avalanches, landslides, and storm erosion</li> <li>• population health of specific species such as threatened and endangered species, endemic or rare species, and migratory species</li> </ul> |
| Hydrologic processes and features | <ul style="list-style-type: none"> <li>• hydrologic features such as springs, wetlands and major water bodies</li> <li>• hydrological interactions such as surface/subsurface interactions in wetlands</li> <li>• hydrological processes such as water flow dynamics, nutrient/temperature regimes, and flood events</li> </ul>  |
| Geologic processes and features   | <ul style="list-style-type: none"> <li>• geologic features such as karst/cave formations, dunes, arches, and soils</li> <li>• geologic processes such as shoreline/barrier island formation, soil/rock erosion, and glaciation</li> </ul>  |
| Soundscapes and lightscapes       | <ul style="list-style-type: none"> <li>• levels of natural ambient sound</li> <li>• night skies</li> </ul>   |
| Viewscapes and scenery            | <ul style="list-style-type: none"> <li>• duration of view</li> <li>• distance of view</li> <li>• sensitivity/concern for views</li> </ul>  |
| Air quality-related values        | <ul style="list-style-type: none"> <li>• visibility</li> <li>• air quality standards</li> </ul>  |

**Table 6: Examples of cultural resource conditions**

| RESOURCE                                      | CONSIDERATIONS  |
|---|---|
| Archeological                                 | <ul style="list-style-type: none"> <li>• overall desired condition</li> <li>• relationship to archeological and other cultural resources in other zones</li> </ul>  |
| Cultural landscapes                           | <ul style="list-style-type: none"> <li>• timeframe represented by the landscape, such as a prehistorical/historical continuum or a specific time period</li> <li>• significant physical attributes, biotic systems, and uses that contribute to cultural significance of the landscape</li> <li>• relationships between natural and built characteristics and features of the cultural landscape</li> <li>• appropriate specific features that further define desired conditions of the cultural landscape</li> </ul> |
| Ethnographic                                  | <ul style="list-style-type: none"> <li>• important ethnographic resources (note that sacred sites may not be appropriate to identify but could inform discussion of desired conditions)</li> <li>• descent groups or communities associated with ethnographic resources</li> <li>• specific condition of resources and level of support for traditional access and use</li> </ul>   |
| Historic and prehistoric structures and ruins | <ul style="list-style-type: none"> <li>• results from specific treatments; for example, four farm outbuildings with external facades restored to their 1867 appearance</li> </ul>   |
| Museum collections                            | <ul style="list-style-type: none"> <li>• objects, specimens, and archival and manuscript materials</li> <li>• level of access to collections</li> </ul>   |



*A grove of trees on a small mound.*

**Table 7: Examples of visitor opportunities**

| OPPORTUNITIES  | CONSIDERATIONS   |
|--|--|
| See and experience natural and cultural features and processes | <ul style="list-style-type: none"> <li>• prominence of the feature in relation to visitors' activities and interactions in the zone</li> <li>• how close or involved visitors are to touching, seeing, and feeling natural and cultural surroundings and points of interest</li> </ul>   |
| Understand natural and cultural history                        | <ul style="list-style-type: none"> <li>• important historical, cultural, and natural resource themes that would be emphasized</li> <li>• connection, understanding, and advocacy for historical, cultural and natural resources</li> </ul>   |
| Experience meaningful visitor perceptions                      | <ul style="list-style-type: none"> <li>• specific things that visitors might feel, see, smell, or hear in relation to natural and cultural resources when they enter and move through the zone</li> <li>• desired perceptions of wonder, adventure, discovery, isolation, remoteness, social affiliation, competitiveness, etc., related to specific resources in the zone</li> <li>• opportunities to interact with other visitors and park staff; opportunities include ranger interaction, guided tours, commercial guides, and community-based groups</li> <li>• differences in magnitude of interaction at attraction sites versus along travel corridors</li> <li>• differences in perception of the experience by diverse groups based on factors such as ethnicity, age, ability, experience, and socioeconomic level</li> </ul> |
| Share cultural heritage with others                            | <ul style="list-style-type: none"> <li>• opportunities for visitors to interact with others and share cultural heritage</li> <li>• prominence of the activity in relation to other activities that may be planned for the zone</li> </ul>  |
| Participate in unique recreation activities                    | <ul style="list-style-type: none"> <li>• character of recreational activities that are unique to or dependent on the area, such as technical climbing, whitewater rafting, or elk hunting</li> <li>• uses or use types that may be prohibited based on particular resource sensitivities</li> <li>• healthy recreation opportunities facilitated by the area's environment, programming, or partnerships</li> <li>• promotion of practices that make the area approachable and relatable to all people</li> </ul>  |



| OPPORTUNITIES                         | CONSIDERATIONS   |
|---------------------------------------|--|
| Experience improved wellness          | <ul style="list-style-type: none"> <li>ways that facilities, programs, and environments can serve as health resources for visitors</li> <li>activities that are self-guided, ranger-led, community-led, or "doctor-led"</li> <li>ways to invite people of all ages and abilities to enjoy the health and wellbeing benefits of federal lands and waters for people and the planet</li> </ul> |
| Participate in special uses or events | <ul style="list-style-type: none"> <li>permitted or commercial activities that are unique to the area</li> <li>one-time or recurring events such as triathlons, group hikes or races, and group bicycle rides</li> <li>privately managed opportunities such as at ski areas, resorts, and lodges</li> </ul>  |



Visitors enjoy live music at Fort DuPont Park in Washington, DC.



**Table 8: Examples of desired kinds and levels of management, development, and access**

| MGMT. TYPE | CONSIDERATIONS   |
|------------|--|
| VUM        | <ul style="list-style-type: none"> <li>• level of structure, including: <ul style="list-style-type: none"> <li>» opportunities for visitors to participate in spontaneous recreation activities and movement versus more structured and formalized schedules and movement</li> <li>» any locations where VUM may primarily occur (access points, camping areas, entrances)</li> <li>» use density throughout the zone (such as near facilities or dispersed in the zone)</li> </ul> </li> <li>• level of effort, risk, time, and skill required, including: <ul style="list-style-type: none"> <li>» whether activities and landscape interpretation are facilitated for visitors or visitors must depend on self-reliance and personal abilities to traverse the area safely and with minimal environmental impact</li> <li>» required level of physical exertion</li> <li>» visitors' risk level and responsibility for that risk</li> <li>» desired time commitment for visitors to participate in recreation or education opportunities</li> <li>» whether the area accommodates day use or overnight use and which is emphasized when planning facilities and providing recreation opportunities</li> </ul> </li> <li>• evidence of management and visitor use activities, including: <ul style="list-style-type: none"> <li>» subtlety of resource management activities and facilities to casual observers</li> <li>» how apparent signs of recreation impacts such as bare campsite soil and widened trails may be to casual observers</li> </ul> </li> <li>• levels of education, interpretation, and orientation provided, including: <ul style="list-style-type: none"> <li>» linkages between interpretive themes, resources, and experiences such as opportunities or interpreted views of cliff faces with strata, riverbeds, unconformities, and talus slopes</li> <li>» intent of educational/interpretive materials/programs to achieve linkages, such as: "Help visitors engage in critical thinking about specific historical/cultural/natural themes or issues."</li> <li>» levels/intensities of orientation information provided onsite and offsite</li> </ul> </li> </ul> |

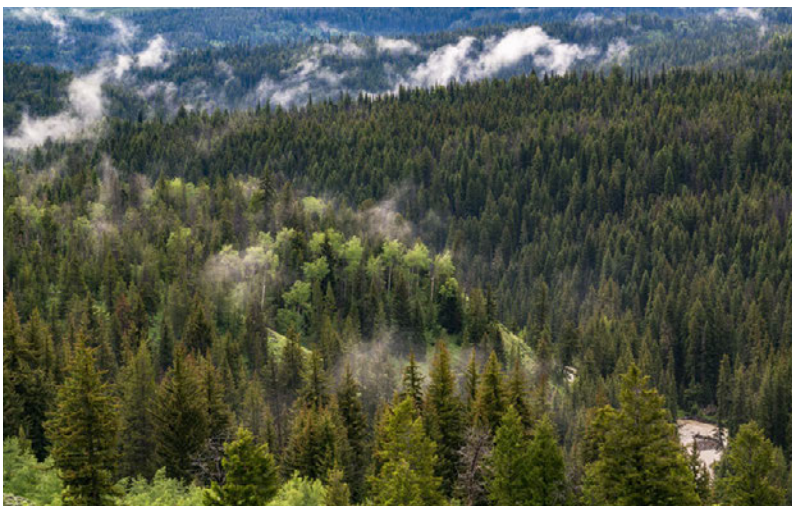
| MGMT. TYPE          | CONSIDERATIONS  |
|---------------------|---|
| Resource management | <ul style="list-style-type: none"> <li>• level of management, including:               <ul style="list-style-type: none"> <li>» degree and extent of management actions permitted and encouraged to protect and rehabilitate significant resources</li> <li>» management activities focus, such as custodial management versus allowing natural processes versus restoration of natural processes</li> <li>» financial and operational capacity</li> <li>» how visible management actions will be to casual observers</li> </ul> </li> <li>• research activities, including:               <ul style="list-style-type: none"> <li>» importance of the area for baseline resource inventories, cultural and natural resource research, social science research, and long-term ecological observations</li> <li>» effort level for identifying research needs and implementing research programs</li> </ul> </li> </ul> |
| Development         | <ul style="list-style-type: none"> <li>• facility types for functions such as orientation/education, recreation, support, and administration:               <ul style="list-style-type: none"> <li>» desired character of developed area(s), such as primitive with little or no site management or highly developed with well-delineated boundaries</li> <li>» extent of development footprint in the zone, such as “clustered at no more than two locations in the road corridor” or “no development within 100 yards of any shoreline”</li> <li>» emphasis on blending facilities with natural or cultural surroundings</li> <li>» use of green building techniques</li> </ul> </li> </ul>   |
| Access              | <ul style="list-style-type: none"> <li>• how accessibility may differ for existing versus new structures</li> <li>• primary modes of transportation, including:               <ul style="list-style-type: none"> <li>» whether primary means of conveyance is motorized or nonmotorized</li> <li>» roadway, trail, and public transportation types or if area will be mainly roadless or trailless</li> </ul> </li> </ul>   |

## Appendix B: Examples of Desired Conditions

The examples in this appendix provide a range of desired conditions statements for projects on different points of the sliding scale of analysis. The examples with more detail tend to reflect projects on the high end of the scale where more specificity is needed, given project complexity. Broader and less-detailed examples tend to reflect projects on the lower end of the scale, where project complexity often necessitates comprehensive but relatively less-specific guidance. A few different formats are included to demonstrate different ways of conveying desired conditions. There is no one right way to present desired conditions. Different approaches may work better in different contexts. In this appendix, desired condition statements are specific to the project site (place names, geologic features, activity types) versus the more generic examples in the main text of this guidebook.

### Natural and Roadless Areas Examples

**Forest habitats and remnant old-growth trees.** Forest habitats and remnant old-growth trees provide unique habitat as part of an important network for yellow-bellied marmots, mule deer, pika, and other species. Standing dead trees, also known as snags, are an important habitat component and are richly abundant in the corridor due to natural processes. Cottonwood and other hardwood habitats increase and provide important habitat diversity for wildlife, including American black bear, Sierra Nevada bighorn sheep, and seventeen bat species.



*A sweeping view of a forested area with a river below.*

### Mixed forest habitats.

Colonies of ponderosa pine, Engelmann spruce, and Douglas fir dominate the landscape, providing mostly natural but occasionally altered landscapes. Vegetation composition, structure, or pattern may be altered to support management uses such as openings

maintained for scenic views or decreased wildfire fuel conditions adjacent to an urban interface, but impacts are mitigated to preserve natural ecological processes. Regulated wildlife-related recreational opportunities such as wildlife viewing and hunting are available in wildlife habitats.

**Natural area resources.** Natural resources are maintained in excellent condition, approaching or matching the pristine nature of the natural systems zone. Visitors can enjoy watching wildlife in a setting rich with natural sights, sounds, and smells. Opportunities exist for solitude and multi-day trips.

**Roadless area.** The roadless area appears natural, with park-like stands of longleaf pine throughout, interspersed with low-growing palmetto stands. Water and elevation dictate what grows here. Natural processes occur freely, including low-intensity fire and occasional landslides. The area offers habitat for the red-cockaded woodpecker and prey opportunities for the endangered Florida panther. With no obstacles to hinder them, the panthers are free to move between this refuge and the nearby national park. There are no trails; visitors disperse freely through the area, pursuing nonmotorized activities in a challenging environment.

### Recreation Area Examples

**Recreation area with summer and winter activities.** Recreation areas provide for a variety of developed and dispersed summer and winter recreation activities, accommodating a range of visitor skills and comfort levels. Developments and facilities generally are limited to those necessary to protect resources, provide for safety, enhance public benefit, and enhance visitor experiences. Facilities reflect



*A visitor rides a snowmobile.*

the rustic style associated with the Rocky Mountains by using native materials, earth-toned colors, and blending into the landscape as much as is feasible. Facilities include campgrounds, boat launches, fire lookouts, radio repeaters, administrative

buildings, trailheads, and trails. Improvements include signs, bridges, fences, shelters, campsites, scenic pullouts and overlooks, interpretive displays, stock containment systems, and water developments.

**River corridor recreation area.** The Miller River-Tall Rock recreation area provides diverse opportunities for river and land-based recreation such as kayaking, canoeing, and tubing, and moderately developed camping sites and high-quality trail activities along a forested river corridor. Facilities and easy river access offer a relatively accessible and quiet recreation experience within ten miles of rural communities and sixty miles of urban population centers.



**Lake recreation area.** The Lavana Recreation Area offers visitors opportunities to find solitude or to have a more social experience. Fishing holes are plentiful, quiet, and accessible to anglers. The lake's many coves provide privacy and isolation while onshore picnic areas allow family groups to enjoy abundant sunshine and views of nearby mountain peaks. Facilities are rustic yet comfortable and blend in with the surroundings.

**Backcountry recreation area.** Pumpkin Valley backcountry recreation activities include hiking, horseback riding, and opportunities to view rock art. Interpretation and opportunities to learn about cultural heritage and stewardship are provided at scenic overlooks and wayside exhibits. Looting and vandalism of prehistoric sites are discouraged via a specific management focus on fostering visitor connections to the landscape to enhance a sense of stewardship. There are multiple access points to the backcountry. Natural aesthetics of the canyon, river, and rock art are preserved. Visitors enjoy opportunities for solitude, self-reliance, and reflection.

### **Motorized Area Examples**

**Road conditions.** Roads are designed so that surface and subsurface water drainage does not increase the risk of accelerated or abnormal hill-slope failure. Roads function in a hydraulic and geomorphic manner that provides watershed and sub-basin scale aquatic habitat connectivity and helps attain state water-quality



*A motorcyclist on a mountain road in an alpine area.*

standards. Roads pass interesting viewpoints with user comfort and convenience in mind. Routes are well-marked and provide reliable access to recreation opportunities throughout the seasons.

#### **Motorized area activities.**

The Elephant Mesa motorized area primarily provides opportunities for motorcycle and all-terrain vehicle use, mountain biking, and camping. Visitors have easy access to varied

recreation opportunities that provide a range of physical challenges depending on skill levels. Visitors enjoy canyon-country aesthetics with opportunities to develop skills and abilities. Visitors are provided with convenient, welcoming, and well-managed sustainable access to park resources and opportunities. Access to different recreation use areas is communicated to and respected by visitors.

## Trail Examples

**High-use trail.** The Moss Forest trail system provides recreational opportunities for hikers, mountain bikers, and horseback riders of varying skill levels. At times, settings are highly social, with frequent encounters between groups. However, visitors can reach intended destinations with minimal crowding and conflicts between different user types.



*A single-track dirt trail through a meadow with large trees on either side.*

**Rail (backcountry) trail.** The Danube Trail provides opportunities for quiet and a sense of solitude. Signs of human development are minimal, supporting a sense of discovery and immersion in a natural habitat. This habitat consists of rolling hills, flowing creeks, and the picturesque Beavertooth Mountain Range. Minimal visitor amenities and services support basic visitor access and trail navigation.

**River trail.** The River Trail is a narrow, tree-lined footpath, providing a sense of remoteness and discovery. Visitors can choose their own campsites without hearing the sights and sounds of others nearby. Campsites are surrounded by trees and spaced far from each other. As night falls, campers can experience dark, starry skies and can hear a free-flowing river.

**National scenic trail.** The Juma National Scenic Trail provides opportunities for outstanding journeys on foot or horseback along the Parrish Mountain Range. The route offers consistent opportunities for users to experience solitude and the feeling of extended retreat from civilization, even if venturing out for only a day. Trail management provides for conservation and enjoyment of scenic, historic, natural, and cultural qualities along the trail. The trail corridor is consistent with or complements a natural, nonmotorized recreation setting. Panoramic views of natural landscapes in a scenic environment are provided where possible. The trail intermittently passes through more developed settings to provide a continuous route. During the winter season, over-snow motorized vehicle use is authorized in surrounding areas where impacts from these vehicles have limited effects on the trail.

**National scenic trail.** The Great Divide National Scenic Trail is a well-defined trail that provides for high-quality primitive hiking, horseback riding opportunities, and other compatible nonmotorized trail activities in a highly scenic setting along the Divide. Significant scenic, natural, historic, and cultural resources along the trail corridor are conserved. Where possible, the trail provides visitors with expansive views of natural

landscapes. Viewsheds from the trail have high scenic value. The area up to one-half mile on either side of the trail has a natural appearance. Potential to view wildlife is high, along with evidence of ecological processes such as fire, insects, and diseases. The trail can be accessed from multiple locations, allowing visitors to select terrain, scenery, and trail length from long-distance to day-use.

**National scenic trails near wilderness areas.** National scenic trails outside designated wilderness areas are clearly marked and identified, especially at trailheads, trail ends, and decision junctions. Access to and clear passage along trails are maintained. Interpretive wayside exhibits along the trail promote connection to resources but do not impair or compromise the features for which the trail was established.

**National historic trail.** The Skyline National Historic Trail connects the Everblue, Greene Pass, Winville, and Gilwood communities via a trail system. The trail system provides recreational opportunities for hikers, mountain bikers, and horseback riders of varying skill levels. While groups can gather at certain points along the trail, visitors can reach intended destinations with minimal crowding and use conflicts. The trail is maintained in what appears to be a natural condition and there are several access points along the trail. Historic characteristics for which the trail was designated are preserved. The landscape along the trail corridor is maintained as an authentic historic landscape and trail users have opportunities to visit historic districts and learn unique stories associated with each district. Significant historic structures and features are protected. Damage to significant historic resources is prevented to the extent possible.

### Wild and Scenic River Examples



*A person fishes in a scenic river segment surrounded by trees and mountains.*

Congressionally designated wild and scenic rivers should have desired conditions that are connected to their ORVs, which are generally identified in the enabling legislation for designated river segments.

#### **Wild and scenic river: scenic.**

Floating the Tenmile River provides opportunities for adventure and challenge. Generally, the river bends and turns mask sights and sounds of other visitors. Natural vegetation dominates the view and facilities are unobtrusive. Campers are surrounded by natural sounds and dark, starry nights. The

setting provides opportunities for self-reliance and to develop and use skills not normally required in everyday life. There is a sense of remoteness and of being in an undeveloped world. Knowledge of prior inhabitants can be gained by visiting

historic sites along the river. The river is dynamic, changing with seasons and water flow. Healthy riparian vegetation and water provide undisturbed habitat for fish and wildlife. Access points are typically quiet and provide easy river access, with minimal wait times for launches. Scenic gravel bars that change in size with river flows provide resting and camping sites. Visitors can experience a clear and fairly pristine river system, with enough separation between groups that they can feel relatively isolated from other human activity.

**Wild and scenic river: wild.** Wildlife diversity in the Osprey River corridor is recognized and managed as part of a healthy riparian ecosystem. High-quality habitat allows wildlife such as marten, fisher, bobcats, and white-tailed deer to disperse throughout the corridor. Floodplain vegetation provides streambank stability and shade. The area's undeveloped characteristics are preserved. The corridor's upper reaches provide refuge for wolves, lynx, and grizzly bear. The river and its environs support wildlife because of clean, abundant water, vegetation diversity, and relatively low disturbance by roads and human activities.

**Wild and scenic river: recreational.** The Solid Rock Recreation Area provides diverse opportunities for river-based recreation such as world-class whitewater rafting, native trout fishing, camping, and hiking in a forested river corridor. Rustic facilities and moderately challenging river access allow for a relatively primitive recreation experience within fifty miles of rural communities and sixty miles of urban population centers.

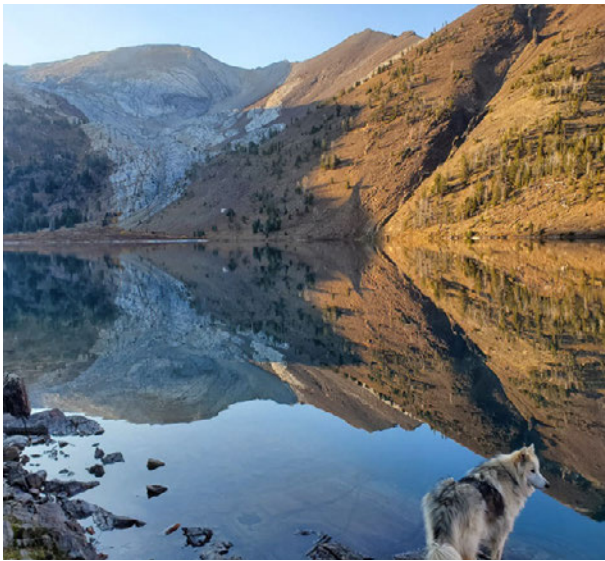
**River corridor.** Pearl River Corridor provides opportunities for overnight rafting, canoeing, kayaking, and wilderness hiking. Visitors of various group sizes and abilities enjoy easy access to diverse backcountry recreation activities. There are opportunities to stop for sightseeing and wildlife viewing along the route. Aquatic biodiversity is predominantly natural, with little human disturbance. Aquatic resources that have been impacted by human activities are managed to return to natural conditions, including abundance, diversity, and distribution. Changing conditions are addressed via adaptive management. The physical, chemical, and hydrological properties of the river and its tributary streams and ponds reflect natural water quality conditions that meet or exceed applicable standards.

## **Wilderness Examples**

Developing meaningful desired conditions statements for congressionally designated wilderness areas follows the same overall process outlined in this guidebook. It is important that desired conditions statements for wilderness areas do not simply repeat phrases from the Wilderness Act or from policy statements that could apply to any wilderness area, but instead provide meaningful direction for guiding stewardship of the particular area.

A wilderness character narrative is a tool that can be used to accomplish the task of describing the area's "purpose" in a broader landscape. The wilderness character narrative describes what wilderness character means for an individual area based on the five qualities cited below. It is intended to be a qualitative, positive, and holistic





*A dog stands near a pristine lake that reflects the hills above.*

description of what is unique and special about a specific wilderness area now and in the foreseeable future; in other words, it identifies what is important to protect. Unlike desired conditions statements, these narratives often include background information to support what makes an area distinctive and may also include information on key threats to wilderness character. Many wilderness character narratives are approximately ten pages long.

The Wilderness Act states that congressionally designated wilderness areas “shall be administered for the use and

enjoyment of the American people in such manner as will leave [the areas] unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and the gathering and dissemination of information regarding their use and enjoyment as wilderness.” (Wilderness Act Statement of Policy, Section 2(a)). The wilderness character concept is important in defining meaningful desired conditions for designated wilderness and other wilderness categories when required by agency policy. The interagency wilderness management community has collaborated to define wilderness character as a holistic concept based on the interaction of:

1. **biophysical environments** primarily free from modern human manipulation and impact
2. **personal experiences** in natural environments relatively free from the encumbrances and signs of modern society
3. **symbolic meanings** of humility, restraint, and interdependence that inspire human connection with nature

Together, these tangible and intangible values define wilderness character and distinguish wilderness from all other lands. Wilderness character includes intangible qualities such as a sense of adventure, refuge, or inspiration, and the following five tangible qualities, according to Wilderness Act Section 2(c):

1. **Natural.** Wilderness ecological systems are substantially free from the effects of modern civilization.
2. **Untrammeled.** Wilderness is essentially free from the intentional actions of modern human control and manipulation.
3. **Undeveloped.** Wilderness retains its primeval character and influence, and is essentially without permanent improvement or modern human occupation.

**4. Solitude or primitive and unconfined recreation.** Wilderness provides outstanding opportunities for solitude or primitive and unconfined recreation.

**5. Other features of value.** Wilderness preserves other features that are of scientific, educational, scenic, or historical value.

### Wilderness areas.

The wilderness area provides outstanding opportunities for natural ecological relationships between wildlife and habitat. A lack of roads and trails provides



*A beautiful mountain range with trees and meadows in the foreground.*

undisturbed wildlife habitat and limits incursion by urban predators that can disrupt interior forest species. Habitat for native carnivores and other habitat-sensitive species including beaver, spotted owls, and marbled murrelets provides safety and refuge from

lands that are more intensely managed. Nonnative invasive species are limited or nonexistent and do not disrupt ecological functions.

The Majestic Wilderness provides outstanding opportunities for immersion in nature with little evidence of modern human impact in much of the wilderness area. Generally, encounters with other humans are rare, except along trails from major access points.

Visitors need to research and prepare for arduous and challenging adventures. Maintained trails guide visitors into the wilderness from major access points, but much of the wilderness is undeveloped. Finding one's way is difficult and may require orienteering or climbing skills.

Natural quiet exists through much of the wilderness area and opportunities to view dark skies are abundant.

Evidence of natural processes is found throughout the wilderness area, including fire scars and blowdowns, which may make trail and cross-county travel difficult.

Accomplishment and wonder are felt during wilderness adventures here.

The size and remoteness of the wilderness provides ample habitat for wildlife and is an important connector to other protected areas.

## Urban Recreation Area Examples

**Diverse opportunities zone.** This management zone provides a range of natural and historic settings and facilities to welcome and support a variety of opportunities that are appropriate to the setting. Key resources are preserved while accommodating different visitor use levels. Visitors have a wide range of educational, interpretive, and recreational opportunities.

**Historic immersion zone.** This management zone preserves historic sites, structures, and landscapes that evoke their period of significance. Selected exteriors and



*Visitors paddle among cherry blossoms on Crystal Lake.*

designated interior space areas are managed to protect historic values and attributes. Visitors have opportunities to be immersed in the historic setting to explore history with direct contact with cultural resources and rich interpretation of past stories and events.

**Cultural landscape zone.** This management zone preserves significant historic, archeological, architectural, and landscape features while being adaptively reused for contemporary needs. Cultural resources and surrounding natural resources that are often integral to the historic site are

preserved and interpreted. This zone allows for visitor enjoyment and exploration of historic values and events while providing for other types of uses.

### Visitor engagement zone in a historic park.

- **Visitor experience:** Areas in the visitor engagement zone focus on interpreting park resources and providing visitor services for an engaging visitor experience.
- **Management presence:** This area is intensively managed to protect cultural resources, increase public safety, and provide an engaging learning environment.
- **Level of development:** This area is relatively well-developed and there is moderate tolerance for resource impacts where necessary for essential visitor and operational needs.
- **Historic features:** As much as possible, the historic landscape is preserved on building exteriors while new construction exteriors are appropriate for the historic landscape. Where possible, historic structures are adaptively reused.
- **Facilities:** This zone is near a transportation network. All development emphasizes operational efficiency, environmental sustainability, and human safety. Development provides full accessibility and complements park resources.





*A park ranger leads a tour at Blackstone River Valley National Historical Park.*

**Visitor engagement zone in a historic park.** Visitors receive park information and orientation in this zone and gain effective understanding of the park units' significance and history. There is a high level of opportunity for self-guided exploration and staff-led education and interpretation programs in buildings and outdoors. Outdoor space is used for recreational activities such as walking and picnicking. Local school programs are a priority and special events can take place in this area. This zone contains the most interactive experiences in the park. There is moderate to high visitor interaction with park staff and high probability of encountering other visitors and vehicles. The visitor engagement zone is accessible and traversable for visitors with impaired mobility.

**Visitor zone.** Visitors experience a modified natural environment with developed visitor facilities. Visitation levels are very high and encounters with other visitors and park staff are routine. Visitors of all physical ability levels can enjoy this area and have opportunities to learn about park resources. Visitor comforts and basic needs are met.

**Historic zone.** Visitors experience an authentic historic landscape and can learn about changing land use, settlement patterns, and livelihoods. Visitors can visit historic districts, develop a sense of the past, and understand the unique stories of each district. Significant historic structures and features are protected to the extent possible.



## Other Examples

**Night sky.** The night environment consists almost entirely of natural light, with little if any onsite artificial outdoor lighting. The zenith sky is nearly absent of artificial lighting, and horizon light domes are small.



*Two kayakers observe wildlife in a national marine sanctuary.*

**Scenic area.** Wild Flame Scenic Area is a mix of private and public areas along the Wombat front range, where local, state, and federal agencies collaborate with residents and visitors to promote shared responsibility of wildland fire risk mitigation. Buildings and surrounding properties are adapted so that when fires burn, firefighters can safely

protect human-made structures while allowing fire to take its natural course in the ecosystem.

**Scenic area.** The iconic views from Nisto Lake of Mihkwaw Peak and Wapiskaw mountain are preserved and showcased as key elements of a visit to the area. Nighttime visitors experience the dark night skies anywhere they find open sky. Views from Nisto Lake offer spectacular, mirror-like reflections of the starry sky.

**Paleontology area.** Triassic Park visitors can view dinosaur fossil remains in-place. Visitor attractions are convenient and easily accessible. Visitors have opportunities to learn about paleontology and to connect with their natural heritage. Partnerships with local schools are prioritized.

**Marine sanctuary.** Whale Island Sanctuary protects and maintains the natural biological communities in the sanctuary. Where appropriate, natural habitats, populations, and ecological processes are restored. Scientific research and monitoring of site-specific marine resources are supported and promoted. Education and interpretative programs focus on raising public understanding for sustainable use of the marine environment in the midst of climate change.

**Winter-use area.** Frosty Pinnacle offers winter recreation opportunities compatible with protecting forest values, cultural resources, wildlife, and air quality. Sustainably designed and maintained facilities accommodate a range of skill levels and opportunities. Educational messaging on responsible recreation encourages visitors to participate safely and respectfully in winter-use activities without damaging resources or creating conflict. Over-snow vehicle sound and emission levels are reduced to address health and safety and to protect natural resources.

## Table Examples

**Table 9: Desired conditions statements for Tree Ridge Park visitors: opportunities, activity types, and potential benefits**

| OPPORTUNITIES   | ACTIVITY TYPES   | POTENTIAL BENEFITS   |
|---|--|--|
| <ul style="list-style-type: none"> <li>• regular access to outdoor activities</li> <li>• development of outdoor skills and activities</li> <li>• individual, group, or family time in the outdoors</li> </ul> | <ul style="list-style-type: none"> <li>• mountain biking</li> <li>• camping</li> <li>• hiking</li> </ul> | <ul style="list-style-type: none"> <li>• Personal</li> <li>• improved health and physical fitness</li> <li>• more outdoor-oriented lifestyle and work/play balance</li> <li>• higher participation in outdoor activities</li> <li>• Community/social</li> <li>• outdoor activities near city</li> <li>• outdoor activity location for group and family activities</li> <li>• Economic</li> <li>• value-added local amenities</li> <li>• green space to attract and retain local residents</li> <li>• Environmental</li> <li>• preservation of special landscape</li> </ul> |

**Table 10: Desired natural conditions for Tree Ridge Park visitors**

| DESIRED NATURAL CONDITIONS | DESCRIPTIONS   |
|----------------------------|--|
| Remoteness                 | Main motorized travel corridors keep a sense of remoteness and several nonmotorized areas are specifically designated.   |
| Naturalness                | The natural landscape is mostly retained. New, nonrecreational modifications such as rights-of-way, fences, and stock ponds are consistent with landscape character in the northern portion. |

**Table 11: Desired social and facility conditions for Tree Ridge Park visitors**

| DESIRED<br>SOCIAL AND<br>FACILITY<br>CONDITIONS | DESCRIPTIONS   |
|---|--|
| Visitor experience                              | Sounds of other people can be heard occasionally outside the trailhead area. Visitor impacts such as bare soil and invasive plants can be found near trailheads and at campsites but are rarely found elsewhere. Other visitors typically are seen more frequently at trailheads and less frequently on trails within a few miles of trailheads. |
| Visitor facilities                              | Primitive recreation developments such as parking lots, kiosks, and restrooms are at access points along County Road 123. The park has well-maintained and well-marked trails..  |
| Visitor information                             | Roads leading to trailheads have clear signage. Trails are clearly marked. Trailheads concentrate visitor information related to maps, rules, and outdoor ethics.  |

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# Appendix C: Agency Resources, References, and Guidance for Defining Desired Conditions

**Table 12: Agency guidance and resources related to defining desired conditions**

| AGENCY | AGENCY GUIDANCE ON DEFINING DESIRED CONDITIONS  | AGENCY RESOURCES TO HELP DEFINE DESIRED CONDITIONS  |
|--------|---|---|
| USACE  | <ul style="list-style-type: none"> <li>• Engineer Regulation 1165-2-400, "Recreational Planning, Development"</li> <li>• Management policies</li> </ul> | <ul style="list-style-type: none"> <li>• Engineer Regulation 1130-3-550</li> <li>• Master Plan 1165-2-400</li> <li>• Comprehensive conservation or other plans</li> <li>• Executive orders and presidential proclamations</li> </ul>  |
| BLM    | <ul style="list-style-type: none"> <li>• Planning for Recreation and Visitor Services Manual 8320</li> <li>• Handbook H-8320-1</li> </ul>               | <ul style="list-style-type: none"> <li>• Enabling legislation</li> <li>• Resource management plans</li> <li>• BLM Recreation Strategy: Connecting with Communities</li> <li>• Outcomes-Focused Management</li> <li>• Policy Handbook 8320-1: Planning for Recreation and Visitor Services</li> <li>• Resource Management Plan, Recreation Area Management Plan, or implementation-level project plan</li> </ul> |

| AGENCY | AGENCY GUIDANCE ON DEFINING DESIRED CONDITIONS  | AGENCY RESOURCES TO HELP DEFINE DESIRED CONDITIONS  |
|--------|---|---|
| NPS    | <ul style="list-style-type: none"> <li>• National Parks and Recreation Act of 1978</li> <li>• NPS Management Policies (2006)</li> <li>• Adaptive Management: The US Department of the Interior Technical Guide</li> <li>• NPS-75, Natural Resources Inventory and Monitoring Guideline</li> <li>• Integrating the Nation's Environmental Monitoring and Research Networks and Programs: A Proposed Framework</li> <li>• Director's Order #2: Park Planning</li> <li>• Director's Order #75A: Civic Engagement and Public Involvement</li> <li>• Planning for a Changing Climate: Climate-Smart Planning and Management in the National Park Service</li> <li>• Management Policies 2006, Sec. 6.3.4.2 Wilderness Management Planning</li> </ul> | <ul style="list-style-type: none"> <li>• Enabling legislation</li> <li>• Foundation documents: fundamental resources and values and primary interpretive themes</li> <li>• General management plans</li> <li>• Park portfolio plans such as wilderness stewardship plans, wild and scenic river plans, trail plans, area plans, VUM plans, resource stewardship strategies, and interpretive plans</li> </ul> |
| NOAA   | <ul style="list-style-type: none"> <li>• National Marine Sanctuaries Act of 1972</li> <li>• Magnuson-Stevens Fishery Conservation and Management Act of 1976</li> </ul>   | <ul style="list-style-type: none"> <li>• National marine sanctuary management plans</li> </ul>  |

| AGENCY | AGENCY GUIDANCE ON<br>DEFINING DESIRED CONDITIONS  | AGENCY RESOURCES TO HELP<br>DEFINE DESIRED CONDITIONS  |
|--------|--|--|
| USFS   | <ul style="list-style-type: none"> <li>• 2012 Planning Rule (36 CFR 219.12)</li> <li>• Forest Service Manual 1900, chapter 1920 Land Management Planning</li> <li>• Handbook 1909.12</li> <li>• Forest Service Manual 2310, Sustainable Recreation Planning</li> <li>• FSM 2300-Recreation, Wilderness and Related Resource Management</li> <li>• FSH 2300—Recreation, Wilderness and Related Resource Management</li> <li>• Landscape Aesthetics: A Handbook for Scenery Management AH-701</li> </ul> | <ul style="list-style-type: none"> <li>• Forest planning</li> <li>• Niche guidance</li> <li>• Land management plans</li> </ul> |
| USFWS  | <ul style="list-style-type: none"> <li>• USFWS Planning Policy 602 FW 3</li> <li>• 605 FW 1</li> </ul>   | <ul style="list-style-type: none"> <li>• Comprehensive conservation plans</li> </ul>   |

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# Appendix D: Examples of Public Engagement Methods and Techniques for Defining Desired Conditions

## Formal Comment Periods

Formal public engagement efforts and comment periods are among many tools to communicate with the public to align expectations with management priorities and changing management strategies. For federal processes, these tools often have been associated with legal requirements outlined in the Administrative Procedures Act of 1946 and the National Environmental Policy Act of 1969 and related Council on Environmental Quality regulations.

## Listening and Reflection Sessions and Focus Groups

Less formal listening sessions, design charettes, and focus groups are common methods for encouraging dialogue and exploring a topic in depth. These forums bring together individuals who may or may not share common experiences and perspectives. Such sessions offer excellent opportunities to use some of the questions in [chapter 5](#) to define desired conditions. To obtain quality engagement and feedback, focus groups should occur in different communities to reach various audiences. Engagement with community leaders who represent different audiences can help recruitment for and facilitation of these sessions.

The arc of dialogue or audience-centered interpretation may be especially useful to navigate contention or controversy. The stages used in the model help individuals establish a foundation of common knowledge and share their personal experience with others. The approach then moves into more difficult questions and discussions to help groups and practitioners arrive at shared goals. For some projects, a facilitator can help listening sessions and focus groups succeed.

Crowdsourcing, typically via the internet, can also be used in a focused way to gather information and opinions.

## Open Houses

As with listening sessions and focus groups, open houses provide opportunities for less formal engagement. They can be personal, participatory, and provide opportunities for one-on-one engagement with managers and other experts. Open houses also provide a forum to experiment with many of the additional tools described in this section, such as use of comparative imagery, participatory mapping, and experience “menus.” Open houses and some other methods and techniques can include futuring (exercises for exploring the future) and foresight engagement exercises through which individuals imagine a shared vision of the future to identify values pertinent to desired conditions. These methods highlight current issues, critical thinking, and values.

## Pop-up Sessions

Onsite interpretation and orientation activities in the project area, such as ranger-led walks, wildlife watches, and interactive “touch tables,” can present novel opportunities to interact with site visitors and serve as entry points for discussing values, beliefs, and preferences. For example, a wildflower walk could provide an opportunity to learn and to gather input on desired conditions for a trail management project.

## Participatory Mapping

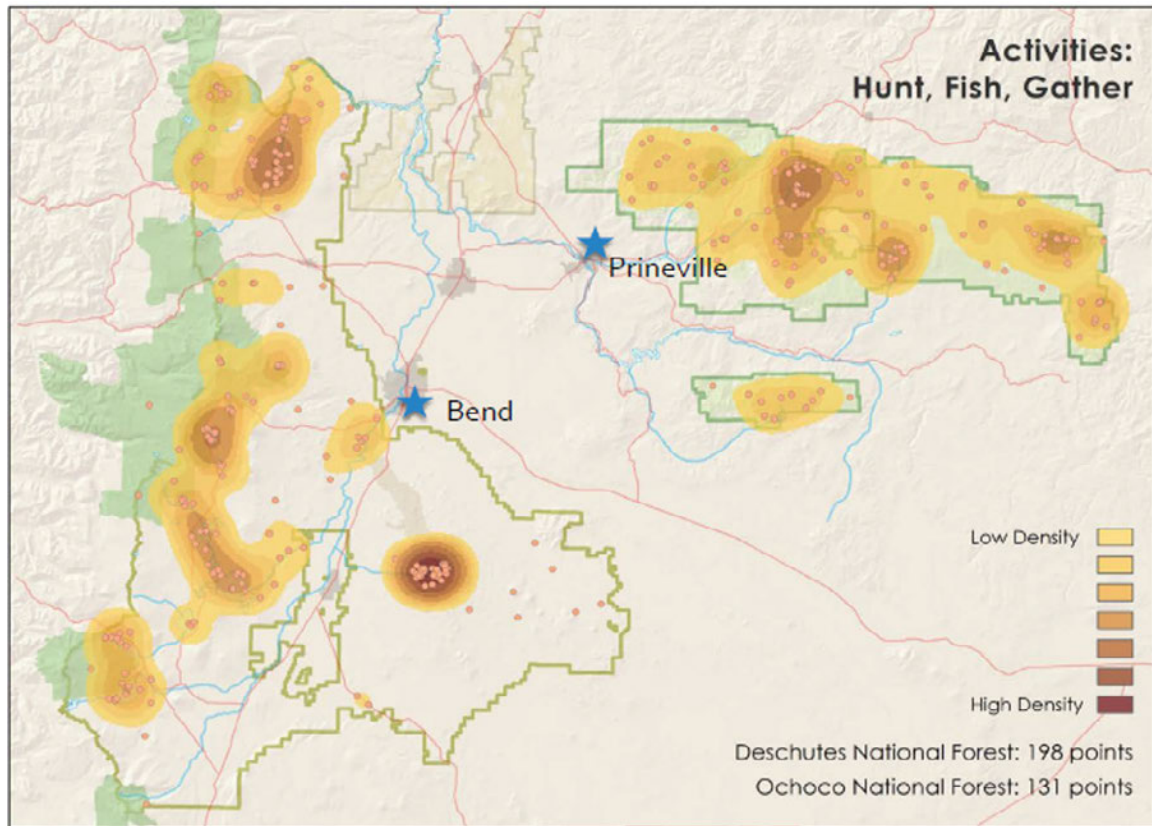
The term participatory mapping is used for methods that leverage maps and other geospatial tools to gather information about parts of the landscape that are important to people. These methods can be in-person or online. Participatory mapping uses geography as a way to elicit and organize visitor experiences and values. It uses direct questions to delve into visitor preferences and concerns about the future. Such questions could include:

- What five places are important to you?
- What threatens your favorite place?
- Where do you see potential for opportunities to improve the recreation experience?

Feedback patterns can be mapped to illustrate hotspots, helping to determine if or how to designate planning zones. Also, resulting social information can be integrated with data such as vegetation types, wildlife corridors, and sensitive cultural landscapes to inform holistic definition of desired conditions. For example, collaborative mapping is a participatory mapping tool, configured as part of the Esri ArcGIS Online platform and supported by the US Forest Service. Additional information can be found at:

- Background: [https://proceedings.esri.com/library/userconf/proc15/papers/890\\_503.pdf](https://proceedings.esri.com/library/userconf/proc15/papers/890_503.pdf)
- Application example: [www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fseprd547532.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd547532.pdf)
- SharePoint site: <https://usdagcc.sharepoint.com/Sites/fs-ppgis/SitePages/Home.aspx>

**Figure 5. Human ecology mapping project**



### **Experience “Menus”**

Several tools are available to help people describe the somewhat intangible experience of recreation. These approaches generate lists of descriptive language that serve as a “menu” of options for people to describe desired social or managerial settings. The recreation experiences and benefits checklist in appendix 2 of *Bureau of Land Management Handbook 8320-1* is one example; it offers a listing of descriptive statements such as “enjoying the closeness of friends and family,” “enjoy risk-taking adventure,” and “escaping everyday responsibilities” that are arranged by category.

Planners and practitioners can pick and choose from existing phrases or create their own, listing evocative words that help participants articulate what makes a particular place unique. Examples include:

- multigenerational
- discovery
- quiet
- comfort
- exploration
- natural sounds
- convenient services
- physically challenging
- rustic
- unconfined
- demanding
- festive

When providing a list of existing experiences, consider cultural biases that may have affected list development. Examples include:

- *Bureau of Land Management Handbook 8320-1* appendix 2, pages A2-1 to A2-4): [Recreation Experiences and Benefits Checklist \(www.blm.gov/sites/blm.gov/files/uploads/Media\\_Library\\_BLM\\_Policy\\_H-8320-1.pdf\)](http://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_H-8320-1.pdf)
- International Mountain Biking Association: Guidelines for a Quality Trail Experience ([www.imba.com/resource/guidelines-quality-trail-experience-gqte](http://www.imba.com/resource/guidelines-quality-trail-experience-gqte))

## Photo Voice

Photo voice is a participatory method in which people take or share photos related to a particular prompt regarding a project area. Some brainstorming questions work well as photo voice prompts. For example:

- What key values need to be protected?
- What is special or meaningful about this place?
- What do you wish was different?

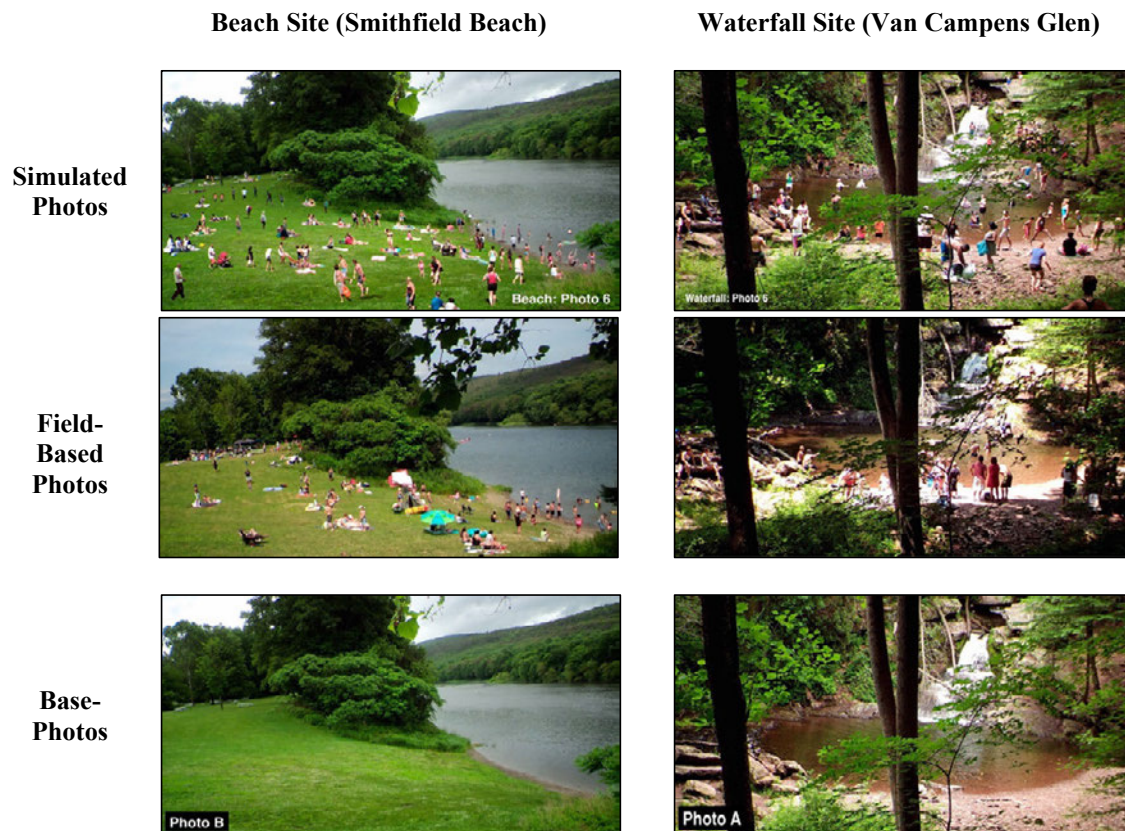
After photographs for each prompt are collected, they are discussed and reflected upon. A facilitator can help guide the conversation and aid in organizing photographs by themes for each prompt. This method can work well for people of different ages and status as well as for individuals who speak English as a second or foreign language or who are uncomfortable with speaking or writing.

## Comparative Imagery

Images often achieve what words cannot. Comparative imagery or visualizations can illuminate experiential qualities of recreation, especially for participants who are visual learners. This approach can take multiple forms. A common approach is to use photographs that show varying numbers of users (people at one time or people per viewscape) in a given location. While such photos often have been shown in sequence with increasing user numbers in images to elicit responses about preferable or acceptable user quantity, researchers recently have suggested that images be shown in nonsequential order to reduce response bias (Gibson et al. 2014). While often employed for crowding studies, these visualizations can be modified to alter different aspects of recreation use such as group size or activity in order to gain valuable information. Some studies, such as those found at [https://tigerprints.clemson.edu/cgi/viewcontent.cgi?article=3424&context=all\\_dissertations](https://tigerprints.clemson.edu/cgi/viewcontent.cgi?article=3424&context=all_dissertations), have shown that actual field-based photos (rather than renderings) from the location improve the quality of the comparative imagery approach (Fefer 2019). The following simulated and actual photos show different levels of visitation at the same area; photos like this can be used as tools for discussing desired levels of visitor use.



**Figure 6. Comparative imagery examples (courtesy: Clemson)**



Complementary approaches use example images that do not include users; instead, they use photos of similar sites, particular development types, or illustrative infrastructure to help guide site planning and design. These toolkits can help to move beyond abstract ideas to tangible discussion about desired conditions. Examples include the US Forest Service *Built Environment Image Guide* or the Bureau of Land Management Guidelines for a *Quality Built Environment*. (Be mindful of Office of Management and Budget requirements under the Paperwork Reduction Act. Contact the appropriate agency's office of management and budget information collections officer for guidance.)

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# Appendix E: Desired Conditions Case Studies

## **CASE STUDY 1. DEFINE NEW DESIRED CONDITIONS: ECLIPSE PATH OF TOTALITY, RUBY PARK AREA, SUMMER 2017**

Ruby Park is an alpine basin and dispersed recreation site in the Big Spruce National Forest. The forest is located in northwest Wyoming in a remote mountain range; visitation is generally high to moderate in the summer, although rough roads limit access. The forest is known for its spectacular granite peaks and rugged trails leading to isolated lakes. A nearby national park draws a high concentration of visitors, and this use can spill over into the forest. Though the entire forest was likely to be affected by eclipse seekers, managers determined that the best viewing area and the area most likely to be impacted was the Ruby Park area. This included several dispersed campsites, backcountry roads, and a series of hiking trails.

### **1. Determine project's position on the sliding scale of analysis**

The sliding scale position was determined to be low. Although interest was high and several thousand visitors were expected, the duration of the event was one weekend. Management actions and desired conditions were temporary for this event only and thus did not require a forest plan amendment.. Complexity was low because access is limited and confined to a small geographic area. The team determined that the risk level of impacts to resources and visitor experiences was also low. Procedures could protect social and biophysical resources as part of the action plan.

### **2. Review foundational information**

The Big Spruce National Forest Land Management Plan divides the forest into several management areas. The Ruby Peak area falls in the backcountry management area, which is managed to provide less-developed recreational opportunities. There were no specific desired conditions in the forest plan beyond this direction, though there are some management prescriptions for this area and general forest plan direction for recreation. These include a prohibition on offroad vehicle travel, limitations on length of stay (14 days), and guidelines for trail uses (nonmotorized but multiple use).

A review of existing knowledge mapped out 100 dispersed campsites, distributed across fifteen miles of road and in the valley. Based on a US Forest Service range (which considered factors such as tree damage, ground cover disturbance, and size of disturbed area) from I (very little disturbance) to IV (highly impacted), most campsites had been inventoried as class II, with a few larger sites inventoried as class III and IV. Though there were no trail use data, anecdotal reports indicated that the trails were popular for day rides on bikes and horses, as well as for day

hiking, with less emphasis on backpacking. There had been occasional conflicts with different use types. There were no restrooms, but use levels did not indicate a need for them. There is one main access road, requiring high clearance in some spots. A river is a main draw for this area; water play and dispersed camping occur here.

### **3. Methods for understanding values, beliefs, and preferences**

Though no specific surveys have taken place in the Ruby Park area, forest patrols and visitor interactions in this area allowed managers to draw some conclusions. Generally, the area is used by repeat visitors who state they come to the area every year and bring their children and later their grandchildren with them. People are well-prepared and self-sufficient, resulting in no search-and-rescue incidents in the prior fifteen years. People tend to camp well away from others and the same campsites are used repeatedly. License plates indicate mostly visitors from the three closest counties, although some out-of-state hikers and National Park visitors are starting to use the area. In general, visitors to this area appear to prefer its remoteness and solitude, as evidenced by their willingness to drive the rough access road, anecdotal comments made to national forest staff, and a lack of typical frontcountry amenities such as generators that are brought by visitors to other locations.

### **4. Select pathway**

Because no specific desired conditions existed for this specific area or event type, the team chose pathway 1: define new desired conditions. An action plan was created to safely coordinate expected visitation and to provide education and enforcement in the area. This included providing staff onsite and developing educational materials. Desired conditions were defined as part of the action plan:

Visitors arriving to Ruby Park will be able to choose between several aspen-shaded, quiet campsites next to a clear, free-flowing river. A network of biking and hiking trails leads into higher, alpine cirques. Though other people may be present, dispersed sites are far enough away to reduce human-created noise. At night, no lights disturb a wide expanse of natural darkness. The area has one primitive road that dead-ends in the valley, contributing to a feeling of remoteness and solitude.

Employees and the public will receive essential communication and will feel safe during the event. Eyewear will be available to watch the eclipse safely; roads will be kept open for emergency response; employees will be prepared to deal with potential hazards including agitated visitors; people-wildlife encounters will not be negative; and clear communications will be in place with dispatchers to respond to emergencies.

Resource impacts will be minimal and impermanent. After the event, the area will appear similar to before the event, with shaded and private dispersed campsites free of trash and human waste.



Visitors will have access to a great view of the eclipse in a unique landscape, with accurate information for planning their trips, establishing realistic expectations, and having friendly personnel onsite for interacting with visitors.

Via this event, visitors will experience a connection between people and the natural world to build support for public lands and stewardship of our lands, wildlife, and waters, build stronger relationships with friends of the forest via involvement in the event, and foster post-event positive feelings.

**Management strategies.** Potential management strategies (a later step of the VUM framework that identifies *how* desired conditions will be achieved) included:

- Provide flyers and public contact at visitor centers and other focal points to educate visitors on proper sanitation, fire safety, and protection of river environments.
- Provide porta-potties for the event.
- Provide a host to monitor the area during the event and to provide other area information to prospective visitors when existing dispersed campsites are occupied.
- Provide information and education while letting prospective visitors know the amount and type of users in the valley area.

**Indicators/thresholds.** Indicators and thresholds (a later step of the VUM framework that identifies *how we will know* if desired conditions are being achieved) include:

- **Number of new campsites.** No new campsites are created during the event.
- **Number of new vehicle routes.** New vehicle routes are not created in the Ruby Park area during the event.
- **Campsite condition.** Campsite condition classes do not increase in the area.
- **Conflicts between users.** No more than 1-2 conflicts during the event.

No specific visitor capacity (a later step of the VUM framework that identifies the maximum type and amount of use the area can accommodate while achieving desired conditions) plan was developed for the area, as the campsites were self-limiting; when they were full, visitors were directed elsewhere to avoid creating new campsites. Day users were directed to a large pullout area from which they could hike the trails or observe the eclipse.

**Monitoring plan.** The host for the area will patrol during the event, educating visitors on proper practices and collecting visitor comments on their experience. After the event, forest recreation staff will inventory the campsites and check for new roads.

## CASE STUDY 2. DESIRED CONDITIONS CASE STUDY: FURTHER ARTICULATED CONDITIONS

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South Mountain National Park is a popular destination for hiking, wildlife viewing, and cultural/historic tourism. The park offers visitors an abundance of opportunities to experience a natural and wilderness setting, with more than eighty-five percent of the park being managed as designated wilderness. The park is near numerous highly populated areas and offers respite from urbanization. An important part of the visitor experience is the park's natural soundscape. Anthropogenic noise degrades the natural soundscape and park managers reduce anthropogenic noise by managing noise sources. Specifically, park managers are creating an air tour management plan (ATMP) that would cover the entire park area.

### 1. Determine project's position on the sliding scale

An interdisciplinary project team is assembled and classifies the project as moderate on the sliding scale of analysis. The park was part of a lawsuit seeking action to manage air tours over the park, which the plaintiff won, indicating some controversy. The problem's complexity also indicated a moderate rating, as the Federal Aviation Administration leads ATMPs while the National Park Service serves as a cooperating agency. In a typical a year, the park has about 1,000 air tours, averaging about three per day, conducted by a single air tour operator.

### 2. Review foundational information

The park has an extensive planning portfolio but has no ATMP or soundscape management plan from which to define desired conditions for park soundscapes. The project team reviewed many other planning documents to identify existing desired soundscape conditions and describe desired conditions for similar natural resources or visitors' experience opportunities. Five documents were relevant, with two especially helpful: the park's natural resource condition assessment and the foundation document. The team searched these documents for words that could relate to soundscapes and air tours, including soundscape, noise, natural sound, aircraft, and anthropogenic, and found hundreds of related sentences and paragraphs. The team then categorized each statement into either a conditions statement, a management objective statement, or a desired conditions statement. Conditions statements addressed the current soundscape state or trend. Management objectives were action-oriented and gave insight into how the park might address resource conditions relating to soundscapes. Desired conditions statements addressed the desired resource conditions. Table 13 provides examples of each.

**Table 13: Conditions statements, management objectives, and desired conditions statements from prior planning documents for South Mountain National Park**

| CONDITIONS STATEMENTS  | MANAGEMENT OBJECTIVE STATEMENTS  | DESIRED CONDITIONS STATEMENTS   |
|--|--|---|
| Local urban development has increased for decades, particularly on the park's east side, degrading historic viewsheds, night skies, and soundscapes. | A soundscape management plan is a high priority, to address growing threats to the park soundscape, particularly due to rising visitation and noise along road corridors.  | Visitors can enjoy natural sounds, dark night skies, scenic vistas, and untrammelled nature while exploring wilderness, and immerse themselves in high-elevation experiences.   |
| Urban development and associated noise, artificial light, scenic intrusion, and habitat fragmentation are concerns related to park conditions.       | The park covers 400,000 acres, eighty-five percent of which is designated wilderness.  | The park provides opportunities for an increasingly urban population to experience sanctuary, wilderness, solitude, and respite from impacts of modern society.   |
| Noise and light pollution are hindering the wilderness experience in some areas.   | Appropriate emergency preparedness fund uses include hiring emergency temporary firefighters, increasing or initiating special detection operations, and leasing initial attack aircraft, all to help ensure prompt responses in case of fire. | The park offers refuge from everyday life challenges for the mind and body and potential for rejuvenation, relaxation, and renewal fostered by immersion in an ancient mountain landscape via roads, trails, and waterways. |

While none of the desired conditions statements directly addressed park soundscapes, the exercise determined the following:

- **Conditions statements:** Park soundscapes conditions are a concern and may be trending negatively.
- **Management objectives:** Soundscape management is a priority.
- **Desired conditions:** A desired visitor experience conditions statement would indicate a soundscape of mostly naturally immersive sounds.

Specifically related to desired conditions, phrases that stood out included those italicized below:

- Visitors can enjoy the experience of natural sounds...and untrammeled nature while exploring wilderness.
- Visitors can...*immerse themselves* in high-elevation experiences.
- The park provides opportunities for an increasingly urban population to experience *sanctuary, wilderness, solitude, and respite* from the impacts of modern society.
- The park offers *refuge* from everyday life challenges for the mind and body and the rejuvenation, relaxation, and renewal fostered by *immersion in an ancient mountain landscape* via roads, trails, and waterways.

### **3. Select pathway**

After reviewing the area's foundational information, the project team decided to follow pathway 3: further articulating desired conditions. The prior plans did well outlining desired conditions for the park overall, but park staff would like to be more specific about how to manage and protect the soundscape resource.

### **4. Methods for understanding values, beliefs, and preferences**

As required by National Parks Air Tour Management Act, Tribal consultation with the park occurred throughout the process and the draft ATMP was published for public review. Other review processes, including section 7 of the Endangered Species Act consultation and section 106 of the National Historic Preservation Act consultation, also were followed.

### **5. Paint the picture and be creative**

The interdisciplinary group created the following desired conditions statements that would communicate desired soundscape conditions and inform management of air tours:

- Visitors can enjoy predominantly natural sounds throughout the park. Park soundscapes support an outstanding visitor experience and opportunities to hear and enjoy natural sounds.
- Park acoustic resources are maintained in an appropriate wilderness condition and wilderness qualities are preserved. The wilderness quality of opportunities for solitude and primitive and unconfined recreation is preserved by enhancing the sense that visitors are in a remote setting with limited anthropogenic sights and sounds.
- Park staff are able to conduct, and visitors are able to experience, interpretive programming with minimal interference due to noise.



## 6. How desired conditions statements will be used

With desired conditions statements completed, the project team now needs to identify pertinent effects of noise related to each statement. For example, at what level does noise interfere with interpretive programs? After pertinent effects are identified, relevant noise exposure metrics help establish indicators and thresholds. (Table 14 shows possible indicators that would match each desired conditions statement, along with possible indicators and management actions.) Noise modeling will be used to determine if indicators and acceptable thresholds are being met or exceeded for current conditions. If conditions are not acceptable, management actions to improve acoustic conditions should be considered.

**Table 14: Indicators and thresholds for South Mountain National Parks ATMP\***

| DESIRED CONDITIONS STATEMENTS   | POSSIBLE INDICATORS  | POSSIBLE MANAGEMENT ACTION  |
|---|--|---|
| Visitors can enjoy predominantly natural sounds throughout the park. Park soundscapes support an outstanding visitor experience and opportunities to hear and enjoy natural sounds.   | <ul style="list-style-type: none"> <li>• Number of audible intrusions</li> <li>• Number of intrusions above a specified noise level</li> </ul>   | <ul style="list-style-type: none"> <li>• Daily caps on number of flights</li> <li>• Restrictions on times of day that flights can occur</li> </ul>  |
| Park acoustic resources are maintained in an appropriate wilderness condition and wilderness qualities are preserved. The wilderness quality of opportunities for solitude and primitive and unconfined recreation is preserved by enhancing the sense that visitors are in a remote setting, with limited anthropogenic sights and sounds. | <ul style="list-style-type: none"> <li>• Number of audible intrusions</li> <li>• Number of intrusions above a specified noise level</li> <li>• The amount of that time noise is above a specific noise level, such as 35 dBA, a level at which wildlife tends to respond to chronic noise</li> </ul> | <ul style="list-style-type: none"> <li>• Require operators to fly more than 2,000 feet above ground level to reduce maximum noise levels</li> <li>• Limit available routes to shorter routes or routes that stay over roads or developed areas</li> <li>• No-flight days</li> </ul> |
| Park staff are able to conduct, and visitors are able to experience, interpretive programming with minimal interference due to noise.   | <ul style="list-style-type: none"> <li>• Number of intrusions above a specific noise level, such as 52 dBA, the level at which interpretive programs are likely to be interrupted</li> </ul>   | <ul style="list-style-type: none"> <li>• Require operators to fly higher to minimize the time that noise levels are above 52 dBA</li> </ul>   |

\*Note: Possible indicators and management actions are shown here to illustrate how desired conditions are related to these later steps of the VUM framework.

## CASE STUDY 3. REFINED DESIRED CONDITIONS STATEMENTS: MAGLIOZZI RIVER

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The Magliozzi River is a stunning wild and scenic river that stretches across New England for more than 100 miles. Popular for its recreational opportunities and uninterrupted stretches of nature, the Magliozzi River leaves a lasting impression on visitors. Various visitor uses occur at different river sections and along riverbanks, with some areas emphasizing recreational uses and others emphasizing wilderness values. Monitoring in the last five years has shown changed visitor use patterns, visitor demographics, and desired social experiences at the Castleton Corridor river section. This twenty-five-mile, easternmost part of the river has a scenic designation for sixteen miles and a recreational designation for nine miles. To address changes, staff decided to update to their comprehensive river management plan for this river section.

The Castleton Corridor has varying levels of development along its banks, including three small towns that provide access for fishing and family boating. Visitors who want to boat or fish must provide their own equipment. Maintenance staff have noticed an increase in litter and natural resource damage, as well as an increase in invasive kudzu. Some of these resource impacts have been attributed to more visitors using the riverbanks for picnics, large social events, and motorized use on the recreational section. Previous desired conditions statements state that the scenic and recreational sections should be free of user-created trails and recreation-related impacts to natural and cultural resources.

### **1. Determine project's position on the sliding scale of analysis**

The Magliozzi River is 115 miles long, with multiple landowners, but its overall management is unified under management by the US Forest Service. While this project focuses on the Castleton Corridor, the project requires coordination between two government agencies (the US Forest Service and the Massachusetts Fisheries and Wildlife Board), one nonprofit organization (the Outdoor Conservancy), and two private landowners. Despite minimal controversy surrounding the project, the complexity of coordinating among multiple interested groups and communities and resource concerns related to water pollution and invasive species led to the determination that this project was moderate on the sliding scale of analysis.

## 2. Review foundational information

The Magliozzi River was designated as a wild and scenic river in 1984 due to its ORVs. This designation requires that designated river sections be managed to protect river values, including water quality and free-flowing condition.

The ORVs include:

- **Ecology**, due to terrestrial and aquatic biodiversity
- **Cultural heritage**, due to significant Native American sites that remain along the river and the history of early colonial villages
- **Scenery**, based on high bluffs, deep pools, and intact forests along the river
- **Recreation**, based on opportunities for river and land-based recreation such as fishing, boating, swimming, and wildlife viewing that draw local and regional visitors.

Early management plans from the 1980s and subsequent amendments established desired conditions that directed management actions. A comprehensive river management plan incorporated desired resource conditions and social preferences for every designated river segment. As the plan was written, demographics of the nearby rural towns have shifted, with more younger families. Recent studies showed that younger families are more likely to picnic and recreate along the riverbanks than to fish or boat. However, a noteworthy percent of visitors surveyed indicated that fishing (eighteen percent) and boating (twenty-one percent) are their primary recreation activities along the river. Also, changing technology has driven use of more motorized craft.

## 3. Determine the project pathway

Plenty of management directions and desired conditions documents were available for the river, but the review of foundational information and monitoring indicated a need for updated desired conditions to support and guide future management decisions for the Castleton Corridor. Existing desired conditions statements lacked specificity and did not account for changing social experiences and uses, instead focusing on river-based and nonmotorized river uses. After a comprehensive review of the existing desired conditions, the team decided the project path was to refine desired conditions related to the Castleton Corridor.

#### **4. Methods for understanding values, beliefs, and preferences**

Representatives from the US Forest Service, the state of Massachusetts, the adjacent town, and the Outdoor Conservancy formed a working partnership to determine methods for learning about current values, beliefs, and preferences.

Previous management plans for the river included public engagement that was well documented, allowing the project team to review previous input. Feedback over the years helped the project team paint a picture of historic visitor use and the river's importance to local history, including Native American Tribes. In addition to previous planning, river management staff and local citizens shared anecdotes with the project team about river uses and observations. These experiences were considered based on monitoring records to confirm changes in social experiences and resource conditions at certain stretches of the river.

The team enlisted the help of a social scientist to better understand the visitor use changes that were identified during monitoring. Social science data supported the rationale for a project path and provided language for refined desired conditions statements. For example, the team learned that many young families could not afford watercraft, which concentrated use on riverbanks.

In addition to the team focus on social experiences and changes, each town along the Castleton Corridor hosted an information and feedback session. Questions encouraged people to reflect on what they did at the river, what left a strong impression, and what might encourage them to go to the river if they had not already been there. The project team formed small groups that focused on separate segments of the Castleton Corridor and their visitors; the small groups were established based on resources, towns, and current zoning and desired conditions.

#### **5. Paint the picture**

Each small group created a StoryMap for their river section that depicted current conditions and visitor use. In a workshop with the project team and the social scientist, the small groups presented their story maps to inspire and facilitate discussion on visitor use and current conditions. The workshop focused on understanding the intent of the foundational information and then being inspired and challenged by the river's current condition and visitors. The team focused on refining desired conditions in a way that maintained the intent of the management plans while accommodating visitors' changing needs. For example, they ensured that the river's natural and scenic beauty would be preserved and appreciated, while describing opportunities for visitor enjoyment. At the end of the workshop, existing desired conditions statements were updated to include social experience.

The project team presented interested groups and communities with a final StoryMap that communicated a vision for the river, the intent of its foundational information, and finally the refined desired conditions statements. Interested groups and communities provided feedback on the revised statements and proposed changes via a survey conducted at the end of the session. The final desired conditions statement was:



The Castleton Corridor of the Magliozzi River is known for its high bluffs, deep, shaded pools, and long stretches of undeveloped riverbank framed by tall maple trees and other native riparian vegetation that supports a robust community of native wildlife. River access points close to local communities offer rustic facilities such as boat ramps, picnic areas, and fish cleaning stations for user convenience and resource protection. Visitors have opportunities to gather with friends and family at scenic viewpoints above the river and areas adjacent to the river where water play is common during warmer months. Between developed facilities, visitors can enjoy natural sights and sounds while floating, fishing, or enjoying several nonmotorized trails along the river corridor.

## **6. How desired conditions statements will be used**

The refined desired conditions statements now included social experiences that varied by specific areas. Based on the new specificity, picnicking areas and group shelters were created in areas with changed visitor use patterns. This provided low-cost options to recreate in ways that protected river values. Boater education encouraged separation of motorized and nonmotorized users and no-wake zones were designated for other users. New indicators based on desired conditions included loss of riverbank vegetation and presence of invasive species. The comprehensive river management plan was updated to include the changes.

River managers also supported river accessibility for changing demographics by selecting sites near growing towns for commercial service opportunities, such as boat and fishing rentals offering local community discounts. River managers also identified opportunities for special events that would introduce people to the river. These changes helped more visitors access recreational opportunities as described in the refined desired conditions statements.

## CASE STUDY 4. DESIRED CONDITIONS CASE STUDY: WINDHAM RIVERBANK NATIONAL WILDLIFE REFUGE

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Windham Riverbank National Wildlife Refuge is a 35,000-acre area known for its winding gentle river, its significance to Native American Tribes, and as a common stopping point for sandhill cranes and other migratory birds. The Refuge includes forty miles of river and riverbank, as well as surrounding hills and forests and several archeological sites. Visitors typically enjoy scenic hikes, wildlife viewing, and recreation on the river. During the sandhill crane fall migration peak, the Refuge offers an on-river viewing experience that takes visitors to see the cranes at a close but safe distance. Each year this tour increases in popularity, leading to concerns about effects on natural and cultural river resources and visitor experience. It was determined that a VUM plan was needed to address concerns related to the tour.

### **1. Determine project on the sliding scale of analysis**

An interdisciplinary project team including river ecologists, ornithologists, archeologists, and visitor use managers evaluated where the project fell on the sliding scale of analysis. The project area included multiple plans and interested groups and communities with overlapping values, including the wildlife refuge, a wild and scenic river, and local Native American Tribes. However, since the sandhill crane is not threatened or endangered and, because of the seasonal aspect of the project, the team determined that it had a moderate position on the scale.

### **2. Review foundational information**

The Refuge was established in 1952 to protect diversity of waterfowl and other migratory birds, including sandhill cranes, and other wildlife and their habitats, and to provide a variety of outdoor experiences. The Refuge has a seven-year-old comprehensive conservation plan (CCP) that identifies river areas as hotspots of sandhill crane activity and includes measures to prevent habitat loss or destruction. The CCP is used in cooperation with the administering entity to maintain and enhance the river values for which the area was designated and that benefit wildlife that depend on the river. Several Native American Tribes have cultural ties to the river and a few historic dwellings remain on the landscape. The Tribes work with Refuge staff to document traditional ecological knowledge and cultural resource conditions and to preserve the river for traditional ceremonies tied to their cultural history.

Visitor use planning documentation includes special values and goals that broadly address Refuge use. These values and goals reflect desired conditions, outlining ideal opportunities, experiences, and impressions of a visit to the Refuge, as well as desired resource conditions. These values and goals do not mention sandhill cranes or the annual tours, nor do they account for more visitors during fall peak migration. Resource experts worry about the effects of higher visitation on the Refuge's natural and cultural resources.

### **3. Select pathway**

After reviewing the Refuge's foundational information, the project team decided to follow pathway 3: further articulating existing desired conditions. The CCP, special values, and goals generally outlined desired conditions, but there was a need to address the seasonal visitation increase and focus on the cranes and tour experience, with contribution from associated Tribes. This was not specifically addressed in the CCP.

### **4. Methods for understanding values, beliefs, and preferences**

Refuge staff, including resource and conservation experts, and tribal leaders formed the core interdisciplinary workgroup to review the values outlined in the CCP. The Refuge's resource experts quickly identified a local birdwatching group as another valuable contributor to the team, as its members had extensive knowledge of the sandhill cranes and have visited the park for the migration for more than a decade. Staff also identified an important community group in defining desired conditions: the directors of a local school program that brought student populations from nearby cities to the Refuge. The group met for a day-long workshop to define desired conditions to guide future management of the area. Part of the workshop was a guided river tour during which guides discussed popular sandhill crane locations, the river condition, visitor numbers, and other relevant topics. Each tour attendee was given a map and a summary of the CCP values.

Throughout the day, the various interested groups and communities groups and some of the students who had visited the Refuge via the school program gave presentations that highlighted their values, beliefs, and preferences regarding the Refuge. Highly visual and engaging storytelling tools helped each person convey their thoughts in an impactful way. The tribes' presentations on the river's cultural history and significance was especially impactful to the birdwatchers who had toured the area for years, and the conservation expert's data presentation regarding the river's ecological trends reaffirmed the need for revised desired conditions. Some of the students noted that their Refuge visit was their first visit to a natural area and how seeing sandhill crane migration changed their thinking about the natural world and their place in it.

At the end of the presentations, the group revisited the initial desired conditions statements. The visitor survey results provided insights on the visitor experience and value reflections that led to the project. Social media images that tagged the Refuge gave insight on the visitor experience, such as what was photographed, what visitors said, and whether other visitors could be seen in the photos. The review of social media and visitor surveys, along with workgroup perspectives and river condition data, helped define the Refuge's qualitative and quantitative needs.

## 5. Paint the picture and be creative

During the final step of the process, the interdisciplinary workgroup is encouraged to close their eyes and visualize their trip down the river. They reflected on the experiences of the past few days, the stories that were shared, the impressions they had, and what made the experience special. The project team worked with a GIS specialist to develop a StoryMap that provides a visual narrative of the visitor experience during the sandhill crane migration and resources at the park. Using the StoryMap, a facilitator guided team members on the journey through the park while reciting the current goals and values. Each attendee filled out a form during the presentation on which they wrote additional thoughts, words, or feelings that expanded on the existing goal and value statements. At the completion of the activity, the facilitator generated a word cloud of the responses for each desired conditions statement. Together, the team reflected on their input and how to improve the desired conditions statement and where in the Refuge each condition applied.

After the workshop, the project team defined the desired conditions for the Refuge during the sandhill crane migration season. These were shared with workshop participants for feedback and further refinement. The final desired conditions statements were:

- Visitors can expect an inspiring boat ride during which sandhill cranes can appear at any moment around a bend in the river, dancing and preening during their stop on their yearly migration.
- Natural conditions are predominant. Native vegetation thrives and supports the scenic beauty of the river and its banks.
- Visitor use on and along the river does not impact the river's function or condition, allowing natural vegetation growth and protecting key areas for sandhill cranes.
- Tribal members can feel peace and reflect on the river's importance and function, which remain similar to that which their ancestors experienced.
- Visitors gain an increased appreciation for the river's ecological function and the Refuge's natural and cultural resources.
- Visitors leave knowing more about sandhill cranes and with pleasing photographs that can be shared and published for others to enjoy.
- Visitors feel and understand the river's importance to Native American tribes for historical meaning and current uses.

Managers synthesized the information and developed management strategies that allowed them to achieve the desired conditions. Staff implemented a monitoring plan to ensure an adaptive approach to management of the area.



# Appendix F: Interagency Guidance for Commercial Services

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Table 15: Interagency guidance for commercial services (color-coded by agency; blank cells indicate “not applicable”)

| AGENCY | USE TYPE   | LAW  | REGULATIONS            | POLICY AND GUIDANCE   | NOTES   |
|--------|--|--|------------------------|---|---|
| NPS    | Commercial services (general)                      | NPS Concession Management Improvement Act of 1998, part 4 of Public Law 105-391, and codified at 54 USC § 101911 et. seq.<br><br>Note: NPS Organic Act (54 USC 100101 et seq.), applies to all NPS activities identified below   | 36 CFR part 51         | NPS Management Policies (2006, chapter 10)<br><a href="#">Commercial Services Guide, NPS, Commercial Services Program</a> | Management authorities under NPS Commercial Services include concession contracts, commercial use authorizations, and leasing (for business and residential purposes).  |
| NPS    | Commercial services (concession contract)          | NPS Concession Management Improvement Act of 1998, part 4 of Public Law 105-391, and codified at 54 USC § 101911 et. seq.  | 36 CFR part 51         | Management Policies, chapter 10   | A concession contract is a binding written agreement between the Secretary of the Interior (or authorized delegate) and a concessioner that requires a concessioner to provide certain necessary and appropriate commercial visitor services in a park under specified terms and conditions.<br><br>There are three types of concession contracts authorized by the NPS. The type of contract is determined by whether construction and/or capital improvements are allowed on park lands, the assignment of lands or buildings to the concessioner, and maintenance requirements on assigned NPS assets.   |
| NPS    | Commercial service (commercial use authorizations) | NPS Concession Management Improvement Act of 1998, part 4 of Public Law 105-391, Section 418   | 36 CFR 1.6 and 5.3     | Management Policies, chapter 10   | A commercial use authorization allows an individual, group, company, or other for-profit entity to conduct commercial activities and provide specific visitor services in a national park unit. NPS-issued commercial use authorizations manage a wide range of commercial visitor services. Depending on the park, this can include road-based commercial tours, guided mountaineering and backpacking, bike tours, kayak trips, photography workshops, scuba-diving classes, and fishing trips. The law mandates that the National Park Service issue commercial use authorizations only for commercial activities and visitor services that are determined to be an appropriate use of the park; will have minimal impact on park resources and values; and are consistent with the park purpose, management plans, policies, and regulations. Typically, commercial use authorization holders do not operate or maintain facilities in a park unit. |
| NPS    | Commercial service (leasing)                       | Historic Preservation Act<br><br>NPS Concession Management Improvement Act of 1998 at 54 USC § 102102  | 36 CFR Parts 17 and 18 | Management Policies, chapter 8<br><br>Director’s Order 38<br>Policy Memorandum #07-01<br><br>Reference Manual 38          | A contract by which the National Park Service conveys a right to occupy and utilize real estate or facilities for a specified period of time and for a specified rent.  |
| NPS    | Cooperating associations                           | 16 USC § 6, which authorizes the National Park Service to accept donations in furtherance of NPS mission objectives<br><br>43 USC § 1473a, which gives the Secretary authority to accept and use contributions for cooperative projects with other federal, state, or private agencies; and 16 USC § 17j-2(e), which authorizes the National Park Service to work with nonprofit organizations engaged in educational activities in the national park system | -                      | Management Policies, chapter 7<br><br>Director’s Order 32<br><br>Reference Manual 32                                      | Not-for-profit organizations known as cooperating associations enhance visitor understanding, knowledge, and appreciation of national parks via the services they provide, such as operating bookstores, developing park-related publications, merchandise and audiovisual programs, and supporting educational and interpretive programming.<br><br>Cooperating associations aid and promote interpretive, historical, scientific and educational activities in parks in order to enhance visitor appreciation and enjoyment.  |

| AGENCY            | USE TYPE  | LAW   | REGULATIONS  | POLICY AND GUIDANCE  | NOTES  |
|-------------------|---|---|--|--|--|
| NPS               | Special park uses   | General uses: 54 USC 100101 et seq.<br>Rights-of-way: 54 USC 100902<br>Commercial filming and still photography: 54 USC 100905<br>Cost recovery: 54 USC 100905  | 36 CFR Parts 1-7   | Management Policies, chapter 8<br>Director's Order 53<br>Reference Manual 53   | A special park use is defined as an activity that takes place in a park area and that:<br>provides a benefit to an individual, group, or organization rather than the public at large<br>requires written authorization and some degree of management control from the National Park Service in order to protect park resources and the public interest<br>is not prohibited by law or regulation<br>is not initiated, sponsored, or conducted by the National Park Service<br>is not managed under a concession contract, a recreation activity for which the National Park Service charges a fee, or a lease |
| NPS               | Special events  | -   | 36 CFR part 2.50   | Management Policies, chapter 8<br>Director's Order 53<br>Reference Manual 53   | Special events may be authorized under permit by the superintendent subject to the same criteria as other special park uses (cited above), provided there is a meaningful association between the purpose of the park and the event and the event contributes to visitor understanding of the park's significance.<br>The National Park Service will not permit special events that are conducted primarily for the material or financial benefit of a for-profit entity or that awards participants an appearance fee or prize of more than nominal value, or in-park publicity or advertising.               |
| USFWS             | Special use permit, letter of authorization, or other permit document | Fish and Wildlife Act of 1956<br>National Wildlife Refuge System Improvement Act of 1997 (16 USC 668dd-668ee)   | 50 CFR § 29.1 - May we allow economic uses on national wildlife refuges?<br>50 CFR § 26.41 - What is the process for determining if a use of a national wildlife refuge is a compatible use? | Refuge Management part 603 FW 1<br>Service Manual 630 FW 4-6. - provided<br>522 FW 22<br>Allowable Commercial Activities and Related Facilities on Federal Assistance Lands<br>US Fish and Wildlife Service Wildlife and Sport Fish Restoration Programs Audit Guide | Commercial uses of a refuge may be appropriate if they are a refuge management economic activity, if they directly support a priority general public use, or if they are specifically authorized by statute, such as the Alaska National Interest Lands Conservation Act. Activities may include boat tours, fishing, hiking, interpretation, and education.   |
| US Forest Service | Special use authorization   | Federal Lands Recreation Enhancement Act (16 USC 6802(h)), which authorizes issuance of special recreation permits<br>Term Permit Act of 1915 (16 USC 497), which authorizes term permits for structures or facilities on NFS lands.<br>Omnibus Parks and Public Lands Management Act of 1996 (16 USC 497c), which authorizes ski areas | 36 CFR 251: Special use permits  | Forest Service Manual 2700 – Special Uses Management; chapter 2710 – Special Uses Authorization; Forest Service Handbook 2709.11 and 2709.14<br>Forest Service Manual 2340 – Privately Provided Recreation Opportunities   | For commercial activities requiring authorized use of NFS land. Examples include outfitting and guiding, recreational events such as races, and ski areas.   |



| AGENCY            | USE TYPE                                       | LAW  | REGULATIONS  | POLICY AND GUIDANCE   | NOTES   |
|-------------------|--|--|--|---|---|
| US Forest Service | Concession                                     | Section 7 of the Granger-Thye Act of 1950  | -  | Forest Service Manual 2700 – Special Uses Management; chapter 2710 – Special Uses Authorization                               | A commercial enterprise operating on NFS land under permit for the purpose of providing goods and services to the general public; for example, campground concessions.  |
| US Forest Service | Collection permits                             | -  | -  | Forest Service Handbook (FSH) 2409.18, chapter 50   | Gathering fuel wood, Christmas tree permits, collection of mushrooms.   |
| US Forest Service | Commercial filming                             | Public Law 106-206   | -  | -   | Requires a permit and a reasonable fee for commercial filming activities or similar projects on federal lands.  |
| BLM               | Special recreation permits (SRPs)              | Federal Land Policy & Management Act of 1976   | 43 CFR Subpart 2930 – Permits for recreation on public lands | BLM Manual MS-2930 – Recreation Permits and Fees<br>BLM Handbook H-2930-1 – Recreation Permit and Fee Administration Handbook | SRPs are issued to authorize specified and often time-restricted recreational uses of the public lands and related water. They apply to commercial use, competitive use, vending, special area use, and organized group activity and event use. |
| BLM               | Recreation use permits                         | Federal Land Policy & Management Act of 1976   | 43 CFR Subpart 2930 – Permits for recreation on public lands | BLM Manual MS-2930 – Recreation Permits and Fees<br>BLM Handbook H-2930-1 – Recreation Permit and Fee Administration Handbook | Short-term recreational use of specialized sites, facilities, equipment, or services.   |
| BLM               | Commercial uses (including commercial filming) | Federal Land Policy & Management Act of 1976   | 43 CFR 2920 – Leases, permits, and easements                 | Assorted BLM Manuals - MS-2200 – 2888)  | 2920 regulations cover an assortment of land use authorizations including commercial filming.   |
| USACE             | General permit                                 | -  | 33 CFR 320-332   | Rules and Regulations: Governing public use of corps of engineer’s water resources development projects                       | Special events including water carnivals, boat regattas, fishing tournaments, and music festivals.  |
| NOAA              | Permit fees                                    | 16 US Code § 1801. Findings, purposes and policy<br>46 US Code § 2101. General definitions | -  | National Marine Fisheries Service Policy Directive 30-120   | Promote domestic commercial and recreational fishing under sound conservation and management principles, including promotion of catch-and-release programs.   |

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## Appendix G: Glossary

**Desired conditions statements.** 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.

**Stakeholder and/or Interested groups and communities.** Any person or group who has an interest in an issue, project, system, or management unit.

**Sliding scale of analysis.** This approach is used to ensure that an investment of time, money, and other resources for a project is commensurate with project complexity and decision consequences.

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## Appendix H: References

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