Chapter 2: Agency Capacity for Effective Outdoor Recreation and Tourism Management

Lee K. Cerveny, Steven Selin, Dale J. Blahna, Noelle Meier, James R. Barborak, and Stephen F. McCool

In any bureaucracy, there’s a natural tendency to let the system become an excuse for inaction.

—Chris Fussell (2016)

Purpose

This chapter explores concepts in agency capacity and discusses how changes in an organization’s capacity to plan and manage outdoor recreation can shape or limit its ability to provide quality outdoor recreation experiences. We use a case study from the U.S. Forest Service to convey how shifts in financial, human, information, and material resources can challenge an agency’s ability to achieve its mission. We present recent models of agency capacity and its effect on organizational performance and explore notions of adaptive capacity and capacity-building to present ideas about how agencies can quickly reallocate resources and strategically focus on initiatives with high impact and maximum efficiency, while also promoting equity in access as well as economic, social, and environmental sustainability.

Problem Statement

There is growing recognition of the value of outdoor experiences and nature connections for human health and well-being. In coming years, protected areas such as national parks, forests, monuments, and refuges, as well as state parks and forest lands, will experience increased demand by visitors because of population growth (particularly in urban areas), improvements in transportation networks, greater affordability of travel, and the easing of travel barriers in nations like China. Meanwhile, many public land management agencies and their partners face budgetary constraints and limited staffing, which can make it difficult to (1) provide adequate resources to keep up with the maintenance and improvement of recreation...
facilities and infrastructure; (2) provide quality interpretation programs for visitors; (3) hire, train, and retain enough skilled workers with backgrounds in recreation; and (4) equip that workforce with science-based decision tools for the planning and management of recreation and tourism. Although the value of outdoor recreation on public lands is increasingly being recognized, this has not yet translated into increased agency support for providing quality outdoor experiences. In the United States, these challenges of increasing visitation and declining capacity have been observed at the state level as well (Smith et al. 2019). Despite these challenges, public agencies can expand their adaptive capacity to increase organizational performance. By reaching out to agency partners and exploring ways to leverage resources and work collectively to achieve common goals, many of these demands can be met. Capacity-building strategies can be employed to focus agency efforts on critical programs, settings, and services and to build resources from the top down and the ground up (Crisp et al. 2000).

Dimension of the Problem: Elements of Agency Capacity

Capacity exists at three levels: societal, organizational, and individual (Bolger 2000). Understanding factors that influence performance at the three levels is important for recognizing an agency’s ability to provide quality outdoor experiences and nature connections for visitors to public lands and protected areas managed by all levels of government. Although our focus is on organizational capacity, these other types of capacity influence how we organize our thinking around our ability to achieve goals to expand outdoor recreation opportunities and promote sustainable recreation and tourism.

Societal Capacity

Capacity can be discussed in terms of social values, socioeconomic well-being, politics, and technology. In relation to public lands management, we might consider how a society values nature, wilderness, and natural resources. Additionally, we may ask what value people place on the need to spend time outdoors and connect with nature. What do we believe about the importance of recreation to human health and well-being? Moreover, a society’s level of support for outdoor recreation is also a function of its economy. If an economy is strong, there will likely be greater consumer spending on outdoor recreation gear and travel to public lands both near and far. If an economy is weak, fewer people will have the resources or time to travel to public lands for relaxation, adventure, learning experiences, or exercise. Economic decline and stagnation may also be associated with crime and reduced safety, which may affect recreation participation. Finally, politics can play a role in terms of government legislative and executive branch support for public lands and their many benefits.
Organizational Capacity

Organizational capacity is shaped by budgetary resources, facilities, human resources, information resources, and leadership (fig. 2.1). An organization’s capacity is its institutional potential to perform—to successfully apply skills, resources, and effective management toward accomplishing its goals and satisfying public expectations. This capacity is expressed in terms of resources (e.g., personnel, physical, and material resources; finances; and information) and a focus on learning and adaptation. It also is expressed in terms of management (e.g., strategic leadership, program and process management, networking and linkages) (Bolger 2000, Lusthaus et al. 2002). Organizational capacity also can be constrained by the language we use and conceptual frameworks that become institutionalized in our creation of programs and budget line items (Armstrong and Derrien 2020). As noted by Blahna et al. (2020a), agencies establish programmatic areas around functional operations that can become highly restrictive. These agency “silos” and standard operating procedures may constrain how resources and opportunities are managed.

![Figure 2.1—Model of resources for organizational capacity. Adapted from Lusthaus et al. (1995).](image-url)
Individual Capacity

Individual capacity refers to one’s access to resources, personal leadership, social capital, and ability to wield influence over an outcome. Are individuals empowered to act in ways that support their personal or organizational goals? Do job descriptions define core competencies needed for each position (Appleton 2016)? To what extent do individuals have the freedom to make decisions or choices and to think creatively? To what extent do individuals exercise “agency” (or the ability and inclination to act independently and serve as change agents to get something done) in their respective positions (Giddens 1984)? Individual capacity may be enhanced or expanded in organizations and societies in which individuals have a sense of autonomy and creativity, where their views are heard and respected, where it is believed that one small human act can lead to change, and where there is relative equity in access to knowledge (e.g., libraries and the Internet). Where information is controlled, hoarded, or unevenly distributed, where there is an overall perception that individual actions are not going to make a difference, or where there is little access to information or training opportunities, individual capacity is low (Bourdieu 1977). Within an organization, individuals can possess varying degrees of capacity. In some cases, individuals are encouraged to think independently, be creative, seek resources, take risks, learn not just from success but from failure, and have the discretion to develop innovative solutions. In other situations, this type of innovation, creativity, and risk-taking is discouraged and the decision space is narrow (Lipsky 2010).

Elements of Organizational Capacity

An organization’s capacity is dependent on access to and control of financial resources, human resources, physical and material resources, and information resources as well as management effectiveness (Lusthaus et al. 1995) (fig. 2.1).

Financial Resources

The availability of an adequate and stable budget plays a crucial role in organizational capacity. Organizational performance depends on the level, stability, and flexibility of financial or budgetary resources. Are operating budgets keeping up with inflation or addressing the challenges of increased demand? Are they adequate to address the maintenance and management of existing resources used by the public? Can the institution generate direct revenues from the public it serves through user fees, taxes, and other means? Does the agency have the ability and will to be flexible, shifting resources quickly to address needs in response to changes on the ground? How well can the agency leverage additional resources through critical partnerships, grants, and agreements?
Human Resources

To maximize public service, organizations depend on having enough trained and skilled staff who are assigned to the right tasks and can build on their individual and collective strengths. Does the organization have enough employees to achieve the recreation mission? Are recreation employees able to respond to public needs? Does the organization have the ability (authorities, funds, and mechanisms) to recruit appropriate employees? Does the organization have the funds to train new and existing employees in the latest practices of recreation management? Are the right people with the right skill sets working in recreation positions? Can the organization use partnerships or agreements with other government agencies or nongovernmental entities and volunteer programs to augment personnel levels to achieve mission results? Are recruitment, retention, promotion, and training tied to critical competencies, job skills, and abilities?

Physical and Material Resources

Facilities and equipment allow services to be provided and work to be completed. Is the agency able to provide high-quality facilities, utilities, infrastructure (e.g., buildings, equipment, displays, and signage), and transportation systems to serve the public need for recreation? What is the status of existing facilities that serve the public, such as trails, restrooms, picnic shelters, boat ramps, and campgrounds? Are there enough to meet public demand? Are new facilities needed to account for increased or shifting public demands and future use? Are existing facilities of sufficient quality to keep people safe? Are adequate resources devoted to periodic maintenance and is depreciation of assets budgeted for? Are there protocols and contingencies to deal with natural disasters and other risks and emergencies?

Information Resources

Organizational capacity must be considered in terms of the accessibility and use of the best available science and information. What is the status of the organization in terms of its ability to provide access to up-to-date information, science, and technology to support recreation management? This can include many sources from simple visitor counts and feedback to data-based models of visitor behavior and management implications. What is the support for foundational and applied research and tool development for outdoor recreation? Are there technology transfer (science delivery) components built into existing agency structures? Are there adequate vehicles and protocols for sharing of best practices? How is agency leadership investing in new science that meet changing public needs? Are there adequate partnerships in place among government agencies, with universities and
research entities, and with nongovernmental organizations to generate and apply new information? Does the agency recognize and incorporate multiple sources of information (local knowledge, traditional ecological knowledge, professional expertise, scientific information) to inform decisions?

Management

Effective management is critical to an organization’s capacity (fig. 2.2). Leadership includes the ability to evaluate the significance of external events to make strategic decisions. Leadership also is required to examine internal operations and make decisions about how to shift priorities and service areas. Effective leaders establish clear goals and motivate employees to achieve those goals. To what extent are organization leaders clear about the mission? How is support for that mission being expressed and reinforced? What are the goals and targets that are being used to measure accomplishment? Does the organization identify core strengths of staff members and teams and build on them through strengths-based leadership?

Ability to focus on learning in a complex, resource-constrained environment is also a significant component of capacity. Along with complexity comes increased

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<td>• Capacity to assess and interpret external needs and opportunities</td>
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<td>• Establish direction to influence and align others toward a common goal</td>
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<td>• Motivate and commit employees to action, and make them responsible for their performance</td>
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Figure 2.2—Types of management. Adapted from Lusthaus et al. (1995).
uncertainty. This uncertainty means that organizations must emphasize learning and tolerance for errors, and must encourage adaptive management. Creating an organizational culture that is open to learning comes from leadership and can be reaffirmed by establishing processes that encourage feedback and highlight learning. In 21st-century settings, not only are resources to manage limited, but the complexity of jobs has increased dramatically.

Also important to management are the establishment of critical linkages across programmatic areas within the organization, opportunities for establishing connections at different hierarchical levels, and partnerships with external organizations to achieve common goals and leverage existing resources.

Case Study in Organizational Capacity: Recreation in the U.S. Forest Service

To illustrate some of the dimensions of capacity in the context of outdoor recreation, we now focus on one agency, the U.S. Forest Service. Although the Forest Service is not representative of all public land recreation management agencies, it also is not atypical. This section combines budgetary and personnel data with observations from recreational professionals employed by the agency. The challenges faced are expressed from the perspective of a recreational professional actively engaged in providing programs and services while facing changes in organizational capacity.

Recreation in the Forest Service at the national level is managed within a broader program called “Recreation, Heritage, and Wilderness Resources.” Access to national forest lands is important to the quality of life, health, and well-being of local residents and visitors and is associated with significant economic impacts. In 2016, national forests and grasslands attracted 148 million visits, generating an estimated $10 billion to the U.S. economy (USDA FS 2016, White et al. 2016). Despite the economic and societal benefits of outdoor recreation, public agencies often face conceptual blinders that make it difficult to recognize the value of outdoor recreation to the American people relative to other ecosystem functions, as noted in chapter 1 of this report (Blahna et al. 2020b). In the Forest Service, public use of national forests for outdoor recreation was historically treated as a secondary forest use behind timber, water, minerals, and other resources. Over the past 30 years, recreation has been outpaced in funding and attention by wildlife, ecological restoration, and fire. Leaders recognize that recreation is the primary means by which Americans connect with their national forests, yet the agency processes and programs have not been reworked to acknowledge the prominence of recreation as a programmatic area.
Financial resources—
Since 2005, the Forest Service has faced a steady decline in real dollars for appropriations in Recreation, Heritage, and Wilderness budget lines (fig. 2.3). Meanwhile, costs of operations, administration, analysis, and litigation have increased over time with inflation. Decreasing allocations have been accompanied by other restructuring at the national and regional levels, in which the Forest Service has centralized several administrative functions away from field offices. Some of those responsibilities have shifted to local managers and field personnel. This is known as “burden shift” (Kashdan 2009, Marsh 2018, U.S. GAO 2011).

![Figure 2.3 — U.S. Forest Service annual appropriations of recreation, wilderness and heritage programs from 2005 to 2019 (president’s budget), adjusted for inflation. Source: U.S. Forest Service budget justification reports: 2006–2019.]

Human resources—
Declining financial capacity has implications for workforce, public engagement, and hiring. Since 2005, full-time equivalent positions in the Recreation, Heritage, and Wilderness Resources program also have declined by more than 1,100 positions based on 2019 estimates (fig. 2.4). Many vacated recreation positions have gone unfilled, contributing to the need to spread recreation personnel across multiple districts and forests. Fewer permanent staff are available to accomplish existing work, especially considering “burden-shift” from increasing administrative duties, staff
being responsible for larger geographic scales (e.g., zone personnel responsible for multiple forests or even a whole region, rather than a specific forest or ranger district), and increased employee supervision. Permanent hiring, especially on short notice, can be difficult. Sometimes applicants qualified by human resources personnel as appropriate for a job series may lack education, training, or experience in recreation management principles and planning frameworks, or they may lack familiarity with recreation research. Moreover, vacant recreation positions are not always ranked as a priority hiring need for forests, falling behind timber, fisheries, and wildlife management positions. Finally, the Forest Service adopted a framework for sustainable recreation in 2012. Measures for sustainable recreation and tourism have been developed by the International Union for Conservation of Nature and are being adopted globally (Leung et al. 2018). Training of recreation planners in the use of these sustainable recreation approaches would be important to implement agency goals.

**Physical resources**—
The Forest Service has faced steady declines in maintenance and capital improvements funding since 2005, losing an average of 5 percent annually, with greater losses in facilities, which declined an average of 8 percent annually (fig. 2.5). Declining budgets for facilities, roads, and trails creates pressure for the agency, which has seen a steady increase of annual visitors. At the close of fiscal year 2016, the Forest Service reported a $5.5 billion maintenance backlog, including...
deferred maintenance for roads, trails, buildings, water systems, and fences, among other categories (Vincent 2017). With visitation predicted to grow in coming years (White et al. 2016), questions are raised about how maintenance needs can keep up with growing visitor use, particularly to day-use areas. Research has demonstrated that provision of outdoor recreation facilities, such as campgrounds, picnic areas, and boat ramps, is associated with higher visitation to public lands, which could generate agency revenues from user fees (Donovan et al. 2016).

Information resources—

The Forest Service prides itself on science-based management, yet there are constraints to the use and implementation of the best available science in the management of outdoor recreation (Cerveny and Ryan 2008). Some of these might be (1) lack of science delivery specialists to translate foundational science or basic research into applications or tools for use by management; (2) lack of time, personnel, or people with the appropriate recreation background to fully immerse in the latest recreation research and adapt science findings to local conditions; (3) cultural differences between research and management that make it hard for scientists to convey findings in a way that meets planning requirements and hard for managers to interpret and implement scientific results (van Wyk et al. 2008). Scientific capacity overall has declined by 500 positions since 2005, based on agency budget reports.
Recreation science in particular has quieted in recent years with the retirement of several key individuals who started their careers in the 1970s and 1980s. A steady stream of social science and recreation ecology research can help natural resource agencies develop tools and frameworks for decision support.

**Public service**
Because fewer employees are engaged in more work, less time is available to interact with the public on the ground, at meetings, or in collaborative situations. As Haque (2001) noted, when the amount of available staff declines, customer service can be adversely affected. When making choices about how to allocate time, customer service may be treated as less critical than meeting internal deadlines. On the other hand, the administrative and analysis deadlines may slip because of long days dealing with pressing issues on the ground.

**Linkages**
The Forest Service makes greater use of volunteers and partners than ever before, often thousands of person-hours of their time per year, per unit. Volunteers and partners provide a tremendous service and amount of labor, filling gaps and creating a vital role in citizen participation in the management of our public lands. Partners have expressed some concerns about being over-tapped and needing greater involvement and oversight from agency staff (Seekamp and Cerveny 2010). These concerns about overburdening volunteers and partner organizations are being considered by public land managers eager to protect these relationships.

This section has illustrated challenges faced by agencies as they seek to achieve their mission, in this case providing opportunities for the public to use national forests for a variety of outdoor activities. The Forest Service is facing declining budgets, personnel, and an increase in maintenance needs along with steady or increased visitation. Partnerships with local and national organizations have increased the role of volunteers and external funding sources and have cultivated an approach to shared stewardship. Our models of organizational capacity suggest that leadership that provides a clear vision, identifies strategic focus areas, establishes effective processes, generates new knowledge, expands linkages and partnerships, and provides opportunities for organizational learning can adapt to these changes.

**New Approaches: Adaptive Capacity and Capacity Building**

**Adaptive capacity**
Organizations that can adapt quickly to changes in societal values and available resources are said to have adaptive capacity (Staber and Sydow 2002). Organizations with capable leadership that can identify and respond quickly
to trends will be able to continue to have high performance. Responses can be made by refocusing the mission, adjusting goals or targets, retraining or hiring new personnel, or developing strategic partnerships. In the case of public land management agencies, this would mean responding to declines in financial, personnel, facilities, and information by reallocating resources, retraining employees, and reaching out to partners with mutual goals to leverage resources. It may require being strategic and focusing on high-priority and high-impact activities, while letting others go. It also suggests the need for proactive, strategic thinking and making difficult choices in response to budgetary and personnel constraints. In many cases, this may mean actually recognizing the need for “doing less with less” rather than “doing more with less.” Adaptive capacity requires nimble leadership and an agency culture that is not averse to change, flexibility, or employee willingness to restructure to meet new demands. Without adaptive capacity, agencies faced with dwindling resources may suffer declines in staff, deteriorating facilities, and loss of focus while trying to do more with less, leading to low morale and gradual loss of public support. Adaptive capacity also suggests a proactive mindset, which identifies challenges, seeks information, and works with research to test and develop innovative tools, rather than a reactive mindset, which responds to problems as they arise. Sustainable resource management is essentially forward looking; it requires anticipating future needs and problems and having flexible and innovative metrics and tools to adapt to those pressures sustainably. Thus, agency adaptive capacity is both a cause and a result of proactive thinking and management, and, as such, it may be the first and most important step in attaining the larger paradigm shift that is needed to address sustainable outdoor recreation management in the 21st century.

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**Features of Organizations With High Adaptive Capacity**

- Ability to refocus mission and establish new targets and goals to meet new reality
- Strategic investment in high-impact activities
- Budgetary flexibility to shift allocation
- Ability to hire, reassign, and retrain employees quickly
- Steady investment in research and development
- Open access to information
- Encourage creativity and innovation
- Encourage partnerships and alternative ways to leverage resources
- Encourage bottom-up solutions
Capacity building—

New approaches are being explored to focus on building organizational capacity for recreation and tourism. Crisp et al. (2000) identified four approaches for capacity building: a **top-down organizational approach** that begins with changing agency policies or practices; a **bottom-up organizational approach**, which provides new skills to existing staff; a **partnerships approach**, which strengthens relationships among diverse organizations; and a **community organizing approach** where community members form new organizations or join existing ones to focus on a common goal.

The past few years provide several examples of approaches implemented in the context of outdoor recreation management.

**Top-down**—For example, a top-down approach in the Forest Service resulted in the establishment of a National Partnership Office, which offered material and training related to partnership development for public land management agencies. The Forest Service also hired a cadre of partnership coordinators throughout the agency at various levels, which strengthened the agency’s capacity to leverage resources and add human resource capacity (Seekamp and Cerveny 2010).

**Bottom-up**—An example of bottom-up approaches might be the development of recreation short courses by universities to help train public land managers in skills related to recreation planning and management. One project focuses on empowering middle managers to have enhanced individual capacity, emphasizing learning and developing critical leadership competencies, such as planning and strategic thinking (McCool et al. 2012).

**Partnerships**—The partnership approach model was exemplified by the Forest Service, which made a concerted effort to hire partnership coordinators at the forest level, which strengthened the agency’s capacity to work with partners on outdoor recreation. The agency also emphasized partnerships as a component of performance evaluations for a wide range of employees.

**Community organizing**—Community-based approaches to outdoor recreation management have emerged in recent years. For example, in Darrington, Washington, a group of local tourism providers and community leaders formed a collaborative group to focus on outdoor recreation, public access, and roads on the Okanogan-Wenatchee National Forest. The Forest Service has implemented formal collaborative efforts for other resource management programs, such as restoration, but no such program exists that focuses on recreation or tourism management.
Further exploration of these capacity-building efforts in the context of outdoor recreation and tourism would help identify exemplary cases and best practices for sharing.

Compelling Questions
The organizational capacity literature suggests several compelling questions to be explored further to advance our thinking about agency capacity related to outdoor recreation and tourism:

1. To what extent are public lands agency leaders clear about the mission regarding outdoor recreation and tourism? How is support for that mission being expressed and supported?
2. What are the goals and targets that are being used to measure accomplishment? How are outdoor recreation programs and services being delivered? How can existing capacity be expanded to improve delivery of critical programs and services?
3. What is our collective capacity to provide innovative science and creative solutions to address resource needs? How might universities and public agencies work together to direct the development of science-based tools and frameworks to inform planning and decisionmaking? To what extent do resources exist to support research and development related to sustainable recreation?
4. What networks, partnerships, and linkages exist among public agencies, industries, partners, and stakeholders to support the provision of recreation on public lands?
5. Can we design and implement alternative capacity-building models to strengthen the efficacy of the managed recreation program? What is leadership’s role in capacity-building efforts and what is the role of community partners?

Conclusions
This chapter presents some preliminary ideas related to our organizational capacity for providing outdoor recreation and tourism and presents some frameworks and concepts to aid in how we think about the role of institutions. More information and deliberation are needed to flesh out these ideas and to think about approaches to organizational capacity building that make sense for different types of protected area management institutions, including federal bureaus and state and local government agencies, as well as their academic, nonprofit, and industry partners.
References


Igniting Research for Outdoor Recreation: Linking Science, Policy, and Action


