

Chapter 5: Rethinking “Outdoor Recreation” to Account for the Diversity of Human Experiences and Connections to Public Lands

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All crises begin with the blurring of a paradigm and the consequent loosening of the rules for normal research.

—Thomas S. Kuhn, *The Structure of Scientific Revolutions* (1962)

Purpose

This chapter explores the historical use and application of the term “outdoor recreation” as an organizing theme for sustainable public land management planning. We suggest that agencies need a more encompassing concept and approach to management involving people—one that recognizes the variety of connections that people have with natural and cultural landscapes, whether for leisure, lifestyle, livelihood, or health. This perspective suggests the need to move from a “recreation as leisure” focus to more of a “recreation as human connections” approach to public land management that better reflects the ways in which people use and value public lands.

Problem Statement

Outdoor recreation is the primary use of most public lands in the United States. For example, a recent study by the U.S. Forest Service found that 85 percent of people who visit national forests do so for recreation (USDA FS 2010). Moreover, the economic activity (e.g., local jobs, income, and tax revenue) associated with national forest recreation far outweighs all other economic contributions from national forests combined. Studies specific to recreation on federal lands show that visitors contribute at least \$51 billion to local economies around their federal recreation destination (English et al. 2014). Despite the economic importance of recreation on public lands, visitor use and economic benefit estimates are based on only a subset

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of traditional recreation activities, such as hiking, skiing, boating, hunting, and fishing. For these activities, we have good models and data for estimating national participation rates, visitor expenditures, and community economic value (English et al. 2014, Rosenberger et al. 2017, White et al. 2016). But these activities do not capture many of the other important ways that people interact with and value public lands, including religious, spiritual, cultural, sustenance, and tribal connections; gathering firewood and hundreds of different wild products for food, medicines, and crafts; participation in shared stewardship and voluntary restoration activities; physical and mental health, therapy, and education values; community sense of place and lifestyle connections; and others (fig. 5.1). For many people, these activities fulfill a vital part of their lives that go beyond simple leisure time and into the realms of cultural values, lifeways, and livelihoods. Our ability to measure and understand these types of human-landscape connections are not well understood relative to

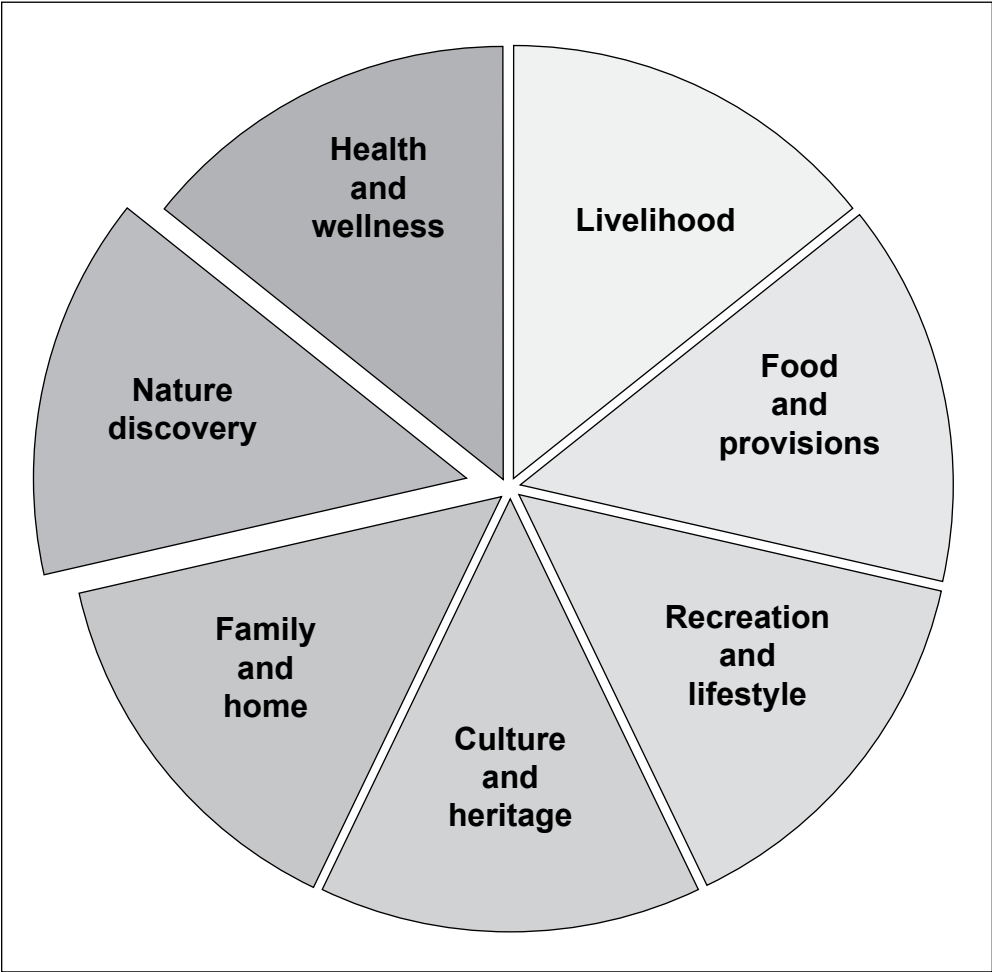


Figure 5.1—Multiple value themes attributed to activities conducted on the Olympic National Forest as identified by human ecology mapping (Cerveny et al. 2017).

more traditionally defined recreation activities. We believe that this discrepancy is tied to lack of agreement about what the concept of “recreation” encompasses and unstated assumptions that go along with the term that limit our abilities to measure and understand a broader suite of human interactions with protected areas.

In this chapter, we develop a rationale for expanding the concept of recreation to include a broader range of human uses, experiences, and connections to public lands, and consider new and more inclusive research and management tools for integrating the broad array of these human-nature relationships in landscape planning and decisionmaking. Our goal is to elevate the importance of what has been called “recreation” in land management agencies to better reflect the diversity and magnitudes of values regarding recreation uses and to improve policy and decisionmaking. Ideally, this broadened scope will help us move from a “recreation as leisure” focus to more of a “recreation as human connections” approach that better reflects the ways in which people use and value public lands.

Dimensions of the Problem

The existing management and planning emphasis on what might be called traditional recreational activities dates back to the mid-20th century (Collins and Brown 2007). During the so-called “recreation boom” following World War II, state and national parks, forests, wildlife refuges, and resource lands all saw dramatic increases in recreation visits. As a result, thousands of studies of outdoor recreation participation, experience expectations, economic value, and ecological impacts were conducted from the 1970s to 1990s and were used to develop recreation planning and management strategies. The recreation activities these tools focused on have come to define our image of what constitutes outdoor recreation, namely sporting and leisure activities. But there have been many demographic, behavioral, sociocultural, and economic changes since then, which have transformed the recreational landscape of the 21st century.

Urbanization and racial and ethnic diversification are the dominant demographic changes of the past two decades nationally. Leisure time activity patterns have also changed (Collins and Brown 2007). Compared to those in the 1970s, trips today tend to be shorter in duration, closer to home or to highly visible or iconic destinations, and with greater focus on tour packages and guided trips. Many rural economies have shifted from resource production to service- and recreation-based economies, and corresponding meanings and values of public lands for some of these community residents have also changed (Vias 1999). For example, Cordell and Overdest (2001) found that 74 percent of the nation’s top retirement destinations were in counties adjacent to national forests, parks, and grasslands. American

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Indian hunting, fishing, access, and treaty rights are being enforced and now include heritage sites and spiritual connections. The dawning of the digital era has changed activity use patterns and management issues (Collins and Brown 2007) and research needs and opportunities (Champ et al. 2013, Tenkanen et al. 2017, Wood et al. 2013).

Barriers and Challenges

Although discretionary uses and social meanings of public lands have diversified in the past 50 years, the recreation “silo” of public land management agencies has remained relatively static. Agencies allocate work across very specific and highly defined programs with standard operating procedures to assure adherence to regulations and guidelines (Wilson 2000). These procedures can become entrenched and continue into the future well after their original purpose or programmatic value has waned, with innovation and creativity ultimately suffering. This problem also exists in research, where scientists and research funding become entrenched in certain conceptual and methodological patterns known as “scientific paradigms” (Kuhn 1962). These silos can restrict how and why resources and opportunities are managed and studied; it is difficult for agency staff, policymakers, and researchers to work across silos and to consider issues outside the prevailing paradigm (or beyond the organizational norms) of their particular silo.

As noted in the prologue (Cervený et al. 2020a), recreation has become one of several silos of land management agencies, rather than an integrated program attempting to achieve a particular vision for multiple human connections with public lands. Certain types of human uses have been tossed into the recreation basket, but not others, and people who manage recreation are trained to focus on certain leisure time activities like hiking, camping, and boating, while other lifestyle and cultural activities have no bureaucratic home or are spread unevenly across other agency silos, like engineering, heritage resources, public services, public use permits, partnerships, and law enforcement. Each of these functional units, in both management and in research, have different organizational structures, training requirements, reporting metrics and methods, and promotion standards. Although specialized expertise and training are important, there is often little communication and integration across silos (fig. 5.2). Although many public land management agencies now include addressing ecosystem services as an integrated approach to describing human-public land connections, how well this approach can overcome the conceptual inertia of longstanding silos remains uncertain (Kline et al. 2013). The identification, planning, and monitoring of many types of human connections to public lands, broadly defined, can be uncoordinated and inconsistent, which may make them appear less tangible and useful for planning and decisionmaking.

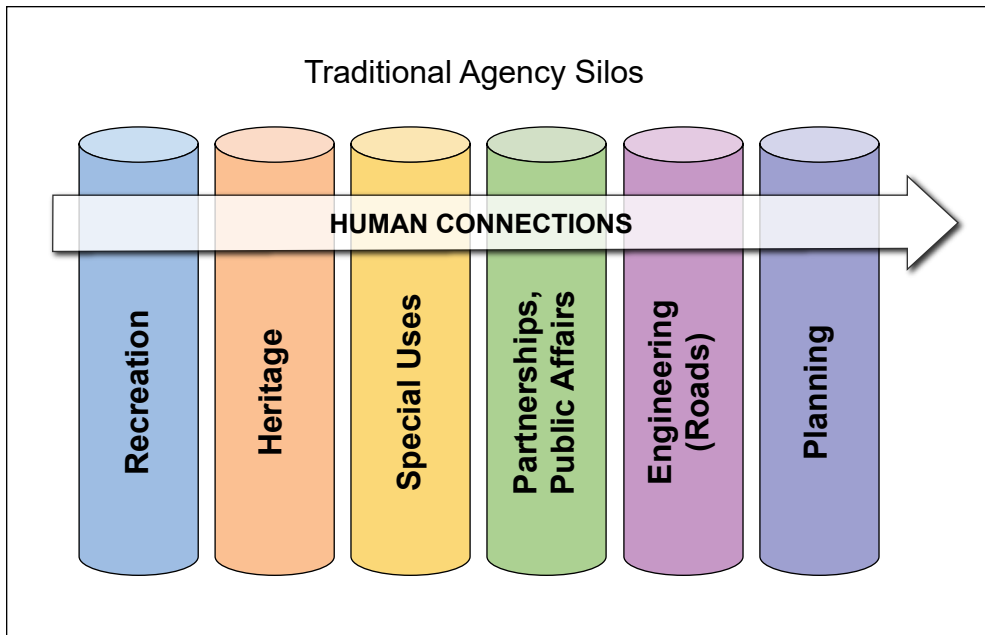


Figure 5.2—Traditional agency silos with hypothetical cross-linkages to account for “human connections” to public lands.

Recreation is often treated as a less essential use of public lands than resource production, wildlife habitat, landscape restoration, and fire and fuels reduction activities. This point came up often in a survey conducted in preparation for the 2018 Sustainable Recreation Research Workshop. One respondent commented, “Recreation and tourism are given short shrift in the agency. Overemphasis on timber and range products ignores what people come to the forest for, including hiking, camping, fishing, or hunting. Basically the agency patches together a program that should be its major emphasis.” In the *National Report on Sustainable Forests—2010* (USDA FS 2011), just 4 out of 134 pages of forest sustainability metrics are directly related to sustainable recreation, with vastly more metrics addressing wildlife, timber production, soil and water conservation, and other more traditional resource use and environmental topics. But the report also identified many social and psychological benefits of forests such as spiritual, heritage, sense of place, and other social and cultural values for which there are few or no specific metrics.

The barrier here may involve inadequate recognition of outdoor activity and nature contact as critical elements in human health, well-being, and lifestyles. This may stem from conceptions of outdoor recreation as play activities that are merely fun and entirely discretionary. However, given that work and leisure increasingly are melding in American lifestyles (Florida 2002, Frumkin et al. 2017), the artificial bifurcation of work and play ultimately may lead to an oversimplification of the human benefits of visiting public lands. For example, Anderson et al. (2000)

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found three distinctive goals for picking bracken fern fiddleheads on the Angeles National Forest: recreation, tradition/lifestyle pursuits, and commercial sale. This is probably typical of forest product gathering activities, as well as many health (e.g., run or outdoor excursion clubs, wilderness therapy), lifestyle (e.g., “hobby” ranching and prospecting), and volunteer stewardship activities (e.g., watershed restoration and trail maintenance) conducted on public lands. It can also be argued that human well-being is equally influenced by the quality of one’s relationship to natural places and the sense of being an active part of a community (Williams and Patterson 2008).

A challenge for recreation managers is overcoming the trap of past mental models that have focused on the notion that recreation is a mix of a small set of activities and a small set of settings that result in recreation satisfaction and then a resultant desired benefit. The Recreation Opportunity Spectrum (ROS), for example, which is the dominant recreation analysis tool of the Forest Service and the Bureau of Land Management (BLM), is a case in point. The ROS is an abstraction of human experiences that classifies an agency’s lands into six very general categories (urban, rural, roaded natural, semi-primitive motorized, semi-primitive non-motorized, and primitive) based on seven criteria (remoteness, access, naturalness, facilities, social encounters, visitor impacts, and management characteristics). This abstraction has taken the diversity of the natural world and our relationship to it and has reduced the richness and complexity of our imagination (Feyerabend 1999). Today, the ROS appears overly reductionist and does not recognize the simultaneous effects of incongruous setting characteristics and personal and social experiences in time, space, mind, or memory (Cervený et al. 2011, Stankey 1999).

Like ROS, most visitor management concepts and tools used today were developed in the 1970s and 1980s (Cervený et al. 2011). They reflect the post World War II “recreation boom” mentality, when a new generation of recreationists provided new challenges to managers, and recreation use levels, visitor conflicts, resource impacts, and crowding became dominant agency concerns (Manning 2010). In the 21st century, agency policies and leadership priorities are emphasizing **increasing** visitor use and access, diversifying the visitor base, enhancing experiences, sharing stewardship, and expanding collaborators in land management and decisionmaking (Collins and Brown 2007). As noted in the prologue (Cervený et al. 2020a), these are very different from the boom era concerns, and concepts like visitor satisfaction, specialization, and carrying capacity are ghosts of past models that are limiting our ability to address today’s challenges. Even terms like “user” and “visitor” are questionable, connoting a distance between people and the landscape (see chapter 4 (Armstrong and Derrien 2020) for other potential language

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anachronisms). As we embrace a more human ecology frame of seeing people as part and parcel with nature, new mental models are needed. In this era, a broader interpretation and melding of concepts related to visitors, communities, lifestyles, and shared responsibilities toward the land are needed.

These challenges have their sources in a paradigm of recreation management that is less suitable to 21st century America, a country culturally, ethnically, economically, and recreationally more diverse than when the outdoor recreation paradigm first emerged. Recreation technologies, digital media, and advanced geopositioning tools also change the cultural landscape of recreation, potentially polarizing use patterns based on income, information, and access to gear, gadgets, and goods. The existing paradigm thus results in new uses being underemphasized in planning, decisionmaking, and other administrative activities because managers, scientists, and administrators simply have not seen them as recreation.

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New Conceptual Approaches and Opportunities

The past 30 years have seen hundreds of studies of different forms of human connections to public lands, including sense of place, rural community resilience, tribal heritage and traditional uses, gathering special forest products, restoration volunteerism, and many others. A broader conceptual approach is needed to link these existing research themes with agency policies and practices to expand the recreation paradigm to account for this diversity of uses and values.

A paradigm or mental model is a way of seeing the world through a particular lens. That new lens allows us to see things we currently do not see, such as activities, experiences, and benefits for public lands that most planners do not currently incorporate or consider relevant. New paradigms arise when normal ways of doing something no longer work well (Funtowicz and Ravetz 1990, Kuhn 1962). In the case of public land recreation, reduced agency capacity and budgets (Cervený et al. 2020b), and lack of influence in decisionmaking in spite of expanding recreational demand, all suggest that the recreation paradigm is no longer as effective as it once was. However, there are areas of research and policy that suggest a more expansive approach to recreation.

Policy basis for expanding concept of recreation—

The legal basis for expanding the description and role of recreation in land management agencies arguably already is present in existing legislation and policies. For example, in a review of Forest Service policies, permits, and management implementation guidelines, Endter-Wada and Blahna (2011) developed the Linkages to Public Lands Framework, which identified the legal foundation for five major categories of public land use and access rights: tribal

linkages, general public use linkages, neighboring land linkages, interest linkages, and decisionmaking linkages. Besides recreation, these categories include uses such as permitted access and gathering rights, historical or cultural interests, volunteers and partners, research and scientific interests, and many other rights of access and use that the public has to national forests and grasslands. For example, adding the relatively new and underutilized regulatory concept of Traditional Cultural Properties to the National Historic Preservation Act is an attempt to better encapsulate and manage for cultural attachments to place by living communities at the landscape level, which can be tied into resource protection through the National Register of Historic Places. Ethnographic assessments are another research tool used to better understand and manage for cultural affiliations to public lands, primarily used by the National Park Service, which could be expanded to an interagency level.

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Ecosystem services—

One promising approach for expanding our understanding and use of the diversity of human connections to public lands is ecosystem services. Ecosystem services analyses seek to describe and measure the broad array of benefits that a landscape provides in terms of human values or outcomes (Costanza et al. 1997, Millennium Ecosystem Assessment 2005). Many federal agencies are now mandated to address impacts to ecosystem services when evaluating agency management actions. For example, the 2012 forest planning rule requires Forest Service personnel to consider and address ecosystem services as they prepare national forest land and resource management plans (USDA FS 2012). An often-identified major category of ecosystem services is “cultural ecosystem services,” which includes recreation but also other human activities and experiences on public lands, including those relating to religious, spiritual, educational, and inspirational values; to sense of place, and to mental and physical health, among others (fig. 5.3). The key contribution of an ecosystem services approach to recreation is its potential to help bridge the divide between biophysical and social management and research silos, and present a framework in which previously divergent land management issues can be given equitable representation by integrating resource analysis across programmatic silos (Jaworski et al. 2018, Smith et al. 2011). How well the ecosystem services approach can live up to its promise remains to be determined.

Several federal agencies have adopted ecosystem service analyses for planning and decisionmaking, and there is now a large body of literature and even journals and university curricula dedicated to the study of ecosystem services. Ecosystem service measures and metrics, however, are not universals; they need to be adapted to different management contexts and planning questions to reflect

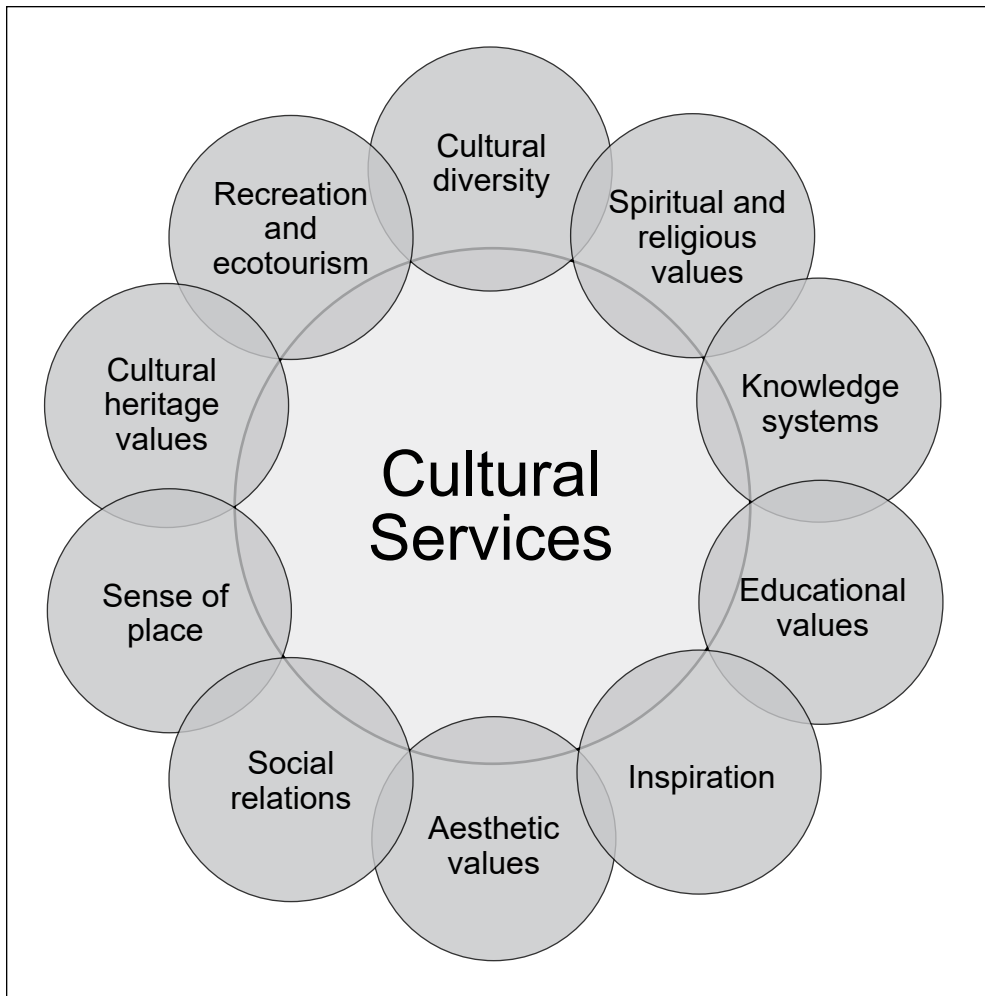


Figure 5.3—The array of cultural ecosystem services described by the Millennium Ecosystem Assessment (2005). Illustration adapted from Hølleland et al. (2017: 212).

the understanding that value is co-created by the kind of interactions and human experiences of natural areas (Asah et al. 2012). The ecosystem services approach also has been criticized for focusing entirely on human benefits rather than intrinsic and intangible values that ecosystems may provide (Chan et al. 2012, Silvertown 2015). As a result, there have been a number of recommendations for moving the field beyond simply monetizing ecosystem service values. For example, Kline and Mazotta (2012) argued for more flexible and diverse approaches to displaying ecosystem service benefit values using different types of quantitative and even qualitative representations of values for use in decisionmaking. Developing such approaches will be critical if we are to expand the identification and analyses of nature experiences as we recommend in this chapter and in chapter 6 (Wolf et al. 2020).

Although ecosystem services analyses provide methods for classifying and accounting for the diverse types of human connections to the land, many other questions must be addressed to plan and manage for sustainable recreation. For example, how do we collect data and implement ecosystem service analyses during times of diminishing capacity? Also, ecosystem service analyses do not typically link people's actions and behaviors to specific sites and landscapes, which is critical for evaluating management tradeoffs (Blahna et al. 2017). Site management application case studies are beginning to be documented, but a body of literature and generalizable principles that are feasible in public land management application still need further development and refinement (Blahna et al. 2020).

Nature and the human spirit—

An early approach to broadening the concept and meaning of outdoor recreation was published by B.L. Driver et al. (1999) in *Nature and the Human Spirit: Toward an Expanded Land Management Ethic*. This book was a compendium of “hard-to-define nature-based human experiences” derived from a wide variety of disciplines. The editors drew on literature and anecdotes from spirituality, art, ecology, human health, feminism, behavioral sciences, and many other areas. It was an expansive treatise and, in a way, a precursor of cultural ecosystems services but from a qualitative perspective. The work led to a line of research activity known as benefits-based management (BBM) in the Forest Service and BLM. BBM was highly descriptive and not operationalized by the Forest Service (Cervený et al. 2011), although the BLM has implemented some aspects in its planning processes.

Sense of place—

Another approach to describe human connections to public lands that goes beyond traditional recreation uses, is “sense of place.” In a now classic paper entitled “Beyond the commodity metaphor: examining emotional and symbolic attachment to place,” Williams et al. (1992) applied the geographic concept of **place** to natural areas and public lands. They recommended a conceptual reorientation of recreation from the past focus on instrumental benefits provided by activities, setting characteristics, and tangible experiences (e.g., solitude) to recognize that certain areas, places, or landscapes have deeper and more emotional meanings and attachments for people. These attachments and meanings result from a history of use, family traditions, cultural meanings, and many other factors unique to an individual's or group's past experiences in specific outdoor settings. Borrowing from the humanistic or phenomenological geography theories of Tuan (1977), place concepts combine geographic, historical, emotional, and cognitive psychology dimensions to the standard social psychological experiences that dominate our current approaches to managing outdoor recreation. Unique, traditional, repeated,

or highly meaningful experiences may all lend more importance to certain places that cannot be described by landscape or experience characteristics alone. It also broadens the traditional bifurcation of work and play. Work activities such as ranching or logging may contribute to one's sense of place on public land as well as outdoor recreation activities. Sense-of-place concepts have spawned hundreds of studies of the role of place in public land experiences.

Mapping places, activities, and values—

Participatory action research methods for mapping connections with landscapes and place have been widely employed and have revealed the diversity of values, uses, and interactions between people and nature (Brown et al. 2015, McLain et al. 2013). Cervený et al. (2017) found that “work” was a common response given for place uses, but that work and classic recreation activities were often listed by respondents as occurring at the same place. Furthermore, recreation activities were commonly described in terms that demonstrated values of family connection and making memorable experiences. Mapping can also have important and specific management implications. For example, Eisenhauer et al. (2000) found that special places on public lands in southern Utah are not substitutable, and many conflicts resulting from limiting use in these areas have deep seated and emotional bases that may seem outsized to managers.

We also need better methodological development and linkages to agency planning and management applications. Human Ecology Mapping and related approaches (Cervený et al. 2017) is an approach that attempts to address some of these methodological needs in a variety of geographic, jurisdictional, agency planning, and management issue contexts. Human Ecology Mapping encourages participants to identify and map outdoor activities and landscape values or benefits that are not well captured in the old recreation paradigm (fig. 5.1). The approach allows the spatial depiction of an array of activities and experiences that may co-occur within particular places in ways that blur the boundaries of leisure/lifestyle/livelihood. In general, human ecology mapping, sense-of-place mapping, and other participatory mapping approaches have the potential for melding ecosystem services, sense of place, and human connections information to be integrated with environmental data in public land planning and decisionmaking (Cacciapaglia and Yung 2013, Gunderson and Watson 2007, McLain et al. 2013).

Eudemonic values—

Most discussions of conservation and public land use values focus on hedonic (instrumental) and moral (intrinsic) values. Eudemonic values have been identified as a third fundamental human value for protecting nature, but they receive little attention in the literature or in management or policy discussions (Chan et al.

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Eudemonic (or relational) value is the idea that it is important to understand one's views of the appropriateness of relationships rather than simply what benefits them, others, or nature (instrumental and intrinsic values).

2016, van den Born et al. 2018). Eudemonic (or relational) value is the idea that, to understand human actions, interactions, and even moral foundations with nature, it is important to understand one's views of the appropriateness of relationships rather than simply what benefits them, others, or nature (instrumental and intrinsic values) (Chan et al. 2016). Tribal connections, for example, are not based solely on personal benefits or the land's intrinsic right to exist, but on beliefs of appropriate interactions between people and the land. Appropriate interactions are moral expressions of what is a meaningful, worthwhile, and well-lived life (van den Born et al. 2018). In this way, eudemonic values reflect the ethics, values, and cultural identity inherent in human interactions with the land that is found in the traditional ecological knowledge literature (Houde 2007), but broader and applied to all stakeholder groups rather than focusing on First Nations and indigenous peoples. Cultural differences in ethical implications of human and nature relations are also discussed in chapter 4 (Armstrong and Derrien 2020), along with international cross-cultural case studies in chapter 7 (Valenzuela 2020).

Outdoor activities and behaviors may be thought of as expressions of appropriateness or meaningfulness of social interactions with natural settings. In addition to tribal linkages, eudemonic values may be represented by many nonrecreational interactions with public lands that have been identified in the literature, such as participation in stewardship, restoration, voluntary, and research activities (Asah and Blahna 2013, Brooks et al. 2006, Charnley 2006, Guiney and Oberhausen 2009, van den Born et al. 2018). These activities help one to live a meaningful life and to make a positive difference in the world. A better understanding of how eudemonic values relate to and influence people's outdoor behaviors and their attitudes toward agency management actions may help provide a richer understanding of outdoor experiences and the many ways that people connect with and value public lands beyond instrumental, intrinsic, and even symbolic values of nature.

Compelling Questions

1. How can we redefine or reconfigure existing definitions and descriptions of outdoor recreation to better account for the diversity of human uses, values, and connections to public lands?
2. In what ways do existing laws, policies, and regulatory frameworks already facilitate and foster recreation and human connections as a consideration in public lands management?
3. How can we describe, map, or display human connections to public lands in ways that are broader and more inclusive than traditional instrumental values like recreation activities, experience expectations, and personal benefits?
4. How can ecosystem services be used to describe and display value estimates (monetary, quantitative, and qualitative) of the many different

types of human connections to public lands so that cultural ecosystem services can be considered along with provisioning, supporting, and regulating ecosystem services in public land policy and decisionmaking?

5. How can cultural ecosystem services be operationalized with a focus on geographic place and at different scales to make them easier for managers to implement?
6. How can sense of place and intrinsic and eudemonic values be incorporated in agency policy and management related to human connections to the land?
7. What are the public health and well-being implications of visiting public lands?
8. How can we integrate human connections to the land in planning and management and better coordinate decisionmaking across agency silos?

Synthesis and Conclusions

Shifting social values, demographics, and economic conditions have changed how, where, and when Americans use, value, and interact with public lands. A new paradigm of human connection to public lands is needed to ensure that “outdoor recreation” is politically relevant, ecologically sustainable, and responsive to human needs and wants.

Recreation and other ways that people connect to public lands are not just about discretionary time and leisure experiences. They are also about lifestyle choices that are partially but not entirely discretionary (Florida 2002, Haggard and Williams 1992, West 1984), as well as the historical, traditional, and emotional attachments people have to certain landscapes and the role that outdoor experiences play in living a meaningful life. Work, leisure, and social interactions can combine in diverse, dramatic, and even mysterious ways to explain how and why people have special connections to the land. In this report, we hope to reconceptualize or at least broaden our understanding of “outdoor recreation.” The goal is to provide agencies with a better understanding of the nature of outdoor experiences, and of policies, management actions, and planning strategies that may help us to better incorporate the many and diverse ways that people connect with public lands. Land management agencies are moving toward a more inclusive view of public uses and outdoor experiences that goes beyond instrumental values, and it is important to incorporate new concepts and tools in sustainable recreation management and research efforts. We identified a few conceptual approaches for understanding some of these human connections, but there is little synthesis of these conceptual approaches in existing land management procedures, policies, and silos. We believe this change will require a paradigm shift from the traditional, instrumental, and agency silo-bound description of recreation to a broader and more inclusive notion of what constitutes human connections to public lands.

Recreation and other ways that people connect to public lands are not just about discretionary time and leisure experiences. They are also about lifestyle choices.

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