





HEALTH, ECONOMY & COMMUNITY:

USDA Forest Service Managers' Perspectives on Sustainable Outdoor Recreation

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Introduction

“Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and cheer and give strength to the body and soul alike.” John Muir

Nature-based recreation is believed to be the fastest growing sector of the recreation and tourism industry globally, generating an estimated 10-12 percent growth in international travel per year (World Tourism Organization, 2001). The United Nations Environmental Programme (UNEP) and Conservation International (CI) have indicated that most of the growth in leisure travel is occurring in and around the world's remaining natural areas (Christ, 2005). Within the United States, demonstrating the highest increases (double digits from 2008), were backpacking, mountain biking, and trail running; with hiking and camping increasing slightly (7 and 9 percent respectively). Participation in nature-based activities has

been measured by Cordell et al. (2008) since 2000. Prominent among the top seventeen activities, viewing or photographing flowers and trees and natural scenery ranked the highest, with growth rates of nearly 26 percent and 14 percent respectively. Cordell et al. (2008) suggest that “Americans’ interest in nature and nature-based recreation, though changing is not declining; rather, is strong and growing” (p. 10).

Increased use comes with concerns. Major initiatives and forums in the 1980's such as the creation of the World Commission on Environment and Development (WCED) and its subsequent 1987 report, Our Common Future (United Nations, 1987); and the 1992 Earth Summit, resulting in the Rio Declaration on Environment and Development, and Agenda 21 (Hall & Lew, 1998) brought to the forefront that “current generations were imposing too great a demand upon the natural environment to allow it to

continue to reproduce and maintain itself at its previous level of stability” (Butler, 1998, p. 26). Evolving as Agenda 21 for the Travel and Tourism Industry (WTTC, WTO, Earth Council, 1995), Agenda 21 laid the groundwork and guidance for sustainable recreation and tourism in a broad sense. It also prompted an expanded discourse on recreation in protected areas, which included the notion of “operating in harmony with the local environment, community, and cultures, so that these become the permanent beneficiaries not the victims of [recreation] development” (WTTC, WTO, Earth Council, 1995, p. 30).

When placed in the context of human development, protected areas serve as storehouses for biodiversity¹, and contribute to human health and well-being, through direct and indirect benefits. The benefits that healthy environments support as “ecosystem services” are often used to understand this relationship. These benefits include: 1) provisioning such as food and freshwater; 2) regulating services, such as climate regulation and water purification; 3) supporting services, such as soil formation and nutrient cycling; and 4) cultural services, such as recreational, spiritual, religious,

and other non-material benefits (Millennium Ecosystem Assessment, 2005). Sustainability becomes synonymous with a conscious strategy to prevent ecological degradation, and hence enhance ecosystem services vital to healthy species existence (Chivian, 2004). Public lands in the United States provide large corridors to protect and conserve biodiversity, as well as provide areas for healthy recreational pursuits, economic benefits to local communities by way of recreation and tourism development, and increase quality of life for surrounding communities. These ideas are also supported by the USDA Forest Service’s mission: “To sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.” (United States Department of Agriculture Forest Service (USDAFS), 2009). Sustainable recreation, conceptualized by global initiatives and supported through our public land managing agencies missions, is a multi-faceted complex idea, which has not been explored through public land manager’s perspective.

This paper explores how public land managers perceive sustainability within the context of managing for sustainable recreation² on USDA FS managed lands. The objectives

of this study were to examine USDA FS personnel perceptions of sustainable recreation and:

1. Improved health for the recreating public;
2. Increased appreciation for surrounding communities;
3. Cooperation with surrounding communities in policy and decision-making processes;
4. Improved quality of life for surrounding communities; and,
5. The economic benefits of sustainable recreation.

Methods

The study population was USDA FS managers in decision-making roles regarding recreation. The levels of responsibility were regional, forest, district, and location. A total of 872 employee’s names and email addresses were gathered and 433 individuals participated. Our final response rate was 50.5 percent, after eliminating non-functioning email addresses.

Survey Instrument

Development of our questionnaire was a multi-phased process. In our first phase we gathered impressions from the field. Suggestions were sought from USDA FS regional recreation managers to discuss the study concept and proposed objectives, which in turn provided insights on critical issues in sustainable recreation and tourism concerns. Survey items were derived from a sustainable operations survey (Winter, 2008), sustainable management concepts explored by Cottrell and others (see Cottrell & Vaske, 2006; Cottrell et al., 2007), and unique items of

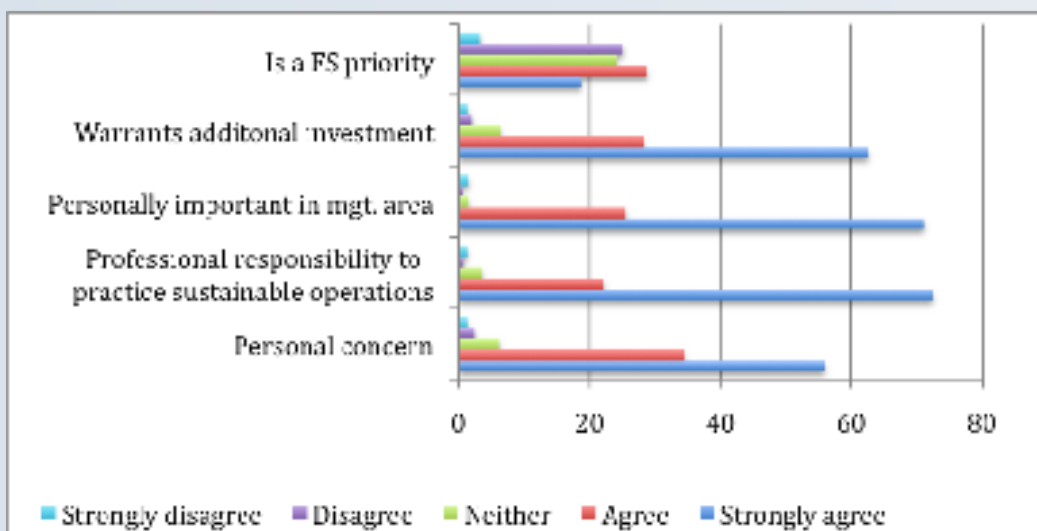


Figure 1. Importance of Sustainable Recreation.

interest to this study such as responses to global climate change which were based on previous work for the California State Parks Public Opinions and Attitudes Survey on outdoor recreation in California (Hendricks et al., 2007). The survey draft was then provided to research colleagues and agency personnel interested in sustainability and/or recreation and tourism for their review and comment, which resulted in a reduction of the number of survey items and rewording several of the items. Review by a union representative and a pretest with a random segment of our sample rounded out our survey development preparatory steps.

Survey Questionnaire

The final survey was specifically designed for online administration through a program called Zoomerang.³ Our survey included selected respondent characteristics (e.g., length of time in area, and highest level of education completed); and respondent position in the USDA FS (e.g., job title and time in assignment). To explore Forest Service managers' understanding of the relationship between sustainable recreation and tourism and surrounding communities, sections of the survey included questions surrounding economic benefits, quality of life, and community involvement in decision-making processes. Two items also explored the importance of sustainable recreation in the employee's management area (e.g., importance within the management area and sustainable recreation as a FS priority), and these were evaluated based on a five-point scale where 1=very unimportant and 5=very important.

Findings represent responses from 433 participants, the vast majority (97.9 percent) who worked full-time, primarily at the district-level (57.0 percent). Most served as recreation managers (47.8 percent) or recreation staff officers (28.9 percent),

and averaged 7.4 years in their current assignment. More than half (59.1 percent) held Bachelor's Degrees, and almost one-third had completed graduate degrees (21.7 percent Master's, 8.5 percent Ph.D.).

Forest Service Manager's Perceived Responsibility for Sustainable Recreation

Results of the survey indicated that respondents view sustainable recreation (SR) as important both professionally and personally (Figure 1). Specifically, over 90 percent of the respondents agreed they were concerned about sustainable recreation. Further, 94 percent felt they had a professional responsibility to practice sustainable operations and have SR in their management area. Almost all (90 percent) felt that SR warranted additional investment of FS resources; however, they were somewhat split on whether or not SR was a FS priority (i.e., approximately 50 percent agreed that it was).

Sustainable Recreation and Community

When considering SR and communities, Forest Service managers generally agreed that several aspects of community life were important to sustainable recreation (see Figure 2). The majority (80 percent) agreed to strongly agree that recreation created new job opportunities and diversified the local economy; and, almost 90 percent felt recreation brings new income to surrounding communities. And, 92 percent felt economic impacts of recreation on surrounding communities was an important to very important aspect of sustainable recreation.

Respondents were also asked about aspects of quality of life and sustainable recreation (see Figure 2). A vast majority (87 percent) felt that improved health for the recreating public was important to very important when considering sustainable recreation. Quality of life for surrounding communities, with 90 percent agreeing that FS managed lands

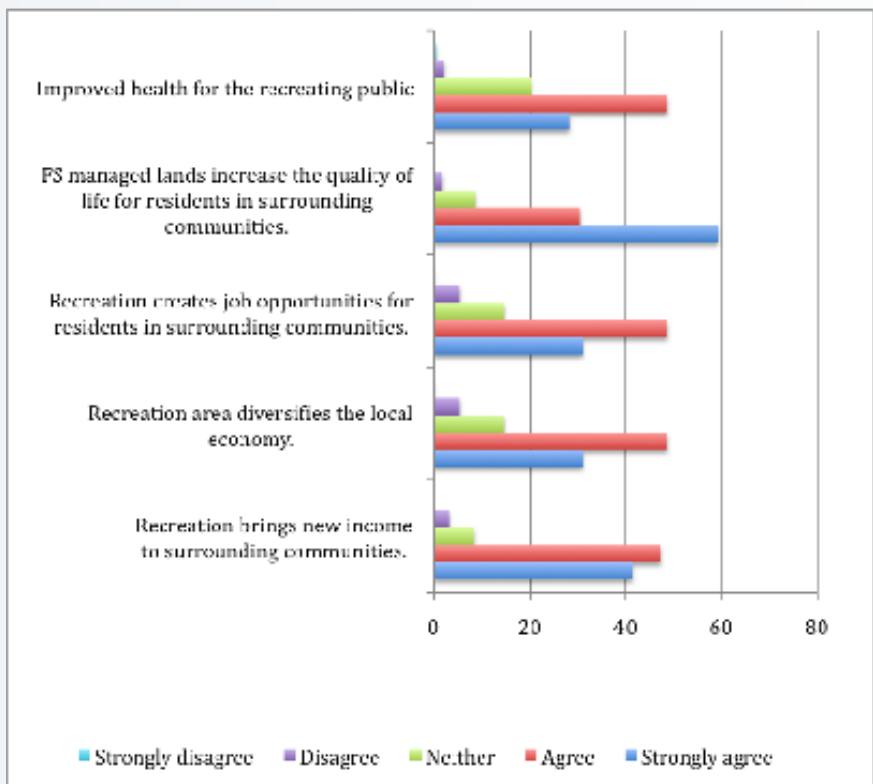


Figure 2. Agreement on Community Benefits.

increased the quality of life for residents in surrounding communities.

Lastly, while most respondents agreed that residents should be involved in decision-making (85 percent), only half (50 percent) actually felt there was good communication among parties involved in the policy and decision-making processes surrounding recreation.

Discussion

This study demonstrated that our respondents agreed there is a connection between healthy communities and sustainable recreation on FS managed lands. While many managers surveyed in this study understood the linkages to community, further assurance that this is a Forest Service priority may provide an incentive for managers to increase their emphasis on conservation and sustainable management of public lands as portals to enhancing ecosystem services (i.e., provisioning, regulating, supporting, and cultural).

This study focused on recreation managers and aspects of communities with respect to sustainable recreation development. Yet we know that protected areas not only provide direct economic benefits, but also create venues for a range of environmental services such as climate regulation, watershed protection, water purification, and pollination (Dudley et. al., 2008). The importance of ecosystem services to livelihoods and economic well-being suggests the need for a broader understanding of managers' perspectives from all resource areas (i.e., water, botanical, wildlife) within our public

lands system. The role of sustainable recreation in the broader sphere of public land management responsibilities might also be important to know. It is at the broader sphere that decisions about resource allocation and agency priorities are made.

The consequences of nearly 700 million visitors (WTO, 2001) roaming the globe at the start of the new millennium has increased awareness of the importance of creating and sustaining the biologically-diverse environments and healthy communities upon which nature-based recreation survival depends. Governments, non-governmental organizations, and communities have a critical need for research to address these public policy issues. The nature-based recreation industry, with the aid of research, has an opportunity to play a leadership role in shaping a more sustainable society, one that brings real benefit to biodiversity conservation and protection of ecosystems at all levels.

We generally accept that sustainable recreation development must be inclusive of not only environmental considerations, but also needs social and economic pillars. By exploring nature-based recreation's relationship to protection of natural areas, including biodiversity and protected areas such as public lands, we can begin to understand ways in which sustainability can be incorporated into all aspects of this complex industry. As Butler (2000) suggests, the "relationship between [recreation] and [protected areas] will never be an easy one, but for the mutual well-being of both partners, the relationship must not only

continue, but become more symbiotic if [these areas] are to continue to perform their multiple functions into the third millennium" (p. 335). And, while we understand that sustainable recreation must safeguard the natural environment in order to meet the needs of the host population and satisfy its visitors, we have yet to determine whether or not this is actually taking place in practice (Cater, 1993). The USDA Forest Service embraces as its motto: "Caring for the land and serving the people." Inherent in its mission and motto is guidance that culminates in sustainable recreation (USDA FS, 2010). For example:

- Advocating a conservation ethic in promoting the health, productivity, diversity, and beauty of forests and associated lands.
- Listening to people and responding to their diverse needs in making decisions.
- Protecting and managing the National Forests and Grasslands so they best demonstrate the sustainable multiple-use management concept.
- Providing technical and financial assistance to State and private forest landowners, encouraging them to practice good stewardship and quality land management in meeting their specific objectives.
- Providing technical and financial assistance to cities and communities to improve their natural environment by planting trees and caring for their forests.
- Providing international technical

assistance and scientific exchanges to sustain and enhance global resources and to encourage quality land management.

- Helping States and communities to wisely use the forests to promote rural economic development and a quality rural environment.
- Developing and providing scientific and technical knowledge aimed at improving our capability to protect, manage, and use forests and rangelands.
- Providing work, training, and education to the unemployed, underemployed, elderly, youth, and disadvantaged in pursuit of our mission.

This study shed some light on support for sustainability in nature-based recreation by land managers that address these issues in their daily work. Further research is needed to address the relationships between sustainable nature-based recreation and the health and viability of adjacent communities. Whether, rural, urban, or somewhere in between, the pillars of sustainable recreation offer guides to beneficial delivery of services across scales and ecosystem types. ■

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ENDNOTES

¹Biological diversity is the “variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems” (IUCN, 2001, p. VIII). Conservation of biological diversity means that we use various management practices to “maintain the populations of genes, species and areas of ecosystems” (IUCN, 2001, p. 1).

²Sustainable recreation is envisioned as an all encompassing term to include both local recreationists (visitors) and those who travel to public lands (tourists), which potentially creates a recreation/tourism industry in local communities.

³The use of trade or firm names in this paper is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.

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