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Conserving Recreation Diversity: Collaborating Across Boundaries

The word "diversity" is defined as "the quality of variety" (Merriam-Webster 1991). Diversity has become an important concept and a highly desired characteristic in many aspects of our daily lives—financial portfolios, communities, classrooms, work places, and the natural environment. This paper discusses the concept of outdoor recreation diversity, the appropriate scale to plan and manage for diversity, factors that contribute to the loss of diversity, and ways to effectively collaborate across agency boundaries to provide and maintain diversity in outdoor recreation.

What is Recreation Diversity?

Recreation diversity can be defined as the type, variety, distribution, quality, and abundance of outdoor recreational opportunities. Further, a "recreation opportunity" is defined as an opportunity for a visitor to participate in a type of recreation activity in a specific setting defined by its important physical, social, and management attributes, in order to realize a particular type of experience and subsequent benefits.

Figure 1 is a matrix for understanding recreation diversity. It borrows from the concepts of the recreation opportunity spectrum and recreation demand hierarchy (Driver and Brown 1978; Clark and Stankey 1979). The vertical continuum reflects the "setting" component of recreation diversity and is a spectrum ranging from an urban human-built setting to a remote natural setting. The horizontal continuum reflects the "experiential" component of recreation diversity and includes the activity, experience, and benefit dimensions of a recreation opportunity. Thus, the conservation of recreation diversity requires due consideration of diversity in activities, settings, experiences, and benefits.

Figure 1 is also a visual representation to help understand demand for and supply of recreation diversity. On the demand side, an individual, family, social group, or community has a preference or demand for the package of recreation opportunities (i.e., activities, setting, experience, and benefits) they would like to participate in or have available. The demand for a particular recreation opportunity can be described and located along the desired portion of the opportunity spectrum.

On the supply side, Figure 1 is

useful to array the current or existing recreation opportunities being provided by the public, private, and non-profit sectors. This can be useful to help the recreation providers define their niche and appreciate their important contribution, to see the system of diverse opportunities in an area, and to identify what demand might be unfulfilled and an opportunity for some potential provider.

Figure 1 can also help to visually understand and track past and future change in recreation diversity. Individuals, families, age cohorts, social groups, communities, and regions evolve in their recreation interests and participation. Recreation change is to be expected, and change is affected by trends, fads, affluence, age, health, interests, skills, economics, popularity, management interventions, population shifts, ethnicity, and many other factors. In some instances, change is a natural and appealing part of personal growth and choice, while in others, it is a misfortune because it precludes options and freedoms. The former is commonly referred to as "recreation succession"; the latter, "recreation displacement." The best examples of succession and displacement can be found by reflecting upon how the reader's personal recreation interests and participation have evolved over the years.

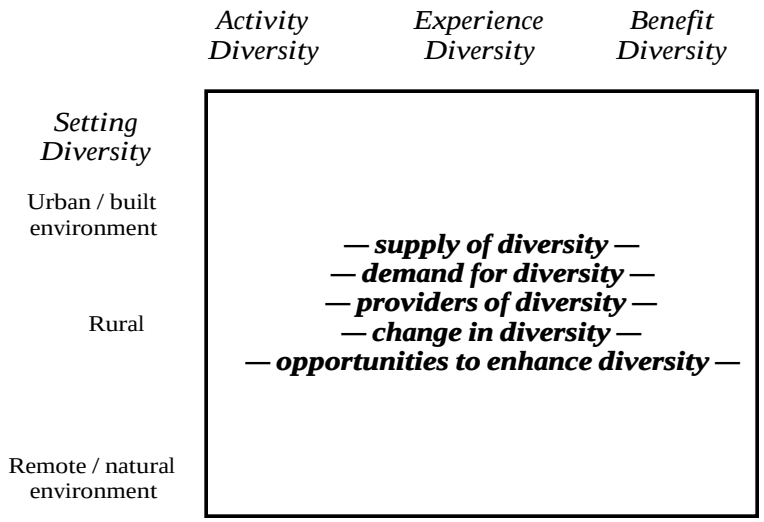

Figure 1. A matrix for conveying recreation diversity.

The Goal of Recreation Diversity

The conservation of recreation diversity should be a national goal because of the profound and significant benefits that accrue to individuals, communities, and the nation from outdoor recreation and nature-based tourism. These benefits are diverse and have been well chronicled (Driver 1999), including physical exercise, increased self-confidence, self-actualization, leadership, creative expression, inspiration, humility, reduced hypertension, family bonding, community identity, economic impact and growth, environmental stewardship, in-creased environmental knowledge, biological diversity, respect for other cultures and times of history, and personal happiness. Furthermore, the vast diversity of tastes and preferences among Americans, coupled with the desire to make outdoor recreation opportunities available to all, adds justification for the conservation of recreation diversity.

Conserving recreation diversity will require recreation planning and management to embrace several more specific operational goals:

- Plan for an integrated system of diverse recreation opportunities involving the collaborative efforts of the private sector, non-profit sector, and local, state, and federal governments;
- Manage and maintain the integrity of the natural and cultural resources, and the integrity of the recreational opportunities for which the area was planned or intended to provide;
- Monitor, learn, and adapt in order to achieve a balance between recreation supply and demand, while maintaining the integrity of the resource.

The Appropriate Scale for Planning for Recreation Diversity

An appropriate scale of analysis is one that assures adequate consideration of all factors important to the purpose of the analysis (CEQ 1993). Theoretically, the scale could range from a site to a management unit or zone, region, nation, or beyond. The appropriate scale should be large enough to include all parts of the system in question, while recognizing that all scale levels are interconnected and require due consideration. For example, biologists manage wildlife in the context of a species' home range, hydrologists manage a river in the context of its watershed, and ecosystem managers plan in the context of bioregions.

Thus, it is proposed that the appropriate scale to plan and manage for recreation diversity is the "visitation range." A visitation range is a geographic area which has (a) a recognizable recreation identity, character, or sense of place; (b) a variety of primary and secondary destinations, recreation and tourism providers, communities, travel routes, and support services; and (c) is generally of a size that requires an extended

stay or repeat visits to fully appreciate. The appropriate scale will be larger than a site, zone, management unit, or any single administrative agency. It will be a geographic area comprising private, non-profit, and public providers of recreation opportunities, along with support services related to marketing, retail, medical, food service, and others. Examples of a visitation range might include the Adirondacks, Poconos, Outer Banks of North Carolina, Ozarks, Black Hills, Four Corners area in the Southwest, Columbia River Basin, Michigan's Upper Peninsula, and Greater Yellowstone area.

Reasons a Regional Scale Can Help Conserve Recreation Diversity

The conservation of recreation diversity will require collaborative planning and management at a regional scale, or, more specifically, at a visitation range scale. This scale will not be easy to implement, and, without more experience and empirical evidence, there needs to be reliance on what has been learned from such fields as urban, land-use, and transportation planning. A regional scale will help conserve recreation diversity because it:

- Allows a more holistic view of the recreation system and of the connectivity among providers and opportunities across the visitation range;
- Helps build a socially and politically powerful regional alliance of stakeholders;
- Helps planners and managers see a larger visitor population than just today's on-site visitor, including those previously displaced local visitors or those who have the will but not the way;
- Allows for a spatial and visual representation of a recreation system, which benefits such purposes as mapping, inventory, simulation, transportation modeling, displaying alternatives, visitor itinerary planning, and public communications;
- Helps managers understand the importance and complementary role or niche of each collaborating provider, and strengthens the resolve of individual managers to maintain the integrity of the collective system;
- Helps build a "seamless" regional delivery system of recreation opportunities through a coordinated and consistent program involving such elements as marketing, message development, public education, interpretive services, visitor management policies, scheduling of special events, construction projects, area closures, and visitor reservation or limitation systems;
- Helps the visiting public become more discerning in deciding among the available recreation opportunities (i.e., type, location, distance, costs, other factors);
- Helps identify private-sector in-

vestment opportunities to develop and manage recreational or supporting services;
- Helps to fairly and equitably distribute recreation opportunities, benefits, costs, and impacts among communities, businesses, and local residents (i.e., helps achieve distributive and environmental justice);
- Helps planners and managers consider recreational opportunities and benefits for the least-advantaged and -engaged publics (i.e., helps achieve social justice);
- Helps increase the efficiency, effectiveness, and support for interagency regional efforts such as marketing, facility maintenance, volunteer programs, fund-raising, monitoring, and scientific study;
- Helps identify the type and location of sensitive, unique, highly valued, or at-risk natural and cultural resources, at-risk recreation opportunities, and locations for restoration and rehabilitation;
- Helps identify locations to expand, reduce, alter, or restore a particular type or amount of recreation opportunity;
- Helps identify important future resource acquisitions in order to increase or protect supply of available opportunities (e.g., land acquisition, water rights, development rights, easements);
- Helps justify recreational constraints in a specific location, when a reasonable set of recreation choices, freedoms, and options are still accessible;
- Helps mitigate the imposition of visitor limits when capacity of an area is threatened or exceeded, by identifying similar or alternative opportunities, alternative locations or times, and staggered or sequenced limits; expanding the supply of opportunities in the region; developing a real-time visitor-use and -capacity information system; and by other means;
- Helps locate current or future land-use conflicts, and to determine how to spatially mitigate and consider tradeoffs (i.e., recreation restoration, conservation easements);
- Helps to anticipate and understand where and what change is taking place in the system, how it will affect other components, and how to respond.

Factors Contributing to the Loss of Recreation Diversity

The factors contributing to the loss of recreation diversity are daunting, and give pause to the reasonableness of a national goal of recreation diversity. Yet, there are signs of change, and we can best prepare and affect change by understanding factors impeding it.

Fragmentation. Planning and managing at a site- or unit-scale level has value, but the conservation of recreation diversity requires a larger landscape scale. A recreational expe-

rience begins before people arrive at a specific site or jurisdiction, and continues upon departure. Visitors visit more than a site, and thus the concept of a visitation range. Yet, each individual agency understandably focuses on its own domain of responsibility, thus causing geographic fragmentation and affecting the connectivity among other recreational opportunities and support services needed to assure a quality visit.

There is also recreation opportunity fragmentation. First, there is a tendency to take a singular activity planning approach without due recognition that visitor participation is often multidimensional. Visitors often have several primary and secondary activities, along with different settings, that they desire to experience. Second, there is a tendency to define a recreation opportunity as simply a recreation activity, although the profession recognizes that a visitor will participate in a specific activity in a particular setting in order to realize a particular experience and subsequent benefits.

A maturing recreation profession. A mature profession is one that has coalesced around a basic set of values, concepts, terms, and tools. The recreation profession, and more specifically public land agencies, are not at this point. There remains much discussion and debate about many fundamental elements: how do we define "recreation," what are the benefits of recreation and tourism, how to measure demand and supply, are we managing for an activity or an experience, should we measure recreation capacity, what is an "appropriate" activity, how do we define a "recreation experience," how do we determine and manage different segments of recreation visitors, what should go into a management plan, what planning process should be used, what should be our guiding principles, and so forth.

Expanding built environments and infrastructure. The USA's population is expanding and so is the size of the human footprint. While the space being allocated to homes, factories, highways, and schools is understandable, the net effect is a loss of potential diversity for outdoor recreation and nature-based tourism opportunities.

It is common to hear about population shifts, urban development, loss of agricultural land and open space, and urban sprawl. This phenomenon is both a bane and blessing for recreation diversity. There are many examples of urban redevelopment projects which have brought outdoor recreation opportunities back to urban residents. Urban rivers and coastal areas have been restored, near-urban agricultural operations are being protected through conservation easements, community development ordinances now often require mitigation of environmental losses, and subdivision developments are being planned with

open space and recreational opportunities. With due diligence, expanding built environments and infrastructure can be an asset to recreation diversity.

Resource loss, deterioration, and change. Changes in the type, variety, distribution, quality, and abundance of natural and cultural resources are inevitable. With changes in resources will come changes to recreation diversity. While natural change is to be expected and is desirable, it is the unnatural or human-induced change that is of particular concern.

The scale of resource loss or deterioration can range from large airsheds, viewsheds, watersheds, and fisheries, to individual plants, animals, campsites, and spiritual sites. Many types of recreation opportunities are dependent on specific natural and cultural resources, and thus, when resources are at risk, recreation opportunities are at risk.

Imbalance in recreation demand and supply. It was noted earlier that our current measurement tools are not adequate to assess recreation demand and supply. Current assessments focus on specific activities, facilities, and acreage, and do not reflect the demand or supply of settings, experiences, or benefits. This measurement limitation will affect diversity.

Another imbalance is the uneven geographic distribution of recreation facilities. Of course, some distribution is a function of where the resources are, but other distribution factors can include past historical use, unplanned recreation developments, local community interests, the existence of willing sellers, political interests, and agency tradition.

There are many examples of imbalances in visitation, both over time and space, such as among park campgrounds over the summer weekends. Visitor conflicts and overcrowding are common indicators of an imbalance. This imbalance can have a direct effect on the type and quality of the desired recreation opportunity the area is being managed for. Without a visitor capacity that numerically defines how many visitors an area can accommodate, the intended recreation opportunities are at risk (Haas 2001).

Competing and conflicting land uses. The desired goods, services, values, and opportunities that the public wants from resources are expanding and changing. By analogy, more and more people want a piece of their pie. There was a time when the size of the pie could feed everyone, but that is no longer the case. We increasingly must decide who gets to sit at the table, who eats first, and who gets what size and part of the pie.

Natural resource planning has become a basic allocation exercise. Twenty years ago, the allocation issue focused across such products and services as recreation, timber,

grazing, mining, and wildlife. Today, recreation allocations must consider not only other traditional land uses but also the many diverse and evolving recreation interests and opportunities. New technology, such as motors and climbing equipment, new values, such as the desire for natural soundscapes, and new land-use designations, such as nontraditional national monuments, require a level of adaptive management that is beyond our capability to respond to. Increased competition, conflict, and complexity are factors working against the conservation of recreation diversity.

Insufficient marketing, public information, and visitor education. The actual provision of diverse recreation opportunities will be for naught unless the public is aware of and understands their choices. The public can be discerning visitors if they have enough information to understand their choices and available combinations of opportunities. Public- and private-sector coordination on a comprehensive marketing and information system is important to the conservation of recreation diversity.

Likewise, visitor behaviors can contribute to the loss of recreation diversity (e.g., large group sizes, loud music or generators, litter or human waste, walking in fragile areas). Public education programs can help visitors understand how they can have a low impact on the resources and other visitors, and how they can help management leave the area better than when they arrived.

Fee-based recreation management. The federal government has initiated the Federal Recreation Fee Demonstration Program, which includes increased use of fees paid by visiting recreationists. The program has been well received by visitors and managers alike, in part because some 80% of the revenue remains with the administering unit of collection. These monies are combined with annual appropriations to finance operations. The danger lies in management becoming complacent and dependent on these monies, and making "hard" and long-term commitments on what are, in effect, "soft" monies. A danger lies in favoring those recreation opportunities that maximize net revenues, thus shrinking recreation diversity.

Insufficient monitoring, science, and adaptive management. The number of academically trained recreation professionals employed in federal management agencies is very small, as are the resources allocated to recreation planning, management, and science. The extent and quality of monitoring is also very small, with a recent federal interagency workshop estimating that less than 5% of parklands, forest, refuges, and rivers having any monitoring effort. Moreover, agency and academic science programs are often not aligned with management needs and the re-

wards to the scientific community for field monitoring and technology transfer can be low. Lastly, adaptive management is a relatively new concept, and the practicality of adapting plans and programs given new information will take some time to be accepted. These factors will contribute to the loss of recreation diversity.

Recommendations for Working Across Agency Boundaries

Efforts to work across agency boundaries on recreation-related issues seem to be increasing. Examples include the National Recreation Lakes Study Commission, Interagency Council to Protect Wild and Scenic Rivers, Interagency Task Force on Visitor Capacity on Public Lands, and the Advisory Council on Historic Preservation.

Of particular relevance to this section has been the work of Interagency Ecosystem Management (IEM) Task Force (1996). Former Vice President Al Gore advanced a National Performance Review, which called for federal agencies to adopt a proactive approach to ensuring a sustainable economy and environment through ecosystem management. In response, the IEM Task Force was initiated in 1993 to test the efficacy of an ecosystem approach in seven demonstration projects: Anacostia River watershed, Coastal Louisiana, Great Lakes basin, Pacific Northwest forests, Prince William Sound, South Florida, and Southern Appalachians.

Table 1 contains recommendations for working across agency boundaries, based primarily upon the finding of the IEM Task Force and the author's personal experience as chairperson of the federal Interagency Task Force on Visitor Capacity on Public Lands.

Conclusion

The wisdom of the conservation of recreation diversity through a regional planning approach is not new. In 1928, federal and state leaders convened the National Conference on Outdoor Recreation. The conference outlined the elements of a federal recreation policy that included the following:

> The initiation, through inter bureau cooperation, of regional studies and planning to determine the policy which should govern forms of use, occupancy and management which will most completely realize the potential educational, scientific, inspirational and recreational values of the national parks and forests (National Conference on Outdoor Recreation 1928, 140).

In 1962, the Outdoor Recreation Resources Review Commission proposed the following management guideline:

> All agencies administering outdoor recreation resources—public and private—are urged to adopt a system of classifying recreation lands designed to make the best possible use of available resources in the light of the

Federal Agency Coordination
- Get effort authorized and endorsed by the Administration, Congress, governors, mayors
- Garner strong top-down support and encouragement for new thinking
- Encourage regular collaboration among high-level decision-makers
- Establish strong technical recreation-planning support with people committed to new ways
- Create joint planning structures, such as task forces, central offices, and joint staffing
- Decentralize and delegate appropriate authority and resources to interagency structure
- Consider boundary adjustments or reciprocal shifts in responsibility

Partnerships with Nonfederal Stakeholders
- Develop a shared regional vision (avoid imposition of federal vision)
- Assure full and equal participation with private, non-profit, and public sector
- Amend the Federal Advisory Commission Act to accommodate an easier exchange of views, information, and advice
- Establish advisory committees for large regional projects
- Offer technical assistance to private sector involved with planning effort
- Encourage local grassroots efforts to collaborate as full partners

Communication with the Public
- Develop communication plan and educational materials
- Train employees in collaborative planning, community relations, and public education
- Develop interagency communications teams and go to the communities
- Use the thoroughness and legal sufficiency of the National Environmental Policy Act process
- Monitor and evaluate public collaboration effort throughout process

Resource Allocation and Management
- Coordinate budget proposals to parallel cooperative roles
- Consider a new budget structure or organization if it would be to advantage
- Integrate field-level managers in budget planning and look long-term
- Use short-term personnel exchanges to infuse new ideas, skills, and increase flexibility
- Consider pooling budget and personnel for large complex efforts

Role of Science
- Support regional natural and social science teams
- Translate science to everyday language and reward technology transfer efforts
- Develop standards for monitoring and scientific studies
- Use external scientific and expert panels for advice and recommendations
- Monitor all efforts as requisite to adaptive management
- Ensure that research programs address primary ecosystem values, and are responsive to change

Information and Data Management
- Create a system for data sharing
- Collaborate on regional data collection and management activities

Flexibility for Adaptive Management
- Develop common monitoring and evaluation standards and procedures
- Provide sufficient incentives, authority, and responsibility for adaptive management
- Make long-term commitments to fund necessary monitoring and research

Table 1. Recommendations for crossing agency boundaries.

needs of people. Present jurisdictional boundaries of agencies need not be disturbed.... Implementation of this system would be a major step forward in a coordinated national effort. It would provide a consistent and effective method of planning for all land-managing agencies and would promote a logical adjustment of the entire range of recreation activities to the entire range of available areas (Outdoor Recreation Re-

sources Review Commission 1962, 7).

Today, there remains little institutional leadership and activity in multi-jurisdictional regional recreation planning. While many public land recreation mangers and planners speak to its need, the authority and support is absent.

Two recommendations might help resolve this dilemma. First, since the early 1960s, state park and recreation agencies have been developing Statewide Comprehensive Outdoor Recreation Plans (SCORPs) in response to the funding requirements for the Land and Water Conservation Fund Act. These plans are, of course, constrained by political boundaries and have largely lacked the collaborative planning spirit popular today. Nevertheless, some 30 years of large-scale statewide recreation planning should provide many insights. There would be merit for the Secretary of the Interior to authorize a national blue-ribbon program evaluation to determine what lessons and benefits have accrued from SCORP planning.

Second, the seven ecosystem management demonstration projects previously mentioned were selected because they encompass traditional land uses, including timber production, fisheries, grazing, agriculture, and watershed management. We learned a great deal from this effort. Given the magnitude—and in many cases, the dominance—of the social and economic benefits rural America derives from recreation and tourism, a demonstration project is needed to determine if similar benefits accrue to a service industry dependent on public natural and cultural resources. There would be merit for a presidential Executive Order or congressional direction to implement a similar demonstration project for outdoor recreation and nature-based tourism, perhaps fittingly called the Outdoor Recreation Resources Regional Planning (ORRRP) Demonstration Project.

Recreation diversity, or the quality of recreation variety, is a strength and a profound benefit to American society. Yet today, even with some 75 years of notice, the conservation of recreation diversity is at risk unless we expand our scale of vision and collaborate across boundaries.

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