

# Assessing Outdoor Recreation in the United States

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"... outdoor recreation is more important than ever in American life—as a fundamental expression of our national character, for its benefits to individuals and to society, and its significant contribution to the nation's economy."

So concluded the Outdoor Recreation Policy Review Group in February, 1983. This group was chaired by Laurance Rockefeller, and was one of the most prestigious ever assembled to examine the fate of outdoor recreation in America. Outdoor recreation is not only important commercially and aesthetically, it is fundamental to our culture. Demand for outdoor recreation has continued its spiraling growth despite an oil embargo, recession, and high unemployment (see figure 1).

In the 1960's and early 1970's government at all levels responded to increasing demands for outdoor recreation with dollars, land, and development. But in the late 1970's and early 1980's these priorities have shifted and budgets for recreation declined. Several critical questions must now be addressed: Does government have an obligation to continue to expand public outdoor recreation opportunities? If so, how can government meet such an obligation? As competition for tax revenues grows, what must we give up? In future years, what recreation opportunities will people want most, and where and how will they seek them?

Responsible government agencies and private recreation enterprise must grapple with these questions and they must be responsive to changes in outdoor recreation wants and needs. A careful and comprehensive

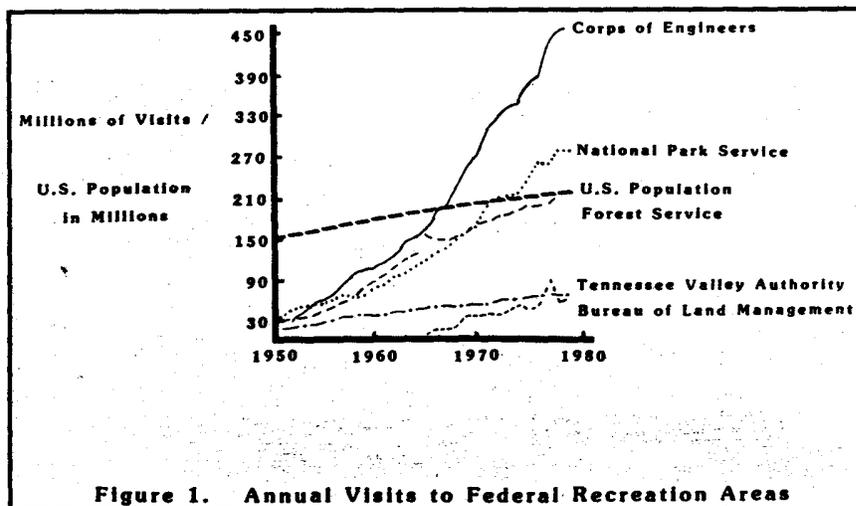


Figure 1. Annual Visits to Federal Recreation Areas

SOURCE: Driver, B.L., and D.H. Rosenthal. 1982. *Measuring and Improving Effectiveness of Public Outdoor Recreation Programs. Appendix 2: Use of Public Outdoor Recreation Opportunities, 1950-1979. Report of the Workshop on Outdoor Recreation Output Measures, Washington D.C.: Department of Human Kinetics and Leisure Studies, George Washington University.*

assessment of the current outdoor recreation demand and supply situation and recognizable recreation trends will help to identify these needs and define options for providing public outdoor recreation opportunities. In this article we explore the need for and problems associated with national recreation resource assessments. Our emphasis is on the U.S. Forest Service research program located in Athens, Georgia, aimed at improving outdoor recreation assessment methods.

## Change is Certain

This country's first comprehensive outdoor recreation assessment was provided in 1962 by the Outdoor Recreation Resources Review Commission (ORRRC). The major observations of ORRRC included:

- Outdoor recreation opportunities are most urgently needed near metropolitan areas.
- Considerable land is available for outdoor recreation, but it does not effectively meet the need.
- Outdoor recreation is a major leisure time activity which is growing in importance.

ORRRC projected how large outdoor recreation demand would be by the year 2000. Halfway through that projection period, we already see that actual growth in demand has greatly exceeded ORRRC's projections. But the significance of ORRRC's projections lie not in their accuracy, but in the fact that all indicators pointed to major changes, many of which have come true for both recreation demand and supply. Tracking these changes and iden-

tifying and projecting meaningful trends are essential to the assessment process. For example, some of the major recreation demand related trends since 1960 include:

- The U.S. population has grown by 53 million people and is shifting South and West
- Income and leisure have increased and recreation has become central to American lifestyles
- The market for outdoor recreation has become segmented into young, middle aged, and older Americans, and concern has shifted from "we" to "me"
- The average American is older
- We are changing from an industrial to a high-technology, communications society with more decentralized government, residence, and business.

Some of the major supply-related trends since 1960 include:

- The Bureau of Outdoor Recreation was created, grew, and has now been dismantled. This agency was responsible for coordinating and funding outdoor recreation planning, acquisition, and management.
- Several systems for preserving irreplaceable natural resources were created, including the National Wilderness Preservation System, the National Wild and Scenic Rivers System, the National Trails System, and National Recreation Areas. Other preservation systems, including the National Park System and the



*One major supply change since 1960 has been creation of the Wild and Scenic Rivers System.*

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- National Wildlife Refuge System, have been greatly expanded.
- Legislation was enacted to reduce air and water pollution and to protect cultural resources
- Federal expenditures for recreation increased from \$75 million in 1960 to a high of \$1.4 billion in 1980
- Federal and State governments acquired 12.6 million acres of recreation areas
- State park systems expanded from 6.6 million to 9.5 million acres
- Local government acres and areas for outdoor recreation doubled
- There has been tremendous growth in private commer-

cial recreation enterprises and facilities including resorts, second homes, ski facilities, and theme parks

- Private land and water areas have been increasingly subdivided, closed, and access otherwise limited to the public. Almost 55 million acres of private farm, forest, and range have been developed for uses other than recreation
- Water impoundments have grown tremendously, including both reservoirs and small ponds.

## Recent Assessment Activity

Several pieces of legislation enacted since 1960 require federal assessments of our national outdoor recreation situation. Public Law 88-29 directs the Secretary of the Interior to maintain an inventory of outdoor recreation needs and resources, and to develop a nationwide outdoor recreation plan. The last plan was published in 1979. Under Public Law 95-192, the Soil and Water Resources Conservation Act (RCA) of 1977, the Secretary of Agriculture is directed to appraise the outdoor recreation situation as it relates to conditions and uses of soil and water resources. The last RCA Assessment was published in 1981. In addition, the Secretary of Agriculture has been directed by the Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, as amended by the National Forest Management Act of 1976, to continuously assess the condition and uses of the renewable resources of the Nation for guidance in develop-

ment of forest and range management policies and programs. Outdoor recreation is one of the primary renewable resources examined in the RPA Assessment.

Recently, private conservation groups have become more interested in outdoor recreation. In 1980, the American Forestry Association and other resource conservation organizations sponsored the National Conference on Renewable Natural Resources. Background papers were commissioned from recognized national experts in seven major areas, one of which was recreation. The summary report from this National Conference report and a subsequent report published in 1983 by the Outdoor Recreation Policy Review Group both recommend establishment of a second ORRRC modelled after the first. A major difference would be that the new ORRRC is to draw heavily upon the expertise and data from ongoing national assessment programs, such as the Forest Service's RPA Assessment. On April 19, 1983, a bill was introduced by Senator Wallop to legislatively establish a second ORRRC.

### Ongoing Assessment Activities

Changing priorities and smaller budgets in the federal government have left only one ongoing outdoor recreation assessment effort - the Forest Service Resource Planning Act (RPA) Assessment. Forest Service research scientists are serving as national coordinators for the outdoor recreation and wilderness section of this assessment. The work is being conducted at the



Private interest in outdoor recreation has heightened recently. A recent study by the Outdoor Recreation Policy Review Group built upon previous Federal assessments and resulted in introduction of Congressional legislation to establish a second Outdoor Recreation Resources Review Commission.

Southeastern Forest Experiment Station's Forestry Sciences Laboratory at Athens, Georgia, with the assistance of key scientists and professionals at other Forest Service research locations, in universities, and in other federal agencies. Much of the research centered at the Athens Laboratory will focus on development of improved assessment methods and then applying these methods in development of the next RPA assessment of outdoor recreation in 1989.

Currently, the Bureau of the Census is conducting a nationwide survey of recreation participation. This National Recreation Survey (NRS) will be comparable with other surveys conducted in 1960 and 1965, and will be used by several federal agencies and universities for planning, research, and education. The Forest Service will draw heavily on this survey for development of projections of future participation in outdoor recreation. The projections will be used in development of the 1989 Assessment.

### Research Needs

Outdoor recreation assessments have largely proven inadequate for long-term planning. Yet, the

information assessments can provide is increasingly important for planning effective recreation delivery systems. To design the most efficient, effective and responsive systems, we need to know as much about the future as we can. This is particularly difficult in the ever-changing arena of recreation. Changes in economic conditions, legislation, demographics, equipment technology, attitudes, available leisure time, and the emergence of recreation fads make prediction of future outdoor recreation participation especially complex.

Past projections have usually underestimated the magnitude of growth in outdoor recreation. More importantly, they have failed to predict new trends and directions in participation. Better projection methods are necessary to increase prediction accuracy, especially in terms of the kinds of changes that are likely to occur.

There are several promising areas where improvements in projection accuracy can be made. First, a single, standardized system for collecting recreation participation data should be established. Without accurate and uniform data, even the best projection models will project the future inaccurately. Improvements also need to be made in statistical projection methods.

A variety of statistical techniques exist, but none have produced fully satisfactory results. Beyond demand prediction, practical and accurate methods for describing recreation supply, scenic quality and recreational quality are important for accurately assessing the recreational merit of both public and private recreational resources. Finally, a system for periodic review and updating of assessment information is necessary to help guide mid-course corrections in policy and funding.

The current system for collecting recreation participation and supply data is largely uncoordinated and unstandardized. A large number of local, state, and federal agencies and a host of private groups provide recreation opportunities for the public. However, because we lack uniform definitions of supply elements and a standard data collection system, interagency, regional, and time series comparisons are haphazard at best. A standard system would provide more meaningful comparisons and would allow more accurate local, regional, and national coordination and planning.

Much of the assessment research being conducted by the Forest Service focuses on improving statistical participation projection methods. Two principal approaches are being evaluated using the current National Recreation Survey. The first approach uses estimates of the costs of travel to recreation destinations, along with indices of complementary and substitute opportunities, income, and other characteristics to predict future use. A second method uses recreation supply indices, participant characteristics, proxies of the price of participation, and other appropriate variables as predictors of recreation participation. The constraints imposed by a set of rigid assumptions associated with "travel cost methods" are relaxed somewhat under this second approach, but at the cost of more limited application of the end results. Improved participation models will be used to develop regional and national participa-

tion projections as well as projections for specific recreational activities.

Another particularly challenging problem is meaningful description of the set of opportunities available to persons in different parts of the country. Practical and accurate methods to describe local and regional recreation supply and conceptual frameworks for structuring samples for deriving estimates of supply quantities are not adequate. Several information sources, including a nationwide survey of rural landowners and a sampling of commercial recreation enterprises, will be pulled together to derive a meaningful and comprehensive supply picture. A particular weakness in the past has been the lack of measurement methodology to determine the urban and suburban supply spectrum.

An important part of assessing the recreational merit of both the public and private resource base is scenic and recreational quality. Research is currently underway to develop the capability to predict and describe the scenic quality of forest and range settings based on traditional forest stand and vegetational

characteristics. A similar project is proposed to model recreational quality and utility. These quality descriptions can be integrated with the Recreational Opportunity Spectrum (ROS), which classifies land on a six-part continuum from primitive to urban settings. This system is currently employed by the Forest Service and the Bureau of Land Management. Research scientists will also attempt to determine ways to predict recreation participation within each ROS category.

The RPA assessment will also include a description of the amount and appropriateness of road and trail access, degree of public rights to access, amount and kind of site development, and management policies and practices. While describing the current status of these resource attributes is rather straightforward, describing trends and making future projections of these characteristics at 10-year intervals, extending 50 years into the future, presents a methodological challenge. Particular attention will be directed toward trends in and influences on private sector supply of outdoor recreation opportunities, and particularly



*An important part of recreation assessment is measuring various forms of outdoor recreational opportunities.*

toward economic influences on land use changes.

## National Assessment is a Cooperative Effort

Much of the Forest Service outdoor recreation assessment research is carried out in cooperation with key scientists in academic and private research institutions, as well as with scientists in other federal agencies. The major cooperating federal land-management agencies concerned with outdoor recreation assessment are the Forest Service, National Park Service, Soil Conservation Service, the Bureau of Land Management, and the U.S. Army Corps of Engineers. While the outdoor recreation interests of each of these agencies differ, there are many areas of mutual need and concern, for example, projections of future patterns of outdoor recreation participation. Current interagency cooperation is strong, but there is much room for strengthening the substance and process of this cooperation.

## A Final Word

The network for supplying outdoor recreation in this country is changing more rapidly than ever before. Budgets and staff are being trimmed, land and water management policies are being reexamined, and some recreation sites and facilities are being closed. At the same time, participation in outdoor recreation has climbed steadily, despite a lagging economy. New forms of outdoor recreation demand are emerging as technology and personal values change.



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*One emphasis of future assessments must be to examine the role of the private sector in outdoor recreation.*

Federal, state, and local governments and the private sector must be able to respond in meaningful ways to rapid changes in outdoor recreation demand. Timely responses require accurate knowledge of the future. Improvements in long-term forecasts of recreation participation will provide a much needed general look at that future. Frequent systematic updates of outdoor recreation assessments are necessary to provide midcourse corrections in policy and funding.

The development of periodic national assessments of outdoor recreation is a challenging and important task. The results of a national assessment are widely used and have pervasive effects. For this reason, the data bases and analyses must be carefully developed, interpreted, and subjected to rigorous standards and review. Our work in Athens is directed primarily toward improving assessment concepts, models and methodologies. This work should result in better data and analyses for the 1989 RPA Assessment, as well as for other possible assessment efforts which may emerge. As the legislation to establish a second ORRRC moves through the legislative process, it will become more clear whether or not a second comprehensive review of outdoor recreation in America will actually occur. If it

does, research to improve data bases and methods for obtaining and analyzing these data will attain even higher relevance. In any case, improved assessment methodology will assist traditional outdoor recreation planning and programming, and should ultimately lead to better management of this nation's outdoor recreation resources.

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