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OUTDOOR RECREATION FOR AMERICA

A Report to the President and to the Congress by the Outdoor Recreation Resources Review Commission

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Be it enacted by the Senate and the House of Representatives of the United States of America in Congress assembled, That in order to preserve, develop, and assure accessibility to all American people of present and future generations such quality and quantity of outdoor recreation resources as will be necessary and desirable for individual enjoyment, and to assure the spiritual, cultural, and physical benefits that such outdoor recreation provides; in order to inventory and evaluate the outdoor recreation resources and opportunities of the Nation, to determine the types and location of such resources and opportunities which will be required by present and future generations; and in order to make comprehensive information and recommendations leading to these goals available to the President, the Congress, and the individual States and Territories, there is hereby authorized and created a bipartisan Outdoor Recreation Resources Review Commission. PUBLIC LAW 85–470

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OUTDOOR RECREATION FOR AMERICA

A Report to the President and to the Congress by the Outdoor Recreation Resources Review Commission

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LETTERS OF TRANSMITTAL TO:

THE PRESIDENT

THE PRESIDENT OF THE SENATE

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

OUTDOOR RECREATION RESOURCES REVIEW COMMISSION

WASHINGTON 25, D. C.

January 31, 1962

Dear Mr. President:

The Commission is pleased to submit its report, *Outdoor Recreation for America*, in fulfillment of the Act of Congress (Public Law 85-470). The report surveys our country's outdoor recreation resources, measures present and likely demands upon them over the next forty years, and recommends actions to ensure their availability to all Americans of present and future generations.

The Congress, in setting out the work of the Commission, gave recognition to the large, permanent value of outdoor activities for the Nation's health and well-being as well as for individual enjoyment. That these physical, cultural, and spiritual benefits should be ensured for each generation of Americans is rightly a matter of persistent national concern, in troubled as in other times. Americans have responded in the past to the need for protecting their unparalleled outdoor heritage. To follow their lead in our time, when our country is growing even faster and becoming ever more urban in character, requires a new scale of effort and ingenuity. Fortunately, both land resources and the abilities of private and public effort are at hand. The Commission believes that a great deal can be accomplished by well-directed actions, taken vigorously in the near future, and by coordinated public and private activity and investment.

The Commission's work was a joint undertaking in the fullest sense. Our studies and proposals benefited immensely from the continuing aid and lively interest of the States, of some twenty Federal agencies, and from the creative criticism of the Commission's Advisory Council. We are most conscious of indispensable cooperation so freely given. Many of the Commission's studies, also, are the contribution of persons, universities, and public agencies who brought to bear special talents and experience. All these sources of aid made the Commission's broad task feasible and helped its proposals to reflect the needs and opportunities of the American people now and in the future.

Respectfully,

Laurance S. Rockefeller

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AN INTRODUCTION
WITH SUMMARY OF RECOMMENDATIONS

This report is a study of outdoor recreation in America—its history, its place in current American life, and its future. It represents a detailed investigation of what the public does in the out-of-doors, what factors affect its choices, what resources are available for its use, what are the present and future needs, and what the problems are in making new resources available. The investigation involves the present and to some extent the past, but its principal concern is for the future—between now and the year 2000. It is a plan for coming generations, one that must be started now and carried forward so that the outdoors may be available to the Americans of the future as it has been to those of the past.

Americans have long been concerned with the values of the outdoors. From Thoreau, Olmsted, and Muir in the middle of the past century to the leaders of today, there has been a continuing tradition of love of the outdoors and action to conserve its values. Yet one of the main currents of modern life has been the movement away from the outdoors. It no longer lies at the back door or at the end of Main Street. More and more, most Americans must traverse miles of crowded highways to know the outdoors. The prospect for the future is that this quest will be even more difficult.

Decade by decade, the expanding population has achieved more leisure time, more money to spend, and better travel facilities; and it has sought more and better opportunities to enjoy the outdoors. But the public has also demanded more of other things. In the years following World War II, this process greatly accelerated as an eager Nation, released from wartime restrictions, needed millions of new acres for subdivisions, industrial sites, highways, schools, and airports. The resources for outdoor recreation—shoreline, green acres, open space, and unpolluted waters—diminished in the face of demands for more of everything else.

In Washington, this created legislative issues in the Congress and administrative problems within the agencies responsible for providing opportunities for outdoor recreation. Similar problems were faced in many State capitals across the country. In some cases, they stemmed from conflicts among different interests vying for use of the same resources. In others, it was the matter of responsibility—who should do the job, and who should pay the bill. Private landowners were faced with problems caused by the public seeking recreation on their land. The factors which brought about the increased need for outdoor recreation grew, and each year the problems intensified.

During the 1950's, the pressing nature of the problems of outdoor recreation had become a matter of deep concern for Members of Congress, State legislators, other public leaders, and many private citizens and organizations. Numerous problems, both foreign and domestic, were making demands upon the Nation's resources and energies. But it was felt that in making choices among these priorities, America must not neglect its heritage of the outdoors—for that heritage offers physical, spiritual, and educational benefits, which not only provide a better environment but help to achieve other national goals by adding to the health of the Nation.

By 1958, Congress had decided that an intensive nationwide study should be made of outdoor recreation, one involving all levels of government and the private contribution, and on June 28 of that year it established the Outdoor Recreation Resources Review Commission.

The authorizing act, Public Law 85–470, set forth the mission. It was essentially threefold:

> To determine the outdoor recreation wants and needs of the American people now and what they will be in the years 1976 and 2000.
>
> To determine the recreation resources of the Nation available to satisfy those needs now and in the years 1976 and 2000.
>
> To determine what policies and programs should be recommended to ensure that the needs of the present and future are adequately and efficiently met.

The Commission that Congress established to carry out this task was composed of eight Congressional members, two representing each party from the Interior and Insular Affairs Committees of the Senate and of the House; and seven private citizens appointed by the President, one of whom was designated as Chairman.

In the fall of 1958, the Commission began recruiting a staff and in the following year launched its study program. The staff designed and coordinated the program and carried out some of the key studies, but many studies were assigned to outside contractors—Federal agencies, universities, and nonprofit research organizations—with particular skills, experience, or facilities. The reports resulting from these studies (listed in appendix C), with a full description of the techniques used in their conduct, are available in separate volumes because of their general public interest and potential value to officials at all levels of government and to others who may wish to pursue the subjects further. A few of the lines of investigation followed may be mentioned briefly.

To assess present resources for outdoor recreation, the Commission initiated an inventory of all the nonurban public designated recreation areas of the country. These numbered more than 24,000. Over a hundred items of information were analyzed in connection with 5,000 of the larger areas in order to evaluate present use and capacity and potential for development.

The Commission also carried out special studies to probe particular problems such as those connected with wilderness, water recreation, hunting and fishing, the densely populated Northeast, and sparsely populated Alaska.

To determine what the pressure is and will be on the resources, the Commission undertook a series of studies on the demand for outdoor recreation. At the base of these studies was a National Recreation Survey, conducted for the Commission by the Bureau of the Census. Some 16,000 persons were asked questions about their background, their economic status, what they presently do for outdoor recreation (if anything), what they would like to do more of, and why they do not do the things they want to do.

In further studies designed to complement and amplify the findings of the survey, the Commission investigated the effects on outdoor recreation of present and prospective changes—sectionally and nationally—in personal income, in population, in leisure time, and in travel facilities. To project future needs,

the effects of such changes were applied to the present patterns as developed by the National Recreation Survey.

In order to have an effective method of working with the States, the Commission asked the Governor of each to appoint a State Contact Officer through whom it might channel all its requests. The Governors generally appointed the head of the State conservation, recreation, fish and game, or planning agency. These men and their associates made a major contribution in carrying out the inventory of State areas. This involved the laborious task of supplying detailed information on every area in the State. In other studies they provided financial, legal, and administrative data.

The Federal agencies in Washington and their field offices made available their valuable experience in the problems of outdoor recreation and provided specific data on their programs. In almost every study, the Commission began by consulting these agencies to determine what information was already available, and a great deal of valuable material was at hand.

The cooperation offered by the States and Federal agencies greatly expanded the reach of the Commission. Hundreds of people contributed significant time and effort and thus made it possible to do far more than otherwise could have been accomplished.

SOME FINDINGS OF THE STUDY

As results of the studies began flowing to the Commission, some old ideas were discarded, some were reinforced, and some new concepts evolved. The following are a few of the major conclusions.

The Simple Activities Are the Most Popular.

Driving and walking for pleasure, swimming, and picnicking lead the list of the outdoor activities in which Americans participate, and driving for pleasure is most popular of all. This is generally true regardless of income, education, age, or occupation.

Outdoor Opportunities Are Most Urgently Needed Near Metropolitan Areas.

Three-quarters of the people will live in these areas by the turn of the century. They will have the greatest need for outdoor recreation, and their need will be the most difficult to satisfy as urban centers have the fewest facilities (per capita) and the sharpest competition for land use.

Across the Country, Considerable Land Is Now Available for Outdoor Recreation, But It Does Not Effectively Meet the Need.

Over a quarter billion acres are public designated outdoor recreation areas. However, either the location of the land, or restrictive management policies, or both, greatly reduce the effectiveness of the land for recreation use by the bulk of

the population. Much of the West and virtually all of Alaska are of little use to most Americans looking for a place in the sun for their families on a weekend, when the demand is overwhelming. At regional and State levels, most of the land is where people are not. Few places are near enough to metropolitan centers for a Sunday outing. The problem is not one of total acres but of *effective* acres.

Money Is Needed.

Most public agencies, particularly in the States, are faced with a lack of funds. Outdoor recreation opportunities can be created by acquiring new areas or by more intensive development of existing resources, but either course requires money. Federal, State, and local governments are now spending about $1 billion annually for outdoor recreation. More will be needed to meet the demand.

Outdoor Recreation Is Often Compatible With Other Resource Uses.

Fortunately, recreation need not be the exclusive use of an area, particularly the larger ones. Recreation can be another use in a development primarily managed for a different purpose, and it therefore should be considered in many kinds of planning—urban renewal, highway construction, water resource development, forest and range management, to name only a few.

Water Is a Focal Point of Outdoor Recreation.

Most people seeking outdoor recreation want water—to sit by, to swim and to fish in, to ski across, to dive under, and to run their boats over. Swimming is now one of the most popular outdoor activities and is likely to be the most popular of all by the turn of the century. Boating and fishing are among the top 10 activities. Camping, picnicking, and hiking, also high on the list, are more attractive near water sites.

Outdoor Recreation Brings About Economic Benefits.

Although the chief reason for providing outdoor recreation is the broad social and individual benefits it produces, it also brings about desirable economic effects. Its provision enhances community values by creating a better place to live and increasing land values. In some underdeveloped areas, it can be a mainstay of the local economy. And it is a basis for big business as the millions and millions of people seeking the outdoors generate an estimated $20 billion a year market for goods and services.

Outdoor Recreation Is a Major Leisure Time Activity, and It Is Growing in Importance.

About 90 percent of all Americans participated in some form of outdoor recreation in the summer of 1960. In total, they participated in one activity

or another on 4.4 billion separate occasions. It is anticipated that by 1976 the total will be 6.9 billion, and by the year 2000 it will be 12.4 billion—a threefold increase by the turn of the century.

More Needs To Be Known About the Values of Outdoor Recreation.

As outdoor recreation increases in importance, it will need more land, but much of this land can be used, and will be demanded, for other purposes. Yet there is little research to provide basic information on its relative importance. More needs to be established factually about the values of outdoor recreation to our society, so that sounder decisions on allocation of resources for it can be made. More must be known also about management techniques, so that the maximum social and economic benefit can be realized from these resources.

THE RECOMMENDATIONS

After 3 years of research, and an aggregate of some 50 days of discussion among the Commissioners, the Commission has developed specific recommendations for a recreation program. The 15 members brought differing political, social, and resource-use opinions to the meeting table, and proposed recommendations were put through the test of this range of opinions. During the course of the study and discussion, views of individual members developed, and the collective opinion crystallized. The final recommendations are a consensus of the Commission.

In the process of evolving recommendations, the Commission's Advisory Council played an important role. It consisted of 25 individuals representative of mining, timber, grazing, business, and labor interests as well as of recreation and conservation groups. The Council also included top-level representatives of 15 Federal agencies which have a responsibility relating to the provision of outdoor recreation. In five 2-day joint meetings with the Commission, the Council reviewed tentative proposals and suggested alternative courses of action on several occasions. The advice of the Council had a marked effect on the final product.

State Contact Officers also contributed to the decision-making process. In a series of regional meetings, at which the Commission sought their advice on pressing issues, they put forward practical and urgent suggestions for action.

In many cases the recommendations are general; in others they are specific. For various reasons, the recommendations tend to be more detailed and more extensive regarding the Federal Government. The Commission wishes to emphasize, however, that the key elements in the total effort to make outdoor recreation opportunities available are private enterprise, the States, and local government. In relation to them, the role of the Federal agencies should be not one of domination but of cooperation and assistance in meeting their respective needs.

The recommendations of the Commission fall into five general categories—

A National Outdoor Recreation Policy.

Guidelines for the Management of Outdoor Recreation Resources.

Expansion, Modification, and Intensification of Present Programs to Meet Increasing Needs.

Establishment of a Bureau of Outdoor Recreation in the Federal Government.

A Federal Grants-in-Aid Program to States.

The body of this report presents the reasoning and significance of these recommendations. To those who would like a quick over-all picture of the recommendations, the following digest will prove helpful.

A National Outdoor Recreation Policy

It shall be the national policy, through the conservation and wise use of resources, to preserve, develop, and make accessible to all American people such quantity and quality of outdoor recreation as will be necessary and desirable for individual enjoyment and to assure the physical, cultural, and spiritual benefits of outdoor recreation.

Implementation of this policy will require the cooperative participation of all levels of government and private enterprise. In some aspects, the government responsibility is greater; in others, private initiative is better equipped to do the job.

The role of the Federal Government should be—

1. Preservation of scenic areas, natural wonders, primitive areas, and historic sites of national significance.
2. Management of Federal lands for the broadest possible recreation benefit consistent with other essential uses.
3. Cooperation with the States through technical and financial assistance.
4. Promotion of interstate arrangements, including Federal participation where necessary.
5. Assumption of vigorous, cooperative leadership in a nationwide recreation effort.

The States should play a pivotal role in making outdoor recreation opportunities available by—

1. Acquisition of land, development of sites, and provision and maintenance of facilities of State or regional significance.
2. Assistance to local governments.
3. Provision of leadership and planning.

Local governments should expand their efforts to provide outdoor recreation opportunities, with particular emphasis upon securing open space and developing recreation areas in and around metropolitan and other urban areas.

Individual initiative and private enterprise should continue to be the most important force in outdoor recreation, providing many and varied opportunities

for a vast number of people, as well as the goods and services used by people in their recreation activities. Government should encourage the work of nonprofit groups wherever possible. It should also stimulate desirable commercial development, which can be particularly effective in providing facilities and services where demand is sufficient to return a profit.

Guidelines for Management

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 needs of people. Present jurisdictional boundaries of agencies need not be disturbed, but where necessary, use should be changed in accordance with the classification.

Implementation of this system would be a major step forward in a coordinated national recreation effort. It would provide a consistent and effective method of planning for all land-managing agencies and would promote logical adjustment of the entire range of recreation activities to the entire range of available areas. Under this approach of recreation zoning, the qualities of the respective classes of recreation environments are identified and therefore more readily enhanced and protected.

The following system of classifying outdoor recreation resources is proposed—

Class I—High-Density Recreation Areas

Areas intensively developed and managed for mass use.

Class II—General Outdoor Recreation Areas

Areas subject to substantial development for a wide variety of specific recreation uses.

Class III—Natural Environment Areas

Various types of areas that are suitable for recreation in a natural environment and usually in combination with other uses.

Class IV—Unique Natural Areas

Areas of outstanding scenic splendor, natural wonder, or scientific importance.

Class V—Primitive Areas

Undisturbed roadless areas characterized by natural, wild conditions, including "wilderness areas."

Class VI—Historic and Cultural Sites

Sites of major historic or cultural significance, either local, regional, or national.

Recommendations for specific applications of the system appear in chapters 6 and 8.

Expansion, Modification, and Intensification of Present Programs

PLANNING, ACQUISITION, PROTECTION, AND ACCESS

1. Each State, through a central agency, should develop a long-range plan for outdoor recreation, to provide adequate opportunities for the public, to acquire additional areas where necessary, and to preserve outstanding natural sites.

2. Local governments should give greater emphasis to the needs of their citizens for outdoor recreation by considering it in all land-use planning, opening areas with recreation potential to use, and where necessary, acquiring new areas.

3. States should seek to work out interstate arrangements where the recreation-seeking public overflows political boundaries. The Federal Government should assist in meeting these interstate demand situations.

4. Systematic and continuing research, both fundamental and applied, should be promoted to provide the basis for sound planning and decisions.

5. Immediate action should be taken by Federal, State, and local governments to reserve or acquire additional water, beach, and shoreline areas, particularly near centers of population.

6. Full provision for acquiring shoreline lands for public access and use should be made in reservoir developments.

7. Surface rights to surplus Federal lands suitable for recreation should be transferred without cost to State or local governments with reversion clauses.

8. Open space programs for metropolitan areas should be continued.

9. Congress should enact legislation to provide for the establishment and preservation of certain primitive areas as "wilderness areas."

10. Certain rivers of unusual scientific, esthetic, and recreation value should be allowed to remain in their free-flowing state and natural setting without man-made alterations.

11. States should use their regulatory power to zone areas for maximum recreation benefit, maintain quality, and ensure public safety in conflicts between recreation and other uses and in conflicts among recreation uses.

12. Recreation areas should be strongly defended against encroachments from nonconforming uses, both public and private. Where recreation land must be taken for another public use, it should be replaced with other land of similar quality and comparable location.

13. Public agencies should assure adequate access to water-based recreation opportunities by acquisition of access areas, easements across private lands, zoning of shorelines, consideration of water access in road design and construction, and opening of now restricted waters such as municipal reservoirs.

14. Interpretive and educational programs should be intensified and broadened to promote appreciation and understanding of natural, scientific, and historic values.

PROMOTING RECREATION VALUES IN RELATED FIELDS

15. Outdoor recreation should be emphasized in federally constructed or licensed multipurpose water developments and thus granted full consideration in the planning, design, and construction of such projects.

16. Recreation should be recognized as a motivating purpose in programs and projects for pollution control and as a necessary objective in the allocation of funds therefor.

17. Flood-plain zoning should be used wherever possible as a method to preserve attractive reaches of rivers and streams for public recreation in addition to the other benefits from such zoning.

18. The Federal Government and the States should recognize the potential recreation values in highway construction programs and assure that they are developed.

19. Activities under watershed and other agricultural conservation programs should be oriented toward greater recreation benefits for the public.

20. The States should encourage the public use of private lands by taking the lead in working out such arrangements as leases for hunting and fishing, scenic easements, and providing protection for landowners who allow the public to use their lands.

MEETING THE COSTS

21. All levels of government must provide continuing and adequate funds for outdoor recreation. In most cases, this will require a substantial increase over present levels.

22. State and local governments should consider the use of general obligation and revenue bonds to finance land acquisition and capital improvements for outdoor recreation.

23. State and local governments should consider other financing devices such as season user fees, dedicated funds, and use of uncollected refunds of gasoline taxes paid by pleasure boat owners.

24. States should take the lead in extending technical and financial assistance to local governments to meet outdoor recreation requirements.

25. Public agencies should adopt a system of user fees designed to recapture at least a significant portion of the operation and maintenance costs of providing outdoor recreation activities that involve the exclusive use of a facility, or require special facilities.

26. In addition to outright acquisition, local governments should consider the use of such devices as easements, zoning, cluster developments, and open-land tax policies to supplement the supply of outdoor recreation opportunities.

27. Public agencies should stimulate desirable gifts of land and money from private individuals and groups for outdoor recreation purposes. The work of private, nonprofit organizations in providing and enhancing opportunities should be encouraged.

28. Government should stimulate and encourage the provision of outdoor recreation opportunities by private enterprise.

29. Where feasible, concessioners should be encouraged to provide facilities and visitor services on Federal lands under appropriate supervision. Where this is not feasible, the Federal Government should build facilities and lease them to private business for operation.

A Bureau of Outdoor Recreation

A Bureau of Outdoor Recreation should be established in the Department of the Interior. This Bureau would have over-all responsibility for leadership of a nationwide effort by coordinating the various Federal programs and assisting other levels of government to meet the demands for outdoor recreation. It would not manage any land. This would continue to be the function of the existing managerial agencies.

Specifically, the new Bureau would—

1. Coordinate the recreation activities of the more than 20 Federal agencies whose activities affect outdoor recreation.

2. Assist State and local governments with technical aid in planning and administration, including the development of standards for personnel, procedures, and operations.

3. Administer a grants-in-aid program to States for planning and for development and acquisition of needed areas.

4. Act as a clearinghouse for information and guide, stimulate, and sponsor research as needed.

5. Encourage interstate and regional cooperation, including Federal participation where necessary.

To assure that recreation policy and planning receive attention at a high level and to promote interdepartmental coordination, there should be established a Recreation Advisory Council, consisting of the Secretaries of Interior, Agriculture, and Defense, with the Secretary of the Interior as Chairman. Other agencies would be invited to participate on an *ad hoc* basis when matters affecting their interests are under consideration by the Council.

The Recreation Advisory Council would provide broad policy guidance on all matters affecting outdoor recreation activities and programs carried out by the Bureau of Outdoor Recreation. The Secretary of the Interior should be required to seek such guidance in the administration of the Bureau.

Initially the new Bureau should be staffed where possible by transfer of experienced personnel from existing Federal agencies. It should have regional offices.

A Research Advisory Committee consisting of professional people from government, academic life, and private business should be established to advise the Bureau on its research activities.

It is urged that each State designate a focal point within its governmental structure to work with the Bureau. This focal point, perhaps one of the existing State agencies, could also serve to coordinate State recreation planning and activities and be responsible for a comprehensive State outdoor recreation plan.

A Grants-in-Aid Program

A Federal grants-in-aid program should be established to stimulate and assist the States in meeting the demand for outdoor recreation. This program, administered by the proposed Bureau of Outdor Recreation, would promote State planning and acquisition and development of areas to meet the demands of the public. Projects would be approved in accordance with a statewide plan. They would be subject to review by the proposed Bureau of Outdoor Recreation to ensure conformance with Federal standards. This program would complement and would be closely coordinated with the open space aid provisions of recent legislation.

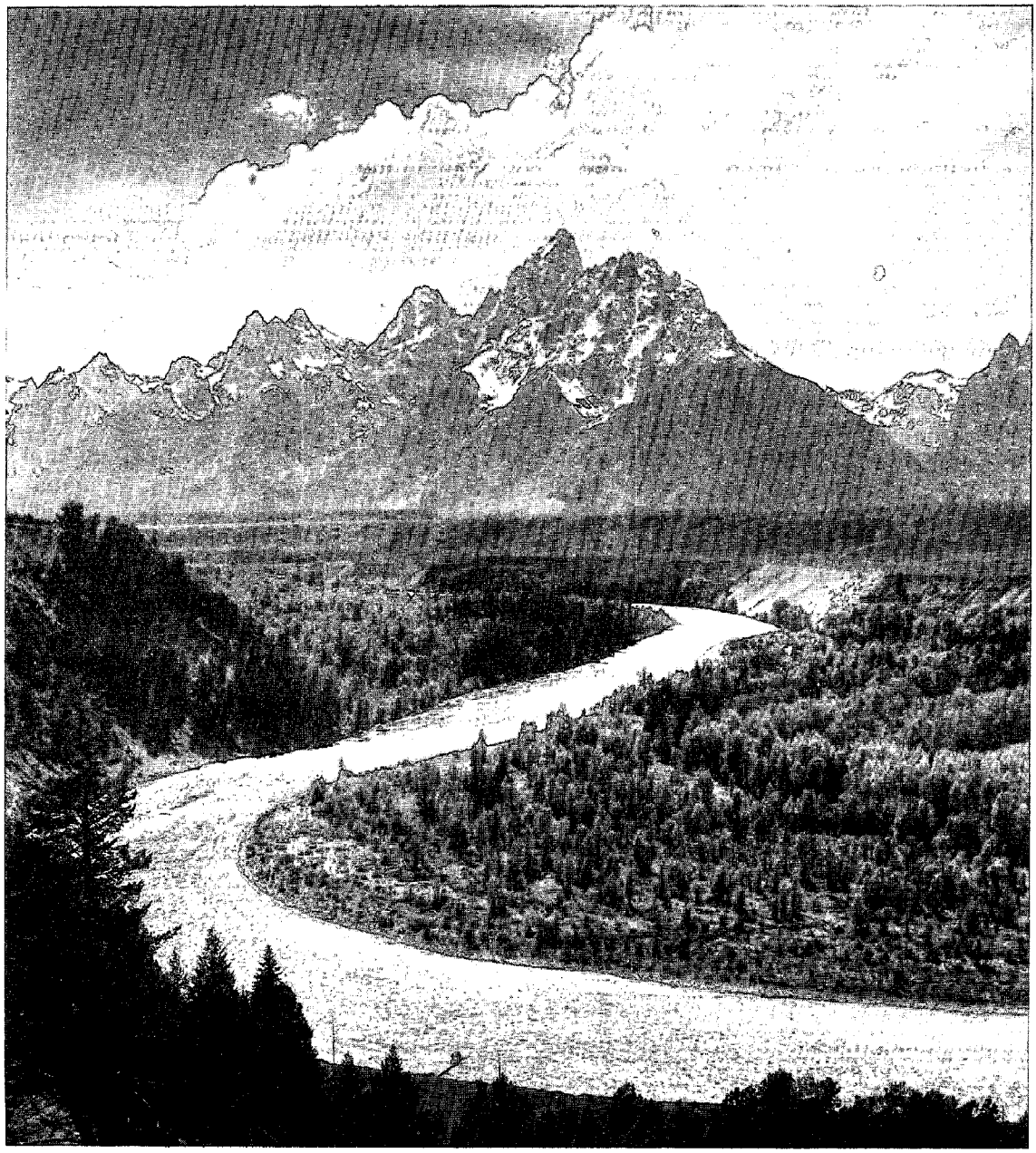
Initial grants of up to 75 percent of the total cost for planning would be made the first year and a reduced percentage thereafter. Grants for acquisition or development would be made up to 40 percent of the total cost. Federal participation could be raised to 50 percent where the State acquisition or development was part of an interstate plan.

Funds for the program would be allocated on a basis which would take into account State population, area, needs, and the amount of Federal land and Federal recreation programs in the State and region.

The grants-in-aid program should be supplemented by a program of loans to the States. This would assist in projects where the States did not have matching funds available but where the need for acquisition or development was particularly urgent, or where funds were needed beyond those available as grants-in-aid.

OUTDOOR RECREATION FOR AMERICA

PART I THE FACTS



CHAPTER 1

THE OUTDOORS IN AMERICAN LIFE

THE HERITAGE

The outdoors lies deep in American tradition. It has had immeasurable impact on the Nation's character and on those who made its history. This is a civilization painfully and only recently carved in conflict with the forces of nature—farms from unbroken prairie and cities from wilderness. The epic of American life is the tale of the pioneer, edging his way westward in the face of unending danger and hardship. When an American looks for the meaning of his past, he seeks it not in ancient ruins, but more likely in mountains and forests, by a river, or at the edge of the sea. The tale is one of discovery, of encounter, of hard-won settlement.

But there is more to the legacy than the land. From the beginning, one of the strongest currents in American thought has been the idea that the outdoors is a *right* of Americans—not only something to be enjoyed but vital to our spirit. The idea was born in an agrarian society, for though the outdoors was then all about, some feared that it would not always be so. Indeed, Jefferson saw the land as the country's ballast against the rootlessness of city living, and he hoped that people who lived among the elements, the farmers, would always outnumber those in the cities.

The agrarian dream faded, but as the "dark satanic mills" went up and the cities grew, the outdoors seemed the more vital. Thoreau reaffirmed its values in words that still compel: industrialization, he believed, could blight us, and he asked: "Why should we not * * * have our national preserves * * * for inspiration and our own true recreation? Or shall we, like villains, grub them all up, poaching on our own national domains?"

This mainstream of thought has continued to have its champions through the years. John Muir spoke for the mountains and the wilderness in a voice that moved even the least sympathetic. Theodore Roosevelt talked not so softly about the disappearance and abuse of natural resources and left as heirlooms some of the biggest sticks to enforce conservation policy. Carl Schurz, the German-American Civil War general and Interior Secretary, tried to halt the uncontrolled exploitation of federally owned forests and paved the way for Gifford Pinchot to carve out the national forest system. Stephen T. Mather gave up a prosperous business career to make the national park system a reality. The list is a long one; these are only a few of the men who, with their supporters and disciples, kept alive through the years the warning that the American people cannot wander too far from the great outdoors without losing character and strength and orientation.

The ways in which these men spoke their minds—or accomplished their ends—were as diverse as the men themselves; but through it all runs a basic conviction. Theirs was more than an impulse to preserve trees, or natural phenomena, or wilderness, or to contemplate man's relationship with the earth. All were dedicated to the understanding and preservation of an environment, which they

were convinced is essential to the American's spiritual well-being—and therefore essential to the development of the Nation.

A recurring theme has been a productive friction between private citizens and public agencies. Occasionally, it has been a dedicated official, in the right place at the right time, who has furnished the impetus. Very often, however, private individuals have furnished the original spark, and they have set up a virtually endless succession of special groups and organizations to badger governments to action.

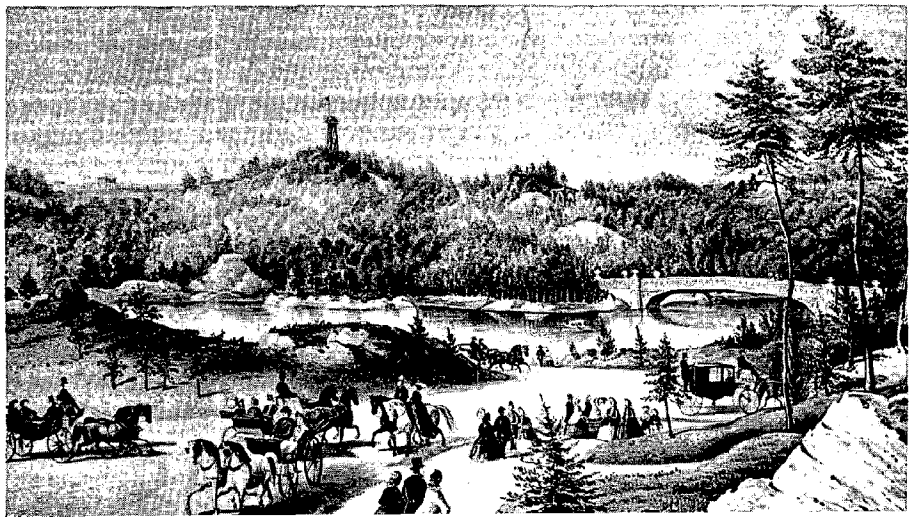
All of these men were fighters. They had to be, for another strong current in American history has been the drive to exploit the land for economic purposes, and a contemptuous dismissal of those who would guard intrinsic values of landscape as impractical visionaries. They were indeed men of vision; but they most certainly were not impractical. They have left behind a striking record of successful public action conceived with sweep and boldness. Indeed, many ideas that today seem new and promising have been foreshadowed in earlier efforts, some going back over a century.

Action in the Cities

To this day the creation of New York's Central Park in the 1850's remains the outstanding example of foresight in acquisition. When William Cullen Bryant, editor of *The Evening Post,* began urging the purchase of "reservations," Manhattan was still countryside north of 23d Street. To some, the idea that the whole island would eventually be built upon seemed farfetched, but to Bryant and his allies it was inevitable. In the 20 years after 1830 the population had doubled; and for all the land beyond 23d Street, there was already a shortage of *usable* space—that is, open space near where most of the people lived. Cemeteries, in fact, provided the major areas for public recreation (one, Greenwood Cemetery, had over 60,000 visitors a year).

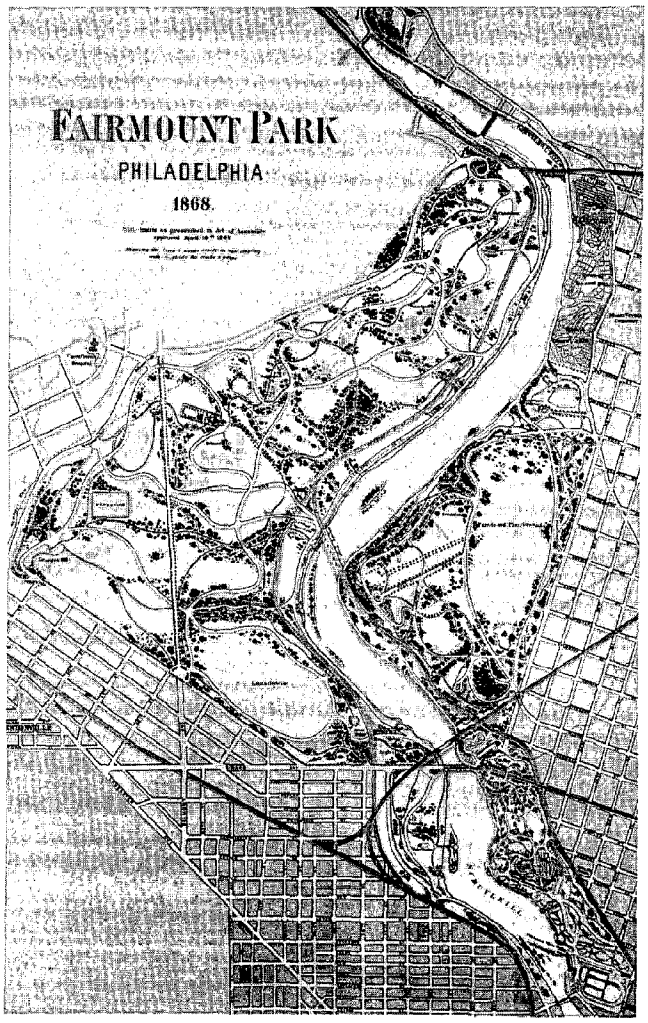
In the center of Manhattan was a large rocky expanse of about 700 acres. The land was quite cheap, too rocky for much except grazing, and dotted with squatters' shacks. Buy the land now, Bryant urged. There was a good economic case to be made—in retrospect, an extraordinary one—but to Bryant, as to so many others, it was primarily a moral issue. On Manhattan Island, he predicted, millions upon millions would live their lives, and how well or ill would depend greatly on the forethought the citizenry showed. The idea took hold, and in 1850 both candidates for mayor made a big point of pledging support.

Central Park, New York, circa *1870*



The land was bought, and it was the genius of Frederick Law Olmsted to submit the winning plan in a competition held by the city for the landscape design of the park. The purpose as he conceived it was to transplant the country to the city—to bring to the city's tired workers "a specimen of God's handiwork that shall be to them, inexpensively, what a month or two in the White Mountains, or the Adirondacks is * * * to those in easier circumstances." Olmsted made a virtue of the rocks and turned the swamps into lakes. His provision of depressed roadways, to avoid splitting up the park, provided the first example of a limited access highway.

The next big step was taken by Charles Eliot and other leaders in Boston in the 1890's. The success of Central Park had led to the creation of parks in other cities, many designed by Olmsted and his followers. Although one of these—Philadelphia's Fairmount Park—was truly grand in scale, essentially they were individual "major site" parks. What Eliot conceived, however, was a *system* of parks and natural reservations for metropolitan Boston as a whole. It was an advanced idea—it still is—but it was carried out with skill and vigor that have rarely been matched since.



Eliot thought in terms of the whole urban region. A system of parks and open spaces, such as promenades along the rivers, should be located to serve the concentrations of population—"more and more shut out from the beauty and healing influence of nature and scenery * * * more and more shut up in their tenements and shops." His plan, which brought 36 separate cities and towns under a metropolitan district as a governing device, laid out sites which were convenient for local and citywide access and connected many of them with tree-lined drives. With devices that many cities have yet to try, he provided public control and landscaping of much of the shores of the rivers and lakes and conserved parts of the seemingly useless wetlands. In Eliot's vision, the surviving bits of landscape near Boston were fragments of the primitive wilderness of New England. The forefathers had blazoned the white pine on their flag. A wood of "tall white pines" was a link with the past, part of a heritage to be held for future generations.

The turn of the century was a creative period for American cities everywhere. The City Beautiful movement was gathering momentum; and, fanciful as some may seem today, the plans were no little plans, and they did have the power to stir men's imaginations. This, more than the specifics, was their great contribution. These plans became the textbooks for a public education; and this was to make possible many large-scale programs a decade or so later.

One of the most notable was the Cook County Forest Preserve District near Chicago. Early in this century, a group of Chicago citizens began pressing for an "outer belt" of unspoiled natural areas easily accessible to urban residents. After many delays and disappointments, the District was established in 1916, and soon substantial tracts of forests and streams some 10 to 15 miles from the center of the city were being set aside.

Creation of the forest preserves was helped by the publication in 1909 of the Burnham plan for Chicago. This was an over-all city design that put great emphasis on proper development of the lakeshore front and on preserving natural areas on the city's western edge. The plan recognized that open space planning is an essential part of urban development, that endless multiplication of factories, stores, and dwellings makes little sense, and that simple outdoor pleasures are necessary for those working and living in the city.

Other cities caught the vision. In Minneapolis and San Francisco large-scale open space plans were put through; in Cleveland, Charles Stinchcomb laid out a superb park system. For Washington, Congress in 1930 passed the farsighted Capper-Cramton Act. It saw Washington as part of a region, and thanks to its provisions, some key parkways and open spaces were in place before the postwar deluge hit.

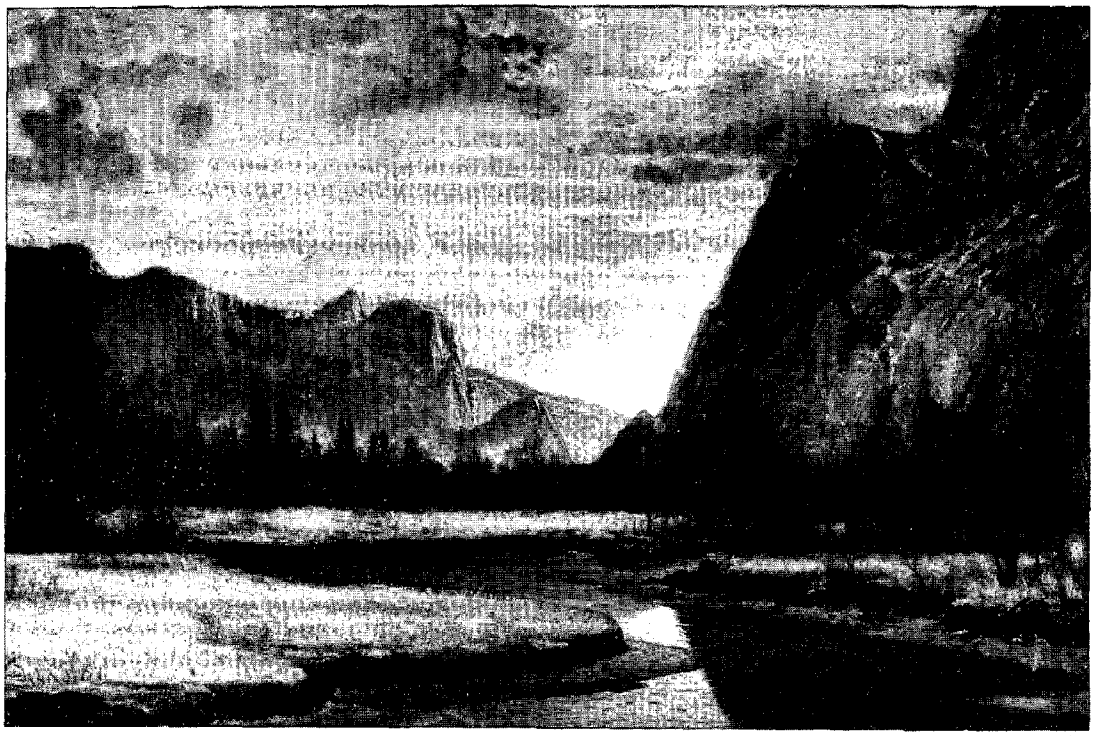
The State Programs

The States are the basic units of government in this country, and through their colonial predecessors they antedate both the cities and the Federal Government. Yet, for a number of reasons, their part in the outdoor heritage of the Nation has been less extensive than that of the other two levels. Only in recent decades have they begun to assume the broad responsibilities that must inevitably be theirs.

From the very beginning, the States concerned themselves with fishing and hunting. Originally, the function of these agencies was almost entirely regulatory and more to preserve food resources than to provide sport. In time, however,

the scope of their interest broadened, and by the 1930's active promotion of fish and wildlife resources and habitat and encouragement of sport opportunities became accepted responsibilities of State governments.

The State park movement got under way in 1864 when a group of California citizens successfully petitioned Congress to grant to the State most of what is now Yosemite National Park "upon the express conditions that the premises shall be held for public use, resort, and recreation and shall be held inalienable for all times." Across the country, two decades later, New York State set aside a State forest reserve in the Adirondacks. In most States, however, parks were not acquired until after the turn of the century, and park agencies came into prominence only after the 1920's. Since eastern States generally had no public lands, funds had to be found for land acquisition. Properties acquired through tax reversions were significant in some cases.



Sunset in Yosemite

Gifts of land have been important to States as well as to other levels of government. In some States, like Connecticut, the bulk of the park land was given to it. Tactically, the gifts have often been used with great shrewdness and, like government matching grants in reverse, they have been conceived as a lever for stimulating large-scale public action. The Massachusetts Trustees of Reservations, the model for many subsequent groups (including Britain's National Trust) made excellent use of gifts in this respect; many State parks had their origin in gifts stimulated by the Trustees.

A big impetus came from the Federal Government. In the 1930's, there was launched a series of programs which had great effect on State action. Under the submarginal land program, the Federal Government bought many tracts of

land and fixed them up as "recreation demonstration areas"; these were then leased on favorable terms to the States and eventually became part of the State systems. Substantial progress was made also through building of facilities and other work in the State parks and forests by the Civilian Conservation Corps and other special programs. The Tennessee Valley Authority stimulated State park activity in its area, and reservoirs built by other Federal agencies have brought about some park and recreation areas now under State programs.

Camp near Round Lake (Adirondacks)

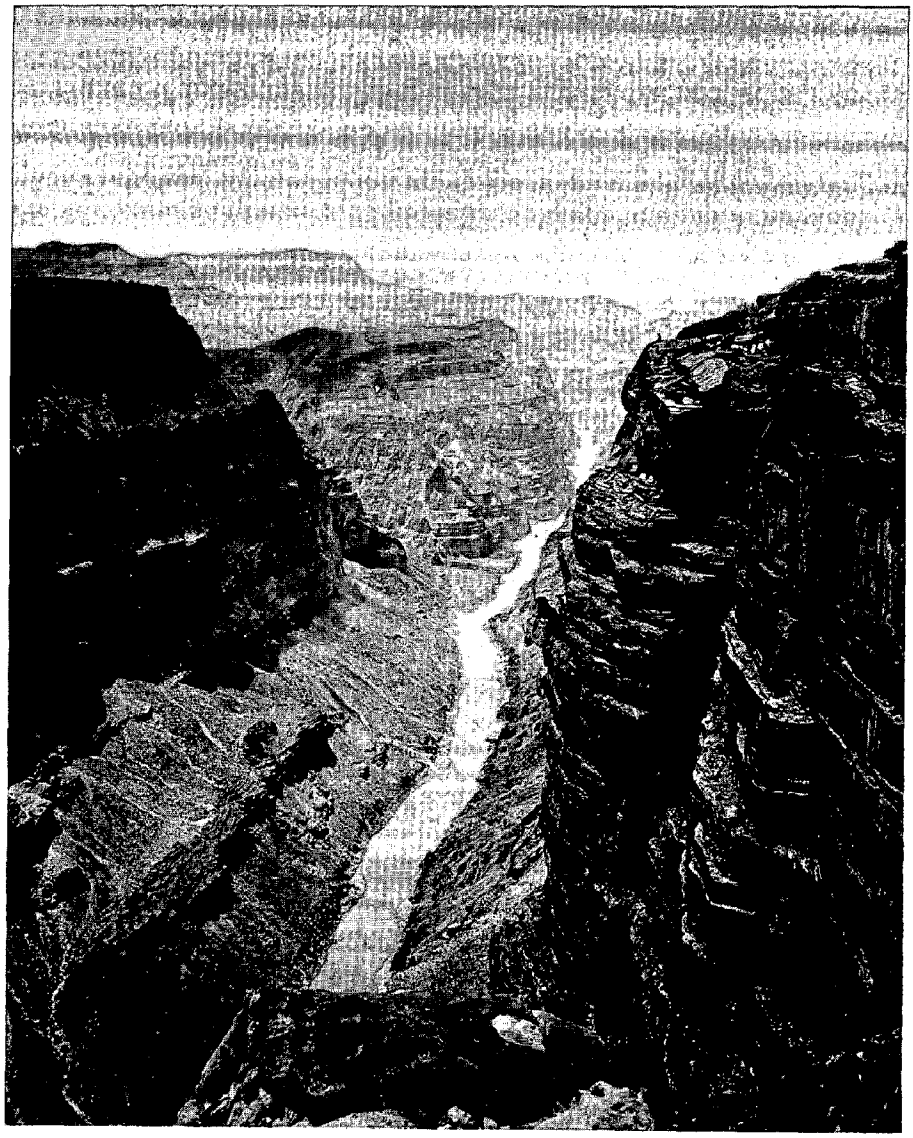
Appropriations from the States' general funds were the original, and until recently the chief, sources of revenue. There is a trend now, however, toward the issuance of bonds for land acquisition, and this may well prove to be the most widely used method of financing the expansion of facilities which will be necessary. In the 1950's, two States were able to embark upon park programs financed by special funds from oil royalties.

Federal Efforts

Federal efforts date from 1870, when a group of outdoorsmen met around a campfire in the Yellowstone area. They had set out to check the incredible yarns of mountain men about fabulous scenery and natural wonders. When they had seen them, they thought at first of forming a private corporation to exploit the territory—a simple and inexpensive matter at that time. But Cornelius Hedges, a Helena, Montana, judge who sat among them, took the position that such an area should be held in trust for all time, for all the people—that it should not be private property. The group returned to civilization and began pressing this idea. On March 1, 1872, President Grant signed a bill that set aside as a public "pleasuring ground for the people" a tract of some 3,000 square miles which came to be known for some years as *The* National Park.

The idea that there should be national sites took firm hold, and from the 1890's on, Congress set up a succession of national parks, military parks, battlefields, and memorials. Under the Antiquities Act of 1906—a piece of legislation far broader than its title suggests—machinery was provided for protecting historic, cultural, and scientific sites as national monuments.

So far, Federal interest had been focused on particulars, but the need for a system was becoming evident. In 1916, Congress made a big step in this direction by setting up the National Park Service in the Department of the Interior, thus providing unified administration for an expanding number of parks, monuments, and other areas. During the half century since then, the National Park System—unparalleled throughout the world—has grown to some 180 areas, ranging from Independence Hall to Grand Canyon.



The Grand Canyon of the Colorado

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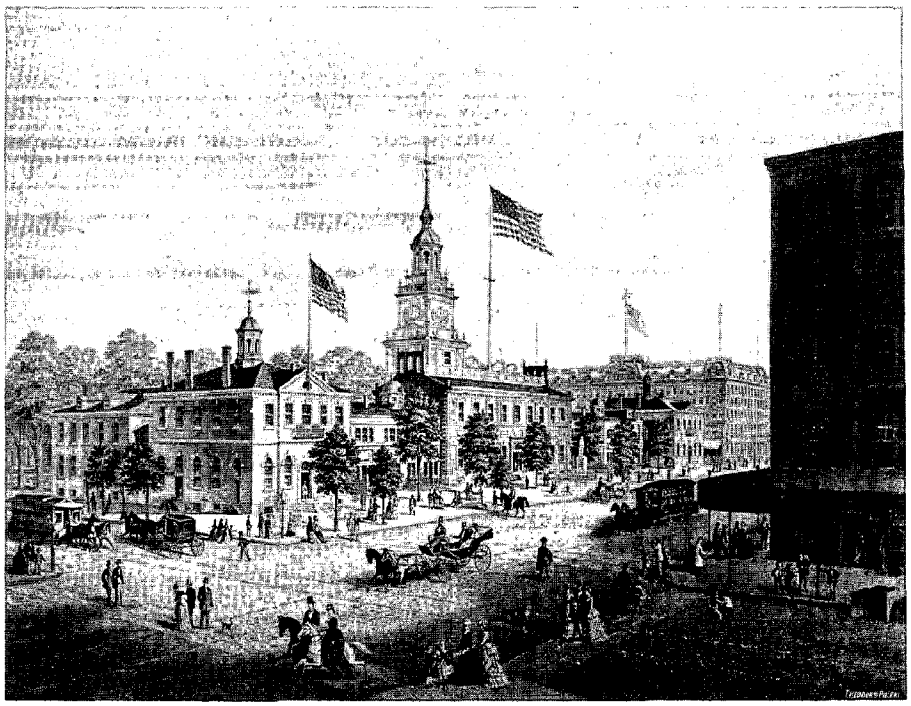


Independence Hall, Philadelphia, 1876

The Historic Sites Act, passed in 1935, authorized a complete survey of historic American sites, including buildings, objects, and antiquities, and paved the way for cooperation between the National Park Service and other government agencies at all levels, with full authority to deal with private parties for the protection and administration of historic areas of national interest. The activities of the Park Service in this field today vary from the erection of bronze plaques on non-Federal sites to the detailed reconstruction of historic areas that were almost lost to the passing years.

While the recreation values of parks and memorials were clear from the start, some of the most important Federal recreation activities began as byproducts of other programs. The national forest system was envisaged in 1877, when Secretary of the Interior Carl Schurz (who knew from his early days in Europe of the watershed and soil protection value of forests) suggested that all timberlands still in the possession of the Government should be withdrawn and protected from looting and exploitation. He urged a uniformed patrol.

Nothing of consequence happened to implement this vision until 1891, when the President was authorized to create forest reserves. These were transferred to the Forest Service, established in the Department of Agriculture in 1905, and soon became known as the national forests. As a part of its management of these areas, which now include 180 million acres, the Forest Service has opened a wide variety of recreation activities to the American people. Today, there are over 80 million visits to these areas annually for outdoor activities ranging from a simple picnic to extensive wilderness travel.

For multiplying effect, the outstanding Federal programs have been those to stimulate State and local action. A good illustration is the encouragement of State park systems. After the National Park Service was set up in 1916, Director Stephen Mather began coming across many tracts—some of them offered as gifts—which were not really of national park caliber, but which had a considerable potential for recreation. Mather thought they would be excellent as State parks and that the existence of such facilities would help take the pressure off the national parks. Missionary work was in order, Mather felt, and in 1921 he helped organize a National Conference on State Parks. This idea was further pushed by the National Conference on Recreation, called by President Coolidge in 1924.

While their history is less directly associated with outdoor recreation, several other Federal agencies make important contributions to recreation opportunity. Three bureaus in the Department of the Interior have had a major influence on outdoor recreation. The Bureau of Sport Fisheries and Wildlife operates game refuges and other areas which provide recreation, and it administers several other programs which improve the supply of fish and game. The Bureau of Land Management holds millions of acres of Federal land, primarily in the West, which have an immense potential. The Bureau of Reclamation in the Department of the Interior and the Corps of Engineers in the Department of Defense have created many impoundments which are important to water-based recreation. The Department of Health, Education, and Welfare is destined, primarily because of its responsibility for pollution abatement, to become increasingly important in the recreation field.

The most recent event in the long history of Federal efforts was the enactment in 1961 of legislation authorizing the Housing and Home Finance Agency to provide financial assistance to local governments for the preservation of open space in urban areas.

THE PROSPECT

While the outdoors has been very much a part of the American past, and making outdoor recreation available has long been a concern of the Nation, this problem in recent years has taken on new dimensions. The growing population—with more leisure time and living largely in cities—has brought about problems different from those that were solved by the action of even the most farsighted leaders in the past. These factors have changed the nature of American society, and they have brought about a new challenge for the provision of outdoor recreation.

The seeds of the problem were sown in the early 1920's when, after the first World War, the workweek was shortened, personal income increased, automobiles came into general use, and the highway system was expanded. For the first time in our history, people generally had leisure time, could find ways to get from one place to another, and could afford to do it. Many types of recreation—boating, for example—became, for the first time, available to the average man. Public recreation areas—many of them ill suited to mass use—were unprepared for the wave of enthusiasts.

Of all forces contributing to the difficulties of the present and future, none is more central than the concentration of population in the great metropolitan areas, where almost two-thirds of the Nation now live. Over 200 of these areas

presently contain 63 percent of the population, living on less than 10 percent of the land area of the United States. Moreover, this concentration is expected to increase in coming decades. By the year 2000 some 73 percent of all Americans will live in metropolitan areas.

This in-gathering of population since the turn of the century has had a profound impact. The problem posed for public policy can be simply stated: there is a striking contrast between the demand for outdoor recreation on the part of urban populations and the limited supply of land and water resources readily accessible to them. Partly this is a matter of inherent limitations of space, and partly it is the basic problem of establishing priorities for use. A huge population generates such an enormous demand for nonrecreation as well as for recreation uses of land and water that recreation may never get its full share of space. Overcrowding at local parks and beaches may persist. This pressure, however, should be a discipline. It puts a premium on a more efficient use of the land that is available—for recreation as well as for housing or for industry—and it is in this respect that the failure has been conspicuous.

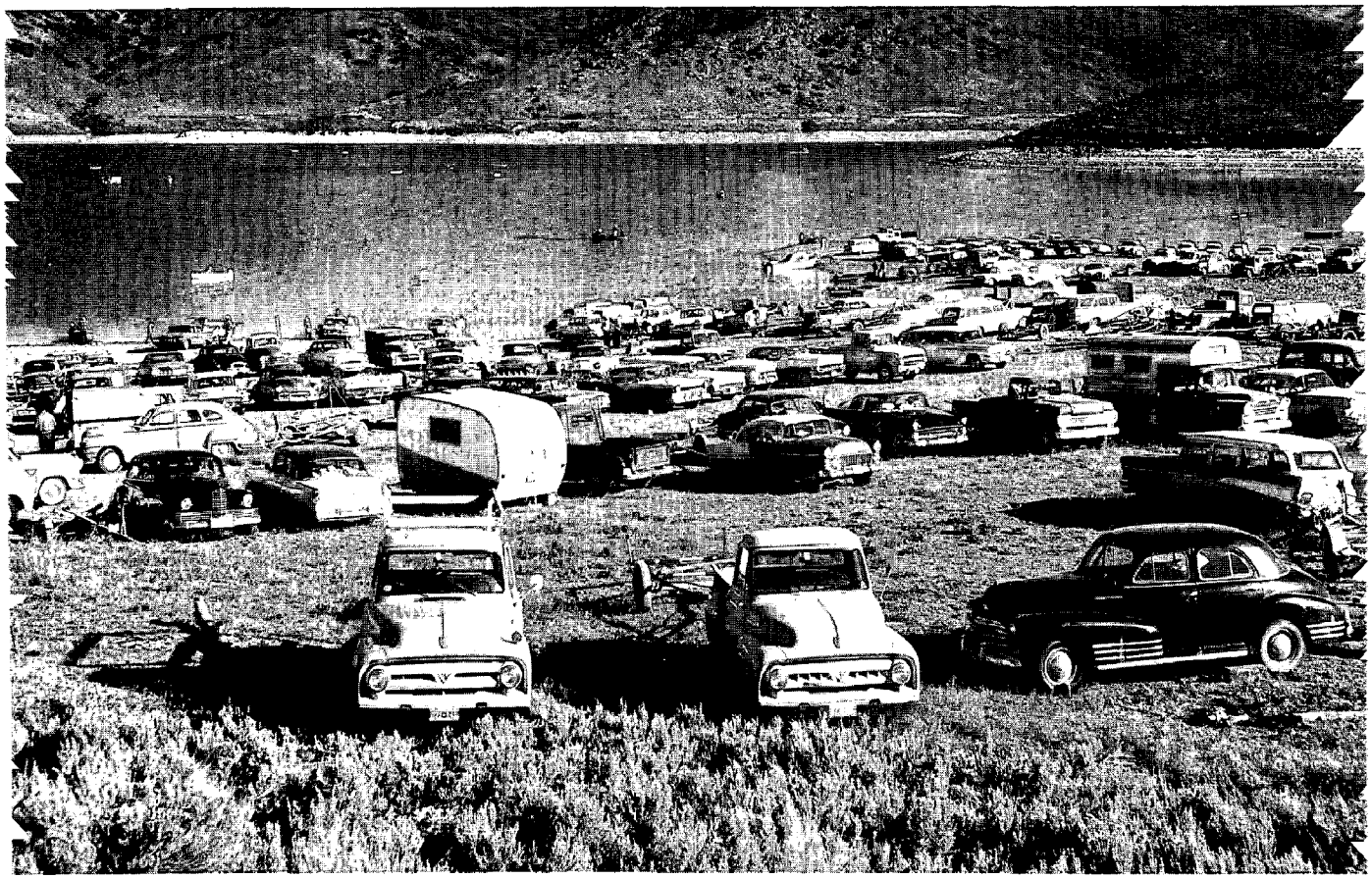
In their search for opportunities for recreation, urban dwellers now travel across States with the same ease with which they once crossed counties. Geography is no barrier, and the demand for recreation spreads out across the national landscape from all of the urban regions. For example, it is not unusual to have tens of thousands of people converge on Lake Mead during a summer Sunday, having hitched up boat trailers and driven nearly all night from Los Angeles. This mobility of the urban populations across the Nation is one of the factors that elevates outdoor recreation to the status of a pressing national concern, and it complicates greatly the planning and provision of facilities.

At the same time, this increased mobility has in one sense greatly enlarged outdoor opportunities. Even among the low-income groups, car ownership is now the rule, and the new network of highways has greatly reduced the barriers of time and space between the city and the outdoors. But the blessing is a mixed one, for the very apparatus that has made the outdoors more accessible has changed the nature of much of it. As people push outward, they push the countryside before them. "Nonresidents not allowed" signs go up on county beaches, and what yesterday was a pleasant hour's drive to a picnic spot is now only a grueling preliminary.

Urbanization and mobility have compounded the impact of the dramatic growth in the leisure time available to Americans. The workweek—60 hours or more at the turn of the century—had fallen to 40 hours by 1960, and many people believe it may decline to as little as 30 hours a week by the end of the century.

Leisure is the blessing and could be the curse of a progressive, successful civilization. The amount of leisure already at hand is enough to have made many Americans uneasy. Ours is a culture that has always been inclined to look upon idle time with some misgivings for reasons that trace to the Puritan tradition of industry, but which spring also from the historic and very practical need for hard work in the building of a nation. Certainly a substantial adjustment in perspective will be required as we move into a period in which the leisure available to all citizens may be greatly increased.

In any event, most Americans face the prospect of more leisure time in the future, and thus the challenge of using it for their own enrichment and development



as individuals and as citizens. This is precisely the contribution that outdoor recreation can make. For at its best, outdoor activity, whether undertaken lightly or with the serious intent of the perfectionist, is essentially a "renewing" experience—a refreshing change from the workaday world.

This is true no matter what an individual actually chooses to do in the outdoors. As long as the activity is freely chosen—because it is refreshing and interesting to do—then it serves the basic function of "recreation"—the task of re-creating human vitality. Latent energy is tapped, unused powers of the body, mind, and spirit are employed, the imagination works on fresh material, and when all these things occur, the individual returns to his work with a sense of renewal.

This use of leisure is important to the health of individuals and to the health of the Nation. The physical vigor of a nation is as much a part of its strength as good education. Even in this era of electronic warfare, men are still the key to vigilant defense. In many situations a fit man with a rifle in his hand is the only effective defense, and in those where machines are the combatants, fit men must direct them. The increasingly high rate of men rejected by the Army for physical reasons—three of every seven called—together with the obvious benefits of good health to individuals argue eloquently for the better physical fitness that many forms of outdoor recreation provide.

Outdoor recreation also has cultural values that are essential to the health of the Nation. It is a part of the educational process that strengthens men's

minds as well as their bodies; that broadens their understanding of the laws of nature; that sharpens their appreciation of its manifold beauties; and that fortifies man's most precious possession—the spirit which gives life its meaning. These are the qualities which in the long run make a nation and its people truly great and which find strong nourishment in outdoor recreation.

All in all, being in the outdoors is a good, wholesome, healthful use of leisure that can help create a better life. What was seen and felt and experienced by Jefferson and Emerson and Muir and Thoreau and Theodore Roosevelt cannot be denied.

Today's challenge is to assure all Americans permanent access to their outdoor heritage. The fact that we live in a world that moves crisis by crisis does not make a growing interest in outdoor activities frivolous, or ample provision for them unworthy of the Nation's concern. Fifty years ago, Senator La Follette made a solemn plea: it was urgently essential, he said, "to save for the human race the things on which alone, a peaceful, progressive, happy life can be founded." His reference was to the great domain of the outdoors—his theme preservation and conservation. With the flight of the years, the significance of this warning and its relevance to outdoor recreation opportunity become steadily more apparent.

CHAPTER 2

THE DEMAND

The demand is surging. Whatever the measuring rod—visits to Federal and State recreation areas, number of fishing license holders, number of outboard motors in use—it is clear that Americans are seeking the outdoors as never before. And this is only a foretaste of what is to come. Not only will there be many more people, they will want to do more, and they will have more money and time to do it with. By 2000 the population should double; the demand for recreation should triple.

This order of magnitude, in essence, is the heart of the problem. But where will it focus? Which activities will become more popular, which less? To obtain a better idea of the action that is needed, the Commission enlisted the help of the Bureau of the Census and a number of research groups to explore the amount and underlying characteristics of demand. The result is the first detailed nationwide study of what people do for outdoor recreation, and what, given the way our society is moving, they are likely to do in the future.[1]

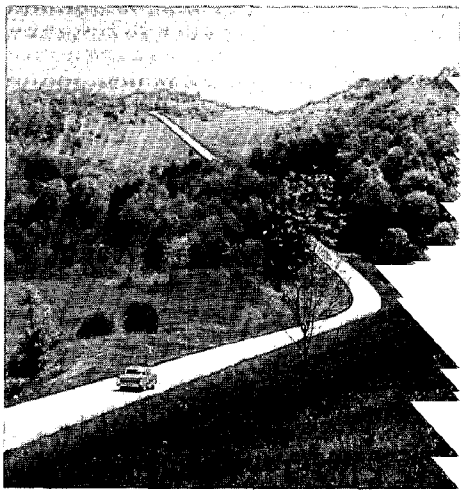
If the magnitude of outdoor recreation in America is great, so too is its variety. Some swim on, and others under, water. Some walk on the surface of the earth or dig for archeological relics, while others descend into caves or go aloft in gliders or planes. Some go camping for silence and isolation. Others seek out campsites where they can be with other people. This variety reflects the values which Americans seek from outdoor recreation—sociability as well as solitude, the serenity of the forest and the excitement of physical activity on the water.

At present, it is the simple pleasures Americans seek most. By far the most popular are pleasure driving and walking; together, they account for 42 percent of the total annual activity. (For the tables on these and subsequent figures see

[1] For the purpose of measuring demand, outdoor recreation includes activities engaged in by an individual away from his home, both within and outside urban areas. The data on the magnitude and nature of the demand are drawn from the following studies.

National Recreation Survey, a Commission staff study based on 16,000 interviews conducted for the Commission by the Bureau of the Census, ORRRC Study Report 19.

Eva Mueller and Gerald Gurin with the assistance of Margaret Wood (Survey Research Center, The University of Michigan), *Participation in Outdoor Recreation,* ORRRC Study Report 20.



appendix F.) The Sunday drive through the countryside is one of the great experiences that families share, and for those who live in the city it is anything but passive; they will often put up with an extraordinary amount of intervening traffic to break their way out.

In other activities, not surprisingly, the greatest amount of time is spent on those which require the least preparation or specialized equipment—playing games and swimming (in summer, swimming goes up almost to the top of the list). Next in order are sightseeing, bicycling, fishing, going to outdoor sports events, and picnicking. Sports that require special conditions, skills, or equipment—such as skiing, mountain climbing, skindiving, and sailing—rank much lower in frequency.

They do not rank low, however, in intensity of personal involvement. This dimension cannot be easily measured, but whether it is pride of skill, a sense of fraternity, or, perhaps, the thrill of danger, a powerful motivation is at work; and one has only to listen to skindivers and skiers talking shop to grasp how compelling it can be. This qualitative dimension is most obvious in the sports of special skill, but it applies to the whole range of activities. Simplicity, after all, is relative; the sailor may look down on the powerboat enthusiast, who in turn may look down on the outboard man, but to many an American even the mastery of a rowboat can be a challenge.

When they are asked what they would like to do more of, people do not necessarily want more of what they are doing. They may do the simple things most of the time—they probably always will. But it is evident that activities just beyond reach—horseback riding, camping, and skiing—stir their aspirations.

Whatever the demand is for, it is concentrated where people are—in metropolitan areas. The pressure is most acute in the Northeast, fast becoming one long city, but it has been building up in every section of the country. The South is rapidly becoming more urban, and the West Coast is well on its way to producing some of the greatest conglomerations. Even the wide-open States of the farm belt are feeling the pressure, and as a once predominantly agricultural population has been moving to the cities, outdoor pleasures that used to be taken for granted are proving harder to come by.

This metropolitan population must get most of its recreation in the metropolitan region, and, for all practical purposes, the existence of extensive facilities somewhere else is little compensation for lack of them at home.

The great bulk of the demand must be satisfied in the afterwork and weekend hours. Americans are a highly mobile people, it is true, but cars and highways do

not alter the basic pattern; even on a vacation trip, more than half seek recreation one or, at the most, two days' travel from home. For weekend and day trips they travel only a few hours. This is true even among upper income groups.

But this does not mean that the more distant areas are the less valuable. They can provide a qualitative element that may be only rarely experienced but which can be very important to people, and to people who live in cities most of all. A park or a wilderness in the Far West may not be easily accessible to the millions who live in the cities of the Northeast; still, the ability to anticipate a trip to such an area is itself important, and even one visit can have an emotional impact that will be remembered for a lifetime.

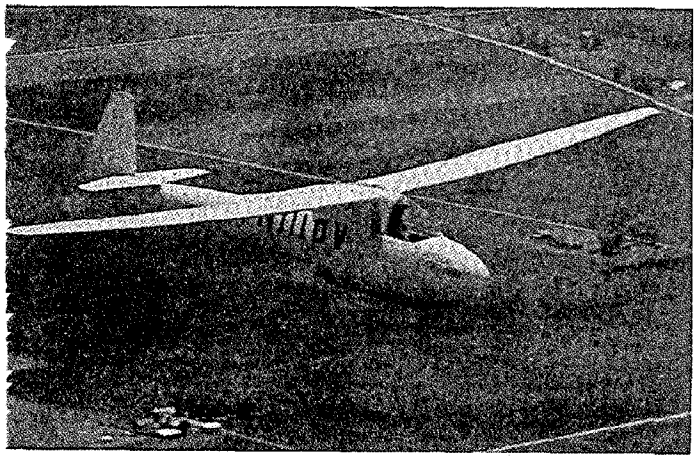
THE PATTERNS OF DEMAND

Equally as important as the magnitude of demand is the way in which it is distributed among the groups within the population. There are significant differences in the desire for outdoor recreation between young and old, rich and poor, city people and suburbanites. The groups themselves, furthermore, are changing—incomes are rising, the older are living longer. A projection of these trends cannot foretell the future, but there are important clues here indicating the new order of needs.

Of all the factors, age has the sharpest influence. As might be expected, the older people get, the less they engage in outdoor activity. This decline is especially noticeable in the more active pursuits—cycling, hiking, horseback riding, water skiing, camping. To be sure, even in late middle age, people still engage in such activities as swimming, motorboating, fishing, and nature walks. And there are types of recreation—walking or driving for pleasure, sightseeing, fishing—where participation rates are impressive even for the oldest category of citizens. But the general picture is one of declining activity with advancing years.

Income has a discernible effect upon the rate of participation. With activities that demand a substantial outlay of time or money—boating, water skiing, horseback riding, and the like—it is hardly surprising that participation is higher among those who have the leisure and resources to participate. Interestingly enough, however, the upper income groups also do more walking.

Some of the differences between income groups are due to such related factors as education, occupation, and age. The very low rate of participation



by the bottom income group, for example, can be partially accounted for by the high proportion of older people, many of them retired, in this bracket. Even after allowance for these other factors, however, it is clear that income itself has a decided influence. In general, participation tends to go up as income does; the jump is sharpest at about the $3,000-a-year mark; from there on, participation steadily increases, reaching a maximum in the $7,500–$10,000 bracket, declining slightly thereafter. The association between income and activity is particularly pronounced in the largest metropolitan areas.

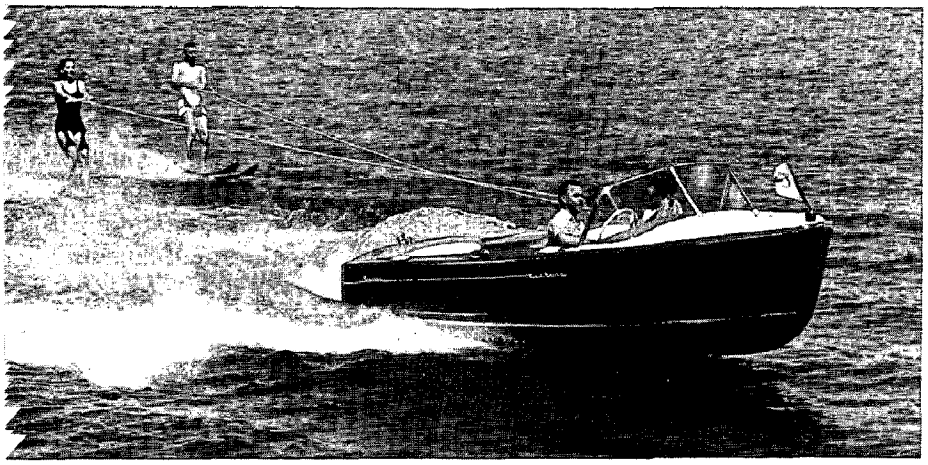
Education affects participation much as income does; generally speaking, the more of it they have, the more active adults are likely to be. This is particularly the case in swimming, playing games, sightseeing, walking, and driving for pleasure. In other activities, the correlation is not very consistent.

In the range of activities as well as the total, nonwhites engage in outdoor recreation less than whites. The nonwhite rate of participation is markedly lower in water sports and in camping and hiking; it is higher in playing games and walking.

Participation does not vary by sex as much as by age or income, but in total, men do tend to participate more than women—a difference largely due to the strong interest men show for such traditionally masculine pursuits as hunting and fishing. In activities like swimming, driving, picnicking, and camping, women participate as much if not more than men. A key fact about such activities, indeed, is that they are family activities.

Families seek outdoor recreation together. About 60 percent of family heads (or their wives) indicate that the whole family enjoys at least two of the same outdoor activities. Families turn to activities in which children can participate along with the parents. The aspiration of parents to educate the child to a level above their own extends to helping him develop in outdoor pursuits.

Occupation has a considerable influence, though to some extent, it may not be so much the particular work a man does as how much he is paid for it and how long a vacation he is given. Among occupations, professional people enjoy the most recreation, farmworkers, the least. The managerial and proprietor group is somewhat under the average for all occupations. This may be due to the large number—perhaps half—of self-employed in the group. In general, the self-employed and their wives show a lower rate of outdoor activity than others.



Small entrepreneurs and retailers have to spend a lot of time minding the shop—and they do not get paid vacations.

By region, there is not much difference in the amount of recreation people do—though in the South, summer activity is one-fourth less than in the rest of the Nation. But there is considerable difference in what they do the most. In the Northeast, people particularly like swimming and winter sports, and they are by far the greatest walkers. In the North Central States, with so many lakes, people do more boating than elsewhere. In fishing, however, it is southerners who take first place; they also do by far the most hunting.

For just plain doing things outdoors, however, westerners rank first. They play games outdoors more than others, they go on more picnics, and they are prodigious campers, riders, and hikers. They also spend a lot of time in their cars, being the most partial to sightseeing.

Suburbanites and people who live in the country participate more than city people. There are also, of course, differences of emphasis: people living farther out tend to favor camping, fishing, and, in particular, hunting—the activities that most involve "roughing it"; while city people emphasize sightseeing and pleasure driving, picnicking, and, most of all, swimming. Contributing to the differences are factors other than place of residence, notably income and age. When all these factors are held constant, however, people in outlying areas still show the highest rate. The simple fact of access, in short, promotes use.

But for all the differences among groups, what is more significant is how alike they are. The demand is pervasive. About 90 percent of all American adults engage in some activity in the course of a year. Thus, those involved are not just a small group of outdoor enthusiasts but the large majority of the American people. All segments of society share a common interest in outdoor activity—even if it is only walking or sightseeing.

While the demand is pervasive, its composition is not static. As shifts in society take place, such as the move to suburbia, changes occur in the kind and quantity of recreation that people seek.

A dynamic is at work. The children of today do more kinds of things outdoors and acquire experience and skills in things like swimming and camping that their parents never had. This new generation, as it grows up, will spend a great deal more leisure time outdoors than the parents of today and so will their children and their children after them.

FUTURE DEMAND [2]

How great will the demand be? The most basic factor, of course, will be the number of people. Barring a war or other catastrophe, it seems very likely that the population will virtually double—from about 180 million today to approximately 230 million by 1976, and to 350 million by the year 2000.

It will be a more concentrated population; compared to 63 percent in 1960, about 73 percent of the people will be living in metropolitan areas by the year 2000. There will be more young people. The proportion of those in the 15–24 age bracket—the most active of all—will go from the current 13 percent of the total to about 17 percent by 1976.

At the very least, then, these figures suggest a doubling of demand by 2000, even if participation did not increase. But it will. Studies of other trends indicate that in the years ahead the individual will be participating a great deal more in recreation than he does now.

Incomes, for one thing, will be higher. With a projected annual growth rate of gross national product of 3.5 percent, disposable consumer income is expected to rise from $354 billion in 1960, to $706 billion by 1976, and to $1,437 billion by 2000. More people will be moving into the higher income brackets. In 1957, about 14 percent of the consumer units had incomes of $10,000 and over; by 1976, it is estimated the proportion will be up to 40 percent and by 2000 to 60 percent (in constant 1959 dollars).

With this new affluence, many more Americans will be able to afford the kinds of activities—like horseback riding, water skiing, and boating—that they do not do now but would very much like to do. As the economic base widens,

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[2] The projections in this section are based on Commission studies included in *Projections to the Years 1976 and 2000,* ORRRC Study Report 23:

"Population Projections of the United States for 1976 and 2000," Commission staff.

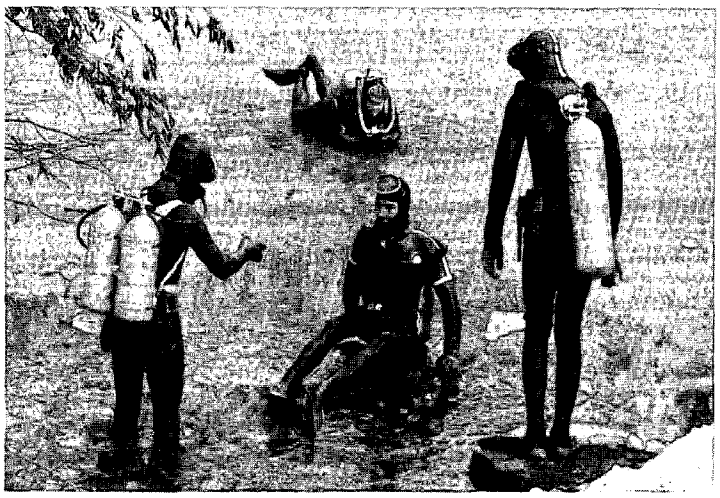
"Economic Projections for the Years 1976 and 2000," National Planning Association.

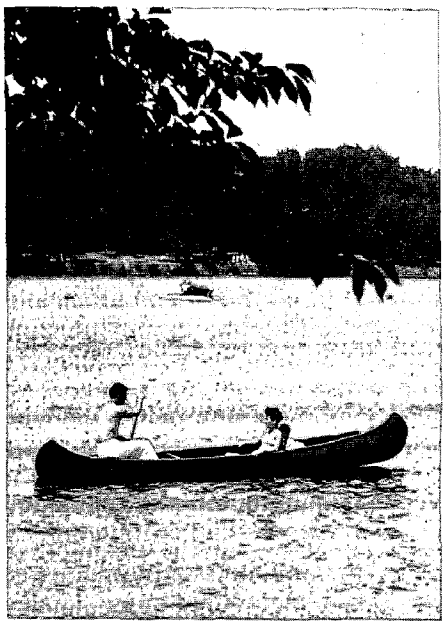
"Economic Projections by States for the Years 1976 and 2000," National Planning Association.

"Industry Output, Employment, and Productivity in the Years 1976 and 2000," National Planning Association.

A. James Goldenthal, "The Future of Travel in the United States."

"Estimates of the Decrease in Hours Worked, 1960–2000," Bureau of Labor Statistics, U.S. Dept. of Labor.





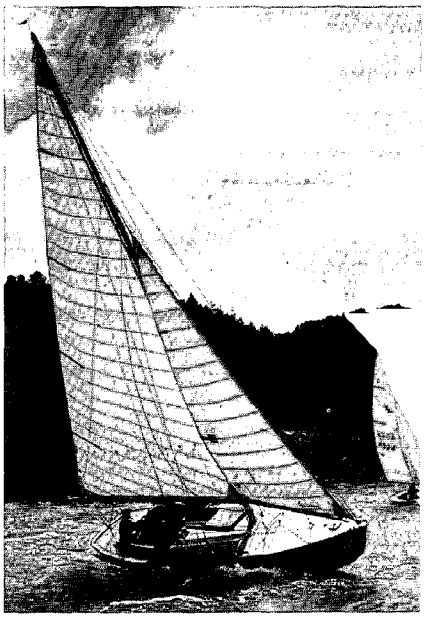
furthermore, many of the present differences between groups in the kinds of recreation they seek will lessen. There will also be a shift in the occupational composition of the population, with more people in the professional, technical, and white collar categories, and this is likely to bring about an increase in outdoor activity. And an expected increase in the educational level of the adult population may be felt in greater participation in such activities as nature walks, attending outdoor drama, playing games, and sightseeing.

People will have more free time. By 1976, it is estimated that the standard scheduled workweek will average 36 hours for the entire industrial work force versus 39 hours in 1960. And by 2000 it may be down to 32 hours. Much of the extra time will go to recreation; at least one-fifth of free time goes into outdoor recreation today, and we may expect at least this much in the future.

The inclination is already quite evident. A large number of people report that they would like to engage in a great deal more recreation activity than they do at present. They cite lack of time as the chief barrier. Lack of money is next. As people get more of both, there will be a considerable step-up in per capita demand; and even a modest increase, when it is applied to a doubled population, could have a great multiplying effect.

The forecasts of travel suggest an enormous expansion. In air travel, for example, some 30 billion passenger miles were flown by domestic carriers in 1960; by 1976, the figure may reach 150 billion; and by 2000, it could go as high as 325 billion. The number of passenger cars is projected at 100 million by 1976—an increase of nearly 80 percent above the number registered as of 1959—and by 2000 the number is expected to grow by as much again. The new degree of mobility should be impressive indeed, and among other effects, this will inevitably increase the pressure on recreation sites that now seem remote.

Travel between countries will also increase. In 1960, 1.7 million Americans went overseas. By 2000, it is estimated that the number will be approximately 4 million. By going abroad Americans will put less pressure on resources at home, but foreign visitors may offset this. In 1960, 600,000 came from overseas, and the trend is up. Major attractions for many of these visitors are the national parks and historic shrines—indeed, quite a selling point is being made of these abroad by the newly established U.S. Travel Service.



THE TOTAL EFFECT

In summary, vast as the demand for outdoor recreation presently is, it pales beside what may be expected in future years. Commission studies show that participation in outdoor recreation during each summer may well leap from the present 4.4 billion separate outdoor recreation "activity occasions"—participation by an individual in a single recreation activity during a day—to 6.9 billion activity occasions by 1976. By the year 2000, this total could rise to over 12.4 billion occasions, an increase of 184 percent over participation in 1960. Between the years 1960 and 2000, when the Nation's population is expected to double, participation in outdoor pursuits will nearly triple.

Consideration of the factors that will affect demand must include supply. What people do depends greatly on what is available for them to do. The opportunity to try an activity is a necessary stimulus, but once experienced, it can set off a powerful spiral. To a degree that is hard for anyone to foresee, the sheer existence of new recreation facilities can stimulate people to use them, to try new activities, and this in turn leads them to seek still more. Water, especially, is a stimulus, and where none was before, the effect is galvanic. Not so long ago many people in the Southwest never counted boating in their way of life; today with their new reservoirs, they are probably the most avid boaters in the whole country.

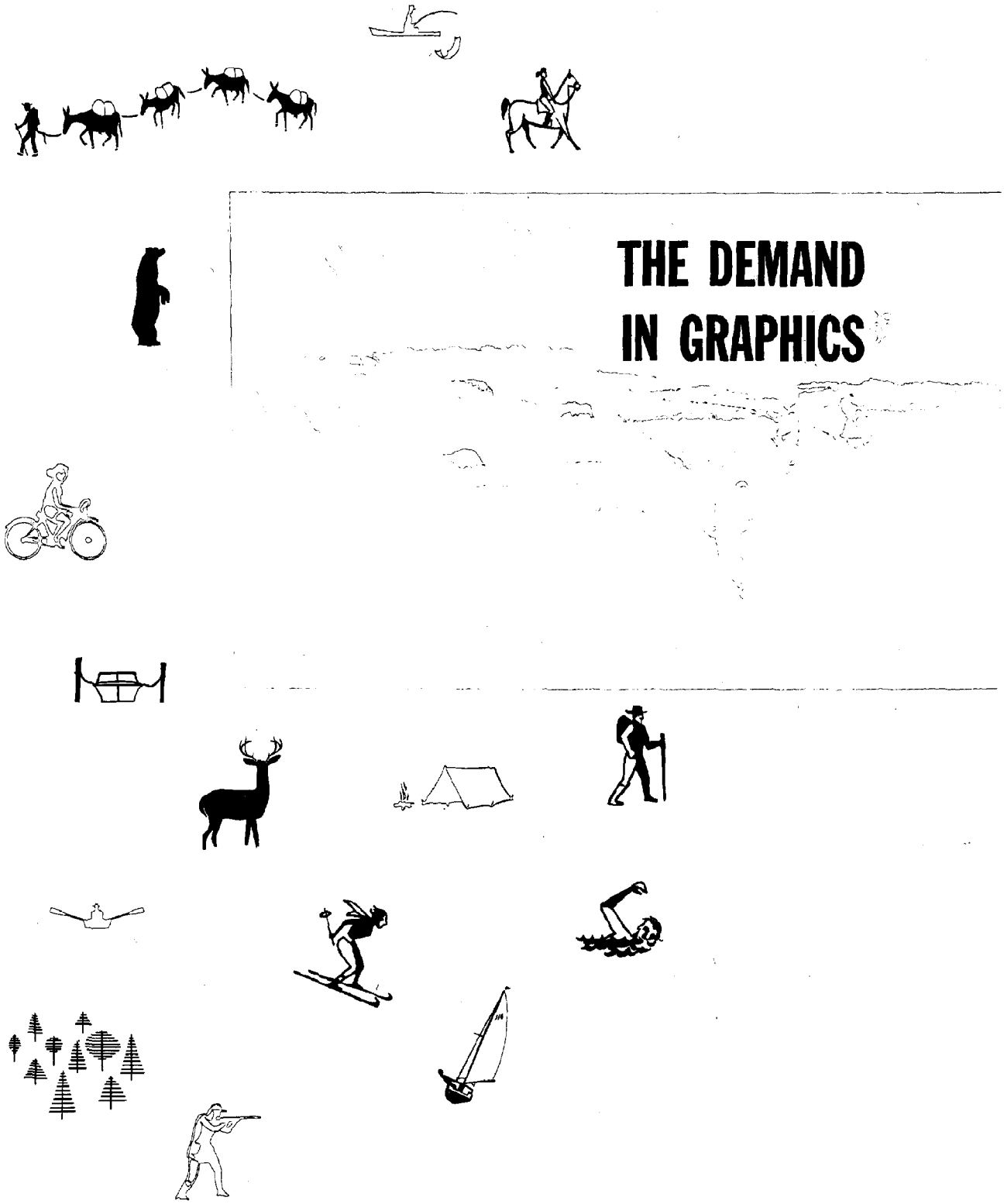
Interaction between supply and demand complicates prediction, but it makes planning all the more necessary. Outdoor recreation may seem to be a vast set of miscellaneous activities whose only common denominator is the fact they take place out-of-doors. Basically, however, they make up a system with qualities of order in it.

Changes or shifts at a point in this system have effects elsewhere. The introduction of water skiing alters the way in which water can be used for other recreation purposes. The use of Yosemite by masses of people from nearby urban areas modifies its character as a national park. A change in the school vacation period in Illinois affects the demand for outdoor recreation facilities in Wisconsin. The new interstate highway program, when completed, will modify and enlarge our present outdoor recreation plant by reducing travel time to now remote areas. Within regions and metropolitan areas, the same kind of factors operate on a smaller scale.

Thus, demand is one element of a system. Analysis of the preferences of individuals and groups can indicate the directions and amount of the total demand. These, together with the other elements of the system—the location of recreation places and the way the resources are used—produce a pattern.

The pattern can be anticipated, and it can be planned for.

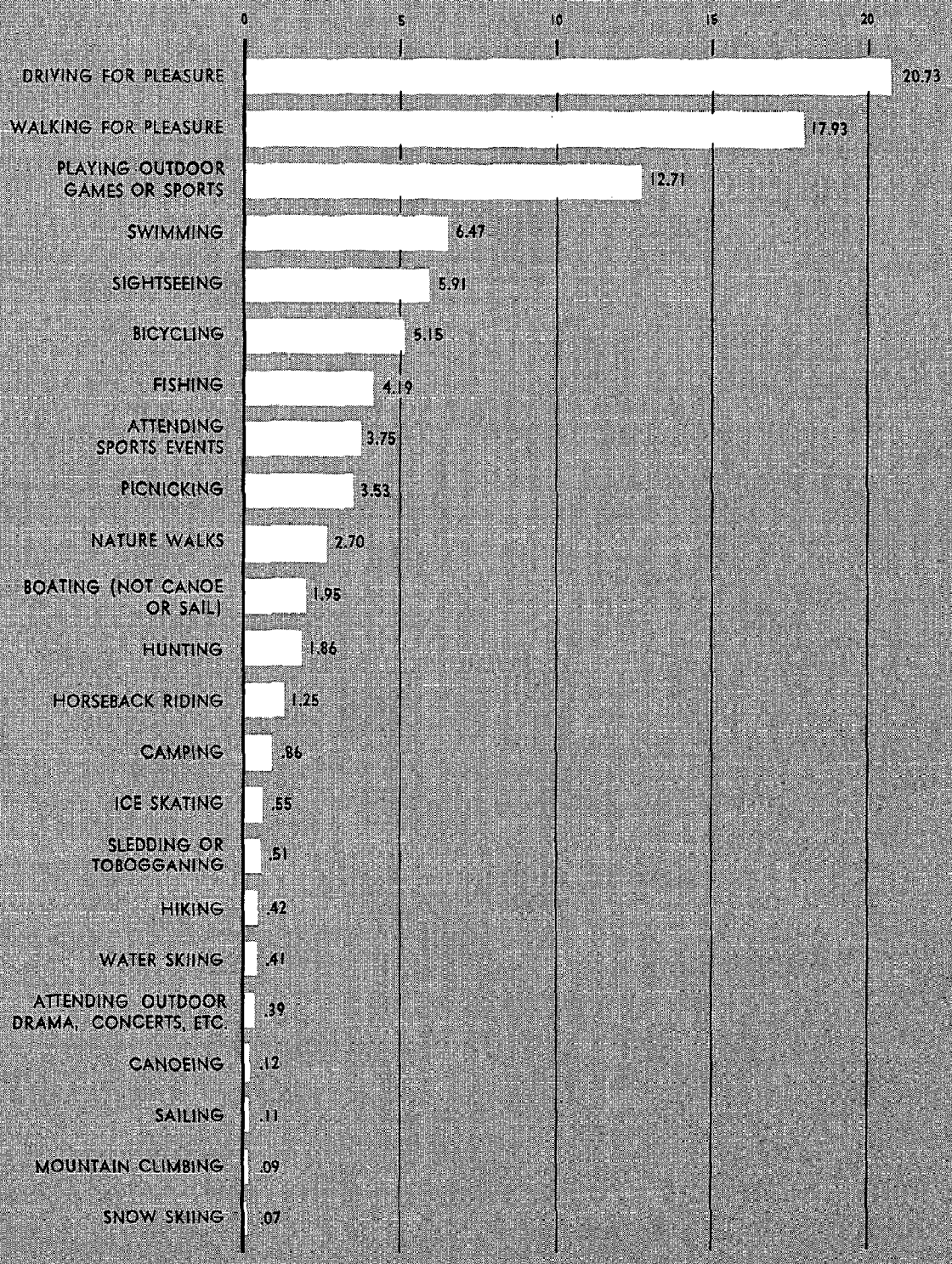
Text continued page 49


THE DEMAND
IN GRAPHICS

WHAT AMERICANS DO MOST

NUMBER OF ACTIVITY DAYS PER PERSON, 12 YEARS AND OVER

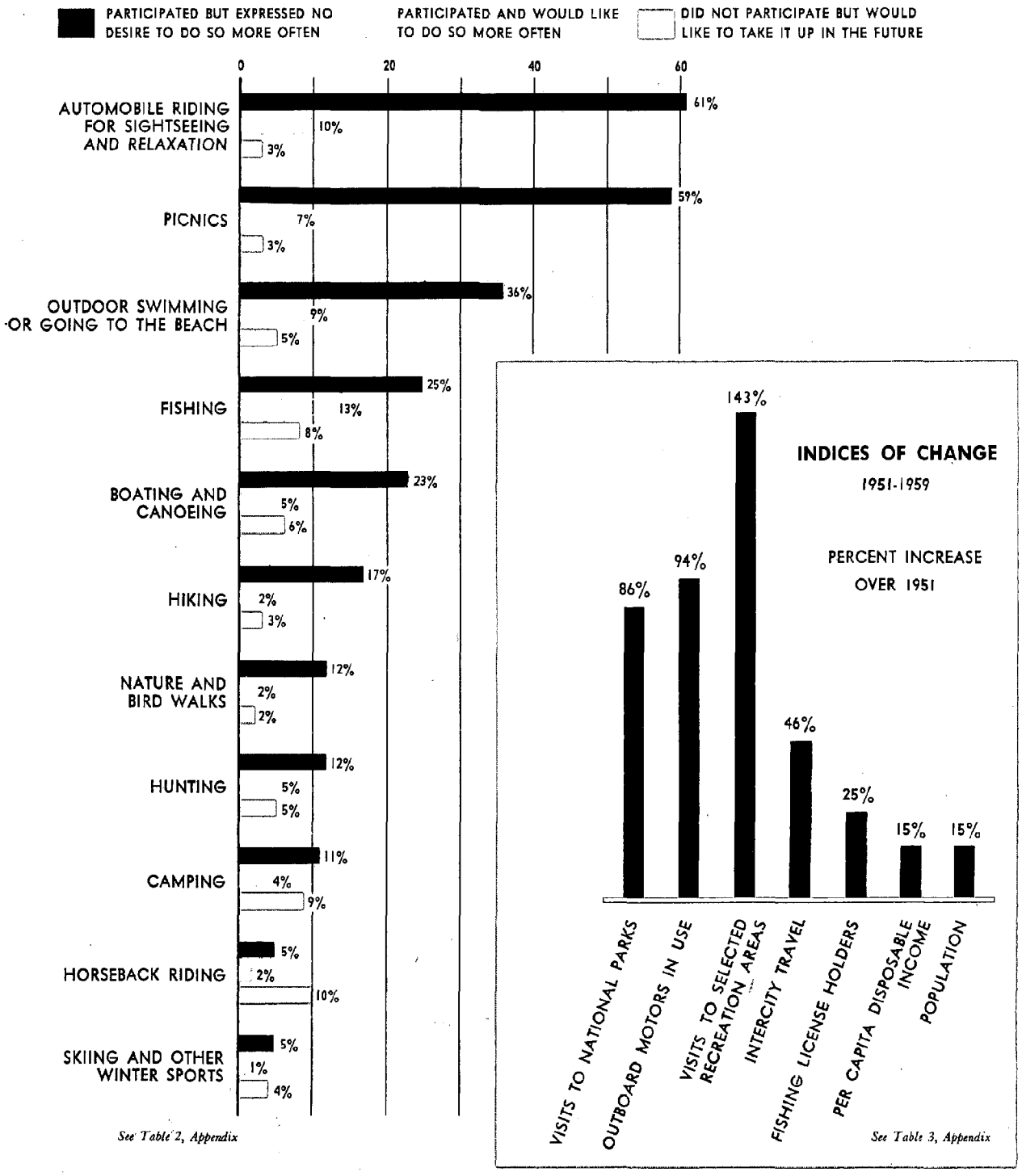
JUNE 1, 1960—MAY 30, 1961



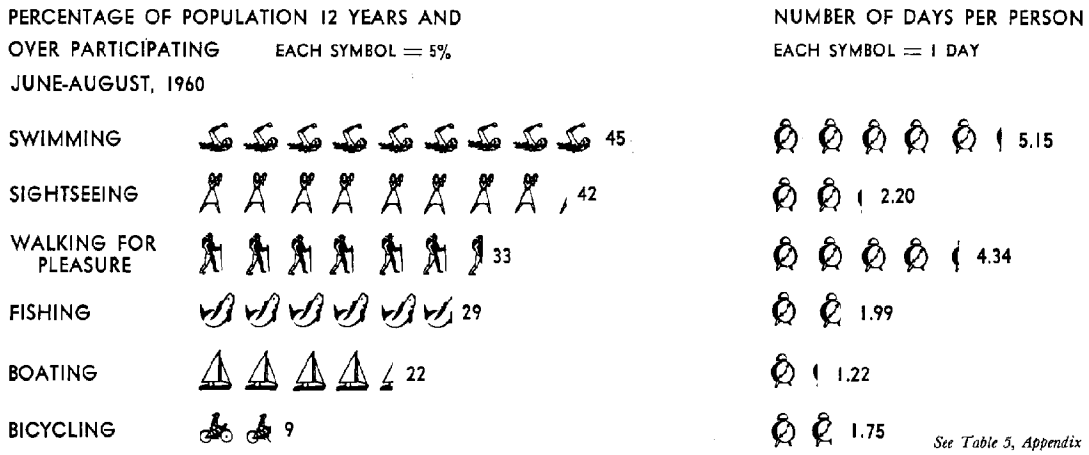
See Table 7, Appendix

The demand is surging. Whatever the measuring rod—visits to Federal and State recreation areas, fishing license holders, the number of outboard motors in use—it is clear that Americans are seeking the outdoors as never before. And this is only a foretaste of what is to come.

EXPRESSION OF PREFERENCE OF PARTICIPANTS AND NON-PARTICIPANTS IN OUTDOOR ACTIVITIES

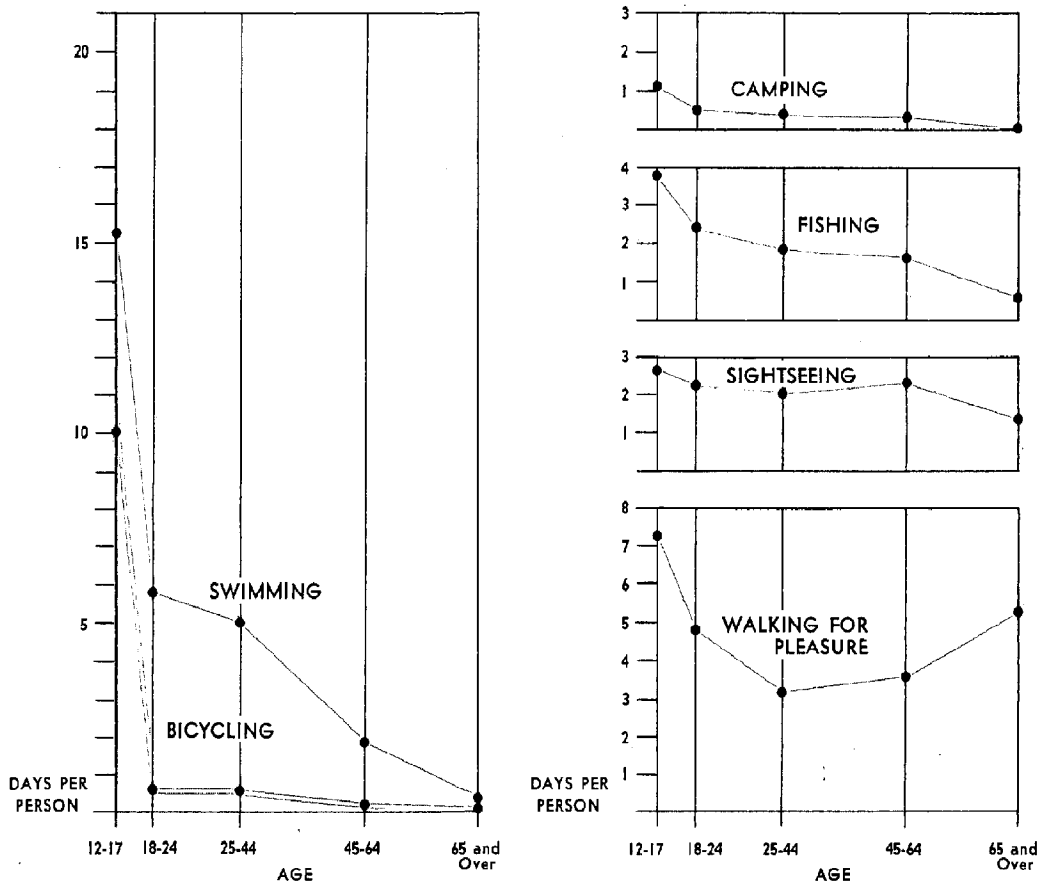


At present, it is the simple pleasures Americans seek most.



See Table 5, Appendix

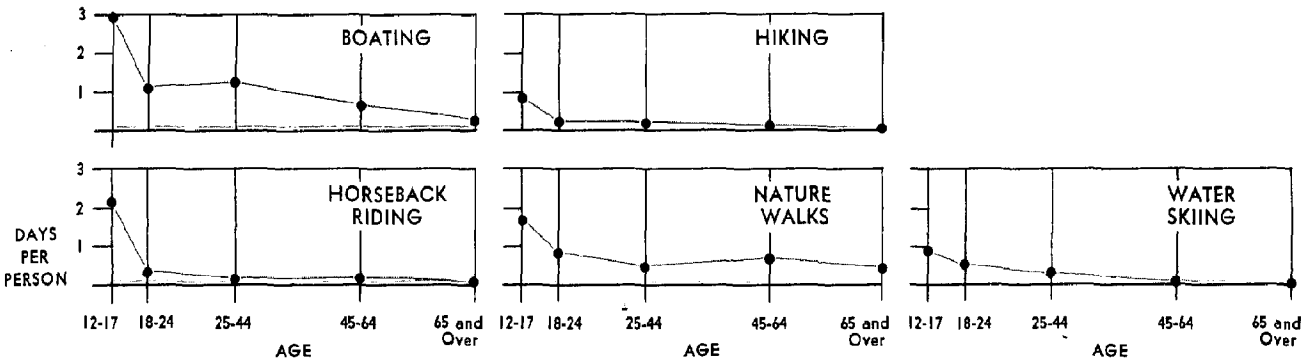
Of all the factors, age has the sharpest influence. As might be expected, older people engage less in most outdoor activities.



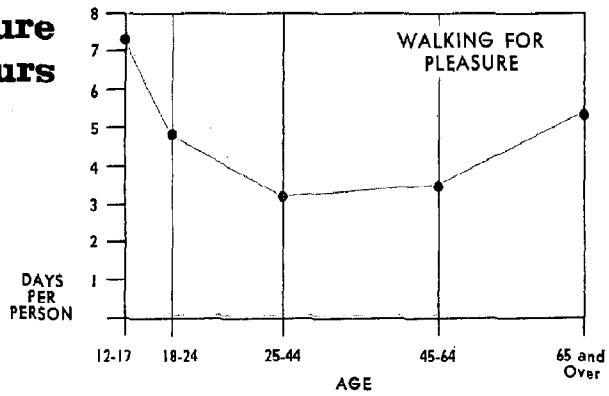
These are primarily activities of the young

these tend to last a lifetime

and these tend to become habit after the early years



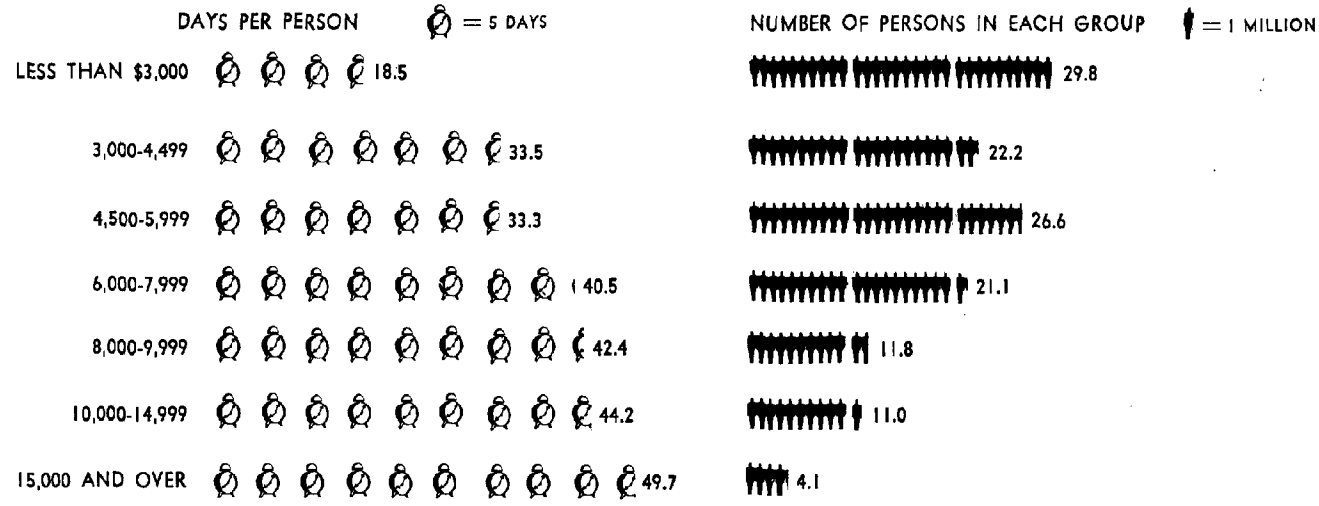
while walking for pleasure is an activity that recurs with age.



Income has a decided influence. Participation tends to go up as income does;

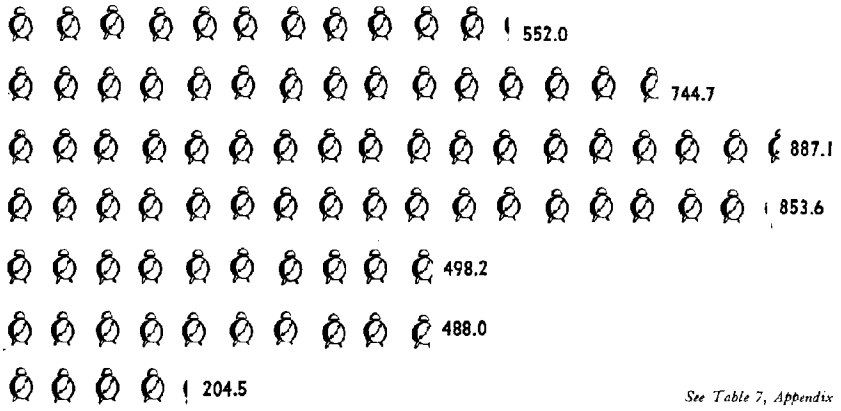
See Table 5, Appendix

TOTAL DAYS PARTICIPATION PER PERSON IN 17 OUTDOOR ACTIVITIES BY FAMILY INCOME JUNE-AUGUST, 1960, 12 YEARS AND OLDER



See Table 7, Appendix

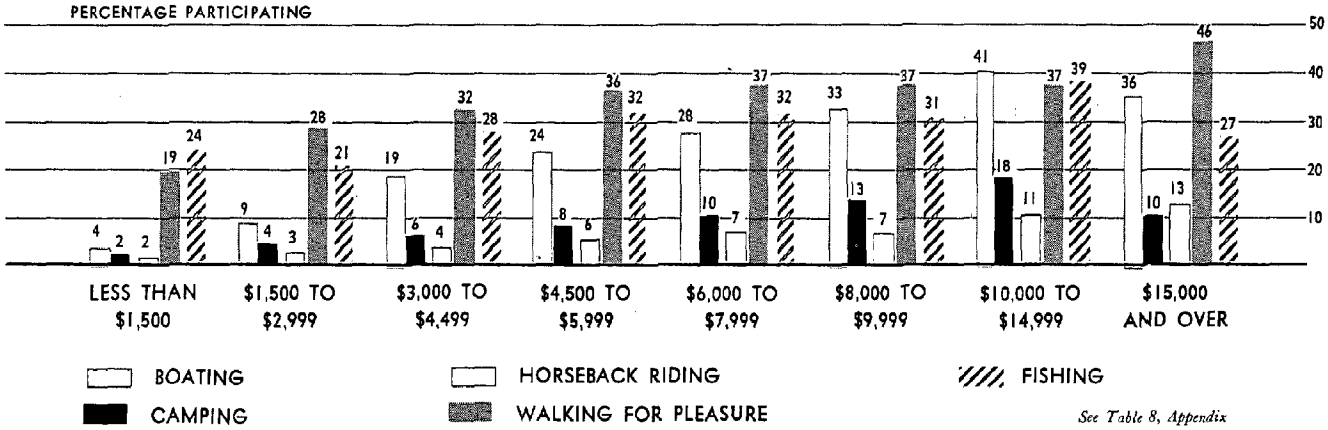
TOTAL DAYS PARTICIPATION BY FAMILY INCOME = 50 MILLION



See Table 7, Appendix

PARTICIPATION IN SELECTED OUTDOOR ACTIVITIES BY FAMILY INCOME

PERCENTAGE OF PERSONS 12 YEARS AND OVER, JUNE-AUGUST, 1960

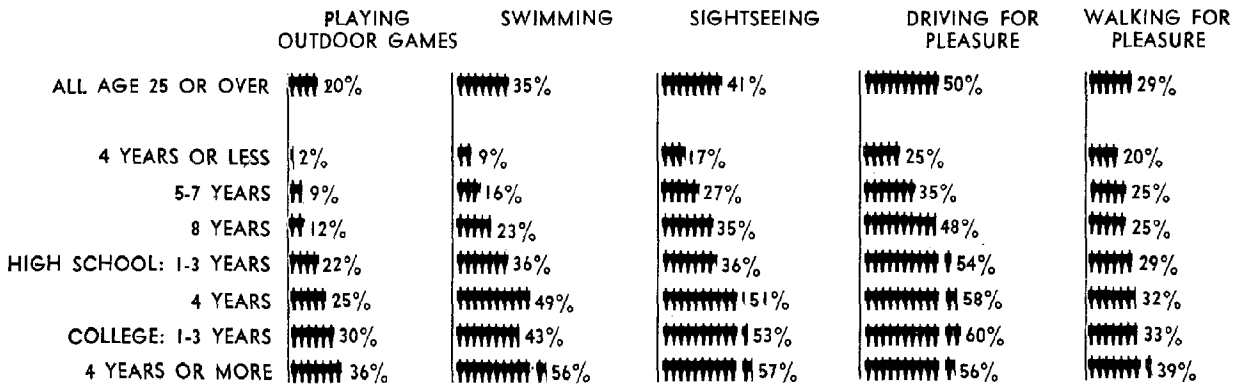


See Table 8, Appendix

Education affects participation much as income does;

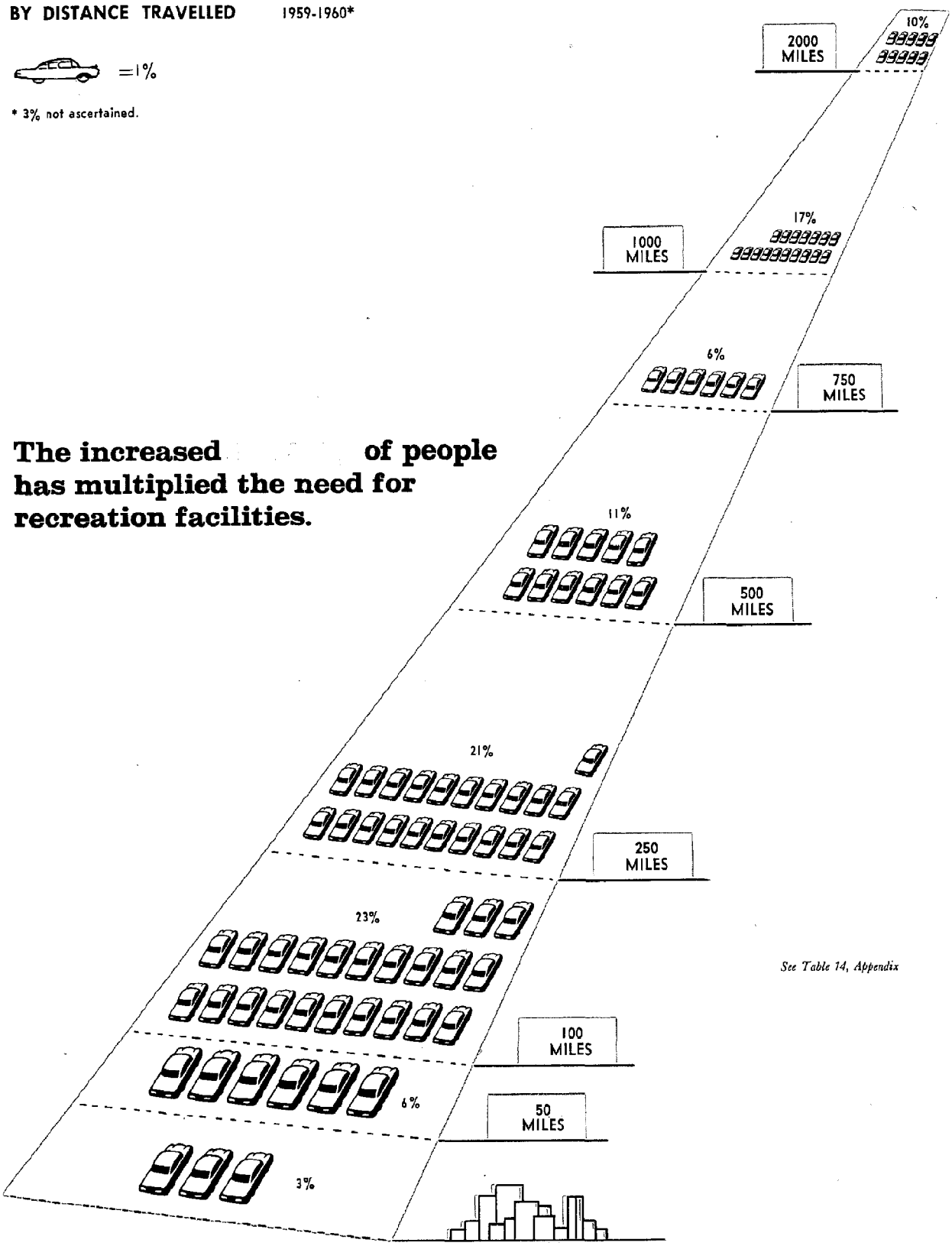
PARTICIPATION IN SELECTED OUTDOOR ACTIVITIES BY YEARS OF FORMAL SCHOOLING

PERCENTAGE OF PERSONS 25 YEARS AND OVER, JUNE-AUGUST, 1960 EACH SYMBOL = 5%



See Table 9, Appendix

PERCENTAGE DISTRIBUTION OF ALL VACATION TRIPS BY DISTANCE TRAVELLED 1959-1960*



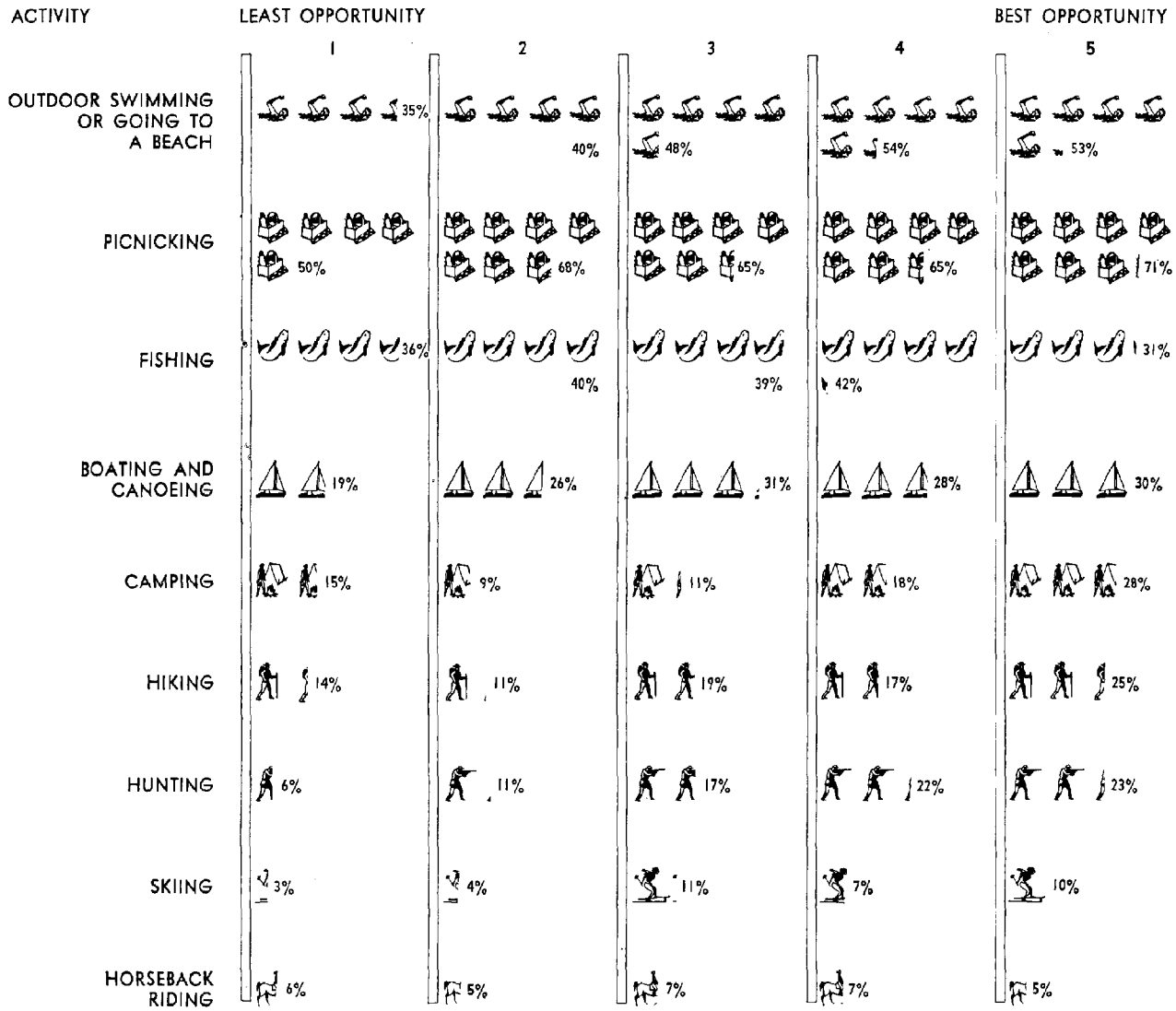
The increased of people has multiplied the need for recreation facilities.

See Table 14, Appendix

Opportunity to participate becomes a significant factor in outdoor recreation activity. When the facilities are there, people use them.

PERCENT OF THE ADULT POPULATION ENGAGING ONE OR MORE TIMES DURING A YEAR, ACCORDING TO RATING OF OPPORTUNITY TO ENGAGE WITHIN DAY-USE AREA OF RESIDENCE

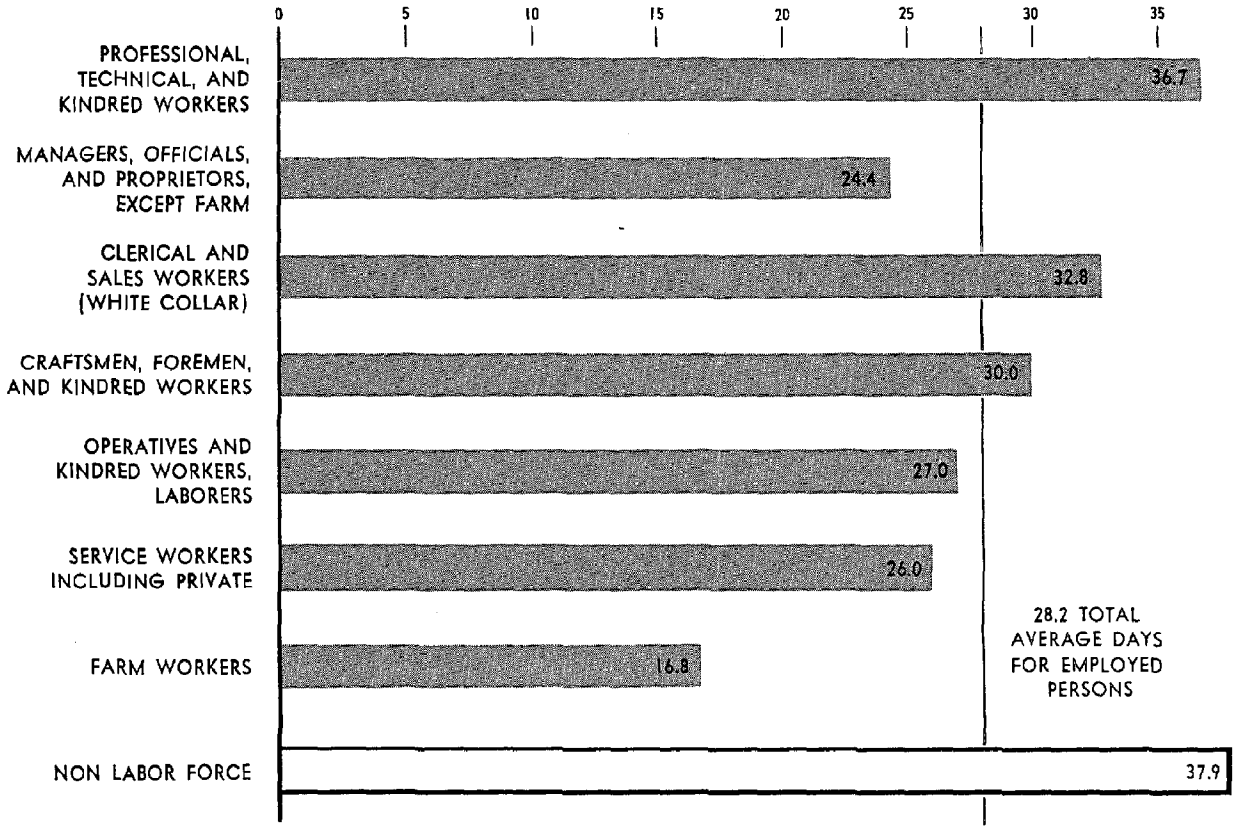
EACH SYMBOL = 10%



See Table 15, Appendix

Occupation has a considerable influence

ACTIVITY DAYS PER PERSON FOR 17 OUTDOOR RECREATION ACTIVITIES BY MAJOR OCCUPATION, JUNE-AUGUST, 1960

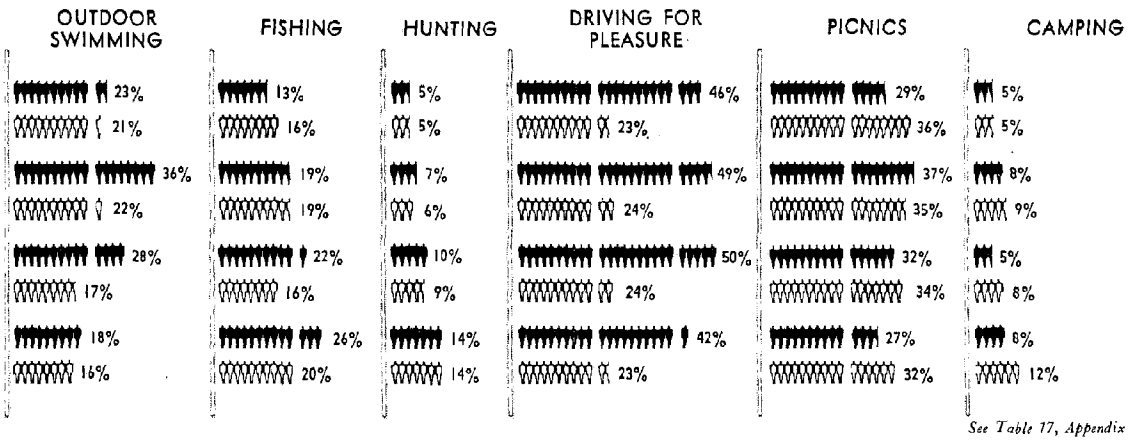


See Table 16, Appendix

Suburbanites are more active than city people.

FREQUENCY OF PARTICIPATION IN SELECTED OUTDOOR ACTIVITIES 1959-60

= OFTEN = 1-4 TIMES EACH SYMBOL = 2%



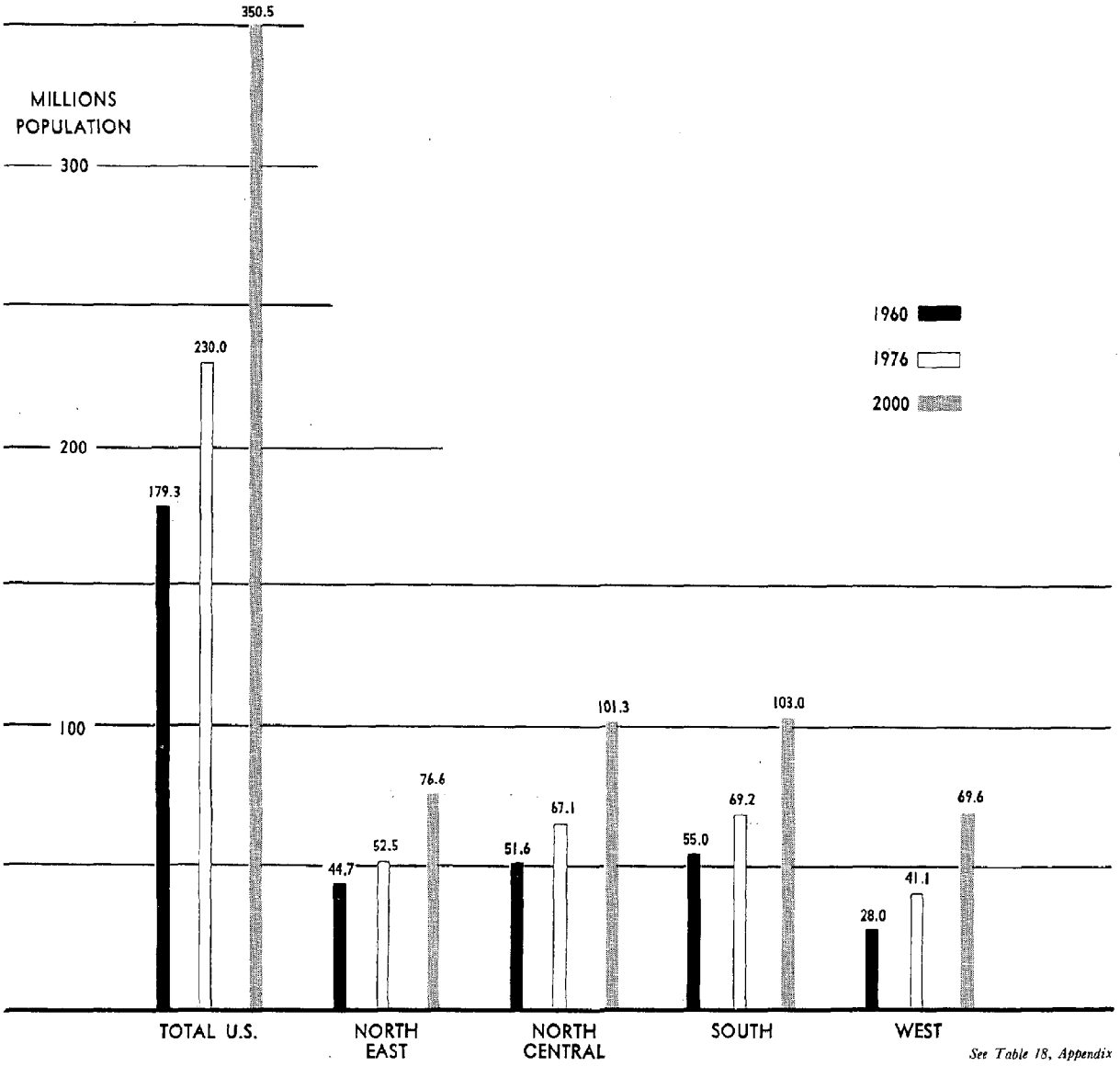
See Table 17, Appendix

Opportunity to participate becomes a significant factor in FUTURE DEMAND

How great will the demand be? The most basic factor, the number of people,

PROJECTED UNITED STATES POPULATION BY CENSUS REGION

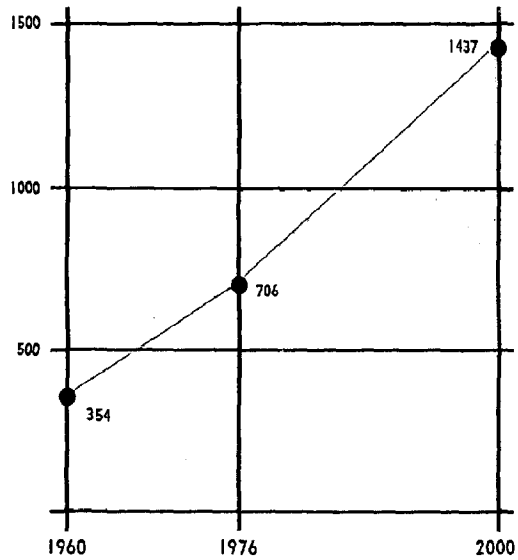
FOR THE YEAR 1960, AND PROJECTED, 1976, AND 2000, IN MILLIONS



See Table 18, Appendix

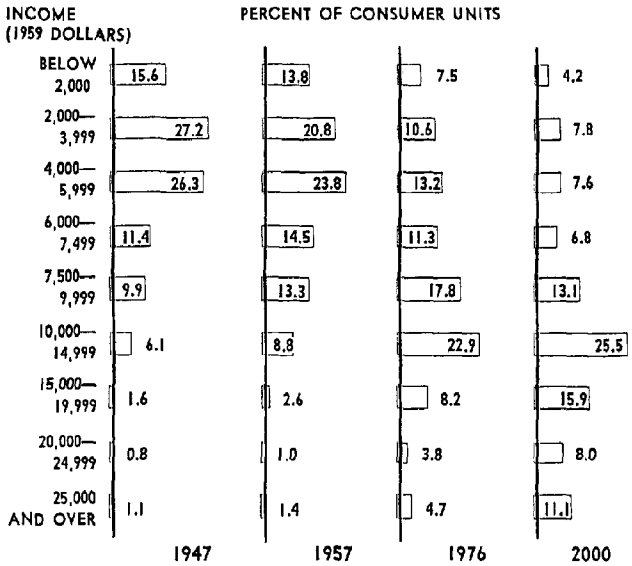
Incomes, will be higher.

DISPOSABLE CONSUMER INCOME IN BILLIONS
1960 AND PROJECTED, 1976 AND 2000



See Table 21, Appendix

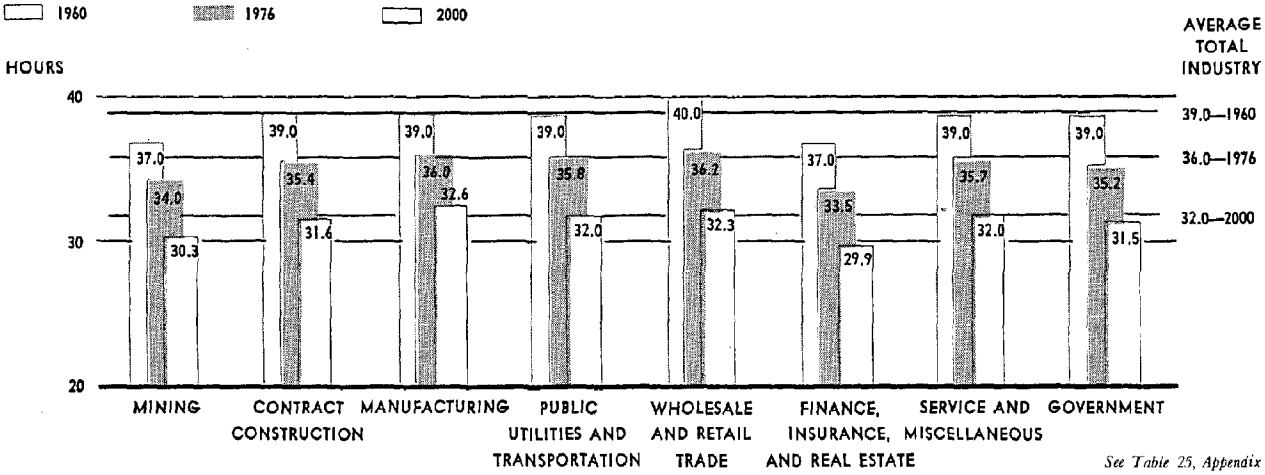
PERCENT OF CONSUMER UNITS IN EACH INCOME CLASS
1947, 1957, AND PROJECTED, 1976 AND 2000



See Table 22, Appendix

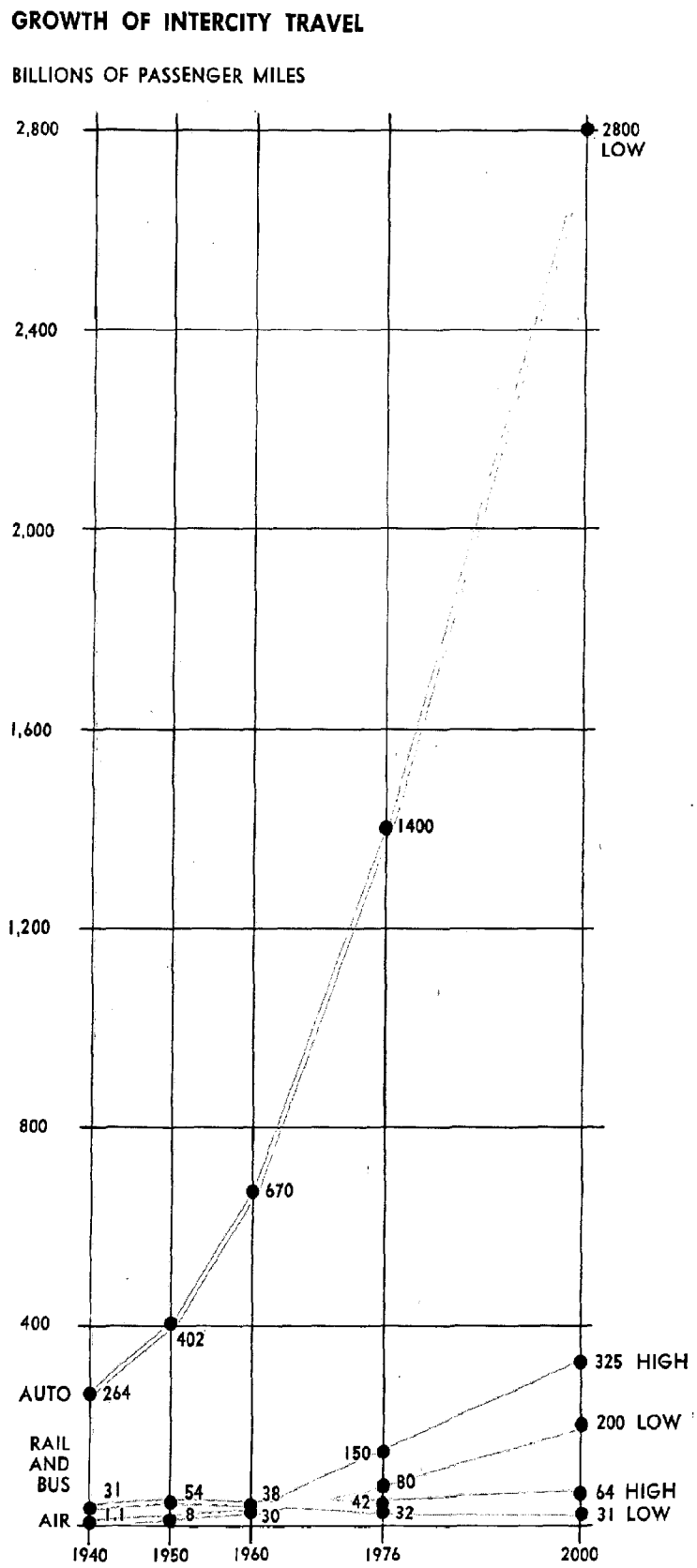
In addition, people will have more free time. Much of the extra time will go to recreation;

AVERAGE SCHEDULED WORK WEEK FOR NONAGRICULTURAL WORKERS BY INDUSTRY
1960 AND PROJECTED, 1976 AND 2000, HOURS



See Table 25, Appendix

The forecast of travel suggests an enormous expansion.

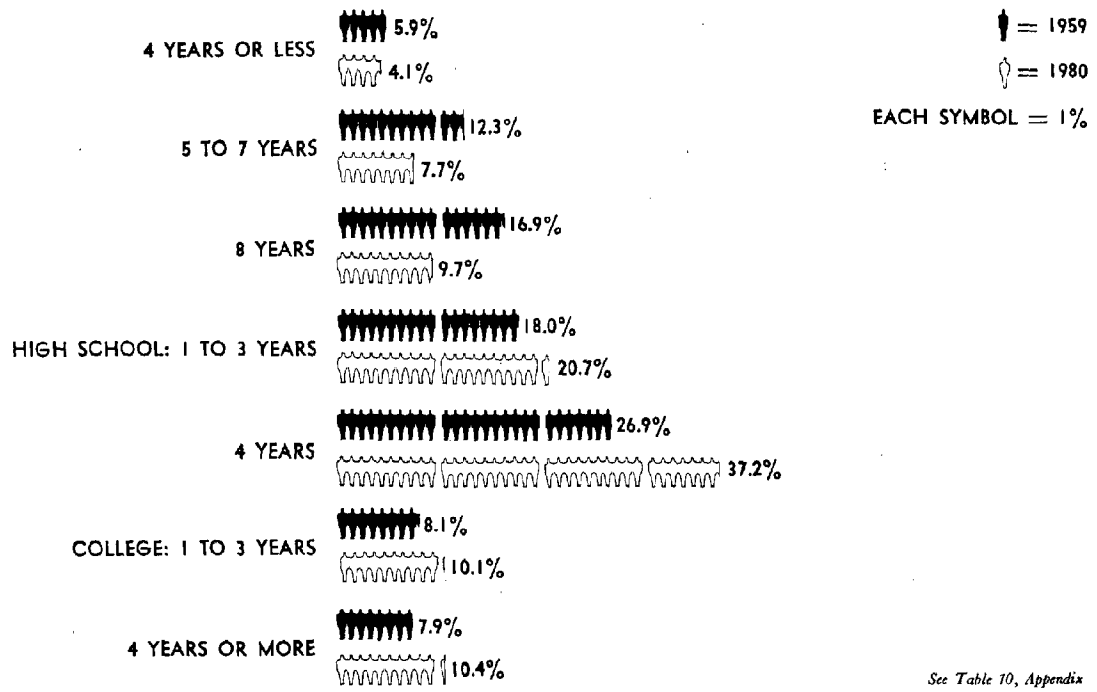


See Table 25, Appendix

The widespread increase in education will influence both tastes and popularity of outdoor recreation.

PERCENT DISTRIBUTION OF U.S. POPULATION 25 YEARS OF AGE AND OVER

BY YEARS OF FORMAL SCHOOLING, 1959 AND 1980 (PROJECTED)



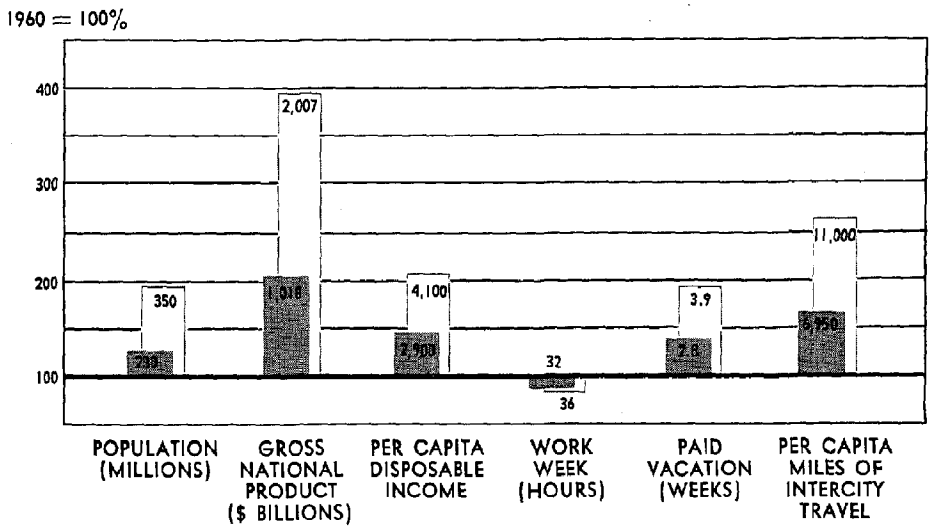
See Table 10, Appendix

in summary, here is a projection of all these increases.

ESTIMATED CHANGES IN POPULATION, INCOME, LEISURE, AND TRAVEL

FOR THE YEARS 1976 AND 2000, COMPARED TO 1960

1960 FIGURES	
POPULATION (MILLIONS)	180
G.N.P. (BILLIONS)	$503
PER CAPITA DISPOSABLE INCOME	$1970
WORK WEEK (HOURS)	39
PAID VACATION (WEEKS)	2.0
PER CAPITA MILES OF INTERCITY TRAVEL	4170

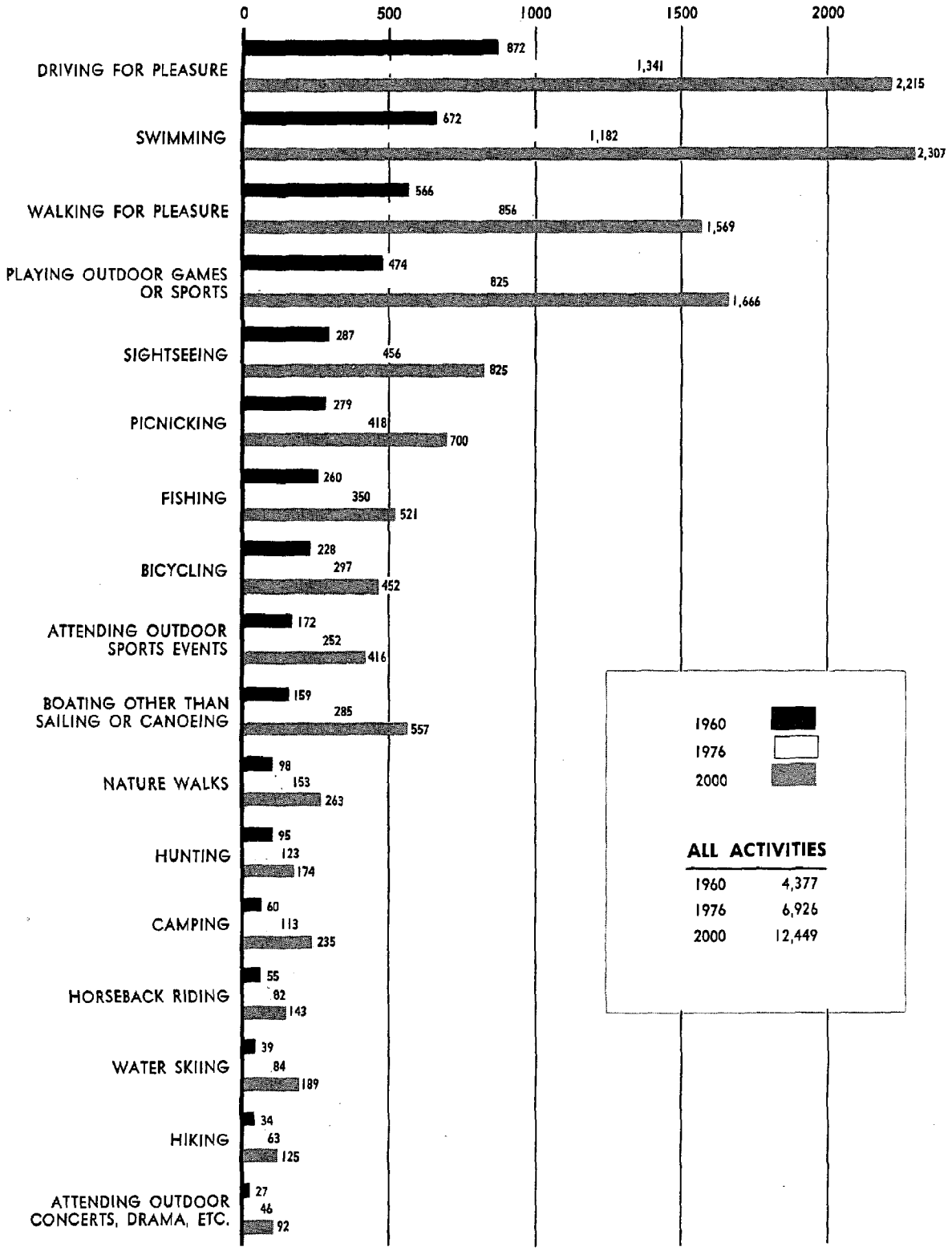


See Table 21, Appendix

...and here is a projection of the total effect by the summer of 2000.

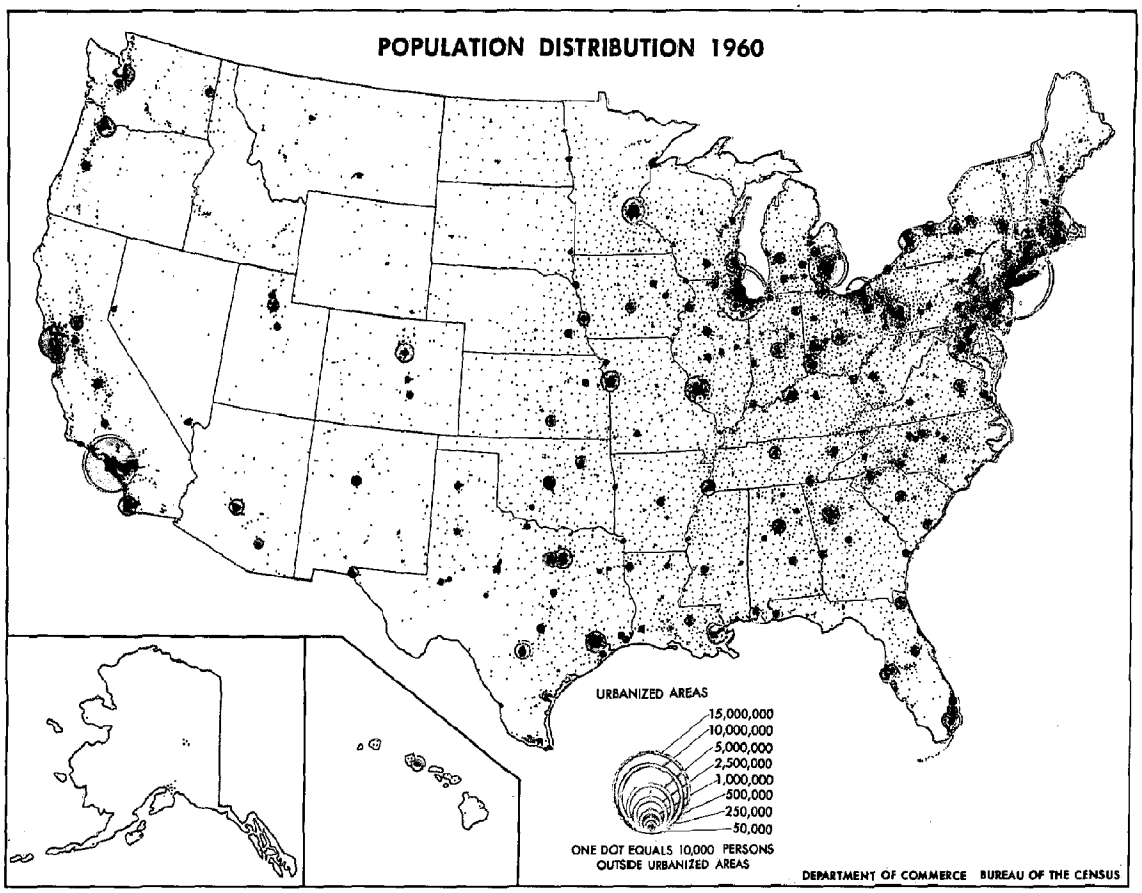
NUMBER OF OCCASIONS OF PARTICIPATION IN OUTDOOR SUMMER RECREATION

1960 COMPARED WITH 1976 AND 2000 (BY MILLIONS)

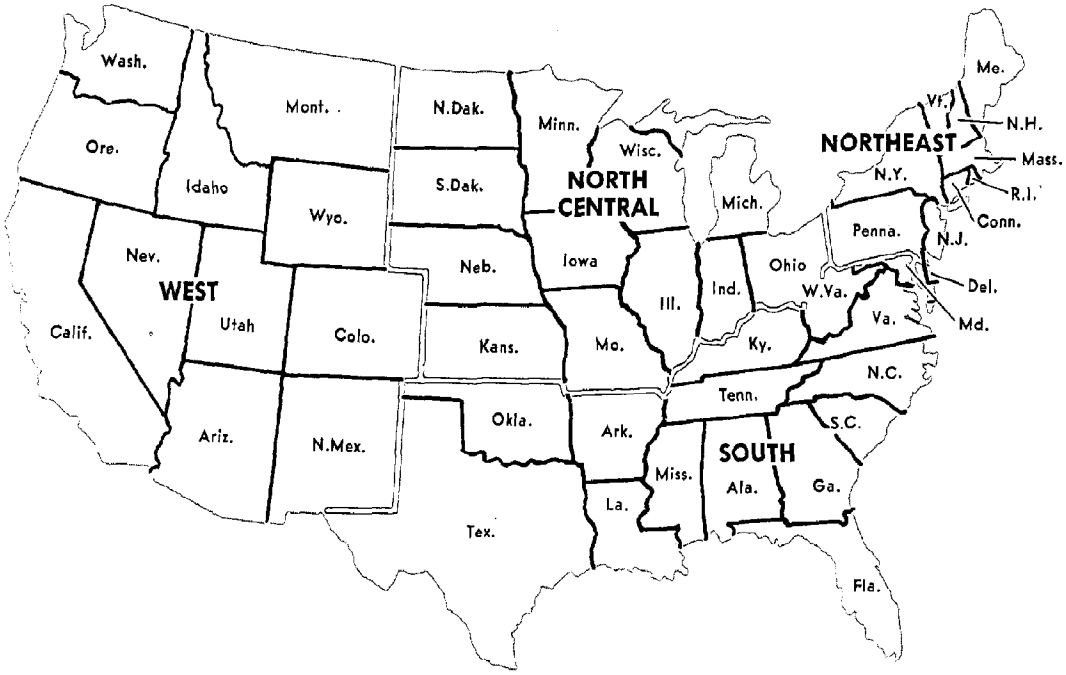


See Table 23, Appendix

The measure of the problem:
outdoor recreation activity,
already a major part of American life,
will triple by the year 2000.



MAJOR CENSUS REGIONS
(48 CONTIGUOUS STATES)



CHAPTER 3

THE SUPPLY

The most striking aspect of the supply of outdoor recreation resources in America is one of paradox. Public areas designated for outdoor recreation include one-eighth of the total land of the country. Millions of other acres, private as well as public, are also used for recreation. But this apparent abundance in many ways fails to provide an adequate supply of outdoor recreation opportunities for the public.

The problem is not one of number of acres but of *effective* acres—acres of land and water available to the public and usable for specific types of recreation. For reasons of location or management, much of the vast acreage nominally designated for recreation is now not available for general public recreation use. Most of this land is in the mountains of the West and Alaska, while a large percentage of the people are in the East. This kind of imbalance often is duplicated within States. Michigan has a vast recreation resource in public ownership, but most of it is located just beyond the range of mass recreation use for the people of Detroit. The pattern is repeated elsewhere.

There are very real limitations on what can be done to adjust this imbalance. In some respects, the location of outdoor recreation resources is a constant factor that cannot be changed. The most promising means of bringing about a balance is management policy, which in many cases may be as much a determinant of supply as acres. This means management in the very broad sense. It includes legislative and administrative decisions as to how public resources should be used and decisions on private investment.

Management decisions can increase the supply of outdoor recreation resources without an increase in acreage. If a given area is transferred from low-density use emphasizing natural environment to high-density use emphasizing facilities, more recreation opportunities are made available. At the same time, intelligent concentration of use in this way can protect other natural environments by diverting mass pressures from them.

This factor is illustrated by the trend of visits to State parks during the period 1950–59. Visits increased by 123 percent, but acreage increased by only 22 percent. The contrast in density of use is highlighted by the fact that the national parks in 1960 had nearly five times as many acres as the State parks but less than one-third as many visits. Thus, in a sense, the density of use in the State parks is 14 times that of the national parks. Much of this intensive use is not by plan but stems from public pressure. However, there is implicit here a management decision to tolerate, if not actively to promote, high-density use.

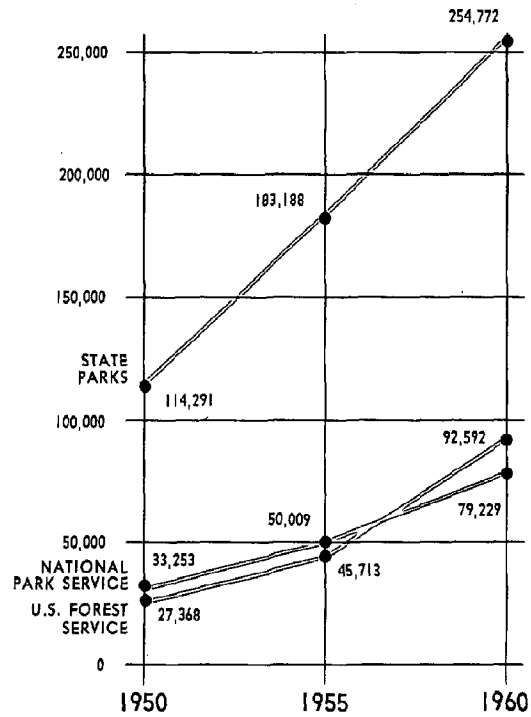
This is not to imply that high-density use is necessarily desirable, but only to point out that it can serve more people. In this process, however, the nature of the recreation experience is affected. A balance of all types of opportunities should be offered, and administrative decisions can manage this balance to meet changing needs. The classification system proposed in chapter 6 is designed to help guide policy to this end.

VISITS AND ACREAGE
SELECTED RECREATION AREAS,
1950, 1955, 1960

ACREAGE (1000's)

	1950	1955	1960
STATE PARKS	4,657	5,086	5,671
NATIONAL PARK SERVICE	23,882	23,899	25,705
U. S. FOREST SERVICE	181,205	188,120	185,772
TOTALS	209,744	217,105	217,148

VISITS (1000's)



The seeming abundance of acres and the ability of management to increase their capacity should not overshadow the need for orderly public acquisition in some places. Where the present combination of public and private ownership makes inadequate provision for outdoor recreation, as is the case in some parts of the country and with certain types of resources, such acquisition is the only answer. Shoreline is an outstanding example.

Approximately three-fifths of the country's land is in private ownership. Most of this is in farms, forests, and range lands, which provide many different kinds of recreation opportunities, notably hunting, fishing, hiking, picnicking, camping, and sightseeing.

Over one-third of the Nation's land is in Federal ownership. The Bureau of Land Management in the Department of the Interior controls about two-thirds of all Federal land. Two-thirds of this is in Alaska. Federal land is used primarily for recreation (including hunting and fishing), timber production, watershed protection, and grazing.

About 4 percent of the land is owned by State and local governments. About half of the State-owned land is used for grazing. Most of the remainder is in highway rights-of-way, forests, parks, and fish and game areas.

The outdoor recreation supply may be considered in three general categories: (1) the resources now publicly designated for outdoor recreation use—traditional park, forest, and recreation areas, (2) the undesignated resources—both public and private—which either are or could be used for outdoor recreation, and (3) special situations that require particular treatment—such as shoreline and primitive areas.

PUBLIC OUTDOOR RECREATION AREAS [1]

The term "recreation areas" as used in this section includes all publicly owned, nonurban areas designated by the agency in charge of their administration as available for recreation use, whether or not they are now so used. It refers to the total land and water acreage, exclusive of inholdings, contained within the exterior boundaries. There are over 24,000 such areas encompassing 283 million acres. This large number of areas includes some 15,000 small areas such as roadside picnic grounds. The large acreage includes the extensive national forests, each of which is classed as a single area.

Acreage [2]

Nationally, these recreation acres are located where the people are not. One-sixth is in sparsely populated Alaska. Seventy-two percent of the remainder is in the West where only 15 percent of the people live. The Northeast, where one-quarter of the people live, has only 4 percent of the recreation acreage of the 48 contiguous States. The South and North Central regions each have about 30 percent of the population but have roughly 12 percent of the recreation acreage in the 48 contiguous States.

This inverse relation to population is particularly well illustrated for the 48 contiguous States by the Federal lands which provide six-sevenths of the total acreage. Eighty-four percent of the national forest acreage and 78 percent of the national park acreage are in the relatively lightly populated West.

The Federal Government manages the vast majority of the recreation acres—84 percent as compared with 14 percent managed by the States, and 2 percent managed by local governments.

In terms of number of areas, the picture is quite different. States manage about 85 percent of the total number. Of the rest, the local governments manage more than the Federal Government.

Among the various types of management agencies, the forest agencies manage the largest number of acres at both the State and Federal levels, again as a result of the generally large size of the forest units. However, in number of units, the Fish and Wildlife Service leads at the Federal level, and the highway and fish and game agencies lead among the States.

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[1] This section is based upon the ORRRC inventory of nonurban public designated recreation areas. The information was obtained by questionnaires completed by the State and Federal officials responsible for administering the areas involved. From a list of over 6,000 areas of 40 acres or more, completed forms were received for 4,888 located in the 48 contiguous States. Information on areas under 40 acres was aggregated so that only more general information—in some cases estimates—was received. Thus, the data are a sample, but a very large sample, which approximates the entire public recreation picture. Tables appear in appendix F.

A full report of the inventory is presented in *Public Outdoor Recreation Areas—Acreage, Use, Potential,* ORRRC Study Report 1; and *List of Public Outdoor Recreation Areas—1960,* ORRRC Study Report 2.

[2] Data for Alaska and Hawaii are not included in the sections dealing with acreage, capacity, use pressures, and expansion plans.

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The inadequacy of acres alone as a measure of recreation supply is highlighted by the size relationships. Most of the seeming abundance of recreation acreage is in large units. Only 1 percent of the areas are over 100,000 acres in size, but they make up 88 percent of the total recreation acreage. Conversely, over two-thirds of the areas are under 40 acres in size, but they contain less than 0.1 percent of the total acreage.

Of the Federal acreage, 95 percent is in areas over 100,000 acres, but these comprise only one-fifth of the total number. The large areas tend to mislead even on the local level, where 44 percent of the acreage is in areas of 100,000 or more. But there are only 10 areas of this size in the total of 1,580 local areas.

Capacity

The capacity of a resource to serve recreation needs is a more accurate measure of supply than acreage. For some activities large numbers of acres are essential, but for most it is not the number of acres but how they are used that is most important. Facilities and improvements are thus in many cases the key to effective supply.

Management decisions can most easily affect day-use facilities. It is relatively easier to add a picnic table or to improve swimming or parking facilities than to change the use of an entire area. Total picnicking acreage, for instance, was doubled between 1950 and 1960. Now there is room for 3 million Americans to go picnicking at any one time.

The more heavily populated regions tend to use fewer acres to do a bigger job. The Northeast has less than half the number of picnic developments, with smaller total acreage, than the West, but it has almost twice the capacity. This situation reflects management decisions in response to the greater demand from the heavily populated Northeast. The same pattern exists in swimming facilities. The Northeast devoted about two-thirds more acreage to these facilities but provided three times the capacity of that in the West.

The distribution of overnight facility capacity generally follows the acreage distribution pattern rather than that of the population.

The Commission inventory indicates that almost a million people can be accommodated overnight "under canvas" in campgrounds, with about 60 percent of the capacity in the West. The remainder is about evenly divided among the other three regions.

This is also true of overnight cabin accommodations. There are over 19,000 cabins with a total capacity of 125,000 people. But the West has about 53 percent of the capacity and the Northeast only 8 percent. The South and North Central Regions have 18 and 21 percent, respectively.

There are nearly 1,000 lodge, motel, and hotel developments on the public areas across the country able to accommodate over 60,000 people. The West again has the lion's share—about half the total capacity. The South is next with 31 percent, and the remainder is divided between the North Central and the Northeast, with the latter a poor fourth.

Use Pressures

The best indicator of the need for additional development or acquisition is the present use pressure on existing resources. That pressure is great—a total of over 500 million visits to the public areas in 1960—but it is uneven. The pressure may reach unmanageable proportions in some areas, while in others it remains light. At times, nearly all areas may be almost deserted.

The seasons are a major factor. Except for those activities that have some other special season, such as skiing and hunting, visits are concentrated in the summer. Furthermore, even within the summer they are concentrated on weekends. Two and a half times as many people come on an average weekend day as on an average weekday. And the visits are concentrated during the daylight hours, as only 10 percent of the visitors stay overnight. Thus, in midafternoon of a summer weekend day, peak use occurs, and this pressure is not approximated at most other times.

The pressure is also unevenly divided among areas administered by different levels of government. Almost half of the visits to all public areas are to those managed by the States, about a third to Federal lands, and the rest to local.

The pattern of demand on facilities is also uneven among regions and upon different areas in the same region. On an average weekend day during the period of heaviest use, from 16 to 29 percent of the public areas could not accommodate all who wanted to picnic. Yet, on the other side of the picture, 43 percent of the picnic areas could handle more visitors, and 14 percent could accommodate an increase of over 25 percent. So, while some areas were experiencing overuse, others were underused.

The pattern was much the same with parking facilities. The Northeast reported the highest percentage overcrowded with the West, South, and North Central regions following in that order. Still, nationally, 67 percent could accommodate more cars.

The uneven pressures prevail for overnight facilities, of both the camping and lodge types. The Northeast again reports the most crowding, with the West, South, and North Central following. Yet each region reports some facilities that can accommodate as much as 25 percent more people and quite a few that can accommodate some more than they now do.

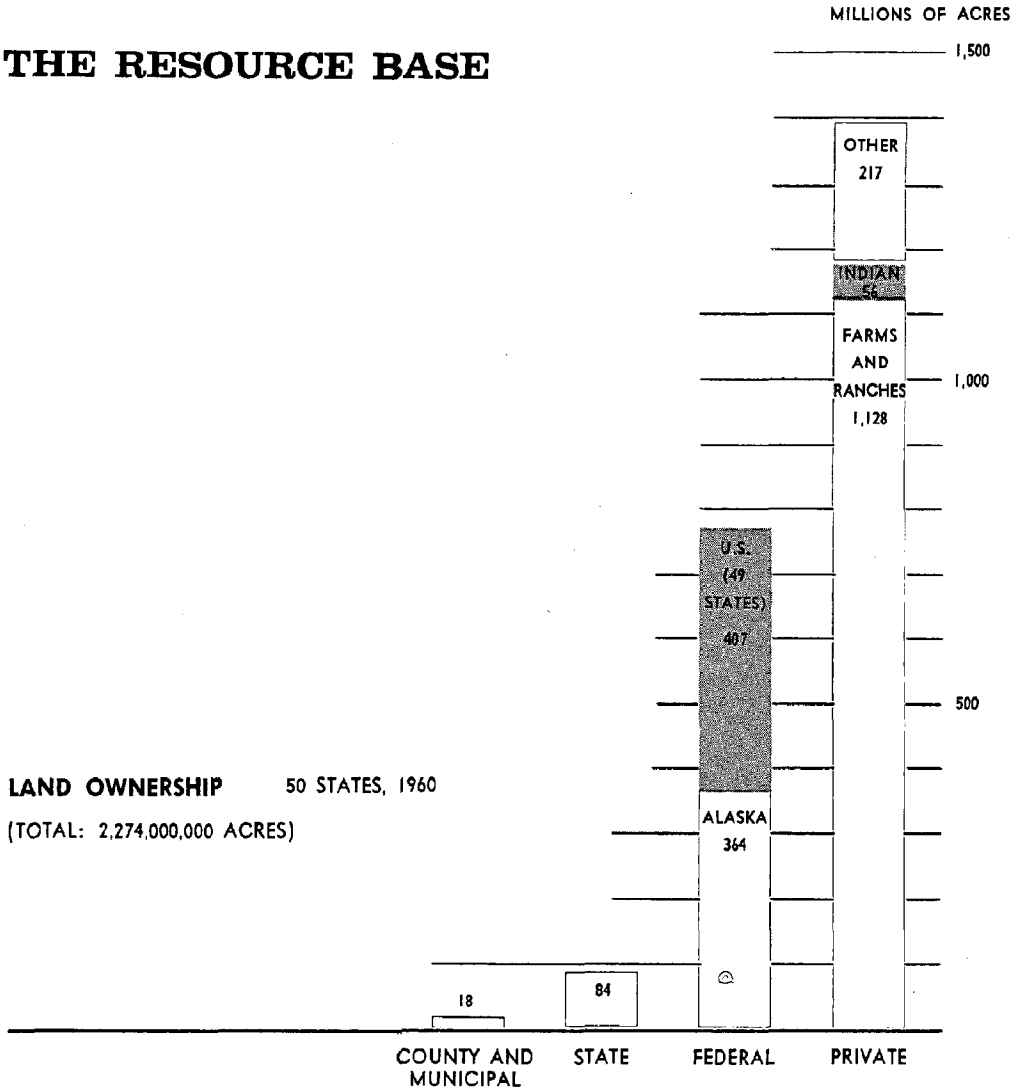
Expansion Plans

Current pressures on resources have brought about extensive plans for the expansion of existing facilities. Definite plans for the next 5 years call for swimming capacity to be increased by 70 percent, campgrounds by 55 percent, picnic areas by 37 percent, and winter sports areas by 36 percent. Long-range plans call for increasing camping capacities about ninefold, winter sports sevenfold, swimming facilities about fourfold, and picnicking close to threefold. Some of these long-range developments are dependent upon the solving of major problems such as pollution, erosion control, and termination of other uses.

In terms of long-range potential development, the West reports a higher possible percentage increase in capacity for picnicking, swimming, and winter sports than do the other regions. This may reflect the greater number of acres upon which to base plans. The South's planned increase in campground capacity is the highest of the four regions.

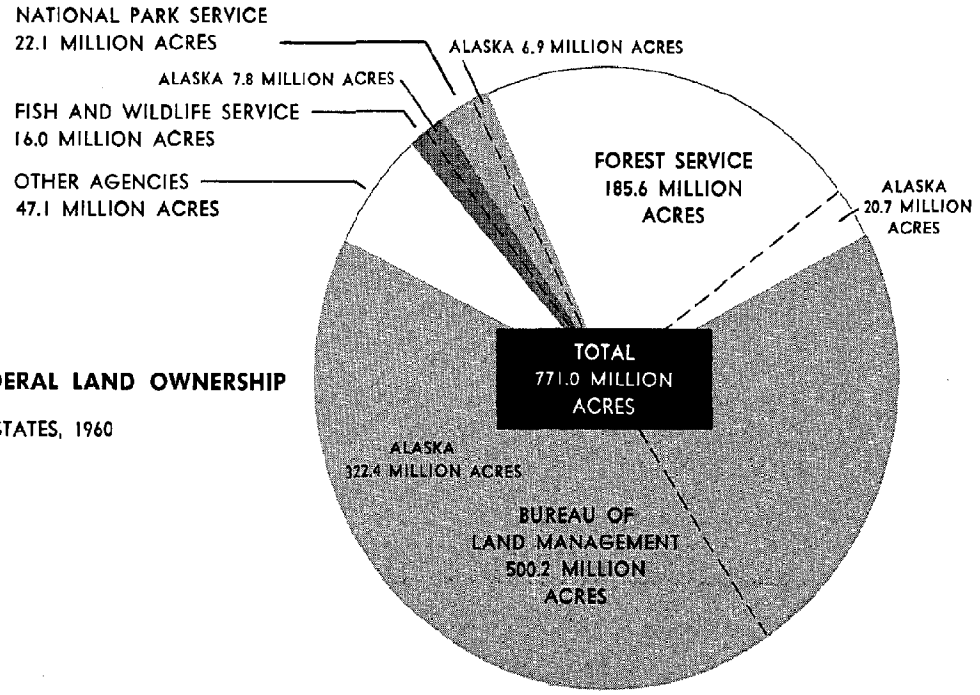
Text continued page 67

THE RESOURCE BASE



LAND OWNERSHIP 50 STATES, 1960

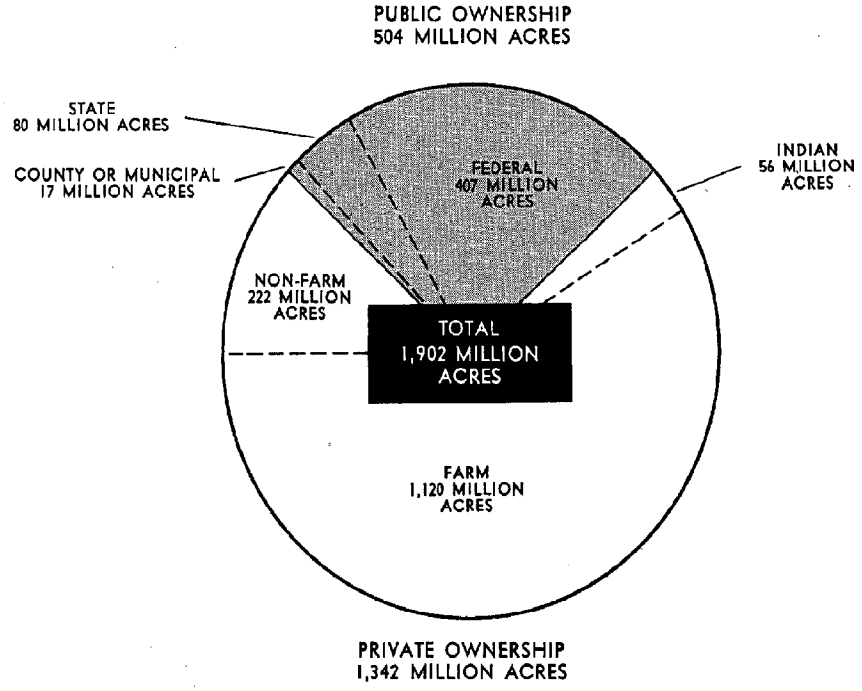
(TOTAL: 2,274,000,000 ACRES)



FEDERAL LAND OWNERSHIP

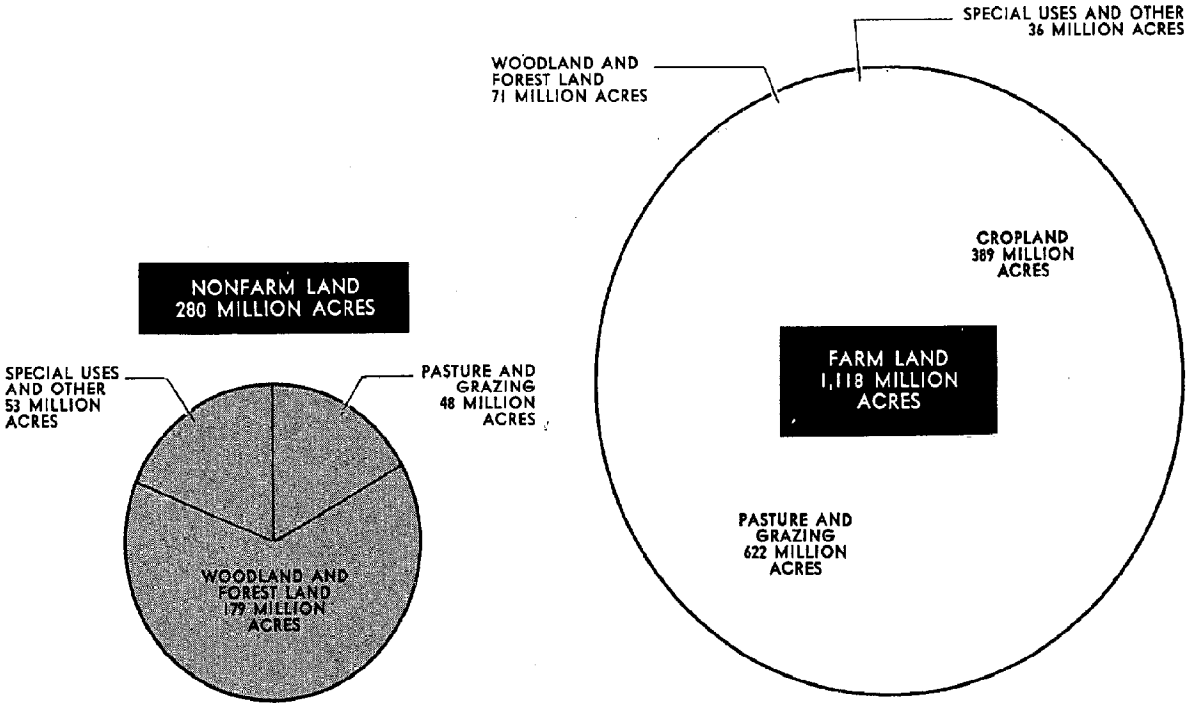
50 STATES, 1960

LAND OWNERSHIP 48 CONTIGUOUS STATES, 1960



UTILIZATION OF PRIVATE LAND 48 CONTIGUOUS STATES, 1959

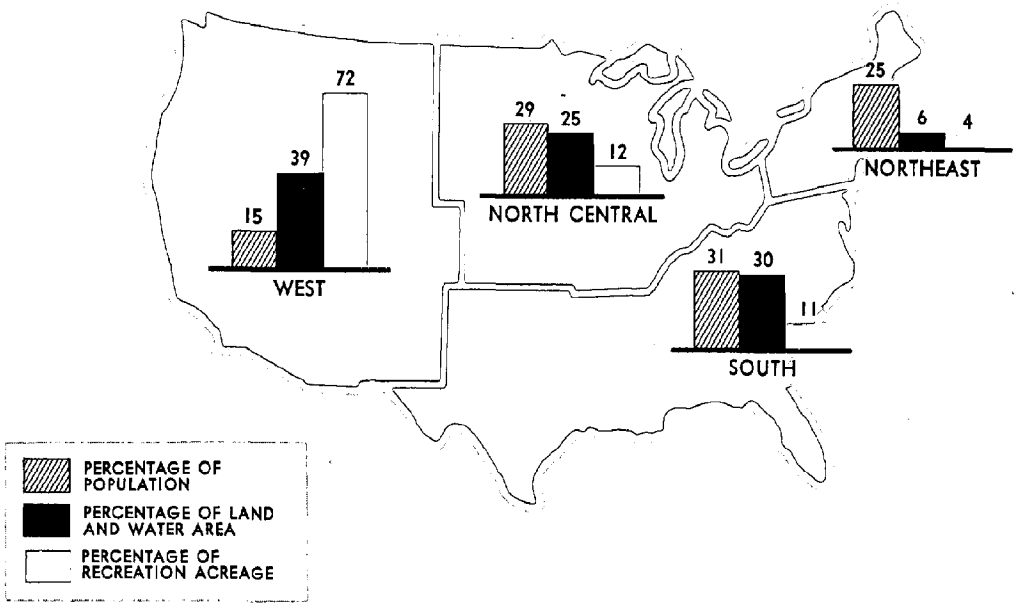
TOTAL: 1,398 MILLION ACRES



Statistical Abstract of the United States, 1961

Most of the recreation acreage is in the West, but most of the people are not

REGIONAL DISTRIBUTION OF POPULATION, AREA AND RECREATION ACREAGE 48 CONTIGUOUS STATES, 1960

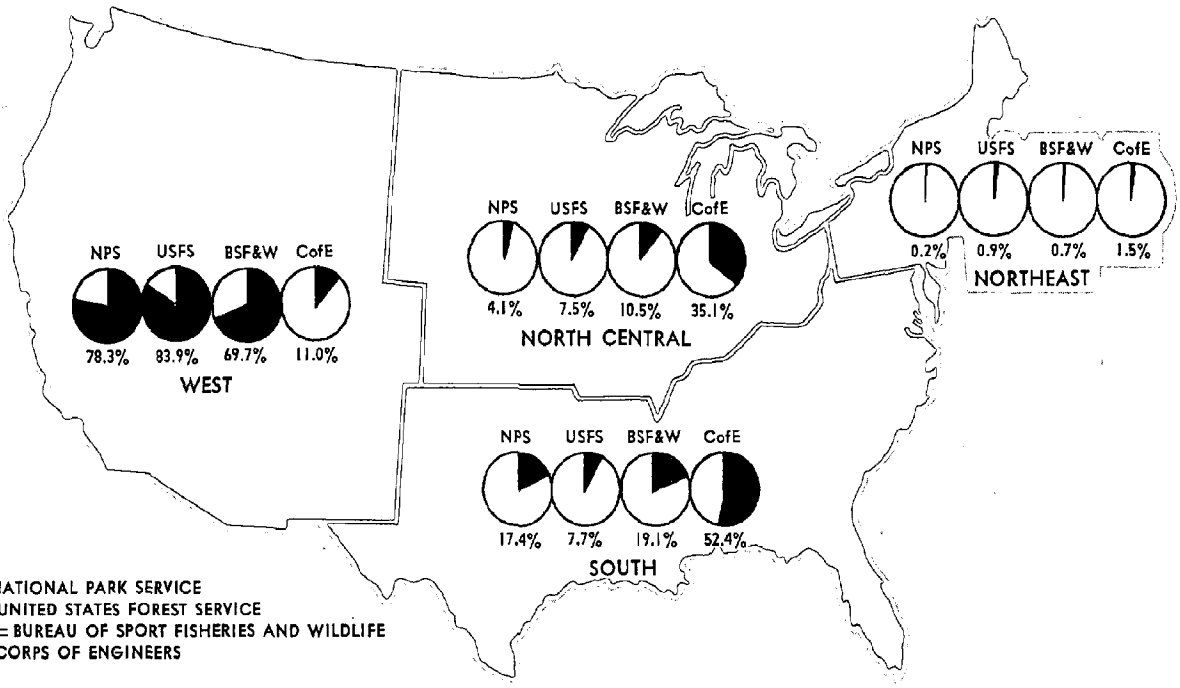


See Table 27, Appendix

. . . and this is particularly true of Federal lands.

REGIONAL DISTRIBUTION OF FEDERAL DESIGNATED NONURBAN OUTDOOR RECREATION AREAS

PERCENT OF AGENCY TOTAL BY CENSUS REGION, 48 CONTIGUOUS STATES, 1960



NPS = NATIONAL PARK SERVICE
USFS = UNITED STATES FOREST SERVICE
BSF&W = BUREAU OF SPORT FISHERIES AND WILDLIFE
CofE = CORPS OF ENGINEERS

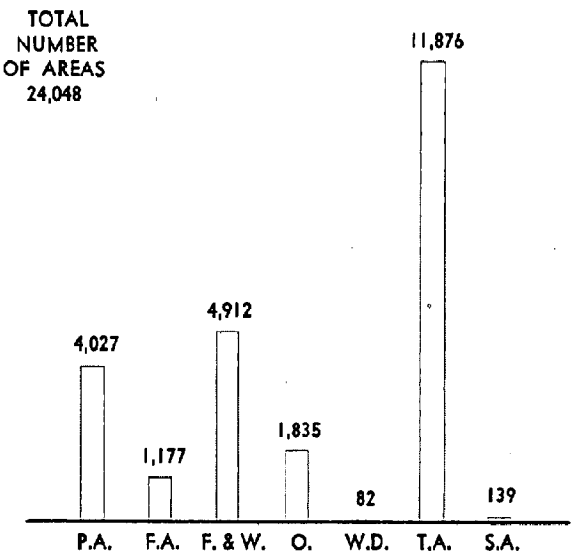
See Table 29, Appendix

Forest agencies at all levels of government manage the greatest number of acres but a small percentage of the total number of areas.

NONURBAN PUBLIC DESIGNATED RECREATION AREAS

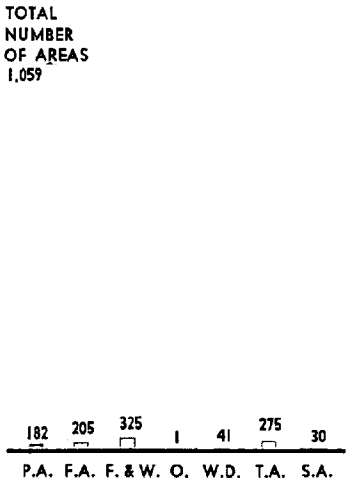
BY MANAGEMENT AGENCY AND LEVEL OF GOVERNMENT, 48 CONTIGUOUS STATES

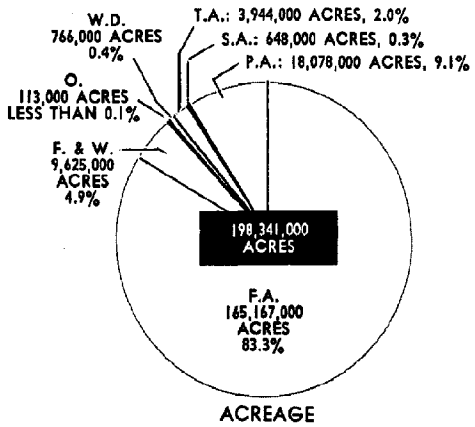
ALL LEVELS OF GOVERNMENT



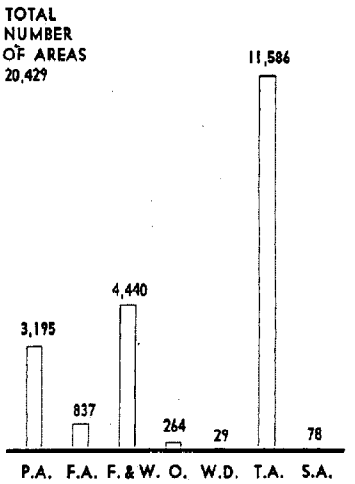
WITHIN EACH LEVEL OF GOVERNMENT

FEDERAL

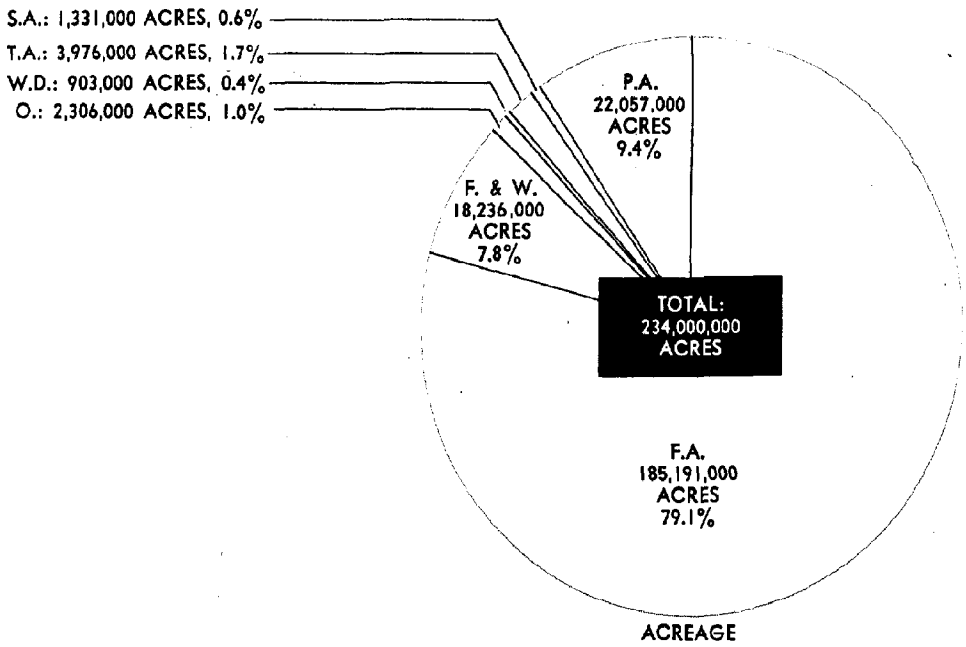




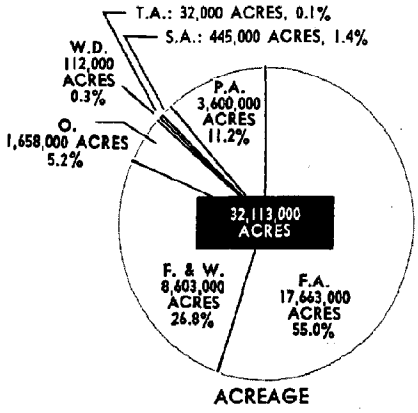
STATE

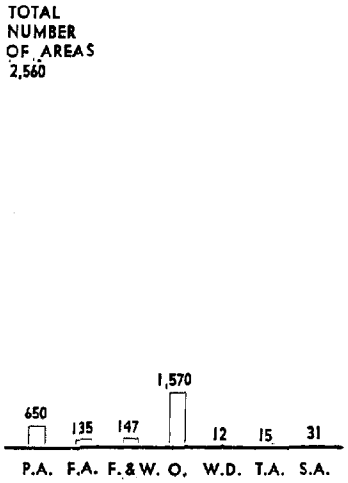


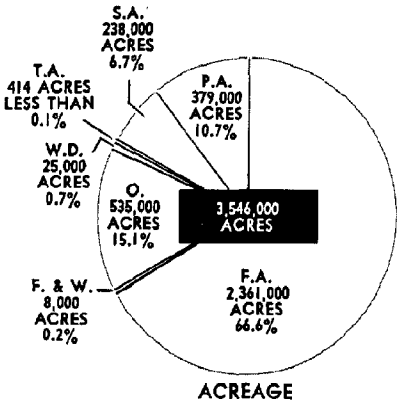
P.A. = PARK AGENCIES
F.A. = FOREST AGENCIES
F. & W. = FISH AND WILDLIFE AGENCIES
W.D. = WATER DEVELOPMENT AGENCIES
T.A. = TRANSPORTATION AGENCIES
S.A. = SPECIAL AUTHORITIES
O. = OTHER



LOCAL





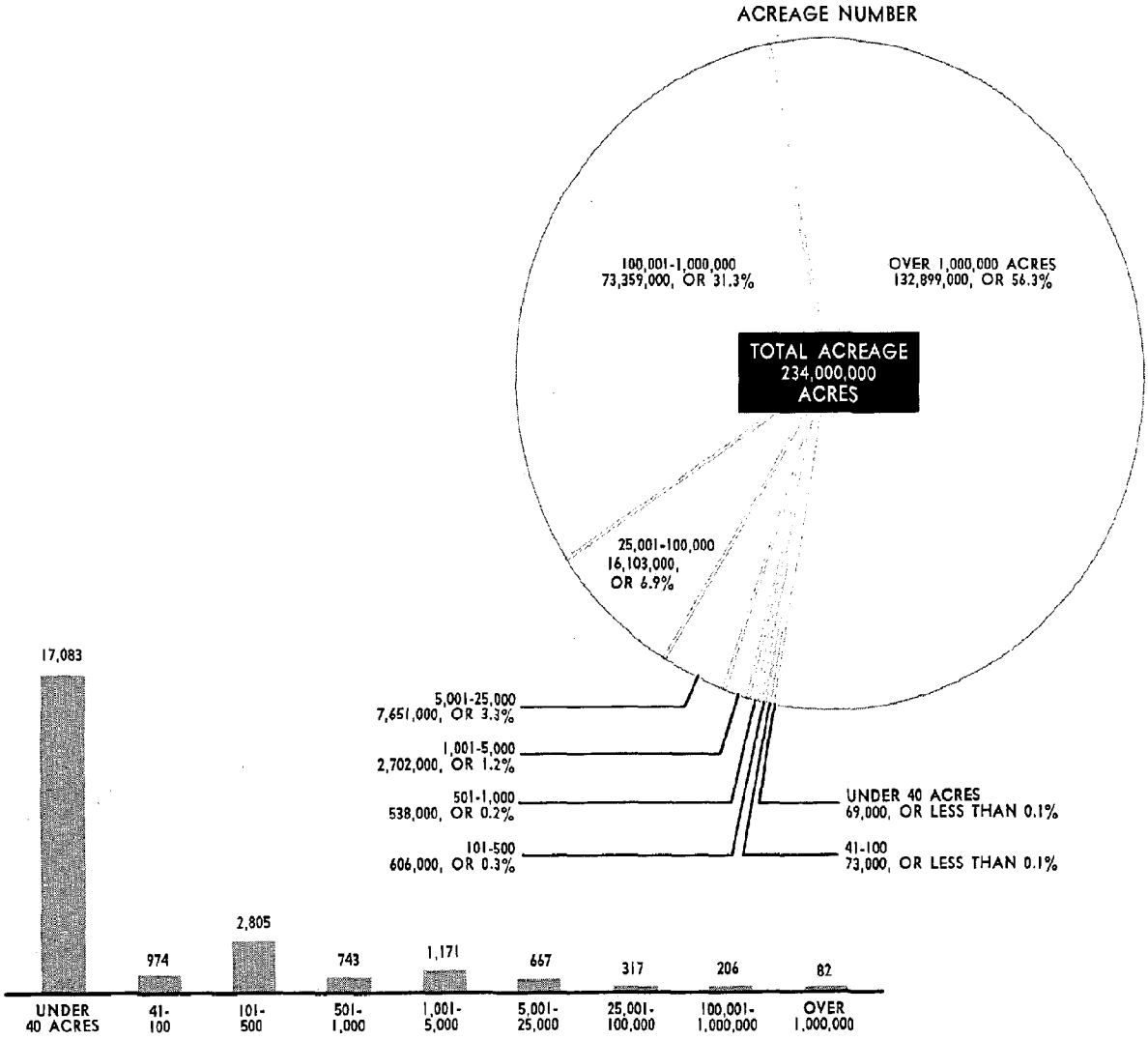


See Table 28, Appendix

Most of the acreage is in large tracts, and conversely most of the units are small—under forty acres.

NUMBER AND ACREAGE OF NONURBAN RECREATION AREAS

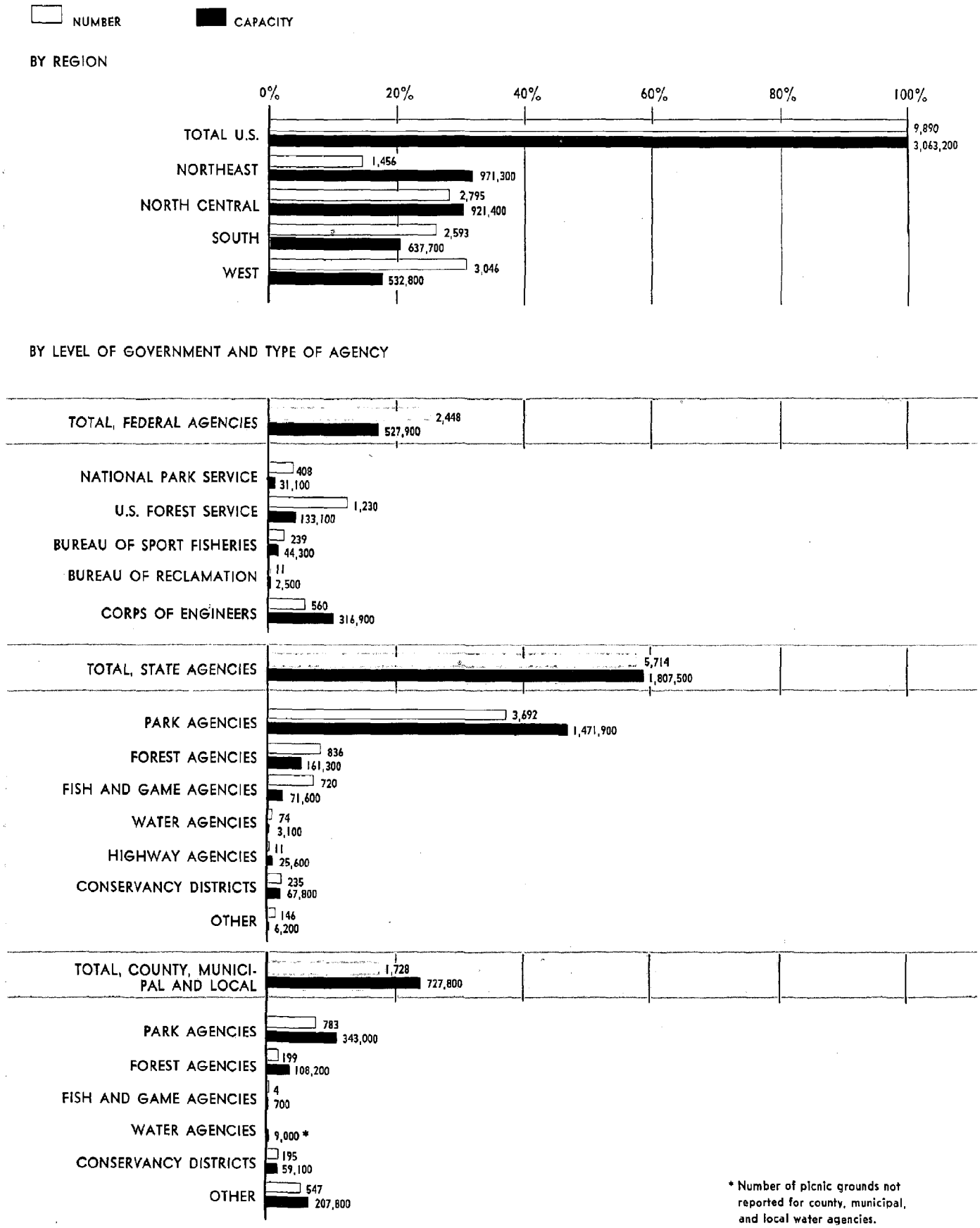
BY SIZE CATEGORY, 48 CONTIGUOUS STATES, 1960



See Table 31, Appendix

Facilities determine use.

NUMBER AND CAPACITY OF DEVELOPED PICNIC GROUND FACILITIES 48 CONTIGUOUS STATES, 1960

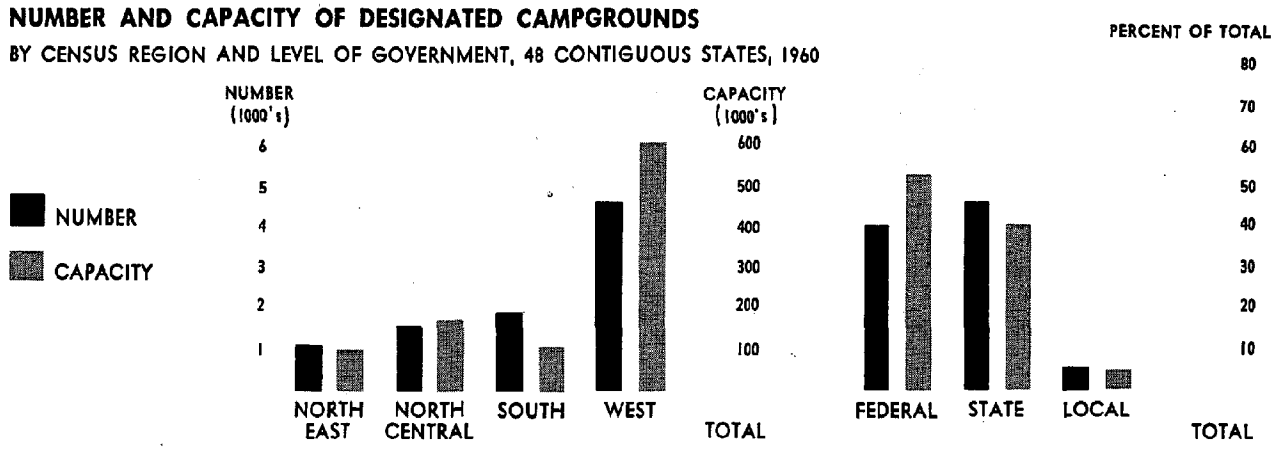


* Number of picnic grounds not reported for county, municipal, and local water agencies.

ORRRC inventory data

NUMBER AND CAPACITY OF DESIGNATED CAMPGROUNDS

BY CENSUS REGION AND LEVEL OF GOVERNMENT, 48 CONTIGUOUS STATES, 1960

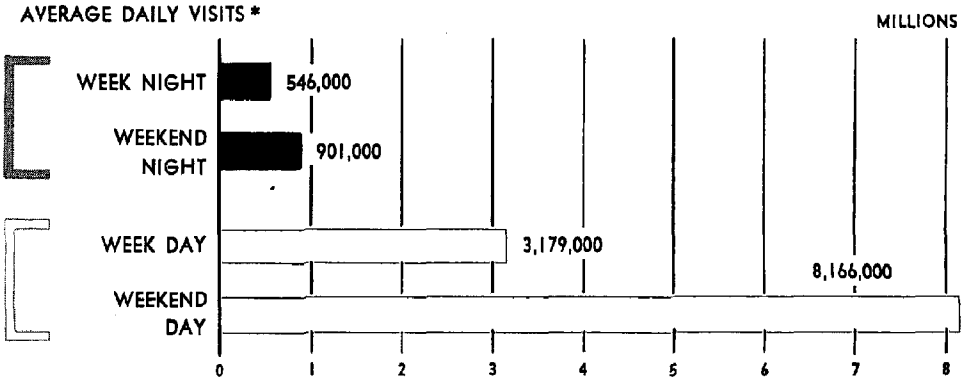


	NORTH EAST	NORTH CENTRAL	SOUTH	WEST	TOTAL	FEDERAL	STATE	LOCAL	TOTAL
NUMBER	1,093	1,611	1,957	4,687	9,348	4,087	4,685	576	9,348
CAPACITY (1000's)	100	173	108	607	988	534	401	53	988

Visits are the measure of pressure.

TOTAL ANNUAL VISITS TO RECREATION AREAS

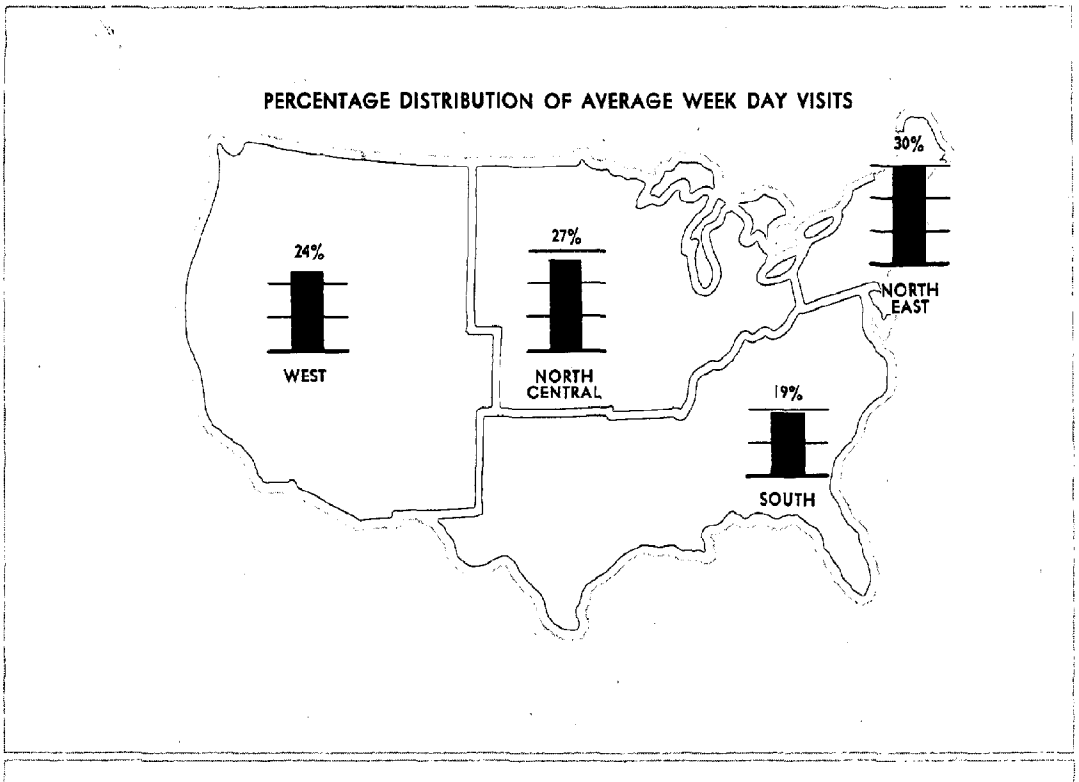
52 MILLION OVERNIGHT VISITS 532 MILLION DAY VISITS

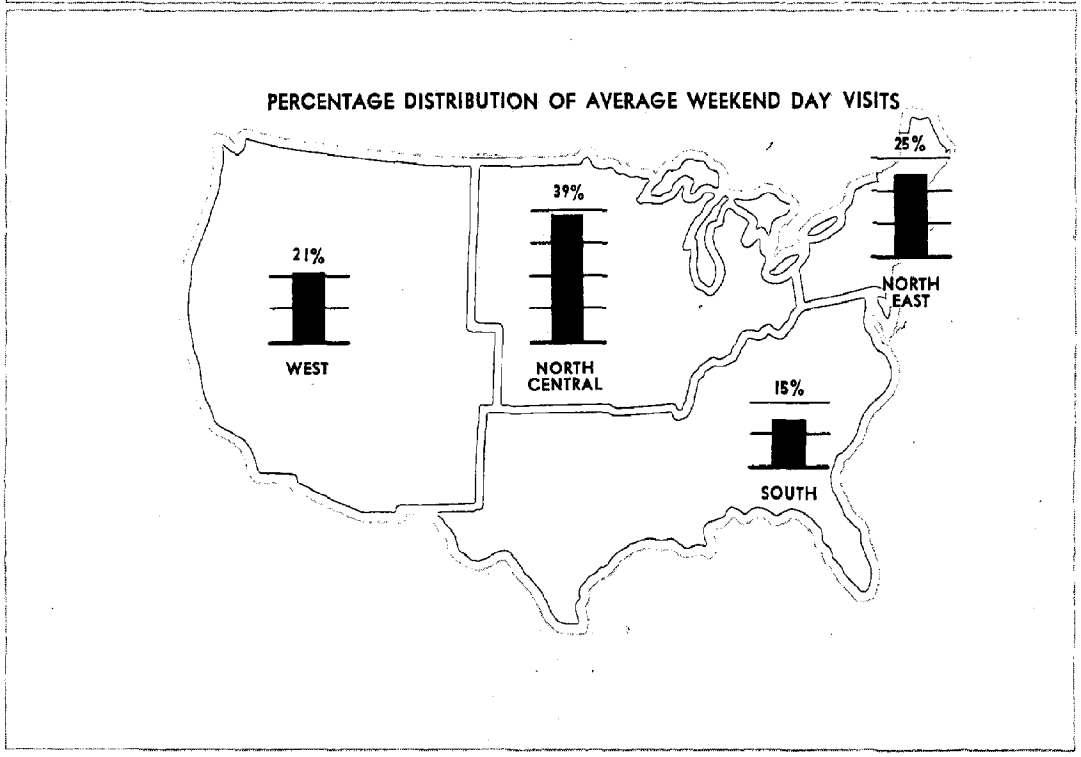


* For 48 contiguous States during principal season of use, 1960.

DAYTIME VISITS BY CENSUS REGION

48 CONTIGUOUS STATES, 1960





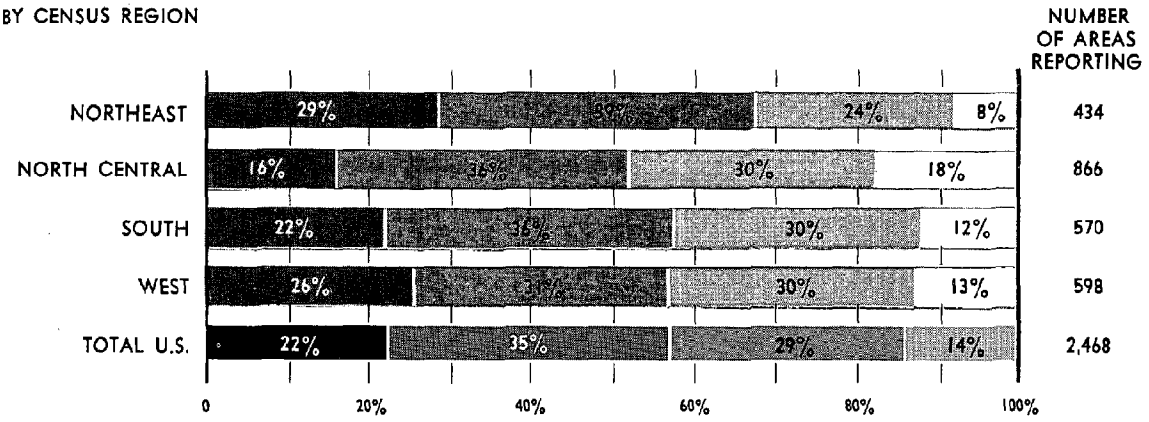
ORRRC inventory data

. . . but the pressures are uneven.

USE PRESSURES ON SPECIFIED FACILITIES

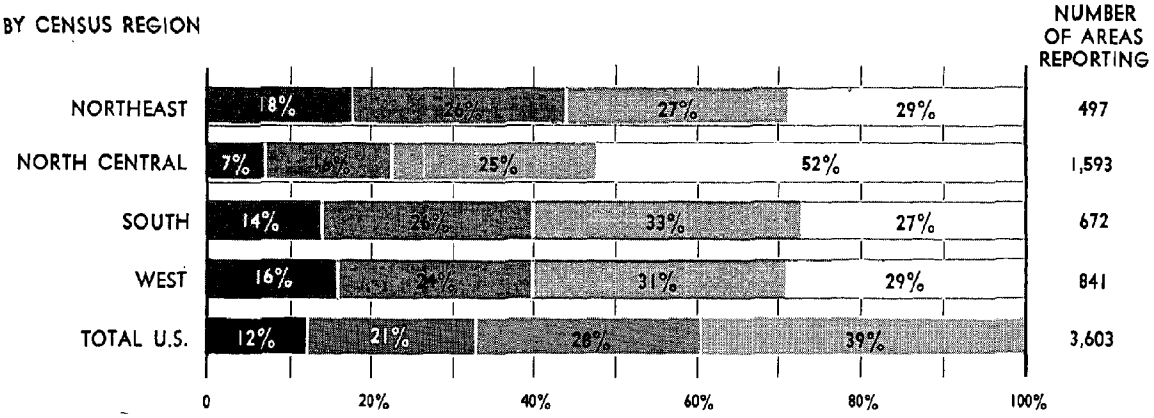
48 CONTIGUOUS STATES, 1960

PICNIC FACILITIES
BY CENSUS REGION



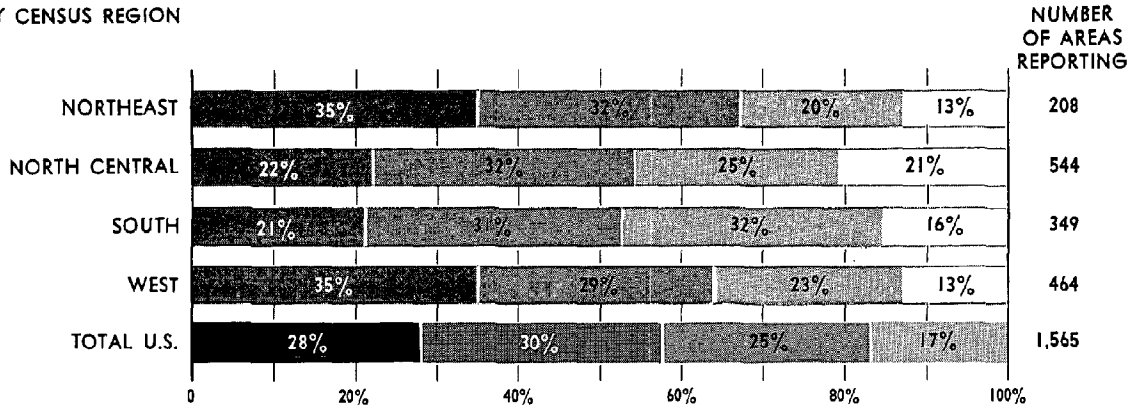
See Table 33, Appendix

PARKING FACILITIES
BY CENSUS REGION



See Table 32, Appendix

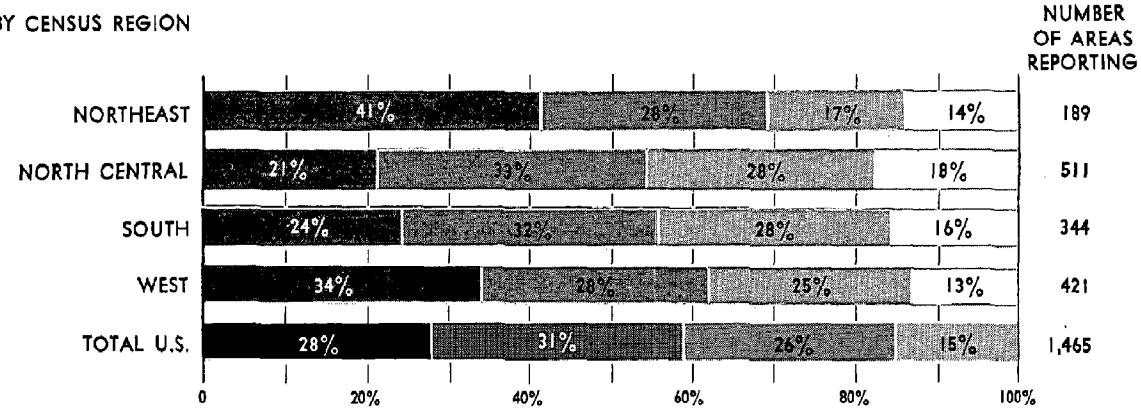
CAMPGROUND FACILITIES
BY CENSUS REGION



See Table 35, Appendix

VERY HEAVY HEAVY MODERATE LIGHT

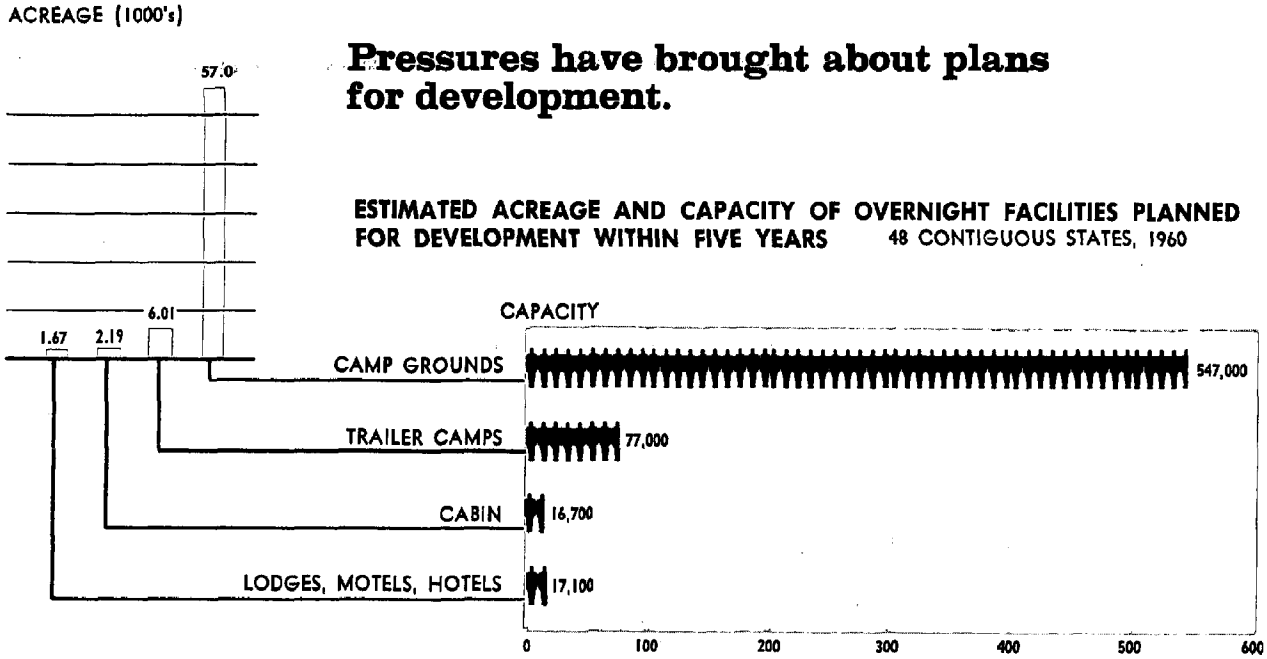
OVERNIGHT FACILITIES
BY CENSUS REGION



See Table 34, Appendix

Pressures have brought about plans for development.

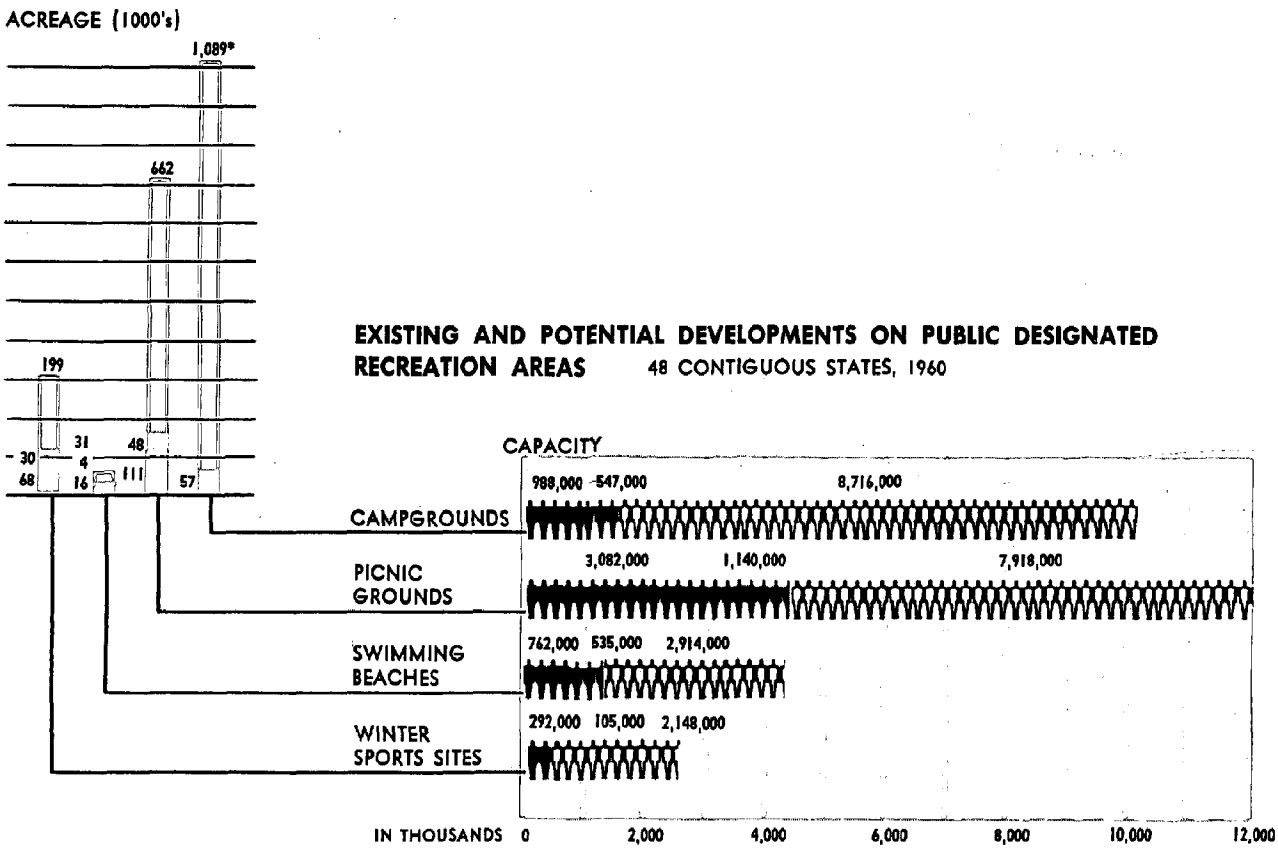
ESTIMATED ACREAGE AND CAPACITY OF OVERNIGHT FACILITIES PLANNED FOR DEVELOPMENT WITHIN FIVE YEARS 48 CONTIGUOUS STATES, 1960



TOTALS: ACREAGE: 66,870; CAPACITY: 657,800

ORRRC inventory data

EXISTING AND POTENTIAL DEVELOPMENTS ON PUBLIC DESIGNATED RECREATION AREAS 48 CONTIGUOUS STATES, 1960



* 1960 data for existing facilities not gathered.

EXISTING FACILITIES

DEVELOPMENT WITHIN FIVE YEARS

LONG TERM DEVELOPMENT

See Tables 36 and 37, Appendix

OTHER RESOURCES USED FOR RECREATION

In addition to the public designated areas, there are substantial other resources which are used or are available for recreation and are thus part of the supply. Some areas, such as parts of the public domain, are public lands not specifically dedicated to recreation use. Others are privately owned.

Other Public Lands [3]

The largest category, by far, of all public lands is the public domain, under the administration of the Bureau of Land Management in the Department of the Interior. There are over 500 million acres, but 65 percent of these acres are in Alaska, and 95 percent of the rest are in the 11 Western States.

The national distribution of these lands thus resembles that of the recreation acreage, but to an even greater extent they are where the people are not. Indeed, that is one reason for their present status. In addition to the location factor, these lands have been limited as a recreation resource by the restricted authority of the administering agency to develop them for recreation.

Despite these limitations, the public domain does offer substantial recreation opportunities—particularly for hunting and fishing. Visits totaled 15 million in 1960. Three States—Nevada, California, and Oregon—accounted for over half this total.

The development potential of these lands is great. Exclusive of Alaska, some 2.9 million acres have a potential for campsite development, another 2.5 million acres for picnicking, 3,000 acres for swimming and beach sites, and 60,000 acres for winter sports. Broadened statutory authority, development capital, and a solution to some serious problems of land and water management must be achieved before this development can take place.

Lands under the administration of the Department of Defense are also used for recreation—over 11 million visits by the military and civilians in 1960. Four million acres of all Defense lands—14 percent—are used for recreation. Army installations account for about three-quarters. The lands are fairly well distributed across the country. The acreage used for recreation is in 38 of the contiguous States. While the Defense lands offer a significant potential, they are necessarily restricted because of their primary purpose. Their extensive development as a recreation resource is thus doubtful. However, as defense needs change, specific areas may be transferred to public recreation use.

Indian Lands [3]

Indian lands are another resource which supplements the total supply. They are spread over 22 States, but two-thirds of the acreage available for recreation is in the 8 intermountain States.

There is now limited development which provides for camping, picnicking, water sports, and some winter sports. Viewing pageants and tribal ceremonies is also important. Hunting and fishing opportunities are considerable.

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[3] This section is based on a Commission inventory similar to, but less detailed than, that conducted for the public designated areas. It is included in ORRRC Study Report 1.

The extent of the use of Indian lands depends upon decisions by the Indian owners to manage their lands for this purpose. The Bureau of Indian Affairs is seeking to encourage this use as a means of economic development. In cases where there is a particular attraction, such as a historic site or a body of water, development may be very successful—providing both income for the Indian owners and opportunities for the public.

Private Lands

Private lands are a very important part of the supply of outdoor recreation resources. Summer homes at one extreme and vast tracts of commercial timberlands at the other are involved. Because of this wide scope, and for other reasons, it is not possible to assess the exact dimensions of the role of private lands. There are, however, indications of their importance. One generalization is that where public resources are limited, the importance of the private role is greater.

Private resources for recreation fall into three categories: (1) those that are used primarily for recreation; (2) those that are managed primarily for some other use but are also used for recreation; and (3) those that could be developed into either private or public recreation sites.

Commercial recreation operations number in thousands and vary widely in size, opportunities offered, management, and attractiveness. A sample study has produced information which is only illustrative of the industry.[4]

The most frequently offered activities in order are swimming, fishing, boating, hunting, picnicking, and winter sports. The facilities range from luxurious resort hotels with costly pools and ski tows to shack fishing camps. Capital investment varies from a few hundred dollars to millions.

The acreage owned or leased by these enterprises is relatively small. Most operate on less than 500 acres and over half on less than 100. About 90 percent are located near public land or water, which is usually part of their attraction.

Resident camps for children provide a great number of outdoor recreation opportunities. Some are operated on a commercial basis, others by nonprofit organizations. There are about 7,500 of these camps and they serve about 3.5 million children.

Nonprofit private organizations—such as the Izaak Walton League of America—youth, church, and civic organizations, also contribute significantly to the recreation supply. They often provide land and urgently needed facilities near centers of population. They also carry out programs to educate for conservation, including outdoor recreation.

In addition to those used specifically for recreation, other private lands are also an important supply of outdoor recreation opportunities. Timber, power, mining, oil and gas, and grazing companies open some of their lands to public use. Hunting, fishing, camping, hiking, and water sports are the most common activities.

American Forest Products Industries, Inc., reports that in 1960 there were more than 6 million visits by the public to forest industry lands. The survey included over 58 million acres owned by 518 different companies, 86 percent of

[4] *Private Outdoor Recreation Facilities,* Economic Research Service, U.S. Dept. of Agriculture, ORRRC Study Report 11.

the total industry-owned commercial forest lands. Of the acreage reported, 97 percent was open for fishing, 92 percent for hunting, and nearly 85 percent for camping, swimming, hiking, picnicking, and berrypicking.

Developments include 146 parks, 157 picnic areas, and 54,739 miles of road open to the public. Eighty-four companies have definite plans for further development.

The U.S. Chamber of Commerce reports that significant resources on lands owned by firms other than forest industries are also open to the public. Ninety-six percent of a small sample of these industries reported their lands open.

Private lands are important also as a potential source of new recreation supply. This might take the form of private commercial or nonprofit development or acquisition by public agencies. The important fact is that there is still a great deal of land that could be used for outdoor recreation. The potential of private lands is important in all sections of the country, but it is particularly significant in the heavily populated Northeast, which has few public lands.

The Northeast might be thought poorly supplied in relation to population densities.[5] Only 4 percent of the Nation's total acreage in public recreation areas (excluding Hawaii and Alaska) falls within the Northeast census region; yet it contains about one-fourth of the Nation's population.

However, aerial photo analysis on a sample basis of open lands in the region reveals that on private lands some 450,000 sites of 30 acres or larger have features that fit them for picnicking, day camping, swimming, some fishing, or general enjoyment of the outdoors—a water body such as a stream or pond, shade, suitable terrain, and access. The majority of these sites are on forested land, and about 50,000 of them are close to dense urban developments.

It is a fortunate circumstance that many of these areas most suitable for recreation are not those most in demand for other uses. Often the most desirable recreation sites, because of terrain, location, or other factors, are not those needed for residential or industrial development. They are, therefore, cheaper to acquire.

Not all these sites would be available for acquisition and development for recreation use. But they constitute a great potential source of well located supply to meet the demand for the simpler types of outdoor activities.

SPECIAL SUPPLY SITUATIONS

Other elements of the supply are special cases because they involve combined use of public and private lands, a large acreage, particular requirements, or an unusual opportunity. Water resources, shoreline, wilderness, the opportunities afforded by Alaska, hunting, and fishing fall into this category.

Water[6]

Water is a key factor of supply. It is essential for many forms of recreation; and it adds to the enjoyment of many others.

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[5] Detailed treatment of this subject is found in *Potential New Sites for Outdoor Recreation in the Northeast,* Economic Research Service, U.S. Dept. of Agriculture, ORRRC Study Report 8.

[6] Detailed treatment of this subject is found in *Water for Recreation—Values and Opportunities,* Geological Survey, U.S. Dept. of the Interior, ORRRC Study Report 10.

Water is physically available for recreation in most parts of the country. Even in the most arid regions, reservoirs have made water-based recreation available to large numbers of people. Most major cities are located on an ocean, lake, or river. Thus the Nation's water resources, unlike the land in the public recreation areas, are generally well distributed with respect to centers of population.

There are, however, serious problems, which will require effort, time, and money to solve. The problems are in three general categories.

The quality of water is as important as the amount of surface acres, miles of banks, or location. Polluted water in the ocean, a lake, a river, or a reservoir is of little use for recreation. Pollution by human or industrial waste is only one aspect of quality which conditions the available supply. The silt load, the bottom condition, temperature, and aquatic plants also affect the usability of water for recreation.

The demand for water for many other purposes—domestic use, industries, irrigation, and power generation—is rising. Only with the most careful planning and full recognition of the values of each use will it be possible to achieve an adequate supply of water for recreation.

While most water bodies are publicly owned, the adjacent land frequently is not. This creates problems of public access which must be solved before much of the total supply of water can be considered as a part of the effective supply of recreation resources.

These problems are discussed further in chapter 13.

Shoreline [7]

A most pressing problem of supply is ocean and Great Lakes shoreline. This resource is one of the most in demand, and it is one of the most scarce in public ownership. The situation is particularly acute near large cities.

The 48 contiguous States have almost 60,000 miles of shoreline. About one-third of this can be considered as possible recreation supply. This includes beach, marsh, and bluff areas.

Less than 2 percent of the total shoreline is in public ownership for recreation—only 336 miles on the Atlantic Coast and 296 miles on the Pacific Coast. Yet both Coasts are centers of population, and they will be more so in the future. The present supply of publicly owned shoreline for recreation is not adequate, and acquisition will be needed.

Primitive Areas [8]

Primitive areas present one of the most difficult problems of supply. They must often be large, and they must not be overused, or the delicate natural balance and the isolation which are their distinctive features will be lost. There is now a

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[7] Detailed treatment of this subject is found in *Shoreline Recreation Resources of the United States,* The George Washington University, ORRRC Study Report 4.

[8] As used here, a "primitive area" is one with natural, wild, and undeveloped characteristics. A "wilderness area" is a primitive area designated and managed to preserve these characteristics. Detailed treatment of this subject is found in *Wilderness and Recreation—A Report on Resources, Values, and Problems,* Wildland Research Center, University of California, Berkeley, ORRRC Study Report 3.

considerable acreage in primitive areas, most of which is in wilderness areas. The exact amount depends on the definition used, and the definition is often a point of controversy. Under most definitions there would be at least 30 million acres. Here again the preponderance of acreage lies in the West and in Alaska.

The supply problems of primitive areas are particularly difficult because of the limited uses for which they are available; and opinions differ as to how restrictive their management must be. There are strong pressures to open wilderness areas to certain commodity uses and against expanding wilderness classification to new areas. Recreation seekers themselves may generate demands for facilities and services that change the character of wilderness areas.

The most promising means of providing an adequate supply of wilderness recreation appears to be very restrictive management in those areas set aside formally as wilderness areas, and augmenting these opportunities with "quasi-wilderness" areas. Many of the latter are in the East and South, which do not have the larger undeveloped areas. Even if managed to allow other limited uses and more recreation development in some parts, they could provide a form of "wilderness experience" that will satisfy a large proportion of those who seek it. The policy implications of this problem are discussed in chapter 8.

Fishing [9]

The supply of fishing opportunities is a special problem involving a variety of environments—public and private areas, salt and fresh water, natural lakes and streams, and artificial impoundments.

A large amount of water is now available for angling. Inland fresh waters within the 48 States cover some 95,000 square miles, an area comparable to the State of Oregon. This water is in almost a million miles of streams and rivers and more than 100,000 natural lakes; 10 million surface acres of it is in artificial impoundments; and over half of the total area is in the Great Lakes.

These fresh waters produced 522 million pounds of fish for sportsmen in 1960. Salt and tidal waters yielded another 590 million pounds.

The demand for fishing opportunities is expected to increase over the coming years—50 percent by 1976 and 150 percent by 2000. Commercial fishing needs must also be met. There may be a slight reduction in the amount of fish each angler will be able to land, but opportunities can generally be adequate if the needed action is taken.

Supply can be increased by a number of means—

1. An increase of inland fishing water. It is estimated that new impoundments over the next 40 years will create 10 million new surface acres of fishing waters. These waters may not all be opportunely located to meet the needs of fishermen, but they will go a long way toward providing the additional supply needed.

2. Better management of existing waters. Applying techniques now known and that can be developed during the coming years can substantially increase the supply. These measures include pollution abatement, better control of environment and undesired fish species, improved hatchery and stocking procedures,

[9] Detailed treatment of this subject is found in *Sport Fishing—Today and Tomorrow,* Bureau of Sport Fisheries and Wildlife, U.S. Dept. of the Interior, ORRRC Study Report 7.

promotion of species not now utilized as sport fish, improved reservoir management, and improved information programs.

3. An increase in salt-water fishing. Ocean waters can provide an almost unlimited increase in fishing opportunities, and some of the increase in demand could be absorbed by a shift to salt-water fishing if problems of management and access can be solved.

Hunting [10]

There is presently a large amount of land available for hunting and a relatively generous supply of game to be hunted. If management is adequate, it is anticipated that the game supply will remain sufficient.

There are 342 million acres of public lands open for hunting in the 48 contiguous States. In addition, much of the 1.4 billion acres of private lands has been available.

However, there are significant trends which tend to reduce this supply. Loss of habitat for migratory waterfowl and wildland game is a serious problem. There is also a growing reluctance of private landowners to allow the public to hunt on their lands.

This restriction of supply has brought several substitutes for public hunting. Leasing of private lands by private lodges and informal groups is increasing, and the prime hunting lands are those most often preempted. Colorado, Texas, Virginia, and California all report that significant portions of the more desirable land have been appropriated to the use of private groups.

Federal and State governments have intensified programs to acquire public hunting rights to supplement the government lands now open. Each of the 48 contiguous States has some program for hunting. Some sportsmen's groups are purchasing rights for the benefit of the general public, and others are working with private landowners to keep private land open.

The outlook is that all these efforts and more will be needed to maintain the present supply of hunting opportunities. It may well be that hunters in the future will have to be satisfied with hunting under less natural conditions.

Alaska [11]

Alaska is a storehouse of recreation opportunities. In this new State, with far less than 1 percent of the total national population, are 31 percent of the lands in the National Parks System, 65 percent of the wildlife refuge lands, 64 percent of the public domain, and 11 percent of the national forest acreage.

This generous supply gives some indication of the role Alaska could play in meeting the recreation demands of the people of the other 49 States. The new State is entitled to select 102 million acres of land from the Federal domain during the next 25 years, but this selection is not expected to affect the over-all supply of recreation resources.

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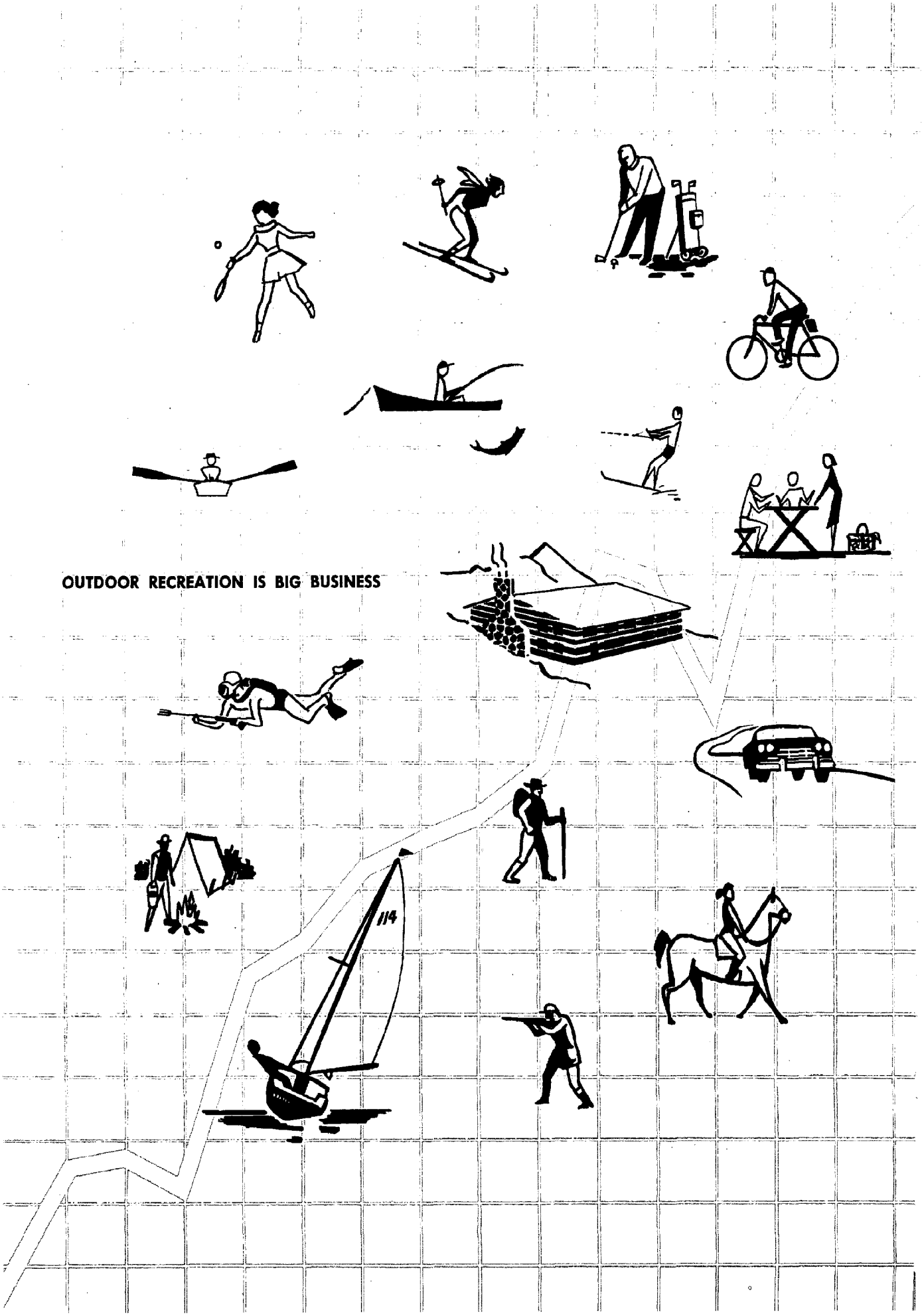
[10] Detailed treatment of this subject is found in *Hunting in the United States—Its Present and Future Role,* Dept. of Conservation, School of Natural Resources, The University of Michigan, ORRRC Study Report 6.

[11] Detailed treatment of this subject is found in *Alaska Outdoor Recreation Potential,* The Conservation Foundation, ORRRC Study Report 9.

There are difficult problems to be solved before this great potential can be realized. Alaska is still remote for most Americans seeking outdoor recreation; it takes time and money to get there. The prospect is that over the next 40 years, the public will have more of both and thus visit Alaska more. Advances in travel technology will also help.

There are also problems in development. The resources are there—some of the finest in the world. Hunting and fishing are excellent. The scenic grandeur is unsurpassed. But at present there are few facilities to serve the public. Without the facilities, the recreation-seeking public will not come. Without the public demand, capital cannot afford the risk of development. Capital for development of recreation potential is thus a prime need.


OUTDOOR RECREATION IS BIG BUSINESS
114

CHAPTER 4

THE ECONOMICS

Outdoor recreation produces many benefits. It provides the healthful exercise necessary for individual physical fitness. It promotes mental health. It offers spiritual values, for being in the outdoors can be a deeply moving experience. It is valuable for education in the world of nature. These benefits are not to be justified on a cost accounting basis. Like education, outdoor recreation is one of those elements of the full life that should be made available to the general public. But there are also important economic effects in the provision of outdoor recreation, and they should not be overlooked.

VALUE TO THE COMMUNITY

Providing open space for recreation usually brings about valuable economic consequences in addition to the social benefits.

The effect of parks on adjoining land values is one example. City after city cites the experience—parks enhance the value of surrounding property. There is no over-all study of this effect, but all reports tend to support it. Minneapolis, noted for its fine park system, says that the increased values in the city due to park developments have amounted to several times the cost of the entire system. Essex County, New Jersey, found that land adjacent to parks increased in value three times as fast as other property.

James Felt, chairman of New York City's Planning Commission, summed up his city's outlook on the economics of recreation space this way: "We are saying now for the first time in New York City that open space is not to be considered as a gouge here and a notch there, depriving builders of valuable floor space, but as a positive aspect of structural development—a usable commodity which over the long term can bring as much profit or more, than the floor space it replaces."

It is sometimes argued that parks may be good for future generations, but that they take land off the tax rolls for the current generation of taxpayers. This is not necessarily a net loss. The use most often competing for potential park land or open space is residential development, and governments often lose money on such development—that is, it costs more to provide schools, streets, and other services than is returned in new taxes. Thus, in many instances, placing the land in recreation use may prevent a drain on the community's finances while engendering a long-term rise in surrounding property values.

Some private developers with the capital to take the long view have seen open space as a sound business proposition. By setting aside a good part of their development in perpetuity as open space or in some cases as golf courses, they have enhanced the market value of their adjoining acreage and more than recaptured the investment in open land.

But immediate land values are not the only economic effect of providing adequate outdoor recreation space. Other community benefits are involved that may not be susceptible to precise measurement but that are very real. In competition for some industries, the relative amenities of community living, of which outdoor recreation is an important part, can sometimes be the deciding factor.

Preservation of open space for recreation can also have a beneficial effect on a community's water and drainage program. If it does a good job in setting aside land for recreation, it will most probably at the same time be conserving the most important part of a drainage network—flood plains, wetlands, and that most efficient of all storm sewers, a stream valley. Some communities have thought that all such land must be "improved" to the maximum, but when the spring rains come and the cellars begin to fill with water, they have reasons for second thoughts.

EFFECTS ON AN UNDERDEVELOPED AREA

The effects of outdoor recreation are most striking when large-scale expenditures come to a relatively underdeveloped area. An example followed completion of seven large reservoirs constructed by the Corps of Engineers in the Arkansas-White-Red River Basins in the States of Arkansas, Oklahoma, Texas, and Missouri.[1]

Three of these reservoirs have been established for 15 years, three for the past 8 years, and one was opened in 1960. With one or two exceptions, the reservoirs were located in counties that had previously been underdeveloped.

All 17 counties in the four States with significant shorelines on these reservoirs were studied, and comparisons were then made with eight adjacent counties that did not have shoreline on these reservoirs. Population growth, per capita income, annual wages, retail sales, bank deposits, taxes, and investment were considered.

In the 10-year period ending in 1960, all counties in the study lost population, but the 17 reservoir counties lost only 8.5 percent in contrast with the 25.1 percent loss in the nonreservoir counties. From 1949 to 1959, annual per capita income of the reservoir counties in Arkansas increased from $669 to $1,053, or 57 percent, in contrast to an increase of $349 to $431, or only 23 percent, in the nonreservoir counties.

The gain in bank deposits also favored reservoir counties—

	1949	*1958*
17 reservoir counties	$82.6 million	$130.0 million
8 nonreservoir counties	15.1 million	21.2 million

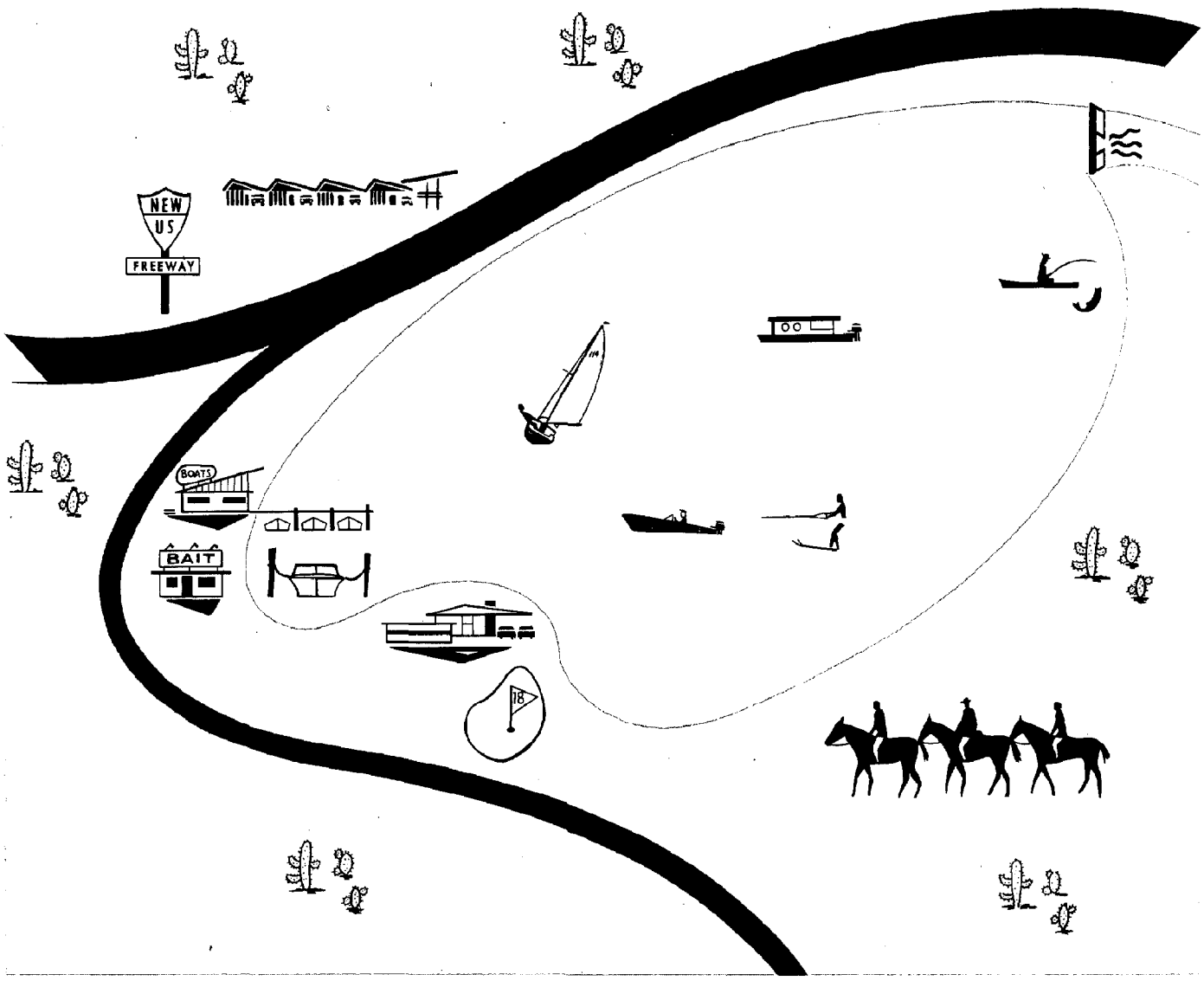
The growth of local tax collections points up the value of business generated by reservoir recreation. From 1945 to 1956, 10 Oklahoma reservoir county tax levies increased nearly 64 percent. Two selected Oklahoma nonreservoir county collections were up only 3.8 percent for the same period. In that period, school taxes were up 296 percent in the reservoir counties compared with 190 percent in the nonreservoir counties.

Another aspect of the effect of reservoir recreation has been the steady annual increase of investment in overnight accommodations from an initial investment in 1945 of $1.4 million to the 1959 total of $20.8 million in the 14 reservoir counties for which data are available. These capital expenditures are, of course, in addition to income generated by visiting recreation seekers.

Still another element of capital investment has been the increasing annual

[1] This discussion of the economics of reservoir recreation is based on a study prepared by Arthur L. Moore of the National Planning Association, "Reservoir Recreation and Local Economic Growth," *Economic Studies of Outdoor Recreation,* ORRRC Study Report 24.

NEW RESERVOIRS STIMULATE NEW BUSINESS



expenditure on private homes and cabins near the reservoirs. This type of investment, in the 14 counties for which data are available, has grown from $86,000 in 1945 to $25.7 million by 1959. The current average expenditure in this form of investment is about $3.2 million annually.

While all the economic gains in the reservoir counties may not be directly attributable to the new lakes, it is undoubtedly true that outdoor recreation has had a dramatic beneficial effect. Almost every economic sign indicates that the reservoir counties are better off. Indeed, in some, it has almost changed the entire way of life, as the stimulus offered by the recreation dollars has had far-reaching ramifications. New schools and better public services have, in turn, brightened other economic prospects.

These cases are special in that large-scale recreation expenditures came to a comparatively depressed area in a rather short period, but they do illustrate the power of the recreation dollar.

A MAJOR MARKET

In addition to effects on local economies, outdoor recreation plays an important part in the economic life of the country. The millions and millions of Americans seeking the outdoors are generating a huge demand for goods and services. Satisfying this demand is a big business, and it is getting bigger—

• Leisure time spending was estimated at $30 billion in 1954. It could be as much as $40 billion today.

• Tourist expenditures have been estimated at about $25 billion annually. In 1957, tourists were estimated to be spending at least a billion dollars a year visiting each of the States of New York, Florida, New Jersey, and Pennsylvania. Six other States reaped at least half a billion each from visitors—Illinois, Michigan, Virginia, Kentucky, Texas, and California.

• In 1959, the total estimated dollar value of purchases of major sporting goods was just under $2 billion. Of this, approximately $1.5 billion was for items related to outdoor recreation.

• An estimated $2.1 billion was spent at the retail level during 1958 for boats, engines, accessories, safety equipment, fuel, insurance docking, maintenance, launching, storage, repair, and boat club membership.

• Fishermen are reported to spend $3 billion annually on their sport.[2]

• Direct expenditures by government for providing outdoor recreation were over a billion dollars in 1960. Federal and State agencies spent $380 million,[3] and the remainder was supplied by local government.

• It has been estimated that visitors to Federal and State parks, forests, and reservoirs spend over $11 billion annually.[4] This does not include expenditures of the large portion of the population that seeks its recreation on private lands.

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[2] *1960 National Survey of Fishing and Hunting,* Circular 120, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U.S. Dept. of the Interior, 1961.

[3] *Public Expenditures for Outdoor Recreation,* based on survey reports from State and Federal agencies, ORRRC Study Report 25.

[4] Marion Clawson, "Private and Public Provision of Outdoor Recreation Opportunity," *Economic Studies of Outdoor Recreation,* ORRRC Study Report 24.

These estimates are merely a sampling. They are rough indicators that do not give even an estimate of the total effect. However, on the basis of these indicators and from general consideration of the field, consumer spending for outdoor recreation is now estimated to be in the neighborhood of $20 billion annually.

Aside from a small fraction for licenses and privilege fees, the bulk of recreation expenditures go for food, lodging, transportation, boats, and other equipment. Thus, the principal recipients of these expenditures are automotive and equipment dealers, boat dealers, purveyors of food and lodging, sporting goods dealers, and service station owners. These expenditures are made in three general zones—in the home community, en route, and at the recreation area. Roughly one-third of the total expenditure is made in each zone.

The great importance of location is clear for retailers who seek to obtain a share of the "en route" and "at or near recreation area" expenditures. This explains to a considerable degree the shift in real estate values along major recreation access routes and in the immediate neighborhood of newly established recreation areas.

Thus, expenditures of recreation seekers provide a significant element in the economic life of the community. An extreme example of this effect is afforded by Teton County, Wyoming, which contains the Grand Teton National Park and is adjacent to Yellowstone National Park. In 1958, tourist expenditures of nearly $7 million produced a business of over $12 million, or about 71 percent of the total business generated in the county by all economic activity.[5]

In 1956, some 2.5 million persons visited the Great Smoky Mountains National Park in southeastern Tennessee and southwestern North Carolina and spent about $28 million within an area extending 30 miles beyond the park boundaries. In 1958, nearly 3.2 million persons spent an estimated $35 million in the same area.

But this is not all. For as the volume of recreation expands, it may bring about additional capital investment, which enlarges the scope of the community's economic activities. The desire of recreation seekers for a summer cabin or a second home near a lake or seashore or in the mountains induces long-term capital investment, as distinct from direct retail purchases. For instance, the estimated 28,000 summer homes in New Hampshire provide a market for real estate, building and other materials, and labor. The summer residents of these homes increase the population by one-fifth—bringing that many more customers to local businesses.[6] In the State of Maine, recreation property values represent 10 percent of the total real property valuation of the State, and of this total over 64 percent was accounted for by privately owned recreation residences.[7]

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[5] *A Study of the Resources, People, and Economy of Teton County, Wyoming,* College of Commerce and Industry, University of Wyoming, a publication of the Wyoming Natural Resource Board, Laramie, Wyoming, 1959, p. 36.

[6] Source: Research Division, New Hampshire State Planning and Development Commission, "New Hampshire Total Estimated 1960 Year-round and Seasonal Population, Including Summer and Winter Accommodations by Region and Town," preliminary unpublished tabulations.

[7] *Recreation Property Inventory, State of Maine, 1959,* Division of Research and Planning, Dept. of Economic Development, Augusta, Maine, July 1960, pp. 7–8.

Thus, while recreation is and should be considered one of that order of services which must be provided for its benefit to the public without a dollar-and-cents accounting of immediate benefits, it does make sound fiscal sense. In urban areas, recreation is often a wise economic use of land, increasing values beyond its cost; in some underdeveloped areas, it may be a means of economic rebirth; and throughout the Nation it provides a major market for goods and services.

CHAPTER 5

THE NEEDS

How can the American people make certain that the outdoors will be available to them and to their children? Will there be enough land and water of the right kind and quality? What kinds of sites will be needed and where should they be located? What changes should be made in present policies and programs?

One thing is clear; the conventional approach to providing outdoor recreation is not adequate for present needs, and it will certainly not be adequate for the future. To underscore the point, let us review briefly the facts of demand and supply.

First, the demand is large, and it is growing. Not only are there more people; individually they are seeking the outdoors at a growing rate, and they are likely to do so even more over the coming decades.

Second, the kind of recreation people want most of all is relatively simple—a path to walk along, an attractive road for a drive, a place to swim, a shady hillside for a picnic.

Third, people want these things where they live—and where most people live is in our growing metropolitan regions.

Fourth, we are not running out of land. We are failing to use it effectively. The physical supply of land and water for recreation is bountiful; for reasons of ownership, management, or location, access to it is not.

In this failing lies the great opportunity. Recommendations for action, which follow in part II, are many and specific, but there is an underlying approach, and this should be made plain. It is not for a series of crash programs. Large-scale acquisition and development programs are needed; so is money—lots of it. The essential ingredient, however, is imagination. The effectiveness of land, not sheer quantity, is the key. As this chapter will illustrate, there are a host of opportunities to be unlocked, and if we will only look, the most exciting of all are before our eyes.

THE METROPOLITAN AREA

The first task is to provide recreation for the metropolitan regions. On the face of it, this would seem an almost impossible task, for it is precisely here that land is hardest to come by and most dear. It always has been, however, and this is why there is such an imbalance today. Traditionally, State recreation programs have directed park acquisition to rural areas. Now that urban land costs have risen further yet, it can be argued, it is too late to shift the emphasis.

But the metropolitan recreation problem cannot be solved somewhere else. Additional recreation land in the faraway places is needed, but the need is far more urgent close to home. Such acquisition, furthermore, can be highly economical. Land prices are higher near built-up areas, it is true, but for good reason: that is where the people are; and in terms of user benefits $1,000-an-acre land close to people can be a better investment than $100-an-acre land a weekend away.

Are there enough sites left? If customary yardsticks are used, locating them will be difficult; the kind of tracts usually favored for regional and State parks—

400 acres or more—are in relatively short supply close to metropolitan areas. If acquisition is tailored more closely to the terrain, however, a surprising number of sites can be discovered. The study of the Northeast demonstrated that even in the most urbanized of regions there are many potential recreation sites—such as ravines, creek valleys, ponds, and woods—and that these are well distributed throughout the region. Many are relatively small—100 acres or less—but their accessibility can greatly magnify the effectiveness of each acre.

The cost can be more reasonable than might at first appear. While average land prices are higher in metropolitan regions than elsewhere, the kind of land that pushes up the average is not necessarily the best land for parks. Recreation does not have to compete head-on with the developer for the prime farm land. Quite the contrary, in the majority of cases, the sites best for recreation are on land that is marginal for most other uses—soil too poor to farm, hills too steep to subdivide.

Location is not always so fortunate, of course; and what is now idle land may not be so in the future. Close to cities, marginal land that is open has magnetic attraction for highway surveyors, and developers are learning new ways to cope with steep gradients. For the present, however, marginal land offers great opportunities for recreation. They should be pressed vigorously.

A RECREATION ENVIRONMENT

But parks and other recreation areas are only part of the answer. The most important recreation of all is the kind people find in their everyday life. Do they find enough of it now? Do the children have to be driven to school—or can they walk or cycle to it safely over wooded paths? Are there streams for an afternoon's fishing—or have they all been buried in concrete culverts? Are the stands of woods all gone—or are a few left for a picnic or a stroll?

What this means, in short, is an *environment*. Thus our challenge: can we shape future growth so that recreation is an integral part of it? It will require a fresh approach. For the overwhelming bulk of the land in our metropolitan areas is in private ownership and will remain so. Yet it is the use of this land that is the heart of the problem. Wholesale public acquisition cannot meet it; what is needed is an imaginative use of a whole range of devices in addition to purchase and a vigorous drive to tie recreation to other land use programs.

The omens are good. Contrary to a widely held assumption, even in our metropolitan areas there is still enough land to house a much greater population and do it without having to lay waste the natural recreation opportunities of the countryside. In the great postwar expansion of suburbia, the opportunities to build recreation into environment were there, but they were missed. Now there is a second chance. Another great suburbia is pushing outward, and it is here that a new generation of Americans is going to be reared.

The Simple Paths

The most basic thing that can be done is to encourage the simple pleasures of walking and cycling. It is something of a tribute to Americans that they do as much cycling and walking as they do, for very little has been done to encourage these activities, and a good bit, if inadvertently, to discourage them. We are

spending billions for our new highways, but few of them being constructed or planned make any provision for safe walking and cycling. And many of the suburban developments surrounding our cities do not even have sidewalks, much less cycle paths.

Europe, which has even greater population densities, has much to teach us about building recreation into the environment. Holland is constructing a national network of bicycle trails. In Scotland, the right of the public to walk over the privately owned moors goes back centuries. In Scandinavia, buses going from the city to the countryside have pegs on their sides on which people can hang their bicycles. Car ownership is rising all over Europe, but in the planning of their roads and the posting of them, Europeans make a special effort to provide for those who walk or cycle.

Why not here? Along the broad rights-of-way of our new highways—particularly those in suburban areas—simple trails could be laid out for walkers and cyclists. Existing rights-of-way for high tension lines, now so often left to weeds and rubble, could at very little cost be made into a "connector" network of attractive walkways.

Cluster Development

One of the best opportunities for building recreation into the environment is in the housing itself. The typical subdivision of postwar suburbia squandered the recreation potentials; it splattered houses all over the countryside in a rigid pattern of equal size lots, and thereby fouled the very amenities people moved outwards to seek. Lately, a new approach has been tried, and it works. Instead of forcing the developer to cover the whole tract with equal size lots, the community encourages him to cluster the houses into a more cohesive pattern and one far more economical to service with roads and utilities. The developer houses as many people as he would under the old pattern, but now he does not have to cut down all the trees and cover the streams to do it; over half of the tract is left open—for parks, bridle trails, and walkways.

Some planners are looking ahead to a further step. Could not these open spaces of separate developments be tied together? It is no great trouble for a developer to arrange his open space to fit adjoining open space; the prime requirement is a community plan that anticipates future development. When the area is eventually built up, such a plan will have reserved a natural network of open land in the heart of it—and at very little cost to the public.

There are many other devices by which private lands can contribute to recreation: flood-plain and agricultural zoning, tax-deferral plans for open space preservation, conservation easements, and the like. Alone, no one device can accomplish very much. If there is a plan in which they are used together, however, each makes the other more practical, and money for outright acquisition goes much further. With a few strategic purchases of land, the community can achieve a unified network which connects the open spaces of cluster developments to school sites with walkways and stream valley parks, and in which prime farmland and the flood plains of the area, functional in themselves, can give shape to the whole.

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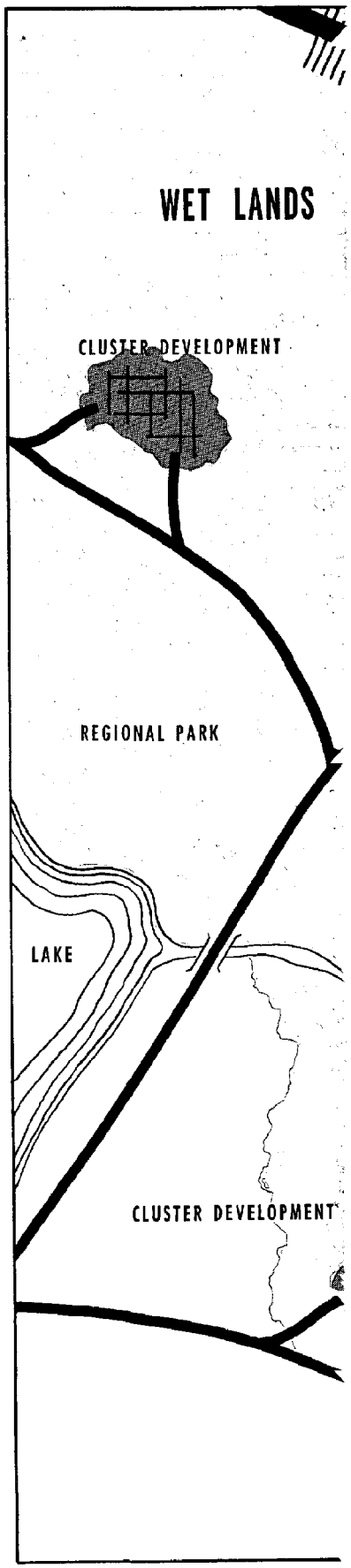
A VARIETY OF WAYS THAT RECREATION CAN BE BUILT INTO AN ENVIRONMENT

1. Natural drainage channels can be preserved as a network of functional open space.
2. Wet lands and flood plains can be zoned to prevent undesirable development and preserve the natural, scenic, and wildlife resources.
3. Appropriate areas for regional parks can be acquired.
4. "Cluster" development can be employed to combat uneconomic and undesirable sprawl.
5. Open space easements can be purchased to preserve rural scenery, and the subdivision of unsuitable areas should be prevented.
6. Residential parkway roads can be developed to follow the route of drainage channels and to border other open areas, such as lakes, marshes, and school grounds.
7. Hunting, fishing, and hiking easements can be purchased to provide increased recreation use of private lands.



SECONDARY ROADS

PARKS

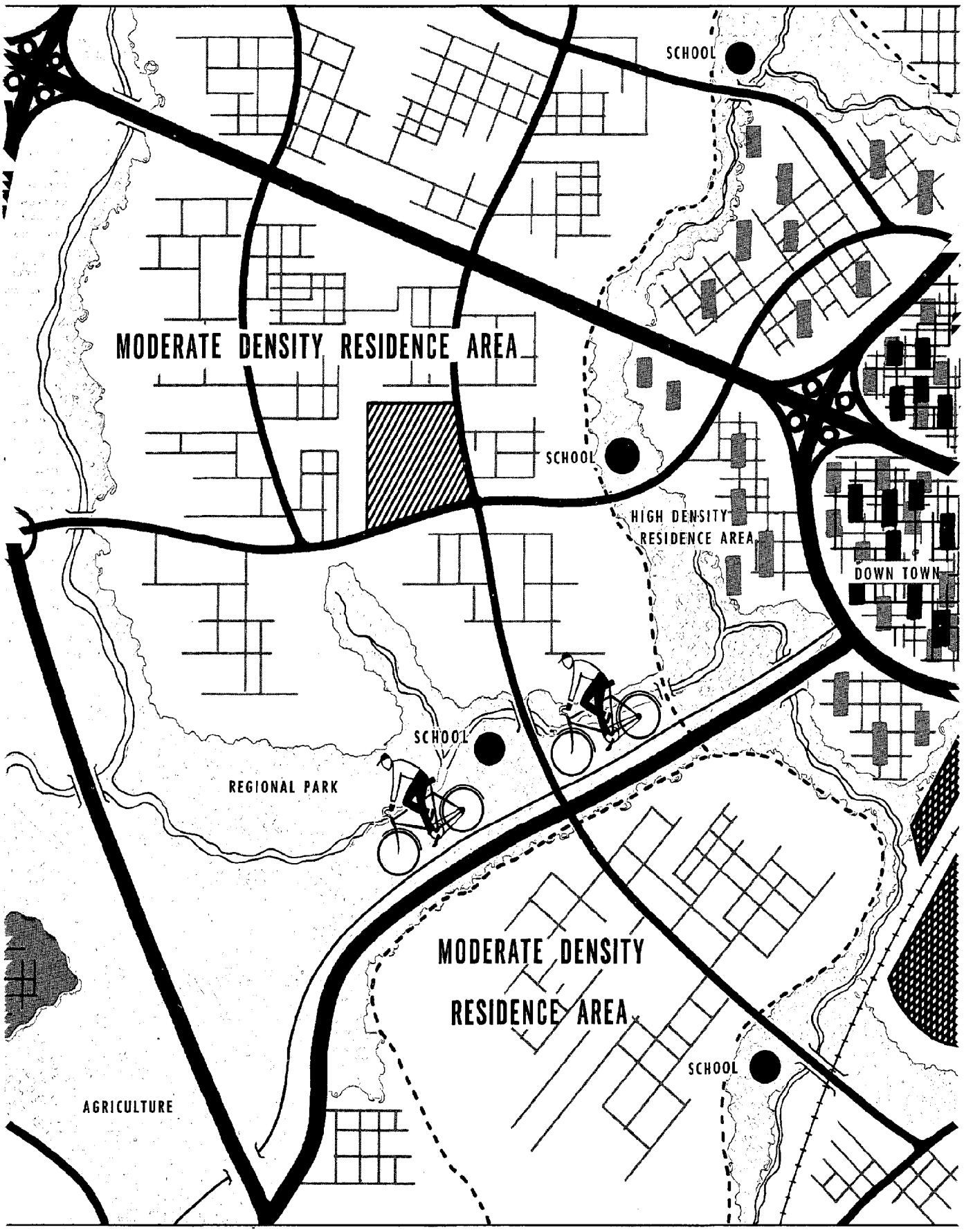
PARKWAY ROADS

OPEN SPACE EASEMENTS

COMMERCIAL HIGHWAYS

INDUSTRIAL AREAS

COMMERCIAL CENTERS


SCHOOL
MODERATE DENSITY RESIDENCE AREA
SCHOOL
HIGH DENSITY
RESIDENCE AREA
DOWN TOWN
SCHOOL
REGIONAL PARK
MODERATE DENSITY
RESIDENCE AREA
SCHOOL
AGRICULTURE

THE BIG OPEN SPACES

As we go from the urban areas to the great open spaces, the problems may seem much different. They are not. The scale is magnified, but the basic situation is the same. It is not the total number of acres that is critical; it is the number of effective acres.

Consider the anomaly posed by our parks and forests. For all their vastness, overcrowding appears to be more and more prevalent. Newspaper pictures of campers being forced away from parks are now a familiar summer feature; so is bumper-to-bumper traffic on the roads to such popular areas as Yellowstone National Park and the Yosemite Valley.

The congestion is somewhat delusory, however. In its survey the Commission found that the trouble with the big open spaces is that large parts of them are being underused. The congestion is real enough, but it is concentrated in a relatively few spots and over short periods of time. Because it is so visible, however, the congestion has diverted the attention of the public—and of recreation managers—from the great bulk of open space that is unused. State forests in the East are another case in point. They have a great recreation potential and are not too far away from the big population centers, yet most citizens hardly know they exist. The same is true of the national forests in the East, particularly those along the Appalachians.

To a large degree, then, there has been a failure to use well what is already available. The problem, essentially, is one of management. This is not to minimize the needs to acquire additional public recreation sites nor the advisability of getting them sooner rather than later. Opening up unused parts of present sites, however, is just as imperative; indeed, without this kind of development, the United States could spend billions on new parks and still not keep up with the demand.

The more effectively these resources are developed, the less pressure will there be for encroachment on areas that should be preserved in primitive condition, such as wilderness areas. They are the best remnant of primitive America, virtually unchanged by the hand of man. They have inspirational, esthetic, scientific, and cultural values of the highest order that must be preserved. The fact that few people use the wilderness does not lessen its significance or the importance of its preservation.

THE MANAGEMENT OF LAND

But what areas should be developed, and for what uses? Which should be left alone? As a guideline, the Commission has devised a classification system that it believes will increase the capacity of many areas while preserving their quality. Under this proposal, recreation areas would be zoned according to the nature of the recreation opportunities to be provided. For example, nonessential recreation developments and visitor service facilities would be excluded from the immediate vicinity of outstanding physical or cultural areas, which would be maintained undisturbed for inspirational and educational purposes. At the same time, areas adjoining these outstanding sites would be developed to encourage and facilitate active recreation use.

The use of this system could do a great deal to relieve congestion in many areas.

The Commission commends it to all recreation agencies as an effective tool for meeting future recreation needs.

It should be recognized, however, that in some places congestion will be inevitable because of peak demands. For most outdoor recreation activities, peak demands occur on holidays and on weekends during the summer and thus overcrowd areas or facilities that at other times are adequate. Since it is not good sense to provide facilities to meet the maximum loads and then to allow them to go unused most of the time, plans should be based on a reasonable average use, and measures should be taken to spread use both in time and location.

Instead of straining limited budgets to meet peakload conditions, management should apply them to over-all recreation development. It should, for example, do as much as possible to promote use of areas throughout the year. Often the season of use can be extended. In some cases, development of winter sports facilities would encourage year-round use of areas now used only in warm weather. Lower user fees on weekdays and seasonal passes could also help promote fuller use.

WATER

Urban or rural, water is a magnet. Wherever they live, people show a strong urge for water-oriented recreation. There are many other reasons for water resource programs, and recreation use often is incidental or unplanned. To say this, however, is to note how great are the opportunities.

The first is clearing up pollution. In most major cities, pollution has destroyed valuable recreation opportunities, just where they are needed most. As a sanitation measure alone, the abatement of pollution is a necessity; inherently, it is also one of the best means of increasing recreation opportunities.

The wise development of our shorelines is another first-order need. They are a unique resource, and the pressure on them is increasing—on beaches along the Atlantic, Gulf, and Pacific Coasts, as well as the Great Lakes, and particularly within a 3-hour travel time of major population centers. Shorelines of inland waters are also of prime importance. The recreation potential of shorelines can be developed in a number of ways, including outright acquisition by public agencies, the purchase of access points, and zoning.

Since World War II, there has been increasing recreation use of reservoirs. The availability of water recreation in areas that previously had little answered a tremendous need, and this is particularly significant because these reservoirs were not built for recreation. Indeed, the restrictions on recreation planning have probably inhibited recognition of many regional recreation possibilities. In future planning for water impoundment projects, the recreation potential should be considered from the start.

HIGHWAYS

Without access, even the most attractive area is of relatively little use for recreation. This highlights the importance of transportation to outdoor recreation. The basic need is twofold. First, good public transit facilities are required to make it possible for those living in the core cities—particularly low-income groups—to reach recreation areas. Second, the layout of our highway network should be geared to recreation as well as other uses.

A higher priority should be given to recreation and scenic values in the overall design of new major highways. The Palisades Parkway in New Jersy is a good example of what can be done when the effort is made. Existing highways, moreover, can be made much more attractive. Antibillboard efforts should be continued, and there should be more provision of rest-stops, scenic lookouts, and picnic areas.

The job of improving the recreation potential of highways is primarily one for States and local governments, but the Federal Government can exert a significant influence. It might, for example, help see to it that the new interstate highways are routed as much as possible around parks and open spaces rather than through them. The threat of such encroachment is a very live issue in many communities, particularly those which have had the foresight to lay aside open space. Unless the trend is reversed, many new highways will be a net subtraction from the recreation supply rather than an addition to it.

The fact that Americans enjoy driving provides a fine opportunity to increase the quality of outdoor recreation. Education is the key. All too frequently the automobile traveler thinks little or nothing of the country en route, yet in every section there is some attraction not so far off the track that would be of interest to him. It need not be a Carlsbad Caverns or a Mount Vernon. It can be a demonstration area explaining soil conservation methods or a museum of the history of a State or community. If more were done to let people know about such attractions, they would serve the dual purpose of increasing the pleasure of driving and of bringing additional income to the area. Some of the oil companies now publish illustrated maps showing the little known as well as the more familiar features in a region. The use of secondary roads should be promoted—slower traveling than on the superhighways, but to the driver who is not in a hurry, much more pleasant.

THE OUTDOORS AND THE CLASSROOM

There is a bigger job yet of education to be done. For the youth of this century the outdoors is no longer the familiar part of everyday life that once it was. Now they have to learn about it, and there is increasing awareness that it is important they do. Lately there has been a new emphasis in American education on the natural world; and the new magazines and books on the subject attest that Americans of all ages are showing an awakening interest in the land and its history.

In the schools a promising start has been made, but it is only a start. There are nature courses, but not enough of them nor are they in enough schools. Many State conservation departments maintain educational programs both in and out of the school system, including conservation workshops for teachers, and some maintain camps and study groups. But here again the efforts are too few and expansion is called for.

One of the particularly commendable features of the Cook County Forest Preserve District is its stress on education. It has made extensive use of newspapers, radio, and television to tell the public about its nature centers and trails. It also works closely with Chicago schools and has stimulated much of the work in conservation education by the teachers.

The "nature centers" movement offers another excellent vehicle. By setting aside natural areas in the midst of metropolitan development, private groups are enabling children to learn at first hand about such simple, but to them entrancing,

elements of the outdoors as wild flowers and deer and brooks. Other new departures that should be followed up are school camping programs and the use of more outdoor facilities under the new "12-months classroom" idea. The youth hostel movement, far more advanced in Europe than here, should get increased support.

The interpretive programs of the National Park Service and of some of the States are good, but they meet only a fraction of the need. The managers of public and private forests and parks have a chance to do more than provide space for vacationers: they can arrange for systematic nature walks, illustrated talks, movies, exhibits, and demonstration of natural phenomena for their visitors. He who knows what to look for in a forest or on a seashore is likely to find there much more of interest and enjoyment. Trained park and forest people have a knowledge to impart about the land and water and wildlife, and there is a widening group of citizens eager to learn.

Another force of importance in this field is organized groups that cover every remote sector of the outdoor recreation field: the mountain clubs, wildlife groups, boating associations, and the other active societies catering to lovers of wilderness and waters, caves and walking, bicycling and swimming, skindiving and bird-watching. These groups serve a special purpose—they address themselves most intimately and effectively to disciples—but they can be a powerful educational force for the layman as well. Their aid should be enlisted in the development of education programs, involving such things as outdoor museums and exhibits. Vacationers, in effect, can become companions with conservation and wildlife organizations and thus have their enjoyment multiplied many times by the acquisition of new knowledge.

SHARPENING THE TOOLS

The needs can be met. They do not involve abstruse problems that depend upon some intellectual or scientific breakthrough for their solution. The tools exist. Virtually every concept that seems new has been foreshadowed in the bold efforts of former years. There are difficult problems, but the same kinds of problems have been surmounted before, and they can be again.

Obviously money will be needed. While this is true of most public programs, it seems to be particularly true of outdoor recreation. Public expenditures in this field have increased in recent years, notably so in several States, but in general they have not kept pace with the demand. The prospect for the coming years is that expenditures will have to be increased substantially just to keep up with increases in population; the demand for outdoor recreation will grow faster yet.

But the people will not begrudge the money, not if the case is put before them. It is their children they are voting for, and this they well understand. Wherever political leaders have gone to the people with a bold program—as recently in New York, New Jersey, and Wisconsin—the popular support has been overwhelming.

There should be many more of these programs and the Federal Government can help bring them about. It can give technical assistance and grants-in-aid to State and local governments, and it can do much to encourage a greater contribution by private interests. Federal aid cannot provide more than a fraction of the funds needed, nor should it; its great importance will be as a catalyst to spur local and State action.

The time is right. Just in the last few years there has been a marked quickening of local action, and in 1961 there was a virtual wave of State legislation to stimulate more. Not all are recreation programs in the conventional sense—land management is the unifying element of many—yet it is possible that these will prove as valuable for unlocking recreation opportunities as the established recreation machinery. So far, these many efforts have not been joined effectively in common cause, but in the very diversity of them lies great potential. In addition to the land-managing agencies—Federal, State, and local—there are county conservation boards, soil conservation districts, nature conservancies, resource development agencies, local, State, and regional planning commissions, and the host of private groups that so often have been the driving force for action.

The large number of public agencies and private groups testifies to the variety and vitality of American society, and in the sheer multiplicity of approaches there are real benefits. But there does need to be more of a joint effort, at the very least more pooling of information, and the local groups themselves are pressing the point.

The State governments are in the key position. They have a variety of agencies that deal directly with recreation and many, like the highway agencies and industrial development commissions, that have almost as great an effect. So far, there has not been much statewide planning to bring these efforts together; but there is a growing recognition of the need for it.

Since solutions will vary from State to State and from community to community, the Commission has not made specific recommendations as to just what measures each State should employ to meet its problems. General lines of effective action are pointed out for consideration. In this report and in its study reports, the Commission has assembled extensive information on supply, on demand, and on the tools for achieving a balance between the two. Much of this is on a State-by-State basis. States and communities will find valuable information bearing directly on their own problems, and they will have a series of yardsticks for comparing their progress with that elsewhere.

In the Federal Government there are some 20 agencies which have a direct or indirect interest in outdoor recreation. Recreation undoubtedly will remain a sideline for many of them, but the effects of their programs need to be looked at far more systematically than in the past. A case in point is the far-reaching impact of growing Federal water programs.

To call for coordination is to urge the obvious. What gives it point are the facts that there has been so little in the past and that there are so many new efforts to be coordinated. All of these programs need help, and they need money. But they also need direction toward common goals.

OUTDOOR
RECREATION
FOR AMERICA

RECOMMENDATIONS

The opening chapters of this report describe the role of outdoor recreation in American life, the demand, the resources available, the social and economic importance of outdoor recreation, and the most pressing needs in the years ahead. The following chapters are devoted to recommendations for action to satisfy these needs.

The recommendations are based on a conviction that outdoor recreation is essential to the well-being of the American people and should, therefore, continue to be an important part of American life. The language used by the Congress in the Act establishing the Commission reflects this conviction and states certain goals which the Commission believes should be the basis of national policy—

> * * * to *preserve, develop,* and *assure accessibility* to all American people of present and future generations such quality and quantity of outdoor recreation resources as will be necessary and desirable for individual enjoyment, and to assure the spiritual, cultural, and physical benefits that such outdoor recreation provides * * *[1]

The natural heritage of our Nation must be preserved in two senses. We cannot afford, by either unwise action or neglect, to lose or impair resources of outstanding natural, scenic, scientific, or historic importance. These must be protected from misuse so that they may be passed on to future generations as nearly in their original state as possible. Equally important is preservation of the opportunity for a wide variety of recreation uses that do not require the strict preservation of resources in their natural condition.

A second goal is the wise development of our recreation resources. While some of our citizens seek a completely natural environment for outdoor recreation, a larger number prefer activities in less primitive surroundings. Outdoor recreation for this larger group requires basic facilities—roads, picnic tables, sanitation. Wise development of existing areas can expand use and make recreation more pleasant for all. As our expanding population makes increasing demands on our limited resources, development can help alleviate growing pressures. In some cases this may mean more intensive construction of facilities, in others the use of resources now overlooked.

[1] Public Law 85–470, 72 Stat. 238 [emphasis supplied].

A third basic goal is accessibility—an opportunity for all Americans to know and enjoy the outdoors. Providing reasonable access to the out-of-doors for large concentrations of population will be one of the central problems of outdoor recreation over the next 40 years. At the center of concern will be the day and weekend needs of the metropolitan residents—particularly those of moderate and low incomes. To achieve accessibility, existing areas must be further developed, and in many instances new sites must be acquired.

A fourth goal, also identified by the Congress, is to attain an effective balance between the recreation needs of the Nation and the many other uses of our natural resources. Careful planning and coordination of effort will not only reduce conflict between recreation and other resource uses but, in many instances, can open up new recreation opportunities without detriment to other uses.

To secure the benefits of outdoor recreation for the American public, a national policy should encourage shared responsibility, not only between public and private activity but among all levels of government.

The outdoor recreation opportunities available to the public may be thought of as a great national system. Some parts of the system are provided by the Federal Government, some by States, some by local government, and still others by private enterprise. What is done in one part affects the others, and constructive action in one part aids all. This diversity provides a productive flexibility as long as it is within the framework of national goals. Business is readily adaptable to changing tastes. Government can do some things best, and within government, different levels are better equipped for specific tasks. The Federal Government's superior resources equip it for large-scale enterprises. States offer flexibility. The local governments are most sensitive to immediate needs.

The public responsibility for providing some types of opportunities is greater than it is for others. Government has three basic responsibilities: (1) To insure, either directly or in cooperation with the private sector, that Americans have access to the outdoor environment and an opportunity to benefit from such activities as enjoyment of scenery and wildlife, picnicking, and hiking; (2) to recognize the importance of recreation in the management of its own lands; and (3) to preserve certain outstanding resources for future generations.

But the provision of outdoor recreation can never be entirely the responsibility of government if the magnitude and range of needs are to be met. The

private sector of the economy can play an important role by allowing the use of private lands, under proper safeguards, for such activities as hunting and fishing, and also by providing recreation facilities of varying degrees of elaborateness from simple picnic grounds to luxury hotels and dude ranches. Our national policy should encourage private enterprise to provide outdoor recreation opportunities and services wherever feasible. Profitmaking enterprises already satisfy a significant part of the total needs, but they could do much more to complement, diversify, and augment government efforts.

Within government, there is a large number of suppliers of outdoor recreation. There is a great need for coordination and cooperation. In the Federal Government alone there are a score of agencies whose programs affect outdoor recreation. There is great diversity of organization in the 50 States and in the thousands of local governments. While the roles of each need not be precisely defined, there is need for a general understanding on division of responsibility based on the ability of the respective agencies to serve the public as effectively as possible.

The Federal Government should carry out the roles of protecting natural, scenic, and historic shrines of national importance; managing its own lands to enhance their recreation value; assisting State and local governments; encouraging regional cooperation; sponsoring research; and exercising general leadership.

The States should play the pivotal role in providing outdoor recreation opportunities for their citizens. They are the most logical units to provide the flexible approach required to satisfy varying needs. States can assess their own needs and take action accordingly. They can be particularly effective in stimulating counties and municipalities, which depend upon the States for their governmental authority, to take both separate and joint action to meet important problems. Through their regulatory power, the States can also play an effective role in stimulating private enterprise. Finally, they are the most effective avenue through which Federal aid can be channeled to meet varying needs.

Cities and other local governments have traditionally provided a wide range of recreation opportunities for their citizens—parks, playgrounds, museums, zoos. These opportunities are in some measure alternatives to outdoor recreation activities beyond the city limits. The current emphasis on open space in and around the cities should be directed toward creating a recreation environment and making our metropolitan areas more livable.

These broad principles are the basis on which the Commission has formulated its recommendations for specific actions in the following chapters.

CHAPTER 6

GUIDELINES FOR MANAGEMENT

NEED FOR MANAGEMENT GUIDES

Over the next 40 years, recreation uses of land and water resources will come into vigorous competition with demands for wood, minerals, agricultural crops, highway development, industry, residential construction, and commercial enterprise of many kinds. To assure present and future generations of Americans outdoor recreation opportunities of adequate quantity and quality, more effective management of land and water resources and more careful planning are urgently needed.

Effective supply can be expanded through more efficient utilization of existing resources, as well as through private and public acquisition and development of additional recreation lands. Both approaches will have to be employed if future needs are to be met.

The management of recreation resources is a basic factor in expanding the supply of future opportunities. The term management is used here to include the over-all policy, planning, and design of recreation development at all levels of government, as well as the operational aspects of administration. Identification of the purposes for which outdoor recreation resources are best suited is essential as a guiding principle in providing a balanced supply.

Outdoor recreation requires the use of a broad range of natural resources in varying combinations, from intensively developed sites providing diversified recreation opportunities for large numbers of people, to undisturbed primitive areas providing enjoyment for limited groups. Between these extremes are areas of various types that have been or may be modified by man. Some are developed solely for recreation, and others are managed for recreation in conjunction with other resource uses.

While the physical and locational aspects of resources strongly influence the types of activities that can be carried out, in the final analysis it is management in the broad sense that determines resource use. Whether a particular resource remains undeveloped and thus appropriate for limited kinds of recreation opportunity, or is modified to sustain a wide range of opportunities for large numbers—in short, the "carrying capacity" of the area—depends upon management criteria and decisions.

Management policies governing public recreation lands vary among agencies and change according to public demand, political pressures, and economic and social imperatives. These agencies have developed their own approaches, criteria, and, in some cases, classifications in order to carry out their responsibilities for outdoor recreation development. These policies reflect the diverse objectives and statutory responsibilities of the various agencies. The result is a diversity of management practices, some duplication and gaps, and, in many cases, less than optimum resource utilization. This situation, aggravated by the lack of consistent standards for recreation management, constitutes a major obstacle to a balanced national program.

CLASSIFYING OUTDOOR RECREATION RESOURCES

The Commission recommends a system of classifying outdoor recreation resources in order to provide a common framework and to serve as an effective tool in recreation management. This approach is one of recreation zoning, based upon relationships between physical resource characteristics and public recreation needs. Under this concept, particular types of resources and areas would be managed for definite recreation uses, sometimes in combination with other uses. Because of the wide variety of possible recreation activities on many areas, the purposes for which each area is particularly suited must be carefully determined to assure a desirable variety of opportunities and of values.

The Commission has developed a system encompassing the full range of physical resources needed for all kinds of outdoor recreation activity and specifying the types of management required for optimum recreation uses of each category. There are six broad classes, which include all types of outdoor recreation resources. They constitute a spectrum ranging from areas suitable for high-density use to sparsely used extensive primitive areas. In most cases an administrative unit, such as a park or forest, would include recreation areas of two or more classes. Although the classification is based largely on physical features, economic and social considerations also play an important part in deciding on the class designation of any given area. Lands not suited or available for recreation will, of course, not fall into any of the suggested classes. Roads, including even parkways, do not themselves fall within the classification. However, waysides within rights-of-way would be classified, and the fact that land borders a parkway would be considered in its management.

These guidelines provide a framework for the development of management policies and practices for all types of outdoor recreation situations. While the specific management policies recommended are most applicable to public areas, the underlying concept of recreation zoning has relevance for private areas as well.

The Commission believes that the principles of this system are essential to outdoor recreation management if future needs are to be fully met and the quality of the physical resource base maintained. It is convinced that these principles will become more meaningful, and their application more essential, as pressures increase and as demands become more diversified. It urges adoption of the classification system and application of the policies which it contains by both public and private landowners. It also urges that classifications by different landowners be harmonized to fit into a broad over-all program for a State or region.

Recommendation 6–1: *The following system of classifying recreation resources should be adopted and applied to aid in the management of recreation resources, to enhance the quality of recreation opportunities, and to facilitate the orderly development of recreation areas.*

Class I—High-Density Recreation Areas

Areas intensively developed and managed for mass use.

Class II—General Outdoor Recreation Areas

Areas subject to substantial development for a wide variety of specific recreation uses.

Class III—Natural Environment Areas

Various types of areas that are suitable for recreation in a natural environment and usually in combination with other uses.

Class IV—Unique Natural Areas

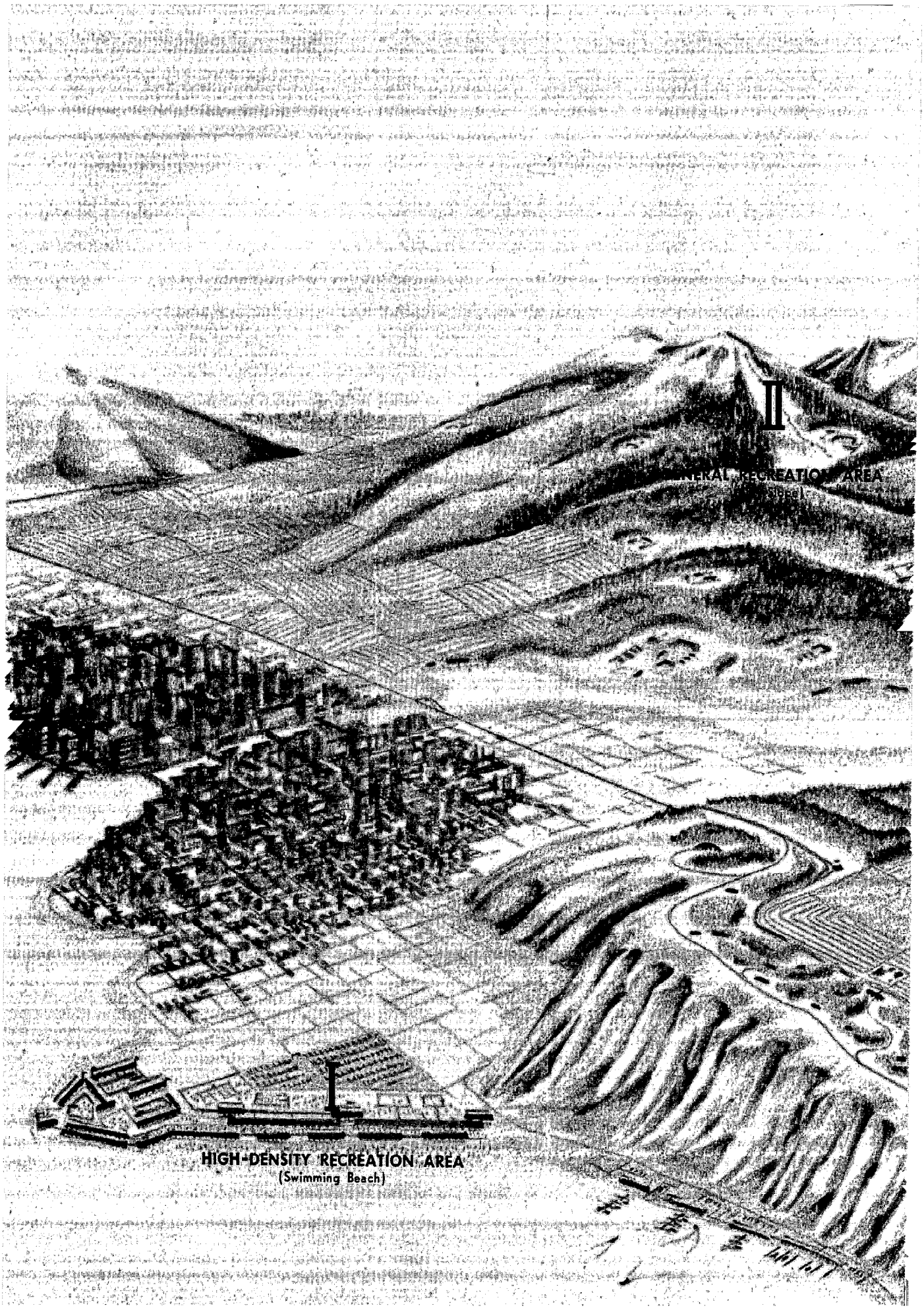
Areas of outstanding scenic splendor, natural wonder, or scientific importance.

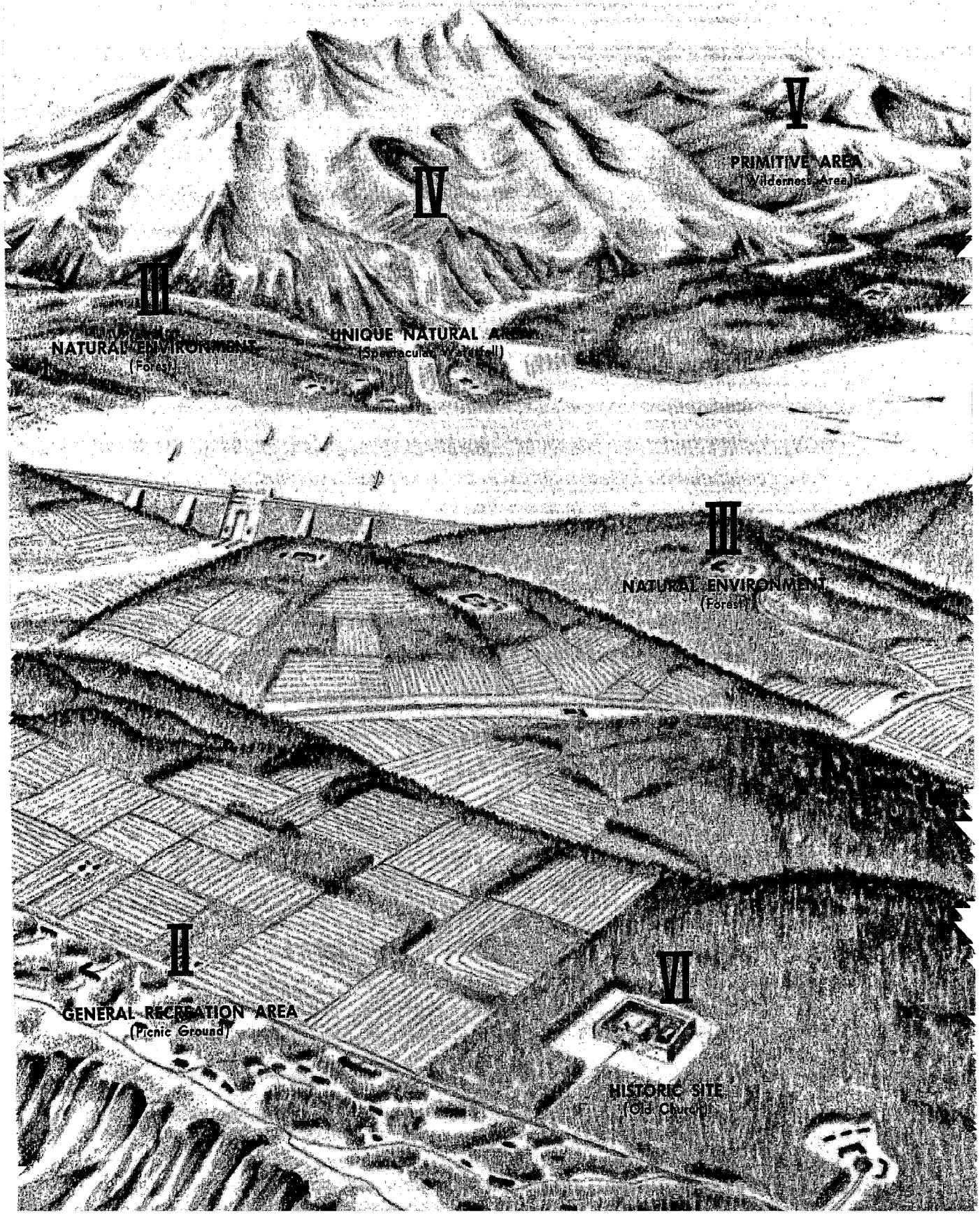
Class V—Primitive Areas

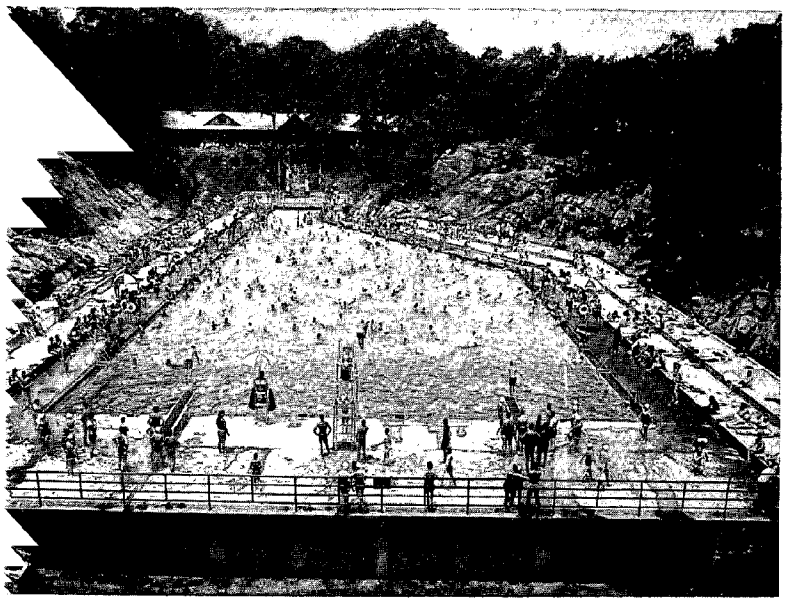
Undisturbed roadless areas, characterized by natural, wild conditions, including "wilderness areas."

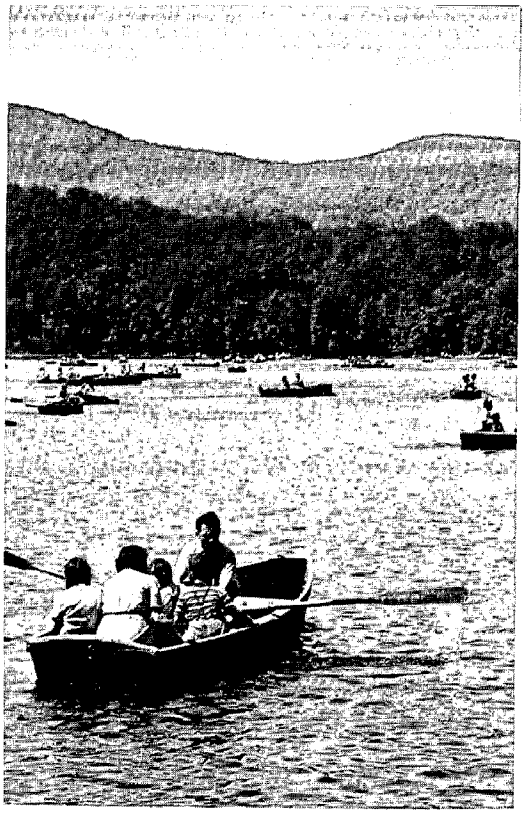
Class VI—Historic and Cultural Sites

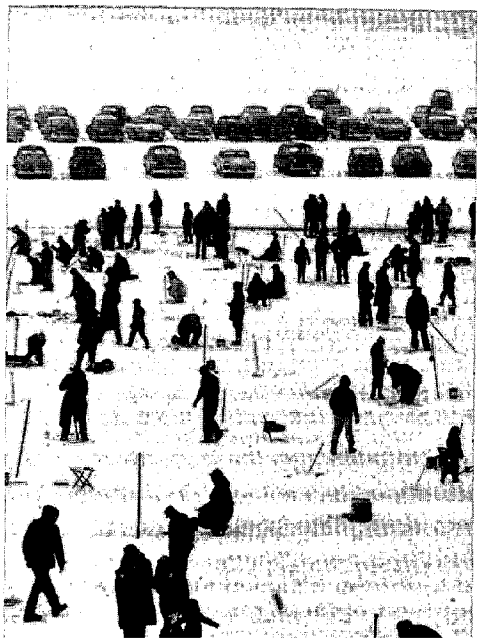
Sites of major historic or cultural significance, either local, regional, or national.

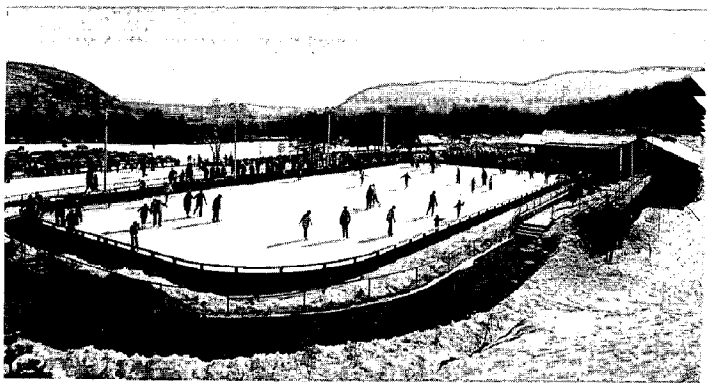

II
GENERAL RECREATION AREA
(Picnic)
I
HIGH-DENSITY RECREATION AREA
(Swimming Beach)


V
PRIMITIVE AREA
(Wilderness Area)
IV
III
NATURAL ENVIRONMENT
(Forest)
UNIQUE NATURAL AREA
(Spectacular Waterfall)
III
NATURAL ENVIRONMENT
(Forest)
II
GENERAL RECREATION AREA
(Picnic Ground)
VI
HISTORIC SITE
(Old Church)



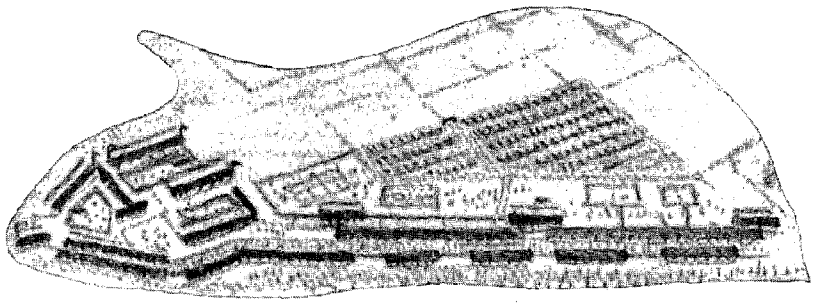






CLASS I AREAS

CLASS I—HIGH-DENSITY RECREATION AREAS



These areas are characterized by a high degree of facility development, which often requires heavy investment. They are usually managed exclusively for recreation purposes. Developments may include a road network, parking areas, bathing beaches and marinas, bathhouses, artificial lakes, playing fields, and sanitary and eating facilities. Such developments provide a wide range of activities for many people. They are particularly suited for day and weekend use. Although subject to heavy peakload pressures at certain times, they often sustain moderate use throughout the year.

These areas are generally located close to major centers of urban population, but they also occur occasionally within units, such as national parks and forests, remote from population concentrations. There are no specific size criteria, and there is great variation in size from one area to another.

Class I recreation areas are commonly held under municipal, county, regional, or State ownership. Many commercial resorts have similar characteristics and

collectively provide a significant portion of Class I opportunities.

Typical examples of Class I areas are portions of Palisades Interstate Park, New Jersey and New York; Jones Beach, New York; parts of the Cook County Forest Preserve, Illinois; Huntington Beach State Park, California; Patapsco State Park, Maryland; the beach and boardwalk area in Atlantic City, New Jersey; and the Colter Bay recreation center in Grand Teton National Park, Wyoming.

Recommendation 6–2: *Local governments, with the help of other levels of government and private enterprise, should give particular attention to the provision of Class I areas near centers of urban population.*

A major need of the Nation will be that of urban communities for readily accessible recreation.

Other demands for Class I lands for such purposes as residential, industrial, highway, and agricultural development will increase sharply during the next 40 years, particularly in metropolitan concentrations. Consequently, State and local governments and planning agencies will have to act promptly and to be increasingly energetic in their programs of acquisition and development to meet future needs for Class I opportunities.

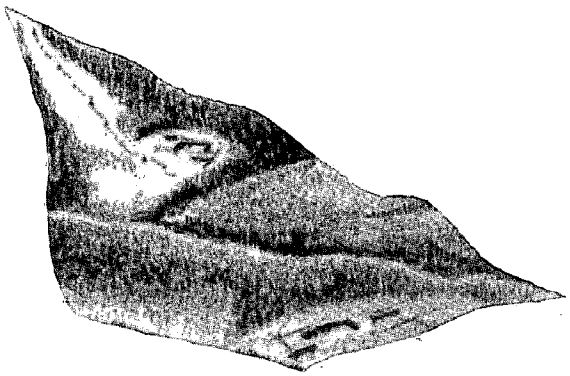
A given area near a metropolitan center may be suitable either for Class I recreation activities or for residential development. Which use should be chosen depends both on its potential value for each purpose and on the availability of other areas suitable for each purpose. Since areas of outstanding value for high-density recreation are likely to be more scarce than attractive residential areas in the vicinity of large cities, the factor of relative availability is apt to weigh heavily in the decision.

Recommendation 6–3: *Metropolitan, regional, and State planning and managerial agencies should act to ensure high standards in the development of Class I areas.*

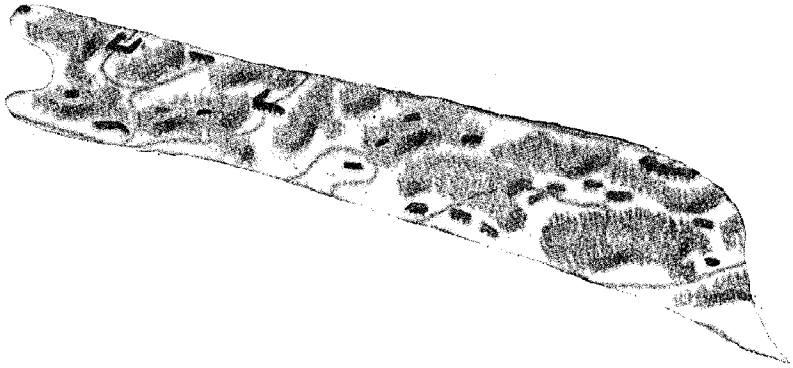
It is difficult to provide for high-density use without sacrificing the attractiveness of the environment, but skillful design and adequate investment can help overcome obstacles, as has been done in the Palisades Interstate Park. Management policies on Class I areas should be flexible and responsive to varying public demands. However, high standards of design and services should be insisted upon to avoid the development of undesirable and poor quality facilities.

Recommendation 6–4: *Limited Class I opportunities should be provided in national and State parks and forests whenever necessary to preserve the integrity of areas in other classes and to provide essential opportunities and services.*

Although Class I developments are generally associated with urban areas, they should occasionally be provided in certain larger administrative units such as parks and forests when these are located far from population centers. High-density areas sometimes furnish a means of avoiding overconcentration of people and facilities in Class III and Class IV areas.



CLASS II—GENERAL OUTDOOR RECREATION AREAS



Class II areas provide a wider range of opportunities than Class I sites and usually involve more extensive, less crowded use. Their special feature is the ability through development of facilities to sustain a large and varied amount of activity, such as camping, picnicking, fishing, water sports, nature walks, and outdoor games. They are found under both private and public ownership and accommodate a major share of all outdoor recreation. Included are portions of public parks and forests, public and commercial camping sites, picnic grounds, trailer parks, ski areas, resorts, streams, lakes, coastal areas, and hunting preserves. These areas range in size from several acres to large tracts of land and are popular for day, weekend, and vacation use.

Class II areas encompass a wide variety of physical resources that have been or can be developed and managed to provide a diversity of recreation experiences. One of their distinctive characteristics is that they are always equipped with some man-made facilities, which may vary from the simple to the elaborate. Campgrounds, for example, may have only the barest necessities for sanitation and fire control or they may have ample and carefully planned facilities such as cabins, hot and cold running water, laundry equipment, and stores. There may be a museum and a small library. Entertainment may be furnished. There may be playing fields for children and sometimes for adults.

Trailer parks may have the same conveniences as those on the outskirts of a city. Ski areas may have permanent tows and buildings that provide for rest and refreshment. At lakes, reservoirs, and seashores, there may be well-equipped marinas, which provide not only boats but gear for fishing, skindiving, and water skiing. Summer homes may be shacks or palaces. Hunting preserves may

CLASS II AREAS

provide lodges for their members and guests. Dude ranches and luxury hotels may provide more than the comforts of home.

The wide variety of activities and facilities characteristic of general outdoor recreation areas (Class II) requires that management objectives be stated in very broad terms. Many factors, particularly the nature of the resources and the prospective demand, must be taken into consideration in determining for what purposes these areas will be used and how intensively they will be developed.

Public areas in this class should be managed to provide a wide range of outdoor opportunities in a relatively natural setting. The principle of activity zoning should be utilized within Class II areas to reduce conflicts among recreation activities, such as between swimming and motorboating, or between camping and field sports. Facilities and services should be dispersed to maximize use of the entire area.

Future needs for outdoor recreation, particularly in the growing metropolitan areas, will create pressures for more general (Class II) and high-density (Class I) recreation areas. Portions of many State and local parks and forests have potential for greater development and use as Class II and occasionally Class I areas. These possibilities should be explored with full consideration of other recreation as well as nonrecreation values that might be lost through extensive development of Class I and Class II activities. A balance among the several classes should be sought.

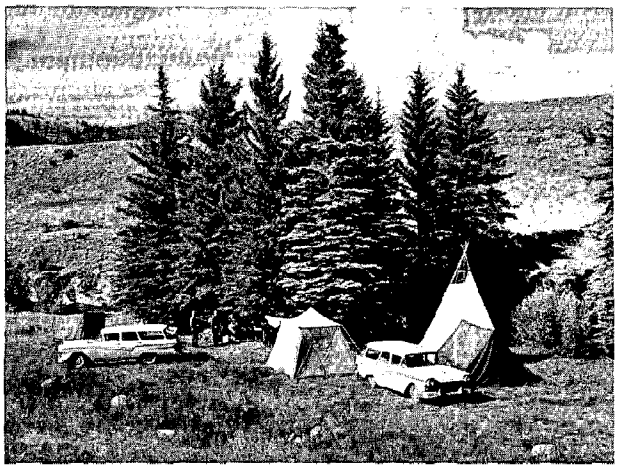
Recommendation 6–5: *Additional portions of national and State parks and forests should be zoned into general outdoor recreation areas (Class II) in order to provide a wider range of recreation activities and services and to protect Class III and Class IV areas.*

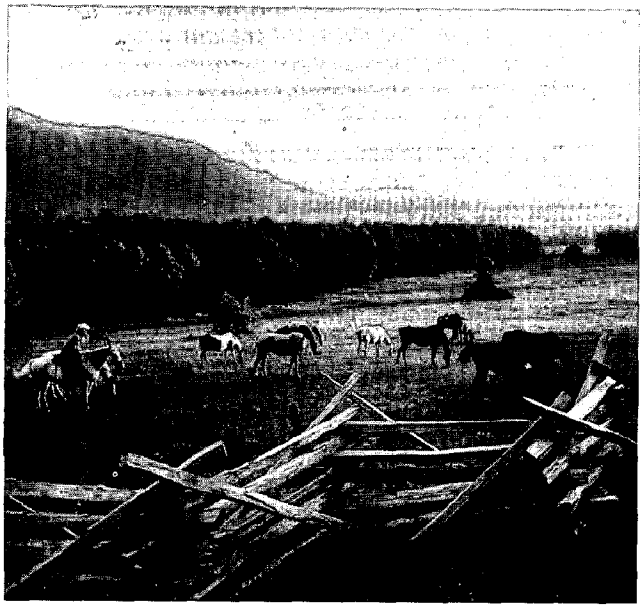
At the national and State levels, many resources in the park and forest systems should be classified and developed in order to accommodate this broad objective. This action should concentrate typical Class II activities in localized Class II areas and thus make it possible to preserve the natural environment and the unique features of Class III and Class IV areas respectively.

Recommendation 6–6: *Public agencies responsible for the development of land and water resources in which recreation does not constitute the primary value should, wherever practicable, adjust their management practices and planning procedures to provide for general recreation development (Class II areas).*

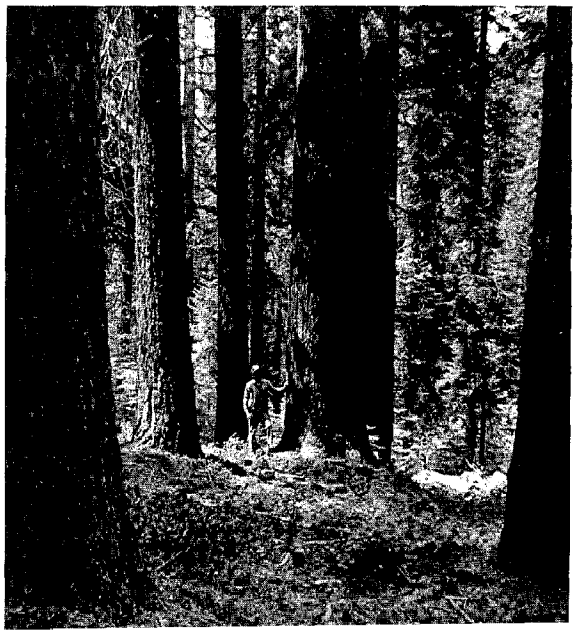
Class II areas can frequently be established on portions of municipal water supply lakes and reservoirs; Federal, State, and industrial reservoir areas; and many streams and lakes. In most cases, their recreation potential has not been fully realized.

State and local planning authorities should establish closer working relationships with other public agencies in order to provide increased Class II recreation opportunities. Outdoor recreation planning should be included in preliminary highway design and location, water resource developments, general urban expansion, and other land and water uses.

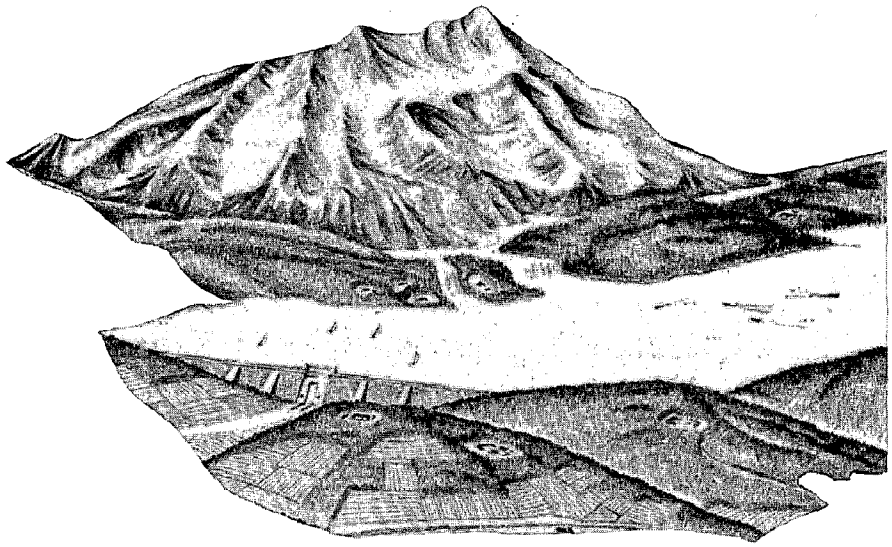




CLASS III AREAS



CLASS III—NATURAL ENVIRONMENT AREAS



Resources in this class represent a transition between general (Class II) and primitive (Class V) areas. The primary recreation management objective should be to provide for traditional recreation experience in the out-of-doors, commonly in conjunction with other resource uses. It should encourage users to enjoy the resource "as is," in a natural environment in which man has to fend largely for himself.

Class III areas occur throughout the country and in terms of acreage constitute the largest class in both public and private ownership. They commonly support grazing, lumbering, or mining, in addition to recreation. There are also many areas in national and State parks managed exclusively for recreation purposes that involve primarily enjoyment of the natural environment. Despite this limited use, the types of outdoor recreation experience provided qualify them for inclusion in Class III.

There are no size criteria for areas in this class, which may include an entire ranger district in a national forest or a similar area in a national park or privately owned timberlands. Many areas suitable in part for assignment to this class, such as portions of the Allagash country of northern Maine and cutover areas in the northern Lake States, have been repeatedly logged, but their natural characteristics remain relatively unchanged. This in part distinguishes them from Class II resources. Public lands of this category often adjoin unique natural (Class IV)

and primitive (Class V) areas in national and State parks and forests, as is the case in the Grand Teton National Park and the Superior National Forest.

Typical recreation activities are hiking, hunting, fishing, camping, picnicking, canoeing, and sightseeing. In contrast to Class II areas, planning and development in Class III areas should emphasize the natural environment rather than the provision of man-made facilities. Developments on Class III sites should include provision of access roads, trails, and basic but not elaborate improvements necessary for camping and related activities. Comparable types of development on private lands should be encouraged.

Many extensive areas of land, both in public and private ownership, are capable of providing recreation opportunities of this type in harmony with other uses. The only special measures necessary would be for fire control, safety, and the prevention of vandalism. For example, some areas might be temporarily closed to the public during periods of extreme fire hazard, or public use of logging roads might be stopped while logging operations are in progress.

Recommendation 6–7: *Federal, State, and local recreation and land managing agencies should reexamine their holdings to determine the areas suitable for inclusion in Class III.*

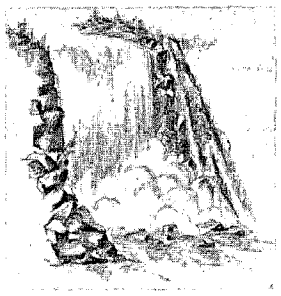
Natural environment areas (Class III) have great potential for meeting our growing national requirements for outdoor recreation. Many designated public recreation areas are now managed without conscious recognition of the concept of recreation zoning. This has often resulted in overconcentration of use in limited areas, particularly those of Class IV type, while adjoining areas of Class III or Class II potential have gone virtually unused. In order to promote fuller utilization of these areas and to increase opportunities for basic experiences in the outdoors, greater attention should be given to identification and use of Class III areas.

Many Federal and State forest, wildlife, and grazing lands are suitable also for Class III recreation management. Public agencies should reexamine their management practices in light of the classification concept, particularly in those sections of the country where the demand for outdoor recreation is heavy.

Recommendation 6–8: *Recreation developments on Class III lands should be limited to basic facilities that are in keeping with the natural features of each area.*

Future developments in Class III areas should emphasize the natural environment and encourage "close to nature" experiences in the out-of-doors. Under this policy, commercial operations such as resorts, trailer parks, marinas, and entertainments would be excluded. Where provided, overnight facilities would be simple and in keeping with the natural environment. Emphasis would be placed upon providing accessibility through the construction of secondary roads, trail systems, and simple campsite facilities, which would be widely dispersed to encourage use of the entire area. If overconcentration of facilities and services can be avoided, the problem of crowding can be minimized, and the quality of the recreation experience enhanced.

CLASS IV—UNIQUE NATURAL AREAS [1]



This class consists of individual areas of remarkable natural wonder, high scenic splendor, or scientific importance. More than one such area may be included in a single large administrative unit, such as a national park or forest. The preservation of these resources in their natural condition is the primary management objective. Adequate access for the enjoyment and education of the public should be provided wherever consistent with the primary objective.

The scenic sites and features included in this class are limited in number and are irreplaceable. They range from large areas within Yosemite Valley and the Grand Canyon to smaller sites such as Old Faithful in Yellowstone National Park; Old Man of the Mountain, New Hampshire; the Bristle Cone Pine Area in the Inyo National Forest, California; and parts of Cape Cod.

The size of unique natural areas (Class IV) will depend upon the physical features of the central attraction. In general, the areas should be of sufficient size to ensure an appropriate atmosphere and to protect the unique characteristics. They will often occupy only part of a national or State park or forest or other sizable administrative unit. Under some circumstances, the "line of vision" concept should be used in determining the desirable size of areas in this class, that is, inappropriate developments would not be visible from within a Class IV site. Extensive natural landscapes usually would not be considered Class IV areas.

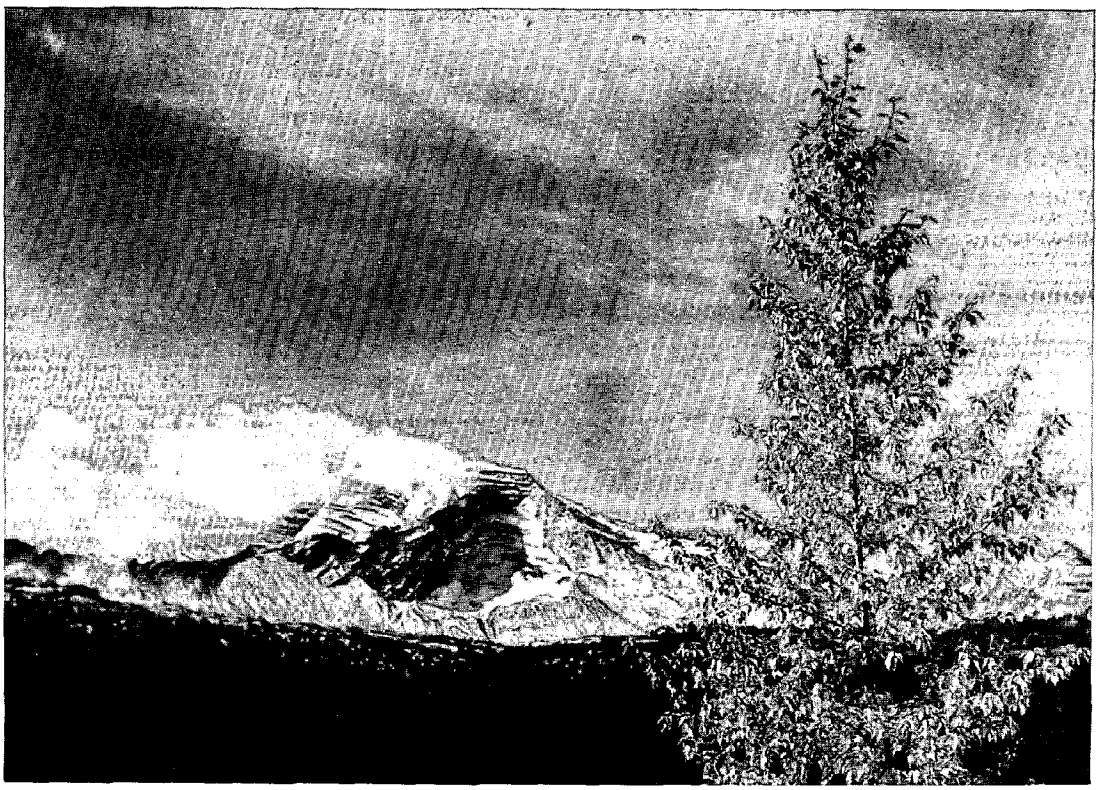
In recent years, parts of many unique natural areas have been subjected to extremely heavy use, which will tend to increase. If the quality of these resources is to be maintained under such pressures, stringent management regulations will be required. The kinds and amount of use that the areas can sustain are limited, and there is a critical point beyond which further use brings about deterioration. This point will vary from one site to another, but in all cases the recreation activities that can be permitted must be measured in terms of the preservation of the particular site, rather than in terms of public demands.

Through limitation of the kinds of recreation activity permitted, the amount of appropriate uses might be expanded significantly. For example, by exclusion of food and lodging facilities from the immediate vicinity of the central attraction, undesirable and damaging crowding can be reduced and all activity focused

[1] There are certain resources of this type which are and should be maintained purely for scientific research purposes. These "natural areas" are not available for outdoor recreation and are therefore not included in this classification system. However, the Commission wishes to underscore the importance of maintaining such ecological communities and to lend its support to their establishment.

upon enjoyment of the outstanding natural features of the particular site. This management policy would permit a larger number of people to benefit from the values for which the resource was initially selected and dedicated.

Recommendation 6–9: *Unique natural areas (Class IV) should be preserved for inspirational, educational, or scientific purposes. General activities such as swimming, picnicking, motorboating, camping, hunting, and fishing should be excluded. Food, lodging, automobile service, and other facilities should generally be located outside the immediate area.*

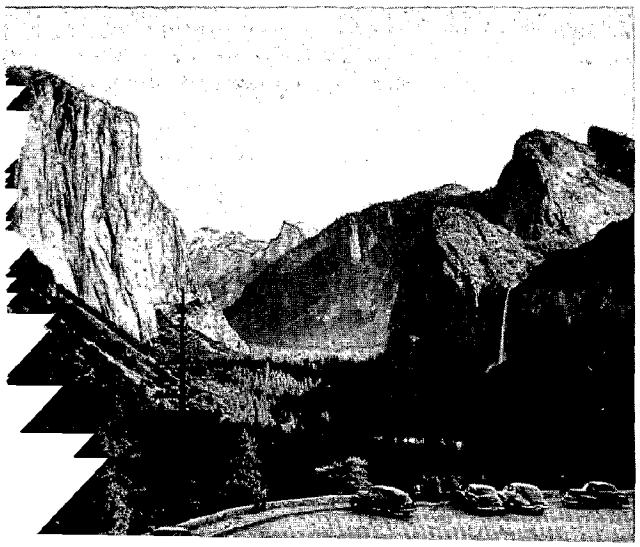


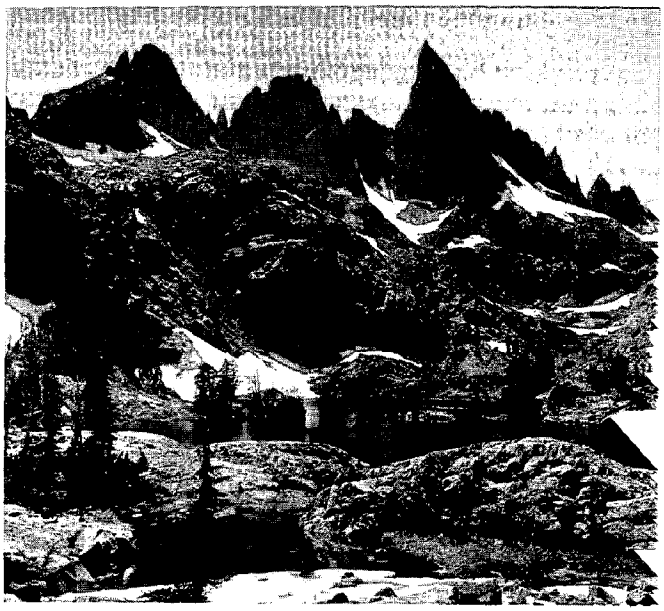
Class IV areas should be managed exclusively for the preservation of the particular values that justify placing them in this class. Public agencies should evaluate the recreation uses now permitted on the areas under their jurisdiction in order to make certain that Class IV areas are managed only for Class IV purposes. For example, areas within the national parks should be appraised in order to establish appropriate zones of use and activity. Clearly, not all of the acreage within the parks would meet Class IV qualifications.

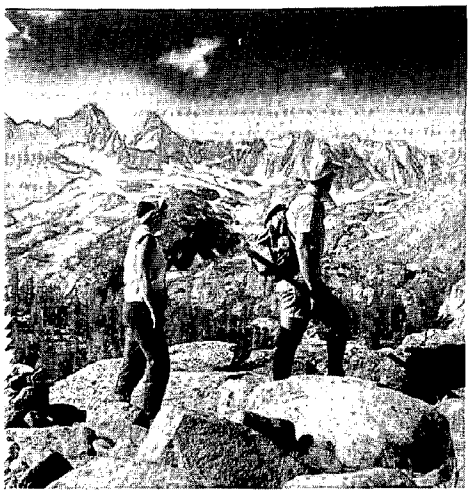
Improvements in these areas should be held to the minimum required for public safety and the protection of the resource, and they should be planned to harmonize with the physical environment of each site. Care should be exercised to prevent overdevelopment. Access roads, parking areas, and sanitary facilities should be located on the periphery of the area, and the public encouraged to walk into the area proper wherever feasible.

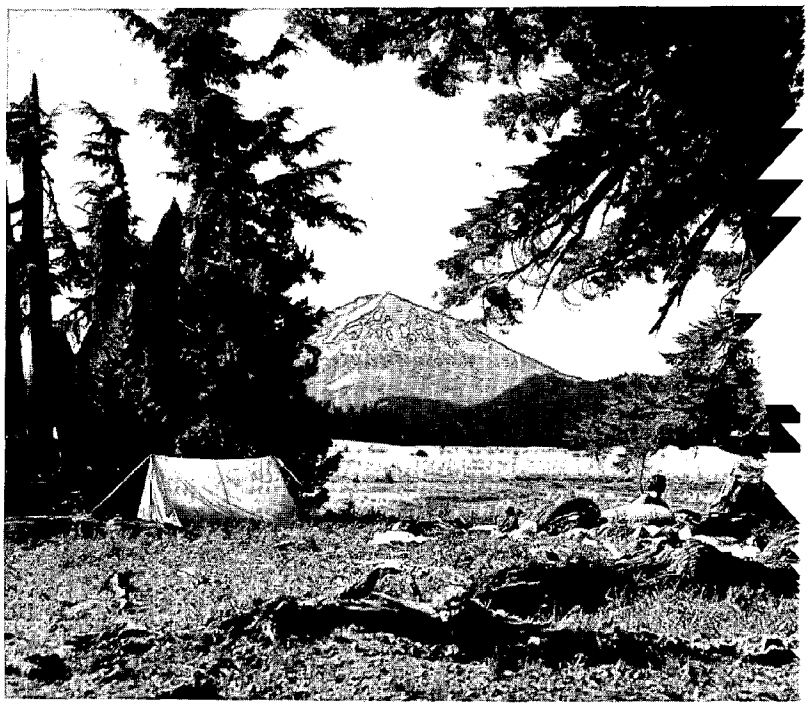
CLASS IV

AREAS





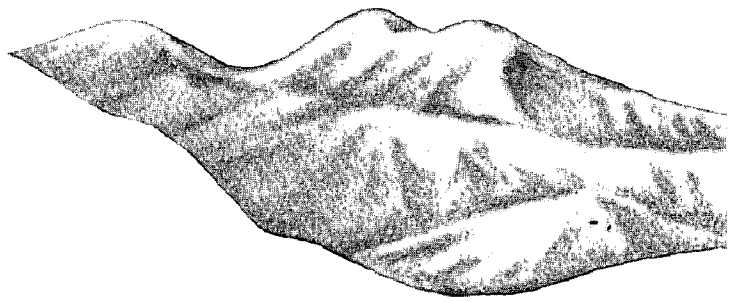




CLASS V

AREAS

CLASS V—PRIMITIVE AREAS



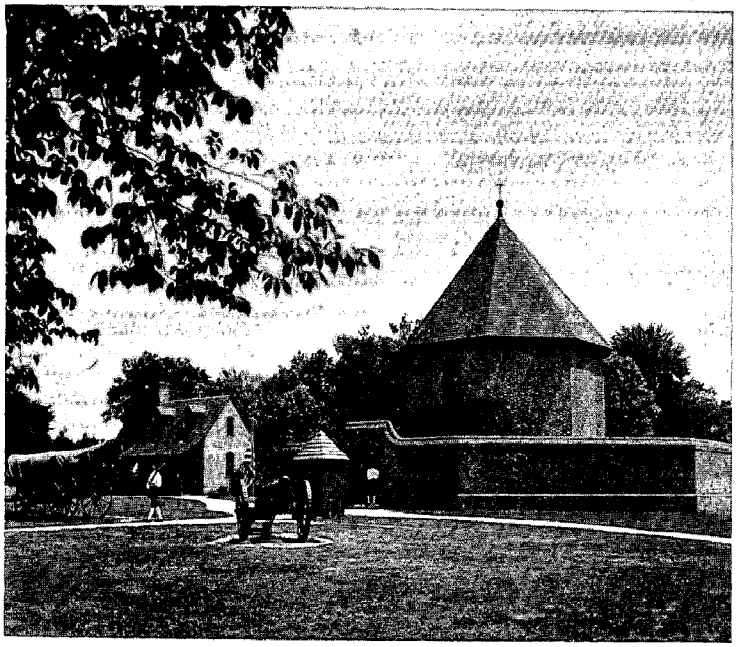
The essential characteristics of these areas are that the natural environment has not been disturbed by commercial utilization and that they are without mechanized transportation. Their natural, wild, and undeveloped characteristics distinguish them from all other recreation resources included in this system of classification. They may or may not be of the unique quality characteristic of Class IV areas. Size is a limiting factor only to the extent that the area must be large enough and so located as to give the user the feeling that he is enjoying a "wilderness experience"—a sense of being so far removed from the sights and sounds of civilization that he is alone with nature. The size will vary with different physical and biological conditions and will be determined in part by the characteristics of adjacent land. Size will also vary in different parts of the country.

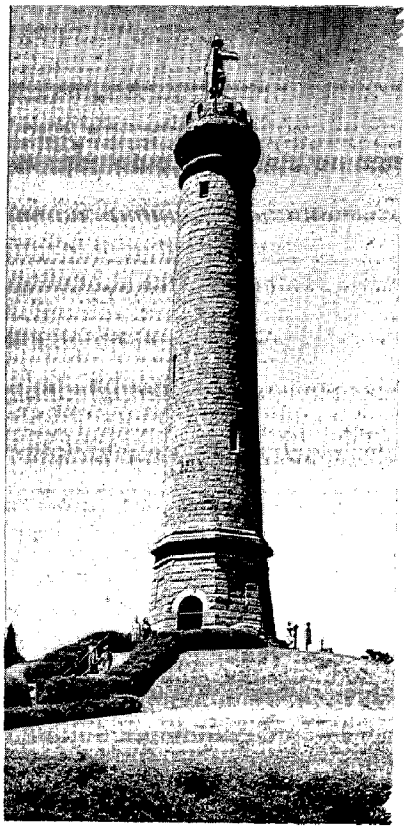
Areas in this class are inspirational, esthetic, scientific, and cultural assets of the highest value. They, and they alone, satisfy the longing to leave behind for a time all contact with civilization. Fortunately, they are a resource of which the country still has an abundant supply and which it can afford to preserve from other uses for the benefit of future generations. At the same time, it must be recognized that there are some areas which meet the physical requirements of this class but which for economic and social reasons are more valuable for some other purposes.

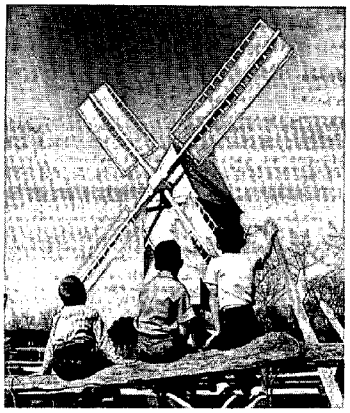
Recommendation 6–10: *Primitive areas (Class V) should be carefully selected and should be managed for the sole and unequivocal purpose of maintaining their primitive characteristics.*

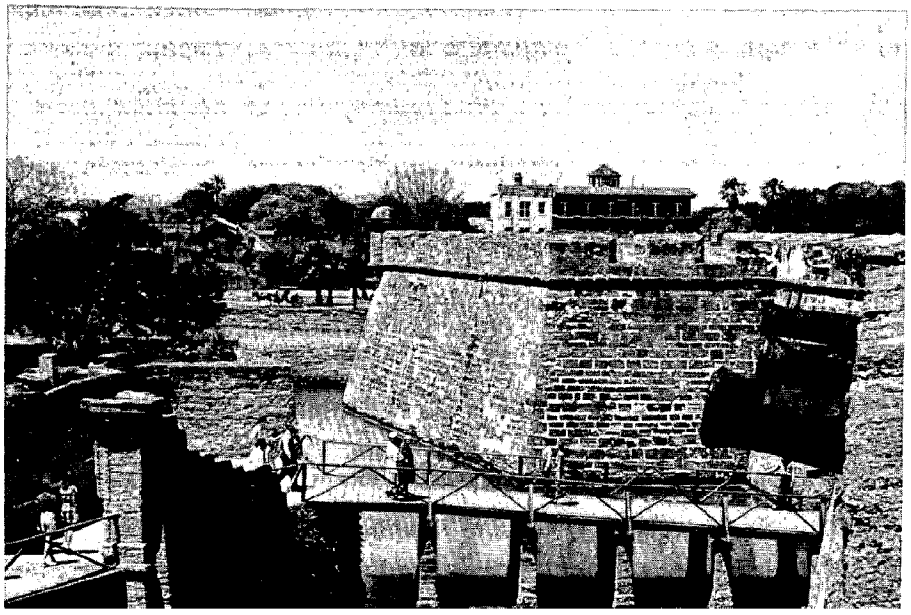
Once an area has been placed in Class V, it should be managed so as to preserve the primitive condition and the isolation that qualified it for inclusion. There should be no development of public roads, permanent habitations, or recreation facilities of any sort. Their avoidance is the keystone of management. Mechanized equipment of any kind should be allowed in the area only as needed to assure protection from fire, insects, and disease. Any economic use of the area, such as the grazing of livestock, that may exist at the time of its establishment should be discontinued as soon as practicable and equitable, and no further commercial utilization of the resources should be allowed.

The preservation of primitive areas, including "wilderness areas," is discussed further under recommendation 8–6, in chapter 8.





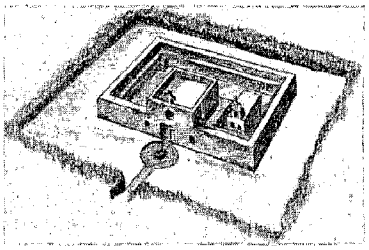




CLASS VI

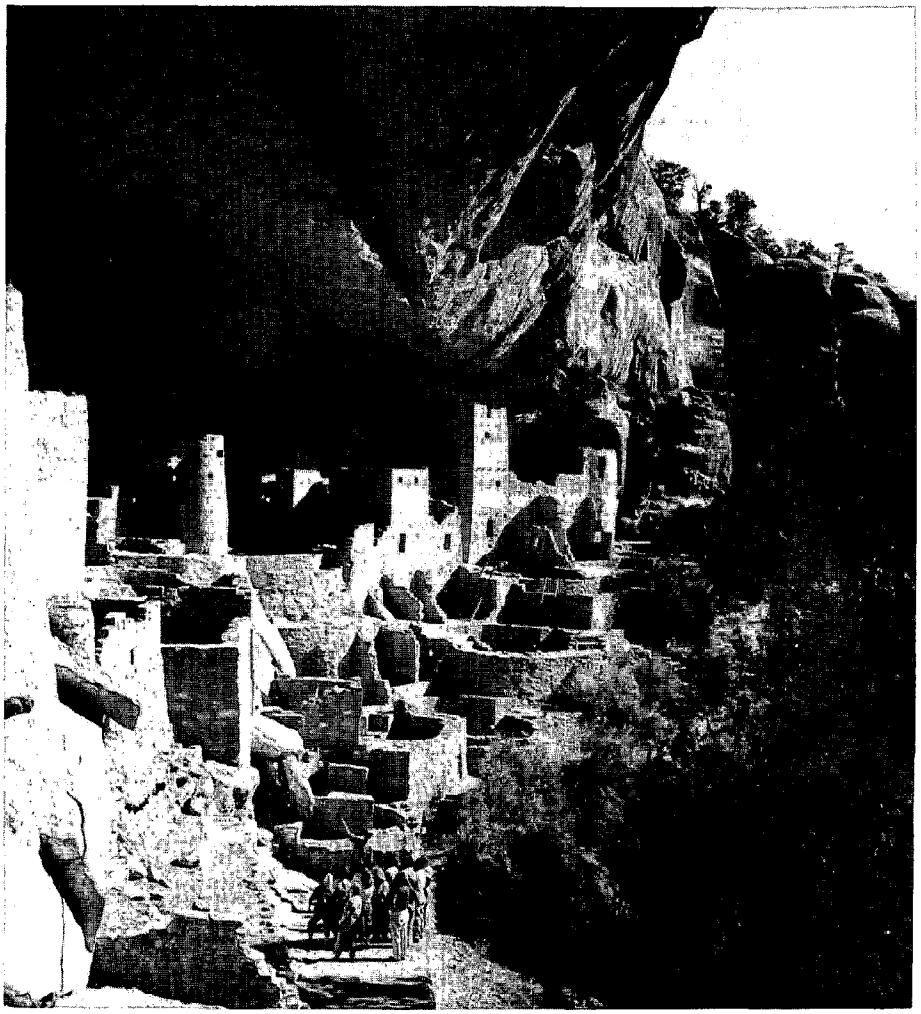
AREAS

CLASS VI—HISTORIC AND CULTURAL SITES



These are sites associated with the history, tradition, or cultural heritage of the Nation which are of sufficient significance to merit their preservation. Many are already under the jurisdiction of the National Park Service, State and local agencies, and private organizations. They are of local, regional, and national importance. Examples are The Hermitage, Mount Vernon, the Civil War battle areas, the historic Indian dwellings in Mesa Verde National Park, and the Picture Rocks in Michigan.

Although these resources do not provide outdoor recreation opportunities in the usual sense, they are closely associated with vacation travel, and hence are included in this classification system. The primary management objective should be to effect such restoration as may be necessary, to protect them from deterioration, and to interpret their significance to the public. Suitable access and prevention of overuse are equally essential.



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CHOOSING BETWEEN CLASSES

Most areas can be used for more than one purpose. When this is the case, several factors should influence the decision as to the best classification for any given area. Physical characteristics, location, economic and social considerations, and public needs for different kinds of recreation activity and for other uses of natural resources, together with the objectives of the owner, must be analyzed and evaluated in making a choice.

Mount Vernon could be placed in Class VI to assure its preservation as a historic shrine, or it could be placed in Class I (high-density recreation areas) to provide mass recreation for the people of the Washington metropolitan area. All of the virgin timber in a national forest could be placed in Class V (primitive areas) to prevent its ever being cut, or appropriate areas could be assigned to Classes II, III, and V (and perhaps to Class IV) so as to open them to a wide variety of recreation and other uses. Opinions may easily differ as to whether a given area is so unique in some respect that it should be placed in Class IV (unique natural areas) and subjected to only a limited form of recreation use, or whether it should be placed in Class II (general outdoor recreation areas) and Class III (natural environment areas) so as to provide a variety of recreation uses and perhaps other uses.

In extreme cases the decision is not difficult. Few, if any, will argue that any of our historic shrines should be turned into Coney Islands; that no more virgin timber on public lands should ever be cut; or that concrete roads should be built into, and elaborate campgrounds developed within, established wilderness areas. There are, however, many situations where the best use, or combination of uses, is not obvious. Decisions must then be reached by responsible planning and managerial agencies in the light of all relevant facts and considerations.

When the physical features and location of an area are such as to permit its classification in more than one class, it should be placed in the class which in the long run will produce the optimum contribution of values. This principle necessitates a comparison of different kinds of recreation values and of recreation values with other values. A few examples will illustrate its application.

The kinds of recreation activities typical of Class I (high-density) and Class II (general) areas are so similar that on the basis of their physical characteristics many areas could logically be zoned in either class. The choice will then depend primarily on the location and anticipated intensity of use. In general, areas near urban centers should be placed in Class I because the scarcity of available land necessitates mass use in order to accommodate as many people as possible. Preference for a Class II zoning grows steadily stronger as increasing distance from urban centers reduces population pressures and makes more land available. Generally speaking, Class I areas, with their inevitable crowding, are undesirable at any considerable distance from population concentrations and particularly so as enclaves in Class III (natural environment areas) or Class IV (unique natural areas).

Many areas are suitable either for the extensive use in a natural environment that is characteristic of Class III, or for the more intensive use with access to man-made facilities that is characteristic of Class II. In an area of considerable size, there is little difficulty in making adequate provision for both classes. The area as a whole can be designated as Class III, with Class II areas occurring on its

periphery and as enclaves. The included Class II areas (enclaves) should occupy sites particularly suited for some specific use, such as camping or skiing, and should be so located as not to encroach unduly on the natural environment of the surrounding Class III area.

Areas whose physical characteristics would permit their zoning in Class II, Class III, or Class IV are not unusual. However, the fact that Class IV areas are by definition unique, and therefore irreplaceable, argues strongly, almost unanswerably, in favor of placing all those that really qualify in Class IV. There are a few Class IV areas, such as the Yosemite Valley, which are so large that a limited number of facilities for food, lodging, and sanitation are essential to permit their legitimate and desirable use by the public. The minimum area needed for this purpose can be zoned as a Class II enclave within the larger Class IV area.

Areas suitable for zoning as either Class III (natural environment areas) or Class V (primitive areas) present an especially difficult problem. The former classification permits wider recreation use and also other uses, while the latter preserves truly primitive conditions. Class III should usually be given the preference where the need to make the area available for general recreation use or for economic utilization of its resources is clearly more urgent than the need for its preservation in primitive conditions. Where this situation does not exist, the Class V choice should be preferred, since once primitive conditions have been destroyed their restoration is virtually impossible.

RÉSUMÉ OF CLASS CHARACTERISTICS

High-density recreation areas (Class I) are usually, though not necessarily, located near urban centers. They may provide facilities for all kinds of recreation appropriate to the terrain, to the location, and to the accommodation of large numbers of visitors. The "mass" use of the area is its most distinguishing characteristic.

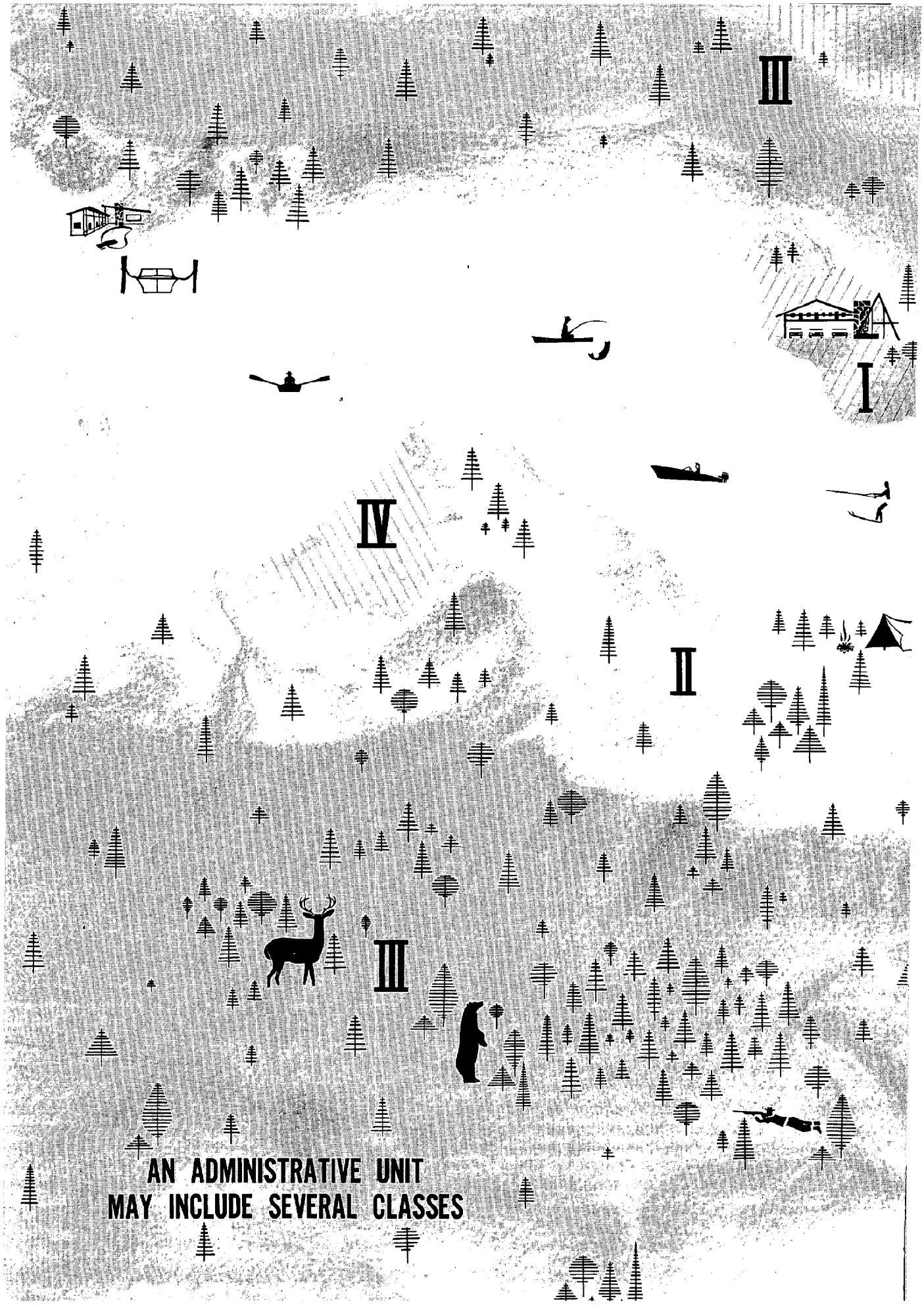
General outdoor recreation areas (Class II) utilize natural resources for the specific recreation activities for which they are particularly suited, irrespective of location. Generally, they are readily accessible and are equipped with a wide variety of man-made facilities, which may vary from the simple to the elaborate. Although use is often heavy, it seldom has the "mass" feature characteristic of Class I. Because of the localized nature of the activities, Class II areas may often occur as enclaves in Class III, occasionally (with very simple facilities) in Class V, and very rarely in Class IV.

Natural environment areas (Class III) are usually large compared with Class I and Class II areas, and recreation activities include those which are feasible in a natural environment with few or no man-made facilities. Scattered rather than concentrated use is normal. Utilization of resources for economic purposes is a common but not essential feature.

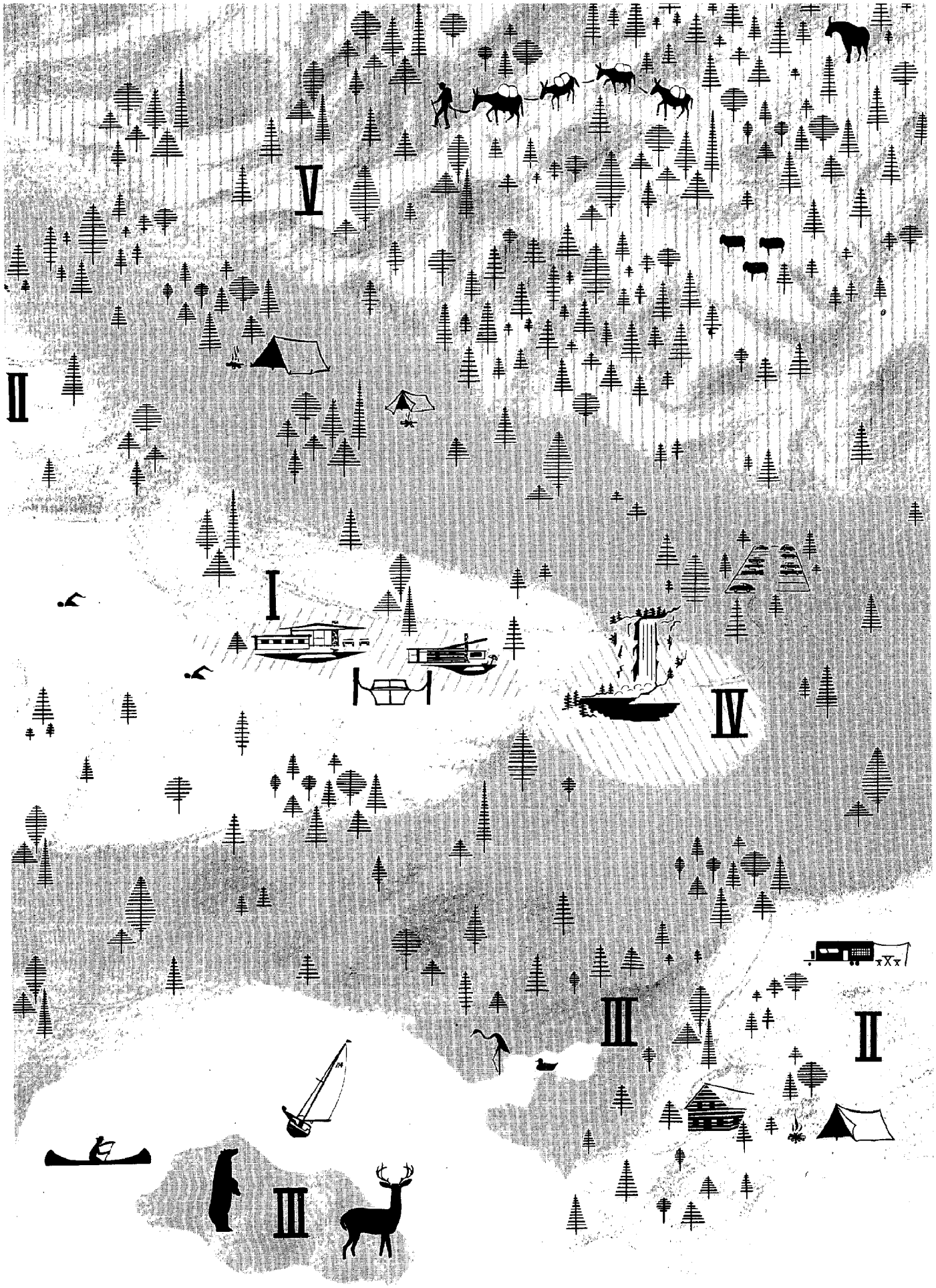
Class IV areas are unique with respect to scenic splendor, natural wonder, or scientific importance. Accessibility is important, but recreation activities are strictly limited to those which will not result in any lessening of the area's unique value.

Primitive areas (Class V) are open only to such developments and such uses as will not interfere with their undisturbed and primitive character.

Class VI areas are set aside and managed so as to make their cultural and



AN ADMINISTRATIVE UNIT
MAY INCLUDE SEVERAL CLASSES


V
II
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historic values available to as many people as possible without deterioration.

A noteworthy feature of the classification is the difference in the availability of the several classes for various recreation activities. Camping, for example, is possible in Classes I, II, III, and V although rather rarely in Class I. Hunting is a typical activity in Class III and Class V areas, except in national parks and monuments. Motoring for pleasure is common through Class III areas but is impossible through Class V areas.

One of the prime virtues of the classification system is that it makes possible the logical and beneficial adjustment of the entire range of recreation activities to the entire range of available areas. When physical conditions permit the classification of a given area in more than one class, the classification which promises the optimum combination of values in the long run should be selected.

CHAPTER 7

ORGANIZING FOR THE TASK

A BUREAU OF OUTDOOR RECREATION

Providing adequate outdoor recreation opportunities for Americans over the next 40 years is a major challenge that will require investment of money, resources, and work. Leadership, vision, and judgment will be needed to guide this investment into the most efficient channels. The present uncoordinated efforts cannot do the job. There must be a new agency of government at the Federal level to provide guidance and assistance to the other levels of government and to the private sector, as well as within the Federal Government itself.

Recommendation 7–1: *A Bureau of Outdoor Recreation should be established in the Department of the Interior.*

The broad function of the Bureau should be to consider the needs of the American people for all phases of outdoor recreation—within cities, in rural areas, and throughout the country. In the past, recreation planning and development have too often been controlled chiefly by the physical resources available. This orientation has largely determined not only the location but the nature and quality of the opportunities provided. But in view of the changing and expanding role of recreation and leisure in the years to come, it is important that planning for outdoor recreation emphasize more strongly the needs of people. Resource development programs that affect recreation opportunities, both directly and indirectly, should be modified to accommodate these needs. The basic purpose of a national Bureau of Outdoor Recreation would be to provide the leadership, coordination, and assistance required to realize this goal.

Why a New Bureau

There are now more than 20 Federal agencies with programs involving some aspect of outdoor recreation. A similar multiplicity is found among State agencies. While the programs of these agencies are generally well planned in themselves, little thought is given in any of them to the over-all development of outdoor recreation throughout the Nation.

Thus a complicated and difficult pattern of intergovernmental relations is created, as numerous Federal organizations seek to work individually and separately with a variety of State and local agencies. There is at present no focal point for coordination of recreation policy, planning, programs, or management. Over-all responsibility for initiating and guiding a national effort in outdoor recreation has never been explicitly assigned.

There are a number of alternative organizational arrangements by which this important responsibility could be assigned. After consideration of all possibilities, the recommendation for a new bureau in the Department of the Interior is made as the most likely to be accepted. A top-level commission or an independent

agency would in some respects be more effective in focusing attention upon the importance of outdoor recreation and in obtaining public support for programs. It would have advantages over a bureau in coordinating the programs of Cabinet-level departments and would be in a favorable position to handle Federal-State relations. Yet there is a general reluctance to establish independent administrative agencies or permanent commissions outside the Cabinet structure, particularly in the light of the large number of agencies which already report to the President and the many urgent matters which require his direct supervision.

It seems impracticable to charge an existing office with these new functions. The duties of the proposed Bureau, nationwide in scope and ranging from the coordination of planning to the administration of financial and technical assistance, could not be adequately carried out within the framework of any present agency.

These facts argue in favor of the establishment of a new bureau within an existing department. With authorizing legislation, such a bureau could, through the Secretary of its department, deal with agencies in other departments as well as with bureaus within the same department. The most effective location for the new Bureau is in the Department of the Interior. Its various programs of resource management, its general orientation, and the recreation experience of the National Park Service and other Interior bureaus make this the logical choice. Many other resource management agencies of the Federal Government are located within Interior, and much of the coordination function could be carried out within the Department.

This organizational change would not be a panacea for all the problems of outdoor recreation. There are difficulties inherent in placing responsibility for coordination of all Federal activities within a single bureau of any department.

The new Bureau's relations with Federal agencies that provide or affect outdoor recreation would be sensitive, at least at the outset. But the traditional organizational rivalries in this field must be overcome, and the creation of a new bureau would help, even though it is placed within the old competitive framework.

The Bureau would also work in close cooperation with non-Federal agencies, and particularly with the States, in ways discussed later in this chapter. Without this new organization, the achievement of over-all national planning, Federal coordination, the administration of an aid program, and coordinated research will be most difficult.

Its Creation and Composition

The Bureau of Outdoor Recreation should be created by vesting it with authority to carry out the functions proposed for it and transferring to it those national recreation planning responsibilities now lodged in the Secretary of the Interior and exercised by the National Park Service under the *Park, Parkway, and Recreational Area Study Act of 1936.*

The new Bureau should be headed by a director and should have a small, highly qualified planning and administrative staff in Washington. Wherever possible, the Bureau should be staffed by transfer of experienced personnel from existing agencies. Regional offices should be located so as to provide effective assistance to other Federal and State agencies.

FEDERAL AGENCIES WITH PROGRAMS INVOLVING SOME ASPECT OF OUTDOOR RECREATION

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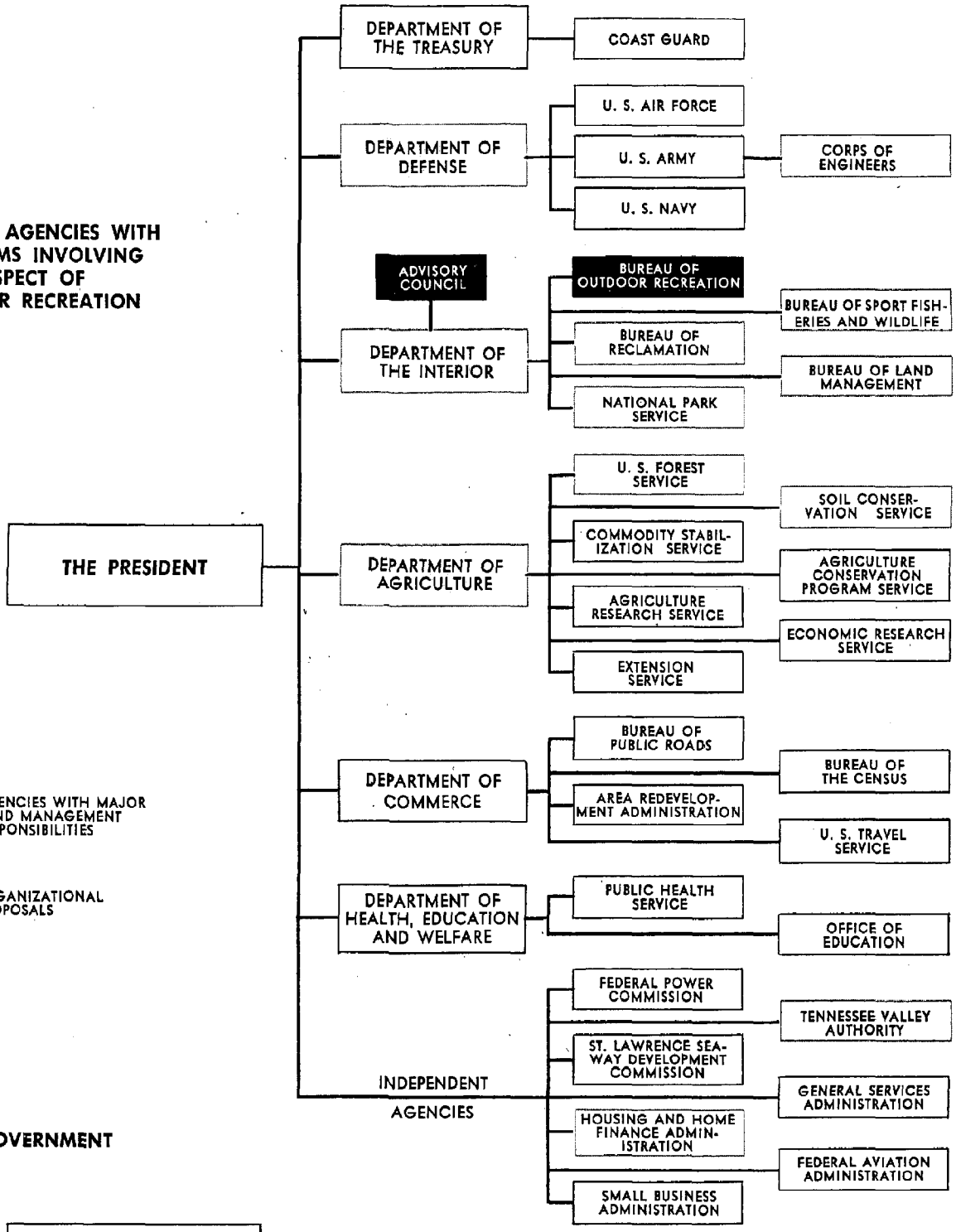
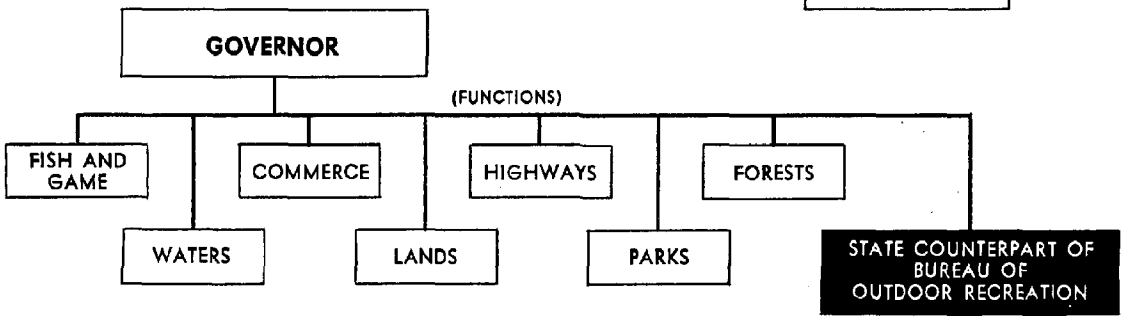


STATE GOVERNMENT



Recreation Advisory Council

To assure that recreation policy and planning receive attention at a high level and to promote interdepartmental coordination, there should be established a Recreation Advisory Council, consisting of the Secretaries of Interior, Agriculture, and Defense, with the Secretary of the Interior as chairman. These agencies are recommended for permanent membership on the Council since each has important and continuing responsibilities for the management and development of resources with major values for outdoor recreation. Other agencies, such as the Department of Commerce, Department of Health, Education, and Welfare, and the Housing and Home Finance Agency, would be invited to participate on an *ad hoc* basis when matters affecting their interests are under consideration by the Council.

The Recreation Advisory Council would provide broad policy guidance on all matters affecting outdoor recreation activities and programs carried out by the Bureau of Outdoor Recreation. The Secretary of the Interior should be required to seek such guidance in the administration of the Bureau. Acting within this policy, the Bureau of Outdoor Recreation, under the Secretary of the Interior, would work toward coordinating programs in the more than 20 Federal agencies and the 50 States.

FUNCTIONS OF THE PROPOSED BUREAU

The proposed Bureau would have six major functions: (1) coordinate related Federal programs; (2) stimulate and provide assistance in State planning; (3) administer grants-in-aid; (4) sponsor and conduct research; (5) encourage interstate and regional cooperation; and (6) formulate a nationwide recreation plan on the basis of State, regional, and Federal plans.

Coordinate Related Federal Programs

It is imperative that the Federal house be put in order. The goal is to assure coordinated and effective programs.

The role of the Bureau would be to review and coordinate the diverse Federal efforts. It would not engage in the management of any lands, waters, or facilities, which would continue to be the responsibility of the Federal resource agencies that now have those duties. The Bureau would have no control over the administrative activities of any existing department or agency. It would, however, be responsible for reviewing recreation developments connected with Federal lands and programs, and its written comments would accompany plans of other agencies submitted to the Executive Office and to the Congress. The proposed Recreation Advisory Council would serve to achieve cooperation among departments, and between the several departments and the Bureau.

Stimulate and Provide Assistance in State Planning

A basic function of the Bureau would be to encourage and stimulate comprehensive, statewide outdoor recreation planning. The achievement of this objective would depend largely upon the cooperation of the States. Each should charge an organization or official with responsibility and authority for carrying out statewide planning in the field of outdoor recreation. This center of

State leadership would also serve as the focal point for working with the Federal Bureau of Outdoor Recreation.

Although major responsibility for the development of State plans must rest with the States, the Bureau of Outdoor Recreation would provide guidance and technical assistance and would assist in developing data and information upon which plans can be based. Both organizations (Federal and State) should be permanent agencies, in order to assure continuous planning and coordination. Plans would be developed in cooperation with other managerial agencies, both at State and local levels—not imposed upon them.

Parts of the planning job might be referred to appropriate Federal agencies by the Bureau of Outdoor Recreation. In other instances the Bureau might organize planning teams, composed of specialists from other agencies, to work with the States. In no case would the Bureau undertake intensive site planning, such as would be involved in the design and layout of specific facilities.

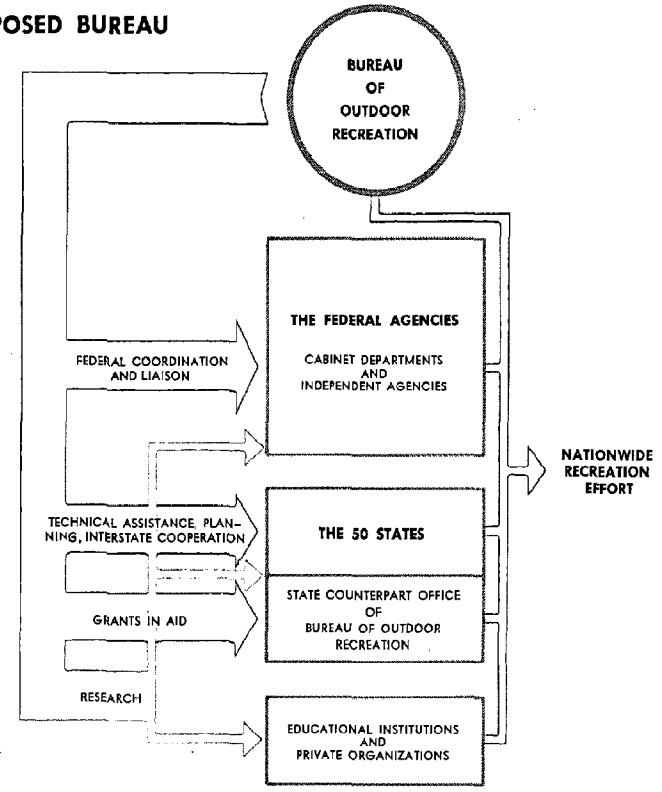
Administer Grants-in-Aid

State and local governments will need financial help from the Federal Government if they are to carry the major burden of planning and executing recreation programs. Federal grants-in-aid in support of both planning efforts and resulting programs would be administered by the Bureau of Outdoor Recreation. This responsibility would substantially strengthen its function of encouraging State planning. Details of the proposed grants-in-aid program are discussed in chapter 12.

Sponsor Research

An effective research program dealing with all phases of outdoor recreation is imperative. Research and experimentation are necessary if optimum use of land and water recreation resources is to be realized.

FUNCTIONS OF PROPOSED BUREAU



Some of the major studies the Commission has undertaken, such as the nationwide inventory and the National Recreation Survey, should be repeated periodically. This would be one of the functions of the Bureau.

The Bureau would also have authority to recommend and to sponsor research by qualified institutions. Extensive use would be made of the excellent capabilities of such agencies as the Economic Research Service and the Forest Service in the Department of Agriculture, the National Park Service and several other Bureaus in the Department of the Interior, the Bureau of the Census, the Public Health Service, State agencies, colleges and universities, foundations, and other organizations.

To assist the Bureau in the selection, scheduling, and coordination of its research projects, the Commission recommends that there be established a Research Advisory Committee such as is used by other Federal agencies. This committee should be made up of professional people drawn from both government and private groups. It would concern itself only with policies and programs affecting research.

A further critical need is to publish and otherwise disseminate the results of research and to inform public and private agencies of work underway in the field of outdoor recreation. The proposed Bureau could help in these directions. Specifically, it would provide a central point for channeling available data and new ideas and methods pertaining to planning, organization, facilities, operation, and administration of all outdoor recreation activities to interested parties, both public and private.

Encourage Interstate and Regional Cooperation

Interstate and regional cooperation is sometimes an essential factor in meeting outdoor recreation needs. The proposed Bureau should encourage such cooperation. It could materially assist States and regions that wish to develop recreation plans on a cooperative basis. It would be in an excellent position to consider regional needs and to bring to the attention of two or more States opportunities for joint action that would be to their common advantage. It would also serve as a means of liaison for States wishing to enter into interstate compacts requiring Congressional consent.

Formulate a Nationwide Recreation Plan

As Federal, State, and regional plans are developed, the Bureau of Outdoor Recreation would formulate an integrated nationwide plan with regional provisions, which could be used by the Bureau and cooperating agencies for over-all planning and programing purposes. As a part of this planning process, the Bureau would—

Maintain estimates of present and future trends in supply and demand.

Identify critical outdoor recreation problems and propose steps for their solution.

Encourage planning and action agencies—Federal, State, and private—to adopt programs designed to attain the many benefits of outdoor recreation.

CHAPTER 8

FEDERAL POLICIES AND PROGRAMS

CHARACTER OF FEDERAL INFLUENCE

Federal policies and programs affect every phase of outdoor recreation. The recreation seeker benefits directly from hundreds of millions of acres of national parks, national forests, and other public lands and waters. He benefits from recreation improvements at multiple-purpose river basin developments constructed under Federal auspices and from pollution abatement financed in part with Federal funds. He benefits from Federal financial and technical assistance programs—in such fields as watershed protection, fish and wildlife habitat improvement, and forest management—which help State and local governments manage and develop natural resources that provide outdoor recreation.

Public recreation opportunities are affected substantially by national agricultural programs. In some instances, these programs contribute to recreation; in others, they detract. Urban renewal, highway and airport construction, loans to small business—all bear upon the amount, kind, and quality of outdoor recreation available to the public.

The demand for, as well as the supply of, outdoor recreation is also affected by many Federal laws and policies. The length of the workweek, minimum wage laws, and civil rights legislation are among the factors that shape the national demand for outdoor recreation.

From 1951 to 1960, direct Federal expenditures for outdoor recreation facilities and services totaled almost $1.2 billion. The comparable State total for the same period was about $1.4 billion. During that decade, annual expenditures rose substantially and in 1960 amounted to $190 million by Federal agencies and $196 million by the States.[1] These figures do not include expenditures that indirectly affect outdoor recreation opportunities, such as the billions of dollars spent annually on highway construction.

FEDERAL RECREATION PROGRAMS

Federal Policy in Transition

Although Federal agencies charged with the stewardship of lands and waters have done an outstanding job, few of them were prepared to meet the surge in recreation demand that began shortly after the close of World War II. Indeed, it is this surge in public demand that presents the greatest threat to the recreation values of these natural resources. Important segments of our parks, forests, and waters are in danger of being smothered by the using public.

During its early years, the National Park Service, although concerned with public recreation in national parks and monuments, devoted its major attention to the scenic, historic, and cultural attractions that particular areas were established to preserve. The need to choose between motorboating or protection of the

[1] *Public Expenditures for Outdoor Recreation,* Commission Staff, ORRRC Study Report 25.

primitive character of Yellowstone Lake, and the demand for laundry facilities at public campgrounds, are relatively new challenges to traditional park concepts.

The Forest Service has long recognized the recreation potential of national forests, but management practices until rather recently have been primarily concerned with the protection of forest, range, and watershed values.

Similarly, until the 1930's, Federal agencies concerned with the management and development of the Nation's rivers were primarily interested in flood control, navigation, irrigation, and the generation of hydroelectric power, and not in recreation.

The Federal agencies have responded to increasing pressures for outdoor recreation. The National Park Service is at the midpoint of "Mission 66"—a 10-year program designed to make more effective use of the national park system. "Operation Outdoors," the first step in a Forest Service plan for developing the outdoor recreation potential of the national forests, is nearing completion. The Corps of Engineers, Bureau of Reclamation, and Tennessee Valley Authority have devoted increased study and effort to developing recreation potential at public reservoirs. The Bureaus of Land Management, Sport Fisheries and Wildlife, and Reclamation—each of which administers areas serving recreation purposes—are seeking legislative authority to recognize outdoor recreation in their programs. In order for each agency to participate fully in a national recreation effort, there should be a consistent approach to similar problems of recreation development, regardless of administrative jurisdiction. One of the principal functions of the Bureau of Outdoor Recreation proposed in chapter 7 would be to foster such an approach. Application of the classification system presented in chapter 6 would also help achieve this goal.

Application of a Classification System

The absence of commonly accepted guidelines for the management of recreation areas under the jurisdiction of different Federal agencies has accounted for considerable confusion in recreation development. While each Federal agency must continue to take responsibility for shaping its own programs and practices, there are a number of general management policies that can be clarified by application of a recreation classification system.

The Commission has framed the following policy recommendations in terms of the classification system.

Recommendation 8–1: *Federal high-density recreation areas (Class I) that serve primarily local recreation needs should be placed under State or local government control.*

The longrun interests both of the Federal agencies and of the local users will be best served by placing responsibility for management of local high-density recreation areas in local hands, provided such management can be readily separated from that of the total Federal administrative unit. This would place the burden of financing upon the major beneficiaries. There is no reason why Federal agencies with national responsibilities should provide for essentially local needs.

Many cooperative arrangements already are in effect between Federal agencies and local public bodies. In California, State and local public agencies

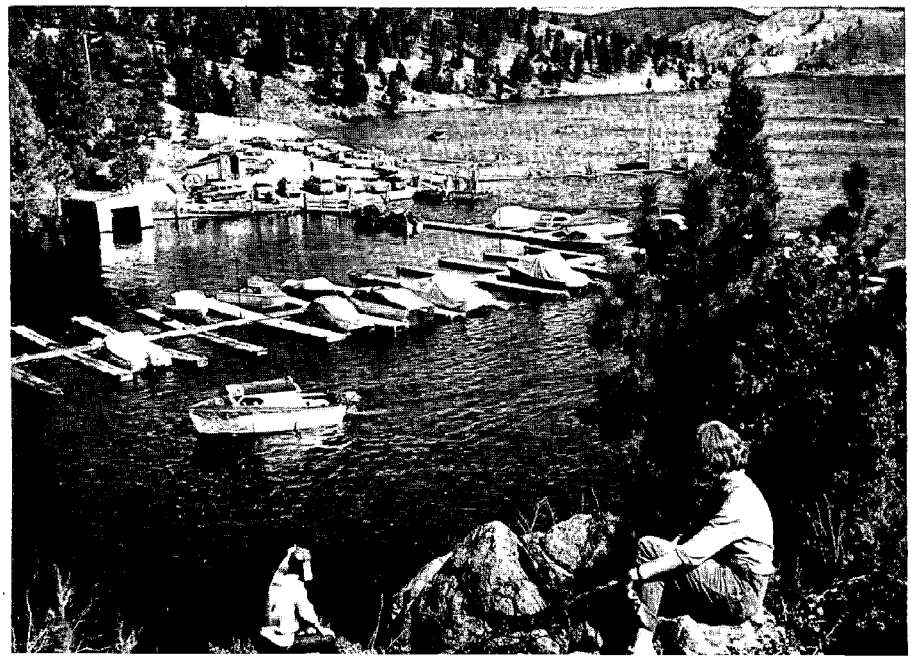
contribute to the maintenance of national forest recreation facilities. Long-term permit arrangements are used in a number of southern and Rocky Mountain national forests. The Bureau of Land Management has made public domain lands available for local use. For many years the Corps of Engineers and the Bureau of Reclamation have looked to nearby cities and towns to take responsibility for the management and operation of Federal reservoir shoreline areas. These arrangements have generally operated to the benefit of all. In view of increasing recreation demands and the patterns of those demands, efforts along these lines should be extended.

The particular mechanics best suited to meet a given situation will vary. In some instances long-term leases may be best, in others outright sale or transfers of land between agencies may be desirable. In all cases, however, there should be safeguards in any agreement between Federal agencies and State or local bodies to assure that lands made available to the lower levels of government are used for their intended purposes. Recapture clauses now in use by a number of agencies provide this assurance.

Recommendation 8–2: *General outdoor recreation areas (Class II) should be carefully planned for and developed at Federal reservoirs.*

Too often Federal reservoir shorelines are characterized by aimless, unplanned developments, which result in cluttered and unattractive conditions. Relatively elaborate facilities are necessary to provide boating opportunities. However, these facilities, and those for parking and sanitation, can be concentrated, leaving substantial frontage on the shore in natural condition. Zoning to permit concentration of Class II resources and facilities should be undertaken well in advance of public use of the shoreline area.

Recommendation 8–3: *General outdoor recreation areas (Class II) should be established at suitable locations in national parks and monuments. This would eliminate the need for further nonconforming development in natural environment (Class III) and unique natural (Class IV) areas and at the same time provide the necessary facilities and services for enjoyment of the areas.*



In a number of national parks, the need to set aside certain areas for intensive development and thus relieve pressures on central attractions has been recognized. This management policy should be extended. Continuous advance planning would remove much of the pressure to expand recreation facilities at the expense of the preservation of natural and scientific resources. A long-range, comprehensive plan setting forth in specific terms the proposed development and use of an entire administrative area is necessary to enable the administrator to handle future public demand.

Overdevelopment of the central features of our national parks and monuments involves much controversy. There have been frequent charges of commercialization of portions of national parks and of undue liberality on the part of park administrators in permitting recreation activities that tend to jeopardize the unique natural character of these areas.

The management of Class IV recreation resources involves some of the most challenging problems in the recreation resource area. These problems will become even more complex as additional pressures build up behind demands that these sites be made more "available" through construction of roads and facilities, that additional recreation activities be permitted, and that alternative resource uses be allowed. The classification system can assist in resolving these difficult problems.

Once a particular resource is determined to be of Class IV quality, it should be managed in unequivocal terms for preservation of its unique values. Further nonconforming development should not be permitted within these areas. If overuse threatens the destruction of irreplaceable natural assets, visits should be rationed by means of advance reservations, permit systems, or limitation on the length of stay. Each visitor to a Class IV area should have full opportunity to gain a better personal understanding of the natural world in which he lives, and this opportunity should not be diluted by commercial uses or incompatible recreation activities.

Recommendation 8–4: *The Forest Service should identify and preserve unique natural areas (Class IV) within the national forests.*

Aside from "natural areas," few unique natural or scientific sites on national forests have been formally identified and set aside for special management. The area of the Gallatin National Forest affected by the landslide of August 17, 1959, is one of the few so reserved. Class IV areas on national forests should be identified and managed for the single purpose of preserving the central feature for public inspiration and appreciation.

Recommendation 8–5: *The interpretive and educational services of Federal agencies should be expanded.*

These services enhance the visitor's appreciation—and, thereby, his enjoyment—of the natural landscape, historic or archeological site, or unique qualities of outstanding scenery. They are particularly important in unique natural areas (Class IV) and historic and cultural sites (Class VI), but they also add to the appreciation of natural environment areas (Class III). As the visitor is helped

to grasp what he sees and as less obvious features and relationships are pointed out, his new understanding adds greatly to his immediate pleasure and to the later recollection of his visit.

The National Park Service has had long experience in this work. With increasing pressure of numbers, it is using new methods of informing visitors, such as self-guided nature trails, audiovisual aids, and nature centers. These services should be greatly expanded not only in quantity to keep up with growing lines of visitors, but also in depth to satisfy the widespread awakening interest of the public in the natural world.

The Forest Service is embarking on interpretive programs in connection with recreation in the national forests. The Fish and Wildlife Service now conducts tours for visitors at its fish hatcheries and may see new opportunities for interpretive work at wildlife refuges as these receive more visits in coming years.

The benefit of these activities is clear, especially for a population that is becoming almost wholly urban in fact and in outlook. They promote understanding of the Nation's heritage and its great variety of landscape, as well as the wise use of natural resources.

Recommendation 8–6: *Congress should enact legislation providing for the establishment and management of certain primitive areas (Class V) as "wilderness areas."*

Primitive areas satisfy a deep-seated human need occasionally to get far away from the works of man. Prompt and effective action to preserve their unique inspirational, scientific, and cultural values on an adequate scale is essential, since once destroyed they can never be restored.

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Portions of national forests, parks, monuments, wildlife refuges, game ranges, and the unreserved public domain meet the basic criteria of primitive areas. The natural environment has been undisturbed by commercial utilization, and they are without roads. Some of these areas are managed for the purposes of wilderness preservation under broad statutory authority. Certain Class V areas of more than 100,000 acres in national forests have already been set aside by the Secretary of Agriculture as "wilderness areas." Others between 5,000 and 100,000 acres have been set aside by the Chief of the Forest Service as "wild areas."

There is widespread feeling, which the Commission shares, that the Congress should take action to assure the permanent reservation of these and similar suitable areas in national forests, national parks, wildlife refuges, and other lands in Federal ownership. The objective in the management of all Class V areas, irrespective of size or ownership, is the same—to preserve primitive conditions. The purpose of legislation to designate outstanding areas in this class in Federal ownership as "wilderness areas" is to give the increased assurance of attaining this objective that action by the Congress will provide.

CONTINUATION OF PRESENT JURISDICTION

It should be emphasized that while implementation of the classification system may result in some changes in management policies and practices, it need not result in changes of present jurisdictional responsibilities among Federal agencies. The agency charged with the administration of a unit of land would continue, in accordance with the governing legislation, to perform whatever management functions are appropriate to the various recreation classes identified. Thus, when the Forest Service classifies a certain portion of a national forest as a unique natural area (Class IV), it would remain under the control of the Forest Service, even though managed according to the same standards as a comparable area in a national park or monument. This concept is incorporated in pending legislation which provides that wilderness areas will be managed by different Federal bureaus.

PROGRAMS RELATED TO RECREATION

In addition to its responsibilities as a land manager, the Federal Government should take full advantage of the opportunities to promote outdoor recreation in connection with many other Federal activities. These include assistance to State and local governments and to landowners through a wide variety of programs—from acquiring open space in urban areas to combating waterfowl disease. The following recommendations suggest some means of expanding the already substantial contributions made by these programs.

Fish and Wildlife Management

Recommendation 8–7: *The Bureau of Sport Fisheries and Wildlife should take the lead in dealing with the legal, economic, organizational, and other problems related to the provision of public hunting and fishing opportunities.*

While resident fish and wildlife resources are responsibilities of the individual States and historically have been managed by them, the Bureau of Sport Fisheries and Wildlife is in a favorable position to work closely with the States, and other levels of local government, in meeting emerging recreation problems.

The Commission strongly endorses the current program of land acquisition, carried out in cooperation with the States, to provide suitable habitat for migratory waterfowl. It urges that this program be continued in order to achieve an adequate and balanced national system of wetland and marsh habitats.

At the same time, the Commission recognizes that public purchase of all the land area that may be needed to satisfy increasing demand is neither possible nor desirable. Rural lands and waters in private ownership, chiefly in small farm holdings, offer a promising opportunity for expanding the public hunting and fishing resource base. Renewed efforts are needed to reach satisfactory arrangements to permit public hunting and fishing on private lands and waters. The Bureau of Sport Fisheries and Wildlife, through its cooperative programs, is in an excellent position to encourage such efforts.

A full-scale program to meet the problem of shrinking public hunting and fishing opportunities has never been attempted on a national basis. The Commission suggests, as a starting point, that the Bureau, in cooperation with the States, sportsmen's organizations, and landowners, undertake research and action programs to promote greater public use of private lands and waters for hunting and fishing. This will entail new legal and economic measures for adequate compensation to property owners and protection of the rights of both the landowner and the using public.

Disposition of Surplus Federal Lands

Recommendation 8–8: *Surplus Federal lands suitable for outdoor recreation purposes should be made available to State and local governments at no cost, with appropriate reversion clauses.*

Many Federal properties, such as coastal defense installations, Coast Guard stations and lighthouse facilities, old forts and military posts, and tracts of land located within or near cities, when no longer needed for their original purpose, can serve public recreation needs.

Present laws permit the disposition of Federal surplus properties to Federal or State agencies at no cost for purposes of wildlife conservation, preservation of historic values, and some educational activities. State and local governments, however, must pay 50 percent of the appraised value of land suitable for public park and recreation use. Appraisals of these properties often are high because of their potential commercial or industrial values. For this reason, 50 percent of the appraised amount is frequently out of reach of State and local governments. As a result, the properties are sold to private commercial developers, and potential public park or recreation areas are lost.

A modification of existing law to allow transfer at no cost for recreation purposes would help alleviate the shortage of park, recreation, and open space areas.

Agreements covering the transfer of Federal property should provide for retention of mineral rights and reversion in case of an inappropriate use.

Indian Lands

Recommendation 8–9: *The Bureau of Indian Affairs should provide increased assistance to Indian owners in developing the economic potential of public outdoor recreation activity on their lands.*

There are nearly 53 million acres of Indian-owned lands held in trust by the Federal Government. These properties, located chiefly in the West, have substantial recreation potential. In a limited way they now provide opportunities for public hunting, fishing, and camping.

The historic obligation of the Federal Government to assist in the social and economic betterment of Indian citizens can be discharged in part by helping Indian owners develop the recreation potential of tribal lands for economic gain. This will necessitate a larger staff and more funds than are now available to the Bureau of Indian Affairs for this purpose, since recreation development of these lands on a larger scale will require planning assistance and capital. In some cases, tribal funds, with the approval of the tribal council, can be used for part of the capital requirements.

Open Space

Recommendation 8–10: *In view of the urgent needs of urban dwellers for areas that can be used for recreation activities, the Commission endorses continuation of the recently authorized "open space" program.*

The recent legislation authorizing Federal assistance through the Housing and Home Finance Agency to urban areas for the preservation of open spaces underscores the national interest in assuring a desirable physical environment for the increasing number of urban residents.

Opportunities for urban recreation can often be substituted for traditional recreation activities outside the city, and the two must be considered together. The program initiated under the "open space" provision will tend to relieve crowded conditions in recreation areas outside of cities, as well as to make urban areas more pleasant places in which to live.

Licensing of Non-Federal Hydroelectric Projects

The Federal Power Act requires that recreation values be considered in the licensing of non-Federal hydroelectric projects. Many licenses contain clauses for the purposes of protecting fish and wildlife, maintaining pool levels at given elevations during certain seasons for recreation purposes, and controlling use and development of shoreline areas.

Many attractive and well-known resort and recreation areas have been developed on the reservoir shorelines of power projects licensed by the Federal Power Commission, including Chelan Lake in the State of Washington, Lake of the Ozarks in Missouri, Santee-Cooper in South Carolina, Deep Creek Lake in western Maryland, and Lake Almanor on the Feather River in California. The Federal Power Commission should continue to encourage developments of this nature.

Small Watersheds

Recommendation 8–11: *Legislation should be enacted to permit explicit consideration of public outdoor recreation benefits created by small watershed projects carried out under the Watershed Protection and Flood Prevention Act of 1954 (Public Law 566, 68 Stat. 666) as amended.*

The broad scope of the small watershed program places it in a particularly favorable position to contribute to public recreation opportunities. Most of the Nation's small watersheds, including many adjacent to metropolitan areas, are eligible for treatment. The program has already brought opportunities for water-based recreation to many "water-scarce" areas of the Southwest.

A 1956 amendment to the law permits Federal cost sharing for fish and wildlife features of watershed improvements, but Federal participation in sharing the costs of other recreation benefits produced by dams constructed under the program is not authorized.

Two conditions must be fulfilled before this program can make its full contribution toward meeting public recreation needs—

1. Statutory authority must be obtained for the Federal Government to share costs for the planning, design, and construction of recreation features of watershed projects.

2. Arrangements must be made with sponsoring local organizations to assure the public reasonable access to enter upon and use recreation facilities developed with Federal assistance.

Other Agricultural Programs

Recommendation 8–12: *Certain programs and policies of the Department of Agriculture should be modified where practical to take account of their potential for providing public outdoor recreation opportunities.*

Since the mid-1930's, the Federal Government, through the Department of Agriculture, has been sharing with landowners the cost of undertaking certain soil and water conservation practices. Agencies such as the Soil Conservation Service, the Commodity Stabilization Service, and the Agricultural Conservation Program Service presently administer conservation programs in which the Government shares the costs of water storage facilities, terracing and stripcropping, forest and range improvements, and other conservation measures. The Agricultural Extension Service, the Economic Research Service, the Agricultural Research Service, and other agencies of the Department provide research and technical assistance that contribute to the planning and application of conservation efforts.

These programs have both direct and secondary influences upon outdoor recreation and should be administered to take account of recreation potentials.

Highways

Recommendation 8–13: *Federal and State governments should give explicit recognition to recreation values in the planning and design of highways.*

Mobility is a key factor affecting outdoor recreation. Routing, design, extent, and capacity of highways exert profound influences on the kind and location of pressures brought to bear on recreation resources.

Through a number of programs, the Federal Government is concerned with the construction of every major road in the Nation. These programs, which collectively involve large sums of Federal money each year, strongly influence the availability of recreation opportunities. Yet with the single exception of the billboard provision of the Federal-Aid Highway Act of 1958, there is no formal consideration of outdoor recreation values in any Federal legislation concerned with financing and constructing the Nation's roads.

Highway policies thus far have been directed primarily toward the accommodation of greater speeds and larger volumes of traffic. While the design and location of roads for efficient and safe transportation is clearly of high priority, other considerations merit recognition. Travel to reach outdoor recreation facilities is a major use of many of our highways. Roads and highways are multiple-use structures serving a variety of public purposes, and outdoor recreation is an important one of these purposes. Wherever feasible, provision should be made for such compatible recreation opportunities as hiking, bicycling, and picnicking. In some cases, highway fills can serve as dams to impound water for recreation purposes.

New highway design should take esthetic considerations into account. Wherever possible, highways constructed along any body of water should be so designed as not to impair recreation values. Additional measures should be adopted to prohibit objectionable developments from marring roadside scenery.

CHAPTER 9

THE KEY ROLE OF STATE GOVERNMENTS

In a national effort to improve outdoor recreation opportunities, State governments should play the pivotal role. They are more advantageously situated than either local units or the Federal Government to deal with many current recreation problems. States have direct experience in shaping programs to meet varying conditions and particular needs of their citizens. And they have the necessary legal authority. Moreover, the States occupy a key position—the middle level in our complex system of government. They deal with other States, work with a great variety of agencies at the national level, and are responsible for guiding and assisting all the political subdivisions within the State—villages, cities, towns, counties, and metropolitan regions. Since other responsibilities that affect outdoor recreation opportunities, such as highway construction and the management of forest, wildlife, and water resources, are also generally focused at this level, the State government can make sure that these programs are in harmony with its recreation objectives.

Colonial governments were interested in outdoor recreation resources some 300 years ago. One of the first resource problems to face public officials was regulation of fishing. Massachusetts vested "Great Ponds," bodies of water more than 10 acres in size, with public title in the 17th century. By 1875 several States had fish commissioners, and by the beginning of the present century practically all the States had developed regulations for the taking of fish and game. Agencies originally established for this purpose have gradually changed their emphasis to the encouragement and promotion of fishing and hunting activities.

State parks were developed initially in connection with efforts to preserve sites with unusual scenic, historic, or geologic features. The first State park—part of what is now Yosemite National Park—was originally given to the State of California for recreation purposes by Act of Congress in 1865. In 1885, New York established its first State park and forest preserve. In 1895, Michigan received Mackinac Island from the Federal Government for use as a State park.

Today, the outdoor recreation programs and activities of State agencies differ considerably across the country. The problems of recreation in a State where population density exceeds 600 persons per square mile and which has little Federal land are quite different from those in a State with a density of 30 or less, and with substantial national park and national forest land. For instance, hunting in heavily populated New Jersey, where most of the land is privately owned, is a different experience from hunting in a national forest in Colorado.

Notwithstanding the diversity of needs, and differences in population, geography, and economies, there are common problems facing the States. These include organizational arrangements; the need to plan; the problem of expanding the State's recreation resource base by acquisition, development, or other means; the use of State regulatory powers to encourage and to control recreation activities; the need to coordinate recreation programs, both within the State and with

neighboring States; the responsibility of dealing with a variety of agencies at the Federal level; the need to assist political subdivisions of the State in solving their recreation problems; and finally, the problem of financing.

State recreation programs present some striking contrasts. By the end of 1961, some 20 of the Nation's 50 States had made surveys of their future needs for outdoor recreation. New York State voters, in 1960, authorized a bond issue of $75 million to be used exclusively for the purpose of acquiring more public land—State, county, and local—for parks, beaches, and uplands. During the first year of the ensuing program, more than 50 areas were acquired and over $10.5 million was obligated. In 1961, the people of New Jersey approved a similar bond issue of $60 million for "Green Acres"; Wisconsin launched a $50 million program. Other States, including California, Massachusetts, and Michigan, are developing comparable programs.

But most State park programs are in difficulty. Practically all State park agencies report trouble in securing adequate funds, even for minimum operations. Facilities at some State parks have not been substantially improved since 1940. Personnel is severely limited. Management tools, such as planning and modern accounting systems, are often lacking. Underlying all of these difficulties is the absence, in many States, of well-developed civic and political support. Inadequate attention is paid to the use of State forests, game refuges, and wildlife management areas for recreation purposes.

EFFECTIVE ORGANIZATION

Recommendation 9–1: *Each State should establish within its government a focal point for the consideration of outdoor recreation.*

Effective organization is essential to the success of State efforts to meet public recreation needs. There is no single simple solution to the great variety of organizational and management problems confronting the various State agencies concerned with outdoor recreation resources and programs. Nor does there appear to be any one organizational arrangement that is eminently suitable for all States.

Regardless of the organizational structure employed, each State should provide a focal point for statewide consideration of recreation problems. This focal point, whether a single agency, a commission, or some other arrangement, should have the authority to undertake—

1. The development of broad recreation policies for the State as a whole and a long-range plan to implement them.
2. A continuing appraisal of the total State recreation needs and the adequacy of current efforts to meet them.
3. The coordination and appraisal of related programs administered by all levels of government and by private enterprise.
4. Cooperation with the national Bureau of Outdoor Recreation proposed in chapter 7, particularly in connection with the distribution and use of Federal aid funds proposed in chapter 12.
5. The encouragement of cooperation among public, voluntary, and commercial agencies and organizations.

STATEWIDE PLANS

Recommendation 9–2: *Each State should prepare a long-range plan for the development of outdoor recreation opportunities.*

State governments must clearly intensify their current activities if they are to fulfill their responsibilities as major suppliers of outdoor recreation services. A first requirement is the development of a comprehensive plan. The plan should take account of the total State resource base and of demands from residents and visitors. It should identify objectives. It should estimate the funds needed. Finally, it should set forth the successive steps necessary to achieve the objectives.

A major aim should be the identification of natural and historic values that warrant protection by the State. An equally important goal is the provision of general recreation opportunities located within day use and weekend range of population centers.

All means for making full use of the existing State recreation resource base should normally be considered before decisions are made to acquire additional areas. In many instances, resources that could be adapted to recreation uses are not being fully employed. Although many States own substantial acreage of forested lands, these lands are frequently not looked upon as a potential recreation resource. State agencies responsible for managing water development and control projects, wildlife preserves, and other facilities can contribute effectively to a statewide recreation program.

The State plan should take account of all State lands and waters having public recreation values and should emphasize multiple-use management. This approach is not yet common among State agencies. Legal authority for multiple-use management should be made generally available to State agencies. The necessary legal steps to clarify titles and boundaries of State holdings should also be considered in any plan. State agencies are reluctant to invest funds if land titles are clouded, as is the case with much tax-reverted land, and if boundaries are in dispute.

ACQUISITION AND DEVELOPMENT

Recommendation 9–3: *States should undertake a program of land acquisition and development as scheduled in the State outdoor recreation plan.*

Even full use of existing State-owned recreation resources is unlikely to meet demands for particular activities or at particular sites. In most States vigorous programs to acquire needed areas should be initiated promptly.

Land and water resources have been acquired by State agencies through purchase, gifts, devises, exchanges, reversions, or easements. In some States, legislatures have granted broad authority to recreation agencies to acquire resources by any or all of these methods. Other State agencies are much more limited in the tools at their disposal. For example, many do not have the power of eminent domain and some must seek special statutory authority for each purchase or exchange. The provision of public outdoor recreation opportunities is a legitimate public purpose that merits the vesting of the power of eminent

domain and of continuing acquisition authority in the agencies concerned.

The specific problems of developing State recreation resources cannot be treated in general terms. The timing of construction, the kinds of facilities to be installed, the priorities to be established in order to make the best use of limited funds—these are matters that can be resolved only by each State. However, States will find the recreation resource classification, proposed in chapter 6, helpful in meeting the kinds of problems they face. The guidelines it furnishes provide a basis for developing a system of management well-suited to State needs.

USE OF REGULATORY POWERS

Recommendation 9–4: *States should exercise their regulatory powers to maintain and improve public outdoor recreation opportunities.*

To date the States have made little use of the police power in behalf of outdoor recreation. This power could be effectively exercised to enforce land-use and pollution controls, to protect shorelines, to assure public safety, and to prevent littering.

Encourage zoning and enforce land-use controls to preserve and enhance recreation and esthetic values along roads and highways, shorelines, and other areas.

Studies of recreation preferences conducted by the Commission on a national basis, and by a number of States including California and Michigan, indicate that driving for pleasure is the most popular outdoor recreation activity in terms of both the number participating and the time devoted to it. These findings underline the importance of preserving attractive landscapes along highways and other roads.

In recognition of the values involved in maintaining the beauty of the countryside, the Federal-Aid Highway Act of 1958 provides for an increase in the Federal share of the cost of building interstate highways where States agree to control or regulate the building of billboards along the routes. The States should take full advantage of this assistance.

Recreation values of the land adjoining bodies of water can be protected if effective zoning and other land-use controls are applied. Communities should be encouraged to recognize recreation in their local zoning regulations.

Recently, several States have urged the adoption of flood-plain zoning in high-flood-risk areas along watercourses in or near urban areas. Many flood plains can provide outdoor recreation opportunities with little or no development of facilities.

In the case of federally constructed reservoirs, State action may be required to ensure the preservation of recreation values in portions of shoreline not in public ownership.

Enact and enforce pollution control and abatement regulations.

The States should give increased consideration to the recreation and esthetic values provided by clean waters.

In 1960, the National Conference on Water Pollution warned—

> But as the demand for water recreation opportunities grows, along with rising population, urbanization, and improved living standards, the supply of suitable water areas is shrinking. * * * There is unmistakable evidence that the increasing pollution of the water resources of the United States is a leading cause.[1]

States should use their authority to preserve present water recreation resources and to regain those lost to public recreation because of pollution. The values to be gained through pollution abatement are obvious in light of the vast public recreation potential now locked up in the heavily polluted waters of even a single stream, such as the Hudson River in New York.

Assure public safety at recreation areas.

As the number of people enjoying outdoor recreation increases, the need for governmental regulation of their activities is also certain to increase. Regulation is required in the interest of public safety and as a means of apportioning recreation resources where conflicting uses are involved.

In a growing number of instances, State and local governments have begun to zone watercourses to restrict the areas in which power boating, water skiing, and other types of water sports are permitted. Other recreation activities are coming into increasing conflict—swimmers and fishermen, campers and picnickers, hunters and hikers.

Although State authorities are reluctant to impose additional regulations, restraints will be needed in outdoor recreation to avoid dangerous, unsanitary, and unsatisfactory conditions. Instead of waiting until public pressures force belated action, State authorities should take early steps to preserve outdoor recreation values.

Take more aggressive action against littering roads and recreation areas.

One of the great blights in outdoor America today is the littering of roads, beaches, parks, and forests. Many major highways are bordered by continuous ribbons of paper, glass, and cans. Rubbish also ruins the attractiveness of many picnic areas and campgrounds. Thoughtless and careless action by a few people thus diminishes the pleasure of all others. It also adds millions of dollars to maintenance costs—dollars which could otherwise be used to provide additional recreation opportunities. The warnings posted by most States seem to have little effect. More aggressive enforcement of anti-littering laws and the publicizing of convictions should be considered, and additional educational efforts against littering, both in the schools and through public information campaigns, should be undertaken.

ASSISTANCE TO LOCAL GOVERNMENTS

Recommendation 9–5: *States should take the lead in working with local governments toward a balanced State-local outdoor recreation program.*

[1] *Recreation and Clean Water,* National Conference on Water Pollution, U.S. Public Health Service, Dept. of Health, Education and Welfare, 1960, p. 1.

Assisting local communities should be a key responsibility of State outdoor recreation agencies. Local governments often lack the funds, technical skills, and manpower that the State can provide.

On the basis of a comprehensive plan, States can coordinate and guide local efforts so that they will be effective parts of a statewide program. Connecticut, for example, has encouraged and assisted local master planning to a point where a total State plan is emerging.

In addition to assistance in planning, local governments need technical help in developing and operating outdoor recreation areas. This requires a continuing working relationship between local and State agencies. New York, through the Economic Development and Planning Division of its Department of Commerce, and California, through its Resources Agency, have accomplished this.

A major need of many local governments is authority to initiate and operate diversified outdoor recreation programs. Special enabling legislation to delegate these powers to political subdivisions of the State may be necessary. One particularly effective device, adopted by Iowa, is legislation that permits local governments to levy special taxes as a means of financing recreation programs. Other helpful grants of authority to local governments include the right of eminent domain for recreation purposes; provision for joint public-private ownership arrangements such as easements, salebacks and leasebacks, special use permits, and long-term leases. Enabling legislation should also require that local plans and programs be in accord with the comprehensive State recreation plan.

INTERSTATE COOPERATION

Recommendation 9–6: *The Commission urges States to act jointly in meeting outdoor recreation problems that are of interstate or regional character.*

Several approaches are available for meeting interstate problems. The arrangements used thus far have been limited in number, but notably successful. For example, the Palisades Interstate Park Commission manages areas from the George Washington Bridge, in New Jersey, to the Ramapo Mountains of New York. Virginia and Kentucky jointly operate the Breaks Interstate Park. New York, Massachusetts, and Connecticut are conducting negotiations for establishment of a tri-State Taconic Park.

Perhaps the most outstanding case of interstate action with respect to resource development and outdoor recreation is the recently approved Delaware River Basin compact. Here four States, Delaware, New Jersey, New York, and Pennsylvania, and the Federal Government are partners in the river basin planning project which will include recreation among its major purposes.

Interstate or regional arrangements of this nature can bridge a significant gap in the present structure of the Nation's outdoor recreation system. Through these arrangements, programs or projects can be undertaken that are beyond the means of a single State but do not warrant Federal acquisition, development, or operation. Indirect Federal assistance, however, may well be justified. In recognition of this, the Commission has included in the grants-in-aid program, recommended in chapter 12, a provision that interstate projects would be entitled to an additional 10 percent Federal contribution.

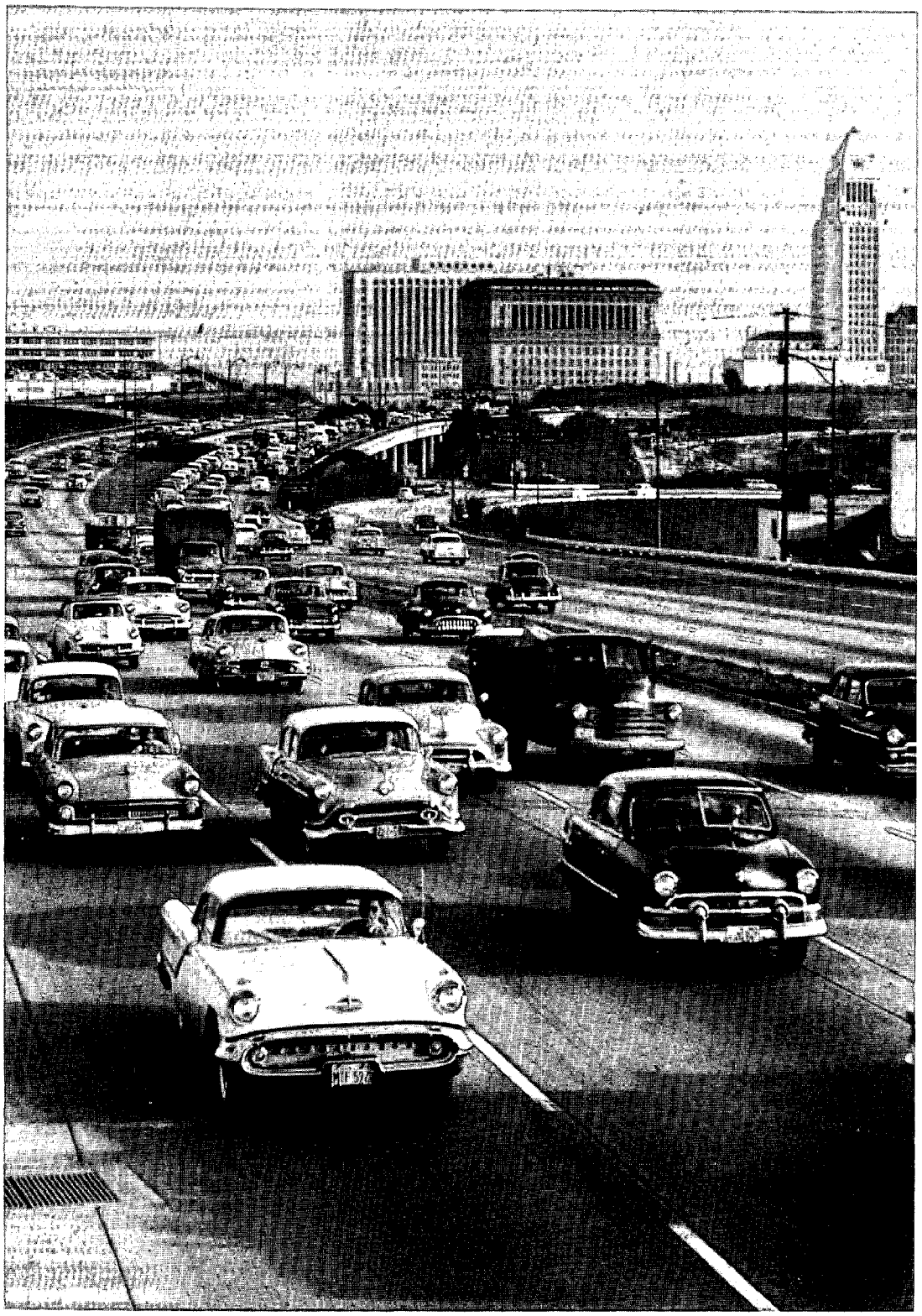
FINANCING RECREATION ACTIVITIES

Recommendation 9–7: *States should provide adequate appropriations for outdoor recreation on a continuing basis.*

Almost every State appears to suffer from a shortage of funds for outdoor recreation programs. Many State park agencies report that they do not receive sufficient funds to maintain existing facilities adequately, much less develop new ones. Appropriations tend to be uniformly low from year to year, with occasional increases for special purposes, such as the acquisition and development of a new park.

Uneven appropriations from year to year discourage long-range management practices and programs. Stable, and in most cases increased, appropriations by State legislatures are essential.

The subject of finances is discussed further in chapter 12.



CHAPTER 10

RECREATION FOR METROPOLITAN AMERICA

As long as men have clustered together in built-up communities, local governments—city and county—have been concerned with the provision of outdoor recreation for their citizens. In the United States, it dates back to the village green of colonial New England, which has remained a landmark in cities like Boston, Hartford, Providence, and New Haven.

Throughout the country, as the population density has increased, so has concern for outdoor recreation. Rural communities faced few difficulties since fishing streams, swimming holes, open fields for games, and woods for hunting were not far from Main Street. But as the open fields were replaced by houses, factories, and stores, and the swimming holes became polluted, problems mounted. Opportunities previously taken for granted as a part of the natural environment had to be consciously planned for—or lost. And as population centers grew in size and number, there was a corresponding increase in the demand for outdoor recreation.

Massive urbanization is a very recent phenomenon. In the 1880's, there were only four cities in the world with a population of over 1 million. In 1960, there were 5 cities and 16 other metropolitan areas in the United States alone with populations exceeding 1 million. Only 14 States were more than 50 percent urban in 1910; in 1960 there were 40. By the year 2000, approximately 73 percent of the country's inhabitants, or 250 million people, will live in metropolitan areas—compared with 63 percent, or 113 million people, in 1960, and 35 percent, or only 43 million people, in 1930. In 1960, the Los Angeles-Long Beach standard metropolitan statistical area had a population of 6.7 million. It is expected almost to triple to 17 million by 2000,[1] a startling contrast to 1900, when only 102,500 lived in the city of Los Angeles.[2]

As cities spill out into suburbs and metropolitan areas are formed, they blend together into a "megalopolis." This interlocking will produce chains of heavily populated, built-up regions, each radiating from a central urban core. Across the country, large belts of populated areas will emerge. In the East, there will be a single urbanized tract extending from Portland, Maine, to Norfolk, Virginia. A midwestern urban complex stretching from Detroit to Cleveland may extend eastward through a chain from Lake Erie along the Mohawk and Hudson Valleys and intersect the Atlantic population belt.[3]

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[1] *Economic Projections by States for the Years 1976 and 2000,* Part II, Statistical Appendix, table 20, "Selected Standard Metropolitan Areas in 1976 and 2000," National Planning Association, May 1961, included in ORRRC Study Report 23.

[2] Except where previously noted, statistics are from *U.S. Census of Population: 1960, U.S. Summary, Number of Inhabitants,* U.S. Dept. of Commerce, Bureau of the Census, tables G, 5, 8, 29, 36.

[3] *The Future of Outdoor Recreation in Metropolitan Regions of the United States,* ORRRC Study Report 21, describes the general characteristics of outdoor recreation activities and particular problems of metropolitan residents, including the problem of access. It contains separate studies of five selected metropolitan regions: New York-New Jersey-Philadelphia, Atlanta, St. Louis, Chicago, and Los Angeles.

STATES OVER 50 PERCENT URBANIZED 1910 AND 1960

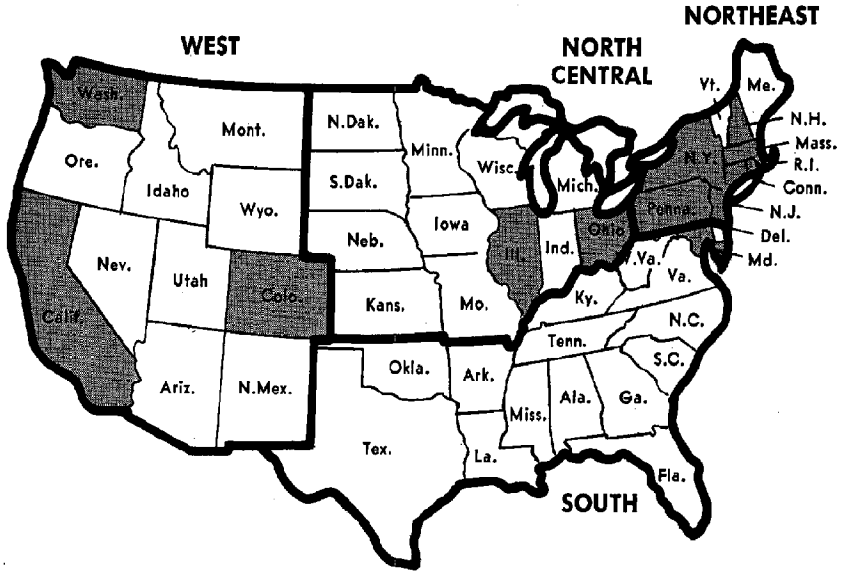
50% OR OVER URBANIZED

OLD DEFINITION

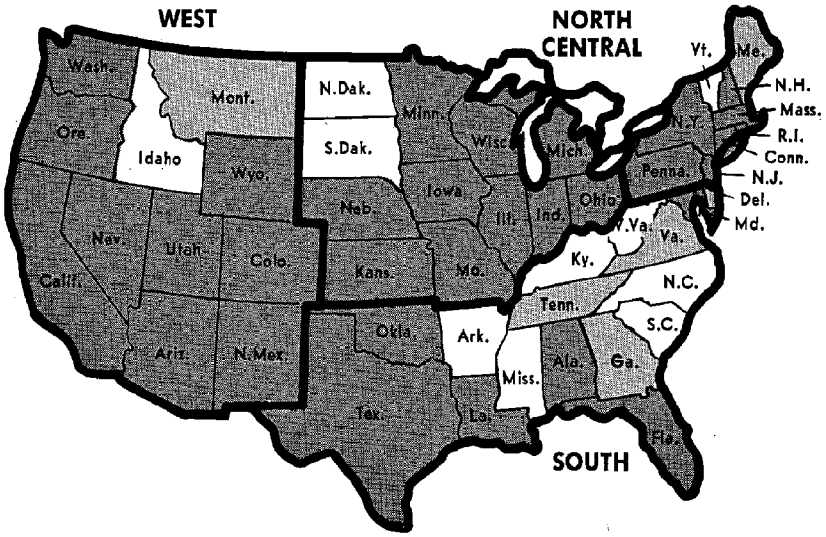
ADDITIONAL STATES QUALIFYING UNDER NEW DEFINITION *

* In 1950 the U. S. Census Bureau revised its definition of the urban population to also include, chiefly, population living adjacent to incorporated territory of larger cities.

1910



1960



	1910	1960
OLD DEFINITION	14*	34*
NEW DEFINITION	—	40*

* Includes D.C., excludes Hawaii

Source: U.S. Census, Population: 1960, U.S. Summary PC(1), 1A, U.S., (1961) Table 20, pp. 31-37.

It is not the growth itself that is the problem, but the pattern of growth. Even with the great expansion to come, there will still be a certain amount of open space within the urban areas. Because the pattern of development has been left largely to the speculative builder, it has been scattered all over the countryside—an unguided sprawl in which 10 acres have sometimes been used to do the work of one, or one acre to do the work of 10. In this leapfrogging process, open space may be left behind, but it is not effective open space; often, it is an agglomeration of bits and pieces too small or too poorly sited to use well—the residue of expired choices. What is done about shaping urban growth, then, will very largely determine the kind of outdoor recreation that will be provided for the bulk of the people.

RESPONSIBILITY OF LOCAL GOVERNMENT

Local government has an important responsibility for providing adequate outdoor recreation opportunities. Almost every community has suitable resources: small parks; places where nature is not disturbed and where grass, trees, and bushes grow, and people can walk, play, or picnic; a marsh with cattails, small mammals, and waterfowl; a clear river, stream, or pond where people can swim, fish, or boat. But many of these features are giving way to the housing subdivision, the industrial plant, the highway, the airport, or the shopping center.

The loss of natural assets narrows the opportunities for physical exercise or escape from the tensions of urban living. But thoughtful and effective local land-use planning, zoning, and programing can often restore to a community, regardless of its size or location, the natural features that contribute so much to making an urban environment a better and healthier place.

Recommendation 10–1: *Outdoor recreation should be an integral element in local land-use planning.*

Planning for public recreation must be as systematic as planning for schools, roads, and municipal water. This objective can be met by giving full recognition to outdoor recreation in local comprehensive land-use plans. Through long-term planning, schedules of priorities and of investment requirements can be prepared.

In order to be effective, planning must have active community support. The public must be convinced of the need for both taking full advantage of existing public areas and facilities and acquiring new ones.

There are some highly encouraging signs. There has been a marked acceleration of local planning efforts; in almost every urbanized State, planning is becoming a more important function. Many of the people involved in these efforts, furthermore, are beginning to give recreation a higher priority than in the past. In their eyes, the areas assigned to recreation are not only valuable in themselves; they are equally valuable as a basic framework for shaping and channeling the area's growth. These areas can often serve several purposes in addition to recreation. A marsh can serve as a sponge for flood protection, as a wildlife sanctuary, as a place for nature study and for hunting, and as a visual contrast to congested areas. Preservation of stream valleys can provide a region with a series of recreation areas as has been possible in the Washington, D.C.

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metropolitan area under the Capper-Cramton Act, which provides Federal assistance to communities in and around the Capital for stream valley acquisition.

A careful inventory of potential outdoor recreation sites should be undertaken by every community. Although not every city can boast of outstanding natural assets within its boundaries, most communities have nearby natural features which can be adapted to outdoor recreation—open fields, marshes and streams, or rocky slopes.

TOOLS FOR THE JOB

Recommendation 10–2: *Local governments should utilize all available techniques in making available for public use the land and water resources needed for outdoor recreation purposes.*

Local governments need to be both resourceful and imaginative. No one answer will suffice. The problem demands the use of all available tools, including relatively new techniques as well as the more traditional means. The tools fall into four groups: (1) Acquisition of full rights, (2) acquisition of rights less than full ownership, (3) regulatory devices, and (4) assessment and tax policies.

Acquisition of Full Rights

EMINENT DOMAIN

In many cases, outright acquisition may be the only effective means of acquiring essential areas and key tracts. This may require exercise of the power of eminent domain. Eminent domain for public park acquisitions has been recognized in the United States since the middle of the 19th century. In 1874, the court of St. Louis County, Missouri, declared that "* * * private property is taken for a public use when it is appropriated for the common use of the public at large. A stronger instance cannot be given than that of the property converted into a public park." [4]

The mere existence of the power of eminent domain, even without its actual use, frequently facilitates negotiated purchase. It also increases the effectiveness of other relatively new devices discussed below. And it is often employed not to "take" land but to clear clouded titles.

NEGOTIATED PURCHASE

No legal problem is involved in acquiring lands for public use by negotiated purchase, for the courts have long affirmed outdoor recreation as a valid purpose for which public funds may be expended. However, negotiated purchase often presents a financial problem, since it is not always possible to obtain needed lands at reasonable cost.

A reserve fund for land acquisition often enables an agency to take advantage of favorable changes in the offering prices of particular tracts. Economical acquisition through negotiated purchase is more likely if agencies inform themselves about the local real estate market. The high rate of property transfers in and near many metropolitan areas indicates that recreation developers might be able to consider for purchase each year a sizable portion of lands having

[4] County Court of St. Louis, *County* v. *Griswold*, 58 No. 175, 196 (1874).

recreation potential. In one Connecticut county near New York City, 80 percent of 38 such tracts analyzed had been sold at least once since 1940, and almost 40 percent of them more than once.[5]

Acquisition of Rights Less Than Full Ownership

Although the traditional method—acquiring land in fee simple and retaining it in public ownership for public use—will probably remain the basic method for public agencies, the acquisition of less-than-fee title can provide many supplementary outdoor recreation opportunities. There are several of these arrangements, each with particular features to recommend it, and they should be considered by every community.

EASEMENTS

By the ancient device of the easement, the public does not have to buy the full bundle of property rights to land. It can acquire only the right that it needs—the right that the land be kept in its natural state or be open to the public for certain purposes like hiking. In highly congested areas, where the speculative value of land for subdivision is very high, easements might cost virtually as much as the land itself; in relatively open land, however, they can be both reasonable and useful.

Easements provide open space and buffer zones for parks. They can preserve a natural countryside to protect the flanks of highways, as with scenic easements bordering the New York Thruway and the Great River Road in Wisconsin. Although public entry may not always be possible on land obtained through these easements, they do produce conservation values as well as recreation value for pleasure driving.

Easements can effectively provide "greenways" within and near metropolitan areas on open space now underused. Rights-of-way for high-tension transmission lines, for example, are too often considered a necessary "eyesore," and the swath they cut through an area is frequently a no-man's land littered with refuse. They can be put to work. Given public action, at very small cost, the land could be used for recreation—and the very fact that the rights-of-way are a network furnishes a readymade means of tying different recreation areas together with walkways.

There are several advantages—mostly economic—for a community in the use of these less-than-fee rights. For one thing, the land obtained through easements—as with other less-than-fee rights—is left in private ownership, usually continuing its present productive use. Moreover, the land is productive from the local government point of view since it remains on the local tax rolls, although perhaps at a reduced valuation. Finally, the acquisition of less than full rights is usually less expensive than acquisition in fee. The easements along the Great River Road in Wisconsin cost $15 per acre—one-fourth the cost of fee title.

OTHER DEVICES

Other legal devices involving less than full title to land are rights, leases, licenses, salebacks, and leasebacks. Public entry is possible with some of these

[5] *Potential New Sites for Outdoor Recreation in the Northeast,* Economic Research Service, U.S. Dept. of Agriculture, ORRRC Study Report 8, table 51.

less-than-fee arrangements, such as fishing rights, which have been widely used in this country. Others like leasebacks and salebacks offer an unusual opportunity for public agencies to acquire control of property and also derive an income from it.

Wherever possible an easement or other less than full title arrangement should be made perpetual. When an arrangement is not perpetual, the right of public use is lost at the termination of the contract. The property is then open for private development and use, and the cost of regaining the right of public use may be prohibitive.

Regulatory Devices

The normal regulatory powers of local governments can also be used effectively.

ZONING

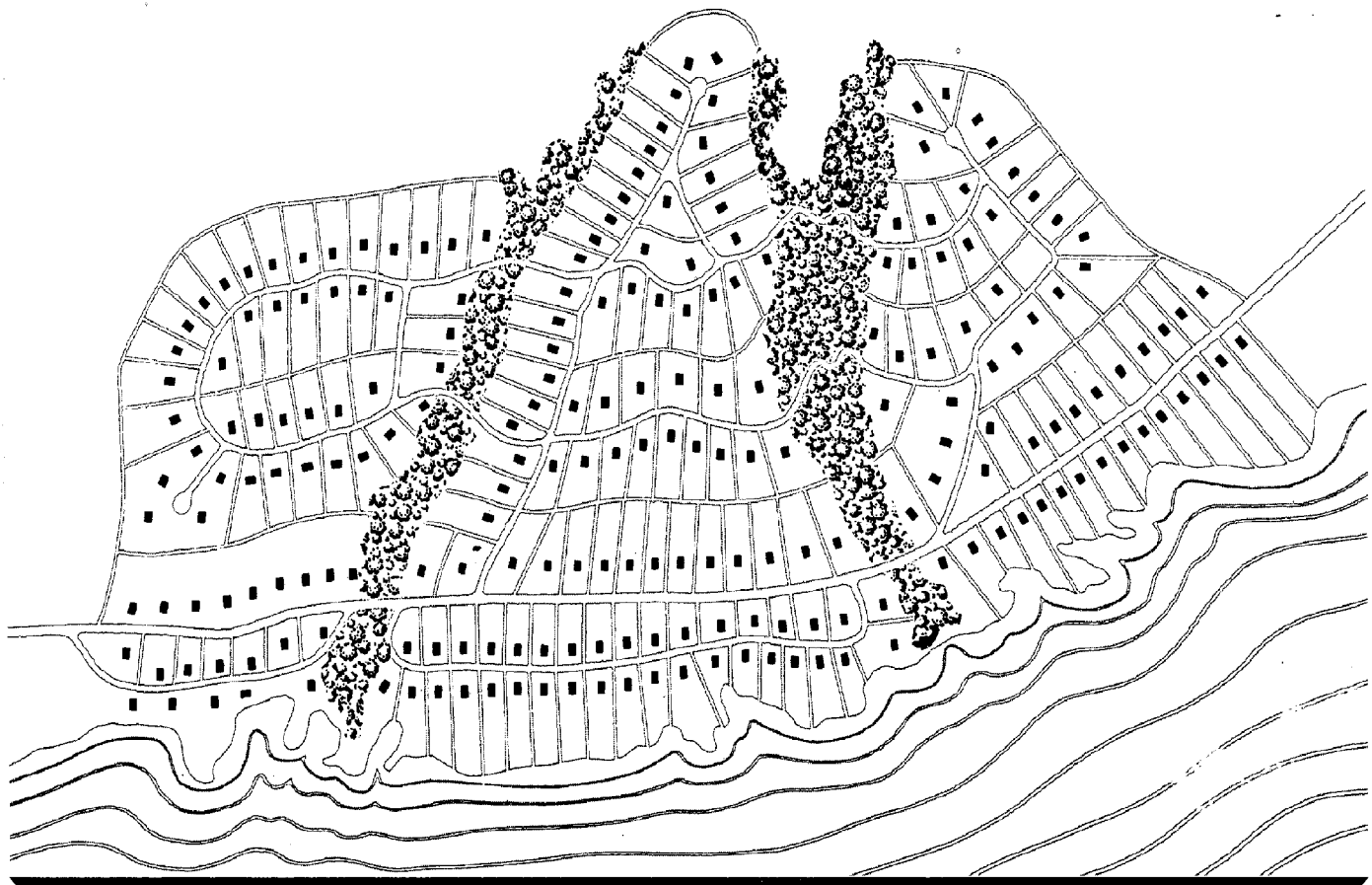
Zoning is the major tool in land-use control. Although zoning cannot always withstand the pressures for development and does not necessarily produce land for public outdoor recreation as does purchase, it can help preserve existing land features. Agricultural zoning, for instance, has been a means of preserving excellent agricultural land and preventing its loss to urban development in Santa Clara County, California. Flood-plain zoning can protect valleys from unsafe developments and preserve natural areas. Even within built-up areas, zoning regulations can provide for more outdoor recreation if greater flexibility in setback requirements permits the clustering of dwelling units, with increased open space in between the clusters.

Subdivision regulations, another form of zoning, can expand opportunities for a community by requiring developers to reserve a certain percent of subdivision land for recreation purposes or, in lieu of land contribution, to pay a fee to a local park fund.

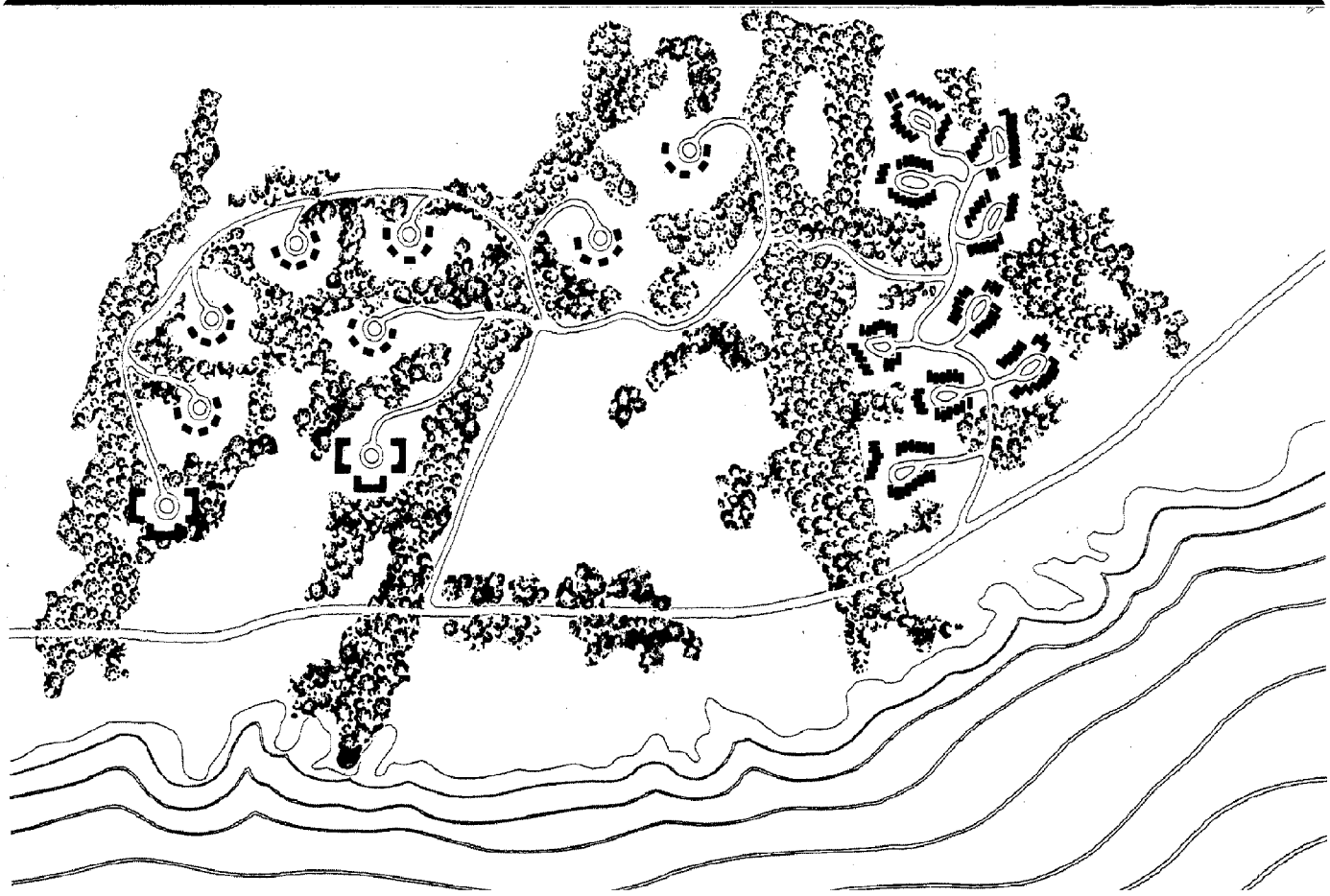
CLUSTER DEVELOPMENT

This is a form of zoning and is, in effect, a change in the pattern of development itself. Until recently, communities thought big lot sizes would guarantee open space, but, in the typical subdivision, this hope proved to be an illusion; big enough to have to mow, too small to use, and a perfect amplifier of sound. Instead of forcing subdividers to chew up all of an area with rigid lot sizes, some communities have suggested that they group the houses in a tighter, more cohesive pattern. This saves money for the developer, for he does not have to provide as much asphalt and service facilities. It may pay him to leave anywhere from 40 to 60 percent of the land open and, as part of the bargain, this is deeded for common use of the residents. Instead of a miscellany of back lots, there can be bridle paths, playgrounds, wooded areas, and—that most desirable of community assets—a stream, flowing in the open and not buried in a concrete culvert.

The potential of a series of open spaces is great. The open space of each cluster development can be planned so that it can connect with others; by wise siting of publicly purchased land for parks and schools, there can be a unified network of open space in which each element contributes to the others.



THE SAME NUMBER OF FAMILIES CAN BE ACCOMMODATED IN THE CLUSTER DEVELOPMENT BELOW AS IN THE CONVENTIONAL SUBDIVISION ABOVE.



Assessment Policies

Closely related to zoning are assessment devices. By assessing open land—such as farms and golf courses—at the value of its current use rather than at its subdivision value, this policy seeks to stem the spiral by which rising land assessment stimulates owners to sell to subdividers, thus further raising the assessment on the remaining open land. The principal defect is one of equity. The landowners are asking that their land be taxed only on its open space value rather than on the full market value. Yet there is no assurance that they will not sell out when it suits their self-interest. Despite this, urban voters have sometimes been in favor of constitutional amendments for such special treatment, for they feel that it will help preserve the countryside about them. These devices will be a source of much debate during the next few years, but the fact that urban voters see such a stake in farmland preservation is very promising for a more comprehensive approach.

THREAT OF ENCROACHMENT

Recommendation 10–3: *Local outdoor recreation areas should not be appropriated for incompatible purposes.*

Public outdoor recreation areas face continual threat from encroachment by other public and private uses—freeways, hospitals, armories, schools, museums, memorials, and business enterprises. Throughout the country, highways have been one of the most frequent invaders. Louisville, Kentucky, will lose one park and parts of two others for highways, and Wilmington, Delaware, will gain a new expressway at the expense of 40 acres of parkland. In Toledo, Ohio, parklands have been turned over to a naval armory, a YMCA building, a police pistol range, a private yacht club, a sewage disposal plant, and factory parking lots.

Where it is necessary to build essential facilities on parklands, there should be a requirement that lands lost for park purposes be replaced with other lands of equivalent size, usability, and quality that would serve the same population.

MEETING REGIONAL NEEDS

Recommendation 10–4: *Large-scale outdoor recreation areas and facilities must be provided on a metropolitan or regional basis.*

In addition to the need for recreation within the urban environment—local parks, parkways, developed riverbanks, stream valleys, and marshes—there is need to use over-all regional resources in metropolitan areas. The regional or metropolitan day-use area—such as Jones Beach in New York, the Cook County Forest Preserve near Chicago, and Strawberry Lane in Cleveland—is quite different from the local site. Local areas cannot be expected to meet all the demands of the masses of people who live in the urban core of metropolitan areas. Urban dwellers and suburbanites are increasingly seeking recreation opportunities beyond community boundaries.

The metropolitan or regional outdoor recreation area is larger and can have a wider variety of natural features and man-made facilities than local areas.

Regional sites within a 2-hour drive from the metropolitan center can provide a broad variety of day-use activities, as well as some overnight facilities.

The size of these areas and of their facilities makes them too large an undertaking for most local governments. They may be provided by a county, as in Essex County, New Jersey; by a special purpose authority, like the Cleveland Metropolitan Park District; by a regional agency, like the East Bay Regional Park District in California; by a State, as in the case of Huntington Beach State Park, California; or by an interstate agency like the Palisades Interstate Park Commission in New Jersey and New York.

Need for Planning

A thorough understanding of areawide needs is essential to planning the location of metropolitan facilities. Adjoining metropolitan areas should also be taken into account. There are a number of outstanding examples of such planning. In Detroit and its four surrounding counties outdoor recreation is provided on a regional basis through the Huron-Clinton Metropolitan Authority. The Metropolitan District Commission has been supplying outdoor recreation in the Boston area since the end of the last century.

A key objective in planning metropolitan outdoor recreation areas is assuring their accessibility to population centers. Accessibility, rather than physical availability of land, is the serious problem. It is particularly important that recreation sites be accessible by public as well as private transportation. Access to many existing recreation areas is now largely limited to private automobiles. In the New York metropolitan area, for instance, at parks like Harriman State Park, with more than 500,000 annual visits, Bethpage State Park, with more than 400,000, and Captree State Park with more than 1 million annual visits, at least 95 percent of their visitors come by car, and approximately 5 percent by common carrier. This reliance on private automobile transportation seriously limits access to these areas for urban residents in the lower income brackets and, of course, creates parking problems.

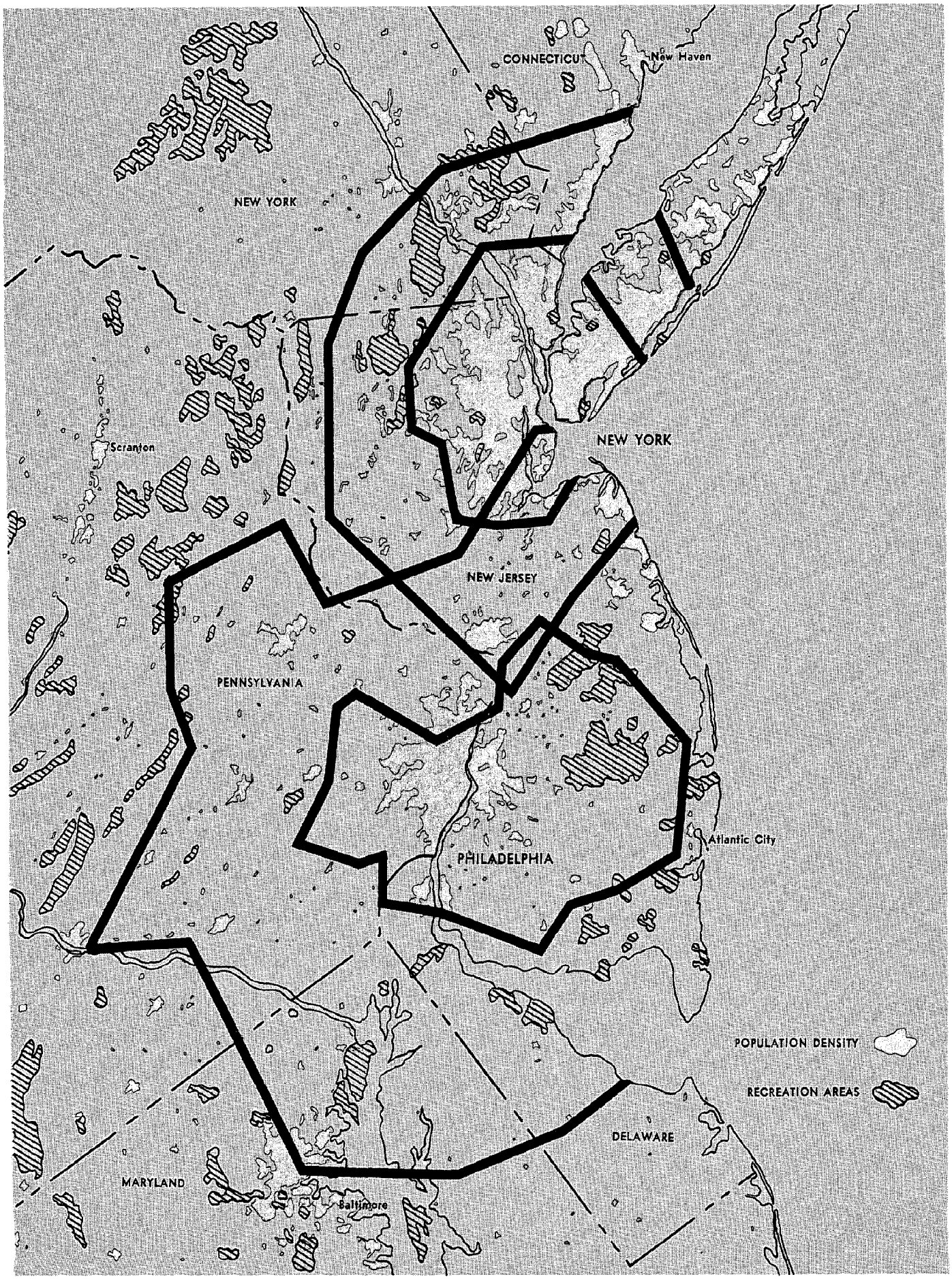
Need for Acquisition

Land-acquisition programs for metropolitan areas must include a broad range of land types to provide a choice of outdoor recreation opportunities. Metropolitan recreation should not be limited solely to high-density areas (Class I), although they should have high priority.

Public agencies acquiring large-scale metropolitan recreation areas will probably rely heavily on purchasing full rights to the land—either through negotiated purchase, use of the power of eminent domain, or outright gifts. Other tools and devices must be explored, however. Easements, for instance, cannot produce a beach which could be used for swimming and picnicking on a weekend day by 200,000 people, but they can provide for scenic outdoor recreation pleasures, especially along highways.

A device which may prove helpful is the land bank, public or private. Allegheny County, Pennsylvania, which includes Pittsburgh, has been able to profit from a private park-acquisition revolving fund, which has already purchased 3,600 acres of land that it will sell at cost to the county for the development of regional parks. Public funds were not available when needed to purchase the entire tract.

"A thorough understanding of areawide needs is essential to planning the location of metropolitan facilities. Adjoining metropolitan areas should also be taken into account."



METROPOLITAN AREA RECREATION RESOURCES IN PUBLIC OWNERSHIP ONE AND TWO HOURS FROM NEW YORK CITY AND PHILADELPHIA

This private acquisition is saving the county from buying land at higher prices later on. Similar arrangements have been made elsewhere in the country.

A number of experiments have been started on the basis of a private effort by landowners, particularly in stream valleys. In the end, public action may be necessary, but private initiative is valuable in stimulating the local government to act. A notable example is the "Scenic Reserve" plan pushed by residents of the Monterey Peninsula in California, an imaginative plan that dovetails park purchase with open space conservation of the prime areas in private hands. Another is the efforts of residents of the Neshaminy River watershed in Bucks County, Pennsylvania—by pledging gifts, citizens are trying to get joint county and State action for the protection of the whole valley's water and scenic resources.

The acquisition of large tracts by regional park systems within a brief period of time can present serious short-term problems to the tax base of the local communities. When large parks are acquired, which remove a major part of a township from the local tax rolls, it may be necessary to consider in-lieu tax arrangements.

PROBLEMS OF DEVELOPMENT

Recommendation 10–5: *All publicly owned recreation land should be developed to maximize its recreation potential yet maintain the quality characteristics of the area.*

In many cases—both in the local community and in the metropolitan area—intensive development can substantially increase opportunities for outdoor recreation. In metropolitan areas where land is difficult to acquire, further development of existing facilities may be the best answer to the problem. Tasteful development is not necessarily cheap and may require almost as much investment as acquisition of new areas, but expert management can increase the carrying capacity of existing areas.

In the course of intensive development, discretion must be used not to damage the resource. Too much asphalt for parking lots and play areas can destroy the natural setting. There should be a balance between intensive use and retention of natural features. Development may require heavy investment, but in areas of dense population, it may produce the greatest number of recreation opportunities at the lowest cost.

CHAPTER 11

THE PRIVATE ROLE

The most important single force in outdoor recreation is private endeavor—individual initiative, voluntary groups of many kinds, and commercial enterprise.

When Americans seek experience in the outdoors, they do not necessarily turn to government. Approximately two-thirds of the Nation's land is in private ownership, and in the Eastern States the proportion is much higher. Outdoor recreation starts on the front lawn or in the backyard. Day outings are often on private lands. People on weekend trips and vacations involving outdoor recreation usually patronize private accommodations, while some stay at privately owned cottages in seashore, lake, or mountain settings. When they do use government-owned land, they are almost certain to patronize private business to prepare for the trip, to get to their destination, to make their stay more comfortable while there, to get home, and to enjoy the trip in retrospect.

Because of the nature of the problems, much of this report has been devoted to recommendations for government action. This is necessary because so many facets of the subject must be considered in terms of the responsibilities and programs of government at all levels. The activities of private landowners and suppliers of food and services in meeting public needs for outdoor recreation will be governed chiefly by the prospect for private profit. These activities are of such broad scope and cover such a wide variety of situations as to make impracticable the framing of specific recommendations. Even this chapter, therefore, which is devoted to the private role, must deal largely in terms of the relationship of government to the private sector.

Outdoor recreation, unlike such a service as police protection, cannot be the responsibility of government alone. General access to the out-of-doors and simple facilities should be made available to everyone, but the more specialized activities are among the good things of life that must be paid for by the individual who wishes them. Government can help make opportunities available and can carry out projects in the public interest that cannot be done privately, but it does not, cannot, and should not provide for all the outdoor recreation needs of every citizen.

This individual responsibility in turn creates a market for private enterprise, and, as pointed out earlier, outdoor recreation is big business. The desire for experience in the outdoors provides customers for automobiles and trailers, patrons for resorts, passengers for common carriers, and an important market for hundreds of goods and services, ranging from climbing boots to yachts, and from film developing to overnight accommodations.

Finally, there are enterprises that are essentially private endeavor but are not commercial. Groups of individuals often band together in clubs or lodges to provide recreation for themselves. Perhaps more significantly, they also band together to provide recreation for others, as in the case of religious, service, and philanthropic organizations. Many industrial organizations provide outdoor

recreation for their employees, and some, such as the timber companies, make it available to the public generally.

There are three general areas of outdoor recreation development in which greater participation by the private sector of the economy should be encouraged: (1) Public use of private lands and waters for recreation purposes; (2) recreation activities by private, noncommercial groups and organizations; and (3) private concessions for facilities and services on public recreation areas.

PUBLIC RECREATION ON PRIVATE LANDS

Recommendation 11–1: *Government agencies should stimulate diversified commercial recreation investments on private lands and waters.*

Government assistance and technical guidance to private endeavor are desirable in order to stimulate sound development of commercial facilities and to promote high standards of operation. In the past, private investment has been limited largely to resort enterprises catering to higher income groups and to the development of private beaches, summer camps, riding stables, yacht clubs, ski areas, boating clubs, and shooting preserves. Resident summer camps for boys and girls are another important segment of the recreation industry. In the years following World War II, the scope of private activities has broadened somewhat in response to growing market demand.

The recreation industry is diverse and varied, and generalized statements can be misleading. Capital investment may range from several hundreds of dollars in some cases to millions of dollars in others. Some are large and extensive corporate efforts; others are family operations. Recreation is the major occupation for some managers; for others it is of secondary or minor importance.

Expansion plans appear to be limited by the availability of capital. There are indications that future demand is favorable for numerous types of recreation development, but many enterprises, particularly the smaller ones, report financing difficulties as an important limitation on expansion.[1] Government agencies can facilitate desirable private recreation development by cooperative arrangements between public recreation agencies and the Small Business Administration, including simplified borrowing procedures and public loan programs. A system of guaranteed loans might be worked out whereby public agencies could encourage private banking institutions to support commercial development.

Another problem is the high cost of personal liability insurance, particularly in the case of ski operations, hunting, swimming, and activities using horses. High real estate taxes, special government licenses, taxes, fees, and regulatory measures increase overhead costs and make operations difficult.

Technical assistance by State and Federal agencies would, in many instances, be useful in helping new enterprises to start and established ones to improve their operations. This assistance would be particularly effective if carried on in connection with public resource development programs. Reservoirs and highways, for example, often provide an initial stimulus to a variety of private

[1] *Private Outdoor Recreation Facilities,* Economic Research Service, U.S. Dept. of Agriculture, ORRRC Study Report 11.

recreation developments. Technical assistance should include information service on potential new fields of outdoor recreation, promotional efforts, and management problems.

Recommendation 11–2: *Government agencies should promote greater public recreation use of private lands and waters.*

Greater public use of private lands and waters would provide significant quantities of additional recreation opportunities, particularly in parts of the country where population density is high and public resources are limited. There will be a growing need in the future to make greater use of this potential.

Public rights to use private lands and waters—as opposed to outright ownership—can be acquired through voluntary agreements reached with landowners, as well as through public leasing arrangements, tax concessions, and easements. Government can lease specific rights to private lands and waters for public hunting, camping, and picnicking. Private hiking clubs can secure rights-of-way from landowners for the development of trail systems. Target shooting and archery have become increasingly popular in recent years; they generally take place on private lands. In some cases, landowners receive special State and local tax benefits in return for providing public access to their lands. The importance of securing perpetual rights and benefits of this nature cannot be stressed too strongly.

In 1960, American Forest Products Industries sponsored a study which reports over 300 developed recreation sites on private forest lands, most of which have been opened since 1955.[2] There is evidence that other business firms are becoming aware of the importance of this multipurpose development. In a 1960

[2] *Recreation on Forest Industry Lands,* American Forest Products Industries, 1960.

United States Chamber of Commerce study, 63 business firms, other than forest product firms, reported that 94.6 percent of their 1,721,280 acres of land and water—or 1,660,426 acres—were open to public use. Hunting, fishing, camping, hiking, riding, and water and winter sports were allowed on these lands.[3] Increased use of private lands will become particularly important in the northeastern portion of the Nation, where public lands are limited and population pressures intense.

Hunting and Fishing

Hunting and fishing by the public are two activities that can often be carried out in harmony with other uses on private lands and waters. Although complete data are not available, Commission studies indicate that the bulk of hunting in the United States takes place on private lands.[4] Fishing more often takes place on public waters, but access across private lands is needed in many cases. In many parts of the country, however, the posting of private lands and waters against hunting and fishing is becoming more and more common, and a corresponding need is arising to make more private lands available for public use.

Some States make habitat improvements on private lands in return for a guarantee that these areas will be open to hunters and fishermen. In Vermont, the State purchases hunting rights on private timberlands, with the owners retaining lumbering and mineral rights. Under this arrangement the owner pays a severance tax on the timber when it is harvested. The State pays the taxes on the land to the local communities, manages the game and habitat, and is responsible for controlling public use of the land. The owner is relieved of liability for damage suits. In Pennsylvania, large tracts of farmland are leased from private owners for public hunting, and State agencies provide protection and game management for the owners.

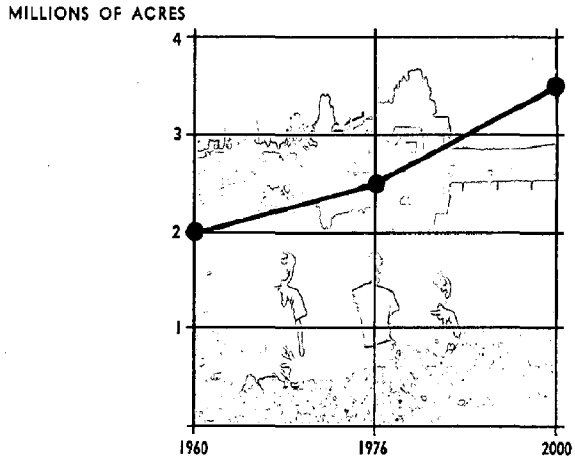
There is an increasingly widespread practice of leasing hunting and fishing rights on private lands to individuals and sportsmen's groups, and hunting preserves are now important in certain areas. These developments withdraw much land from general public use. On the other hand, recent developments have opened previously posted lands to greater public use. Organized groups such as the Izaak Walton League have obtained general public hunting opportunities on closed lands by agreeing to supply and post "Hunting By Permission Only" signs. Areas near buildings and livestock are carefully delineated for safety purposes. This type of cooperative arrangement should be encouraged in the public interest.

The development of the farm pond program, conducted by the Department of Agriculture in the interest of better soil and water conservation, has introduced a new element in recreation fishing. The number of farm ponds in the United States, which currently account for approximately 2 million surface acres of productive fish habitat, will increase by one-half million by 1976, and by another million by the year 2000.[5] In the past, these areas have provided fishing and

[3] *Private Outdoor Recreation Facilities,* Economic Research Service, U.S. Dept. of Agriculture, ORRRC Study Report 11.
[4] *Hunting in the United States—Its Present and Future Role,* Dept. of Conservation, School of Natural Resources, The University of Michigan, ORRRC Study Report 6.
[5] *Sport Fishing—Today and Tomorrow,* Bureau of Sport Fisheries and Wildlife, U.S. Dept. of the Interior, ORRRC Study Report 7.

FARM PONDS

SURFACE ACREAGE, 1960, 1976, AND 2000



recreation for the farmer and his immediate friends and neighbors, but this resource could be used more fully by the general public, furnishing at the same time a source of income to the farmer. These ponds are capable of producing great opportunities for certain forms of fishing and can provide convenient facilities for nearby urban populations. This kind of multiple-use management should be encouraged through joint programs of State game agencies, the Soil Conservation Service, and the Agricultural Extension Service.

Camping

Although public hunting and fishing on private lands have been more widespread in the past than other activities, it should be possible in the future to increase other uses. Camping, for example, is becoming a significant part of vacation travel in the United States. For the most part, campers have depended upon Federal and State parks and forests up to this time. Yet it is probable that farm and forest lands could be developed and managed so as to provide camping opportunities in areas where demand exceeds the capacity of public facilities.

The establishment of a standard user-fee policy for public campgrounds, as recommended in chapter 12, would encourage the development of commercial camping areas, provide additional income for landowners, and diversify opportunities for the public.

Public Behavior

Perhaps the most serious difficulty in public use of private lands is the problem created by the guests. Complaints are common about vandalism, theft, and thoughtless actions injurious to property and to the general recreation environment. Picking up trash and litter left by guests and repairing petty damages are often a major expense. The danger of fire caused by carelessness is of special concern, particularly when large numbers of inexperienced people congregate in the out-of-doors.

These "guest oriented" problems are of such a character that there are few direct or short-term measures that could be utilized by public agencies to overcome them. Public agencies can institute information and education programs designed to improve the behavior of individuals using both private and public recreation facilities. The Smokey Bear fire-prevention campaign is an excellent example. Educational and interpretive programs in public recreation areas can stress the importance of proper attitudes and behavior in the out-of-doors. Law enforcement programs can be strengthened. The private recreation industry can take steps to advance its own cause, explaining to the public its functions as well as its problems. But in the final analysis, it will be the individual recreation user who must "police" himself and, by so doing, engender in others a respect for the outdoor recreation environment, private as well as public.

ROLE OF NONCOMMERCIAL PRIVATE GROUPS

Recommendation 11–3: *Government agencies should support the efforts of charitable, service, and civic organizations to acquire and conserve outdoor recreation sites which serve public needs.*

The role of private, noncommercial organizations in providing and preserving outdoor recreation opportunities is a major one. The Audubon Society, the Izaak Walton League of America, and the Boy Scouts are examples of organizations which for many years have been acquiring significant recreation resources.

A wide range of organizations—youth groups, fraternal and veterans' organizations, sportsmen's groups, charitable and civic associations, and church groups—have an interest in fostering outdoor recreation. Many organizations of this type provide recreation opportunities for their members on their own land; others promote supervised use of public facilities. A large portion of the resident summer camps in this country are owned and administered by organizations such as churches, settlement houses, and other nonprofit agencies. These private efforts to provide recreation opportunities should be encouraged.

Through the establishment and expansion of hiking, walking, and camping clubs, private groups, in cooperation with public agencies and the private landowner, can promote greater utilization of outdoor resources. These groups are developing continuous, interconnecting trail systems and campsites, using private as well as public lands. The well-known Appalachian Trail has long been established in the eastern portion of the United States. A number of local groups now utilize this major trailway and are developing local systems associated with it. Members reach agreement with private landowners for the development of rights-of-way and construct and maintain walking and hiking trails under local supervision and control. In some cases, simple shelters and campsites are constructed along major trails.

In Europe, and particularly in England, systems of "walkways" provide a significant opportunity for outdoor recreation. It is a type of development which holds potential for the United States, particularly in areas of submarginal agricultural and forest lands close to major urban concentrations. Although hiking is not currently an important component of the total demand for outdoor recreation, it should be encouraged in the future. Government agencies should

recognize the potentiality of the walkway system as a means of providing recreation opportunities on private lands and should assist in its expansion.

Recommendation 11–4: *All levels of government should encourage and stimulate donations from private individuals and groups.*

Private donations have supplied a generous part of the total public recreation resource. Several units of the National Park System have been given to the Federal Government. Important State recreation areas, such as Maine's Baxter State Park, are the result of private benefactions. Gifts are extremely important on the local level. In the New York 22-county metropolitan area, for instance, the Regional Plan Association found in its 1960 study that approximately 25 percent of all State- and county-owned park land had been acquired through gifts.[6]

Public agencies should work with prospective donors to make giving more attractive. Details can be arranged so that the donors may have the full benefit of the tax advantages available. Life tenancies, spreading the gift over a number of years, and the timing of the gifts can help in this regard. In some cases, public agencies need additional authority to work out such arrangements. This authority should be promptly sought.

Agencies should undertake a program of publicizing the opportunities for giving recreation land. Many landowners may not know the possibilities of making valuable contributions and of the benefits to themselves. Cash donations should also be encouraged.

Not all offers can be accepted; each proposed gift of land must be reviewed to determine its suitability. Acceptance of random gifts or those of dubious value

[6] *The Race for Open Space,* Metropolitan Regional Council, Regional Plan Association, New York, 1960, pp. 9, 18.

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can increase administrative burdens and lead to pressures for the investment of public funds in facilities of an inappropriate type or at the wrong location. Public agencies accepting gifts of land must also consider the short-run loss of local tax revenue. Governments must be prepared to defend the wishes of the donors in the future use and protection of these lands.

Philanthropic organizations also often act as agents for the public in acquiring and managing areas of national significance. Colonial Williamsburg and Mount Vernon are outstanding examples. Government policy should encourage this activity.

The activities of private nonprofit groups or institutions can also help expand outdoor recreation opportunities for local communities. Groups like the Trustees of Reservations in Massachusetts, Natural Lands Trust in Philadelphia, and the Permanent Committee for Open Land in Chicago are obtaining land for scientific study, conservation, and the preservation of open space. These private groups can help provide outdoor recreation opportunities in cases where local governments are unable to do so. Accordingly, consideration should be given to exempting such groups from real estate taxes, provided they demonstrate their intention to use the lands for conservation, recreation, wildlife preservation, education, or open space and provide appropriate assurances that the lands will not be developed for commercial purposes. These assurances can take the form of restrictions in the deed to the land, or the actual ceding of development rights to local government.

CONCESSIONS

Private enterprise plays an important role in partnership with government in providing facilities and services on government-owned land. This arrangement—the concession system—is widely used by the Federal Government, by some States, and by local units of government. It provides services for the public without government expenditure and creates opportunities for private investment.

Federal Government

Recommendation 11–5: *Where feasible, Federal agencies should continue the present concession system of private construction and ownership. Where not feasible, the Federal Government should construct facilities and lease them to private enterprise for operation.*

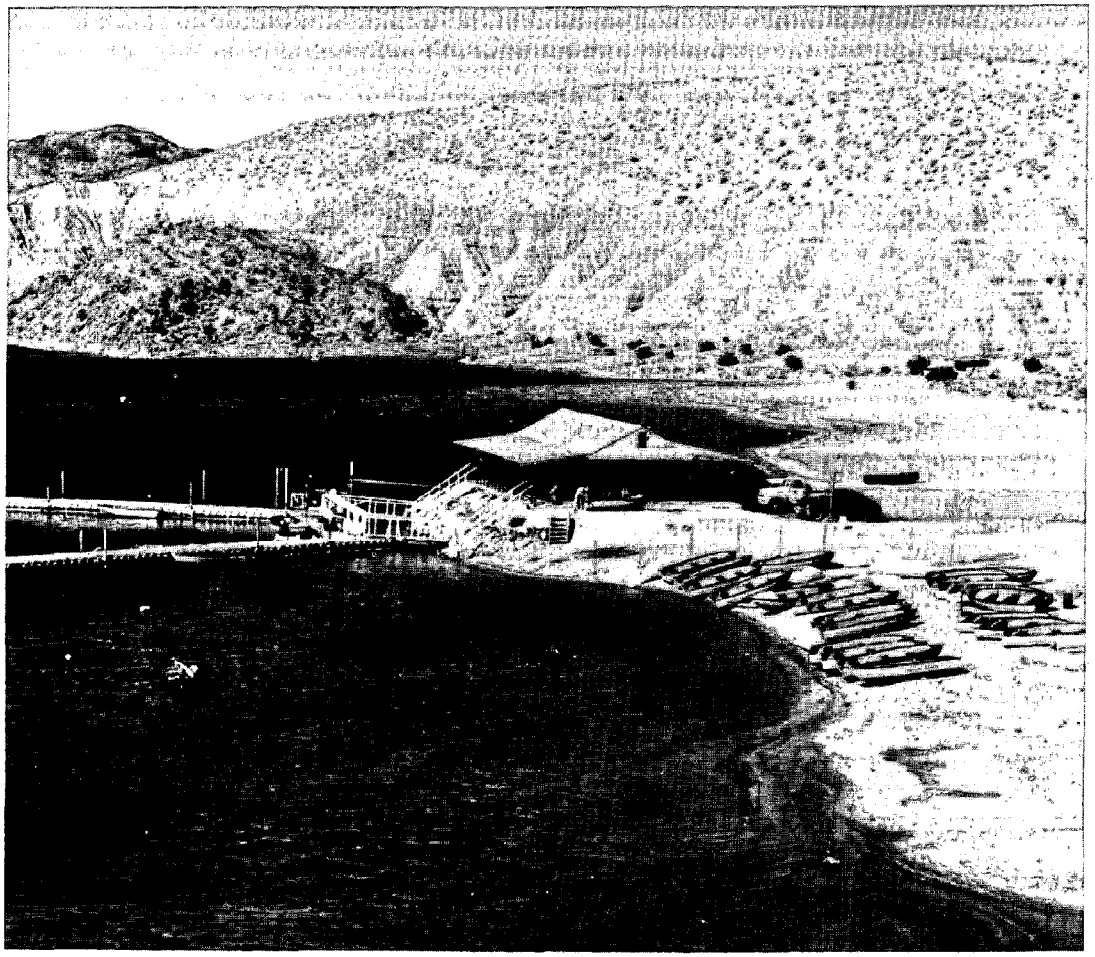
Concessions are important on the recreation lands of the Federal Government. The National Park Service, the Forest Service, the Corps of Engineers, and the other Federal agencies offering outdoor recreation opportunities generally operate under the policy of encouraging private capital to provide services wherever feasible. The Forest Service has over 1,400 concession contracts in effect, the National Park Service 177, and the Corps of Engineers 278. These numbers are somewhat misleading in terms of total effect, since the individual concessions of the Forest Service and Corps of Engineers tend to be smaller than those of the National Park Service.[7]

[7] *Financing Public Recreation Facilities,* National Planning Association, ORRRC Study Report 12.

In aggregate, the amount of investment is large. The Corps of Engineers estimates that $140 million has been invested in recreation and related facilities around its reservoirs. The National Park Service "Mission 66" program calls for private investment of $75 million over a 10-year period. Individual operations on various Federal lands range from small refreshment stands, which take in a few thousand dollars a season, to the Yosemite Park & Curry Co., which grossed over $8 million in 1960.

Concession operations constitute a significant contribution to America's recreation resources, and the present system should be continued. In situations which do not require large-scale investments, concession operations can be particularly effective.

However, it must be recognized that there are limitations to the concession system. It is, quite properly, geared to the profit motive. It can, under certain circumstances, profitably provide lodging, food, and services which are normal business functions. But the role of profit-seeking capital is limited by a number of factors. The recreation industry generally is a highly speculative one subject to extreme fluctuation. The season of many operations, particularly in national parks, is quite short. Construction costs are often high because of the remoteness



of location. Operation is complicated by the necessity of conforming to government regulations. The legal status of buildings and facilities is complex. Since concessioners cannot own the land upon which they build, they do not have fee title to their buildings. The contracts under which the concessioners operate allow a great deal of discretion to the administering agencies and little security to the concessioner.

These factors combine to make it extremely difficult for concessioners to borrow large sums for capital expansion. Banks and institutional lenders have not been willing to advance long-term capital in the face of these adverse factors. The majority of concessions have been financed from personal savings and from money generated by the business. This works well enough in small operations, but it often is inadequate for the needs of large operations in the national parks.

A congressional review of the concession situation would be most helpful. There are actions which could be taken to ease the difficulty of concessioners in obtaining capital. These include a strong statement of policy at a high level to create confidence in the system; a government loan-guarantee program; contracts of long duration and on favorable terms; and tax incentives. Some aspects of these actions amount to a subsidization of the concession system.

The concession system on Federal lands could perhaps be stimulated by some of the actions suggested. There are many instances, however, where the difficulties are too great to expect private enterprise to construct facilities and operate them at a profit. In such cases, where it is clearly in the public interest that such opportunities be available, the Federal Government should build the needed facilities and lease them to private enterprise for operation. These cases would arise chiefly in the national parks and national forests where overnight accommodations are necessary for the enjoyment of the area but cannot be provided at a profit by private enterprise. Provision should also be made whereby a State can share with the Federal Government the cost of building facilities on Federal lands.

State Government

There is wide variation among State and local governments in the use of concessions. Some States operate facilities from top to bottom with State employees. Many, however, build facilities with public funds and lease them to private interests for operation under State regulation. States do not rely widely upon private capital to construct facilities. The Commission suggests that the States thoroughly explore the feasibility of using private capital as a partner in increasing the supply of outdoor recreation facilities.

CHAPTER 12

FINANCING OUTDOOR RECREATION

Lack of adequate funds for outdoor recreation is a serious problem. Public agencies find park and recreation appropriations among the last to be considered in budget discussions and among the first to be pared down.

Two major needs stand out. First, to provide adequate outdoor recreation opportunities, substantial additional funds will be needed at all levels of government for planning, acquiring, developing, operating, and maintaining facilities. Second, public investments will have to be geared more accurately than in the past to meet current needs and emerging requirements.

Recent years have seen a swift expansion in the demand for outdoor recreation, brought about in large part by factors discussed earlier in this volume—rapid urbanization and increases in population, disposable income, leisure time, and mobility. These same factors have also contributed to other demands which compete for limited public funds. The provision of basic recreation opportunities for all citizens is an essential public service and deserves full consideration in budget decisions. A number of States, metropolitan areas, and local communities have taken action to meet their responsibilities for providing this service. For example, the Huron-Clinton Metropolitan Authority, with responsibility for recreation in a five-county area including Detroit, raised $2,430,000 in the fiscal year 1958 by levying a ¼-mill tax, its permitted maximum. Unfortunately, such examples of effective local action are not common.

Assurance of a continuous flow of adequate funds is necessary if effective planning and administration are to replace the stopgap operation now common in many public recreation agencies. Bond issues, grants, and loans can help provide funds for special needs, but they cannot alleviate the continuing problems caused by inadequate and irregular annual operating budgets. Planning, operation, and maintenance are continuous processes demanding steady financial support. These activities account for a large portion of the recreation budget. Operation and maintenance expenditures accounted for approximately 64 percent of total direct outdoor recreation expenditures made by the States during the period 1951–60, compared with 26 percent for development and construction, and 10 percent for land acquisition.[1]

Allocating available funds equitably and efficiently is the second major need. The pattern of public recreation investments has not always reflected the distribution of our population or its recreation requirements. For example, Federal expenditures have been devoted to developing facilities on Federal lands, which are largely in the West, and at water resource projects, which have been built for purposes other than meeting recreation demands. In the future, Federal expenditures should be related more closely to the over-all recreation needs of the Nation.

Public agencies will need to utilize as many revenue-producing devices as possible in order to meet the future demand for outdoor recreation. State and local governments, in particular, have pressing financial responsibilities that must

[1] *Public Expenditures for Outdoor Recreation,* Commission Staff, ORRRC Study Report 25.

be met if the recreation needs of the public are to be served. Today, outdoor recreation is far down on the list of public services competing for State and local tax dollars. The proposed provision of Federal financial assistance will help, but it will not substitute for State and local efforts. New programs will need capital. Existing facilities must be further developed, as well as operated and maintained.

STATE AND LOCAL PROGRAMS

Recommendation 12–1: *State and local governments should consider general obligation and revenue bonds as a means of financing capital investments.*

Development and construction projects and land acquisition demand large amounts of money that usually cannot be raised through current taxes or user charges. Bond issues have long been used by cities and States for financing public projects requiring heavy capital investments which produce long-term benefits.

Recently, bond issues have been used by the States to obtain funds for outdoor recreation. New York has passed a $75 million bond issue, and New Jersey a $60 million bond issue to finance the acquisition of lands for outdoor recreation by both the State and local governments. Other States have adopted or are studying similar proposals.

Recommendation 12–2: *State and local governments should consider new revenue-producing possibilities in developing plans for financing their recreation programs.*

The States have experimented with various devices in an effort to increase funds for outdoor recreation. The sale of a sticker for a car, which admits it to certain areas for a season, has been used successfully by both State and local governments as a form of entrance fee. This source of revenue, which is now more generally used by local governments, may become an increasingly popular device for State governments in the future. Other means of obtaining revenue, such as the use of uncollected refunds of State taxes on gasoline used by boats, need to be studied.

USER FEES AND CHARGES

Recommendation 12–3: *Public agencies supplying outdoor recreation opportunities should adopt a system of user fees and charges.*

A fair and reasonable system of fees and charges is a basic revenue producer, available to all agencies. At present, less than 30 percent of the public outdoor recreation areas report charging any fee at all. The following principles should be employed in setting user fees and charges—

1. Fees should be charged for those activities which involve exclusive use of facilities or which require the construction of specialized facilities by the government. Fee rates should be calculated to recover a reasonable portion of the cost

of administering, operating, and maintaining such facilities. However, this should not preclude the recovery of part or all of the capital costs in special cases where this is possible with reasonable fees.

2. Other activities should be made available by government to the public free of charge or at a fee low enough to ensure that no citizen would be precluded from enjoying them because of inability to pay.

User charges should not prevent or curtail the possible use and enjoyment of basic outdoor recreation opportunities. Adoption of these criteria would mean that people who use public property for such activities as hiking, picnicking, nature walks, or viewing wildlife could do so either free of charge or by paying a very nominal fee. On the other hand, those who use areas for activities that require the provision of special facilities, services, or supplies would pay a fee, as recommended above. Feasibility of collection is, of course, a limitation on this standard.

It is urged that uniformity in user fees be established among agencies on the same level of government and among different levels of government. This fee structure will serve to stimulate provision of similar services by private operators, who will not be faced with competition from free government facilities.

FEDERAL GRANTS-IN-AID

Recommendation 12–4: *A Federal program of grants-in-aid should be established promptly to provide matching funds to the States to stimulate recreation planning and to assist in acquiring lands and developing facilities for public outdoor recreation.*

The provision of outdoor recreation is a national concern. The interest of the Federal Government can no longer be limited to preserving sites of national significance and exercising stewardship over its own lands. It is generally recognized that our Nation is stronger if its citizens are properly nourished, housed, and educated. The nation benefits also if its citizens have the opportunity to use their nonwork hours in constructive and healthful pursuits, among which outdoor recreation ranks high.

All levels of government share an interest in and responsibility for meeting the outdoor recreation needs of the Nation. There will be continuing need for cooperation and joint action among all jurisdictions. However, the State governments have dominant public responsibility and should play the pivotal role. Accordingly, it is extremely important to stimulate State activity.

As was pointed out in chapter 9, State performance in outdoor recreation has been uneven. Some States are expanding their outdoor recreation programs, but progress has been slow in many areas. The proposed grant program would encourage action on both State and local problems. In the fields of fish and wildlife management, forest fire control, timber management, water pollution control, and hospital construction, Federal aid programs have proved successful stimulants to State and local action. The recommended grants-in-aid program for outdoor recreation would have a similar effect.

The program is designed to increase the ability of State and local governments to provide public outdoor recreation opportunities through (1) sponsoring and assisting in the development of State, regional, and local plans; (2) providing

financial assistance for land acquisition; (3) supplying part of the capital needed for the construction of facilities as well as some technical assistance; and (4) setting standards and controls on the use of funds to ensure that all elements of the population are served effectively.

The most pressing problems are in and adjacent to major population centers. The Housing Act of 1961 initiated a program to help metropolitan areas acquire open space for recreation and other purposes. This encouraging beginning can be a major force for meeting needs of urban residents, and the Commission recommends that the program be continued.

The open space program alone, however, cannot be expected to meet the problems involved in providing urban residents with adequate outdoor recreation opportunities out of the city. There will need to be close coordination between the proposed Bureau of Outdoor Recreation and the Housing and Home Finance Agency, which administers the open space program.

Administration of Program

The Federal aid program would be administered by the proposed Bureau of Outdoor Recreation. The Bureau would have responsibility for coordinating Federal activities and would provide the focal point for Federal leadership in encouraging development of State and interstate recreation programs. Its duties would include the review and approval of State plans supported by Federal funds, the disbursal of funds, and the auditing of accounts.

Through the grants-in-aid program, the Bureau of Outdoor Recreation would be in a position to play a leading role in improving outdoor recreation programs throughout the Nation. Personnel in the regional offices of the new Bureau would work closely with the States and help to devise statewide plans and keep them up to date.

There are strong grounds for believing that this national program will improve the standards of State operations. The Council of State Governments, in a survey conducted in 1949, found that of 317 State agencies administering 10 grants-in-aid programs, 70 percent thought their standards of administration and service had been improved by Federal participation.[2]

Types of Grants

GRANTS FOR PLANNING

The development of statewide outdoor recreation plans is essential. To encourage prompt State planning, the Commission recommends that planning grants be authorized for a 5-year period beginning at the option of the State. Federal participation up to 75 percent of the cost of developing State outdoor recreation plans should be authorized for the first year, 50 percent for the second year, and 35 percent for the succeeding 3 years.

These rates of Federal participation are recommended because it is essential to achieve prompt State action in launching the basic planning job, and valuable time and opportunities would be lost by delays. The total dollar outlay for planning would be small.

[2] *Federal Grants-in-Aid,* Report of Committee on Federal Grants-in-Aid, Council of State Governments, 1949, p. 274.

The value of this kind of assistance has been illustrated in the public health field where State planning already has been encouraged, particularly in water pollution control and hospital construction. The hospital program, for example, provides Federal funds without a matching requirement for planning and survey purposes.

In developing their plans, the States would be able to draw upon both the technical staff of the proposed Bureau of Outdoor Recreation and the staffs of local governments for data as well as advice.

GRANTS FOR LAND ACQUISITION AND DEVELOPMENT OF FACILITIES

Grants for land acquisition and development would be based on comprehensive State plans approved by the proposed Bureau of Outdoor Recreation. Plans developed prior to the availability of Federal funds would require approval before a State could become eligible for assistance.

Federal cost sharing would not exceed 40 percent, except that when States join in implementing an interstate plan, the Federal share could be raised to 50 percent. The additional 10-percent Federal contribution would be for the purpose of encouraging interstate action.

Eligibility

The agency authorized by a State to receive grants-in-aid for outdoor recreation purposes would be eligible to submit applications for assistance to the proposed Bureau of Outdoor Recreation. Political subdivisions of the State could also submit applications to the Bureau with the approval of the State outdoor recreation agency.

Standards

All programs and projects would have to be designed and managed to meet minimum standards of quality, economy, and efficiency as defined by the Bureau of Outdoor Recreation after consultation with State agencies.

Apportionment

Funds would be apportioned among the 50 States on the basis of their population and area, with equal weight given to each factor. Federal lands, other than restricted military areas, would be excluded from State area computations. The apportionment should reflect the extent of Federal recreation programs within the State and on Federal lands readily accessible in adjacent States. It should also reflect the current needs for outdoor recreation. A reasonable minimum apportionment should be specified.

Source of Funds

Federal grants should be appropriated from general Treasury funds on an annual basis. Use of general funds of the Treasury is appropriate in view of the broad social values of the proposed program. Some grants-in-aid programs,

such as those for highways and fish and wildlife, are financed by excise taxes. However, excise taxes and similar financial devices based on payment by beneficiaries would be difficult to levy on an equitable basis among the varied activities and users involved in outdoor recreation. It should be noted, however, that adoption of user fees, as recommended in this chapter, would have the effect of requiring beneficiaries of outdoor recreation facilities to make a special contribution to their support.

FEDERAL LOAN PROGRAM

Recommendation 12–5: *A Federal loan program should be established to complement the grants-in-aid program.*

A Federal loan program is recommended for public outdoor recreation projects included in approved State recreation plans. These loans would be used principally to finance the development of more specialized recreation facilities, or to provide an additional means of financing planning, land acquisition, and development. Such a program would introduce a needed element of flexibility and provide States with a number of options. It could be particularly helpful in assisting States in cases where immediate acquisition funds are needed but are not available.

Long-term loans would be made available at interest rates determined by the Bureau of Outdoor Recreation in consultation with the Department of the Treasury. Administration of loans would follow the same procedures as those used in the proposed grant program.

CHAPTER 13

WATER—A KEY ELEMENT

Water is a prime factor in most outdoor recreation activities. The Commission's National Recreation Survey reports that 44 percent of the population prefer water-based recreation activities over any others. Water also enhances recreation on land. Choice camping sites and picnic areas are usually those adjacent to or within sight of a lake or stream, and the touch of variety added by a pond or marsh enriches the pleasures of hiking or nature study.

Recreation on the water is increasing. This trend is likely to continue as more young people acquire an interest in water sports, new reservoirs are constructed, the boating industry wins new converts, and relatively new forms of water-based recreation, such as skindiving and water skiing, become increasingly popular. In fact, Commission studies indicate that by the year 2000 swimming will be the most popular single outdoor recreation activity—exceeding even driving for pleasure, which now holds first place. The trend will be greatly accelerated if pollution control programs are successful in cleaning up streams, lakes, and seashore areas that are presently off limits for recreation, or are now so unattractive as to preclude many activities.

As the population grows and interest in water-based recreation increases, the already heavy recreation pressures on water resources will reach critical proportions. The problems stemming from this pressure are among the most difficult in the entire outdoor recreation field.

As with land, the usefulness of water for outdoor recreation hinges on three factors: (1) proximity to population; (2) physical and legal accessibility; and (3) suitability for recreation purposes. There is a generally favorable relationship between most of the large concentrations of people in the United States and the physical location of recreation waters. Many of our great cities are within easy driving distance of the oceans or the Great Lakes, and nearly all of our larger inland cities are on major rivers. The requirements of access and suitability are not so easily satisfied. Limitations upon public access and poor quality are serious problems in many places. Public policy at all levels of government should be directed toward eliminating these barriers to outdoor recreation.

INLAND WATERS

Recommendation 13–1: *Public agencies should direct particular attention to assuring that adequate opportunities for water-based outdoor recreation are accessible to all Americans.*

Actions to meet this general objective include—

Acquire access areas and water resources for public use.

The general public is often excluded from waters that are legally open to common use. State action to acquire access areas may be necessary to make these waters available to the public. In some States, nonnavigable lakes surrounded by privately owned lands may be opened to public use through public purchase of a shorefront tract.[1]

Where needs are particularly pressing, the entire land and water area may need to be acquired for public use by purchase (including condemnation), gift, or lease. The State of Ohio, among others, has acquired water areas by these means.

Secure public rights to cross private lands.

A number of State and local governments have purchased access easements over private lands to increase the availability of water for public use. The State of Nebraska has obtained public rights-of-way and use of private lands by agreements with the owners for managing the waters and stocking them with fish. Easements, leases, and similar arrangements are often useful supplements to outright purchase and provide effective means of gaining access to waters that would otherwise be unavailable to the public. Easements or other rights short of outright acquisition should be made perpetual if possible, since limited or terminable leases or other arrangements give no permanent security for public use.

[1] In States that follow the rule of law that permits reasonable common use by riparian owners of all surface waters of nonnavigable lakes, the surface of such lakes may be opened to public recreation use through purchase by the State of a shorefront tract. The State would thus become a riparian owner of the shoreline, and the public would be entitled to make reasonable use of all surface waters of the lake in common with other riparian owners. See "Property—Riparian Rights—Right of Riparian Owners to Use Entire Surface of Nonnavigable Lake for Recreation," Asher Rabinowitz, *N.Y.U. Law Review*, Nov. 1960, vol. 35, No. 7, pp. 1377–1384, commenting on *Johnson* v. *Seifert*, 100 N.W., 2d 689 (Minn. 1960). See also *Flynn* v. *Beisel*, 102 N.W., 2d 284 (Minn. 1960).

Control development of lake and river shorelines.

As demand increases, conflicts between private ownership and public use of water areas will become more acute. Private property rights must, of course, be respected, but the rights of the public to use and enjoy publicly owned resources must not be restricted by lack of access. Under certain conditions, zoning may help to resolve these conflicts. In areas not already fully developed, zoning may be an effective tool to prevent undesirable development or location of certain kinds of commercial, industrial, or residential facilities. Private establishments may thus be concentrated at suitable locations where they will not interfere with public facilities, rather than scattered promiscuously along an entire shoreline. The remaining open areas may then be purchased, leased, or subjected to easements for public use. The State of Wisconsin, for example, requires that as a condition of subdivision approval all lake and stream shore plats include provision for public access to the low water mark at not more than ½-mile intervals along the lake or stream by means of a right-of-way at least 60 feet wide.[2] Similar provisions are being adopted in other States under State laws or local ordinances.

Construct and maintain public roads and access facilities to take full account of recreation needs and uses.

If care is taken in planning and effective coordination is assured between recreation and public road agencies, the availability of water areas to the general public can be increased substantially. Where they do not impair scenic or other natural assets, roads should provide direct access to recreation water resources. Access roads should be sufficiently wide to permit use by vehicles, bicycles, and pedestrians, or side trails for pedestrians and cyclists should be provided.

Review the status of public waters now closed to outdoor recreation use to determine whether such restrictions can be modified or removed.

The status of water areas in public ownership but now unavailable for outdoor recreation should be reviewed to determine whether they can be opened to selected recreation activities without harm to other public interests. For example, recreation activities are not permitted at many municipal water supply reservoirs. Such absolute restrictions are seldom essential to protect the purity of domestic water supplies, since in most cases the water is treated before delivery to the consumer. Sebago Lake near Portland, Maine, and Quabbin Reservoir in Massachusetts serve as important sources of recreation as well as water supply. It may not always be possible to allow swimming, but fishing and some forms of boating might be permitted.

Defense installations include large areas of desirable recreation waters, both coastal and inland, and some public use may be compatible with military requirements. The restricted status of all defense areas should be reviewed periodically. Also, when lands are no longer needed for defense facilities and are declared surplus, all feasible steps should be taken to make them available for public recreation purposes.

[2] West's Wisconsin Statutes Annotated (1957), sec. 236.16(3).

Recommendation 13–2: *Public agencies should promote and maintain the suitability and attractiveness of water areas for outdoor recreation activity.*

Actions to achieve this objective include the following—

In programs and projects for pollution control, recreation should be recognized as a motivating purpose and as a necessary objective in the allocation of funds therefor.

Demands upon water for all purposes are soaring. The report of the Senate Select Committee on National Water Resources indicated that total national requirements will increase from approximately 300 billion gallons at present to 888 billion gallons per day in the year 2000.[3]

Water is used in tremendous quantities for carrying away sewage, for diluting chemical wastes, and for many other municipal and industrial requirements. The resulting pollution problem has aroused widespread national concern. The extensive use of water for cooling purposes can also have significantly adverse effects upon the recreation use of water, particularly for fishing. Water from the Lehigh River, used heavily for cooling in steel mills, has measured over 100° F. at the Lehigh's confluence with the Delaware River, which is much higher than fish and other aquatic life can tolerate.

Existing treatment facilities and practices are often inadequate to maintain the quality of water for recreation purposes. For example, at various times during the summer of 1961, the Potomac River near Washington had a bacterial count 250 times greater than the maximum suggested by the U.S. Public Health Service as safe for swimming areas.[4] Many beaches in metropolitan areas have been closed to recreation use because of domestic and industrial pollution.

Soil erosion should be controlled to prevent siltation.

In all parts of the country, improper land use contributes to the siltation of streams, lakes, and reservoirs and thus impairs the recreation values of these waters. Comprehensive watershed management and soil conservation practices should be extended as a means of reducing siltation and increasing the recreation potential of the Nation's water resources.

Flood-plain zoning should be encouraged.

Many attractive areas along our rivers and streams are lost to outdoor recreation by default. Some are subject to intermittent flooding and therefore present substantial risks for private investment for industrial or residential purposes. The attractiveness of these sites for residences or their location along navigable waterways often brings about pressures for protecting them from floods by dams, levees, or channel improvements. In some instances, these improvements are necessary and warranted. In many cases, however, it may be more economical and efficient

[3] *Report of The Select Committee on National Water Resources,* S. Rept. 29, 87th Cong., 1st sess., Jan. 30, 1961, pp. v, 5.

[4] *Washington Post and Times Herald,* July 2, 1961, p. A3.

from a public point of view to restrict the use of flood-plain areas to purposes, like outdoor recreation, which require only limited development and which are not frustrated by periodic floods. The State of Connecticut has employed flood-plain zoning principles in redeveloping areas devastated by the 1955 floods. Some of these areas are now used for various forms of outdoor recreation.

Studies on flood-plain zoning undertaken by the Tennessee Valley Authority and the University of Chicago indicate that this regulatory mechanism provides a great potential for wiser use of water courses and their adjacent lands. The TVA report advised Congress that the rapid growth of urban communities is "* * * creating new pressures to utilize inviting but hazardous flood plains for subdivisions, shopping centers, commercial establishments, and other improvements. This mushrooming trend is creating new flood-damage potential faster than construction works can add to existing protection. New demands for Federal flood-control expenditures thus are created." The report went on to recommend that flood-plain zoning be a prerequisite to the contribution of Federal funds to local flood protective works.[5] The Corps of Engineers recently has been authorized to carry out flood-plain information studies.[6] The use of flood-plain zoning for outdoor recreation should be intensively explored and such zoning effected where feasible.

Public action is needed to resolve conflicts between recreation and other uses of water, as well as among recreation activities themselves.

Recreation use of water areas faces competition from many sides. Attractiveness of recreation areas may be reduced by the presence of industrial and manufacturing plants on adjacent sites. However, sound planning and coordination will assure that areas of particular value for outdoor recreation are maintained in as attractive settings as possible.

Different forms of recreation are also sometimes in conflict. The safety and attractiveness of a beach for bathing, for example, are substantially reduced by unregulated motorboating. The use of such a device as activity zoning can do much to resolve these problems. Unless prompt action is taken, however, dangerous conditions will become even worse as the demand for water-related outdoor recreation continues to climb.

Certain rivers should be preserved in their free-flowing condition and natural setting.

In early 1961, the Senate Select Committee on National Water Resources recommended "That certain streams be preserved in their free-flowing condition because their natural scenic, scientific, esthetic, and recreational values outweigh their value for water development and control purposes now and in the

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[5] *A Program for Reducing the National Flood Damage Potential,* Memorandum of the Chairman to Members of the Committee on Public Works, U.S. Senate, 86th Cong., 1st sess., Aug. 31, 1959, pp. v, 9.

[6] The Flood Control Act of 1960 authorized such studies in order to "secure an optimum balance between the needs of man for the use of the flood plain and of nature for discharge of flood waters."

future."[7] The Select Committee report suggests several rivers that meet these requirements: the Allagash River in Maine, the Current and Eleven Point Rivers in Missouri, and the Rogue River in Oregon.

In a recent Federal case which arose in Wisconsin,[8] the Federal Power Commission was upheld in its refusal to grant permission for the construction of a power dam specifically because this dam would have impaired the beauty of a stream now used for recreation.

Because of the unique recreation and scenic values that certain rivers provide, the Commission endorses efforts to preserve them in their natural condition. Further studies should be made to identify rivers or parts thereof that have these values.

Recommendation 13–3: *Recreation should be recognized as a beneficial use of water.*

State water law is a complex and controversial legal area, which cannot be treated here. It does seem clear, however, that if public demands for outdoor recreation are to be satisfied, the right of the public to use water for outdoor recreation must be promptly recognized.

COASTAL AND GREAT LAKES SHORELINES

In the 48 contiguous States, the recreation shorelines of the Atlantic, Gulf of Mexico, Pacific, and Great Lakes total over 21,000 miles. Of this total, 4,350 miles are beach, 11,160 miles are bluff shores, and the remainder is marsh shoreline. The total shorelines[9] of Alaska (33,904 miles) and Hawaii (1,092 miles) also offer a wide variety of recreation opportunities.

Historically, the shoreline has been relatively neglected by the Nation as a public resource. It has been left for acquisition and use by whoever wanted it. It is estimated that some 90 percent of this limited, highly desirable resource is under private control, about 5–7 percent is in public recreation areas, and about 3 percent is in restricted military areas.[10] The central problem is to secure adequate access to shorelines for public recreation. In light of the prevailing pattern of ownership, this means public acquisition of shoreline areas and other governmental action to guarantee rights of access to the general public.

[7] "Water Recreation Needs In the U.S., 1960–2000," *Water Resources Activities In The United States,* Senate Select Comm. on National Water Resources, Comm. Print No. 17, May 1960, p. 2.

[8] The opinion of the court stated in part: "We think there was substantial evidence and a rational basis for the Commission's finding of existing unique recreational value in the lower 22-mile stretch of the Namekagon River which should be preserved. The Commission, in fact, decided that the unique recreational features of the river were of greater public benefit than the use of the river for waterpower development." (*Namekagon Hydro Co.* v. *F. P. C.,* 216 F. 2d 509.)

[9] *Statistical Abstract of the United States, 1960* (Coast and Geodetic Survey figures), U.S. Dept. of Commerce.

[10] R. D. Campbell, H. L. LeBlanc, and M. A. Mason (The George Washington University), *Shoreline Recreation Resources of the United States,* ORRRC Study Report 4, ch. 2. The authors point out that since a field inventory of shoreline ownership was not available for this study, precise ownership data could not be obtained for all shoreline areas. The estimates may understate the amount of public shoreline and as a result overestimate the amount of private recreation shoreline. The uncertainty with respect to precise percentages of shoreline in public ownership applies mostly to local, county, and to a lesser extent, State ownership.

Recommendation 13–4: *Immediate action should be taken by Federal, State, and local governments to acquire additional beach and shoreline areas.*

The need for acquisition of additional public shoreline areas has been a matter of increasing public concern since the end of World War II.

In 1954 the National Park Service undertook a national survey of the Atlantic and Gulf coastlines. Subsequent studies were made of the Pacific coast and the shorelines of the Great Lakes.

The 13 shoreline areas that were recommended for addition to the national park system are examples of areas that should be acquired for public use. The 87th Congress enacted legislation [11] to authorize acquisition of one of these, the Cape Cod National Seashore. This is a significant forward step, but State and Federal agencies should act promptly to preserve for public use and enjoyment the remaining magnificent stretches of unspoiled coastline.

The National Park Service surveys also identified an additional number of shoreline areas that offer great promise for providing high quality public recreation. Pending legislation would authorize further studies by the Department of the Interior of the means and costs of acquiring 14 ocean and lake shoreline areas, as well as shoreline studies by the Department of Agriculture.[12] These efforts should provide a sound basis for acquisition of shoreline by various units of government or through interstate arrangements. Both local and national considerations influence the decision as to which administrative jurisdiction should acquire and manage these resources. Highest priority should be given to acquisition of areas located closest to major population centers and other areas that are immediately threatened. The need is critical—opportunity to place these areas in public ownership is fading each year as other uses encroach.

FEDERAL IMPOUNDMENTS

Within limits, the location of reservoirs and artificial lakes can be deliberately planned. This offers a flexibility in distribution not paralleled by any other water recreation resource. Reservoirs have brought water-based recreation to many people in the arid and semiarid West, and thus affected the general pattern of recreation activity in these areas. Plans for continuing Federal reservoir construction at a high rate emphasize the importance of taking full advantage of the recreation potential.

The use of reservoir areas for outdoor recreation is already extensive. Corps of Engineers reservoirs received 109 million visitor-days in 1960. Public visits to 64 reservoir areas administered by the Bureau of Reclamation were almost 23 million in 1959. The TVA reservoirs had 42 million visitors in 1960. These figures exceed attendance at national parks and national forests combined. The over-all rate of growth in the use of all national reservoirs for recreation has been over 10 percent annually—a doubling of visitor-days every 5 to 7 years. The

[11] Public Law 87–126, 87th Cong., 1st sess. (75 Stat. 284).
[12] S. 543, 87th Cong.

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growth of visitor use at reservoirs in the Southwest from 1950 to 1958 was 159 percent.[13]

Despite the extensive recreation use made of Federal reservoirs, access and facilities are often inadequate. Estimates of the numbers of people served do not measure how well their needs are being met. Nor do they reveal the public values that may have been forgone because of inadequate public-use areas, poor access, or meager facilities.

This problem has concerned water resource policymakers and recreation planners for many years. There is increasing recognition that public recreation values created by Federal water developments should be considered in the procedure used for calculating total benefits and costs. But there is still substantial

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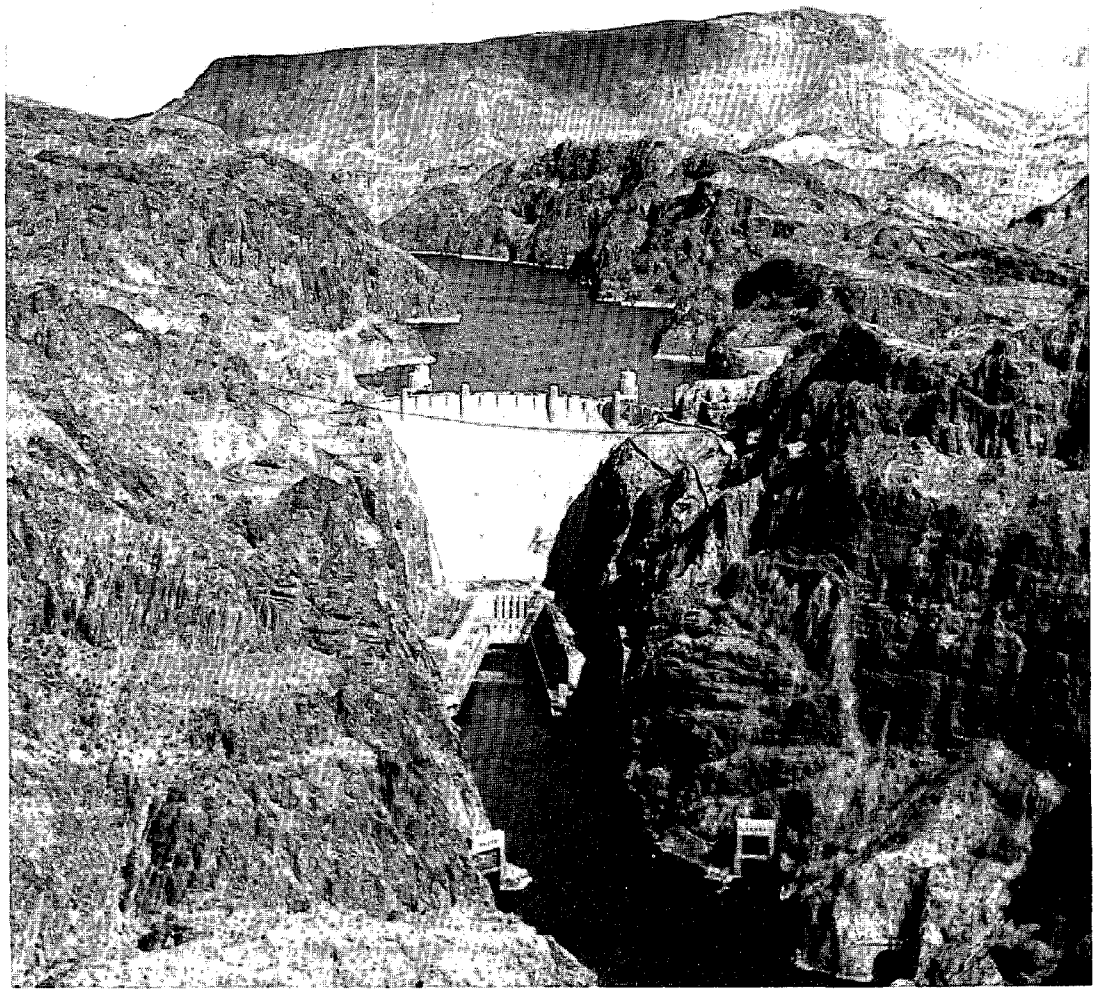
[13] Sources: Corps of Engineers; Bureau of Reclamation; *Outdoor Recreation for a Growing* Nation, TVA, Sept. 25, 1961, p. 89; *Public Outdoor Recreation Areas—Acreage, Use, Potential,* ORRRC Study Report 1.



disagreement over what the policy should be in this area. The research aspects of this problem are considered in chapter 14.

Recommendation 13–5: *Outdoor recreation should be considered as an important purpose of Federal multipurpose water resource developments, and thus guaranteed full consideration in the planning, design, construction, and operation of projects. Federal investments for recreation should be approved when the recreation opportunities created are an integral and harmonious element of a State or regional recreation plan. Existing developments should be reviewed under these criteria.*

Water resource projects and programs undertaken by the Federal Government should take full account of public outdoor recreation values whenever possible. Federal investments for recreation at water developments should be based on recreation needs rather than on needs for water for other purposes. For this reason, investments should be made when the recreation opportunities created will be integral and harmonious elements of State or regional recreation plans. This policy would permit Federal construction of an impoundment primarily for recreation in areas of particular need.

In some cases, the drawdown of water levels because of power generation or irrigation needs coincides with the highest seasonal recreation use. Recreation usually is the loser in such conflicts if it is not given full consideration in reservoir planning, and if a share of the cost of dam construction is not allocated to it.

Conflicts of this kind often can be foreseen. The problem in such cases is to decide whether the outdoor recreation benefits involved merit the additional investment required to provide more stable pool levels. If it appears that the impoundment will provide a substantial contribution to a balanced State or regional recreation program, and reasonable alternatives do not exist, the additional investment is certainly justified.

This policy should be extended to existing structures. These should be reexamined to determine their suitability for recreation development and their role in meeting State and regional recreation needs.

Major Federal construction agencies are not recreation agencies, and have little basis for deciding whether an impoundment fits State or regional recreation requirements. In consultation with the States and the construction agency involved, the proposed Bureau of Outdoor Recreation should coordinate the planning of recreation features of multiple-purpose water resource developments. This responsibility would include the scheduling of investments to meet changing requirements.

Recommendation 13–6: *Reservoir planning should provide for acquisition of adequate shoreline lands for public access and use.*

There has been a great deal of controversy over the policies for acquisition of shorelines at reservoirs built by the Corps of Engineers and by the Bureau of Reclamation. Some 30 years ago, when general land values were low and

shoreline properties of relatively little value, the generous acquisition of land for reservoirs constructed for flood control, navigation, or irrigation purposes usually provided ample shoreline areas for recreation purposes. In 1953–54 the policy was changed to require that only those shorelands necessary to provide minimum access be purchased, and that flowage easements in lieu of outright acquisition be used for other lands. This policy was modified in 1959 to permit construction agencies to propose land acquisition for recreation and public use in addition to land needed for traditional project purposes. Although this change was a step forward, present practices are often inadequate.

The recreation potential created by a reservoir cannot be realized unless it is made available to the public. This requires access roads and sufficient shoreline lands for the installation of necessary facilities. It is unrealistic to consider outdoor recreation in allocating costs at Federal impoundments without providing for acquisition of sufficient shortline and adjoining lands to permit recreation use. Land needs for this purpose should be considered at the outset of project planning.

In the planning of water resource projects, full provision should also be made for early consultation with the States involved. Project proposals should clearly identify shoreline lands proposed for acquisition. The costs of such acquisition should usually be borne by the Federal Government. In many instances, however, ideal State park opportunities are created by Federal water developments. For example, Nebraska has planned a chain of State parks to be established in conjunction with Federal impoundments proposed in the Platte River valley. The Commission believes that costs of land adjacent to reservoirs that is purchased for State parks may be borne in part by the Federal Government, if these lands constitute elements of a comprehensive State or regional plan. Such Federal contributions should be considered in the apportionment of grants-in-aid to States. The proposed Bureau of Outdoor Recreation, in cooperation with the States concerned, should play the key Federal role in reaching decisions on land requirements for recreation at Federal reservoirs.

CHAPTER 14

RESEARCH—AN ESSENTIAL FOUNDATION

NEED FOR KNOWLEDGE

The need for recreation research has been highlighted by two findings which have been emphasized in this report. First, pressure on the Nation's natural resources will increase sharply over the next decades—both for outdoor recreation and for other requirements. Second, there is land available for outdoor recreation, but it is not being effectively used in many cases. The Nation's outdoor recreation demands will be met only through wise decisions on resource allocation, sound planning, and effective development of facilities. These all require the support of thorough knowledge and extensive data—the product of research.

Recommendation 14–1: *A systematic and continuing program of research is needed to provide the basis for wise decisions and sound management.*

Increased pressure on the Nation's resources will require their more efficient use. Recreation will be only one of the claimants for these resources. Policymakers and planners will have to choose among a number of competing uses. Research is needed to provide the factual background for making these choices among alternative uses for the same scarce resources. Unless both the tangible and the intangible values of outdoor recreation are supported by a bulwark of factual knowledge other, possibly less essential, uses may well preempt present and potential recreation resources. This will be particularly true in areas near large centers of population where recreation needs will be the greatest.

Outdoor recreation is a major land use involving a quarter of a billion acres of public land and perhaps as much private land. Over 90 percent of the population participates. It is a $20 billion a year industry with an annual government investment of an additional $1 billion. Yet, there is no systematic coordinated research program in outdoor recreation as there is in other fields which involve fewer people, acres, and dollars.

Perhaps no other activity involving so many people and so basic a part of our life has received less attention from qualified investigators and scientists. This is not to belittle the efforts which have been made. The surveys and studies made for this Commission, and the writings and publications of interested persons and agencies, indicate a live and growing interest in the field. These efforts represent a good beginning on a large task.

It is a tribute to the recreation leaders of the past that they were able to accomplish so much without the support of systematic research. Most of the recreation research that was done was directed toward solving specific, and often local, problems of management. Though limited in scope, these studies have improved conditions in many recreation areas, and they have yielded valuable information at the practical level of recreation management. Yet, as a major activity in contemporary social life, and as a broad field of public and private enterprise, outdoor recreation has had relatively little systematic study.

CATEGORIES OF RESEARCH

There are three related but distinct categories of recreation research that will require greater and continuing attention.

Data Collection, Inventory, and Factfinding

The need for current basic statistical information is fundamental. The Commission's inventory of nonurban designated public recreation areas, its National Recreation Survey, and its associated studies have provided much essential information. These constitute a framework upon which continuing research can build. Background data are needed to establish and maintain information on past and developing trends. Periodic inventories of the Nation's recreation resources and surveys of participation in major outdoor recreation activities must be made to reflect changing conditions and to provide the facts needed for sound planning.

Applied Management Research

There is a need for problem-solving research to establish general principles and techniques essential for efficient management. For example, what factors should be considered in establishing the carrying capacity of a recreation area? What are the problems of determining the "carrying capacity" of a high-density (Class I) area on the one hand and of a primitive (Class V) area at the other extreme?

What portion of the total need can be met in urban areas? Answers to questions of this type are needed before recreation development and acquisition programs can move forward with full efficiency. Applied research efforts in the social as well as in the biological and physical sciences will be required.

Fundamental Research

Still another kind of research is urgently needed—research aimed not directly at solving specific problems but at providing information on a wide range of topics, some relating directly, and others only indirectly, to recreation. Basic and comprehensive research efforts dealing with recreation values of all kinds are imperative. Where, for example, does recreation fit into the social values of our society? What, if any, are the substitutes for outdoor recreation?

The move to urban living over the last half century and the prospect that it will continue for the next represent one of the major currents of American life; much needs to be learned about the effects of this trend upon the future need for, and availability of, adequate opportunities for outdoor recreation.

There is growing evidence that many decisions relating to resource use must in the final analysis be value judgments. Rather than obviating the need for research this makes it all the more necessary that the decision maker be provided with all possible factual information as a basis for judgment. In short, it helps to remove value judgments from the realm of guesswork and increases the likelihood that the correct choice will be made.

A PROBLEM IN ECONOMICS

One of the most urgent research needs is for more knowledge about the direct benefit that individuals derive from outdoor recreation. Something is

known about the indirect effects or impact of expenditures by those seeking recreation, but little is known about the direct benefit to the individual who participates. Information of this nature is important, for it should play an important part in decisions allocating resources to outdoor recreation.

Public outdoor recreation is not generally sold for a price. Therefore, since there is no adequate dollar measure of the worth of recreation experiences at public sites, there is great difficulty in judging the primary direct benefits that accrue to people engaging in outdoor recreation, and hence in knowing how to allocate resources among competing uses. In the past, this problem has arisen most critically in connection with Federal multipurpose water impoundments.

If the benefits which will accrue directly to recreation seekers from a specific proposal for investment cannot be measured, how can it be known that there are not superior alternatives, e.g., as among several alternative recreation developments and as between recreation and other uses of some of the resources? What assurance is there that decisions will result in a reasonably efficient use of resources?

In view of these questions, Federal agencies and others have sought for a number of years to devise methods for measuring the value to the individual of publicly provided outdoor recreation.

Proposals have been made to value more or less arbitrarily all visits to Federal water impoundments at 50 cents per day, $1 per day, or $1.60 per day. A schedule of values for days of fishing under different conditions has also been considered. The principal objection to these fixed-value proposals is that the estimates derived from them vary directly with visitation. Consequently, the resulting estimates of benefits do not measure differences in quality or in activities at the site. In any event, the estimated value per unit rests almost entirely on a "judgment value."

Another method, which has attracted some attention, is that of developing schedules of demand based on cost of travel at varying distances from the recreation area. But this method involves the assumption that the benefit is the same to all users, while costs increase with distance. Thus, the entire estimate of benefit rests on the location of the recreation area and not on the amount or quality of the opportunity it provides.

Still another method is to value a recreation resource in terms of its highest alternative use. The objection to this method is that some of the best recreation areas, like the Grand Canyon, might have no value in an alternative use, while some of the poorest recreation areas, such as perfectly flat land with highly fertile soil, might be very productive in an agricultural use.

In some respects the most promising method of measuring the economic value of outdoor recreation is afforded by market area surveys. People could be asked to select among several suggested prices that might be charged for admission to a proposed recreation site, located within stated distances and offering a specified combination of activities. Detailed investigations could also be made of charges for use of private recreation facilities in the area. The interviews would be costly and would involve other relatively expensive procedures for the tabulation and interpretation of the data.

Recently developed methods, in which market situations are simulated in controlled laboratory experiments, might be applied to outdoor recreation. There is no reason to believe that a series of realistic choice situations could not be artificially

constructed to evaluate the subjective value to consumers of a service presently priced at zero.

In order to provide a guide to the kinds of data needed to solve problems of outdoor recreation benefit-cost analysis, one of the Commission studies developed an analytical framework to assist in the orderly planning and development of recreation facilities.[1] The study first defines the conditions of supply. Thus, a certain volume of development costs (land and capital) and certain annual operating costs are combined to produce a planned capacity of recreation service at selected levels of intensity of use. Consumer demand is inversely related to the price of a recreation service, intensity of use, and distance.

Essentially the problem is to estimate the number of people and the per capita charges necessary to provide a surplus over costs, to equal costs, or to provide recreation below cost. This same method can be used to suggest choices between potential recreation sites. The study states that the kinds of information most needed are as follows: rated capacity, the amount of recreation activity for different sizes and kinds of development, and the associated costs; the estimated number of user-days of use of the recreation area and of each facility within the area under several alternative conditions; the intensity of use under varying conditions; the changes in costs as more or less capacity is provided; the extent of use under different price levels; and the relative attractiveness of the site.

Such an analysis will require time and money, particularly in the collection of detailed information to describe the "recreation setting" of each proposed project. However, the same justification exists for applying highly detailed investigative methods for measuring recreation benefits as applies to justification for the expenditures of hundreds of thousands of dollars for soil surveys, agricultural economic studies, and hydrologic and engineering surveys that precede the construction of any other resource development project. Hence, if recreation is to be considered a purpose of resource development, similar effort, time, and money must be devoted to studies which will make possible intelligent judgments in each particular case.

Each of the methods for measuring the direct benefit of outdoor recreation discussed has serious shortcomings when applied across the board. Indeed, it seems quite likely that the principal error in all these proposals for evaluating outdoor recreation is that of seeking a single uniform solution to a number of highly specialized individual problems. It may very well be the case that each proposal for recreation investment must be investigated as a unique situation and that the origin of benefits may differ widely from one situation to another.

Regardless of the technique employed, it is clear that no single value can be assigned to the wide variety of recreation activities. Any value—such as dollars per recreation day—derived from judgment that is applied universally is almost certain to lead to a poor approximation of the real benefits for any given project. The net benefits of recreation, like those of irrigation and flood control, vary with time, and place, and origin.

With the present state of knowledge, it appears that the best procedure for measuring the value of recreation is a detailed analysis of each individual project.

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[1] Ivan M. Lee (University of California, Berkeley), "Economic Analysis Bearing on Outdoor Recreation Development," *Economic Studies of Outdoor Recreation,* ORRRC Study Report 24.

THE BREADTH OF RECREATION RESEARCH

Since research on outdoor recreation must cover a broad spectrum, the use of many talents will be required. Many areas of human behavior need to be considered, for an adequate understanding of outdoor recreation depends upon a study of people and their society as well as a study of natural resources and their use.

The investigation and understanding of outdoor recreation extend far beyond the realm of any one specialized field. Much of the research yielding important insights might not at first appear to be "recreation research," since it is carried out by economists, sociologists, anthropologists, political scientists, demographers, psychologists, land-use specialists, and geographers, to mention only a few. Yet there is ample evidence that the types of research carried out by these and other disciplines could greatly increase knowledge of outdoor recreation and its values. Unfortunately, the analysis and interpretation of the research in these fields have only rarely been related to recreation. Thus, there is much factual material already available for recreation research if placed in the proper context.

CARRYING OUT THE TASK

One of the principal functions of the proposed Bureau of Outdoor Recreation should be to act as the central clearinghouse of information on outdoor recreation. Where there is a lack of knowledge, the Bureau should stimulate or sponsor research on a particular topic. Universities, nonprofit research organizations, or other Federal agencies could be called upon. The Commission has found them to be invaluable in its own research program.

There are presently many excellent research organizations within the Federal and State governments, in educational institutions, and in private enterprises. Closer working relationships should be established between State colleges and universities and public recreation agencies. With the Bureau stimulating and coordinating their work in the field of outdoor recreation, the total effects of these efforts could be great. For instance, if one State is carrying out extensive research on a particular problem, the Bureau could encourage other States to turn their efforts to other topics.

In addition to providing important insights to outdoor recreation, an effective research effort will also develop a large reservoir of trained professional men and women capable of administering, managing, and further studying recreation and its associated problems. This important byproduct could fill a major need.

The Research Advisory Committee that is proposed for the Bureau of Outdoor Recreation could play an important function in this process. Through the inclusion of representatives of private organizations and universities as well as Federal and State officials, the scope of the unified effort could be further broadened.

In essence, a capable research potential currently exists in the Federal Government, the States, universities, and private business. What is needed is stimulation to turn the attention of these organizations to the problems of outdoor recreation and coordination of their efforts. This can be done. In initiating its own program, the Commission found that it stimulated research efforts far beyond those that it was able to finance directly. The Bureau of Outdoor Recreation and its Research Advisory Committee can accomplish this on a broad and continuing basis.

A FINAL WORD

After three years of surveying the needs, we have presented in this report a program that, in our judgment, can assure the benefits of outdoor recreation for all American people now and in the future. It contains recommendations for action along a wide front. Now the task must pass to others.

The next step is for legislative bodies and administrative agencies at all levels of government, for private landowners, and for individuals and their organizations to take action. We urge all to push forward in a nationwide effort to secure the contribution that outdoor recreation can make to the well-being of the Nation and its people.

OUTDOOR
RECREATION
FOR AMERICA

APPENDIXES

APPENDIX A

THE ACT

Public Law 85-470
85th Congress, S. 846
June 28, 1958

AN ACT

For the establishment of a National Outdoor Recreation Resources Review Commission to study the outdoor recreation resources of the public lands and other land and water areas of the United States, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to preserve, develop, and assure accessibility to all American people of present and future generations such quality and quantity of outdoor recreation resources as will be necessary and desirable for individual enjoyment, and to assure the spiritual, cultural, and physical benefits that such outdoor recreation provides; in order to inventory and evaluate the outdoor recreation resources and opportunities of the Nation, to determine the types and location of such resources and opportunities which will be required by present and future generations; and in order to make comprehensive information and recommendations leading to these goals available to the President, the Congress, and the individual States and Territories, there is hereby authorized and created a bipartisan Outdoor Recreation Resources Review Commission.

Outdoor Recreation Resources Review Act.

SEC. 2. For the purposes of this Act—

Definitions.

(1) "Commission" shall mean the Outdoor Recreation Resources Review Commission;

(2) "Outdoor recreation resources" shall mean the land and water areas and associated resources of such areas in the United States, its Territories, and possessions which provide or may in the future provide opportunities for outdoor recreation, irrespective of ownership.

(3) "Outdoor recreation resources" shall not mean nor include recreation facilities, programs, and opportunities usually associated with urban development such as playgrounds, stadia, golf courses, city parks, and zoos.

72 Stat. 238.
72 Stat. 239.

SEC. 3. (a) The Commission hereby authorized and created shall consist of fifteen members appointed as follows:

Membership.

(1) Two majority and two minority members of the Senate Committee on Interior and Insular Affairs, to be appointed by the President of the Senate;

(2) Two majority and two minority members of the House Committee on Interior and Insular Affairs to be appointed by the Speaker of the House; and

(3) Seven citizens, known to be informed about and concerned with the preservation and development of outdoor recreation resources and opportunities, and experienced in resource conservation planning for multiple resources uses, who shall be appointed by the President, and one of whom shall be designated as chairman by the President.

Vacancies occurring on the Commission shall not affect the authority of the remaining members of the Commission to carry out the functions of the Commission, and shall be filled in the same manner as the original positions.

(b) The Commission members shall serve without compensation, except that each member shall be entitled to reimbursement for actual travel and subsistence expense incurred in the services of the Commission and each member appointed by the President shall be entitled to a per diem allowance not to exceed $50 per day when actually engaged in Commission business.

(c) The Commission shall convene as soon as practicable following appointment of its members, to implement the purposes and objectives of this Act.

Personnel, etc.

SEC. 4. (a) The Commission is authorized, without regard to the civil-service laws and regulations, to appoint and fix the compensation of an executive secretary and such additional personnel as may be necessary to enable it to carry out its functions, except that any Federal employees subject to the civil service laws and regulations who may be assigned to the Commission shall retain civil service status without interruption or loss of status or privilege.

(b) The Commission shall establish headquarters in the District of Columbia and shall make such other arrangements as are necessary to carry out the purposes of this Act.

Liaison officers.

(c) The Commission shall request the Secretary of each Federal Department or head of any independent agency which includes an agency or agencies with a direct interest and responsibility in any phase of outdoor recreation to appoint, and he shall appoint for each such agency a liaison officer who shall work closely with the Commission and its staff.

Advisory Council.

SEC. 5. (a) There is hereby established an advisory council which shall consist of the liaison officers appointed under section 4 (c), together with twenty-five additional members appointed by the Commission who shall be representative of the various major geographical areas and citizen interest groups including the following: State game and fish departments, State park departments, State forestry departments, private organizations working in the field of outdoor recreation resources and opportunities, landowners, State water pollution control agencies, State water development agencies, private forestry interests, livestock interests, mining interests, State travel commissions, petroleum production interests, commercial fishing interests, commercial outdoor recreation interests, industry, education, labor, public utilities, and municipal governments.

(b) The functions of the advisory council shall be to advise and counsel the Commission in the development of ways, means, and procedures whereby maximum cooperation may be obtained from all agencies and groups whose assistance in accomplishing the purposes of this Act will be required in arriving at sound methods and criteria for evaluating outdoor recreation resources data assembled and otherwise to advise and assist the Commission in carrying out the purposes of the Act.

72 Stat. 239.
72 Stat. 240.

(c) Members of the advisory council, except those employed by the Federal Government and assigned to the Commission as liaison officers, shall serve without compensation except that each shall be entitled to reimbursement for actual travel and subsistence expenses incurred in attending meetings of the advisory council called by the Chairman of the Commission, or incurred in carrying out duties assigned by the Chairman of the Commission.

(d) The Chairman of the Commission shall call an initial organization meeting of the advisory council, a meeting of such council each six months thereafter, and a final meeting of such council prior to transmitting the final report to the President and the Congress.

Duties.

SEC. 6. (a) The Commission shall proceed as soon as practicable to set in motion a nationwide inventory and evaluation of outdoor recreation resources and opportunities, directly and through the Federal agencies, the States, and private organizations and groups, utilizing to the fullest extent possible such studies, data, and reports previously prepared or concurrently in process by Federal agencies, States, private organizations, groups, and others.

(b) The Commission shall compile such data and in the light of the data so compiled and of information available concerning trends in population, leisure, transportation, and other factors shall determine the amount, kind, quality, and location of such outdoor recrea-

tion resources and opportunities as will be required by the year 1976 and the year 2000, and shall recommend what policies should best be adopted and what programs be initiated, at each level of government and by private organizations and other citizen groups and interests, to meet such future requirements.

(c) The Commission shall present not later than September 1, 1961, a report of its review, a compilation of its data, and its recommendations on a State by State, region by region, and national basis to the President and to the Congress, and shall cease to exist not later than one year thereafter. Such report, compilation, and recommendations shall be presented in such form as to make them of maximum value to the States and shall include recommendations as to means whereby the review may effectively be kept current in the future. The Commission, on its own initiative or on request of the President or the Congress, shall prepare interim or progress reports on particular phases of its review. Reports; termination.

(d) The Commission is authorized to conduct public hearings and otherwise to secure data and expressions of opinion.

(e) The Commission is authorized to make direct grants to the States, and to transfer necessary funds to Federal agencies, from sums appropriated pursuant to section 8, to carry out such aspects of the review as the Commission may determine can best be carried out by the States, or Federal agencies, under such arrangements and agreements as are determined by the Commission; and may enter into contracts or agreements for studies and surveys with public or private agencies and organizations. The Commission is also authorized to reimburse Federal agencies for the expenses of liaison officers appointed under section 4 (c) and other cooperation. 72 Stat. 240. 72 Stat. 241.

SEC. 7. The Commission, in its inquiries, findings, and recommendations, shall recognize that present and future solutions to problems of outdoor recreation resources and opportunities are responsibilities at all levels of government, from local to Federal, and of individuals and private organizations as well. The Commission shall recognize that lands, waters, forest, rangelands, wetlands, wildlife and such other natural resources that serve economic purposes also serve to varying degrees and for varying uses outdoor recreation purposes, and that sound planning of resource utilization for the full future welfare of the Nation must include coordination and integration of all such multiple uses. Resource planning.

SEC. 8. There are hereby authorized to be appropriated not more than $2,500,000 to carry out the purposes of this Act, and such moneys as may be appropriated shall be available to the Commission until expended. Appropriation.

SEC. 9. This Act may be cited as "the Outdoor Recreation Resources Review Act". Short title.

Approved June 28, 1958.

Public Law 86-6
86th Congress, H. R. 1776
March 25, 1959

AN ACT

73 Stat. 14.

To amend the Act of June 28, 1958, entitled "An Act to provide for a National Outdoor Recreation Resources Review Commission, and for other purposes".

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subsection (a) of section 4 of the Act of June 28, 1958, entitled "An Act to provide for a National Outdoor Recreation Resources Review Commission, and for other purposes" is amended to read as follows:

72 Stat. 239.
16 USC 17k note.

"The Commission is authorized, without regard to the civil service laws and regulations, and without regard to the Classification Act of 1949, as amended, to appoint and fix the compensation of an executive secretary and such additional personnel as may be necessary to enable it to carry out its functions, except that any Federal employees subject to the civil service laws and regulations who may be assigned to the Commission shall retain civil service status without interruption or loss of status or privilege."

Approved March 25, 1959.

Public Law 87-12
87th Congress, S. 449
March 29, 1961

AN ACT

75 STAT. 19.

To extend the time in which the Outdoor Recreation Resources Review Commission shall submit its final report.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the first sentence of section 6(c) of the Act entitled "An Act for the establishment of a National Outdoor Recreation Resources Review Commission to study the outdoor recreation resources of the public lands and other land and water areas of the United States, and for other purposes," approved June 28, 1958 (72 Stat. 238), is amended to read as follows: "The Commission shall present not later than January 31, 1962, a report of its review, a compilation of its data, and its recommendations on a State by State, region by region, and national basis to the President and to the Congress, and shall cease to exist not later than September 1, 1962."

Outdoor Recreation Resources Review Commission.
Final report.
16 USC 17k note.

Approved March 29, 1961.

GPO 34139

APPENDIX B

THE STATE CONTACT OFFICERS

At the request of the Commission, the Governors of the 50 States, Puerto Rico, and the Virgin Islands appointed contact officers to provide an orderly and effective means of cooperation. The following are the persons who served in this capacity during the work of the Commission. In cases where more than one contact officer is listed, the first is the one serving at the time of publication of this report.

Alabama

Roy Marcato
Director
Department of Publicity and Information

Alaska

Phil Holdsworth
Commissioner
Department of Natural Resources

Arizona

Governor Paul Fannin
Represented by Dennis McCarthy
State Parks Director
Arizona State Parks Board

Arkansas

Ted Woods
Executive Director
Publicity and Parks Commission

California

DeWitt Nelson
Director
Department of Conservation

Colorado

George O'Malley, Jr.
Director
State Park and Recreation Board

Harold W. Lathrop (deceased)
Director
Colorado State Park and Recreation Board

Connecticut

Donald C. Mathews
Director
Connecticut State Park and Forest Commission

Delaware

Norman G. Wilder
Director of Conservation
Board of Game and Fish Commissioners

Florida

James H. Sayes
Manager
Recreation Department
Florida Development Commission

Georgia

Henry D. Struble
Assistant to the Director
Georgia Department of State Parks

Hawaii

Richard C. Dunlap
Director of State Parks
Department of Land and Natural Resources

Wayne Collins
Director of Agriculture and Conservation

C. Eric Reppun
President
Board of Agriculture and Forestry

Idaho

J. W. Emmert
Park Consultant
(Former Superintendent of Parks)

Illinois

William T. Lodge
Director
Department of Conservation

Glen D. Palmer
Director
Department of Conservation

Indiana

Kenneth Kunkel
Director
Department of Conservation

Kenneth R. Cougill
Director
Division of State Parks

Kenneth Marlin
Director
Department of Conservation

Iowa

Robert E. Beebe
Member
Iowa Conservation Commission

George V. Jeck
Chairman
Iowa Conservation Commission

Kansas

Lynn Burris, Jr.
Director
State Park and Resources Authority

Alvin F. Grauerholz
Chairman
Governor's Advisory Board

Kentucky

Edward V. Fox
Commissioner of Parks

Paul Gannon
Commissioner of Conservation

Louisiana

I. W. Patterson
Executive Director
Department of Commerce and Industry

Curt Siegelin
Executive Director
Department of Commerce and Industry

Maine

Lawrence Stuart
Director of State Parks
State Park Commission

Maryland

Joseph F. Kaylor
Director
State Department of Forests and Parks

Massachusetts

Charles H. Foster
Commissioner
Department of Natural Resources

Michigan

Clifford Ketcham
Secretary
Michigan Conservation Commission
Department of Conservation

Minnesota

Clarence Prout
Commissioner
Department of Conservation

George A. Selke
Commissioner
Department of Conservation

Mississippi

John P. Camp, Jr.
Executive Director
Mississippi Game and Fish Commission

Rex McRaney
Executive Director
Mississippi Game and Fish Commission

Missouri

Joseph Jaeger, Jr.
Director of Parks
Missouri State Park Board

Montana

Robert F. Cooney
Chief, Game Management Division
Department of Fish and Game

Nebraska

Melvin O. Steen
Director
Nebraska's Game, Forestation and Parks Commission

Nevada

William J. Hart
Director
State Park Commission

New Hampshire

Maurice J. Murphy, Jr.
Attorney General

New Jersey

H. Mat Adams
Commissioner
Department of Conservation and Economic Development

Salvatore A. Bontempo
Commissioner
Department of Conservation and Economic Development

New Mexico

Eastburn R. Smith
Superintendent
State Park Commission

Joe M. Clark
Superintendent
State Park Commission

New York

Harold G. Wilm
Commissioner of Conservation

North Carolina

Thomas C. Ellis
Superintendent of State Parks
Department of Conservation and Development

Thomas W. Morse
Superintendent of State Parks
Department of Conservation and Development

Colonel Harry E. Brown
Director
Department of Water Resources

North Dakota

Russell W. Stuart
Commissioner
North Dakota Game and Fish Department

I. G. Buc
Commissioner
North Dakota Game and Fish Department

Ohio

Herbert B. Eagon
Director
Department of Natural Resources

Oklahoma

John Hannah
Oklahoma Planning and Resources Board

Oregon

Dan P. Allen
Executive Secretary
Oregon Committee on Natural Resources

Pennsylvania

Maurice K. Goddard
Secretary
Department of Forests and Waters

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APPENDIX C

ORRRC STUDY REPORTS[1]

1. Public Outdoor Recreation Areas—Acreage, Use, Potential, 260 pages, prepared by the Commission staff, presents a description and analysis of all nonurban public designated recreation areas in the 50 States, Puerto Rico, and the Virgin Islands. Nearly 10,000 named areas, and an additional 15,000 small areas, are included, with pertinent data on their acreage, location, and management agency. Areas containing more than 40 acres are evaluated and analyzed in terms of visits, use pressures, major activities, facilities, number of employees, and future expansion potential. This study contains a separate inventory of recreation use of military areas, public domain, and Indian lands in the United States. Definitions and procedures utilized in the study are included.

2. List of Public Outdoor Recreation Areas—1960, 190 pages, prepared by the Commission staff, contains the names of approximately 10,000 recreation areas, grouped by State and managing agency, and provides data on their acreage and county location. Additional aggregate data for minor recreation areas, such as waysides and picnic areas, are included. Data on areas are presented by census region, management agency, and size category. Definitions and procedures utilized in obtaining these data are included.

3. Wilderness and Recreation—A Report on Resources, Values, and Problems, 340 pages, prepared by The Wildland Research Center, University of California, Berkeley, presents a comprehensive discussion and analysis of wilderness preservation. The study contains an inventory of 64 areas, containing approximately 28 million acres. It discusses traditional concepts of wilderness, various approaches to its economic evaluation, and basic legal and administrative considerations and problems involved in wilderness preservation. An evaluation is made of the commercial potential of existing wilderness areas—timber, grazing, water, and mineral resources. An analysis of the social and economic characteristics of wilderness users is based upon a sample survey carried out in three specified areas.

4. Shoreline Recreation Resources of the United States, 150 pages, prepared by The George Washington University, contains an analysis of the Great Lakes and ocean shoreline of the contiguous States, and presents a detailed State-by-State summary of quantitative and qualitative factors affecting their recreational use. It includes a classification of national shoreline resources—beach, marsh, and bluff. Problems of private ownership, access, and suitability are discussed, and recommendations are made.

5. The Quality of Outdoor Recreation: As Evidenced by User Satisfaction, 95 pages, prepared by the Department of Resource Development, Michigan State University, presents the findings of a study designed to test the usefulness of user satisfaction as a measure of area quality. This study is based in part upon a user survey of 24 recreation areas, Federal, State, and local. Data from the survey are summarized and evaluated in terms of socioeconomic characteristics and activities engaged in. Field appraisals of various elements which affect quality—facilities, physical characteristics, cleanliness, degree of congestion—of each site were carried out by a team of resource technicians to provide a framework for relating and assessing the survey findings. An analysis is made of the validity of employing expressions of

[1] Page counts are estimates.

user satisfaction as a measure of area quality, and the resulting implications for public policy are discussed.

6. Hunting in the United States—Its Present and Future Role, 180 pages, prepared by the Department of Conservation, School of Natural Resources, The University of Michigan, examines the forces affecting game supply and summarizes a State-by-State survey of factors influencing hunting in the 48 contiguous States. Attention is given to wildlife regulations, limitation of hunting access, public hunting areas, fee hunting, and shooting preserves. The significance of land-use trends and Federal land-use programs as they affect game supply are evaluated. Problems affecting State game agencies are analyzed and suggested solutions are offered.

7. Sport Fishing—Today and Tomorrow, 130 pages, prepared by the Bureau of Sport Fisheries and Wildlife, U.S. Department of the Interior, presents an appraisal of fishing as a form of recreation in the United States and includes a State-by-State survey of the problems of supply, status of fishing waters, and management policies and responsibilities. It covers present and future supply of both warm- and cold-water fish and makes projections of the status of sport fishing in the years ahead. It summarizes the future prospects by regions.

8. Potential New Sites for Outdoor Recreation in the Northeast, 170 pages, prepared by the Economic Research Service, U.S. Department of Agriculture, presents the findings of a study designed to determine the existence of potential recreation sites of 30 acres or more, currently in private ownership and located in the 10 densely populated Northeastern States. The location of sites is based upon an analysis of aerial photographs. Site potentiality is determined according to land type, recreation suitability, and proximity to major metropolitan concentrations. Case studies carried out in New Hampshire, Pennsylvania, and Connecticut are utilized to illustrate ownership patterns, problems, history of land transfer, current land use, and availability for public purchase. The report describes procedures used by and available to State agencies for land acquisition and development.

9. Alaska Outdoor Recreation Potential, 50 pages, prepared by The Conservation Foundation, appraises the major factors affecting the development of Alaska's recreation potential. It discusses land control and disposition patterns and economic development problems. It evaluates the present status of recreation, examines the essentials of sound recreation planning, and concludes with a summary of current problems and recommendations for future development of Alaska's recreation potential.

10. Water for Recreation—Values and Opportunities, 130 pages, prepared by the Geological Survey, U.S. Department of the Interior, presents an analysis of future water-based recreation in the United States. It relates recreation uses of water to other types of water development and discusses the importance of including recreation in the planning of water resource projects. The problem of access is discussed, and the effects of such factors as water quality and reservoir management upon recreation use are analyzed.

11. Private Outdoor Recreation Facilities, 150 pages, prepared by the Economic Research Service, U.S. Department of Agriculture, consists of two parts. The first reports on a mail survey of private owners of recreation facilities such as resorts, dude ranches, campgrounds, ski areas, vacation farms, and resort hotels, and includes a partial inventory from secondary sources of industrial recreation areas, including large commercial timber holdings. The second phase of the study is a qualitative appraisal of 66 cases representing various types of private recreation facilities scattered

throughout the United States. Included is a discussion of such factors as type of specific activities provided, amount of land used, number of visitors, fees charged, problems encountered, and plans for expansion.

12. Financing Public Recreation Facilites, 100 pages, prepared by the National Planning Association, contains an analysis of the difficulties involved in obtaining long-term financing for recreation facilities. The role of concessioners is the principal focus with particular emphasis on factors such as Federal policy, short season, contract provisions, and general philosophy. Some consideration is given to State policies. The analysis is supplemented by 18 case studies of concession operations on Federal lands and the approach of seven selected States: California, Indiana, Kentucky, New Hampshire, New York, Oklahoma, and West Virginia.

13. Federal Agencies and Outdoor Recreation, 130 pages, prepared by The Frederic Burk Foundation for Education, San Francisco State College, presents a descriptive analysis of the organizational and administrative structure of Federal agencies concerned with outdoor recreation. While the traditional Federal land-managing agencies receive primary consideration, attention is also given to other agencies which indirectly affect the total supply of outdoor recreation opportunities. The study is focused upon recreation program objectives and policies of the agencies. Important problems encountered are analyzed, and opportunities for more effective program coordination and cooperation are identified.

14. Directory of State Outdoor Recreation Administration, 195 pages, a Commission staff project based on an American Political Science Association study, presents a State-by-State description of recreation administration. It is designed to serve as a directory of State agencies concerned with outdoor recreation, together with a brief description of agency authority, organization, and programs. Attention is given to significant or unique activities or administrative features.

15. Open Space Action, 60 pages, prepared by William H. Whyte, deals with ways and means of acquiring open space in the fast developing areas of this country. Part I is a brief history of significant Federal, State, and local developments in open space action. Part II contains observations and guidelines for open space action programs. Specific recommendations for action by all levels of government are presented in part III. An appendix contains examples of Federal and State legislation, tax abatement measures, easement forms and costs, and plans incorporating new devices such as cluster development.

16. Land Acquisition for Outdoor Recreation—Analysis of Selected Legal Problems, 60 pages, prepared by Norman Williams, Jr., reviews the constitutional power of State and local governments to acquire land by purchase or condemnation for recreational purposes and for related open space, and the constitutional power of the Federal Government to condemn land for such purposes. The study also examines legal problems involved in acquiring easements and other less-than-fee rights in land for recreation and open space.

17. Multiple Use of Land and Water Areas, 45 pages, prepared by John Shanklin, discusses multiple use both in a statutory and in a management sense and analyzes the relationship of recreation to other uses of land and water. It reviews the multiple-use concepts of the land management agencies of the U.S. Government and includes sections on multiple use at the State level and on private land. The volume contains sections on multiple-use criteria and suggestions for multiple-use management of public lands. Comments on the study from Federal, State, and private land management agencies are included in the report.

18. A Look Abroad: The Effect of Foreign Travel on Domestic Outdoor Recreation and a Brief Survey of Outdoor Recreation in Six Countries, 45 pages, prepared by Pauline Tait, discusses the effect of Americans going abroad as a substitute for major outdoor recreation trips in this country and the impact upon our own outdoor recreation resources of foreign travelers coming to this country. It presents travel projections to the years 1976 and 2000. A second part contains a brief review of outdoor recreation programs in Great Britain, France, West Germany, Denmark, The Netherlands, and Japan. Attention is directed to innovations that might be applicable in this country.

19. National Recreation Survey, 300 pages, prepared by the Commission staff on the basis of data collected by the Bureau of the Census, contains the tabular results and analysis of a nationwide survey of the outdoor recreation habits and preferences of the American people 12 years of age and over. These data are derived from four separate samples, each involving approximately 4,000 interviews. Tables show various participation rates by activity and region, according to age, sex, place of residence, education, occupation, and race. Activity rates are also shown by state of health, physical impairment, and size of community. Activity preference and data on vacation trips and outings are expressed according to selected socioeconomic characteristics. Estimates are made of expenditures, proportion of leisure time devoted to outdoor recreation, and other factors. Descriptive analyses of the results of the survey include socioeconomic factors associated with participation in 17 specified outdoor activities; expenditures on vacations, trips, and outings; and background factors associated with participation in certain groups of activities.

20. Participation in Outdoor Recreation: Factors Affecting Demand Among American Adults, 100 pages, by Eva Mueller and Gerald Gurin with the assistance of Margaret Wood, contains the results of a survey conducted by the Survey Research Center, The University of Michigan. It discusses the effect upon participation of income, education, occupation, paid vacations, place of residence, region, sex, age, life cycle, and race. Included are discussions of outdoor recreation in relation to leisure-time use, vacation and weekend trips, parks and recreation areas. It contains a chapter on camping. The study is based upon 2,759 interviews with a representative sample of U.S. adults.

21. The Future of Outdoor Recreation in Metropolitan Regions of the United States, 640 pages, prepared jointly by the Commission staff and selected universities and planning agencies. One part describes the general characteristics of outdoor recreation activities and particular problems of metropolitan residents, including the problem of access. It contrasts present and future outdoor recreation opportunities against the backdrop of expanding urbanization. It contains separate studies of five selected metropolitan regions: New York-New Jersey-Philadelphia (The Institute of Public Administration), Atlanta (Center for Continuing Education, University of Georgia), St. Louis (Washington University), Chicago (Northeastern Illinois Metropolitan Area Planning Commission), and Los Angeles (University of California, Los Angeles). The central topic in each study is an analysis of the supply and demand aspects of outdoor recreation. In each case, central problems are identified and possible solutions suggested.

22. Trends in American Living and Outdoor Recreation, 315 pages, contains a group of essays dealing with the effects of current social and cultural trends upon future needs and preferences for outdoor recreation. These essays, prepared independently by recognized scholars in the behavioral sciences, are focused upon the

following topics as they relate to outdoor recreation: historical development; cultural change; demographic factors; the family; mass communication; physical and mental health; education; voluntary groups; political institutions; urban growth; and the planning process. Authors include Lawrence K. Frank, Herbert J. Gans, William J. Goode, Morton Grodzins, Philip M. Hauser, Max Kaplan and Paul F. Lazardsfeld, Margaret Mead, Jay B. Nash, Harvey S. Perloff and Lowdon Wingo, Jr., Julian W. Smith, George D. Stoddard, and Melvin M. Webber.

23. Projections to the Years 1976 and 2000: Economic Growth, Population, Labor Force and Leisure, and Transportation, 510 pages, contains a set of four fundamental studies which project the size, distribution, income, leisure, and mobility of the American population to 1976 and 2000. The population studies are by the Commission staff, economic projections by the National Planning Association, labor force and leisure projections by the Bureau of Labor Statistics, U.S. Department of Labor, and the transportation study by A. J. Goldenthal, Washington, D.C. In addition to national aggregates, attention is directed to regional and State characteristics.

24. Economic Studies of Outdoor Recreation, 150 pages, contains a group of essays dealing with various economic aspects of outdoor recreation. Both theoretical and practical approaches are taken to some basic economic problems of recreation development, including those of investment, pricing, timing, benefit-cost evaluation, public-private relationships; and economic impact. Methods of economic analysis and evaluation utilized by various Federal resource development agencies are discussed. In addition to Commission staff, contributors include Marion Clawson, Resources for the Future; Arthur L. Moore, the National Planning Association; and Ivan M. Lee, University of California, Berkeley.

25. Public Expenditures for Outdoor Recreation, 90 pages, prepared by the Commission staff, indicates the total direct expenditures made by Federal, State, and local governments for providing outdoor recreation opportunities, facilities, and services during the period 1951–60. An analysis is made of the relative amounts spent within each State and each major census region, as well as among the agencies concerned, for land acquisition, development, construction, operation and maintenance. Appendix tables show detailed data on annual expenditures by level of government, by agency, and by objective.

26. Prospective Demand for Outdoor Recreation, 150 pages, prepared by the Commission staff, measures the needs and preferences of the American people for a number of outdoor recreation activities. This comprehensive analysis is based on data obtained from the National Recreation Survey, the Commission inventory, the metropolitan studies, and the essays concerned with trends and patterns of American life.

27. Outdoor Recreation Literature: A Survey, 100 pages, by the Library of Congress, discusses the problems of preparing a bibliography on outdoor recreation—the diversity of the field, and its relationship with other fields—and includes a listing, description, and assessment of some of the more important references. The discussion is divided into literature on resources and literature on users. Two appendixes contain separate bibliographies on leisure and intergovernmental problems.

APPENDIX D

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[1] Includes cooperative financial agreements with Federal agencies.
[2] Numbers refer to ORRRC Study Reports described in appendix C.

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APPENDIX F

STATISTICAL TABLES

Demand

Table 1.—Number of activity days per person 12 years and over during 1960–61, by major region and by season of the year, 48 contiguous States, by outdoor activity.

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Supply

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Table 41.—Potential development of campgrounds, acreage and capacity, by census region, 48 contiguous States, 1960.

Demand

TABLE 1.—*Number of activity days per person 12 years and over during 1960–61, by major region and by season of the year, 48 contiguous States, by outdoor activity*

Outdoor activity	United States [1]					Region [2]			
	Year	Summer	Fall	Winter	Spring	Northeast	North Central	South	West
Driving for pleasure	20.73	6.68	4.34	4.66	5.05	21.29	21.32	19.63	20.42
Walking for pleasure	17.93	4.34	4.22	4.88	4.49	24.62	16.08	14.65	16.67
Playing outdoor games or sports	12.71	3.63	2.77	2.58	3.73	12.31	11.68	12.88	14.44
Swimming	6.47	5.15	.63	.16	.53	7.97	5.34	5.54	7.63
Sightseeing	5.91	2.20	1.38	1.17	1.16	5.11	6.64	5.09	7.46
Bicycling	5.15	1.75	.93	.87	1.60	5.38	4.98	5.32	4.64
Fishing	4.19	1.99	.75	.38	1.07	3.26	4.01	5.30	3.93
Attending outdoor sports events	3.75	1.32	1.23	.45	.75	3.22	3.61	4.18	4.07
Picnicking	3.53	2.14	.62	.21	.56	3.77	3.64	2.77	4.30
Nature walks	2.70	.75	.69	.62	.64	2.79	2.42	2.65	2.88
Other boating	1.95	1.22	.36	.12	.25	1.77	2.21	1.86	1.78
Hunting	1.86	.19	.73	.80	.14	1.35	1.79	2.58	1.36
Horseback riding	1.25	.42	.21	.20	.42	.74	1.08	1.50	1.98
Camping	.86	.46	.20	.07	.13	.55	.65	.79	2.00
Miscellaneous	.57	.40	.08	.05	.04	.82	.60	.24	.63
Ice skating	.55	(3)	(3)	.52	.03	1.07	.99	.05	.06
Sledding or tobogganing	.51	(3)	(3)	.44	.07	1.18	.46	.28	.12
Hiking	.42	.26	.06	.05	.05	.41	.35	.35	.72
Water skiing	.41	.30	.05	.01	.05	.32	.27	.54	.62
Attending outdoor concerts, drama, etc.	.39	.21	.08	.03	.07	.50	.34	.29	.48
Canoeing	.12	.07	.02	.01	.02	.13	.13	.10	.12
Sailing	.11	.05	.04	.01	.01	.17	.07	.04	.13
Mountain climbing	.09	.04	.01	.01	.03	.08	.05	.14	.09
Snow skiing	.07	(3)	(3)	.06	.01	.18	.07	.02	.04

[1] Months included in each season: summer, June–August 1960; fall, September–November 1960; winter, December 1960–February 1961; spring, March–May 1961.

[2] Regions are the standard delineation of the U.S. Census Bureau, excepting Alaska and Hawaii.

[3] Less than 0.005 days per person.

Source: *National Recreation Survey*, Commission staff, ORRRC Study Report 19.

TABLE 2.—*Percent of adults participating and not participating at least once in outdoor activities "last year," according to whether or not respondent would like to do more often or take up in the future, 1959–60*

Outdoor activity	Participated in activity at least once "last year"		Did not participate in activity "last year"	
	Did not express desire to engage in activity more often	Would like to do more often in the future	Would like to take it up in the future	Expressed no preference for this activity, or no answer
	Percent	*Percent*	*Percent*	*Percent*
Fishing	25	13	8	54
Outdoor swimming or going to the beach	36	9	5	50
Automobile riding for sightseeing and relaxation	61	10	3	26
Camping	11	4	9	76
Horseback riding	5	2	10	83
Boating and canoeing	23	5	6	66
Hunting	12	5	5	78
Picnics	59	7	3	31
Skiing and other winter sports	5	1	4	90
Hiking	17	2	3	78
Nature and bird walks	12	2	2	84

Source: Eva Mueller and Gerald Gurin with the assistance of Margaret Wood (Survey Research Center, The University of Michigan), *Participation in Outdoor Recreation*, ORRRC Study Report 20, tables 2, 6. Percentages are based upon a total sample of 2,759 cases.

TABLE 3.—*Indices of change in recreation-related factors, 1951–59 (1951=100)*

Year	Visits to national parks [1]	Visits to recreation areas [2]	Outboard motors in use [3]	Intercity travel [4]	Fishing license holders [5]	Per capita disposable income (1960 dollars) [6]	Population residing in United States [7]
1952	114	119	107	108	107	101	102
1953	125	133	114	116	110	104	103
1954	129	147	124	120	116	103	105
1955	135	163	140	128	118	108	107
1956	148	180	157	135	117	111	109
1957	170	205	171	141	120	112	111
1958	176	221	182	145	126	111	113
1959	186	243	194	146	125	115	115

Adapted from the following sources:

[1] *Public Use, National Parks and Related Areas*, Annual Reports, National Park Service, U.S. Dept. of the Interior, Washington, D.C.

[2] All units of National Park System, State parks, TVA reservoirs, Corps of Engineers reservoirs, National Wildlife Refuges, national forests. Data supplied by National Park Service and Fish and Wildlife Service, U.S. Dept. of the Interior; Forest Service, U.S. Dept. of Agriculture; Corps of Engineers, U.S. Dept. of the Army; and Tennessee Valley Authority.

[3] *Boating 1960*, National Association of Engine and Boat Manufacturers and Outboard Boating Club of America, Chicago, Illinois, 1961, p. 5.

[4] A. J. Goldenthal, "The Future of Travel in the United States," *Projections to the Years 1976 and 2000*, ORRRC Study Report 23.

[5] *Statistical Abstract of the United States, 1960*, U.S. Dept. of Commerce, Washington, D.C., 1960.

[6] *U.S. Income and Output*, a supplement to the *Survey of Current Business*, Office of Business Economics, U.S. Dept. of Commerce, Washington, D.C., 1958, p. 145; and *Statistical Abstract of the United States, 1960, op. cit.*

[7] *Statistical Abstract of the United States, 1960, op. cit.*

TABLE 4.—*State or country of residence of motor vehicle entries to Grand Canyon National Park, Arizona, in 1954*

State or country of residence	Number of entries	Percent of total entries	State or country of residence	Number of entries	Percent of total entries
California	48,155	21.0	Iowa	4,575	2.0
Texas	17,660	7.7	Wisconsin	4,660	2.0
Arizona	14,650	6.4	Washington	4,360	1.9
Illinois	13,815	6.0	Utah	4,105	1.8
Ohio	10,545	4.6	New Mexico	3,635	1.6
New York	10,090	4.4	New Jersey	3,380	1.5
Michigan	8,555	3.7	Oregon	3,035	1.3
Colorado	6,715	2.9	Canada	3,000	1.3
Missouri	6,670	2.9	Florida	2,700	1.2
Pennsylvania	6,530	2.9	Massachusetts	2,700	1.2
Indiana	5,930	2.6	Nebraska	2,525	1.1
Minnesota	5,595	2.4	Louisiana	2,250	1.0
Kansas	5,430	2.4	All other States and countries	23,115	10.1
Oklahoma	4,920	2.1	Total	229,300	100.0

Source: Adapted from *Grand Canyon Travel Survey*, conducted by Division of Economics and Statistics, Arizona Highway Department; Bureau of Public Roads, U.S. Dept. of Commerce, in cooperation with National Park Service, U.S. Dept. of the Interior, 1955, table 3, p. 11.

TABLE 5.—*Percent of the population 12 years and over participating and number of days per person for selected outdoor activities, by age, 48 contiguous States, June–August 1960*

Age	Bicycling		Hiking		Horseback riding		Water skiing	
	Percent	Rate	Percent	Rate	Percent	Rate	Percent	Rate
All	9	1.75	6	0.26	6	0.42	6	0.30
12 to 17	41	10.02	18	.91	22	2.17	14	.93
18 to 24	10	.61	5	.18	8	.33	14	.55
25 to 44	5	.62	6	.16	3	.09	6	.29
45 to 64	2	.12	2	.13	2	.15	(1)	(2)
65 and over	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)

Age	Camping		Swimming		Boating		Fishing	
	Percent	Rate	Percent	Rate	Percent	Rate	Percent	Rate
All	8	0.46	45	5.15	22	1.22	29	1.99
12 to 17	20	1.07	83	15.27	39	2.97	45	3.76
18 to 24	8	.55	65	5.75	28	1.08	39	2.43
25 to 44	8	.41	55	5.02	23	1.29	31	1.88
45 to 64	5	.35	22	1.88	16	.69	23	1.61
65 and over	1	.06	(1)	.42	5	.25	10	.59

Age	Nature walks		Walking for pleasure		Sightseeing	
	Percent	Rate	Percent	Rate	Percent	Rate
All	15	0.75	33	4.34	42	2.20
12 to 17	28	1.64	53	7.29	52	2.71
18 to 24	16	.82	34	4.84	45	2.31
25 to 44	15	.53	34	3.23	46	2.09
45 to 64	10	.67	25	3.57	40	2.37
65 and over	6	.44	22	5.36	23	1.37

[1] Less than .5 percent
[2] Less than 0.005 days per person.

Source: *National Recreation Survey*, Commission staff, ORRRC Study Report 19.

TABLE 6.—*Total days participation per person in 17 outdoor activities by family income and size of place of residence, for the population 12 years and older, 48 contiguous States, June–August 1960*

Annual family income	Total United States	Within standard metropolitan areas		Urban not in S.M.A.	Rural in and out of S.M.A.
		Over 1 million	Under 1 million		
All	33.0	35.3	33.4	37.2	29.8
Less than $3,000	18.5	24.8	20.9	25.6	13.8
$3,000 to $4,499	33.5	34.3	28.3	39.9	32.7
$4,500 to $5,999	33.3	32.1	34.6	27.7	35.5
$6,000 to $7,999	40.5	35.7	43.2	57.7	38.8
$8,000 to $9,999	42.4	43.8	44.0	50.6	37.5
$10,000 to $14,999	44.2	43.0	38.1	53.5	45.5
$15,000 and over	49.7	63.1	41.3	(1)	37.7

[1] Omitted because of insufficient sample size.

Source: *National Recreation Survey*, Commission staff, ORRRC Study Report 19.

TABLE 7.—*Total days participation and days per person in 17 outdoor activities by family income, for the population 12 years and older, 48 contiguous States, June–August 1960*

Annual family income	Total days participation (millions) [1]	Total days per person	Percent of sample	Estimated population (millions)
All	4,306.7	33.0	100.0	130.4
Less than $3,000	552.0	18.5	22.8	29.8
$3,000 to $4,499	744.7	33.5	17.0	22.2
$4,500 to $5,999	887.1	33.3	20.4	26.6
$6,000 to $7,999	853.6	40.5	16.2	21.1
$8,000 to $9,999	498.2	42.4	9.0	11.8
$10,000 to $14,999	488.0	44.2	8.5	11.0
$15,000 and over	204.5	49.7	3.2	4.1
Not reported			2.9	3.8

[1] The total days for income classes do not total to the amount shown for "all" because of 2.9 percent nonresponse on income.

Source: *National Recreation Survey*, Commission staff, ORRRC Study Report 19.

TABLE 8.—*Percent of persons 12 years and over participating and number of days per person for selected outdoor activities by family income, 48 contiguous States, June–August 1960*

Annual family income	Boating		Camping		Horseback Riding		Walking for Pleasure		Fishing	
	Percent	Rate	Percent	Rate	Percent	Rate	Percent	Rate	Percent	Rate
Less than $1,500	4	0.14	2	0.05	2	0.24	19	5.20	24	1.50
$1,500 to $2,999	9	.52	4	.13	3	.25	28	4.72	21	1.00
$3,000 to $4,499	19	.97	6	.29	4	.27	32	4.06	28	2.57
$4,500 to $5,999	24	1.05	8	.44	6	.68	36	4.21	32	2.15
$6,000 to $7,999	28	1.56	10	.63	7	.55	37	4.31	32	2.16
$8,000 to $9,999	33	2.06	13	.92	7	.36	37	3.61	31	2.12
$10,000 to $14,999	41	2.29	18	1.09	11	.40	37	4.07	39	1.94
$15,000 and over	36	3.16	10	.68	13	.75	46	6.66	27	1.58

Source: *National Recreation Survey*, Commission staff, ORRRC Study Report 19.

TABLE 9.—*Percent of persons 25 years of age and over participating and number of days per person in selected outdoor activities by number of years formal schooling, 48 contiguous States, June–August 1960*

Education	Playing games		Swimming		Sightseeing		Driving for pleasure		Walking for pleasure	
	Percent	Rate	Percent	Rate	Percent	Rate	Percent	Rate	Percent	Rate
All age 25 or more	20	1.61	35	3.12	41	2.07	50	5.47	29	3.71
4 years or less	2	.11	9	.57	17	.49	25	1.75	20	3.80
5 to 7 years	9	.77	16	1.00	27	1.01	35	3.97	25	3.85
8 years	12	.47	23	1.25	35	1.90	48	4.44	25	3.82
High school:										
1 to 3 years	22	1.51	36	3.00	36	1.82	54	5.85	29	3.27
4 years	25	1.93	49	4.55	51	2.59	58	6.63	32	3.11
College:										
1 to 3 years	30	3.15	43	5.22	53	3.14	60	7.03	33	4.26
4 years or more	36	4.31	56	5.85	57	3.39	56	7.22	39	5.69

Source: *National Recreation Survey*, Commission staff, ORRRC Study Report 19.

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TABLE 10.—*Percent of U.S. population 25 years of age and over by years of formal schooling, 1959 and 1980 (projected under two assumptions)*

Education	1959 [1]	1980 [2] (projected)	
		A	B
	Percent	*Percent*	*Percent*
4 years or less	5.9	3.9	4.1
5 to 7 years	12.3	7.2	7.7
8 years	16.9	9.2	9.7
High school:			
1 to 3 years	18.0	20.0	20.7
4 years	26.9	38.1	37.2
College:			
1 to 3 years	8.1	10.6	10.1
4 years or more	7.9	11.1	10.4
Not reported	1.9		

[1] "Literacy and Educational Attainment: March 1959," *Current Population Reports, Population Characteristics*, U.S. Dept. of Commerce, Washington, D.C., Feb. 4, 1960 (Series P-20, No. 99), table 4, p. 15.

[2] "Projections of Educational Attainment in the United States: 1960 to 1980," *Current Population Reports, Population Characteristics*, U.S. Dept. of Commerce, Washington, D.C., Jan. 12, 1959 (Series P-20, No. 91), table 2, p. 9.

TABLE 11.—*Percent of persons/participating and number of days per person for selected outdoor activities, June–August 1960, by white and nonwhite, population 12 years of age and over, 48 contiguous States*

Outdoor activity	White		Nonwhite	
	Percent	Rate	Percent	Rate
Camping	9	0.51	2	0.08
Hiking	6	.28	3	.06
Boating	24	1.34	6	.18
Swimming	47	5.52	31	1.96
Attending outdoor concerts, drama	9	.23	4	.10
Playing games	30	3.48	29	4.86
Bicycling	9	1.64	10	2.67
Walking for pleasure	32	4.27	40	4.93
Sightseeing	44	2.31	32	1.25
Driving for pleasure	54	6.89	42	4.85
Fishing	29	1.98	28	2.07

Source: *National Recreation Survey*, Commission staff, ORRRC Study Report 19.

TABLE 12.—*Estimates of (adjusted) mean activity score for U.S. adult males and females, by income, when eight other factors are held constant, 1959–60*

Family income	Male		Female	
	Adjusted [1]	Number cases	Adjusted [1]	Number cases
Under $3,000	5.86	256	4.49	431
$3,000 to $4,999	6.76	289	5.24	327
$5,000 to $7,499	7.15	353	5.86	395
$7,500 to $9,999	7.19	160	6.19	135
$10,000 and over	7.00	133	6.02	130

[1] The "adjusted" represents the mean score for the income class after removing the effect of eight other factors influencing participation. These factors are education of head of household, occupation of head, the number of weeks paid vacation of head, place of residence, region, age of head, life cycle of family, and race.

Source: Eva Mueller and Gerald Gurin with the assistance of Margaret Wood (Survey Research Center, The University of Michigan), *Participation in Outdoor Recreation*, ORRRC Study Report 20, table 22.

TABLE 13.—*Reasons adults began to participate in swimming, fishing, and camping, among those who began to participate as adults, United States*

Reasons why adults started to participate	Swimming	Fishing	Camping
	Percent	*Percent*	*Percent*
Total	100	100	100
Social	40	76	72
Family	18	52	39
Friends and groups	22	24	33
Facilities available	23	10	7
Other	35	10	17
Not ascertained	2	4	4
Number of cases	79	160	153

Source: Eva Mueller and Gerald Gurin with the assistance of Margaret Wood (Survey Research Center, The University of Michigan), *Participation in Outdoor Recreation*, ORRRC Study Report 20, table 35.

TABLE 14.—*Percent of vacation trips by adults during past 12 months by distance traveled, for all vacation trips and trips including a park visit, United States, 1959–60*

Miles traveled (one way)	All vacation trips	Park visitors [1]	Other vacationers [1]
	Percent	*Percent*	*Percent*
Total	100	100	100
Under 50	3	1	3
50 to 99	6	4	9
100 to 249	23	15	26
250 to 499	21	19	20
500 to 749	11	15	11
750 to 999	6	8	5
1,000 to 1,999	17	20	17
2,000 and over	10	16	7
Not ascertained	3	2	2
Number of cases	1,186	267	547

[1] Only families who took a single vacation trip are included in this column: those who took two or more trips are excluded since it was not determined on which of the trips the park visit occurred.

Source: Eva Mueller and Gerald Gurin with the assistance of Margaret Wood (Survey Research Center, The University of Michigan), *Participation in Outdoor Recreation*, ORRRC Study Report 20, tables 39, 46.

TABLE 15.—*Percent of adults engaging one or more times during a year in selected activities according to rating of opportunity to engage within day-use range of the residence of respondent*

Outdoor activity	Area ratings for outdoor recreation				
	Percent of respondents who participated in areas with—				
	Least opportunity				Best opportunity
	1	2	3	4	5
Hunting	6	11	17	22	23
Outdoor swimming or going to a beach	35	40	48	54	53
Picnicking	50	68	65	65	71
Camping	15	9	11	18	28
Boating and canoeing	19	26	31	28	30
Hiking	14	11	19	17	25
Skiing	3	4	11	7	10
Horseback riding	6	5	7	7	5
Fishing	36	40	39	42	31

Source: Eva Mueller and Gerald Gurin with the assistance of Margaret Wood (Survey Research Center, The University of Michigan), *Participation in Outdoor Recreation*, ORRRC Study Report 20, table 8.

TABLE 16.—*Total activity days per person in 17 outdoor recreation activities and activity days per person for selected activities by major occupation, for the employed population 14 years of age and over, and for persons 12 years and over not in the labor force, 48 contiguous States, June–August 1960*

Employment status	Total 17 activities	Activity						
		Fishing	Boating	Swimming	Camping	Picnics	Playing outdoor games	Sightseeing
Not in labor force	37.9	1.93	1.18	6.50	0.47	2.28	4.50	2.01
Labor force	28.2	2.05	1.26	3.84	.45	2.00	2.77	2.38
Professional, technical, and kindred workers	36.7	1.64	1.46	5.75	.87	2.47	4.18	3.35
Managers, officials, and proprietors, except farm	24.4	1.79	.95	4.00	.19	1.42	2.64	2.66
Clerical and sales workers (white collar)	32.8	1.47	1.41	4.74	.34	2.69	2.74	2.89
Craftsmen, foremen, and kindred workers	30.0	3.33	1.67	3.36	.80	2.34	2.54	2.58
Operatives and kindred workers, laborers	27.0	2.48	1.13	3.39	.35	1.69	2.90	1.64
Serviceworkers including private	26.0	1.36	1.45	3.69	.39	1.56	2.98	2.18
Farm workers	16.8	2.12	.53	1.67	.37	1.35	1.30	1.81

Source: *National Recreation Survey*, Commission staff, ORRRC Study Report 19.

TABLE 17.—*Percent of U.S. adults engaging often, a few times, and not at all, in selected outdoor activities, by location of residence of the person, 1959–60*

Activity and residence	Percent engaging in activity last year—					Number of cases
	Often	A few times (1–4 times)	Not at all	Not ascertained	Total	
Outdoor swimming or going to a beach:						
Cities	23	21	54	2	100	799
Suburban areas	36	22	41	1	100	733
Adjacent areas	28	17	54	1	100	534
Outlying areas	18	16	65	1	100	691
Fishing:						
Cities	13	16	69	2	100	799
Suburban areas	19	19	61	1	100	733
Adjacent areas	22	16	61	1	100	534
Outlying areas	26	20	52	2	100	691
Hunting:						
Cities	5	5	88	2	100	799
Suburban areas	7	6	86	1	100	733
Adjacent areas	10	9	80	1	100	534
Outlying areas	14	14	71	1	100	691
Driving for sightseeing and relaxation:						
Cities	46	23	29	2	100	799
Suburban areas	49	24	24	3	100	733
Adjacent areas	50	24	25	1	100	534
Outlying areas	42	23	32	3	100	691
Picnics:						
Cities	29	36	34	1	100	799
Suburban areas	37	35	26	2	100	733
Adjacent areas	32	34	33	1	100	534
Outlying areas	27	32	40	1	100	691
Camping:						
Cities	5	5	88	2	100	799
Suburban areas	8	9	82	1	100	733
Adjacent areas	5	8	86	1	100	534
Outlying areas	8	12	78	2	100	691

NOTE: Cities are urban places of 50,000 population or more; suburban areas immediately surround these cities; adjacent areas extend beyond suburban areas to a distance of 50 miles; outlying areas are at least 50 miles from a city of 50,000 population or more.

Source: Eva Mueller and Gerald Gurin with the assistance of Margaret Wood (Survey Research Center, The University of Michigan), *Participation in Outdoor Recreation*, ORRRC Study Report 20, table 13.

TABLE 18.—*Actual and estimated population by major census region, 1960, 1976, and 2000, United States* [1]

Region	1960 [2]		1976 [3]		2000 [3]	
	Thousands	Percent	Thousands	Percent	Thousands	Percent
Total	179,323	100.0	230,019	100.0	350,477	100.0
Northeast	44,678	24.9	52,526	22.8	76,569	21.8
North Central	51,619	28.8	67,124	29.2	101,305	28.9
South	54,973	30.7	69,235	30.1	102,976	29.4
West	28,053	15.6	41,134	17.9	69,627	19.9

[1] Includes Alaska and Hawaii; includes Armed Forces stationed within the United States but not abroad.
[2] "Number of Inhabitants," *U.S. Census of Population, 1960, United States Summary*, Bureau of the Census, U.S. Dept. of Commerce, 1961, table 9.
[3] "Population Projections of the United States for 1976 and 2000," Commission staff, included in *Projections to the Years 1976 and 2000*, ORRRC Study Report 23.

TABLE 19.—*Actual and estimated population of major census regions by SMSA's and large SMSA's, 1960, 1976, and 2000, United States* [1]

Region and SMSA	1960		1976 [2]		2000 [2]	
	Thousands	Percent	Thousands	Percent	Thousands	Percent
Total U.S.	179,323	100.0	230,019	100.0	350,477	100.0
SMSA:						
Total	112,889	62.9	154,055	66.9	257,131	73.3
Northeast	35,288	19.7	42,230	18.4	63,169	18.0
North Central	31,020	17.3	43,362	18.8	72,230	20.6
South	26,450	14.7	36,625	15.9	61,992	17.7
West	20,131	11.2	31,838	13.8	59,740	17.0
Large SMSA: [3]						
Total	61,778	34.4	87,175	37.9	152,753	43.6
Northeast	23,930	13.3	28,679	12.5	42,955	12.3
North Central	19,171	10.7	27,454	11.9	47,411	13.5
South	7,021	3.9	11,216	4.9	21,934	6.3
West	11,656	6.5	19,826	8.6	40,453	11.5

[1] Excludes Armed Forces overseas.
[2] "Population Projections of the United States for 1976 and 2000," Commission staff, included in *Projections to the Years 1976 and 2000*, ORRRC Study Report 23.
[3] Population of 1 million and over.

TABLE 20.—*Actual and estimated population by census division, 1960, 1976, and 2000, United States* [1]

Region	1960		1976 [2]		2000 [2]	
	Thousands	Percent	Thousands	Percent	Thousands	Percent
Total [3]	179,323	100.0	230,019	100.0	350,477	100.0
New England	10,509	5.9	11,840	5.1	17,165	4.9
Middle Atlantic	34,169	19.0	40,686	17.7	59,404	17.0
East North Central	36,225	20.2	48,756	21.2	75,415	21.5
West North Central	15,394	8.6	18,368	8.0	25,890	7.4
South Atlantic	25,972	14.5	35,043	15.2	54,155	15.5
East South Central	12,050	6.7	13,050	5.7	17,544	5.0
West South Central	16,951	9.5	21,142	9.2	31,277	8.9
Mountain	6,855	3.8	9,928	4.3	16,239	4.6
Pacific	21,198	11.8	31,206	13.6	53,388	15.2

[1] Includes Armed Forces stationed within the United States but not abroad.
[2] Source: "Population Projections of the United States for 1976 and 2000," Commission staff, included in *Projections to the Years 1976 and 2000*, ORRRC Study Report 23.
[3] Rounded to nearest 1,000.

TABLE 21.—*Actual and estimated population, gross national product, disposable income, and paid vacation, 1960, 1976, and 2000, United States*

Year	Population (millions)	Gross national product (billions)	Disposable income (billions)	Per capita disposable income	Per household disposable income	Paid vacation
		Constant dollars	*Constant dollars*	*Constant dollars*	*Constant dollars*	*Weeks*
1960	179	503	354	1,970	[1] 6,574	2.0
1976	230	1,018	706	2,900	10,350	2.8
2000	350	2,007	1,437	4,100	14,748	3.9

[1] 1959.

Source: *Projections to the Years 1976 and 2000*, ORRRC Study Report 23:
"Population Projections of the United States for 1976 and 2000," Commission staff.
"Economic Projections for the Years 1976 and 2000," National Planning Association.
"Estimates of the Decrease in Hours Worked, 1960–2000," Bureau of Labor Statistics, U.S. Dept. of Labor.

TABLE 22.—*Actual and estimated percent of consumer units in each income class, 1947, 1957, 1976, and 2000*

Income (1959 dollars)	Percent of consumer units			
	1947	1957	1976	2000
Below 2,000	15.6	13.8	7.5	4.2
2,000 to 3,999	27.2	20.8	10.6	7.8
4,000 to 5,999	26.3	23.8	13.2	7.6
6,000 to 7,499	11.4	14.5	11.3	6.8
7,500 to 9,999	9.9	13.3	17.8	13.1
10,000 to 14,999	6.1	8.8	22.9	25.5
15,000 to 19,999	1.6	2.6	8.2	15.9
20,000 to 24,999	0.8	1.0	3.8	8.0
25,000 and over	1.1	1.4	4.7	11.1

Source: "Economic Projections for the Years 1976 and 2000," Part III, table 11, "Income Size Distribution," National Planning Association, included in *Projections to the Years 1976 and 2000*, ORRRC Study Report 23.

TABLE 23.—*Actual and estimated number of occasions*[1] *(millions) by persons 12 years and over in selected recreation activities, 1960, 1976, and 2000*

Outdoor activity	1960	Without opportunity factor [2]				With opportunity factor [3]			
		1976	2000	Percent change		1976	2000	Percent change	
				1960–76	1960–2000			1960–76	1960–2000
All activities [4]	4,377	6,926	12,449	58	184	7,444	14,371	70	228
Driving for pleasure	872	1,341	2,215	54	154	1,420	2,476	63	184
Swimming	672	1,182	2,307	76	243	1,279	2,688	90	300
Walking for pleasure	566	856	1,569	51	177	(5)	(5)		
Playing outdoor games or sports	474	825	1,666	74	251	861	1,804	82	281
Sightseeing	287	456	825	59	187	597	1,359	108	374
Picnicking	279	418	700	50	150	468	864	67	209
Fishing	260	350	521	35	100	(5)	(5)		
Bicycling	228	297	452	30	98	(5)	(5)		
Attending outdoor sports events	172	252	416	46	142	266	465	54	170
Boating other than sailing or canoeing	159	285	557	79	250	312	664	96	317
Nature walks	98	153	263	56	169	(5)	(5)		
Hunting	95	123	174	30	81	127	181	34	91
Camping	60	113	235	89	293	149	388	149	545
Horseback riding	55	82	143	49	162	(5)	(5)		
Water skiing	39	84	189	114	384	93	225	135	476
Hiking	34	63	125	89	269	84	207	148	511
Attending outdoor concerts, drama, etc.	27	46	92	69	232	50	102	79	271

[1] Number of separate days on which persons 12 years and over engaged in activity during June-August, except for hunting for which September-November period was used.
[2] Assumes continuing 1960 quality and quantity of facilities available on a per capita basis.
[3] Assumes improvement from 1960 quality and quantity of facilities available on a per capita basis.
[4] Total for the 17 activities itemized below. "With opportunity factor" totals included activities for which this estimate is not available on the "without opportunity factor" basis.
[5] Data are insufficient to estimate effects on changes in opportunity.

Source: 1960: *National Recreation Survey*, Commission staff, ORRRC Study Report 19. 1976 and 2000: estimated by Commission staff.

TABLE 24.—*Actual and estimated number of occasions*[1] *(millions) by persons 12 years and over residing in large standard metropolitan areas,*[2] *by selected recreation activities and major region, 1960, 1976, and 2000*

Outdoor activity	1960					1976					2000				
	United States	North-east	North Central	South	West	United States	North-east	North Central	South	West	United States	North-east	North Central	South	West
All activities	1,606	622	547	150	288	2,785	918	920	326	623	5,742	1,616	1,827	783	1,514
Driving for pleasure	298	107	126	27	38	502	160	187	59	96	952	264	324	131	233
Walking for pleasure	277	132	74	27	45	442	163	130	53	95	892	267	270	124	230
Swimming	260	115	71	22	52	498	176	148	56	118	1,107	323	335	149	300
Playing outdoor games or sports	187	65	68	15	39	356	110	121	40	85	810	221	262	108	221
Sightseeing	118	32	49	10	26	201	56	74	22	49	408	105	137	54	112
Picnicking	106	45	36	7	18	172	60	57	18	38	325	94	104	42	85
Bicycling	71	20	19	15	17	104	29	30	19	26	188	48	55	33	52
Attending outdoor sports events	59	18	25	7	8	95	28	35	13	18	180	48	61	26	44
Fishing	58	20	23	5	11	89	27	32	10	20	159	43	53	21	42
Boating other than sailing or canoeing	56	24	20	4	9	110	38	38	11	23	248	72	81	32	63
Nature walks	37	19	11	3	4	63	24	20	7	12	124	38	39	16	30
Camping	17	4	6	2	5	36	10	12	4	11	88	22	28	12	27
Hunting	14	4	6	2	2	21	6	8	3	5	36	9	12	5	9
Hiking	14	4	3	1	6	28	8	7	3	10	62	16	17	8	21
Water skiing	12	5	3	1	3	30	10	8	4	7	79	23	23	11	22
Horseback riding	11	4	3	1	3	18	6	6	2	5	39	10	12	5	11
Attending outdoor concerts, drama, etc.	11	4	4	1	2	20	7	7	2	5	45	13	14	6	12

[1] Number of separate days on which persons engaged in activity during June–August, except hunting for which September–November period was used.
[2] Population 1 million persons and over.

SOURCE: Estimated by ORRRC. Comparable to "without opportunity factor" estimates in table 23. Regional detail does not necessarily add to U.S. totals because of rounding.

TABLE 25.—*Average standard (scheduled) workweek for nonagricultural workers by industry, 1960, 1976, and 2000, United States*

Industry	Workweek (hours)		
	1960 [1]	1976	2000
Total, all industry	39.0	36.0	32.0
Mining	37.0	34.0	30.3
Contract construction	39.0	35.4	31.6
Manufacturing	39.0	36.0	32.6
Transportation and public utilities	39.0	35.8	32.0
Wholesale and retail trade	40.0	36.2	32.3
Finance, insurance, and real estate	37.0	33.5	29.9
Service and miscellaneous	39.0	35.7	32.0
Government	39.0	35.2	31.5

[1] Computed by Commission staff.

Source: "Estimates of the Decrease in Hours Worked, 1960-2000," Bureau of Labor Statistics, U.S. Dept. of Labor, included in *Projections to the Years 1976 and 2000*, ORRRC Study Report 23.

TABLE 26.—*Estimated miles of domestic intercity travel in the United States, 1940, 1950, 1960, 1976, 2000*

Means of transportation	1940	1950	1960	1976		2000	
				High	Low	High	Low
	Passenger miles (billions)						
Total	296	464	738	1,592	1,512	3,189	3,031
Auto	264	402	670	1,400		2,800	
Air	1.1	8	30	150	80	325	200
Rail and bus	31	54	38	42	32	64	31
Rail	21	28	18				
Bus	10	26	20				
	Miles per capita						
Total	2,230	3,075	4,170	6,950	6,600	11,000	

Source: A. J. Goldenthal, "The Future of Travel in the United States," *Projections to the Years 1976 and 2000*, ORRRC Study Report 23.

Supply

TABLE 27.—*Total land and water area, number and acreage of nonurban public designated recreation areas, and population, by census region, United States, 1960*

Geographic area	Total land and water area			Nonurban public designated recreation areas, land and water [1]				Recreation lands as percentage of total lands	Population	
	1,000 acres	Percent of total United States		Number of areas	1,000 acres	Percent of total United States			Millions of people	Percent
		Excluding Alaska, Hawaii, Puerto Rico, and Virgin Islands	Including Alaska, Hawaii, Puerto Rico, and Virgin Islands			Excluding Alaska, Hawaii, Puerto Rico, and Virgin Islands	Including Alaska, Hawaii, Puerto Rico, and Virgin Islands			
Northeast	108,386	5.6	4.7	2,569	9,288	4.0	3.3	8.6	44.7	25.0
North Central	489,939	25.3	21.1	10,969	29,064	12.4	10.3	5.9	51.6	28.9
South	575,841	29.8	24.9	5,554	26,495	11.3	9.4	4.6	55.0	30.8
West	760,162	39.3	32.8	4,956	169,153	72.3	59.8	22.3	27.2	15.3
Total, 48 contiguous States	1,934,328	100.0	83.5	24,048	234,000	100.0	82.8	12.1	178.5	100.0
Alaska	375,296	----------	16.2	90	47,140	----------	16.7	12.6	.2	------
Hawaii	4,111	----------	.2	153	1,499	----------	.5	36.5	.6	------
Total, 50 States	2,313,735	----------	99.9	24,291	282,639	----------	100.0	12.2	179.3	------
Puerto Rico	2,198	----------	.1	15	70	----------	(2)	3.2	2.3	------
Virgin Islands	85	----------	(2)	34	9	----------	(2)	11.0	(3)	------
Total	2,316,018	----------	100.0	24,340	282,718	----------	100.0	12.2	181.6	------

[1] "Nonurban public designated recreation areas" means publicly owned and managed land and water areas upon which recreation is a recognized use. Hunting and fishing take place on some areas. The areas include the entire acreage of national, State, county, and local parks, monuments, historic sites, memorials, geologic areas, archeological areas, forests, recreation areas, public hunting and shooting grounds, water access areas, fish hatcheries, and wildlife refuges where the public is permitted to engage in recreation activities. Also included are about 15,000 small areas; about 11,000 are highway wayside and picnic areas, with a total of about 21,000 acres, and the other 4,000 are access areas, State, county, and other local forests, and recreation areas totaling close to 200,000 acres. Acreage is net; inholdings are excluded.

[2] Less than 0.1 percent.

[3] Less than 50,000 persons.

Source: Total acreage figures from *Statistical Abstract of the United States, 1961*, p. 161. Recreation area data from staff inventory studies, *Public Outdoor Recreation Areas—Acreage, Use, Potential*, ORRRC Study Report 1.

Table 28.—*Number and acreage of nonurban public designated recreation areas, by level of government and type of agency in charge of recreation management, 48 contiguous States, 1960*

Type of management agency [1]	Level of government															
	Federal				State [2]				County or other local [3]				Total			
	Areas		Amount		Areas		Amount		Areas		Amount		Areas		Amount	
	Number	Percent	Acres 1,000's	Percent	Number	Percent	Acres 1,000's	Percent	Number	Percent	Acres 1,000's	Percent	Number	Percent	Acres 1,000's	Percent
Park agencies [4]	182	17.2	18,078	9.1	3,195	15.7	3,600	11.2	650	25.4	379	10.7	4,027	16.8	22,057	9.4
Forest agencies	205	19.4	165,167	83.3	837	4.1	17,663	55.0	135	5.3	2,361	66.6	1,177	4.9	185,191	79.1
Fish and wildlife agencies [5]	325	30.7	9,625	4.9	4,440	21.7	8,603	26.8	147	5.7	8	.2	4,912	20.4	18,236	7.8
Water development agencies [6]	41	3.9	766	.4	29	.1	112	.3	12	.5	25	.7	82	.3	903	.4
Transportation agencies [7]	275	25.9	3,944	2.0	11,586	56.7	32	.1	15	.6	(8)	(9)	11,876	49.4	3,976	1.7
Special authorities [10]	30	2.8	648	.3	78	.4	445	1.4	31	1.2	238	6.7	139	.6	1,331	.6
Other [11]	1	.1	113	(9)	264	1.3	1,658	5.2	1,570	61.3	535	15.1	1,835	7.6	2,306	1.0
Total, 48 States	1,059	100.0	198,341	100.0	20,429	100.0	32,113	100.0	2,560	100.0	3,546	100.0	24,048	100.0	234,000	100.0

[1] Agency means the department, bureau, division, or board specifically charged with management of the resource for recreation purposes.
[2] Includes both State agencies and regional agencies above the county level.
[3] Includes nonurban recreation areas managed by county and municipal or town agencies.
[4] Includes forest areas under two State agencies where no administrative division is made between forest and park management.
[5] At the Federal level, includes only the Bureau of Sport Fisheries and Wildlife. Elsewhere includes fish and game agencies and, in a few States, agencies charged with resources management.
[6] At the Federal level, includes only the Bureau of Reclamation. Elsewhere includes irrigation and water development agencies.
[7] At the Federal level, includes only the Corps of Engineers. Elsewhere includes highway anp other transportation agencies.
[8] Amount reported was 414 acres.
[9] Less than 0.1 percent.
[10] At the Federal level, includes only the Tennessee Valley Authority. Elsewhere includes conservancy districts, regional development agencies, etc.
[11] Includes land offices, historical societies, special-purpose agencies, city administrations, boards of supervisors, etc.

Table 29.—*Number and acreage of nonurban Federal designated outdoor recreation areas, by recreation management agency, and by census region, 48 contiguous States, 1960*

Agency responsible for recreation management	Census region														
	Northeast			North Central			South			West			Total		
	Number of areas	Acreage		Number of areas	Acreage		Number of areas	Acreage		Number of areas	Acreage		Number of areas	Acreage	
		1,000's	Percent		1,000's	Percent		1,000's	Percent		1,000's	Percent		1,000's	Percent
National Park Service	10	38	2.4	14	745	4.8	76	3,143	15.3	82	14,152	8.8	182	18,078	9.1
U.S. Forest Service	5	1,439	89.8	25	12,384	79.8	43	12,740	62.0	132	138,604	86.2	205	165,167	83.3
Bureau of Sport Fisheries and Wildlife	26	67	4.2	85	1,013	6.5	101	1,835	8.9	113	6,610	4.2	325	9,625	4.9
Bureau of Reclamation										41	766	.5	41	766	.4
Corps of Engineers	35	58	3.6	96	1,386	8.9	112	2,065	10.1	32	435	.3	275	3,944	2.0
Tennessee Valley Authority							30	648	3.2				30	648	.3
Other							1	113	0.5				1	113	(1)
Total	76	1,602	100.0	220	15,528	100.0	363	20,544	100.0	400	160,667	100.0	1,059	198,341	100.0

[1] Less than 0.1 percent.

TABLE 30.—*Number and acreage of nonurban State designated outdoor recreation areas, by type of recreation management agency, and by census region, 48 contiguous States, 1960*

Type of State agency [1] responsible for recreation management	Census region														
	Northeast			North Central			South			West			Total		
	Number of areas	Acreage		Number of areas	Acreage		Number of areas	Acreage		Number of areas	Acreage		Number of areas	Acreage	
		1,000's	Percent		1,000's	Percent		1,000's	Percent		1,000's	Percent		1,000's	Percent
Park agencies [2]	435	620	8.3	626	1,120	10.3	435	677	12.1	1,699	1,183	14.5	3,195	3,600	11.2
Forest agencies	377	5,621	75.2	338	7,591	69.9	74	945	16.8	48	3,506	42.9	837	17,663	55.0
Fish and wildlife agencies [3]	293	1,178	15.8	3,043	1,891	17.4	601	3,751	66.9	503	1,783	21.8	4,440	8,603	26.8
Water development agencies							2	2	(4)	27	110	1.3	29	112	.3
Highway agencies [5]	1,049	8	.1	4,897	8	.1	3,855	10	.2	1,785	6	.1	11,586	32	.1
Special districts and authorities [6]	11	36	.5	20	99	.9	14	183	3.3	33	127	1.6	78	445	1.4
Other [7]	51	6	.1	147	156	1.4	28	37	.7	38	1,459	17.8	264	1,658	5.2
Total	2,216	7,469	100.0	9,071	10,865	100.0	5,009	5,605	100.0	4,133	8,174	100.0	20,429	32,113	100.0

[1] Includes State agencies, and regional agencies above the county level.
[2] Includes forest areas under two State agencies where no administrative division is made between forest and park management.
[3] In a few States, also includes agencies charged with resource management.
[4] Less than 0.1 percent.
[5] Includes highway and other transportation agencies.
[6] Includes conservancy districts, regional development agencies, etc.
[7] Includes land offices, historical societies, special-purpose agencies, city administrations, boards of supervisors, etc.

TABLE 31.—*Number and acreage of nonurban public designated recreation areas, by level of government in charge of recreation management, and by size class, 48 contiguous States, 1960*

Size class (acres)	Level of government															
	Federal				State				County or other local				Total			
	Areas		Acres		Areas		Acres		Areas		Acres		Areas		Acres	
	Number	Percent	1,000	Percent	Number	Percent	1,000	Percent	Number	Percent	1,000	Percent	Number	Percent	1,000	Percent
40 and under	71	6.7	1	(1)	[2] 16,151	79.1	60	0.2	861	33.7	8	0.2	17,083	71.0	69	(1)
41 to 100	45	4.2	3	(1)	742	3.6	57	.2	187	7.3	13	.4	974	4.0	73	(1)
101 to 500	132	12.5	34	(1)	1,423	7.0	350	1.1	1,250	48.9	222	6.3	2,805	11.7	606	0.3
501 to 1,000	73	6.9	54	(1)	582	2.8	423	1.3	88	3.4	61	1.7	743	3.1	538	.2
1,001 to 5,000	189	17.8	475	0.2	871	4.3	1,996	6.2	111	4.3	231	6.5	1,171	4.9	2,702	1.2
5,001 to 25,000	187	17.7	2,235	1.1	446	2.2	4,998	15.6	34	1.3	418	11.8	667	2.8	7,651	3.3
25,001 to 100,000	145	13.7	7,297	3.7	153	.7	7,843	24.4	19	.7	1,013	28.6	317	1.3	16,103	6.9
100,001 to 1,000,000	137	12.9	58,871	29.8	59	.3	12,853	40.0	10	.4	1,580	44.5	206	.9	73,359	31.3
Over 1,000,000	80	7.6	129,371	65.2	2	(1)	3,528	11.0					82	.3	132,899	56.8
Total	1,059	100.0	198,341	100.0	[2] 20,429	100.0	32,113	100.0	2,560	100.0	3,546	100.0	24,048	100.0	234,000	100.0

[1] Less than 0.1 percent.
[2] About 11,000 of these areas, containing about 21,000 acres, are in highway wayside and roadside picnic areas.

TABLE 32.—*Number of areas reporting specified use pressure on parking facilities, average weekend day, by census region, 48 contiguous States, 1960*

Use pressure	Census region									
	Northeast		North Central		South		West		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Could accommodate more than 25 percent additional use	144	29	823	52	182	27	246	29	1,395	39
Could accommodate up to 25 percent additional use	136	27	403	25	222	33	261	31	1,022	28
All users accommodated	129	26	257	16	177	26	197	24	760	21
Could not accommodate all	88	18	110	7	91	14	137	16	426	12
Total	497	100	1,593	100	672	100	841	100	3,603	100

TABLE 33.—*Number of areas reporting specified use pressure on designated picnic facilities, average weekend day, by census region, 48 contiguous States, 1960*

Use pressure	Census region									
	Northeast		North Central		South		West		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Could accommodate more than 25 percent additional use	50	8	155	18	70	12	80	13	355	14
Could accommodate up to 25 percent additional use	100	24	265	30	174	30	179	30	718	29
All users accommodated	166	39	309	36	203	36	187	31	865	35
Could not accommodate all	118	29	137	16	123	22	152	26	530	22
Total	434	100	866	100	570	100	598	100	2,468	100

TABLE 34.—*Number of areas reporting specified use pressure on overnight facilities, average weekend day, by census region, 48 contiguous States, 1960*

Use pressure	Census region									
	Northeast		North Central		South		West		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Could accommodate more than 25 percent additional use	26	14	92	18	55	16	55	13	228	15
Could accommodate up to 25 percent additional use	33	17	143	28	96	28	103	25	375	26
All users accommodated	52	28	170	33	110	32	118	28	450	31
Could not accommodate all	78	41	106	21	83	24	145	34	412	28
Total	189	100	511	100	344	100	421	100	1,465	100

TABLE 35.—*Number of areas reporting specified use pressure on campground facilities, average weekend day, by census region, 48 contiguous States, 1960*

Use pressure	Census region									
	Northeast		North Central		South		West		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Could accommodate more than 25 percent additional use	28	13	116	21	57	16	60	13	261	17
Could accommodate up to 25 percent additional use	41	20	134	25	111	32	105	23	391	25
All users accommodated	66	32	174	32	106	31	136	29	482	30
Could not accommodate all	73	35	120	22	75	21	163	35	431	28
Total	208	100	544	100	349	100	464	100	1,565	100

TABLE 36.—*Estimated acreage and capacity of facilities planned for development within 5 years, 48 contiguous States, 1960*

Type of facility	Acres	Capacity
	1,000's	People—1,000's
Picnic grounds	48	1,140
Swimming beaches or pools	4	535
Winter sports sites	30	105
Campgrounds	57	547
Total	139	2,327

TABLE 37.—*Estimated acreage and capacity of potential long-range developments on existing public designated recreation areas, 48 contiguous States, 1960*

Type of facility	Potential long-range development	
	Acres	Capacity
	1,000's	People—1,000's
Picnic grounds	662	7,918
Swimming beaches or pools	31	2,914
Winter sports sites	199	2,148
Campgrounds	1,089	8,716
Total	1,981	21,696

TABLE 38.—*Present and potential development of picnic facilities, acreage and capacity, by census region, 48 contiguous States, 1960* [1]

Census region	1960 development	Potential development			
		Planned in 5 years [2]	Long-term development		
			Under "A" conditions [3]	Under "B" conditions [4]	Regional totals, potential [5]
Northeast:					
Acreage (1,000's)	(21)	6	36	16	58
Capacity (1,000's)	(974)	292	901	213	1,406
Percent increase over 1960 capacity		30	93	22	145
North Central:					
Acreage (1,000's)	(38)	14	75	28	117
Capacity (1,000's)	(929)	468	1,715	660	2,843
Percent increase over 1960 capacity		50	185	71	306
South:					
Acreage (1,000's)	(25)	17	68	182	267
Capacity (1,000's)	(641)	167	1,443	432	2,042
Percent increase over 1960 capacity		26	225	67	318
West:					
Acreage (1,000's)	(27)	11	231	26	268
Capacity (1,000's)	(538)	213	2,089	465	2,767
Percent increase over 1960 capacity		40	388	86	514
All regions:					
Acreage (1,000's)	(111)	48	410	252	710
Capacity (1,000's)	(3,082)	1,140	6,148	1,770	9,058
Percent increase over 1960 capacity		37	199	57	293

[1] In estimating long-term potential under "A" and "B" conditions, recreation area managers were asked to think in terms of the maximum recreation development possible under their agencies' existing policies, on the existing land and water acreage on the area.

[2] Facilities planned for development on the specific area within the next 5 years (1960–64).

[3] Sites which could be developed now (access exists or could be provided).

[4] Sites whose development hinges on some future change in conditions or solution of acute land and water management problems (e.g., water developments, reforestation, pollution, erosion control, termination of other use rights, etc.).

[5] Regional totals are for planned and potential acreage and capacity only.

TABLE 39.—*Present and potential development of swimming facilities, acreage and capacity, by census region, 48 contiguous States, 1960* [1]

Census region	1960 development	Potential development			
		Planned in 5 years [2]	Long-term development		
			Under "A" conditions [3]	Under "B" conditions [4]	Regional totals, potential [5]
Northeast:					
Acreage (1,000's)	(5)	1	5	1	7
Capacity (1,000's)	(319)	111	558	105	774
Percent increase over 1960 capacity		35	175	33	243
North Central:					
Acreage (1,000's)	(4)	1	3	3	7
Capacity (1,000's)	(219)	295	393	165	853
Percent increase over 1960 capacity		135	179	75	389
South:					
Acreage (1,000's)	(4)	1	5	1	7
Capacity (1,000's)	(124)	67	596	165	828
Percent increase over 1960 capacity		54	481	133	668
West:					
Acreage (1,000's)	(3)	1	12	2	15
Capacity (1,000's)	(100)	62	718	215	995
Percent increase over 1960 capacity		62	718	215	995
All regions:					
Acreage (1,000's)	(16)	4	25	7	36
Capacity (1,000's)	(762)	535	2,265	650	3,450
Percent increase over 1960 capacity		70	297	85	453

[1] In estimating long-term potential under "A" and "B" conditions, recreation area managers were asked to think in terms of the maximum recreation development possible under their agencies' existing policies, on the existing land and water acreage on the area.

[2] Facilities planned for development on the specific area within the next 5 years (1960–64).

[3] Sites which could be developed now (access exists or could be provided).

[4] Sites whose development hinges on some future change in conditions or solution of acute land and water management problems (e.g., water developments, reforestation, pollution, erosion control, termination of other use rights, etc.).

[5] Regional totals are for planned and potential acreage and capacity only.

TABLE 40.—*Present and potential development of winter sports facilities, acreage and capacity, by census region, 48 contiguous States, 1960* [1]

Census region	1960 development	Potential development			
		Planned in 5 years [2]	Long-term development		
			Under "A" conditions [3]	Under "B" conditions [4]	Regional totals, potential [5]
Northeast:					
Acreage (1,000's)	(14)	4	10	6	20
Capacity (1,000's)	(96)	33	183	47	263
Percent increase over 1960 capacity		34	191	49	274
North Central:					
Acreage (1,000's)	(14)	(6)	16	3	19
Capacity (1,000's)	(53)	12	132	47	191
Percent increase over 1960 capacity		23	249	89	361
South:					
Acreage (1,000's)	(9)	10	1	1	12
Capacity (1,000's)	(15)	2	92	9	103
Percent increase over 1960 capacity		13	613	60	686
West:					
Acreage (1,000's)	(31)	16	152	10	178
Capacity (1,000's)	(128)	58	1,477	161	1,696
Percent increase over 1960 capacity		45	1,154	126	1,325
All regions:					
Acreage (1,000's)	(68)	30	179	20	229
Capacity (1,000's)	(292)	105	1,884	264	2,253
Percent increase over 1960 capacity		36	645	90	771

[1] In estimating long-term potential under "A" and "B" conditions, recreation area managers were asked to think in terms of the maximum recreation development possible under their agencies' existing policies, on the existing land and water acreage on the area.
[2] Facilities planned for development on the specific area within the next 5 years (1960-64).
[3] Sites which could be developed now (access exists or could be provided).
[4] Sites whose development hinges on some future change in conditions or solution of acute land and water management problems (e.g., water developments, reforestation, pollution, erosion control, termination of other use rights, etc.).
[5] Regional totals are for planned and potential acreage and capacity only.
[6] Less than 1,000 acres.

TABLE 41.—*Potential development of campgrounds, acreage and capacity, by census region, 48 contiguous States, 1960* [1]

Census region	1960 development [2]	Potential development			
		Planned in 5 years [3]	Long-term development		
			Under "A" conditions [4]	Under "B" conditions [5]	Regional totals, potential [6]
Northeast:					
Acreage (1,000's)		6	39	6	51
Capacity (1,000's)	(100)	76	378	48	502
Percent increase over 1960 capacity		76	378	48	502
North Central:					
Acreage (1,000's)		9	74	23	106
Capacity (1,000's)	(173)	125	998	329	1,452
Percent increase over 1960 capacity		72	577	190	839
South:					
Acreage (1,000's)		10	127	216	353
Capacity (1,000's)	(108)	98	1,324	558	1,980
Percent increase over 1960 capacity		91	1,226	516	1,833
West:					
Acreage (1,000's)		32	510	94	636
Capacity (1,000's)	(607)	248	4,339	742	5,329
Percent increase over 1960 capacity		41	714	122	877
All regions:					
Acreage (1,000's)		57	750	339	1,146
Capacity (1,000's)	(988)	547	7,039	1,677	9,263
Percent increase over 1960 capacity		55	713	170	938

[1] In estimating long-term potential under "A" and "B" conditions, recreation area managers were asked to think in terms of the maximum recreation development possible under their agencies' existing policies, on the existing land and water acreage on the area.
[2] 1960 acreage data not collected by Inventory Staff survey.
[3] Facilities planned for development on specific area within the next 5 years (1960-64).
[4] Sites which could be developed now (access exists or could be provided).
[5] Sites whose development hinges on some future change in conditions or solution of acute land and water management problems (e.g., water developments, reforestation, pollution, erosion control, termination of other use rights, etc.).
[6] Regional totals are for planned and potential acreage and capacity only.

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Note: Throughout this index, BOR is Bureau of Outdoor Recreation (proposed); ORRRC is Outdoor Recreation Resources Review Commission.

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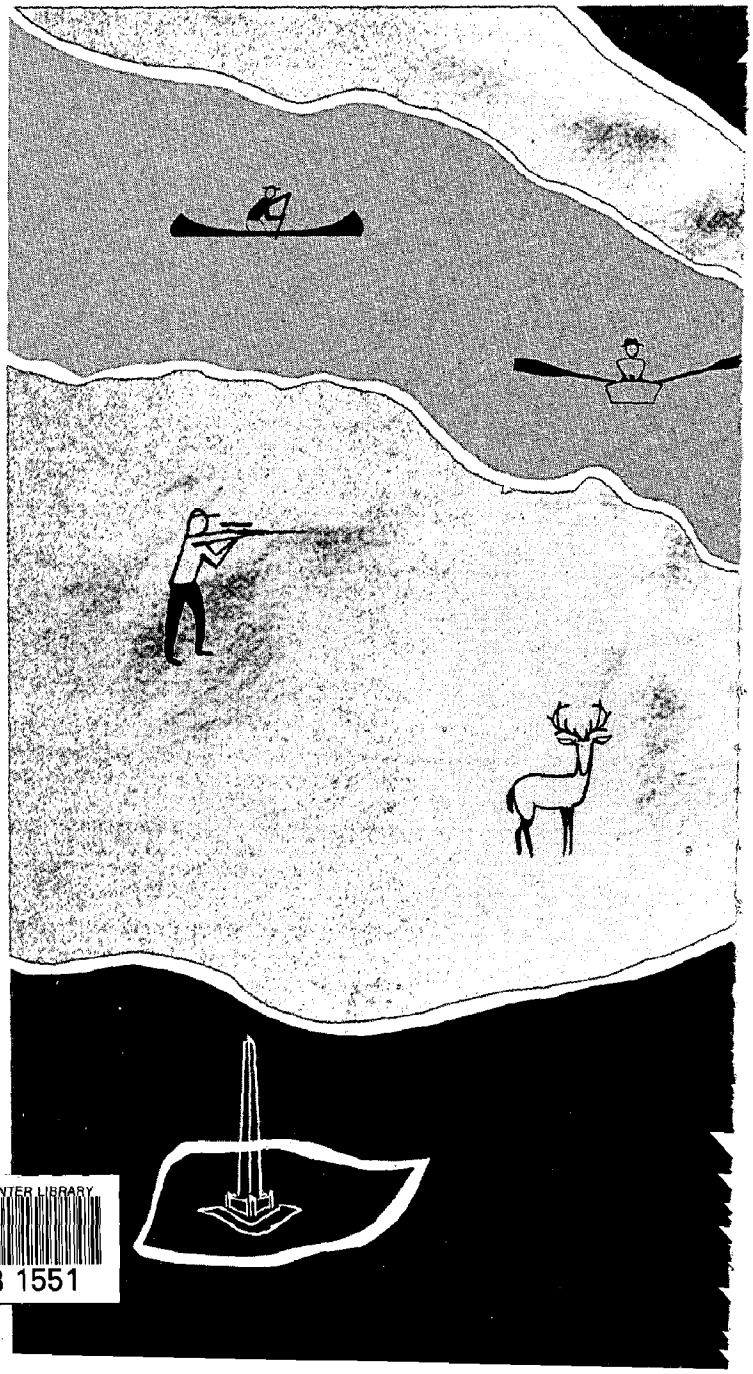

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