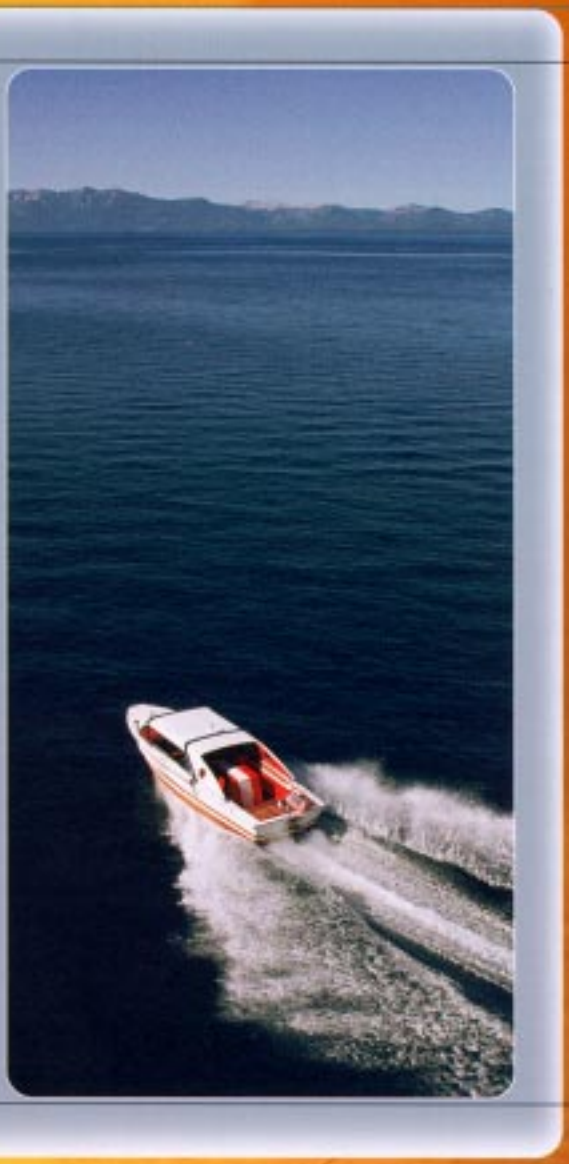
Reservoirs of Opportunity



Report of the

National Recreation
Lakes Study Commission

June 1999

Executive Summary

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Federal Lakes: Popular Demand, Unrealized Potential

Over the past half century, the nation's federal manmade lakes have become a powerful recreation attraction. These lakes, a product of dams built primarily for other purposes, have acquired significant added value in water-related recreation. They have become popular destinations for vacations and day trips. By the hundreds of thousands, people flock to their waters, their shores, their adjacent parks, and their tailwaters downstream. Federal lakes are a canvas of boating, camping, swimming, fishing, hiking, and other leisure pursuits. Lake recreation is also an economic force, greatly buoying state tourism and local economies.

This very success, however, reveals long neglected and growing problems at federal lakes. Despite good intentions, many of the federal agencies in charge of lakes are unable to provide recreation facilities and lake conditions that meet public demand and present-day expectations; and they are failing to recognize and act on recreation opportunities. So say recreation consumers, industry groups, conservation organizations, and state and local governments. All have become increasingly dissatisfied with recreation at federal lakes.

The National Recreation Lakes Study Commission was created by Congress and appointed by President Clinton to examine these concerns. After a year of research, nationwide workshops, and deliberations, the Commission finds that recreation at federal lakes is, in fact, beset by a multitude of difficulties and shortcomings.

At many sites, facilities ranging from restrooms to boat docks to roads are inadequate, aging, and falling apart. Pollution and aquatic plant invasions threaten lake health. Fish habitat is compromised, and with it, species survival and sport fishing. Recreation–too often not integrated with overall project management–is sometimes left high and dry when water is drawn down for other purposes. Some recreation uses conflict with others.

Recreation funding has been cumulatively inadequate, leaving a huge backlog of deferred maintenance. Yet money alone will not fix what is wrong at federal lakes. Policy and management barriers to improved lake recreation are as evident as funds are short.

The Consequences of Neglect

If these problems are not solved, recreation facilities and offerings at federal lakes will continue to deteriorate, and the public will be under served despite its expressed demand. Clean water, which is both a prerequisite for recreation and a check on recreation overuse, will not receive the consideration it deserves as an environmental responsibility. Opportunities to improve recreation services and local economic vitality will be missed. At the same time, the nation will fail to protect fully and capitalize on its past investment in lake recreation resources.

Fortunately, there are constructive measures that the federal government can take to avoid these consequences and to realize the recreational potential of our national lakes. These are outlined presently in this summary. First, however, it is appropriate to look at some background information and the Commission's findings.

> Despite good intentions, many of the federal agencies in charge of lakes are unable to provide recreation facilities and lake conditions that meet public demand and present-day expectations.

Background

The nation owns 1,782 lakes created by federal dams that hold 50 acre feet or more of water. Nearly 500 of these have 1,000 or more surface acres of water. These lakes are managed by 11 federal agencies. The largest number of lakes are managed by the Army Corps of Engineers (537), the Bureau of Reclamation (288), the Forest Service (268), and the U.S. Army (175).

The agencies manage these projects to suit a variety of missions and objectives. Seven of the federal land management agencies (Bureau of Land Management, Bureau of Reclamation, Army Corps of Engineers, Forest Service, Fish and Wildlife Service, National Park Service, and Tennessee Valley Authority) develop partnerships with the private sector to provide public recreation. The Bureau of Reclamation, Army Corps of Engineers, and Tennessee Valley Authority also partner with states, counties, and cities.

Despite a prevailing misconception to the contrary, recreation is an authorized purpose at almost all federal lakes. The authorizing legislation may differ, but it is in place. The confusion may result because the dams that created these lakes were built, mainly during the New Deal, for other primary purposes: job creation, flood control, irrigation, navigation, and electric power generation. As a practical matter, recreation found its way onto the list after World War II when Americans increasingly flocked to their federal lakes.

Findings

Growing User Demand. The nation's nearly 1,800 federal lakes host about 900 million visits a year and generate more than $44 billion in economic impacts. Their use is growing 2 percent annually. By the middle of the new century, they will host nearly 2 billion visits a year. Most lakes are within an hour's drive of a population center, a factor that explains so much of the expanding demand. Because use is growing and because few new reservoirs are likely to be created, recreation facilities at existing lakes are under tremendous pressure.

Growing Maintenance Backlog. A Commission survey revealed that 90 percent of the recreation facilities originally planned at federal lakes were built. Since then, however, age and growing public use have overwhelmed them. The Commission found evidence that there are not enough facilities of the type and design needed to keep up with increasing use. Some facilities fail to meet current health and safety standards. Given the lag in funding over the years, the backlog of deferred maintenance at federal lakes now exceeds $800 million. Some agencies have developed a schedule to reduce this backlog but limited funds allow them to target only the most critical needs. Not all agencies are participating in the backlog reduction.

> There is a prevailing misconception that recreation is not an authorized purpose, but it is at almost all federal lakes.

Shrinking Appropriations. While public recreation use at federal lakes has been growing, budget appropriations for lake recreation needs have been shrinking. The appropriation process itself is uneven because agency priorities differ and because funding for agencies resides in different House and Senate subcommittees, which also have differing priorities and perspectives. This yields a mix of funding levels and arrangements at different agencies. For example, lake projects may be funded through a general appropriation, or one specifically for a particular lake. Some general appropriations may be made without regard to local fee revenues at lakes. Appropriations for some agencies have been reduced to offset such revenues.

Financial Burdens on State and Local Government Partners. Self-imposed policies at some agencies restrict cost sharing with state and local government partners who manage lakeside parks on federal land. Caught between rising public use on one side and increasing operation and maintenance costs on the other, many of these partners are chafing under funding liabilities for land they don't own. Since 1971, 22 jurisdictions have turned back parks to the Bureau of Reclamation, leaving the agency with operation and maintenance costs it was not prepared to bear. The Corps of Engineers has responded to this problem with a policy of closing turned back parks. State and local governments are also constrained by requirements to match federal grants for recreation projects. Many of these jurisdictions can't afford to put up matching funds, so they pass on projects that would benefit the public, despite the availability of federal moneys.

> The commission found that user fees are an effective and justifiable means of supplementing recreation costs incurred by those who use recreation amenities most heavily.

Inconsistent User Fee Policies. In concert with previous review panels, the Commission found that user fees are an effective and justifiable means of supplementing recreation costs incurred by those who use recreation amenities most heavily. However, user fees are a hodgepodge of permissions, prohibitions, and procedures from agency to agency. Generally, user fees have failed to make up for declining agency appropriations. Federal agencies have, on average, funded about 10 percent of lake recreation operating costs from user fees. State park systems, by contrast, fund 40 percent of their operating costs from user fees.

The User Fee Demonstration Program, which was implemented in 1996, shows promise of enhancing user fees as a funding mechanism at federal lakes. It contains a built-in incentive to collect user fees, allowing agencies to retain all demonstration program revenues, and to keep at least 80 percent of the revenues at the site where they are collected. Four agencies are participating in this demonstration, the Forest Service, the National Park Service, the Bureau of Land Management, and the Fish and Wildlife Service. During their first year of demonstration program operation, Fiscal Year 1997, these agencies increased total fee revenues at 208 demonstration sites by more than $55 million, a 63 percent increase over fees collected at the same sites the year before the demonstration program went into effect.

Tensions With Private Sector Partners. It is evident to the Commission that the public has benefitted from development and operation of recreation facilities at federal lakes through arrangements with private sector partners. Their expertise has provided such facilities as campgrounds, restaurants, marinas, equestrian facilities, resorts, golf courses, and nature centers. Concessionaires benefit too, realizing more than $2.2 billion in gross annual revenues.

Nevertheless, there are longstanding tensions between the federal government and its private sector partners over federal lake concessions. The government side is concerned about maintaining control, receiving a reasonable return on the arrangement, keeping the contracting process open and fair, and accounting for collection and distribution of fee revenues charged to concessionaires. Private partners object to policies that make it difficult for them to operate efficiently and make a reasonable profit. In particular, they say contract durations are not long enough to amortize investments, which makes it difficult to secure financing. They say fluctuations in water levels from other reservoir operations can hurt business in their short peak seasons, making it difficult to secure loans, service debt, and meet other operating expenses.

Several dozen federal reviews have focused on this problem, and the response to their recommendations has varied. A 1995 interagency agreement on concession policy has been implemented only partially. Legislation was passed setting concession policy for the National Park Service. The Commission finds that the 1995 interagency agreement, despite difficulties in implementation, probably shows the most promise as an approach to the concession problem.

Other Partnership Barriers. Barriers to successful partnerships go beyond financial and contractual arrangements. The biggest barrier may lie with organizational attitudes and cultures. Private sector representatives who appeared before the Commission acknowledged that there are a number of mutual misunderstandings between private sector entities and federal agencies, but they pointed to a list of problems on the agency side. They alleged agency bias against public recreation projects, bureaucratic inflexibility, excessive agency oversight and control, mistrust of private sector motives, misunderstanding of private sector business requirements, inability to see the benefits of private-public partnerships, and lack of consistency among agency policies across local areas. Some of these perceptions are undoubtedly valid, but even those that are not constitute a problem because they influence the way that private sector and agency personnel relate to one another.

Support for Integrated Water Management. The Commission found that there are both supporting constituencies and policy precedent to justify integrating recreation and environmental purposes into reservoir operations, even to the extent of modifying water management to accommodate these purposes. There are also valid reasons to manage water releases to improve fish habitat and recreation conditions downstream.

The Critical Importance of Clean Water. In addition to its view that clean water has intrinsic environmental value, the Commission believes that clean water is essential for recreational use of federal lakes. For example, sediment, pollutants that stimulate algae growth, or invasions by foreign aquatic plants can harm both a lake's environmental balance and its recreational value. The Commission agrees that clean lake water begins beyond the lake's boundaries, extending to upstream tributaries and adjacent uses. Because manmade lakes are constructed on primary rivers, they are usually part of a much larger watershed, resulting in higher loads of sediment, nutrients, and toxins than at natural lakes.

Although great progress has been made in cleaning up lakes and rivers since the Clean Water Act of 1977, water quality in about half of the nation's 2,000 major watersheds is still seriously or moderately deficient. According to a 1996 survey by the Environmental Protection Agency, a higher percentage of lakes (61 percent) are clean, but a fourth to a third of lake acres surveyed rated only fair or poor in terms of ability to support water-related recreation.

The Commission agrees with provisions of the 1998 federal Clean Water Action Plan that are relevant to lake cleanup and protection. The Commission received testimony that Section 319 funding under the Clean Water Act is not addressing the environmental needs of lakes as did Section 314 funding, which was discontinued by Congress after 1994. The Commission also heard from EPA that the agency intends to increase funds for lake cleanup activities previously funded under Section 314.

There are both supporting constituencies and policy precedent to justify integrating recreation and environmental purposes into reservoir operations.

Deficiencies in Data for Policy and Management Decisions. The Commission found that data on public recreation needs and lake recreation resources are inadequate and inconsistent across agencies, as are data on management performance and customer satisfaction. Thus, assessing needs and making decisions on the basis of accurate information is not now possible. Such data deficiencies impaired the Commission study itself.

National Recreation Lakes–System or Program? The Commission was specifically charged to examine the feasibility and desirability of a national recreation lake system, a designation and arrangement that would give federal lakes higher visibility and stature. The Commission finds that a national recreation lake system is feasible and could be beneficial, but is wary of establishing such a system before testing the concept on a small scale, preferably in the form of a lake demonstration program. A demonstration program could be operated as a "management lab" with a number of pilot lakes as part of the National Partnership for Reinventing Government.

Conclusions

Based on its findings, the Commission draws these conclusions about the status of recreation at federal manmade lakes, and about the difficulties of providing water-related recreation to the public.

1. Federal lake recreation is a significant national resource and public benefit of federal water projects, and it makes important contributions to local, state, and national economies.

2. Recreation at federal lakes has not been treated as a priority, or often even an equal, with other reservoir uses, despite its stature as an authorized purpose. This is manifested in often inflexible water management for recreational purposes, in lack of public communication about changes in water levels for other purposes, and in failure to provide and maintain the facilities and services needed to meet public demand for recreation at federal lakes.

3. Recreation management at federal lakes has suffered from lack of unifying policy direction and leadership, as well as insufficient interagency and intergovernmental planning and coordination.

4. Recreation facilities at most federal lakes are inadequately maintained and insufficient for current levels of public use. Funds are not available to correct an $800 million maintenance backlog, nor to construct and operate new facilities.

Recreation management at federal lakes has suffered from lack of unifying policy direction and leadership, as well as insufficient interagency and intergovernmental planning and coordination.

5. Federal recreation user fee practices are not particularly successful as a revenue generator. The Fee Demonstration Program appears to provide a model for greater success in producing fee revenue.

6. Meeting current and future demands for lake-related recreation, with or without increased appropriations, will require smart, flexible, visionary management and better ways of doing things.

7. The value of providing recreation services through local partners underscores the need to expand and improve development and operating partnerships with state and local governments and with private businesses.

8. Inconsistent concessionaire policies across lake management agencies do a disservice to the public, which benefits when concessionaires have the conditions to succeed.

9. Agency policies against cost sharing with state and local government partners are unwise. Cost sharing in the operation and maintenance of facilities operated by local jurisdictions would be cheaper for the federal government in the long run and in the best interest of the public.

10. There is ample justification and precedent to integrate reservoir water management, particularly drawdowns and flow levels, to serve recreation and environmental purposes. This can be done while still achieving the intent of Congressional authorizations.

11. Clean water is critical to lake recreation as well as lake health. The Commission endorses the total watershed approach to clean water and the Environmental Protection Agency's expressed commitment to give increased emphasis to clean lakes under the Clean Water Act.

12. The concept of a national recreation lake system has merit, but such a system should not be created before it can be tested through a smaller scale demonstration program.

Recommendations

Commission recommendations are presented in a framework of five overarching themes:

- *Make recreation a higher priority at federal lakes.*
- *Energize and focus federal lake recreation leadership.*
- *Advance federal lake recreation through demonstration and reinvention.*
- *Create an environment for success in federal lake recreation management.*
- *Identify and close the gap between recreation needs and services.*

1. Make Recreation a Higher Priority at Federal Lakes

As the 21st century approaches, the federal government has an obligation to respond to increasing public demand for recreation at federal lakes. It should develop strategies that integrate recreation with other authorized project purposes and optimize all public benefits at federal lakes. In particular, closer policy and management coordination is required to overcome institutional barriers to consistent, quality lake recreation. These barriers include fragmentation in lake project statutes and Congressional oversight of lake management agencies, inconsistent budget appropriations for lakes, varied agency missions and priorities concerning lakes, and the isolation of local lake managers.

Recommendation 1-1 *Provide clear guidance at all agency levels that recreation is a project purpose and should receive appropriate budgetary and operational treatment.* Everyone involved in water project management should understand that recreation is a valid project purpose with legal standing, substantial market demand, and significant economic benefit.

2. Energize and Focus Federal Lake Recreation Leadership

The Commission believes that for recreation to be revitalized and offered cost-effectively at federal lakes, the first step required is to energize and refocus federal leadership in order to resolve federal lake issues and create an environment for success.

Recommendation 2-1 *Establish and adequately fund an interagency Federal Lakes Recreation Leadership Council to coordinate recommendations of the National Recreation Lakes Study Commission.* The formation of this Council is the cornerstone for implementing the recommendations in this report. Without an official body to lead the way, the recommendations here will not move forward.

As the 21st century approaches, the federal government has an obligation to respond to increasing public demand for recreation at federal lakes.

3. Advance federal lake recreation through demonstration and reinvention.

Using the guiding principles and recommendations developed by the National Recreation Lakes Study Commission, the Council would be invested with the responsibility to develop a National Recreation Lakes Demonstration Program.

Recommendation 3-1 *Develop a National Recreation Lakes Demonstration Program and apply for Reinvention Laboratory status for the program.* The Council would establish an application and selection process to identify 12 or more pilot lakes to participate in the demonstration program. The demonstration would be geographically diverse and would include all agencies and entities that manage federal lake resources.

4. Create an environment for success in federal lake recreation management.

This will require lake managers to broaden their approach to water resource management. It will require broader use of recreation fees and local control over those fees. It will also require the removal of a number of barriers to more successful federal recreation management partnerships with the private sector and with state and local governments.

Recommendation 4-1 *Operate federal lakes to optimize water use for all beneficial purposes, including recreation and environmental values, consistent with Congressionally authorized purposes.* Many federal lakes with significant recreation potential are authorized primarily for navigation, flood control, water supply, and power generation. The recreation and environmental benefits of these lakes can be affected significantly by the way agencies implement Congressionally authorized purposes. The Commission believes that integrated management of federal lakes will reduce present and future conflict over water use and resource stewardship.

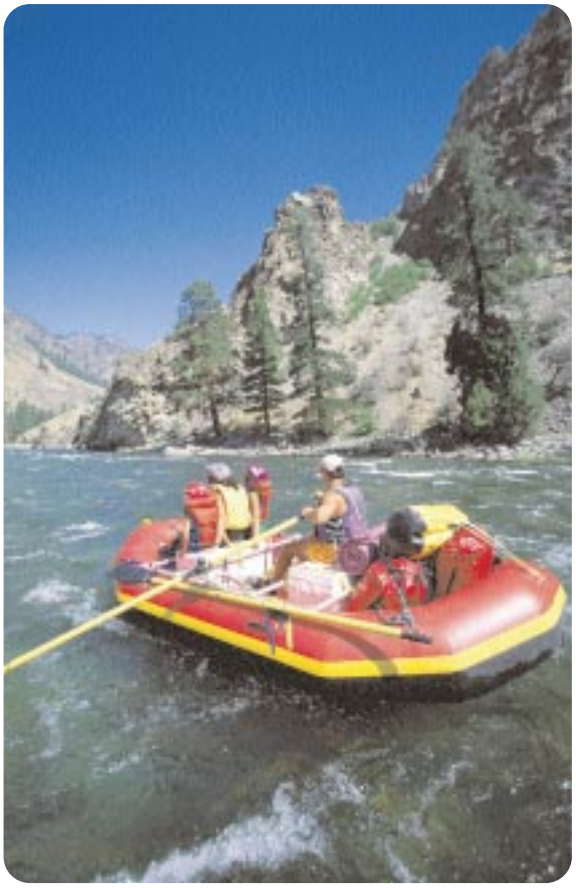
Recommendation 4-2 *Review current guidelines regarding recreation activities for all federal lakes and develop policy recommendations which will include best business practices encouraging private sector investment in needed recreation facilities.* The Commission supports the development and implementation of a commercial recreation activity policy as described in the 1995 memorandum of understanding signed by several federal agencies regarding concessions management. An excellent starting point would be to review, modify and implement that memorandum of understanding.

Recommendation 4-3 *Make the Fee Demonstration Program permanent and allow it to include revenues collected from concessions operations.* Include the Bureau of Reclamation and the Army Corps of Engineers in the program. Allow fee revenues to be retained at the management unit where collected, and allow them to be used for capital improvements and operations and maintenance costs. It is important that future fee programs enable agencies to develop an entrepreneurial approach to service delivery.

Recommendation 4-4 *Encourage partnerships with nonfederal entities. Specifically, change Bureau of Reclamation and Army Corps of Engineer s policies that now forbid cost sharing with nonfederal government partners for operation, maintenance, and rehabilitation of recreation facilities at parks on federal lakes.* Reclamation and the Corps share costs with their state and local government partners on new construction projects, but not on operation, maintenance, and rehabilitation. Cost sharing in the rehabilitation, modification, operation and maintenance of those facilities would be cheaper for the federal government in the long run and in the best interest of the public.

Recommendation 4-5 *Amend Public Law 89-72 to repeal the requirement that federal entities can develop new recreation facilities only through cost sharing agreements with nonfederal governmental entities.* This would give the Bureau of Reclamation and Army Corps of Engineers the same flexibility to manage and provide lake recreation now enjoyed by other federal land management agencies.

Recommendation 4-6 *Amend federal grant-in-aid programs to eliminate the requirement for state matching funds when projects benefit federal lakes.* This would allow the states to use federal grant-in-aid funds for projects that benefit recreation and related resources at federal lakes without the necessity of providing a nonfederal funding source to meet cost-share requirements.



Recommendation 4-7 *Develop and implement programs to inform public users of federal lakes about the mission, history, management, services, and facilities of the lakes.* There is no federal prohibition against communications, including marketing or advertising, unless it deals with political issues or is little more than agency self-promotion. Communication programs serve the legitimate purposes of promoting lake recreation, educating the public about lake management and issues, and encouraging public involvement.

Recommendation 4-8 *Establish water-related recreation performance measures for all federal lake management agencies.* This meets the intent of the Government Performance and Results Act, which directs all federal agencies to base their performance on results. Lake management agencies have strategic plans and

performance measures for water-related recreation services, but these plans and measures should be made consistent across all agencies.

Recommendation 4-9 *Establish regular federal, state and local government and tribal inter/intra-agency and private sector development assignments, exchanges and meetings for federal lakes supervisors and staff to enhance expertise and understanding.* Agencies should foster a culture of cooperation in federal lake management. When managers at federal lakes are particularly successful at offering or improving recreation services, or solving related problems, these successes should be shared to the benefit of everyone in federal lake management.

Recommendation 4-10 *In the implementation of the National Recreational Fisheries Conservation Plan, give special emphasis to federal lakes.* The basic objective of the recreational fisheries conservation plan is closely aligned with the goals and guiding principles of the National Recreation Lakes Study. Improving habitat for fish, increasing opportunities for the angler, educating the public about recreational fisheries programs, and developing partnerships to achieve these aims are all means of enhancing recreation and conserving the environment.

Recommendation 4-11 *Encourage agencies to work with communities on lake management issues.* In regard to lake use, there are competing interests in communities, including businesses, industries, recreation users, and environmental advocates. Learning to interact with communities and these interests in a flexible, productive manner will help agencies institutionalize the practice of meaningful community involvement at federal lakes and throughout the federal government.

5. Identify and close the gap between recreation needs and services.

Recommendation 5-1 *Conduct assessments at federal lakes to determine customer needs, infrastructure and facility needs, and natural resource capabilities.* Develop a strategic plan for future investments in recreation infrastructures in response to these assessments. Consistent with the strategic plan, reduce the recreation facilities maintenance backlog over the next 10 years.

Recommendation 5-2 *Improve lake water quality through a watershed management approach.* Clean lake water should be treated by lake management agencies as both a recreation and environmental priority. These agencies, at all levels, should support the total watershed approach to clean water. At the same time, they should also direct an appropriate portion of their resources to keeping lakes clean. The Environmental Protection Agency should fulfill its expressed commitment to support clean lakes under the Clean Water Act.

Acknowledgements

The National Recreation Lakes Study Commission would like to acknowledge the many organizations that have contributed to the work of this study. They included departments and offices of federal, state, local, and tribal governments, as well as businesses, trade associations, and nonprofit organizations with an interest in recreation at federal lakes. Federal agencies provided staff support, research, data, and subject expertise. State, local, and tribal governments, businesses, associations, and nonprofits participated in study workshops, supplied data and background information, and offered expert comment on various study issues.

Federal agencies and offices contributing to the study included:

Army Corps of Engineers
Bureau of Indian Affairs
Bureau of Land Management
Bureau of Reclamation
National Park Service
Office of Surface Mining
US Fish and Wildlife Service
Tennessee Valley Authority
USDA Forest Service
US Geological Survey

Department of the Interior's
- National Business Center
- Office of Budget
- Office of Communications
- White House Liaison
- Congressional and Legislative Affairs Office
- Office of External Affairs
- Office of the Solicitor

Other participants of special note included state parks and tourism agencies, state fish and wildlife agencies, local government park and recreation offices, tribal natural resource offices, concessionaires at federal lakes, national recreation associations, hydroelectric power producers and user groups, recreation equipment manufacturing associations, water user and recreation groups, environmental and conservation organizations, and trade media with an interest in lake recreation.

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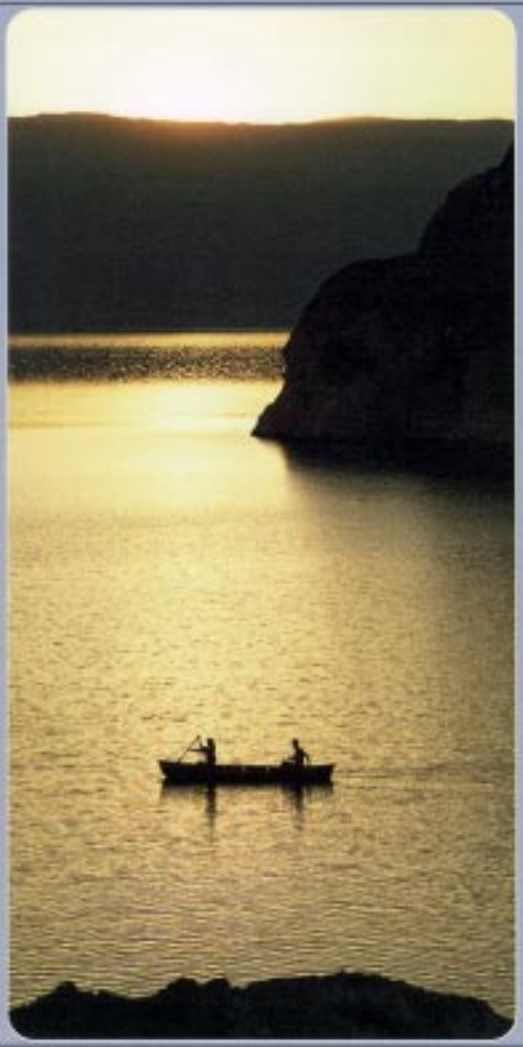

THE NATIONAL RECREATION LAKES STUDY

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