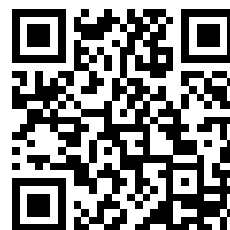

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preliminary wilderness proposal

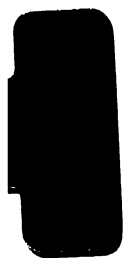
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LAKE MEAD



NATIONAL RECREATION AREA / ARIZONA-NEVADA





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PRELIMINARY WILDERNESS PROPOSAL



**Lake Mead
National Recreation Area
Arizona-Nevada**

January 1979

United States Department of the Interior / National Park Service

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FINDINGS

TWENTY-FIVE UNITS TOTALING 418,655 ACRES WITHIN LAKE MEAD NATIONAL RECREATION AREA HAVE BEEN FOUND SUITABLE FOR PRESERVATION AS WILDERNESS AND ARE PROPOSED FOR INCLUSION IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM. OTHER AREAS TOTALING 262,125 ACRES INCLUDING STATE, COUNTY, AND PRIVATE INHOLDINGS; LANDS ENCUMBERED BY OUTSTANDING RIGHTS AND RESERVATIONS; AND ONE PARCEL ENCUMBERED BY AN OUTSTANDING MINERAL LEASE ARE PROPOSED FOR POTENTIAL WILDERNESS ADDITIONS. WHEN ADVERSE USES ARE ELIMINATED, POTENTIAL WILDERNESS ADDITIONS WILL AUTOMATICALLY BECOME WILDERNESS.

LAKE MEAD NATIONAL RECREATION AREA AND ITS ENVIRONS

Lake Mead National Recreation Area, in southern Nevada and northwestern Arizona, was formally established by the Act of October 8, 1964 (78 Stat. 1039). It includes two reclamation impoundments, Lake Mead and Lake Mohave.

Dramatic contrasts characterize Lake Mead National Recreation Area. The seemingly endless desert and massive mountain ranges, unencumbered by dense vegetation, are strange and awesome to many visitors. In contrast, most of the lifeforms of the desert are cryptic, small, and even fragile - but likewise unfamiliar to urban-oriented visitors. Another unusual contrast is the incongruity of two enormous bodies of water in one of the most arid environments in the Western Hemisphere. Rugged north-trending mountain ranges and broad alluvial slopes dominate the recreation area.

Shaped by fiercely hot summers, temperate winters, and low cumulative, but often locally intense rainfall, the desert generally supports sparse creosotebush/mesquite communities. However, in washes and other areas where moisture periodically accumulates, scattered cottonwood, tamarisk, and saltbush grow. In middle elevations, Joshua trees and several species of cactus flourish. On the higher and wetter Shivwits Plateau are a pinyon/juniper forest and stands of ponderosa pine.

Lake Mead National Recreation Area contains a great diversity of wildlife. Most notable is the rare and elusive desert bighorn, which thrives in the River Mountains and other ranges. Other animals include the mule deer, cougar, bobcat, coyote, and ringtail cat, and a host of small desert rodents. Feral burros create problems of habitat degradation. Over 230 species of birds have been recorded, including more than 60 species of waterfowl attracted to the impounded water.

Several species of game fish have been introduced to Lake Mead and Lake Mohave, including the largemouth black bass, rainbow trout, silver salmon, channel catfish, black crappie, blue gill, green sunfish, and most recently the striped bass. Lake Mead is noted nationally for its spring bass-fishing. Native fish species still exist in the Colorado River above the upper portion of Lake Mohave. Of particular interest and concern is the endangered Colorado River squawfish.

Archeological artifacts and petroglyphs provide a record of early Indian habitation, but many of the most significant of these are now underwater. Fossil evidence is abundant, chronicling the plants

and animals unable to cope with environmental changes of other eras.

Lake Mead National Recreation Area offers expanses of clear, fresh water combined with stark desert landscapes and a temperate winter climate. Its primary assets are open space, solitude, quiet, fresh air, water, and the recreational developments provided for human enjoyment.

The primary users of Lake Mead National Recreation Area are residents of southern Nevada, southern Utah, Arizona, and southern California. The residents of southern California are the most numerous out-of-state users of the recreation area, and their use is increasing at a rapid rate. The coastal area of southern California is a sprawling "supercity," and one of the fastest growing regions in the United States. It had a population of 11.5 million in 1970, and 17 million is projected by 1985.

Nearby units of the National Park System are Death Valley National Monument to the west, Zion National Park to the northeast, and the recently enlarged Grand Canyon National Park to the east.

Most lands adjacent to or in the general region of Lake Mead are federally owned and administered by the Bureau of Land Management, the U.S. Fish and Wildlife Service, or the Department of Defense.



THE WILDERNESS STUDY

BACKGROUND OF THE STUDY

A wilderness study of the Lake Mead National Recreation Area was conducted by the National Park Service during 1973 and 1974 pursuant to the Wilderness Act of 1964 (78 Stat. 890). However, in 1974, the Department of the Interior recommended that in view of the potential energy needs of the West and because the entire area is subject to withdrawals for power purposes, the area should receive further study and further recommendations should be submitted within 3 years. This recommendation was made in a presidential message to the Congress on December 4, 1974.

A reclamation potentials study thus became the first order of business. This first-phase study was initiated by the Bureau of Reclamation in 1974, and a report entitled "Reclamation Potentials within the Lake Mead National Recreation Area" was completed in January 1977. Additional studies by the Bureau of Reclamation are to be completed at various times through 1983.

In January 1975 Congress passed the Grand Canyon Enlargement Act (88 Stat. 2089), which consolidated much of the Grand Canyon into a single national park and included some lands that had previously been part of Lake Mead National Recreation Area. The Sanup Plateau, 93 miles of the Colorado River, and portions of the Grand Wash Cliffs were deleted from the Lake Mead National Recreation Area and added to Grand Canyon National Park. This action reduced the gross acreage of the Lake Mead National Recreation Area from 1,936,978 acres to 1,496,600 acres, and correspondingly reduced the roadless study area.

There are several factors which affect the designation of portions of the study area as wilderness. These factors have been analyzed for their impact upon the resources of Lake Mead National Recreation Area and have been considered in the formulation of the proposed wilderness units. Highlights of the 1977 reclamation potentials study and other study factors are described in the following subsections.

POTENTIAL SITES FOR RECLAMATION DEVELOPMENT (RECLAMATION POTENTIALS STUDY, JANUARY 1977)

Purpose of the Study

The Bureau of Reclamation supported the designation of wilderness units in the Lake Mead National Recreation Area in 1974 and does not oppose wilderness areas at locations where it has no foreseeable

long-range possibilities to use the land. The bureau's prerogative over lands withdrawn for reclamation purposes is reflected in the legislative history of Lake Mead.

Lake Mead was formed by the impoundment of water behind Hoover Dam, which was authorized by the Boulder Canyon Project Act of December 21, 1928 (45 Stat. 1057), for the purposes of controlling floods, improving navigation in the Colorado River, providing for storage and delivery of stored waters for reclamation of public lands, and generating electrical energy. In recognition of the national significance of the recreation area that developed around Lake Mead, Congress passed the Lake Mead National Recreation Area Act of October 8, 1964, describing the functions and activities to be exercised by the Secretary of the Interior in his administration of the area. The legislation states that the establishment of boundaries of the Lake Mead National Recreation Area

. . . shall [not] affect the validity of withdrawals heretofore made for reclamation or power purposes. All lands in the recreation area which have been withdrawn or acquired by the United States for reclamation purposes shall remain subject to the primary use thereof for reclamation and power purposes so long as they are withdrawn or needed for such purposes.

Since construction of Hoover Dam and establishment of the national recreation area, the Bureau of Reclamation has lifted its withdrawal in Arizona and Nevada on approximately 684,000 acres within the recreation area. Additional revocations are anticipated when the bureau can accurately forecast its land requirements for anticipated actions such as the importation of water, pumped-storage projects, and other reclamation activities. The revocations made since October 8, 1964, were made on the basis of language in the act that ensures that land in the recreation area will remain subject to the primary uses for reclamation and power purposes as long as they are withdrawn or needed for such purposes.

On September 30, 1974, the assistant commissioner of the Bureau of Reclamation directed the regional director in Boulder City, Nevada, to investigate reclamation potentials in the area and to work with the National Park Service in the formulation of future wilderness proposals. The study conducted in compliance with those directions identifies potentials for reclamation uses, including power development, on lands located within the Lake Mead National Recreation Area. The study report does not specifically address reclamation potentials on lands that were formally within the recreation area but later transferred to Grand Canyon National Park.

Summary of Investigations

In future years, it is possible that the Bureau of Reclamation will require areas adjacent to Lake Mead and Lake Mohave in connection with the following potential uses, such as pumped-storage projects for electrical power generation or projects for importing water to the Colorado River from another region.

Pumped Storage. Pumped storage appears to have one of the most promising potentials for power development in Lake Mead National Recreation Area. In such an operation, off-peak electrical energy is used to lift water into a storage reservoir for use during on-peak load periods. The criteria for pumped-storage sites can be generalized as follows:

- Must be close to a lake or a constant water supply
- Must have a suitable geological structure for impounding water
- Must meet the overall requirements for an integrated system

The number of potential pumped-storage sites is relatively small within Lake Mead National Recreation Area, and it would appear, from initial examinations, that most sites could be used without appreciably reducing the overall wilderness area objectives. Six such potential sites have been located and are identified on the preliminary wilderness plan map. They are Pinto Valley on Lake Mead, and Indian Rapids, Fenlon Bend, Mohave, Fire Mountain, and Newberry Mountains, all on Lake Mohave.

Hoover Powerplant Modifications. Pursuant to the Water Resource Development--Feasibility Studies Act (89 Stat. 825), the Secretary of the Interior has been authorized to engage in feasibility investigations of Boulder Canyon Project modifications. A preliminary report, published in April 1973, indicates that it is technically and economically feasible to increase the generating capacity at the Hoover Powerplant, but that the extent of development would be limited by availability of water, agreement among affected parties, and the need to preserve established scenic and recreational qualities.

Transmission Corridors. In conjunction with these potential hydroelectric projects, a review of transmission requirements was undertaken to determine the need for additional transmission line rights-of-way. With the exception of the Pinto Valley pumped-storage site, it appears that most transmission requirements could be satisfied by construction of new transmission lines in corridors adjacent to existing high-voltage transmission lines. The Pinto Valley site would require the establishment of a new corridor across the recreation area.

This concept is in keeping with a study published by the Bureau of Land Management in July 1975 entitled The Need for a National System of Transportation and Utility Corridors. This study concludes that to minimize ecological and environmental impacts and the proliferation of rights-of-way on Federal land, as well as developing and distributing much-needed new energy sources, planning corridors appear to be the most optimum action to take despite some obvious shortcomings. The report recommends that Federal agencies be directed to identify and reserve across Federal lands a national system of planning corridors that are suitable for, and shall remain open to, future routing of transportation and utility rights-of-way.

The environmental criteria adhered to by the Department of the Interior and the Department of Agriculture require that properly sited established rights-of-way should be used where warranted for the location of additions to existing transmission facilities to minimize conflict with other ongoing and planned uses of the land.

The existing transmission lines crossing the Lake Mead National Recreation Area and the potential corridor locations for the Pinto Valley site are indicated on the preliminary wilderness plan map.

300-Foot Setbacks from Lake Mead and Lake Mohave. Pursuant to an inter-bureau agreement of October 13, 1936, clarified by the Lake Mead National Recreation Area Act of October 8, 1964, the National Park Service and the Bureau of Reclamation have enjoyed unified land jurisdiction and shared joint administration over the Lake Mead National Recreation Area.

In 1971, reclamation withdrawals were revoked from the recreation area boundary to a point measured 300 feet horizontally back from the high-water lines of Lake Mead and Lake Mohave. Reclamation withdrawals were retained on these strips of land along the lake-shores that are used by the public for intensive recreation and by the Bureau of Reclamation for reservoir maintenance activities and for water measurements, water quality evaluations, evaporation studies, control of natural slide areas, etc.

Southern Nevada Water Project - River Mountains Tunnel. The Southern Nevada Water Project (SNWP) delivers municipal and industrial water from Lake Mead to one of the fastest growing areas of the country. The area served includes Las Vegas, North Las Vegas, Henderson, Boulder City, and Nellis Air Force Base. The initial stage of the project diverts water from Lake Mead at a rate of up to 132,000 acre-feet annually, which is part of Nevada's allocated share of Colorado River water.

Project works consist of intake facilities at Lake Mead, eight pumping plants, a 3.8-mile-long, 10-foot-diameter tunnel through the River Mountains, and approximately 35 miles of pipeline.

Access must be maintained to all project facilities for operation and maintenance.

Future Additional Flows to the Colorado River. The Pacific Southwest Water Plan (PSWP) report of January 1964 contains an estimate that water requirements in the Pacific Southwest will be about 20,000,000 acre-feet by the year 2000. This was based on a policy of no expansion in the irrigation economy.

Congress declared in the Colorado River Basin Project Act of September 1968 (82 Stat. 885) that meeting requirements of the Mexican Water Treaty from the Colorado River constitutes a national obligation which shall be the first priority of any increased river flow modification project. Congress also provided that for a period of ten years from this enactment the Secretary shall not undertake reconnaissance studies of any plan for the importation of water into the Colorado River Basin from other natural river drainage basins lying outside the seven Colorado River Basin states.

No studies of importation of water from outside the Colorado River Basin have been made since the publication of the PSWP report due to the restrictions placed on such studies by Congress. However, the 10-year restriction will terminate in October 1978, and it is assumed that appraisal studies could be initiated some time after that date. If additional flows are necessary to increase water in the Colorado River, Lake Mead would be the logical terminal reservoir.

Colorado River Highway Crossings. The crest of Hoover Dam is presently used as a link between Arizona and southern Nevada and is designated as U.S. Highway 93. Because of the increasing volume of both tourist and commercial traffic, compounded by the attraction that the dam presents, serious problems have developed at and in the vicinity of the dam. The problems relate to both the safety of tourists and the maintenance of the dam and appurtenant structures. Because of this, an alternate route for through-traffic is under consideration. Should major construction activities at Hoover Dam ensue as a result of the Hoover Powerplant modification feasibility studies, construction of a bypass will be almost mandatory, since existing traffic is at or near maximum capacity of the present roadway.

The alternate route, designated as a "bridge crossing one mile below Hoover Dam," would have 4 miles of access road in Nevada and 1 mile of access road in Arizona. Most of the route would be located within the area designated as the Reclamation Administrative Zone. Adequate areas for interchanges and visitors' facilities would also be required. In addition, provisions might be made during the design of the bridge to provide for future communications, power, oil, gas, and water lines. Corridors for these future utilities, as

they diverged away from the bridge, would also have to be provided.

Bureau of Reclamation Recommendations

Potential Wilderness Additions. The Bureau of Reclamation recommends that the following areas be designated as potential wilderness additions until such time as these areas can be eliminated from further consideration for reclamation developments.

Newberry Mountains - Contain potential pumped-storage sites.

Fire Mountain - Contains potential pumped-storage site.

Malpais Mesa and Fenlon Bend - Contain potential pumped-storage sites.

Roaring Rapids - Lands adjacent to Lake Mohave may be required in conjunction with Hoover Powerplant modifications.

Indian Rapids - Contains potential pumped-storage site. Lands adjacent to Lake Mohave may be required in conjunction with Hoover Powerplant modifications.

Pinto Valley - Contains potential pumped-storage site and associated transmission corridors.

Indian Rapids and Ringbolt Rapids - Lands adjacent to Lake Mohave may be required in conjunction with possible Hoover Powerplant modifications.

Five of the above-mentioned pumped-storage sites use Lake Mohave as a lower reservoir. The limited storage capability of Lake Mohave would preclude the development of all five sites even if all sites were technically and engineeringly feasible. However, until the most promising one or two sites can be identified, all potential pumped-storage sites should be designated as potential wilderness additions.

Nonwilderness. All transmission corridors should be excluded from wilderness. These include the following:

- Four Corners-Eldorado 500-KV line (existing 1,660-foot-wide corridor)
- Mead-Liberty 345-KV line (existing 1,660-foot-wide corridor)
- Pinto Valley pumped-storage site corridor (potential corridor crossing through Arch Mountain and Petroglyph Wash units)
- Mead-Davis 230-KV line (existing 330-foot-wide corridor)

Existing corridors will meet the need for additional transmission lines for all of the above-mentioned projects except the Pinto Valley project, and also for other projects outside the Lake Mead National Recreation Area that may be needed to meet projected loads in the Southwest.

The Bureau of Reclamation believes that the following additional lands should also be excluded from the wilderness proposal:

River Mountains Tunnel Corridor - To maintain access to the several features of the Southern Nevada Water Project that are in the River Mountains, including the River Mountains Tunnel, SNWP telemetry systems, and associated utility lines and access road, and to meet its other responsibilities concerning the SNWP as it is now designed, the bureau recommends exclusion of the following minimum corridor in section 6, T. 22 S., R. 64 E., MDB&M. The corridor would have a southern boundary lying 660 feet south of the present River Mountain Tunnel alignment. The northern boundary would begin at the mid-point of the east section line, proceed westward along the mid-section line until it is within 300 feet of the access road, and then maintain this distance from the road until the recreation area boundary is reached.

Hoover Dam - To allow for modification of the Hoover Powerplant and/or development of a new Colorado River highway crossing below the dam, the bureau proposes that all lands within the Hoover Dam Reservation boundary be excluded from any wilderness or potential wilderness area.

Lake Setbacks - To provide for reclamation activities along the shorelines of Lake Mead and Lake Mohave, it is recommended that a 300-foot horizontal setback from the high water elevations of 1,229 feet for Lake Mead and 655 feet for Lake Mohave be omitted from proposed wilderness.

Future Reclamation Studies

Additional studies will be required by the Bureau of Reclamation before potential wilderness additions can be designated as wilderness areas.

Appraisal studies of the potential pumped-storage sites will be required to determine which sites, if any, are suitable for development. The Bureau of Reclamation is currently involved in a study to identify and appraise ways of expanding water-related energy production in the Western United States. This 15-month, bureau-wide Western Energy Expansion Study will range from investigating potential new sources of hydroelectric power to considering possible

integration of solar energy with hydropower, and it includes appraisal of several of the pumped-storage sites discussed in this report. This study will place in priority those sites which merit more detailed investigation and possible development.

The Bureau of Reclamation will pursue the possibility of conducting a power peaking study of the Lower Colorado Region. A similar study of the Upper Colorado Region, the "Colorado River Basin Power Peaking Capacity Feasibility Study" was authorized by the Feasibility Studies Act of September 7, 1966 (80 Stat. 707), and is now underway. Although this study was limited to the Colorado River Basin in Arizona, Colorado, and Utah, and the eastern part of Bonneville Basin along the Wasatch Mountains in Utah, it would appear logical to engage in a similar study encompassing the entire Lower Colorado River Basin. To date, the Secretary of the Interior has been authorized to engage in feasibility investigations of Boulder Canyon Project modifications in the lower basin (89 Stat. 825). These feasibility studies, which began in fiscal year 1977 (October 1976) and will extend for 3 years through fiscal year 1980, will determine the extent to which the power peaking capability of Hoover Powerplant can be increased.

Design standards have been tentatively agreed upon for a Colorado River highway crossing below Hoover Dam, and the Bureau of Reclamation has provided feasibility designs and estimates to the Arizona and Nevada Highway Departments.

Timetable of studies is as follows:

Timetable of Studies

Boulder Canyon Project Modifications (Authorized)

Oct. 1, 1976	Initiate modification studies
Sep. 30, 1980	Complete feasibility studies

Pumped-Storage Studies (Scheduled)

FY - 1979	Initiate studies
FY - 1982	Complete studies
FY - 1983	Final report to NPS

National Park Service Response

Bureau of Reclamation recommendations have been adopted in the preliminary proposal as suggested for all wilderness units, with the

exception of the maintenance access route through the River Mountains unit, which the National Park Service believes should be considered for possible wilderness designation since it is used on an infrequent basis. The National Park Service recognizes the potential need for development within units classified as potential wilderness additions and strongly agrees with the Bureau of Reclamation that these areas should be reclassified as wilderness when they are no longer being considered for development as pumped-storage sites. The "Timetable of Studies" incorporated in the reclamation potentials study indicates that this information will not be available until fiscal year 1983. If funding allows, it is hoped that these studies can be completed before that date to permit designation of wilderness at the earliest opportunity. Discussions of each affected wilderness unit follows in the section describing the preliminary wilderness proposal.

USES OF LAKE MEAD NATIONAL RECREATION AREA

Legislative Intent

Section 4.(a) 3 of the Wilderness Act (78 Stat. 890) states

Nothing in this Act shall modify the statutory authority under which units of the national park system are created. Further the designation of any area of any park, monument, or other unit of the national park system as a wilderness area pursuant to this Act shall in no manner lower the standards evolved for the use and preservation of such park, monument, or other unit of the national park system in accordance with the Act of August 25, 1916, the statutory authority under which the area was created, or any other Act of Congress which might pertain to or affect such area. . . .

The National Recreation Area enabling legislation of October 8, 1964 (78 Stat. 1039), specifies that the area will be used in the following ways:

SEC. 4. (a) Lake Mead National Recreation Area shall be administered by the Secretary of the Interior for general purposes of public recreation, benefit, and use, and in a manner that will preserve, develop, and enhance, so far as practicable, the recreation potential, and in a manner that will preserve the scenic, historic, scientific, and other important features of the area, consistently with applicable reservations and limitations relating to such area and with other authorized uses of the lands and properties within such area.

(b) In carrying out the functions prescribed by this Act, in addition to other related activities that may be permitted hereunder, the Secretary may provide for the following

activities, subject to such limitations, conditions, or regulations as he may prescribe, and to such extent as will not be inconsistent with either the recreational use or the primary use of that portion of the area heretofore withdrawn for reclamation purposes:

- (1) General recreation use, such as bathing, boating, camping, and picnicking;
- (2) Grazing;
- (3) Mineral leasing;
- (4) Vacation cabin site use, in accordance with existing policies of the Department of the Interior relating to such use, or as such policies may be revised hereafter by the Secretary.

SEC. 5. The Secretary of the Interior shall permit hunting, fishing, and trapping on the lands and waters under his jurisdiction within the recreation area in accordance with the applicable laws and regulations of the United States and the respective States: Provided, That the Secretary, after consultation with the respective State fish and game commissions, may issue regulations designating zones where and establishing periods when no hunting, fishing, or trapping shall be permitted for reasons of public safety, administration, or public use and enjoyment.

The wilderness study, pursuant to the requirements of the Wilderness Act and the enabling legislation, considers the following uses to assure that wilderness designation will not be in conflict with the original intent for which the area was created but rather complement this intent.

Road Corridors

The Lake Mead National Recreation Area Resources Management Plan identifies roads required to provide for current recreational uses and meet future recreational needs and to support grazing, hunting, administration, and maintenance. Consideration was given to this basic road system in developing the preliminary wilderness proposal.

Recreation

Recreational Development. Existing recreational and administrative developments have been excluded from wilderness. Additional lands previously identified for future recreational and administrative development have also been excluded.

Hunting. Hunting is permitted in most sections of the recreation area and is an acceptable use in national recreation area wilderness.

Boating. Lake Mohave and Lake Mead are by far the biggest attraction to visitors using the recreation area. Water-oriented users engage in many activities utilizing motorized craft, such as water-skiing, fishing, or just touring the vast expanses of water. Motorboating will continue to be a permitted water sport on most of the two lakes for those visitors wishing to pursue it.

Other General Recreational Uses. The primary consideration in ensuring opportunities for other recreational uses, ranging from hiking to four-wheel-drive vehicle use, is the provision of adequate road systems for recreational driving and access to other recreational activity areas. Wilderness use is a form of recreation that will complement the other, more intensive recreational opportunities available within the national recreation area. In the harsh desert away from the reservoirs, a day-use philosophy seems appropriate for most wilderness users. Roads will allow access to the vicinity of wilderness units for recreational vehicle enthusiasts and backpackers. Coves and inlets along the shoreline will provide access to the wilderness for those using watercraft on Lake Mead or Lake Mohave.

Many of the wilderness units border developed areas, such as Temple Bar, where large numbers of retired persons spend a good share of the winter. Such pristine areas in close proximity to these developed areas allows for a special desert experience during the cool winter months when it is possible to comfortably explore this historic and picturesque area. Wilderness designation will assure that this opportunity will continue to be available for all to enjoy. It is this wilderness background that enriches the experience of all those who use the recreation area.

Desert Bighorn Program

An active desert bighorn program is being carried on in Lake Mead National Recreation Area. As a part of this program, it has been proposed to construct rainwater catchments and water guzzlers at key locations in the recreation area. This is a compatible use of wilderness.

Grazing

Historically, nearly all of the recreation area has been grazed. This use has continued since creation of the recreation area through lease arrangements managed by the Bureau of Land Management and subject to approval by the National Park Service. Grazing is an acceptable use of recreation area wilderness.

Mining

Mining Claims. Sections of the recreation area were closed to mineral entry because of withdrawals for reclamation purposes. However, an unknown number of mineral claims were filed prior to reclamation withdrawals, and claims exist on lands that were not withdrawn. By passage of the Act of September 28, 1976 (90 Stat. 1342), Congress called for the adoption of regulations to control mining activities within units of the National Park System. Section 8 of the act requires all persons holding unpatented claims to record them with the area's superintendent by September 28, 1977, or the claim will be presumed abandoned. There have not been any unpatented claims recorded with the superintendent of Lake Mead within the proposed wilderness units.

Mineral Leases. The act establishing Lake Mead National Recreation Area (78 Stat. 1039) provides for mineral leasing within the recreation area, subject to limitations, conditions, or regulations prescribed by, and at the discretion of, the Secretary of the Interior, to such extent as will not be incompatible with recreational use or the primary use of areas withdrawn for reclamation purposes. There are four mineral leases totaling 2,880 acres currently outstanding, plus one 640-acre lease under appeal for renewal. Their locations are shown on the accompanying wilderness plan map.

All existing mineral leases have been excluded from wilderness. The 640-acre Knight lease is proposed for potential wilderness classification. This lease to explore for uranium in Sec. 25, T. 33 N., R. 10 W. was granted to Audrine G. Knight on March 9, 1966. Minor exploration drilling was done by Cotter Corporation in 1968-69 pursuant to a contract with Mrs. Knight. On October 7, 1974, she requested that her lease be transferred to Exxon Company. This request was approved by the Bureau of Land Management. On July 8, 1974, Exxon Company applied to the Bureau of Land Management for three leases to explore for uranium. On July 20, 1977, Exxon indicated they had no further interest in any of the leases due to negative results obtained through explorations on lands adjacent to the Lake Mead National Recreation Area. However, there is still uncertainty regarding the standing of the Knight lease.

Mineral Reservations. The Shivwits Plateau and certain lands east of Lake Mohave are burdened by mineral reservations and railroad repurchase rights, retained by Santa Fe Industries, as indicated on the preliminary map. It is the intent of the National Park Service to acquire these outstanding reservations and rights. These lands are recommended as potential wilderness additions.

NON-FEDERAL LANDS

National Park Service policy is that privately owned lands or lands on which there are privately owned interests are not recommended for wilderness, unless acquisition of such lands or interests by the United States is assured.

There are 11,900 acres of private land and 2,725 acres of county and state lands within Lake Mead National Recreation Area. Acquisition of these lands or exclusion of lands adjacent to the boundary through a boundary revision is actively being pursued with the objective of eventual Federal ownership of all lands within the recreation area boundary. These lands are proposed as potential wilderness additions.

INDIAN LANDS

The enabling legislation for the recreation area (78 Stat. 1039) states in Section 3.(a): "The inclusion of Indian lands within the exterior boundaries of the area should not be effective until approved by the Hualapai Tribal Council."

Since such action has not been taken by the council, these lands, totaling 224,420 acres, were not studied or considered for wilderness designation.

Commerce Meeting Room, at the intersection of U.S. Highways 93 and 66, Kingman, Arizona, and on March 30, 1974, at the Environmental Protection Agency Auditorium, National Environmental Research Center Building, 944 East Harmon Avenue, Las Vegas, Nevada, for the purpose of receiving comments and suggestions as to the appropriateness of a proposal for the establishment of wilderness comprising about 469,300 acres within the Lake Mead National Recreation Area. The hearing in Kingman, Arizona, will begin at 10:00 a.m., recess from 12:00 noon until 1:30 p.m., and continue until 6:00 p.m. The hearing in Las Vegas, Nevada, will begin at 9:00 a.m., recess from 12:00 noon until 1:30 p.m., and continue until 5:00 p.m. The National Recreation Area is located in northwestern Arizona and southeastern Nevada.



ACREAGE

GROSS ACREAGE	1,496,600
FEDERAL	1,257,555
PUBLIC (COUNTY & STATE)	2,725
PRIVATE	11,900
HUALAPAI INDIAN RES.	224,420

UNIT	WILDERNESS	POTENTIAL WILDERNESS ADDITION
1	7,660	0
2	16,870	0
3	17,870	640
4	17,636	0
5	25,666	0
6	6,976	0
7	36,630	0
8	26,580	0
9	16,666	0
10	8,888	80
11	16,220	0
12	24,040	0
13	10,670	0
14	22,096	0
15	14,620	0
16	8,646	0
17	16,370	0
18	19,780	0
19	12,100	0
20	13,896	0
21	7,720	0
22	14,020	0
23	14,290	676
24	32,216	0
25	10,770	606
A	0	32,966
B	0	16,296
C	0	16,146
D	0	26,606
E	0	2,046
F	0	14,646
G	0	13,030
H	0	6,306
I	0	13,676
J	0	23,766
K	0	14,646
L	0	83,990
TOTAL	419,655	262,125

WILDERNESS PLAN

PRELIMINARY—SUBJECT TO CHANGE

LAKE MEAD NATIONAL RECREATION AREA ARIZONA-NEVADA

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JAN 75 DEC

P R E L I M I N A R Y W I L D E R N E S S P R O P O S A L

GENERAL DESCRIPTION

Twenty-five units totaling 418,655 acres (as indicated on the wilderness plan map) are being proposed for wilderness designation in the Lake Mead National Recreation Area. These units comprise about 28 percent of the area's total acreage. The preliminary proposal also includes potential wilderness additions totaling 262,125 acres which will be designated wilderness when current nonqualifying conditions no longer exist and the areas otherwise qualify as wilderness. The total wilderness and potential wilderness additions comprise 680,780 acres, or about 45 percent of the national recreation area.

Summary of Wilderness Proposal

<u>Unit</u>	<u>Wilderness</u>	<u>Potential Wilderness Addition</u>	<u>Unit</u>	<u>Wilderness</u>	<u>Potential Wilderness Addition</u>
1	7,650		19	12,100	
2	15,870		20	13,895	
3	17,970	640	21	7,720	
4	17,635		22	14,020	
5	29,665		23	14,290	615
6	6,975		24	32,215	
7	35,530		25	10,710	600
8	25,580		A		32,955
9	16,665		B		15,295
10	9,885	80	C		15,145
11	15,220		D		25,605
12	24,040		E		2,045
13	10,610		F		14,645
14	22,095		G		13,030
15	14,620		H		5,305
16	8,545		I		13,875
17	15,370		J		23,765
18	19,780		K		14,545
			L		83,980
			Total	418,655	262,125

The roadless area study identifies the boundaries of the land areas to be considered for wilderness designation. Each of the units was considered on the basis of the definition of wilderness as specified in Section 2.(c) of the Wilderness Act (78 Stat. 890):

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

As stated earlier, specific uses are permitted in the recreation area. These uses or conditions were carefully considered in the process of determining wilderness suitability and in some cases led to exclusion of nonsuitable areas. Examples of areas not included are existing mining leases, existing and proposed recreational and administrative development sites, road access corridors for recreation and grazing purposes, and existing and potential reclamation development sites.

WILDERNESS UNITS

Wilderness boundary lines follow topographic features, the recreation area boundary, and section lines. Wilderness designation along the shorelines of Lake Mead and Lake Mohave is proposed to coincide with a 300-foot horizontal setback from the high-water lines.

Unit I (Christmas Tree Pass)

This unit, consisting of 7,650 acres, is located in the extreme southwest corner of the recreation area. It is bordered on the north and east by the Grapevine Canyon Road and Highway 71 and on the west and south by the park boundary. The Newberry Mountains reach elevations of 5,600 feet, which offer a cool refuge from the desert environment. The user is confronted with contrasts: from within the unit a person can look to the south and east and see Davis Dam, Mohave Power Plant, Katherine Landing, or Bullhead City, but he can turn his back on such developments and be immersed in solitude, serenity of mountain peaks, and secluded valleys splashed with colorful desert vegetation. Comparisons of this type are valuable to a user and develop an

appreciation of untrammelled lands in contrast to those where man's work dominates the scene. A study of contrasting uses is obvious here and throughout the recreation area.

Unit 2 (Nellis Wash)

This 15,870-acre unit includes portions of the isolated Newberry Mountains along the western side of the recreation area. Finger-like drainages and alluvial fans extend eastward from the mountains toward Lake Mohave. Some mining has occurred within the unit, as is the case in most areas of the recreation area. However, it is not obtrusive and in effect adds a historic element that is characteristic of the old West. There is no active mining occurring within the unit. A powerline corridor and access road form a boundary to the north and east. The Empire Wash access bounds the unit on the south, and the recreation area boundary is on the west.

Unit 3 (Black Mountains)

The Black Mountains capped by 2,000-foot Mount Davis provide the background to users on Lake Mohave. Approximately 17,970 acres are included within this proposed wilderness unit. Scattered washes and side canyons transect the Black Mountains from east to west as they wind their way to the Colorado River. The Four Corners-Eldorado transmission line forms the north boundary, the west boundary is 300 feet from the high-water line of Lake Mohave, the south boundary follows a series of roads of the Cottonwood Valley system, and the east boundary is the recreation area boundary line.

Unit 4 (Opal Mountain)

Within this proposed wilderness is a portion of the Eldorado Mountains, gently rolling hills and outwashes extending to Lake Mohave. Rugged mountains, secluded valleys, and flat alluvial fans provide opportunities for seclusion and isolation in a setting of scenic splendor. The unit is bounded on the north by the Aztec Powerline road, on the east by a 300-foot setback from Lake Mohave, on the south by the Opal Mountain Road, and on the west by the recreation area boundary. Approximately 17,635 acres are included within this unit.

Unit 5 (Eldorado Mountain)

Contained within this 29,665-acre unit are the picturesque and rugged Eldorado Mountains. The unit is a maze of peaks and side canyons with vertical cliffs extending to the edge of the Colorado

River. State Highway 60 forms the southern boundary; the Colorado River/Lake Mohave 300-foot setback constitutes the east boundary, the northeast side is bounded by the Mead-Liberty transmission line, and the recreation area boundary forms the west unit boundary.

Unit 6 (River Mountains)

This 6,975-acre wilderness unit is dominated by the rugged irregular River Mountains. Harbored within this range is a herd of approximately two hundred bighorn sheep that utilize the excellent habitat provided by this natural refuge. The range is surrounded by urban environments and heavy recreational pressures associated with use in the Boulder Basin.

The topography of the River Mountains is diverse, ranging from low, rolling hills to extremely rugged terrain. Elevations range from 1,260 feet at Boulder Beach on the eastern side to 3,789 feet at the crest of the mountains. A ridge of peaks, extending 3 miles from the center of the range south to Black Mountain, constitutes the highest part of the River Mountains. Eastward from this ridge the topography is heavily cut by major drainages and resulting steep canyons. The remainder of the range, though rough in isolated areas, is low rolling country, washes, and alluvial fans.

This unit includes part of the Southern Nevada Water Project (SNWP) including the River Mountains Tunnel, which carries water from Lake Mead to municipal and industrial users. On the surface above the tunnel there is a primitive road used on an irregular basis for maintenance to serve survey needs in connection with future project work. SNWP construction is underway and involves adding pumps and pipelines up to both ends of the existing tunnel. There is also the possibility that a second tunnel might have to be bored if water from other sources is diverted to Lake Mead.

The National Park Service recognizes the necessity to maintain and repair damage to the existing tunnel and the potential need for expansion of the tunnel facility, but finds the surface lands to be in a primitive condition and containing significant wilderness values. The only evidence of man's work which will be found within this unit is a primitive four-wheel-drive access route used on an infrequent basis for maintenance and to perform survey work as needed for the reclamation projects. The National Park Service proposes that this irregular and infrequent use on the surface be allowed to continue and is not significant enough to disqualify any portion of the area from wilderness designation.

Outstanding natural features, scenic peaks, geological formations, opportunities for seclusion close to major developments, the

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opportunity to view bighorns in close proximity to an urban setting, the bighorn habitat and ability of the herd to exist adjacent to man's intrusions, all indicate that wilderness designation is appropriate for the River Mountains unit. Wilderness designation would assure a high level of protection for this primitive area and its remnant bighorn herd.

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Unit 7 (Kingman Wash)

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Approximately 35,530 acres are included within this unit. It is bordered on the north by the 300-foot horizontal setback from the high-water line of Lake Mead, on the west by the Kingman Wash development and access road, on the south by U.S. 93, and on the east by access roads. An area used for intensive recreation and an area which may be needed as a powerline corridor are identified as nonwilderness along the east boundary. The undulating Black Mountains typify the topography of the region. Access to the unit is provided on all sides by existing road corridors.

Unit 8 (White Hills), Unit 9 (Temple Bar), and Unit 10 (Gregg's Hideout)

These proposed wilderness units are located within the White Hills. This rolling hill country includes some evidence of earlier historic mining activities and trails associated with these efforts. The early methods of mining did not scar the area excessively, and many scars have healed to the point of not being noticeable. However, areas further to the west are not proposed as wilderness because they have been severely scarred by modern exploration techniques and road construction. Isolation, seclusion, scenic beauty, and historic significance characterize the proposed wilderness. Unit boundaries consist of access roads, setbacks from Lake Mead, development areas, and recreation area property lines. Hiking into the wilderness area from developed areas, such as Temple Bar, is an easily pursued activity for those desiring this type of day experience. Access to the area is also possible from existing roads or by boat from Lake Mead. These three units have a total of approximately 52,130 acres.

Unit 11 (Cathedral Wash)

This 15,220-acre unit is bounded on the north by the Echo Wash access road, on the east by the 300-foot setback from the high-water line of Lake Mead, on the south by an access road, and on the west by Nevada Highway 41A and the Boathouse Cove access road. Mountainous terrain representing the northeast extremities of the Black Mountains dominates the area and contrasts directly with the flat surface of Lake Mead.

Unit 12 (Overton)

Most of this 24,040-acre unit consists of flat to "badland-like" lands sloping westward from mountainous terrain to a road corridor east of the recreation area boundary. The unit forms the scenic background for lake users and for shoreline users on the west side of Overton Arm. These flat outwashes lack the spectacular contrasts found within other units, but represent a typical desert landscape which has retained its primitive condition and affords the user an opportunity for seclusion and an unconfined type of recreation. The unit is bordered on the north by the Narrows South access road, on the east by the recreation area boundary, on the south by the Catclaw access road, and on the west by the 300-foot setback from Lake Mead.

Units 13, 14, 15, 16, 17, 18, 19, 20, 21, and 22

These units are known as Twin Springs, Scanlon Wash, Hiller Mountains, Hell's Kitchen, Indian Hills, Cockscomb, Grand Wash Cliffs, Iceberg Ridge, South Cove, and Pierce Ferry. The units contain rugged mountain ranges which provide a scenic background for the Virgin Basin section of Lake Mead. Gentle outwashes extend from the mountain ranges and then fold abruptly into Lake Mead. Spectacular vertical strata in Iceberg Canyon may be intimately examined from the lake surface by proceeding up finger coves which are sliver-like in appearance and penetrate the desert, providing access to the wilderness units. From here, a visitor can proceed into this harsh environment where the desert can be experienced on its terms without the comfort provided by a boat on an artificially created water surface.

The units are bounded by a network of roads that provide access to developed areas or the lakeshore, by recreation area boundaries, and by the lakeshore setback. The interior portions of these wilderness units are readily accessible from adjacent roads. Units 13 through 22 contain approximately 138,755 acres.

Unit 23 (Andrus Point), Unit 24 (Whitmore Point), and Unit 25 (Lava)

These three proposed wilderness units consist of approximately 57,215 acres in the northeast sector of the recreation area. Contained within these units are Parashant, Andrus, and Whitmore Canyons; all are precipitous side canyons of significant grandeur that feed into the Grand Canyon. The entire area is undeveloped land retaining its primeval character with the imprint of man's work substantially unnoticeable and provides an opportunity for solitude or a primitive and unconfined type of recreation in a scenic setting of steep escarpments, colorful redwalls, and deep canyons.

Geologic formations and processes in evidence here may provide information on the origin of the Grand Canyon, which is of interest to the scientific and educational communities. Also of interest to these communities are the archeological sites of several Indian cultures, including the Virgin Anasazi and more recently the Paiutes.

Grazing has occurred in this region for over a hundred years and the Lake Mead establishing act identifies grazing as an acceptable use. Roads and tanks or water pockets found to be needed for grazing operations and requiring road access are excluded from the wilderness proposal. All of the roads in this area and on the Shivwits Plateau serve dual roles providing access for recreation and for grazing support purposes.

Wilderness unit boundaries consist of road systems, recreation area boundaries, and plateau rims. Adjacent primitive areas of Grand Canyon National Park were considered while deriving this wilderness proposal for Lake Mead. The areas are contiguous and provide for a contiguous unit of primitive lands extending westward from the Pine Mountains across the Sanup and Shivwits Plateaus to the Grand Wash Cliffs.

POTENTIAL WILDERNESS ADDITIONS

Potential Sites For Reclamation Development to Meet The Energy Needs of the Southwest

Eleven areas, identified by letters A and C-K on the preliminary wilderness plan, are proposed as potential wilderness additions. The Bureau of Reclamation has identified these areas as potential locations for reclamation facilities ranging from modification of Hoover Dam to new transmission line corridors. Each of these potential facilities could require a considerably larger area for construction activities than the principal construction site due to requirements for access roads, transmission and utility lines, and borrow pits. The Bureau of Reclamation plans to make the final selection of sites for development by 1983. It is recommended that those areas that are not selected for construction of reclamation facilities become wilderness. In the interim, these areas will be managed as potential wilderness additions to retain their natural condition and to provide opportunities for solitude and an unconfined type of recreation.

Unit B (Cottonwood Valley)

Cottonwood Valley was not previously considered for wilderness because of outstanding mineral reservations. However, this

outwash trending to the west provides solitude and isolation in a primitive setting just to the north of a major development at Katherine Landing. It is the intent of the National Park Service to purchase the outstanding rights. Until that time it is proposed as a potential wilderness addition. This 32,955-acre unit is bounded on the north, south, and west by existing access roads and on the east by the recreation area boundary. The terrain slopes gently westward toward Lake Mohave.

Unit L (Shivwits Plateau)

Approximately 83,980 acres are included within this unit. A diversity of activities occur in this remote section of Lake Mead ranging from hunting to grazing. Due to a higher altitude, the region is cooler, has more precipitation, and supports pinyon/juniper and ponderosa pine forests. Therefore, it also contains a wider variety of wildlife including some of the best concentrations of mule deer to be found in the recreation area. Big game hunting is a favorite recreational pursuit and probably accounts for the majority of visitation to this area. The cooler, wetter climate also provides for some of the better grasslands which sustain larger numbers of cattle per unit of area than other sections of the recreation area. Additional recreational activities include nature study, dry camping with a vehicle, rockhounding, exploring with four-wheel-drive vehicles, and hiking the superlative rim country. Kelly Point, Twin Point, and other points along the rim permit spectacular views of the Grand Canyon. This unit contains 66,350 acres which are still subject to Santa Fe Industries mineral reservations and repurchase rights. The National Park Service intends to acquire these rights in the near future. It is proposed that this area be designated as a potential wilderness addition until the purchase of outstanding rights is consummated.

In considering this unit for wilderness, individual contacts were made with ranchers having grazing allotments within the recreation area to identify tanks, corrals, and roads where motorized access is necessary to maintain these facilities. During these discussions, the enabling legislation was described and allottees were assured that wilderness would have no effect on their present grazing operations within the Lake Mead National Recreation Area. Wilderness is not proposed for areas where roads and other facilities are required for grazing operations. Grazing lands that are proposed as wilderness are those which do not contain roads or other major facilities, are not subject to the use of motorized equipment, and generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.

The boundaries of this unit follow rims, internal access roads, and recreation area boundaries. Adequate access is provided for

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hunting, four-wheel-drive exploring, scenic overlooks, etc. The proposal does not include closing any roads on the Shivwits, and in certain instances, it recommends that additional roads be added to the approved roads plan as outlined in the natural resources management plan for the recreation area to meet both recreation needs and grazing requirements.

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This unit appears to be narrow and splintered by access roads. However, when considered along with the adjacent proposed wilderness units in Grand Canyon, it is apparent that these would be significant contiguous wilderness units.

Knight Lease

The Knight uranium lease covers 640 acres (less a road corridor) in Unit 23. A denial of lease renewal is now under appeal. Until a final decision is rendered, this tract is recommended for potential wilderness designation to become wilderness if the lease renewal denial is upheld. If it is determined that the lease is valid and development takes place, the lands would not retain their present primitive condition and would not become wilderness.

State, County, and Private Lands

Within the proposed wilderness units there are 2,095 acres of state, county, and private parcels that have been proposed as potential wilderness additions. It is the intent of the National Park Service to acquire these lands at some time in the future. These lands would then be designated as wilderness when all nonconforming uses have been terminated and when the areas qualify as wilderness.

NONWILDERNESS

Nonwilderness areas, including approved road systems, comprise 820,910 acres, or about 55 percent of the total park acreage, which is 1,496,600 acres.

None of the water area is included in the wilderness proposal because the lake surfaces provide for intensive recreational activities involving motorized watercraft. Remaining lands excluded from wilderness are presently used for administrative and recreational developments, and for nonwilderness types of recreation. Many of these areas are crisscrossed by roads providing access to the lakes or for four-wheel-drive recreation. Other excluded areas include lands that will continue to be managed for reclamation and power projects, mineral leasing, and other uses consistent with the act establishing the recreation area.

SPECIAL PROVISIONS

It is recommended that the legislation designating wilderness at Lake Mead National Recreation Area state that within the Lake Mead wilderness the primary purpose shall be its preservation for use and enjoyment as wilderness. By definition in the Wilderness Act, development for reclamation and power purposes, oil and gas leasing, or mineral leasing, as authorized in the enabling legislation for the national recreation area, is incompatible with wilderness values and would be proscribed by this primary purpose and use.

IDENTIFICATION OF WILDERNESS MANAGEMENT FACILITIES AND PRACTICES

Should legislation be enacted designating wilderness at Lake Mead, it is recommended that the congressional committee reports on that legislation recognize that certain uses are compatible with wilderness and may take place within the wilderness. This includes the placement of wildlife watering devices and the continued use, maintenance, and future modification of the tunnel system within the River Mountains portion of the wilderness.

RELATED STUDIES

GRAND CANYON ADJACENT LANDS STUDY

Grand Canyon National Park was expanded by the Grand Canyon National Park Enlargement Act, passed January 3, 1975 (88 Stat. 2089), in order to consolidate most of the geographic areas known as the Grand Canyon. Recognizing the potential park value of other adjacent areas, including the tributary canyons of Parashant, Andrus, Whitmore, and Kanab Canyons as well as the Shivwits Plateau, the House Committee of Conference directed the Secretary of the Interior to study these areas to determine if they, or any part of them, qualify for national park designation. This evaluation is now being made by the National Park Service, Bureau of Land Management, and Forest Service. No deadline for completion is specified in the House conference report.

The areas within Lake Mead National Recreation Area currently being studied are Parashant, Andrus, and Whitmore Canyons and the Shivwits Plateau. For purposes of the Lake Mead wilderness study, current land uses, as specified in the enabling legislation, were adhered to in making decisions on wilderness unit designations. The issue of further Grand Canyon boundary adjustments is a complex one and is not expected to be resolved prior to completion of the wilderness study.

GRAND CANYON WILDERNESS RECOMMENDATION

The wilderness recommendation for Grand Canyon National Park is being readied for submission to Congress. Primitive areas within Grand Canyon National Park which are adjacent to the recreation area, and which are also being proposed for wilderness designation, were taken into consideration during the development of the Lake Mead wilderness proposal. The areas are contiguous and form a contiguous unit of primitive lands extending eastward from the Grand Wash Cliffs to the Pine Mountains.

BUREAU OF LAND MANAGEMENT WILDERNESS STUDIES

The Bureau of Land Management offices in Las Vegas, Nevada, and St. George, Utah, were consulted to identify and locate the areas near the recreation area which will become wilderness study areas as required under the bureau's new Organic Act. As yet, the bureau has no definite studies or plans underway.

PROPOSED BOUNDARY REVISIONS

The National Park Service is proposing to revise the boundary of Lake Mead National Recreation Area. The general areas under consideration have been excluded from wilderness consideration.

**APPENDIX:
WILDERNESS PRESERVATION
AND MANAGEMENT POLICY**

THE NATIONAL PARK SERVICE WILL PRESERVE AN ENDURING RESOURCE OF WILDERNESS IN THE NATIONAL PARK SYSTEM AS PART OF THE NATIONAL WILDERNESS PRESERVATION SYSTEM, TO BE MANAGED FOR THE USE AND ENJOYMENT OF WILDERNESS VALUES WITHOUT IMPAIRMENT OF THE WILDERNESS RESOURCE.

From the earliest beginnings of the National Park System, the concept of wilderness preservation has been an integral part of park management philosophy. In the ensuing century, the national park movement has been a focal point for an evolving wilderness philosophy within our country.

In 1964 the efforts of the wilderness movement were capped by passage of the Wilderness Act (P.L. 88-577, 78 Stat. 890). The main thrust of the act was to establish a National Wilderness Preservation System and provide for the study of federal lands in the national forests, wildlife refuges, and the National Park System for inclusion in the system. Consistent with the Wilderness Act, no park area may be designated as wilderness except by an act of Congress.

The Wilderness Act specifies that designation of a park area as wilderness shall in no manner lower the standards evolved for the use and preservation of such park in accordance with the Act to Establish a National Park Service, August 25, 1916 (39 Stat. 535), and other applicable legislation.

Wilderness areas shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, including "outstanding opportunities for solitude or a primitive and unconfined type of recreation." Thus, the preservation of wilderness character and values is the prime administrative responsibility of the Park Service, and activities to achieve other legal purposes of areas designated as wilderness must be administered so as to preserve the wilderness character. The public purposes for which park wilderness shall be managed relate to recreational, scenic, scientific, educational, conservation, and historical uses.

The National Park Service has conducted wilderness studies in conformity with the Wilderness Act, and the Secretary of the Interior has submitted legislative recommendations to the President and the Congress for designation of park areas as

wilderness. The Park Service will continue wilderness studies on parks authorized since the passage of the Wilderness Act wherever required or desirable.

The policies contained in this chapter relate specifically to park wilderness or to park areas that have been studied and recommended for wilderness designation. Policies of general application to parks are contained in other chapters and are not repeated here. The Park Service's wilderness policies may vary from those of the Forest Service and the Fish and Wildlife Service, based on the differing missions of the three agencies. All, however, have as their goal the preservation of wilderness character.

The Park Service has traditionally used the term "backcountry" to refer to primitive, undeveloped portions of parks. This, however, is not a specific land classification, but refers to a general condition of land that may span several of the Park Service's land classifications that are essentially undeveloped and natural in character. Where the term wilderness is used, it will apply only to congressionally designated wilderness or to areas being studied or proposed for wilderness designation. The park "backcountry" would include the designated or proposed wilderness, but could also include other roadless lands which contain minor developments not appropriate in wilderness and provide for a number of different park purposes and activities.

WILDERNESS REVIEWS

The Park Service will continue to review areas that qualify for wilderness study, consistent with provisions of the Wilderness Act and subsequent legislation directing that wilderness studies be made. Wilderness studies shall be subject to compliance with the Procedures for the Protection of Historic and Cultural Properties promulgated by the Advisory Council on Historic Preservation.

Protection of Roadless Study Areas

Roadless study areas subject to review for wilderness designation will be protected from activities which would endanger or alter their natural, primitive character until administrative study or the legislative process determines their suitability for wilderness designation.

Nature of Wilderness Land

The act defines wilderness, in part, as undeveloped federal land retaining its primeval character and influence which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable."

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In interpreting this section, the Park Service considers lands that have been logged, farmed, grazed, or otherwise utilized in ways not involving extensive development or alteration of the landscape as qualifying for consideration of inclusion in wilderness proposals. Where such uses have impaired wilderness qualities, management will be directed toward restoration of wilderness character.

Management Considerations

An area will not be excluded from a wilderness recommendation solely because established or proposed management practices require the use of tools, equipment, or structures if those practices are necessary for the health and safety of wilderness travelers or protection of the wilderness area.

Grazing and Stock Driveways

Lands will not be excluded from a wilderness recommendation solely because of prior rights or privileges, such as grazing and stock driveways, provided these operations do not involve the routine use of motorized or mechanical equipment and do not involve development and structures to such an extent that the human imprint is substantially noticeable.

Historic Features

Historic features which are primary attractions for park visitors are not included in wilderness. However, an area that attracts visitors primarily for the enjoyment of solitude and unconfined recreation in a primitive setting may also contain historic features and still be included in wilderness. Typical historic features which may be included are archeological sites, historic trails, travel routes, battle sites, and minor structures. Historic trails may serve and be maintained as part of the wilderness trail system. However, if the planned scope and standard of maintenance would result in the imprint of man's work being substantially noticeable, the trail or other feature should not be included in wilderness.

Potential Wilderness Additions

When nonqualifying lands are surrounded by or adjacent to an area proposed for wilderness designation, and such lands will within a determinable time qualify and be available federal land, a special provision should be included in the legislative proposal which would provide for the future designation of these lands as wilderness upon publication in the *Federal Register* of a notice by the Secretary of the Interior that all uses thereon prohibited by the Wilderness Act have ceased.

Mining or Prospecting

Any recommendation that lands presently subject to mineral exploration and development be designated wilderness will only be made subject to the mineral interests being eliminated.

Utility Lines

Lands containing aboveground utility lines are not included in recommended wilderness. Areas containing underground utility lines may be included if the area otherwise qualifies as wilderness and the maintenance of the utility line does not require the routine use of mechanized and motorized equipment. No new utility lines are to be installed, and existing utility lines may not be extended or enlarged.

WILDERNESS USE

Wilderness is recognized in the Wilderness Act as an area "where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain."

The visitor must accept wilderness largely on its own terms. Modern conveniences are not provided for the comfort of the visitor; and the risks of wilderness travel, of possible dangers from accidents, wildlife, and natural phenomena must be accepted as part of the wilderness experience.

For a majority of park visitors, park wilderness will be appreciated primarily from outside wilderness boundaries as part of the park scene, viewed from park roads and developments. To them, as well as to the visitor who hikes into the wilderness, protection of the wilderness character is essential to the quality of the park experience.

Information on Wilderness Use

Information on wilderness and backcountry use will be available in each park having such resources, specifying

- the kinds of clothing and equipment necessary for such use
- special dangers of wilderness use and precautions to be observed by the user
- regulations regarding wilderness and backcountry use

Limitation of Wilderness Use

If necessary to preserve the wilderness character, the Park Service will limit or disperse use through a variety of means best suited to the particular wilderness concerned.

Overnight Use

The Park Service may designate campsites where the protection of resources dictates the need. Campsite facilities are to be the minimum necessary for the health and safety

of the wilderness traveler and for the protection of the resources. Facilities may include an identifying site marker, pit toilet, tent sites, and unobtrusive fire rings.

Day Use

In smaller wilderness areas where the use pattern is essentially day use, provision of campsites may not be necessary, or they may be provided outside of wilderness boundaries.

Commercial Services

Guide services for horseback trips, hiking, boat trips, and similar services designed to provide opportunities for the enjoyment of primitive and unconfined types of recreation or other wilderness purposes of the area are permissible under careful control by each park as to their nature, number, and extent. Structures or facilities in support of such commercial services are not permitted within wilderness.

Caches

The storage of boats or other equipment by the public is not permitted. All equipment brought in must be taken out at the end of each wilderness trip.

Research

The Park Service, recognizing the scientific value of wilderness areas as natural outdoor laboratories, permits those kinds of research and data gathering which require such areas for their accomplishment, and which will not adversely modify either the physical or biological resources and processes of the ecosystems, nor intrude upon or otherwise degrade the aesthetic values and recreational enjoyment of wilderness environments. All activities must be in accord with wilderness management policies.

Refuse Disposal

Refuse may not be disposed of within wilderness, except for the burning of combustible materials where campsites are permitted. The "carry out" concept will be implemented by each park containing wilderness.

Hydrometeorologic Devices

Hydrologic or hydrometeorologic devices are usually permanent or semi-permanent installations used to gather water and climatic data related to the management of resources outside of the wilderness. Such existing devices may be retained in wilderness. New or additional devices should not be placed in wilderness, except upon a finding by the Secretary of the Interior that essential information cannot be obtained from locations outside of wilderness and that the proposed device is the minimum tool to successfully and safely accomplish the objective. The installation, servicing, and

monitoring of these devices shall be accomplished by such means as will assure human safety and will result in the minimum permanent and temporary adverse impact upon the wilderness environment.

WILDERNESS MANAGEMENT

Use of the Minimum Tool or Equipment

In the management of wilderness resources and of wilderness use, the Park Service will use the minimum tool necessary to successfully, safely, and economically accomplish its management objectives. When establishing the minimum tool, economic factors should be considered the least important of the three criteria. The chosen tool or equipment should be the one that least degrades wilderness values temporarily or permanently. Accepted tools, equipment, structures, and practices may include but are not limited to: fire towers, patrol cabins, pit toilets, spraying equipment, hand tools, and fire-fighting equipment. The specifics of wilderness management for a given park will be included in the park's backcountry management plan.

A detailed discussion of the minimum tool *and the specific approval authority required* are provided in the backcountry/wilderness management guidelines. Specific approval is required for the nonemergency use of motorized or mechanical equipment, the installation of new facilities or the modification of existing facilities in wilderness.

Motorized or Mechanical Equipment

As a general rule, use of motorized equipment or mechanical transport by the public is not allowed. Boating with hand propelled craft is an acceptable use of wilderness. Language customarily used in the National Park Service's recommended wilderness legislation would make applicable to the National Park Service a special provision of the Wilderness Act pertaining to the use of aircraft and motorboats. Under this provision, where the use of aircraft and motorboats has already become established, the use may be permitted to continue subject to such restrictions as the Secretary of the Interior deems desirable. This does not mean that previously established motorboat and aircraft uses of an area must be allowed to continue upon the designation of that area as wilderness or that water areas must be excluded from wilderness recommendation where motorboats are involved. Any recommendation to allow established aircraft or motorboat use to continue in wilderness would be based upon a finding that the purpose, character, and manner of such use is suitable to the specific wilderness under consideration.

Administrative use of motorized equipment or mechanical transport, including motorboats and aircraft, is permitted only as follows:

- in emergency cases involving the health and safety of wilderness users or the protection of wilderness values
- as necessary to meet the minimum needs of management to achieve the purpose of the area

MANAGEMENT FACILITIES

Wilderness is defined, in part, as undeveloped federal land retaining its primeval character and influence, without permanent improvements. Facilities are permitted only as necessary to meet the minimum requirements for the administration of the wilderness area.

Roads

Permanent roads are not permitted in wilderness. Where wilderness includes abandoned roads, their use by vehicles is not permitted and the road should be restored to a natural condition. Temporary vehicular access is permitted only to meet the minimum requirements of emergency situations.

Trails

Narrow, unpaved foot and horse trails are permissible. Trails intended for foot travel only will be maintained, generally, to a width sufficient for persons to walk single-file. Trails intended for combined foot and horse travel, or for horse travel only, will be maintained to a width sufficient for horses and their riders to travel single file. Trail bridges are permitted at stream crossings if the crossing, without a bridge, would be unsafe during the normal period of use.

Heliports, Helipads, Helispots, and Airstrips

Heliports, helipads, and airstrips are not permissible. Natural openings may be utilized as helispots. No site marking or improvements of any type will be permitted, except in conjunction with specific emergencies, after which the area will be restored.

Communications Facilities

Radio facilities are permitted where necessary for management of the wilderness area.

Fire Management

Action will be taken to control wildfires in such a way as to protect natural and cultural features and to minimize the lasting impacts of the control action and the fire itself.

Fire Lookouts

Fire lookouts for wilderness protection are permitted where there is no adequate alternative method of fire detection.

Ranger Stations, Patrol Cabins, and Storage Structures

These structures are permitted only to the minimum extent necessary for wilderness management.

Fences and Hitching Racks

Fences and hitching racks are permitted only where essential for protection of the resource.

Chalets and Concessioner Camps

These facilities are not permissible.

Signs and Markers

Signs and markers may be provided only where they are necessary for visitor safety, management, or resource protection.

Tables

Picnic tables are not permissible.

Toilets

Toilet facilities are limited to locations where there are health and sanitation problems or danger of serious resource damage, and where reducing or dispersing visitor use is not practical or realistic.

PLAQUES, MEMORIALS, AND BURIAL PLOTS

Existing commemorative features and burial plots may be retained. No future additions may be made, unless permitted by existing reservations.

WILDERNESS TEAM PERSONNEL

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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

