The earlier inhabitants, called the Basket Makers, occupied the area from about the beginning of the Christian era down to about A. D. 800. Acheologists have learned much about them from the pottery, stone, bone, and shell artifacts collected in rock shelters and from scattered camp sites.

The Pueblo Indians and the more recent Paiute, Walapai, and Mohave Indians, who still inhabit outlying sections of this arid region, also left numerous remains of their modes of life.

Plant Life

WITH THE exception of the higher plateaus to the eastward, the major portion of the area lies within the arid Lower Sonoran life zone. As a result of the average annual rain-

Joshua Trees in Bloom. Photo by William Belknap, Jr.

fall of less than 5 inches, the plant life is highly specialized. The perennials send out vast root systems to obtain water, while the annuals develop from seed to mature plant in a matter of only a few weeks when sporadic rains make a limited amount of moisture available.

Few flowering plants are found in bloom during the summer, but from February until June there is an interesting procession of flowers on the mountain slopes and in the gravelly washes. The various species of cacti are the most colorful, with the beavertail cactus affording the greatest display of brilliance. But other species also splash their color patterns across the area. Solid masses of yellow, visible for a considerable distance, speak eloquently of the presence of the shrubby brittlebush. Asters, desert chicory, wild heliotrope, desert mallow, and sandverbena bloom

Trout From Below Hoover Dam. Photo by William Belknap, Jr.

profusely by the side of some of their smaller and less showy neighbors. Somewhat higher up on the desert slopes, the long whiplike ocotillo, with its vivid red flowers, vies for attention with the white-flowered yucca. As a climax to this floral display, the springfed hanging gardens of the lower Grand Canyon region offer a vast profusion of scarlet-hued monkeyflowers and yellow columbines.

There are few trees in the area except along some washes and on the higher plateaus to the east. Along the lower Virgin River the cottonwood grows in scattered groves, with desertwillow, mesquite, and catclaw occupying the remainder of the available terrain. Tamarix is widespread along the shores of Lake Mead. One of the largest Joshua-tree forests in the Southwest is found on and adjoining the area along the road to Pierce Ferry. The high plateaus to the

Outdoor Electric Hot Plates in Campground.



eastward, such as the Shivwits and Hualpai, contain pinyon and juniper forest, with a number of ponderosa pines in the higher regions of the Shivwits.

Animal Life

ABOUT 60 different species of mammals have been noted within the boundaries of Lake Mead National Recreational Area. The Nelson bighorn, or mountain sheep, one of the most interesting animals in the region, is found in all the larger canyons and on the higher mountains throughout the area, although its numbers are limited. Some Inyo mule deer live on the high plateaus in the eastern portion of the area. Predatory mammals are represented by coyotes, bobcats, badgers, ringtails, and foxes. Coyotes may occasionally be seen in the daytime, but the others are rarely seen and then usually at night. Jackrabbits are found in all parts of the area and cottontail rabbits along the streams and around springs.

Small rodents make up the bulk of the animal population and are a very interesting group for study. There are kangaroo rats with their long powerful hind legs for jumping, pocket mice with their cheek pouches for carrying food, pack or wood rats, white-footed or deer mice, ground squirrels, and other rodent forms. The little antelope ground squirrel, the one most commonly seen, is often mistaken for the ordinary chipmunk, which it greatly resembles. The best distinguishing characteristic is the tail, which is white on the ground squirrel. Some of the ground squirrels and chipmunks may be quite bold. It is wisest to enjoy them without actual contact, however, for some rodents are known to carry dangerous diseases.

More than 200 different species of birds, ranging in size from tiny hummingbirds to the majestic golden eagle, have been seen in the recreational area. This number includes year-round residents, winter and summer residents, and migratory species. Since Lake Mead is the only large body of water within a radius of many miles, it is not surprising that more than 60 species of waterfowl and wading birds are found here, among them ducks, geese, grebes, coots, mergansers, herons, terns, gulls, sandpipers, plovers, stilts, and avocets. Predatory birds include 12 species of hawks and 4 species of owls, in addition to the golden eagle. There is a long list of vireos, warblers, flycatchers, wrens, sparrows, and other species.

Reptiles are represented by at least 17 different species of lizards, an equal number of snakes, and 2 species of turtles. The spotted toad is the most common among the 6 listed species of amphibians.

Lake Mead contains bony tail, Colorado "white salmon," largemouth bass, channel catfish, carp, bluegill, humpback

suckers, black crappie, rainbow trout, and mosquito fish. Other species were planted in the Colorado River below Hoover Dam and should persist for some time in the new Lake Mead

NATIONAL RECREATIONAL

ARIZONA • NEVADA

AREA

Interpretive Service

INFORMAL TALKS are frequently given at the Boulder Beach campground, except during the colder months. A schedule of these programs may be obtained at all ranger stations or from any ranger. Organized groups may obtain the services of a naturalist for boat trips or nature walks by writing to the superintendent requesting this service. Scientists making special studies in the area will be given all help possible.

Small museums maintained in the administration building in Boulder City and in the ranger station at the Boulder Beach road junction contain exhibits on the plant and animal life, extinct animals, Indians, and the geology of the area. Another museum, located at Overton, contains exhibits on the prehistoric Indians of the region. This museum is a cooperative project of the National Park Service and the State of Nevada.

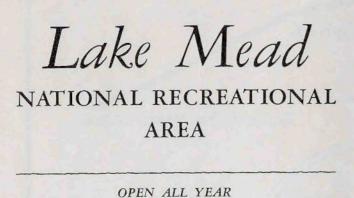
General information also is available at the superintendent's office and at ranger stations located at Boulder Beach, Las Vegas Wash, Overton, and Davis City.

What To Do

SWIMMING and boating are popular activities in the recreational area. The water is ideal for swimming many months of the year. From June to September, diving floats and safety lines are provided on the lake shore at Boulder Beach, Overton Beach, and Las Vegas Wash. Lifeguards are on duty at these places during the busy hours of the day. The many miles of shore offer other picnic and swimming opportunities for group activities, although no developments have been made.

Over 1,000 privately owned boats operate on the two lakes of the area. Boats must be registered with the National Park Service before launching. Anyone may bring his own boat. The Lake Mead Boat Co. maintains complete boat service, from rental of rowboats and outboard motors to regularly scheduled trips by larger cruisers and charter trips. Similar service, except for scheduled cruiser trips, is available at other developed lake shore sites. The fisherman or sightseer has ample opportunity to reach any point on the lakes by using these services.

Many side trips can be made by automobile from the main highways over the primitive trails to remote lake shore points through the vast spectacular desert land. Local inquiry should be made before traveling over these dirt roads.



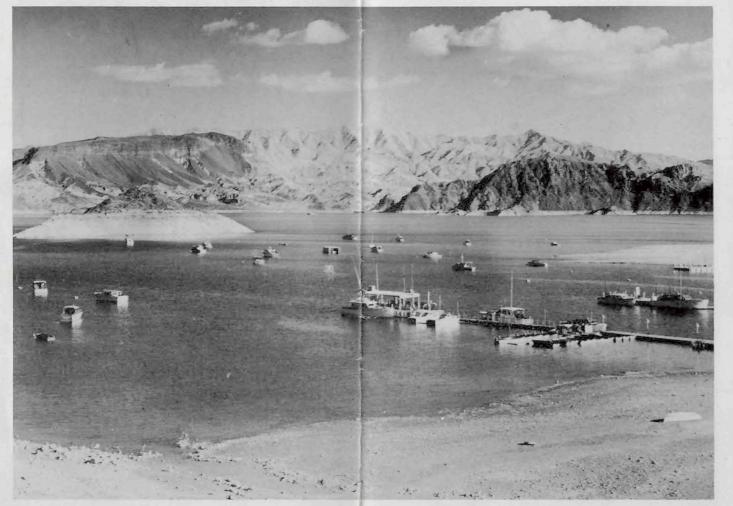
LAKE MEAD, the main feature of Lake Mead National Recreational Area, is the reservoir created by the construction of Hoover Dam. This beautiful blue lake, with its 550-mile shore line at high watermark, nestles in magnificent canyons along the Colorado River. Surrounded by the rugged and colorful canyon walls, some of them towering a mile above the surface of the lake, it has a high scenic quality. It also affords exceptional water-recreational facilities in the midst of a desert region. Within the recreational area the river which forms this lake makes a great bend and flows almost due south toward the Gulf of California.

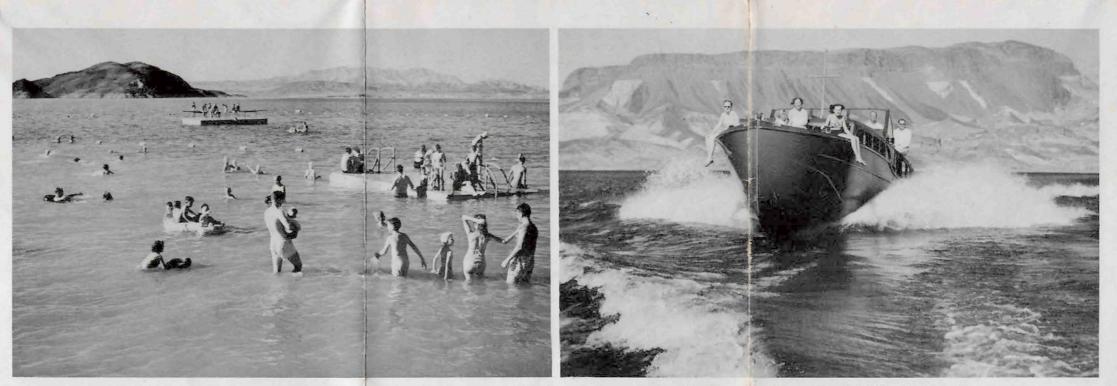
The lake winds 115 navigable miles to the east from Hoover Dam, and varies from wide open waters to narrow connecting links through the lesser canyons. At its highest level Lake Mead has a depth of 589 feet and contains 32,359,274 acre-feet of water, covering 229 square miles. The muddy Colorado River, as it enters the lake, drops its load of silt to the bottom. As a result, the lake waters are a vivid, cool blue against the subdued colors of the desert mountains.

Lake Mead was named after the late Dr. Elwood Mead, who was commissioner of the Bureau of Reclamation at the time Hoover Dam was constructed.

Below Hoover Dam, another cool, clear lake is im-

Harbor and Landing on Lower Lake Mead.





At Boulder Beach. Photo by William Belknap, Jr.

pounded behind Davis Dam. This dam and Lake Mohave formed by it are also included in the recreational area.

Lake Mead National Recreational Area was established October 13, 1936, and was expanded July 18, 1947, through approval by the Secretary of the Interior of an interbureau agreement between the National Park Service and the Bureau of Reclamation, both in the Department of the Interior. Under this agreement the Bureau of Reclamation administers Boulder City, Hoover Dam, and Davis Dam, all of which were built by that agency. All recreational activities, plans, and developments in the area are supervised by the National Park Service. The area includes approximately 1,899,728 acres of federally owned land. It joins Grand Canyon National Monument on the east and follows the course of the Colorado River for approximately 185 miles, extending as far south as Bullhead City, Ariz.

Geological Features

THE REGION around Lake Mead has fascinated geologists ever since Major Powell made his two thrilling explorations down the Colorado River by rowboat in 1869 and 1871. The character and position of the rock formations that lie beneath the earth's surface are vividly portrayed here. They are the result of the erosion of the Colorado River and its drainage system. When boating in the eastern part of Lake Mead National Recreational Area, one may see the western portion of the Grand Canyon of the Colorado.

Boating on Lake Mead. Photo by William Belknap, Jr.

From Lake Mead the view of the colorful towering cliffs of the canyon walls is spectacular beyond belief. Layer upon layer of limestone and shale deposited by ancient (Paleozoic) seas on an older land surface of granite (Archeozoic) form the sides of this gorge which is 4,000 to 6,000 feet deep.

At Pierce Ferry, Ariz., the Grand Wash Cliffs, like gigantic steps, mark the western termination of the high plateaus through which the Colorado River has carved the Grand Canyon. From a distance these cliffs appear as an unbroken vertical wall 4,000 feet high, but upon closer examination they are found to be rugged, steplike slopes whose upper edges are often sharply contorted.

West of the Grand Wash Cliffs the surface features contrast sharply with nearly level plateaus to the east. Broad valleys lie between high, but narrow, north-south trending mountain ranges. Across these valleys Lake Mead takes a meandering course, with a shore line made irregular by numerous coves and peninsulas. Promontories and monoliths such as "Napoleon's Tomb" and "The Temple" rise precipitously above the lake level, adding character and interest. Elsewhere, rocks resembling mushrooms, sphinxes, and phantom ships are common features, the result of erosion of the soft clays and silts (upper Tertiary) which were deposited in the broad valleys before the Colorado River had undertaken its major work of excavating the Grand Canyon. Lavas appear as dark bands in the lighter colored rocks, or as caps covering mesas, at numerous places along the shore.

Through the mountain ranges which separate these broad valleys, Lake Mead follows narrow but deep gorges that were cut by the Colorado River into rock formations whose individual layers often are steeply tilted. Several of these gorges are of outstanding beauty, showing a wealth of color with grey, yellow, and tawny red predominating.

Below Hoover Dam, the lake above Davis Dam first is confined to the narrow and spectacular Black Canyon of the Colorado River and then opens into the first of the broad valleys that characterize the river as it continues its flow to the sea.

A thickness of over 18,000 feet of sediments has been deposited to form the rocks that are exposed in Lake Mead National Recreational Area. This tremendous thickness of sediments, laid down by ancient seas, rivers, and lakes, represents most of the divisions of geological time.

Many of the sedimentary layers (Paleozoic) which occur in the walls of Grand Canyon contain fossil shells in abundance, indicating that the seas in which these animals lived must have been teeming with life. At other localities immediately north of Lake Mead, the sediments (Mesozoic) contain large fossil trees. In this same series of rocks, the remains of large amphibians and reptiles also have been found. During the great Ice Age (Pleistocene), mammoths, camels, ground sloths, and associated mammals were common inhabitants of the area as is indicated by the great number of bones that have been collected.

Indian Background

THE REGION now included within Lake Mead National Recreational Area has been almost continuously inhabited by man for approximately 2,000 years. In such arid regions the activities of the prehistoric Indian inhabitants naturally centered around permanent water. Because many of these sites along the Colorado and Virgin Rivers were in the path of the rising waters of the reservoir, a careful survey of this region was conducted in order that as much as possible of this almost irreplaceable evidence might be salvaged before being lost forever beneath the waters of this largest of man-made lakes.

Many camp sites were found, but in only one section of the area have extensive, permanent aboriginal dwellings been discovered. These are the ruins popularly known as "The Lost City," a large group of pueblos located in the Moapa Valley. Above the high-water level of Lake Mead, in the nearby town of Overton, Nev., a museum of archeology now tells what is known of the fascinating story of the Pueblo Indians who occupied this village from about A. D. 800 to 1200.

Eldorado Canyon. Photo by Cliff Segerblom.



How To Reach Lake Mead National Recreational Area

By automobile and bus.-Detailed information regarding motor roads to Lake Mead National Recreational Area may be obtained from local travel agencies and chambers of commerce. Most points in the area may be reached by surface roads. Consult the map in this folder.

Personally conducted trips provided daily by the Greyhound Lines from Las Vegas to Boulder City and Hoover Dam include a boat ride on Lake Mead. The buses return to Las Vegas the same day.

Charter and sightseeing trips are scheduled by Riddle Scenic Tours and Tanner Motor Tours.

Bus service is available from Las Vegas, Boulder City, and Kingman, Ariz., to Hoover Dam and Davis Dam.

By airplane.-United Air Lines, Western Airline Express,

and Bonanza Airlines have daily service to Las Vegas. Desert Skyways, Inc., provides charter air service and sightseeing trips from the Boulder City Airport.

Private planes may use the indicated landing strips throughout the area. At the Boulder City Airport, fuel and mechanic service may be obtained.

By railroad.-The nearest railroad is the Union Pacific in Las Vegas, 23 miles away. Special bus sightseeing trips are available through the Union Pacific Railroad Co. The Santa Fe Railway at Kingman, Ariz., is about 80 miles from Boulder City.

Travel Season

THE RECREATIONAL area is open throughout the year and is a favorite winter resort for lovers of the outdoors. The really choice months are March, April, and May, when the desert flowers perfume the air and paint the landscape with their brilliant colors. Then the birds are singing, the air is balmy, and nature calls to those who have ears to listen or eyes to perceive. October and November are usually bright and warm by day, with cool nights. Even during July and August, when temperatures may reach 110°, the heat is not oppressive because of low relative humidity; and the nights are comfortable.

For the summer sunshine, protection for the head and colored glasses are recommended. Blankets are usually required at night, even in the summertime. Winter weather may require the wearing of heavy coats, particularly in the mornings and evenings.

Accommodations

A FREE public campground for both tent and trailer use is maintained by the National Park Service on the lake shore at Boulder Beach. Nearby are Lake Mead Lodge and a swimming beach and boat landing. At the campground are modern comfort stations, tables, fireplaces, waste receptacles, convenient water hydrants, and electric hotplates and outlets operating on commercial meters. Several hundred shade trees and shrubs have been planted here to make an attractive oasis.

Elsewhere about the area, at many points where roads reach the lake shores, informal camping areas have been designated for public use. When using these remote sites, campers should be prepared to provide all their own needs for their entire stay. In some sections of the area the source of supply may be as much as 75 miles distant.

Lake Mead Lodge, at Boulder Beach near the lake shore, furnishes excellent overnight accommodations. Comfortably furnished rooms, equipped with electric heating for winter and air cooling for summer, an unusually attractive dining room, lounge, and recreation rooms are among the service: offered.

Cabin and tent-cabin facilities have been established at Overton Beach, Temple Bar, Willow Beach, Eldorado Canyon, and Searchlight Ferry (Cottonwood Landing). These may be equipped for housekeeping if desired.

In Boulder City, there are hotel and auto-court accommodations and several cafes that serve good meals at reasonable prices. A variety of accommodations is also available at Las Vegas, 23 miles from Boulder City, and at Kingman, Ariz., 79 miles from Boulder City.

Telephone, telegraph, postal, medical, and religious facilities are available in Boulder City, Las Vegas, and Overton, Nev., and at Kingman, Ariz., as are stores, garages, and photographic and curio shops.

Administration

THE NATIONAL PARK SERVICE representative in direct charge of Lake Mead National Recreational Area is the superintendent, who is assisted in serving the public by rangers, naturalists, boat pilots, and other members of his staff. The Service's headquarters are located in Boulder City. Visitors are welcome.

Communications should be addressed to the Superintendent, Lake Mead National Recreational Area, Box 755, Boulder City, Nev.

Help Us Protect This Area

"Let no one say, and say it to your shame, That all was beauty here until you came."

THE RECREATIONAL area regulations are designed for the protection of the natural features and for the comfort, convenience, and safety of visitors. Complete regulations, from which this synopsis has been prepared, may be obtained at the superintendent's office or from any park ranger.

BOULDER CITL onal Park Se WILLOW REACH ies - Repai ELDORADO (ANYO) shing supplies. Repa Searchlight Bullhead City DAVIS DAM District Ranger Statio Boats - Motors - Gasoli Overnight accommo Bullhead City To Needles A B Campgrounds .- Automobile camping is confined to desigvate boat owners in areas designated by the superintendent. nated campgrounds, except when it is necessary to make Such moorings must be constructed in accordance with approved specifications, obtainable from the superincamp on trips to isolated portions of the area. To keep all camping spots clean and sanitary, garbage and empty tendent's office. Special regulations affecting safety, sanicans should be placed in garbage receptacles or buried if no tation, navigation, and other phases of boating operation containers are provided. Camping in any one campground must be observed. Houseboats are not permitted

> Dogs .- Dogs are not permitted to run at large in public campgrounds, on the beaches, in the vicinity of the boat landing, or in other places of visitor concentration.

Noises .- Persons in camp should be quiet after the usual time for retiring. Most visitors come to the area for rest.

Fishing .- Either a Nevada or Arizona State fishing license is required in the area, since each State has reserved the right to require a license whenever fishing is done within the State concerned. Fishing is permitted all day, every day of the year. Limits are established for the entire recreational area as conditions may require.

(15)

is limited to 30 days in any calendar year.

is not allowed.

Public Property, Trees, Flowers, and Animals .- The de-

struction, injury, or disturbance of public property, vegeta-

tion, flowers, rocks, birds, animals, and other natural features

Boating .- Boats may be launched on Lake Mead after a

boat permit has been obtained from the superintendent's

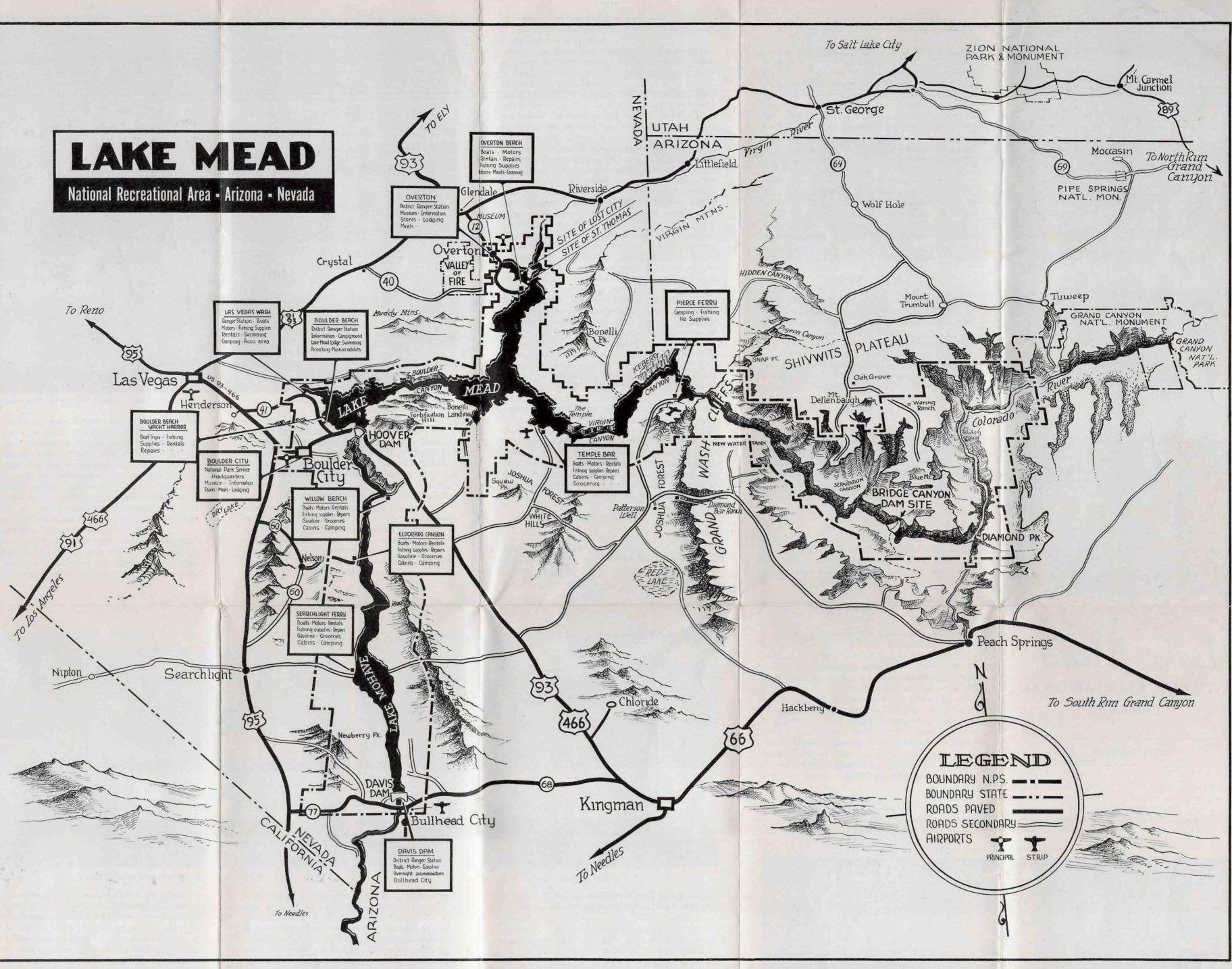
office or from any park ranger. Arrangements may be made

with representatives of the recreational area concessioner

for mooring boats at a monthly charge determined by the

length of such craft; or moorings may be provided by pri-

(14)



Hunting .---Hunting within the area is restricted. Certain sections may be open to hunting when it is determined to be desirable by the National Park Service superintendent and the State Game Commission. Hunting is not permitted in other areas administered by the National Park Service. Always obtain specific information from the superintendent's office or the local State game warden before entering the area to hunt.

Lost and Found.-Persons finding lost articles may deposit them at the chief ranger's office in the National Park Service administration building located in Boulder City, or leave them with a park ranger.

Park Rangers.-The rangers are here to help and to advise you, as well as to see that regulations are enforced. When in doubt, consult the rangers.

Safety Rules .- Fishermen, boatmen, and swimmers are urged to follow these basic rules of safety:

1. Always leave word with someone as to when and where you are going and when you expect to return. This information will aid rescue parties in the event you are missing.

2. Stay ashore when water is rough. If you are on the lake when it is very rough, find a sheltered cove and wait for calm water.

3. Sit down, and sit still, when in a boat.

4. Equip your boat with air tanks; carry a life preserver for every passenger; carry day and night flares for use if in distress.

5. Swim only in designated places.

UNITED STATES DEPARTMENT OF THE INTERIOR

OSCAR L. CHAPMAN, Secretary NATIONAL PARK SERVICE Newton B. Drury, Director



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