



Swimming and diving fun at Wahweap Beach.

Boating on the snaky Escalante arm of Lake Powell.

#### **Regulations and Safety Measures**

Roads. Before driving on improved dirt or primitive roads, inquire locally as to their condition. Primitive roads are generally limited to 4-wheel-drive vehicles. Do not leave roads: crosscountry travel can be dangerous.

Camping. Overnight camping is prohibited in picnic areas, on designated beaches, and adjacent to developed areas. Camping from vessels is limited to 30 days at any one location. Please leave a clean campsite and bring back your trash for deposit in the litter cart at boat landings.

Fishing, permitted in accordance with Federal and State laws, is prohibited in designated harbor areas and from, or within 200 feet of, any public raft or float designated for water sports.

Swimming from vessels underway is prohibited. Children under 12 years of age in a boat in Utah, and water skiers when in "tow", must wear approved life preservers.

Water skiing. At least two persons must be in the boat, with one other than the operator observing the progress of the person or persons being towed.

Firearms. Carrying or discharging loaded firearms or explosives in developed or concentrated public-use areas is prohibited.

Pets must be under physical control when in or near developed areas

**Boating**. Before getting underway, be sure you know your boat and its operation. Make certain you understand and comply with State, U.S. Coast Guard, and National Park Service boating regulations.

CAUTION—Certain areas along Lake Powell seem to offer highly desirable camping sites. Before you pick your camp, however, survey the location carefully. Sandy and rock debris areas sloping into the lake are subject to sloughing and sliding. You may have noticed a number of these (San Juan and Escalante Rivers and the Rincon and Castle Butte areas). Avoid them and choose flat or gently sloping sites to camp and to anchor your boat. Do not allow your visit to be spoiled by an accident. While every effort has been made to provide for your safety, there are still hazards which require your alertness and vigilance. Exercise common sense and caution.

WATER SANITATION—The draining, dumping, or discharging of wastes or refuse, including human waste, into the waters from any vessel is prohibited. Boat sanitary stations for emptying holding tanks are located at Wahweap, Rainbow Bridge, and Bullfrog Basin.

#### **Facilities**

Page, Motels, restaurants, and stores. Scenic flights available from Page Airport. For information, write to the Chamber of Commerce, Page, AZ 86040

Wahweap, National Park Service administrative offices, information, campgrounds, picnic shelters, launching ramp, and swimming beach. Concessioner-operated boat rental, boat tours, boating supplies and repairs, marina, restaurant, motel, trailer village with utility hookups, and service station. Concessioner: Canyon Tours, Inc., Box 1597, Page, AZ 86040.

Wahweap Campground, about  $4\frac{1}{2}$  miles by the paved Lakeshore Drive north of the dam, includes 178 campsites for tents and trailers (no utility hookups) with charcoal grills (firewood not available) and picnic tables. Nearby are restrooms and drinking water.

Bullfrog, Ranger station, launching ramp, campground, and picnic area. Concessioner-operated lodging, service station, restaurant, camp store, marina, and a trailer village with utility hookups. Concessioner: Bullfrog Marina, Inc., 231 East Fourth South, Salt Lake City, UT 84111.

Lees Ferry, Ranger station, launching ramp, and campground. Concessioner-operated boat rentals, boat tours, boating supplies and repairs, camp store, restaurant, service station, and limited lodging. Concessioner: Fort Lee Co., Box 2103, Marble Canvon, AZ 86036.

Halls Crossing Launching ramp and campground. Ranger on duty. Concessioner-operated lodging, boat rental, marina, boat excursions, boating and camping supplies, and trailer village with utility hookups. Concessioner: Lake Powell Ferry Service, Inc., Blanding, UT 84511.

Hite Concessioner-operated boat-fuel service, limited camp supplies, and small primitive camping facilities. Concessioner: Hite Marina, 4131 West 3860 South, Granger, UT 84119.

Rainbow Bridge Floating Marina, Ranger station, restrooms, emergency communications. Concessioner-operated boat-fuel service and camp supplies. Concessioner: Canyon Tours, Inc., Box 1597, Page, AZ 86040.



Lees Ferry-a profusion of color.

#### **Indians and Pioneers**

The rough canyon country of the Colorado Plateau has been known to various Indian tribes for at least 2,000 years. Sporadically used in the early centuries of the Christian era, it was most heavily used for farming by people of the Pueblo culture between A.D. 900 and 1100, a period of agricultural expansion. These people left the Glen Canyon region in the 1200's, after almost a century of drought.

The many ruins found in the area are relics of small, usually temporary, outposts of Pueblo settlements. Archeological excavations in the region have uncovered a large variety of stone and bone tools, basketry, pottery, and other artifacts.

The first recorded description of the Glen Canvon area is found in the journal of Father Escalante, a Spanish Franciscan missionary. In July 1776, Father Escalante and Father Dominguez and their party set out from Santa Fe, N. Mex., to pioneer a route to California. In early October, after reaching the vicinity of Milford, Utah, they decided to return to Santa Fe.

The return journey was one of difficulty and hardship. On October 26, the party reached the Colorado River at Lees Ferry, but near-disaster marked attempts to cross the river. Laboriously, the explorers climbed cliffs and walked through deep sand, scouting for a ford. On the night of November 2, they camped along Wahweap Creek, a short distance north of the present Wahweap Campground.

Four more days they struggled on, sustained by horsemeat and "toasted leaves of small cactus plants." On the morning of November 7, they chopped some steps in the sandstone wall at Padre Creek and safely led their pack stock to the bank of the Colorado. Without a guide, they had located an old Indian crossing. The crossing was wide but safe, and by 5 o'clock all were over, "praising God our Lord and firing off a few muskets as a sign of great joy." The party arrived safely in Santa Fe on January 2, 1777. The place at which they crossed the Colorado became known as the "Crossing of the Fathers."

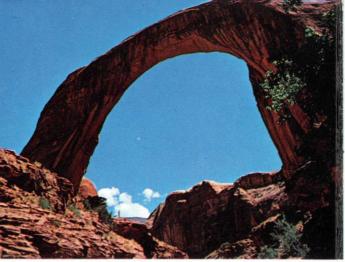
Jacob Hamblin led the first of several Mormon missionary trips to the Hopis in 1858, using the Crossing of the Fathers. In 1864 he first crossed the Colorado River at what later became known as Lees Ferry.

John D. Lee established a ranch at the mouth of the Paria in 1871 and began ferrying travelers the next year. The ferry continued to provide this vital link between Utah and Arizona until the high-arch Navajo Bridge was completed below Lees Ferry in 1928.

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### **Natural History**

The rock of the mountains and vertical cliffs is sedimentary in origin. You can see examples of wind-deposited sediments in the brick-red Navajo sandstone in the cliffs near the dam, where the structure, texture, and slopes of one-time sand dunes are revealed. Examples of sea-deposited sedimentary rocks are exposed at Wahweap; there the red Carmel formation overlies the Navajo sandstone. Other formations contain fossils of marine animals that lived millions of years ago. The last uplift of the region began about 60 million years ago. As the uplift progressed, meandering streams of the ancient low-lying Colorado Basin ran faster, cutting the labyrinth of canyons that you can explore today on the waters of Lake Powell. Although inconspicuous, many plants grow in Glen Canyon's seemingly bare landscape. Some of the streaks seen on canyon walls are lichens. Throughout the area grow several species of cactus and the bayonet-tipped yucca. In spring, wildflowers spread their brilliance upon mesas, over dunes, and along streambeds; another blossoming season may occur after summer rains.



A national landmark-the majestic Rainbow Bridge.

The name "Glen Canvon" was given to a long stretch of the Colorado by John Wesley Powell, who led exploratory trips through the canvons in 1869 and in 1871. He mapped the area and named many of the features.

Around 1900, Glen Canyon became known as a goldmining area, with hundreds of prospectors working the sand and gravel bars along the river. But the gold particles were too fine to be recovered in profitable amounts.

The Navajos, whose reservation adjoins Glen Canyon on the south, are newcomers compared with the Hopi and Rio Grande Pueblo peoples. Although the Navajos are believed to have arrived in the northwestern New Mexico region in the 1500's, they did not move toward the Glen Canyon area until about 1860. The Navaios acquired some of the crafts of the historicperiod Pueblo people, such as pottery making and silverwork. More recently, they have become noted for their handsome and durable rugs and distinctive paintings.

Plans are underway for a Navajo tourist development on Lake Powell at Padre Point. You can obtain more information about the Navajos at their headquarters in Window Rock, AZ

Cottonwoods, willows, and tamarisks grow near streams, with Utah junipers and pinyons at higher elevations.



A family observes Indian relics in Forgotten Canyon

Campers relish the striking beauty of Iceberg Canyon.

You may see desert animals in the beam of your headlights, for these creatures do their hunting and feeding at night. You will also see their tracks in the sand or wet soil at the lakeshore. The doglike tracks are made by coyotes and foxes; small tracks by rats, mice, and lizards. Sharp-pointed hoof tracks of deer can be found in many of the longer side canyons.

Animals seen most frequently are lizards, represented by about 14 species-all nonpoisonous. The largest is the chuckwalla, which feeds entirely upon plants. There are some snakes, of course, and occasionally a rattlesnake. Though you might hike in this area for a year and not see one, you should still be watchful for this poisonous snake as you walk about, especially at night.

Many species of birds live in and around the cliffs of Glen Canyon and, since the filling of Lake Powell, many species of waterfowl use the lake as a flyway.

#### Information

For information about Lake Powell and Rainbow Bridge National Monument write to the Superintendent, Glen Canvon National Recreation Area, Box 1507, Page, AZ 86040.

For information about Glen Canyon Dam and Powerplant or about the city of Page, write to Chief, Glen Canyon Field Division, Bureau of Reclamation, Box 1477, Page, AZ 86040, or Regional Director, Bureau of Reclamation, Box 11568. Salt Lake City, UT 84111.

#### **Motion Pictures**

"Lake Powell-Jewel of the Colorado," a 16 mm, color film on both the dam and the lake, is available for loan to groups. A film on construction of the dam, "Operation Glen Canyon," is also available. Send your request to Film Management Center, Building 67, Denver Federal Center, Denver, CO 80225.

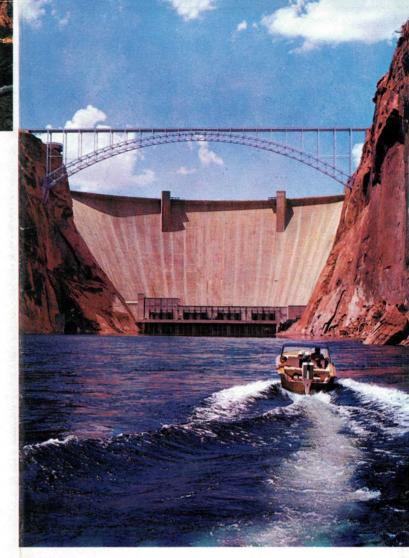
As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources." The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States-now and in the future.

STANLEY K. HATHAWAY Secretary of the Interior

GARY E. EVERHARDT - Director **National Park Service** 

GILBERT G. STAMM - Commissioner Bureau of Reclamation [REVISED 1973]

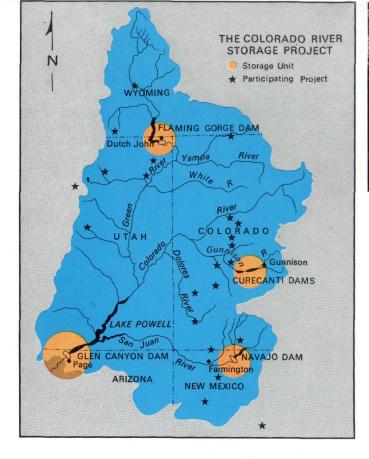
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# Glen Canyon

Dam and National Recreation Area

**U.S. DEPARTMENT OF THE INTERIOR** National Park Service **Bureau of Reclamation** 



#### A white concrete monolith between red cliffs, harnessing the waters of the turbulent Colorado River— This Is

#### **Glen Canyon Dam**

Glen Canyon Dam was built by the Bureau of Reclamation between 1956 and 1964. Containing almost 5 million cubic yards of concrete, it rises 710 feet above bedrock and 583 feet above the original river channel and has a crest length of 1,560 feet. The first two generating units in the powerplant were put on the line in September 1964, and the eighth and final unit began generating power in February 1966. Plant capacity is 900,000 kilowatts, enough to meet the electric energy needs of a city of a million people.

#### Glen Canyon Dam and The Colorado River Storage Project

Glen Canyon Dam and Lake Powell are the principal features of the Colorado River Storage Project. The concrete arch dam stores water in Lake Powell to meet downstream commitments, thus permitting use of remaining water in upstream valleys. Controlled releases of water through the giant turbines of the powerplant generate great amounts of hydroelectric power for use by cities and industries throughout the West. Revenue from



Boating amid the dramatic cliffs of Reflection Canyon.

the sale of CRSP hydropower will repay the cost of Glen Canyon Dam and help pay for many other Federal Reclamation projects in the upper basin of the Colorado River. These projects, which irrigate the land and supply municipal water and other benefits, are called participating projects.

Presently authorized CRSP projects and features will cost nearly \$1.5 billion. Roughly 95 percent of the Federal investment will be repaid to the United States treasury, principally through the sale of power produced at Glen Canyon and other CRSP hydroplants.

The large water-storage capacity of Lake Powell (27 million acre-feet at 3,700-foot elevation above sea level) permits long-term cyclical storage and maximum utilization of water.

The Carl Hayden Visitor Center, on the rim of the canyon above the dam, contains interesting exhibits and is the starting and end point for self-guided tours through the dam and powerplant. These tours can be taken daily throughout the year, and visitors may proceed at their own pace. Park guides are on hand to answer questions.

Blue-green water, deep and clear, between steep walls of red sandstone: Watery fingers winding through scores of narrow side canyons and lapping high mesas— This Is

#### **Lake Powell**

Lake Powell, when filled, will be 186 miles long, with 1,960 miles of canyon-indented shoreline. It was named for John Wesley Powell, the explorer-scientist who led the first expeditions through the canyons of the Colorado.

From the beginning, the recreation potential of the lake to be formed behind Glen Canyon Dam was considered to have national significance. When Congress, in 1956, authorized construction of Glen Canyon Dam and other units of the Colorado River Storage Project, it also authorized the Secretary of the Interior to provide for recreational use of the reservoirs to be created.

The Bureau of Reclamation operates the dam and powerplant, while the National Park Service administers Glen Canyon National Recreation Area, supervising its activities and developments.

The National Park Service conducts campfire programs and other interpretive activities in summer at Wahweap, 5 miles upstream from the dam. (See posted notice in campground for times and programs.)



A thrill-a-minute on Wahweap Bay.

#### **Places To See**

**On Foot.** The self-guided tour through the Carl Hayden Visitor Center and Glen Canyon Dam and Powerplant is most rewarding and takes only a short time.

**By Boat.** Glen Canyon Dam, 5 miles down the Wahweap arm of Lake Powell, is an interesting destination for a short cruise. Lake Powell provides easy access to Rainbow Bridge National Monument, containing the largest known natural stone bridge. A boat trip from Halls Crossing, Bullfrog, or Wahweap takes visitors into Bridge Canyon, where a foot trail about ½ -mile long leads to spectacular Rainbow Bridge.

A trip up the river from Lees Ferry proceeds between towering, rust-colored sandstone walls. The twisting channels of cold, crystal-clear water provide 15 miles of excellent trout fishing.

Lake Powell's colorful and fiordlike side canyons are its chief distinction. Narrow and crooked, they are often shadowed by high vertical walls and overhanging cliffs.

Most easily accessible by boat from Wahweap are such canyons as Antelope, Navajo, Dungeon, Cathedral, Driftwood, and Cascade and from Bullfrog, Halls Crossing, and Hite are Twilight, Reflection, Lake, and Forgotten Canyons, and Escalante, San Juan, and Dirty Devil Rivers.

**By Car.** Although roads in the Four Corners area have not been greatly improved, you can drive to places offering superb scenery, glimpses of Indian life, and historic sites. At Lees Ferry, off U.S. 89-A below the dam, you can view Lees Ferry Fort, roadside interpretive exhibits, and a variety of relics of the Spencer mining days of 1910. This is also the site of one of Father Escalante's camps and the site of the pioneer ferry crossing.

U.S. 89 north leads to Kanab, where many "Westerns" are filmed, and thence to nearby national parks and monuments.

Utah 95 has been improved by the construction of three new bridges near Hite. They span White Canyon, the Dirty Devil River, and the Colorado River at Narrow Canyon. A trip along this unpaved road provides striking views of the rugged terrain and access to many natural wonders. A paved road off Utah 95 at Trachyte Junction furnishes access to Bullfrog Basin. Also, an improved road leads from Blanding, Utah, to Halls Crossing.



The Carl Hayden Visitor Center.

#### Water Sports Things to do-but remember SAFETY FIRST!

**Boating.** Of all water sports, boating is supreme on Lake Powell. Powerboats, canoes, kayaks, and sailboats—all have their place here. Small boats and rough water, however, do not go together; prudent boatmen remain ashore when this condition prevails.

For sailing craft, Wahweap, Padre, and Bullfrog Bays provide more room to maneuver and more consistent winds. For small craft, such as canoes and kayaks, the twisting channel of the Escalante River is suitable.

**Swimming.** There are lifeguards and a swim float at the beach at Wahweap in summer and early autumn. Many other places on the lake, such as the sandy coves of Last Chance and Padre Bays, also attract swimmers.

**Fishing.** Rainbow trout, largemouth bass, and kokanee salmon have been planted in Lake Powell. Catches of bass and trout frequently include specimens weighing up to 10 pounds. Native catfish are also plentiful. Below the dam, the clear cold water of the river is making Lees Ferry famous for its trout fishing. Check fishing regulations at park ranger stations and at the administrative offices at Wahweap. Appropriate State fishing licenses are required and are available locally.

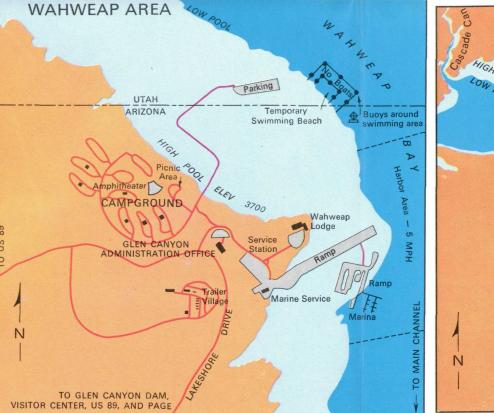
Water skiing. The wider channels and bays of Lake Powell are best for this popular sport. Wahweap, Padre, Last Chance, and Bullfrog Bays provide plenty of room and beautiful surroundings.

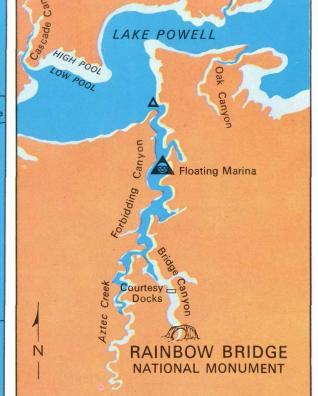
#### **About Your Visit**

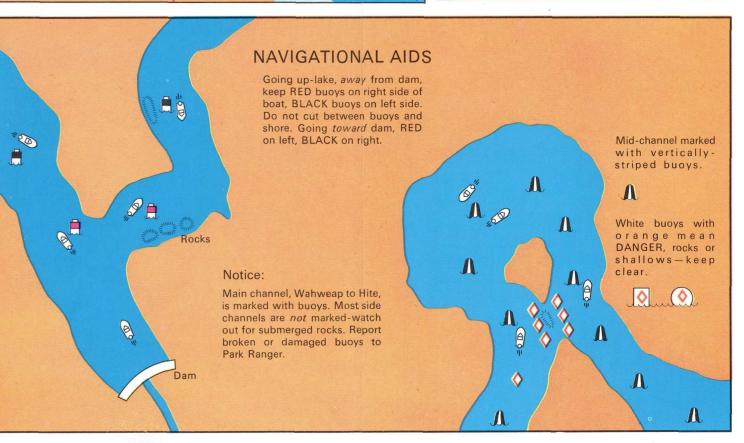
U.S. 89 intersects east-west routes, both north and south of Glen Canyon. Page has bus service from Flagstaff, Ariz., and Salt Lake City, Utah, and scheduled flights from Phoenix and Grand Canyon, Ariz., and Salt Lake City. Rental cars are available in Page.

Utah 95 crosses the recreation area at Hite, Utah, from which roads lead to Bullfrog and Halls Crossing.

Boating services, lodging, and meals are available all year at Page and at Glen Canyon National Recreation Area. Roads are always open, and the main waterways of the lake are open all winter. Temperatures at the southern end of Lake Powell range from zero in winter to  $106^{\circ}$  in summer. Campers should be prepared for seasonal conditions.







# GLEN CANYON NATIONAL RECREATION AREA-LAKE POWELL









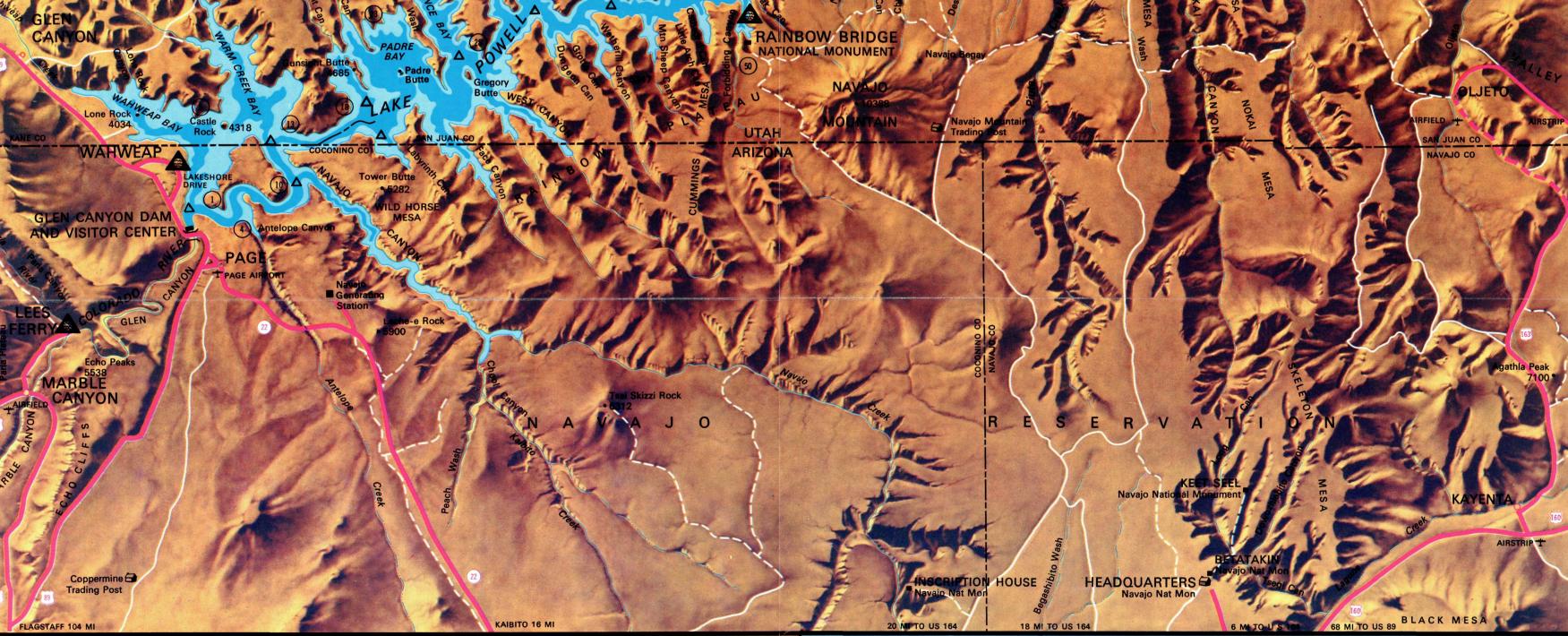
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SCALE IN MILES 4 0 4

## BOATING SAFETY

Before getting underway, be sure you know your boat and its operation. Make certain you understand and comply with State, U.S. Coast Guard, and National Park Service boating regulations.

These items should be included on your pre-sailing checklist:

1. Check the weather; when the water is rough, stay ashore. If you are on the lake when the water becomes rough, seek a sheltered cove and wait for calm water.

2. Make sure fuel vapors are dispersed before starting your engine.

 Be sure you have enough fuel for your round trip.
Make sure an easily available life

preserver is carried for each person in the boat.

5. Know your distress signals; carry

simple signaling equipment.

6. Remember: The loading of a boat has an effect on the boat's stability. Keep the load low.

7. Do not stand up in a small boat.

8. Do not overload or overpower the boat.

9. Riding on the bow of the boat is prohibited unless it is fitted with bow railing.

In addition, you should be familiar with "Rules of the Road" for boatmen and the local use of navigational aids, such as buoys, lights, and charts.

Two other ingredients are essential for good boaters; consideration for others and common sense. Do not attempt to cruise Lake Powell without a good supply of both.



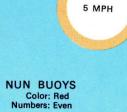
LIGHTED

MID-CHANNEL Color: Black and white Numbers: None Pass: Either side

LIGHTED (white only)

DIVERS FLAG





CIRCLES MARK

N Red buoys indicate right side of safe channel when going up-lake away from dam.

SQUARE OR RECTANGLE



Do not pass

n this buoy