# **Foundation Document** Lake Mead National Recreation Area

Arizona and Nevada

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# **Mission of the National Park Service**

The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The NPS core values are a framework in which the National Park Service accomplishes its mission. They express the manner in which, both individually and collectively, the National Park Service pursues its mission. The NPS core values are:

- **Shared stewardship**: We share a commitment to resource stewardship with the global preservation community.
- **Excellence**: We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- Integrity: We deal honestly and fairly with the public and one another.
- Tradition: We are proud of it; we learn from it; we are not bound by it.
- **Respect**: We embrace each other's differences so that we may enrich the well-being of everyone.

The National Park Service is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises over 400 park units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of park units throughout the nation require a strong commitment to resource stewardship and management to ensure both the protection and enjoyment of these resources for future generations.



The arrowhead was authorized as the official National Park Service emblem by the Secretary of the Interior on July 20, 1951. The sequoia tree and bison represent vegetation and wildlife, the mountains and water represent scenic and recreational values, and the arrowhead represents historical and archeological values.

# Introduction

Every unit of the national park system will have a foundational document to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of a foundation document include a brief description of the park as well as the park's purpose, significance, fundamental resources and values, other important resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for park planning. Along with the core components, the assessment provides a focus for park planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the park. The process of developing a foundation document begins with gathering and integrating information about the park. Next, this information is refined and focused to determine what the most important attributes of the park are. The process of preparing a foundation document the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

While not included in this document, a park atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and park operations. The atlas is published as a (hard copy) paper product and as geospatial data for use in a web mapping environment. The park atlas for Lake Mead National Recreation Area can be accessed online at: <a href="http://insideparkatlas.nps.gov/">http://insideparkatlas.nps.gov/</a>.



# Part 1: Core Components

The core components of a foundation document include a brief description of the park, park purpose, significance statements, fundamental resources and values, other important resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

# **Brief Description of the Park**

Lake Mead National Recreation Area (NRA) is a startling contrast of desert and water, mountains and canyons, primitive backcountry and human innovation. Two powerful forces created the backdrop for this park. First, natural processes occurring over millions of years along the interface of the Basin and Range geologic province and the Colorado Plateau geologic province built its foundation. This landscape consists of vast desert expanses, dramatic geologic features, and diverse ecological communities. Then, over the past 100 years, humans modified the landscape to better suit it to present day needs. The primary modifications include two massive reservoirs—Mead and Mohave—in one of earth's hottest, driest regions. These lakes supply high-quality municipal water, power production, and agricultural irrigation water to tens of millions of people across Nevada, Arizona, California, and Mexico. Collectively, Lake Mead NRA encompasses this unique array of natural and modified landscape and waterscape.

With this combination of large water bodies amidst vast terrestrial expanses in Nevada and Arizona, Lake Mead NRA provides a very diverse recreational resource. As the nation's first national recreation area, water- and land-based recreation attract approximately seven million visitors per year—not including the four million vehicles that travel 20 miles through the park on US Highway 93—which makes the park one of the most visited park units in the national park system and an integral component of the region's economy. Larger than the state of Delaware at 1.5 million acres, Lake Mead NRA is the third largest unit in the national park system outside of Alaska. This figure includes more than 185,000 acres of designated wilderness and more than 373,000 additional acres of proposed, eligible, and potential wilderness.





The park represents elements of the Mojave, Sonoran, and Great Basin deserts. The geologic diversity and convergence of these desert ecosystems provide habitat for a rich diversity of plants and animals. Currently, 822 native plant species and 387 native animal species have been officially documented in the park, with 10 of these listed as threatened, endangered, or candidate species, and 140 considered rare species. Anecdotal evidence and informal documentation indicates that many more species of animals and plants inhabit the park. In addition, the park contains globally significant herds of desert bighorn sheep, with some of the highest population numbers in the world. Also included in the park's diverse natural resources are spectacular vistas including deep canyons, sheer cliffs, layers of sharp and colorful mountain ridges and rock formations, and sweeping bajadas.

Both terrestrial and submerged landscapes add to the park's rich human history and diversity. Evidence of 10,000 years of Native American civilization is found in the vicinity of the Lake Mead NRA. Fur trappers, Mormon settlers, prospectors, ranchers, and developers of riverboat and railroad supply networks arrived later in attempts to survive and prosper in the rugged desert environment. Architectural wonders such as the Hoover Dam, built in the 1930s, and the Mike O'Callaghan-Pat Tillman Memorial Bridge that opened in 2010, add to the rich human history. Today, Lake Mead NRA is an attraction to millions of people from large metropolitan communities in the region as well as visitors from all over the world.

In addition to overseeing the resources and values of Lake Mead NRA, the managers of Lake Mead NRA also assist in joint management with the Bureau of Land Management (BLM) of the adjacent Grand Canyon-Parashant National Monument to the northeast. Approximately 200,000 acres of the Grand Canyon-Parashant National Monument, which was established in 2000, are within the legislative boundaries of the Lake Mead National Recreation Area. Although these two park units are operationally distinct and separate, staff from Lake Mead NRA assist in resource management, visitor use management, and law enforcement to assure that the overall mandates of the area are fulfilled. The relationship between the two parks and the related management of the Grand Canyon-Parashant is evolving. It should be noted that this foundation document applies only to Lake Mead NRA, with the exception of any transboundary issues that are identified later in this document. A separate foundation document will be developed for Grand Canyon-Parashant National Monument.

#### **Park Purpose**

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Lake Mead NRA was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was established when the enabling legislation adopted by Congress was signed into law on October 8, 1964 (see appendix A for enabling legislation and appendix B for other related legislation). The purpose statement lays the foundation for understanding what is most important about the park.

The purpose of LAKE MEAD NATIONAL RECREATION AREA is to provide diverse public recreation, benefit, and use on Lakes Mead and Mohave and surrounding lands in a manner that preserves the ecological, geological, cultural, historical, scenic, scientific, and wilderness resources of the park.



# **Park Significance**

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Lake Mead National Recreation Area, and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and system-wide context. They focus on the most important resources and values that will assist in park planning and management.

The following significance statements have been identified for Lake Mead NRA. (Please note that the sequence of the statements do not reflect the level of significance.)

- 1. As the first and largest national recreation area in the national park system, Lake Mead National Recreation Area is an expression of the national value of expanding outdoor recreation opportunities. The National Park Service manages public access to the waters, shorelines, and surrounding lands of the park, including the largest reservoir in the United States.
- 2. Lake Mead National Recreation Area offers dramatic scenery and a diverse array of land- and water-based recreation opportunities in close proximity to several large urban centers of the southwestern United States. With approximately seven million visitors each year, the park supports some of the nation's highest levels of water recreation and backcountry use.
- 3. Situated in the northeastern Mojave Desert near the interface with both the Great Basin Desert to the north and the Sonoran Desert to the south, Lake Mead National Recreation Area preserves a great diversity of biological resources, intact habitat, and ecological connectivity in the region, including many endemic, threatened, and endangered species and rare natural communities.
- 4. Lake Mead National Recreation Area showcases a remarkable collection of geological and paleontological features spanning more than 1.4 billion years of the earth's history. These exposed features, which include bajadas, lava flows, granite plutons, boulder fields, volcanoes, fault lines, petrified wood, and other fossils, collectively provide insights into complex geologic processes and represent some of the oldest rocks in this geographic region.
- 5. The high diversity of cultural resources found at Lake Mead National Recreation Area—both on land and submerged—remain as evidence of a 10,000-year continuum of human history in the region. These resources represent many human themes and stories that relate to numerous Native American cultures and their adaption to and migration through the landscape, as well as European settlement, mining, ranching, exploration, and the construction of Hoover Dam.
- 6. Lake Mead National Recreation Area contains vast backcountry and wilderness lands, including nine designated wilderness areas that cover more than 185,000 acres and several other proposed, eligible, or potential wilderness lands that encompass an additional 373,000 acres. These lands serve to preserve ecological resources and processes and provide exemplary opportunities for primitive recreation and desert solitude.
- 7. Lake Mead National Recreation Area contains water storage reservoirs and infrastructure managed by water and energy supply agencies that provide critical resources to Nevada, Arizona, and California. These resources also provide a focal point for scientific research and policy discussions of national importance, including: the implications of urbanization on water scarcity, the need for water use efficiency and sustainable land uses, the importance of maintaining high water quality, and the effects of climate change on the natural and human environment.

### **Fundamental Resources and Values**

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to a park's legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the park. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The following fundamental resources and values have been identified for Lake Mead NRA:

- Abundant Land and Water Recreation The park offers abundant opportunities for a wide range of land- and water-based recreational pursuits. Frontcountry settings offer swimming, beach lounging, boating, sailing, kayaking, fishing, hiking/ walking, bicycling, picnicking, as well as car, tent, and recreational vehicle camping. Backcountry settings offer opportunities for self-reliant and self-directed adventures in boating, river rafting, boat tours, selfcontained camping, hiking, backpacking, 4x4 travel on approved roads, climbing and canyoneering, swimming, SCUBA diving, fishing, wildlife watching, and hunting.
- **Opportunities to Appreciate Spectacular Scenery** – The park offers opportunities to appreciate spectacular visual resources including: deep canyons, dry washes, sheer cliffs, near and distant mountain ranges, the variable reflection and motion of the lakes, colorful soils and rock formations, mosaics of visual texture provided by different vegetation, and appealing contrasts between rugged desert landscapes and vast water bodies.
- **Riverine and Reservoir Ecosystems** The park includes riverine and reservoir ecosystems of the Colorado River system, including open water, shoreline environments, and outstanding water quality at the heart of the park.







- **Groundwater** The park contains groundwater resources of sufficient quality and quantity to support springs as well as the specialized aquatic and riparian habitats they provide.
- Diverse Array of Geologic Features and Processes The park encompasses a diverse array of geologic features and dynamic geomorphic and hydrogeologic processes that give rise to iconic landforms, resilient ecosystems, rich mineral resources, and important paleontological finds.
- **Functional Desert Habitats** The park preserves resilient and ecologically functional native plant and animal assemblages within diverse terrestrial desert habitats.
- **Species of Conservation Interest** The park hosts populations and protected habitat for plant and animal species of conservation interest, including federally listed species and their critical habitats, species protected under conservation plans in lieu of listing, species that are new to science, and ecologically rare and endemic species.
- Lands with Wilderness Character The park contains nine designated wilderness areas (185,080 acres) that possess the following qualities of wilderness character: untrammeled, undeveloped, natural, outstanding opportunities for solitude or primitive and unconfined recreation, and other features of value. The park also contains another 91,963 acres of proposed wilderness, 264,615 acres of eligible wilderness, and 16,816 acres of potential wilderness that may possess these same qualities of wilderness character. These wilderness lands provide both easily accessible and challenging wilderness experiences for park visitors in rugged desert terrain. The wilderness lands also protect large tracts of important habitat and critical water sources for range-wide benefits to many different plant and animal species. (See the FRV analysis table for "Lands with Wilderness Character" in appendix D for definitions of each wilderness category.)
- Science and Research The park provides abundant opportunities for applied and empirical research, including the scholarly studies of social science, natural and cultural resources, and physical and biological processes, including climate change. These opportunities include the preservation, curation, and use of park archives and collections.

- **Cultural Landscapes and Historic Structures** The park contains intact historic structures and cultural landscapes. The historic structures include buildings, roads, railroads, and a variety of other structures constructed to serve past human activities, such as agriculture, ranching, mining, and the construction of Hoover Dam. Cultural landscapes include both natural elements (such as land forms, soil, and vegetation) and cultural elements (such as archeological sites and historic structures and submerged resources) that reflect human adaptation and use of the natural environment. Identified potential cultural landscapes within the park relate to the Puebloan occupation, historic mining and settlement, and park development.
- **History and Cultural Anthropology** The park helps preserve exemplary stories, places, and other resources associated with Native Americans and their traditional practices, early European and European American exploration, settlement, farming, religious activities, mining, ranching, and government activities that influenced the environment.
- Archeology The park includes well-preserved archeological sites (including submerged sites) that contribute to our understanding of the human ecology throughout the Holocene. Prehistoric archeological sites range from prehistoric surface artifact scatters to deeply stratified multicomponent sites, pueblo ruins, and rock art sites. Historic archeological sites range from trash scatters and early mining and ranching sites to town sites and complex industrial sites associated with the construction of Hoover Dam.



#### **Other Important Resources and Values**

Lake Mead NRA contains other resources and values that are not fundamental to the purpose of the park and may be unrelated to its significance, but are important to consider in planning processes. These are referred to as "other important resources and values" (OIRV). These resources and values have been selected because they are important in the operation and management of the park and warrant special consideration in park planning.

The following other important resources and values have been identified for Lake Mead NRA:

- **Experiential Opportunities** The park provides opportunities for park visitors to experience the natural world and cultural context through important visual connections, dark night skies, natural sounds, and natural smells.
- **Clean Air** The park is characterized by good air quality and protected air qualityrelated values, such as visibility, as both components of the natural system provide for healthy conditions for park visitors, partners, and employees.
- **Transboundary Connectivity** The park is managed within a broader context such that ecological, cultural, and managerial connectivity to adjacent conservation lands is fostered, including shared and adjacent wilderness areas, "Areas of Critical Environmental Concern," critical habitat for listed species, wildlife management areas, and regional parks and trails.

#### **Related Resources**

Related Resources, Facilities, and Operations Not Managed by the National Park Service – Within the park boundaries, numerous resources, facilities, and operations are managed by other local, state, and federal agencies, including major water supply infrastructure for the Las Vegas Valley, two major federal dams affecting lake water levels/volumes, a state wildlife refuge, a federal and a state fish hatchery, two county parks, major federal and state highways, and utility transmission corridors. Although other agencies hold the primary management responsibility for these facilities and sites, Lake Mead National Recreation Area is directly affected by their management and the National Park Service collaborates in their respective management decisions.



### **Interpretive Themes**

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all park significance statements and fundamental and other important resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Lake Mead NRA:

- 1. The striking landscapes of Lake Mead National Recreation Area awaken the human spirit with opportunities for wilderness solitude and offer millions of visitors a place for relaxation, recreation, and renewal.
- 2. The convergence of three deserts, two geographical provinces, and North America's largest inland reservoir creates a mosaic of landforms and rich, diverse, but fragile ecosystems that allows us to explore the lessons of interdependence found in the natural world around us.
- 3. Water is life in the desert, creating diversity and prosperity that has long attracted people to this area. Over the long continuum of human activity at Lake Mead National Recreation Area, interaction with the river changed the people, changed the river, and changed the desert. This relationship continues today and into the future as new opportunities and challenges emerge.

