NATIONAL PARK SERVICE • U.S. DEPARTMENT OF THE INTERIOR

Foundation Document Overview

Great Basin National Park

Nevada

Contact Information

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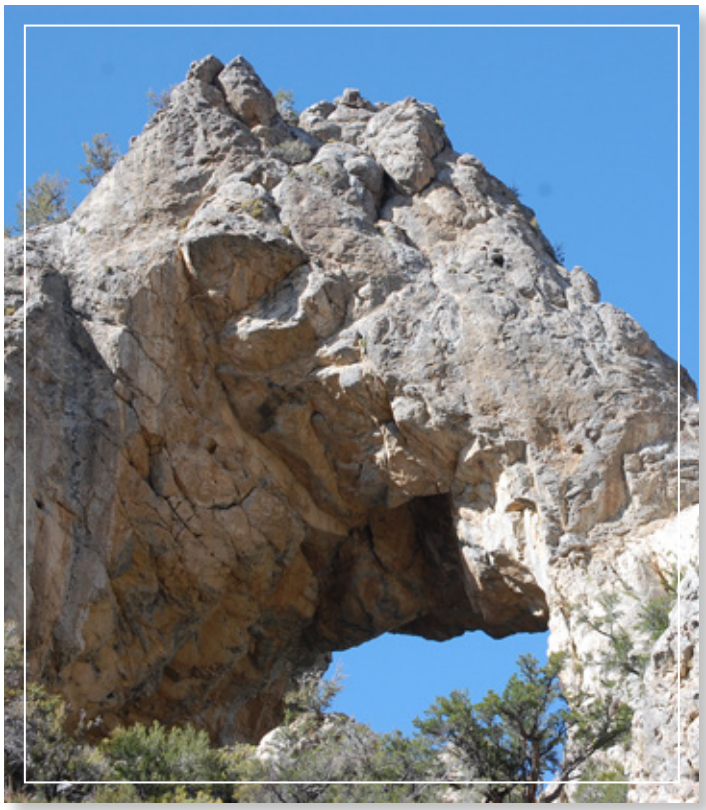
Park Description

Great Basin National Park, established by Congress in 1986, lies within a vast geographic region known as the Great Basin, the only region in North America where water has no outlet to the sea. Consisting of a seemingly endless expanse of mountains and desert valleys, the Great Basin also holds the distinction of being the largest desert in the United States.

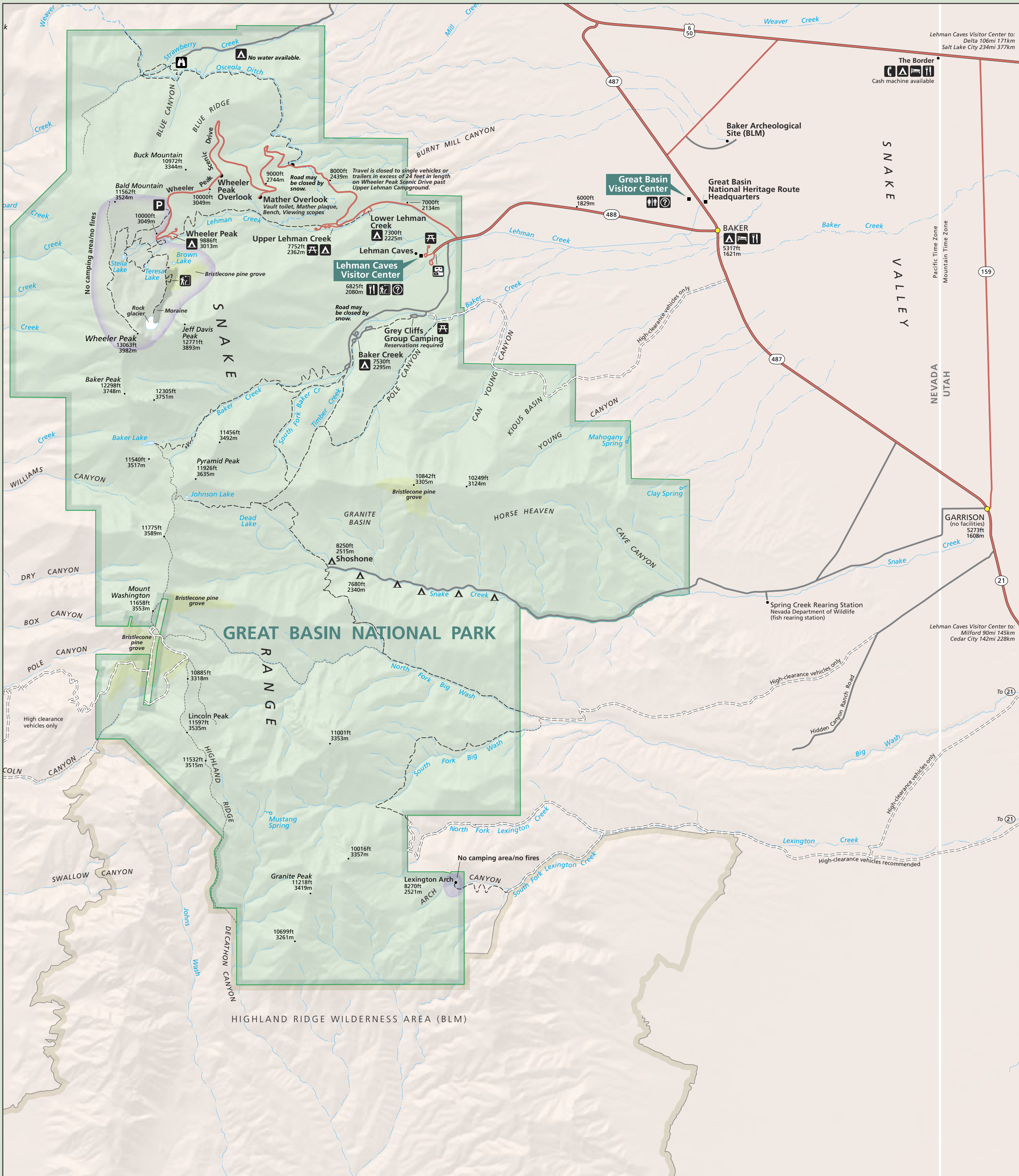
The story of the Great Basin includes ecology, geology, and more than 13,000 years of human history. The park's natural environments range from sagebrush flats on the desert floor, through extensive conifer forests, to the alpine peaks of the South Snake Range, including Wheeler Peak—the second highest mountain in Nevada. The ecology of the South Snake Range is an excellent example of "island biogeography," where the surrounding desert has isolated species in areas of higher elevation, forcing them to develop unique adaptations to survive. This varied landscape is home to a rich diversity of plant and animal communities, including ancient groves of bristlecone pine, the oldest living trees on the planet.



Great Basin National Park showcases an exceptional combination of geological features, with more than 40 known caves, including beautiful Lehman Caves. Archeological sites, rock art, and traditional cultural places in the park illustrate the past and continuing presence of American Indian peoples, including the Shoshone and Paiute. Miners, cattle ranchers, farmers, and sheepherders have left their own distinctive mark on the landscape. Collectively, the park's ecological and geological diversity, remoteness, and challenging environmental conditions highlight the importance of adaptation—for plants and animals, as well as for people—and offer an ideal setting for researchers to observe and study the effects of climate change.

Great Basin National Park is located in a remote area along the eastern border of Nevada with limited services, so visitors must plan ahead. Those who make the journey are rewarded with a variety of recreational and educational opportunities, including rigorous alpine hiking, fishing in backcountry streams, camping, stargazing, sightseeing along the Wheeler Peak Scenic Drive, cave tours, and several other ranger-led programs.

Park Map


GREAT BASIN NATIONAL PARK
SNAKE RANGE
SNAKE VALLEY
HIGHLAND RIDGE WILDERNESS AREA (BLM)
Lehman Caves Visitor Center
6825ft 2080m
Great Basin Visitor Center
Great Basin National Heritage Route Headquarters
BAKER
5317ft 1621m
GARRISON (no facilities)
5273ft 1608m
The Border
Cash machine available
Baker Archeological Site (BLM)
Lehman Caves Visitor Center to: Delta 106mi 171km Salt Lake City 234mi 377km
Lehman Caves Visitor Center to: Milford 90mi 145km Cedar City 142mi 228km
Spring Creek Rearing Station
Nevada Department of Wildlife (fish rearing station)
NEVADA
UTAH
Pacific Time Zone
Mountain Time Zone
Wheeler Peak
13063ft 3982m
Jeff Davis Peak
12771ft 3893m
Wheeler Peak Overlook
10000ft 3049m
Mather Overlook
Vault toilet, Mather plaque, Bench, Viewing scopes
Wheeler Peak Scenic Drive
Wheeler Peak
9886ft 3013m
Upper Lehman Creek
7752ft 2362m
Lower Lehman Creek
7300ft 2225m
Lehman Caves
Grey Cliffs Group Camping
Reservations required
Baker Creek
7530ft 2295m
Shoshone
8250ft 2515m
7680ft 2340m
Strawberry Creek
No water available.
Osceola Ditch
Travel is closed to single vehicles or trailers in excess of 24 feet in length on Wheeler Peak Scenic Drive past Upper Lehman Campground.
Road may be closed by snow.
9000ft 2744m
8000ft 2439m
7000ft 2134m
6000ft 1829m
Buck Mountain
10972ft 3344m
Bald Mountain
11562ft 3524m
10000ft 3049m
No camping area/no fires
Stella Lake
Teresa Lake
Brown Lake
Bristlecone pine grove
Rock glacier
Moraine
Baker Peak
12298ft 3748m
12305ft 3751m
11456ft 3492m
Baker Lake
11540ft 3517m
Pyramid Peak
11926ft 3635m
Johnson Lake
Dead Lake
11775ft 3589m
GRANITE BASIN
10842ft 3305m
10249ft 3124m
HORSE HEAVEN
Clay Spring
Mahogany Spring
Mount Washington
11658ft 3553m
Lincoln Peak
11597ft 3535m
10885ft 3318m
11532ft 3515m
11001ft 3353m
Mustang Spring
10016ft 3357m
Granite Peak
11218ft 3419m
10699ft 3261m
Lexington Arch
8270ft 2521m
No camping area/no fires
High clearance vehicles only
High-clearance vehicles only
High-clearance vehicles recommended
Hidden Canyon Ranch Road
BURNT MILL CANYON
BLUE CANYON
BLUE RIDGE
WILLIAMS CANYON
DRY CANYON
BOX CANYON
POLE CANYON
LINCOLN CANYON
SWALLOW CANYON
DECATHON CANYON
HIGHLAND RIDGE
YOUNG CANYON
KIOUS BASIN
CAVE CANYON
ARCH CANYON
Lehman Creek
Baker Creek
Snake Creek
Weaver Creek
Mill Creek
Timber Creek
South Fork Baker Cr
North Fork Big Wash
South Fork Big Wash
North Fork Lexington Creek
South Fork Lexington Creek
Lexington Creek
Big Wash
Johns Wash
6 50
487
488
159
21
To 21

Purpose

Great Basin National Park preserves an outstanding segment of the Great Basin, including old-growth bristlecone pines, rich biodiversity, Lehman Caves and other distinctive geologic features, expansive scenic views, and 13,000 years of human history for the inspiration, enjoyment, and scientific understanding of current and future generations.

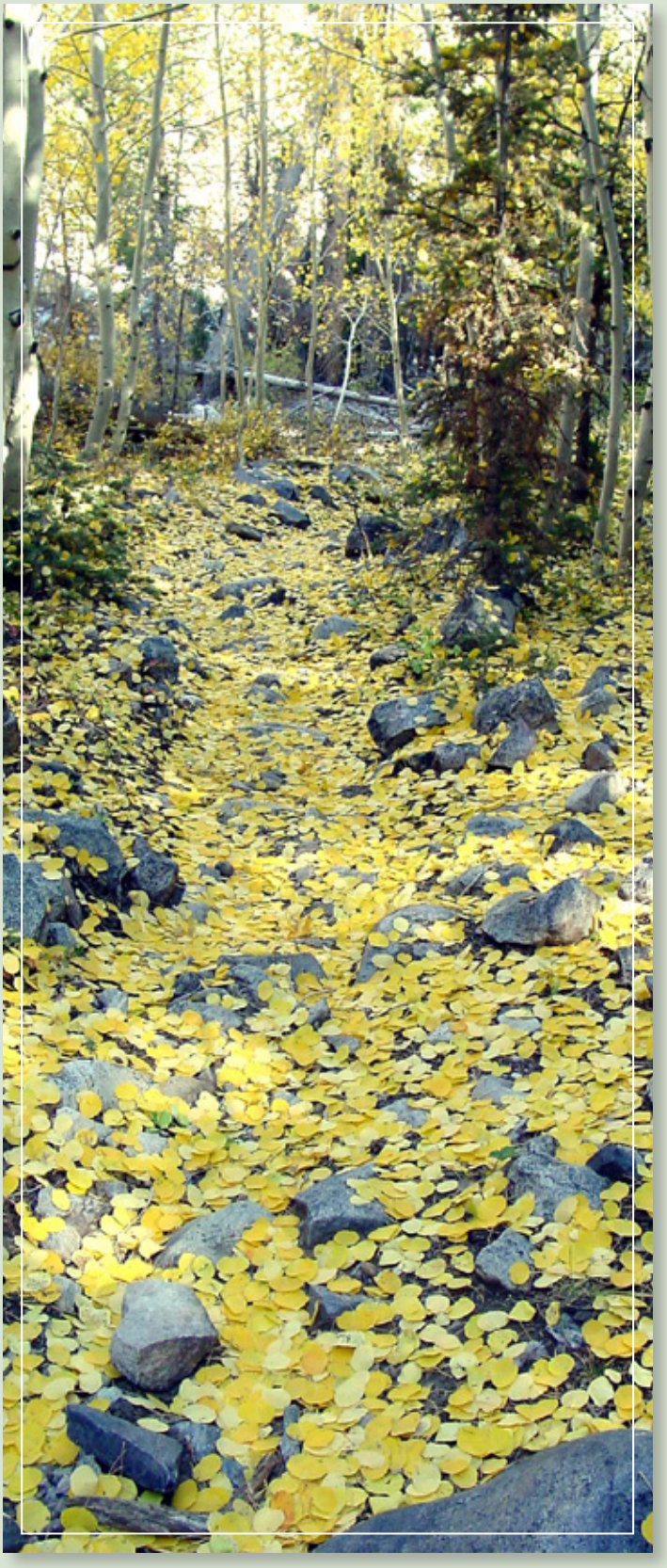
Significance

Significance statements express why Great Basin National Park resources and values are important enough to merit national park unit designation. Statements of significance describe why an area is important within a global, national, regional, and systemwide context. These statements are linked to the purpose of the park unit, and are supported by data, research, and consensus. Significance statements describe the distinctive nature of the park and inform management decisions, focusing efforts on preserving and protecting the most important resources and values of the park unit.

- Great Basin National Park preserves an outstanding segment of the Great Basin geographic region and highlights its four defining characteristics: the Basin and Range topography; the hydrographic Great Basin, where no water flows to the sea; the Great Basin Desert, North America's largest; and the presence of numerous cultures over many millennia.
- With nearly 8,000 feet of vertical relief, Great Basin National Park rises from the desert floor to alpine tundra, protecting exceptional biodiversity and providing an excellent example of island biogeography, where the surrounding desert has isolated plants and animals, forcing them to adapt and evolve.
- Great Basin National Park protects iconic bristlecone pines, the oldest living trees on the planet, a remnant strain of Bonneville cutthroat trout once thought to be locally extinct, and several plant and animal species found nowhere else in the world.

Significance

- Great Basin National Park showcases an exceptional combination of geologic features and processes, including historic Lehman Caves, classic Basin and Range topography, and glacially carved lakes, all crowned by 13,063 foot Wheeler Peak, the highest point in the central Great Basin.
- Great Basin National Park protects and preserves valuable archeological and historical sites, historic structures, and traditional places that remain important to people of diverse backgrounds today. These resources enrich our understanding of people living in and adapting to the challenging mountain desert environment of the Great Basin for more than 13,000 years.
- Due to its remote location, Great Basin National Park provides one of the best opportunities within the national park system for people to experience dark night skies, expansive views, peaceful natural sounds, solitude, and clean air.
- The convergence of ecological factors, including climate, hydrology, pristine air quality, genetic isolation, relict communities, cave environs, and a steep elevation gradient, make Great Basin National Park a prime laboratory for studying global climate change. The park is uniquely positioned to contribute to the national and global understanding of climate change—one of the greatest challenges of our time.



Fundamental Resources and Values

Fundamental resources and values are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to merit primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance.

- **Caves, Karst, and Cave-Forming Processes, Including Lehman Caves.** Great Basin National Park contains the longest, deepest, and highest elevation caves in Nevada and one of the highest concentration of caves in the Great Basin. Because roughly half of the park consists of karst topography, there is a high potential for many additional cave discoveries. Likewise, the geologic and hydrological cave-forming processes are ongoing and protected in the park, yielding a continual development and evolution of caves and cave formations. Lexington Arch is an outstanding example of a remnant cave system. These cave systems support many endemic species such as the Model Cave amphipod and the Lehman Caves pseudoscorpion, as well as several species of bats, including the Townsend's big-eared bat. Caves are also a repository of paleontological resources for study of regional faunal change. Caves used as shelter by people over 13,000 years may contain important archeological information. The park's signature cave, Lehman Caves, was originally protected as Lehman Caves National Monument prior to the establishment of the national park and contains more than 300 shield formations.

- **Water Resources.** Great Basin National Park protects 10 perennial streams in an arid desert environment, 6 sub-alpine lakes, and 425 perennial springs, as well as the interaction of groundwater and surface water in its many caves. The cave-forming processes and endemic cave biota are dependent on these natural hydrological processes. Water resources provide habitat for many aquatic species, including the native Bonneville cutthroat trout, springsnails, and other native aquatic species. Stream corridors and periodic flooding also provide essential conditions for the survival of riparian plant and animal communities in a desert environment. Four of the park's natural springs serve as public water supplies for visitors and staff and the park serves as a watershed for public water supplies in the surrounding valleys.

- **Evidence of Past and Current Climate Change.** Great Basin National Park preserves important resources that document the surrounding climate conditions over the past million years. These resources include: cave formations (speleothems), lake sediment cores, packrat middens, cirques and other glacial features, bristlecone pines, fossils, and evidence of human response to change in archeological sites. These resources provide unique periods of reference from multiple lines of evidence that can help inform projections of future climate patterns and changes.

Fundamental Resources and Values

- **Intact Great Basin Ecosystems.** Great Basin National Park protects a wide range of biological diversity and ecological systems representative of the Great Basin. Due to the almost 8,000-foot vertical gradient in the park, the ecosystems range from desert scrub to montane forests to alpine tundra. Healthy populations of native plants and animals are found throughout the park, including species endemic to the park or the nearby area.
- **Ancient Bristlecone Pines.** Found on windswept ridges and moraines, ancient bristlecone pines are the iconic species of Great Basin National Park. Great Basin National Park protects some of the oldest and most expansive groves of bristlecone pines, the oldest trees on earth, which can survive more than 5,000 years. Their twisted and gnarled forms connect us to an ancient past. As an iconic species, bristlecones are a major draw for visitors, who can access ancient groves via a moderate hike. By cross-dating with dead downed trees, a complete climate record of more than 7,000 years has been compiled. In addition to the famous ancient groves, the park also contains mesic groves at lower elevations, where bristlecones have shorter lifespans, but still may live a thousand years.
- **Solitude.** Visitors to Great Basin National Park have opportunities to experience solitude because of the park's remoteness and limited park development. Abundant trails provide opportunities to experience areas where natural sounds predominate.
- **Scenic Views and Dark Night Skies.** The clean air and unique lack of artificial lighting and development inside and outside of the park enhances the color and contrast of landscape features, allows visitors to see great distances, and provides panoramic views of the naturally dark night skies.
- **Representative Resources of the Great Basin's 13,000 Years of Human History.** Unique and important archeological sites, historic structures, cultural landscapes, and ethnographic resources offer insight into 13,000 years of human interaction with the desert, providing opportunity to understand our place in this Great Basin environment. Over the millennia, native cultures experienced environmental change from Paleo period post glacial landscapes to Archaic adaptions for increasing desert conditions. Fremont farming and foraging and the continuing life of Paiute and Shoshone people are evident in archeological sites, rock art, and traditional cultural places of the park. Historic structures and sites and cultural landscapes reflect the growing economy of the Western United States from the late 1800s through modern times, preserving a tangible link to generational history and connection with larger regional, American, and world history.

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 of the park significances and fundamental resources and values.

- The park showcases the key features of the Great Basin, where rugged topography, inland drainage, and a high cold desert climate create a unique, but vulnerable, landscape.
- Over millions of years the forces of water, mountain building, and climatic change, shaped and then decorated the delicate formations in Lehman Caves; and yet, human activities can change this fragile environment in an instant.
- Abrupt elevation gain from the desert lowlands to the alpine peaks creates distinct habitat zones, nurtures exceptional biodiversity, and isolates plant and animal communities—forcing them to adapt or die.
- As the oldest living trees on the planet, bristlecone pines teach us inspiring stories of survival and longevity under harsh conditions.
- Great Basin National Park offers an increasingly rare opportunity to view a natural dark night sky, provoking contemplation, inspiration, and wonder.
- Great Basin National Park's vast and remote natural setting offers exceptional opportunities for solitude, introspection, and contemplation.
- Capturing more than 13,000 years of human experience, Great Basin National Park presents a continuous tapestry of people living and thriving within this challenging high desert environment.
- Great Basin National Park is a living laboratory for the study of climate change, where that change has shaped the landscape and continues to impact all forms of life.