



# Foundation Document Overview

## Great Sand Dunes National Park and Preserve

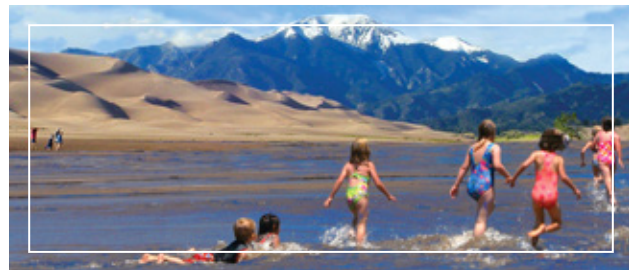
Colorado



### Contact Information

For more information about the *Great Sand Dunes National Park and Preserve Foundation Document*, contact: [grsa\\_superintendent@nps.gov](mailto:grsa_superintendent@nps.gov) or (719) 378-6395 or write to: Superintendent, Great Sand Dunes National Park and Preserve, 11999 State Highway 150, Mosca, CO 81146

## Purpose



*From the crest of the Sangre de Cristo Range to the floor of the San Luis Valley, GREAT SAND DUNES NATIONAL PARK AND PRESERVE provides long-term stewardship of the tallest dunes system in North America and its supportive ecosystems. The park and preserve provides exceptional opportunities to experience, understand, and study the rare convergence of natural processes, associated natural and cultural resources, scenery, and designated wilderness.*



## Significance

Significance statements express why Great Sand Dunes National Park and Preserve 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 Sand Dunes National Park and Preserve contains the tallest dunes in North America, spectacular and diverse, continually shaped by a dynamic wind and water system.
- Great Sand Dunes National Park and Preserve protects a globally significant water- and wind-driven system. Mountain streams provide for the transport of sand, recharge of aquifers, and produce the rare hydrologic phenomenon of surge flow. The wind provides energy to transport the sand, continually shaping the dunes.
- Great Sand Dunes National Park and Preserve provides immersive and diverse opportunities to visitors of all ages for recreation, exploration, and education in the scenic settings of the dunefield, adjoining creek environments, and soaring mountain peaks.



- Great Sand Dunes National Park and Preserve hosts a great diversity of plants and animals, including insect species found nowhere else on Earth. The system, which spans high desert to alpine life zones, supports rare biological communities that are mostly intact and functional.
- The greater dunes system has special importance to people of various cultures through time. It contains some of the oldest known archeological sites in the United States and is recognized for the culturally diverse nature of human use.
- The park and preserve includes two distinct designated wilderness areas. The expansive dunefield of the Great Sand Dunes Wilderness is an easily accessible, highly resilient, and high-density use area, though solitude is readily found through a short hike into the dunefield. The immediately adjacent Sangre de Cristo Wilderness protects the wilderness character of some of the highest peaks in the Rocky Mountains, allowing for primitive forms of recreation and contemplative solitude.
- The knowledge and understanding gained from scientific research at Great Sand Dunes played an important role in the establishment of the park and preserve and continues to inform management, understanding, and protection of the greater dunes system. This dynamic laboratory provides ongoing research opportunities to enhance our understanding of Earth and planetary science.

## 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.

- **Dunes System**
- **Water**
- **Natural Diversity**
- **Human Connections**
- **Visitor Opportunities**
- **Wilderness**

Great Sand Dunes National Park and Preserve contains other resources and values that may not be fundamental to the purpose and significance of the park, but are important to consider in management and planning decisions. These are referred to as other important resources and values.

- **Historic Resources**



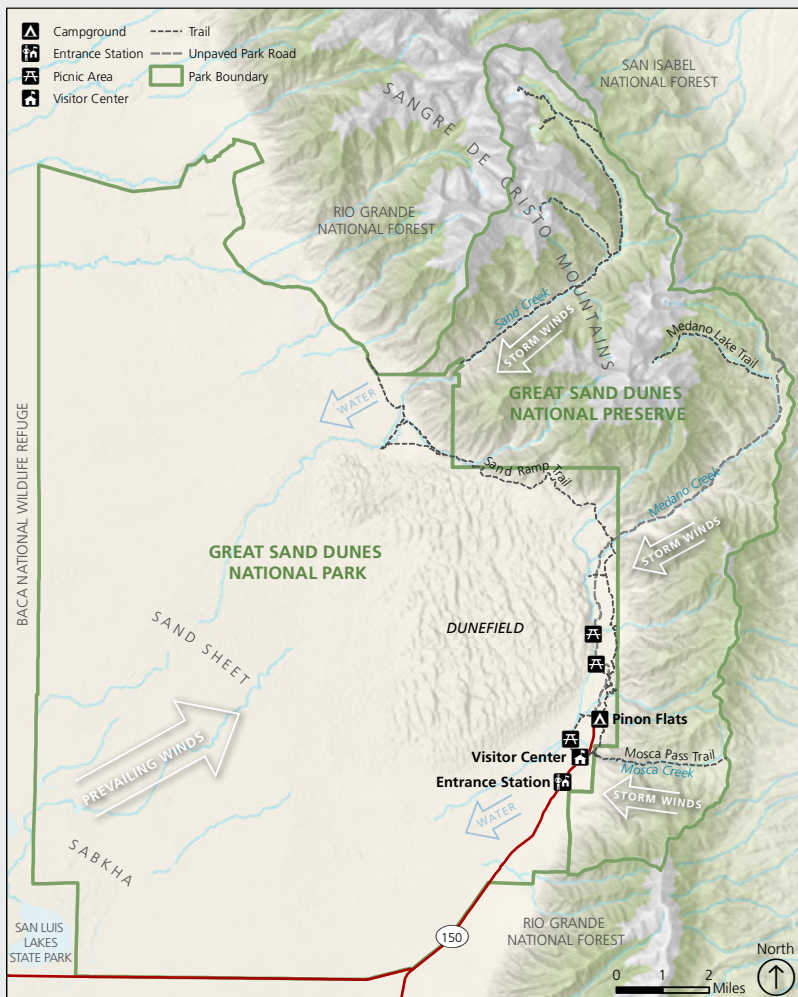
# Description

Great Sand Dunes National Park and Preserve is in the San Luis Valley of south-central Colorado at an elevation of 8,175 feet. The dunes lie on the eastern edge of the valley at the base of the Sangre de Cristo Range. The dunefield is part of the nearly 150,000 total acres of the park and preserve that also protects alpine lakes, tundra, six peaks over 13,000 feet, ancient spruce and pine forests, large stands of aspen and cottonwood, grasslands, and wetlands.

The park is part of a fragile, dynamic system that influences and sustains the tallest dunes in North America. The dunefield, roughly 30 square miles, is a huge deposit of pure, fine-grained sand nestled against the mountains. It sits between Sand and Medano Creeks, which carry sand from the east and north sides of the dunefield and redeposit it where southwesterly winds can transport it back to the dunefield, which is constantly being shaped by wind. The sand sheet surrounds the dunefield and is stabilized by grasses and other low-growing plant life.

The sabkha (a sand deposit hardened by minerals) is west of the sand sheet and is cemented by minerals deposited by seasonal wetlands. Streams originating from high alpine lakes in the adjacent Sangre de Cristo Range recycle wind-blown sand back to and around the dunes and feed underground aquifers. Over time, sand, wind, and water combine and join forces to shape the ever-changing dunefield.

A dramatic diversity of healthy life zones, supported by a lack of artificial noise and light, provides distinct communities of plant and animal life. Just above the dunefield, at the base of the mountains, short shrubs give way to sparse pinyon-juniper woodland. With rising elevation, the pinyon-juniper forest transitions into denser mountain forests of fir, pine, and aspen. Higher still is the subalpine life zone, where hardy stands of spruce and fir mingle with rocky talus slopes. Forest communities of bristlecone and limber pine grow on rocky ridges and outcrops where other tree species are unable to thrive. Near the crest of the mountains is the rocky, snowy alpine zone.



American Indian groups hunted and used wild plant resources near the Great Sand Dunes as early as 10,000 to 12,000 years ago. Through time, the region appears to have been continuously used on an intermittent basis because of its reliable water and plentiful food resources. Beginning around AD 1400 Indian groups that we now know as Apaches, Arapahos, Cheyennes, Comanches, Kiowas, Navajos, and Utes seasonally used the San Luis Valley and its abundant resources.

The Spanish arrived in the San Luis Valley in the late 1500s and their cultural influence remains today. In 1807, explorer Zebulon Pike and his men climbed over the crest of the Sangre de Cristo Range and into the valley. Miners, homesteaders, ranchers, farmers, and migrant workers labored in this valley over the years. In the 1920s, local pride and income from tourists encouraged residents of the area to press for national monument status, which came to pass in 1932. A congressional act in 2000 expanded the monument to a national park and preserve.

Visitors experience sand, sun, wind, and water in this land of elemental contrasts. At the foot of the dunes, Medano Creek's surging waters provide a delightful contrast to the barren sand surface in the spring and early summer. In addition to the dunes, visitors can enjoy mountain forests, expansive grasslands, wildlife viewing, stargazing, and surprisingly accessible designated wilderness opportunities.