



Great Sand Dunes National Park and Preserve
11999 Highway 150
Mosca, CO 81146-9798

Final Summary of General Management Plan/Wilderness Study/ Environmental Impact Statement

April 2007

Dear Friends, Neighbors, and Associates,

I am pleased to provide you with an executive summary for the final General Management Plan / Wilderness Study / Environmental Impact Statement for Great Sand Dunes National Park and Preserve. I want to thank each and every one of you who worked with us during this important process. We believe that this document will provide us with the necessary guidance to manage the park for the next twenty years.

We have chosen to print this executive summary and to attach a CD containing the final GMP to minimize printing and mailing costs. We realize that some of you will prefer the printed version and we will be sending copies to area libraries, other governmental offices, and repositories when they arrive. If you wish to receive a printed copy, they are available upon written request. Please send your request to the superintendent's office at the address on the back page of this summary.

Again, thank you for your ongoing interest and helpful participation in the future of the Great Sand Dunes National Park and Preserve.

Sincerely,

Art Hutchinson, Superintendent
Great Sand Dunes National Park and Preserve



Introduction

The General Management Plan / Wilderness Study / Environmental Impact Statement (GMP/WS/EIS) for Great Sand Dunes National Park and Preserve provides comprehensive guidance for managing the Great Sand Dunes over the next 15 to 20 years. This summary and the full document (on the attached CD) are the culmination of a collaborative process that began in 2003. The planning process explored and evaluated four alternatives, recommended a preferred alternative, and resulted in the final plan.

This general management plan (GMP) is needed because the previous 1977 master plan for Great Sand Dunes National Monument is outdated, and because the park was significantly expanded in 2000. The Great Sand Dunes National Park and Preserve Act (2000) enlarged the national monument almost four-fold, authorized conversion of the national monument to a national park, and established the Great Sand Dunes National Preserve. The wilderness study is included as part of this GMP because of legislation, public interest, and timeliness. The GMP also includes an evaluation of wild and scenic rivers.

Issues addressed by the GMP include protection of fundamental park resources and values, management of new park lands, public access, crowding/overuse, and development and uses in and around the park.

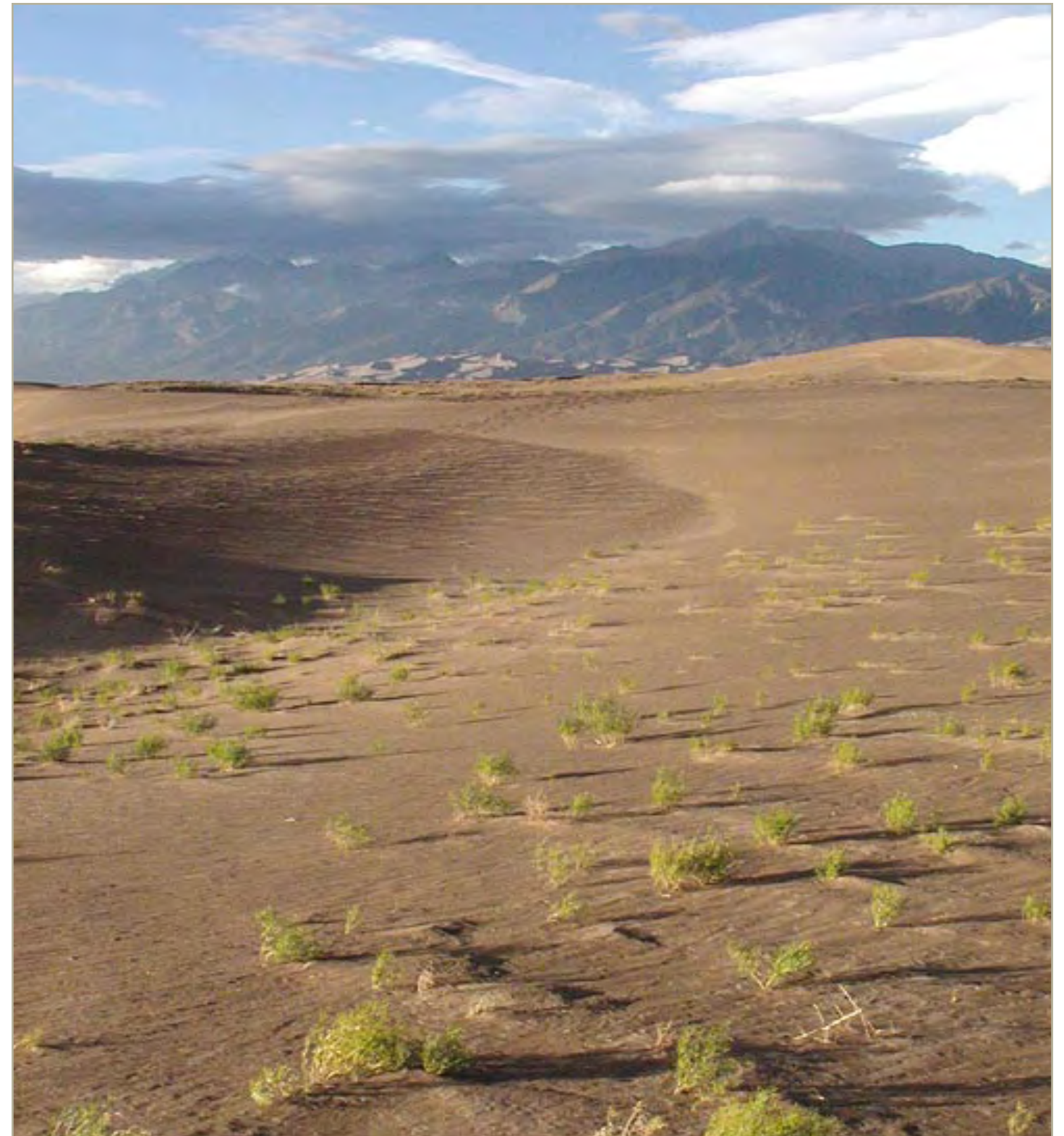
Public involvement for the Great Sand Dunes National Park and Preserve GMP included:

- one preliminary community-based workshop (about 40 participants)
- twelve public meetings in five communities (total attendance about 222)
- four wilderness hearings in four communities (testimony by about 50 individuals)
- five newsletters (334 comments received)
- sixty-day public review of the draft GMP (3,394 comments received)
- quarterly (or more often) Great Sand Dunes Advisory Council public meetings since January 2003
- numerous informal and formal meetings in communities by the advisory council, park superintendent, and park staff

The Great Sand Dunes Advisory Council

The legislation that expanded Great Sand Dunes National Monument also provided for the establishment of the Great Sand Dunes National Park Advisory Council. The advisory council's role is to advise the secretary of the interior (generally via the superintendent of the Great Sand Dunes) regarding the development of the GMP for the national park and preserve.

The advisory council is comprised of 10 members, to be appointed by the secretary, and to include: (1) one member of, or nominated by, the Alamosa County Commission, (2) one member of, or nominated by, the Saguache County Commission, (3) one member of, or nominated by, the "Friends of the Dunes," organization, (4) four members residing in or near the San Luis Valley, and (5) three members of the general public. Throughout the development of the GMP, 13 dedicated individuals served in the 10 positions of the advisory council: council Chairman Robert Ogburn; and members Herry Andrews, Christine Canaly, Hobart Dixon, Bill McClure, Robert Philleo, Paul Robertson, Terry Sandmeier, Michael J. Spearman, Michael Tetrault, George Whitten Jr., Jeff Woodard, and Robert Zimmerman. Their meetings (nearly quarterly throughout the four-year process) were always open to the public. They played a valuable role by sharing their expertise and facilitating public participation. Now that the GMP is complete, their job is done and the council will adjourn.



As the nation's principal conservation agency, the Department of the Interior has the responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses the energy and mineral resources, and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

The complete Final GMP/WS/EIS for Great Sand Dunes National Park and Preserve (CD included on the facing page) analyzes a no-action alternative, the preferred alternative (the plan), and two other action alternatives. The EIS discusses potential consequences of each alternative’s actions on archeological resources, historic character of the built environment, cultural landscapes, vegetation, ecologically critical areas, federal threatened and endangered species, wildlife (including Colorado state-listed species), soils and geological resources, wetlands, water resources, visitor use and experience, scenic resources and visual quality, socioeconomics, health and safety, NPS operations, and operations of other entities and management agencies. It is important that the complete document be reviewed prior to implementing actions in the plan to ensure appropriate consultation and compliance with applicable laws and policies.

The planning process included public involvement, agency consultation, and tribal consultation. *Federal Register* notices, public meetings in the vicinity of the park and preserve, newsletters, and letters were the primary means of communication with the public. Tribal consultation established a foundation for discussing the type of relationship that should exist between all parties in the future. Tribal consultations included the Jicarilla Apaches, the Oglala Lakotas, the Pueblo of Laguna, the Comanches, and the Southern Utes. Agency consultations included the USFS (Rio Grande National Forest) and the U.S. Fish and Wildlife Service (San Luis Valley National Wildlife Refuge) regarding northern access issues, the U.S. Fish and Wildlife Service (Colorado field office) regarding threatened and endangered species, the Colorado state historic preservation office regarding cultural resources, and others.

Great sand DUNES

Primary Changes to the Preferred Alternative
(from draft to final plan)

- Public vehicle access from Baca National Wildlife Refuge is not an option for the life of this plan, a determination made in consultation with the U.S. Fish and Wildlife Service. The backcountry access zone was changed so that it no longer connects with the park/refuge boundary. If public vehicle access to the new park and USFS lands in the north is provided, it would have to be via Saguache County roads through the Baca Grande subdivision. This issue will be further addressed in an ongoing, collaborative planning process.
- The potential routes for public vehicle access for backcountry use through the northwest portion of the park were further modified. First, the eastern terminus of the Cow Camp Road route was moved farther north of the Deadman Creek riparian corridor to avoid potential impacts. Secondly, an existing two-track located north of Cow Camp Road has been identified as another option for access. The backcountry access zone in the northwest portion of the park has been modified to reflect these changes. These options, plus a USFS study of Liberty Road, provide flexibility for the ongoing collaboration, but only one route would eventually be implemented.
- Acreage recommended for wilderness designation was increased by 2,062 acres (new total now 53,013 acres). The additional acreage is located near the eastern boundary of Cow Camp Road, and northeast of Medano Ranch.

The plan is built on a foundation for planning and management that identifies what is most important about the park.

Purpose, Significance, and Fundamental Resources and Values

The intentions of Congress in creating the park as a unit of the national park system, which take precedence over all other considerations, are expressed by the park’s purpose, significance, and fundamental resources and values.

Park Purpose

Park purpose statements convey the reasons for which the park was set aside as part of the national park system. They are grounded in a thorough analysis of park legislation and legislative history, and provide fundamental criteria against which the appropriateness of plan recommendations, operational decisions, and actions are tested. The purpose of Great Sand Dunes National Park and Preserve is to:

- Preserve spectacular and unique sand dunes and their high-elevation watersheds, and perpetuate the entire system for the benefit and enjoyment of present and future generations. Protect the sand deposits associated with the dune mass and the groundwater system on which the dunes and wetlands systems depend.
- Provide long-term protection of the geological, hydrological, ecological, scenic, scientific, cultural, wilderness, educational, wildlife, and recreational resources of the area. Preserve the remarkable biodiversity evident in the landscape from the valley floor to the mountain crest.
- Provide opportunities for visitors to experience, understand, enjoy, and gain a sense of stewardship of the park’s natural and cultural resources.
- Facilitate research to support park management and to promote scientific knowledge and education.

Park Significance

Park significance statements capture the essence of the park’s importance to the nation’s natural and cultural heritage. They describe the park’s distinctiveness and describe why the area is important within regional, national, and global contexts. This helps park managers focus their efforts and limited funding on protection and enjoyment of attributes that are directly related to the purpose of the park. Great Sand Dunes National Park and Preserve:

- Contains the tallest dunes in North America and one of the most fragile and complex dune systems in the world.
- Protects a globally significant water- and wind-driven system, which includes creeks that demonstrate surge flow—a rare hydrologic phenomenon.
- Provides tremendous scenic settings that, for many, provoke strong emotional responses. These settings (including massive dunes surrounded by alpine peaks, a desert valley, creeks flowing on the surface of the sand, pristine mountains, and rural rangeland) offer spacious relief from urban America, exceptional opportunities for solitude and quiet, and a remarkably unspoiled day and night sky.
- 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.
- Contains some of the oldest (9,000+ years before present) known archeological sites in the United States. The dunes have been identified as having special importance by people of various cultures, and the area is recognized for the culturally diverse nature of human use.
- Provides special opportunities for recreation, exploration, and education in the highly resilient dune mass and adjoining creek environments.

Fundamental Resources and Values

Fundamental resources and values are systems, processes, features, visitor experiences, stories, and scenes that deserve primary consideration in planning and management because they are critical to maintaining the park's purpose and significance.

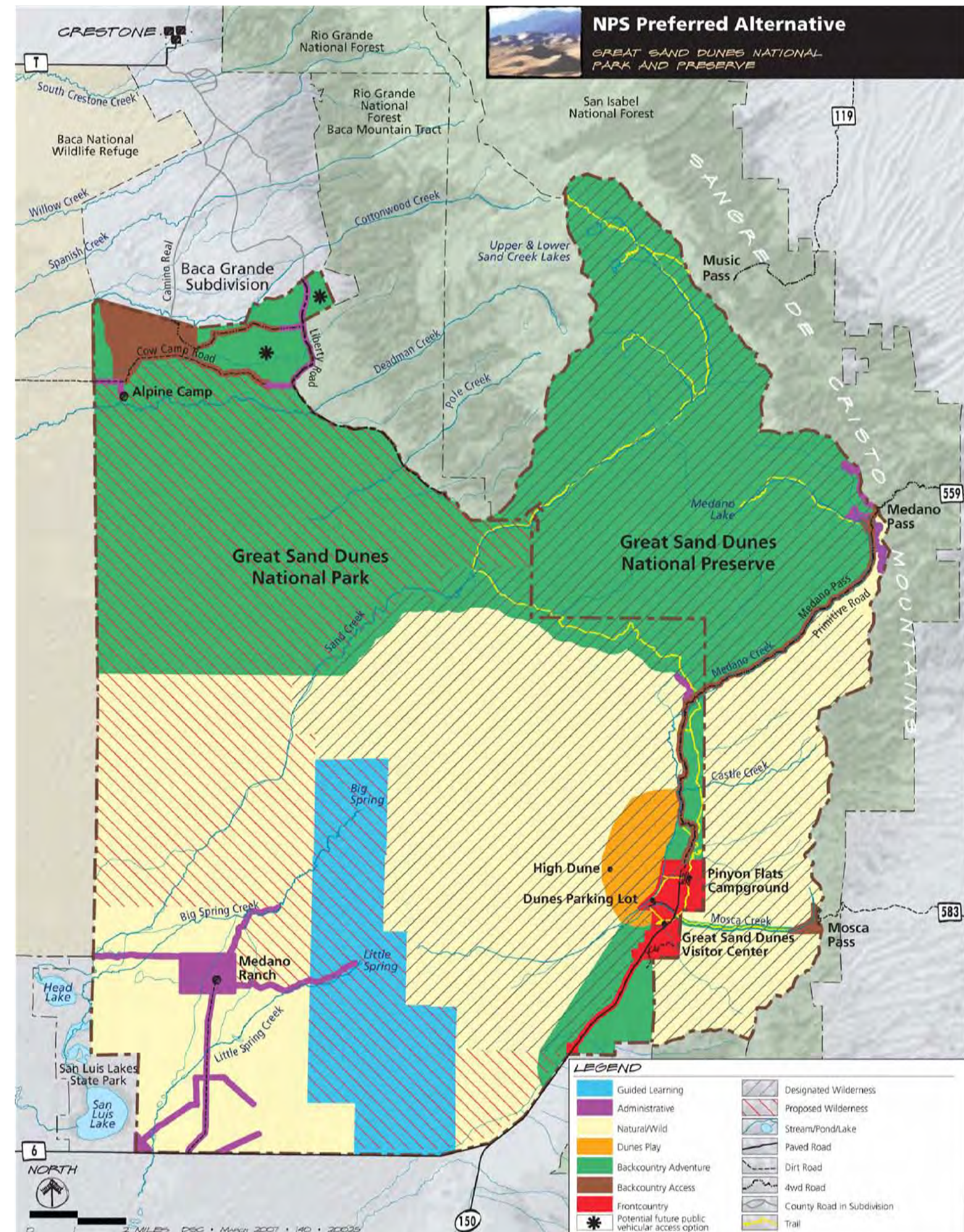
Dunes System

- **dunefield (complex, tall, inland dunes)**—natural transport of sand by streams must be protected
- **sand sheet (relatively flat sand sheet stabilized by vegetation)**—natural vegetation patterns must be protected
- **sabkha (sand deposit hardened by minerals)**—groundwater aquifer must be protected
- **Sand Creek (transports and recirculates sand)**—watershed and groundwater aquifer must be protected
- **Medano Creek and its surge flow (transports and recirculates sand)**—watershed and groundwater aquifer must be protected
- **groundwater aquifers (integral to sabkha, vegetation on sand sheet, surface water flows)**—natural water table levels must be maintained



Natural Diversity

- **insects that are endemic to the Great Sand Dunes**—there are at least seven known endemic species
- **Medano Creek's outstanding water quality and closed system**—serves as a genetic refuge/breeding area for native fish such as the state-endangered Rio Grande sucker and the Rio Grande cutthroat trout, a state species of special concern
- **unhybridized narrowleaf cottonwoods**—located along creeks (e.g., Sand Creek), trees up to 340 years old (oldest cored) that conserve a native gene pool
- **sand sheet wetlands**—(e.g., interdunal ponds, Big Spring Creek, Little Spring Creek); increase the variety of flora and fauna
- **balanced and sustainable populations of native wildlife and plants**—important habitat and natural processes, including fire, must be protected
- **tundra**—highly erosive, fragile, highly vulnerable to damage from visitor use



Great Sand Dunes Management Zones



Frontcountry Zone: These are higher use areas providing structured opportunities to enjoy and learn about the park. Scenic driving, taking short walks, and attending interpretive programs are common visitor activities. Facilities include visitor centers, paved roads, formal campgrounds, surfaced trails, operational facilities, etc. Encounters with others are likely, especially around developed facilities. Natural processes and landscapes may be altered to restore damaged areas, to preserve or maintain cultural resources, or to direct visitor use to avoid widespread resource impacts. This zone occurs in nonwilderness areas.



Dunes Play Zone: These are natural areas for visitor enjoyment of the dunes and Medano Creek, two of the park’s prime resources. Sand and water play and climbing the high dunes are common visitor activities. Encounters with others are likely, especially during busy visitor times, but it’s possible to find solitude within a quarter mile of the dunes parking area. The only facilities are small signs. Camping is not permitted. Lasting evidence of recreational use is not apparent (evidence is temporary). This zone occurs primarily in wilderness areas.



Backcountry Access Zone: These are generally unpaved vehicle travel routes or trailheads from which backcountry adventure or natural/wild areas can be accessed. The routes are surrounded by mostly natural landscapes and conditions. Congestion due to numbers of vehicles occurs only on summer holiday weekends. There is little to no roadside damage to vegetation and soils from vehicles passing each other. Parts of the natural landscape may be altered to protect resources from impacts (e.g., installing culverts under roads). This zone may include primitive campgrounds with basic amenities such as tent pads and vault toilets. This zone occurs in nonwilderness areas.



Guided Learning Zone: In these areas, visitor use is permitted only with a guide or escort to protect sensitive resources or to enhance visitor safety. Visitor activities include guided interpretive and educational tours on horseback, by foot, or (in nonwilderness areas) by vehicle. Parts of the natural landscape may be altered (e.g., designated trails and backcountry toilets installed) to protect resources from negative impacts. This zone occurs primarily in wilderness areas.



Backcountry Adventure Zone: These are natural landscapes with a few facilities such as designated trails, backcountry campsites, and backcountry patrol cabins. Encounters with other hikers are common on trails during busy visitor periods, but solitude can always be found in off-trail areas. Hiking, backcountry camping, and horseback riding are common activities. Resources may be manipulated, when necessary, to restore damaged areas, to preserve or maintain cultural resources, or to direct visitor use to avoid resource impacts. This zone occurs in wilderness or nonwilderness areas.



Natural/Wild Zone: These are relatively remote, trailless, natural areas that provide great opportunities for challenge and adventure. The expectation for solitude is high and can be found in most of this zone. Hunting (preserve only), hiking, backcountry camping, and horseback riding are common activities. Natural and cultural resources are generally unaltered and unaffected by human influences. This zone occurs in wilderness or nonwilderness areas.

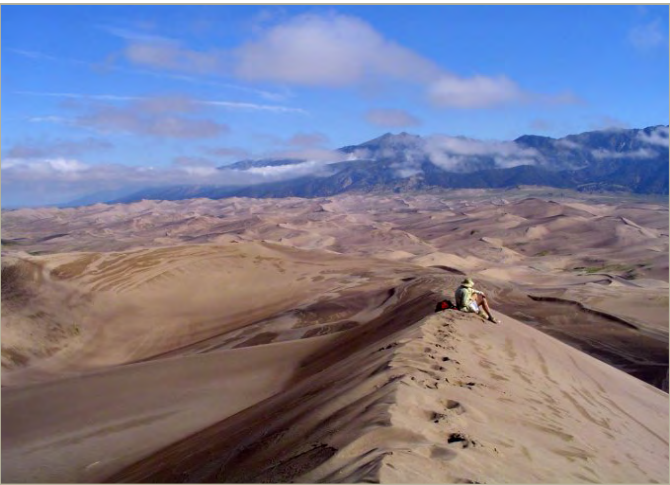


Administrative Zone: The primary purpose of these areas is to support management and administration of the park (or other mandated activities such as the Closed Basin Project), but these areas are generally open to visitor traffic on foot and horseback with some limitations in the vicinity of Medano Ranch. Natural processes and resources may be altered to support park or other operations; the degree of alteration would be dependent on need. This zone occurs in nonwilderness areas.

Fundamental Resources and Values

Human Connections

- **early archeological sites**—associated with Folsom Early Man, ~9,000 years before present
- **dunes area**—important to American Indians and other people; e.g., traditional hunting and gathering place, sacred and spiritual place
- **scarred ponderosa pines**—inner bark of peeled trees used by native peoples for food (mid-1800s)—one cluster of trees (Indian Grove) is listed in the National Register of Historic Places
- **contemporary community ties to the dunes**—emotional connection, support for park expansion



Visitor Opportunities

- **climbing and descending the high dunes**
- **experiencing surge flow, playing in Medano Creek near the foot of the dunes**
- **seeing the heavens (Milky Way, stars, planets, comets, etc.) at night**—dark night sky must be protected
- **viewing the dune mass with backdrop of the high peaks and from the mountains**—key elements: views from west and south, viewing the dunes from the mountains, changing light conditions—shadow and contrast especially impressive in early morning and evening—air quality and undeveloped mountain slopes must be protected
- **seeing wildlife in its natural setting (e.g., elk, pronghorn, deer)**—important habitat must be protected
- **learning about the dunes system, its components and dynamic nature**—includes research, education, and stewardship opportunities
- **experiencing quiet, solitude, isolation in a wilderness environment**
- **driving in sand on Medano Pass primitive road**—(high-clearance four-wheel drive required)

Summary of the Plan

The GMP provides overall guidance for the new national park and preserve. Desired future conditions, or goals, are identified that describe the ideal conditions that the National Park Service is striving to attain. They guide actions taken by park staff on such topics as natural and cultural resource management, wilderness management, park facilities, and visitor use management. Strategies describing actions that may be taken by park staff to achieve the desired conditions are also identified. The parkwide desired conditions and strategies, combined with actions that are specific to the plan, form the complete GMP for the Great Sand Dunes.

Several actions were deemed common to all action alternatives in the draft plan, including the preferred alternative, and those actions are also part of this final plan. They include cooperation with neighbors, acquisition of subsurface rights, a position that a NPS-managed bison herd would not likely occur during the life of this plan, a Medano Ranch irrigation study, no permitted use of ORVs, a hunter access permit system, elimination of unnecessary roads, treatment of historic structures in the backcountry, sanitation facilities, a fee program, use of Alpine Camp, and boundary adjustments. The National Park Service will continue to work with partners and park neighbors to develop management strategies for elk and bison.

Most of Great Sand Dunes National Park and Preserve will remain wild and undeveloped. Management zones have been established for park lands. Management zones define specific resource conditions, visitor opportunities, and management approaches to be achieved and maintained in each area of the park. Sensitive resources will be protected by actions such as the designation of a “guided learning zone” around Big and Little springs.

A formal wilderness study was conducted as part of this planning process. The wilderness study

recommends the addition of about 53,000 acres within the national park expansion lands to the National Wilderness Preservation System.

No significant changes will occur in the main dunes area. However, future vehicle congestion will be addressed by construction of trails to reduce vehicle use, a modest shuttle bus at peak times, and other management techniques, rather than by expanding parking areas. Medano Ranch, managed by The Nature Conservancy, may eventually come under NPS management. The National Park Service would seek partnerships to maintain structures and provide scheduled visitor activities and educational opportunities at Medano Ranch headquarters.

The NPS preferred alternative for access to the northern portion of the park is a road that would enter the park at the boundary of the Baca Grande sub-division, and terminate in a trailhead with a 10 to 15 vehicle parking area near the mountain front. The road and trailhead would be located north and outside of the Deadman Creek riparian corridor. In consultation with the National Park Service, the U.S. Forest Service (USFS) will study the need for (and impacts of) providing public vehicle access to USFS lands via Liberty Road or via a route through the park that would connect with Liberty Road. These options (see asterisks on NPS “Preferred Alternative” map) are not evaluated in this GMP and would require a separate public joint (NPS/USFS) environmental analysis study.

Capital costs for the NPS preferred alternative are estimated at \$16.5 to \$21.2 million. Major costs include a new trailhead, trails, access road, relocating the nonhistoric entrance station, bicycle lanes, removal of a bison fence, and utility and structural improvements at Medano Ranch. Implementation of these projects is largely contingent upon future funding by Congress. Partners will be sought for projects such as the Medano Ranch improvements.



Summary of the Plan

General Emphasis	<ul style="list-style-type: none">Dunes area remains the main focus of visitor activity.New visitor opportunities in northwest backcountry and at Medano Ranch.New horseback and trail options.Seek cooperative or joint facilities (e.g., access routes, trailheads, ranger stations).
Management Zones	<ul style="list-style-type: none">Most of the park and preserve are zoned backcountry adventure zone or natural/wild zone.Frontcountry zone and dunes play zone—continue existing activities.Guided learning zone provides new visitor opportunities and protects sensitive resources.Backcountry access zone provides vehicular routes to backcountry destinations.Administrative zone for NPS operations and scheduled activities at Medano Ranch.
Wilderness	<ul style="list-style-type: none">Most undeveloped areas of new park land recommended for wilderness (53,000 acres).
Medano Ranch Headquarters	<ul style="list-style-type: none">Maintain and adaptively use historic structures for NPS administrative purposes and open to the public on a limited basis for scheduled activities. Seek partnerships for maintaining structures and providing visitor activities and educational opportunities.
New Trails and Trailheads	<ul style="list-style-type: none">New trailhead in northern part of the national park and new trails in backcountry adventure zone areas.Link park trails to outside trails where possible.New trails in guided learning zone.Cooperative trailheads around park if possible (e.g., Oasis, Baca National Wildlife Refuge, San Luis Lakes State Park).
Public Access to North Part of Park	<ul style="list-style-type: none">Small backcountry trailhead (10–15 vehicles) within backcountry access zone improves foot, horseback, and vehicle access to public lands in the northwest.No campground in this area.Vehicular access route to trailhead to be determined in the future.Public vehicle access options to new USFS lands will be considered in a separate, future environmental analysis process.
Main Dunes Area Carrying Capacity	<ul style="list-style-type: none">Possible modest shuttle system to transport visitors from remote parking areas to the dunes during peak summer weekends.
Backcountry Carrying Capacity	<ul style="list-style-type: none">New trails in backcountry adventure zone accommodate use in areas that tolerate it.Guided learning zone protects areas around Big Spring and Little Spring.Sensitive areas (Upper and Lower Sand Creek lakes, Deadman Creek, Big Spring and Little Spring) are monitored and adaptively managed.Backcountry areas that join other public lands are managed in collaboration with those agencies.
Dogs	<ul style="list-style-type: none">Within the national park, leashed dogs are allowed only within the frontcountry, dunes play, and backcountry access zones, and the Liberty Road administrative zone.Leashed dogs generally allowed in the national preserve.Unleashed dogs allowed for hunting (permitted only within the national preserve).
Bison	<ul style="list-style-type: none">An NPS-managed free-roaming bison herd is not likely to occur during the life of the GMP. If additional bison habitat becomes available at some time in the future, this option can be reconsidered by the National Park Service.

