INTRODUCTION

The purpose of wilderness designation, which is accomplished solely by congressional action, is to preserve and protect wilderness characteristics and values over the long term while providing opportunities for solitude or primitive and unconfined recreation. With passage of the 1964 Wilderness Act (16 USC 1131 *et seq.*), Congress declared that it is national policy to secure for present and future generations the benefits of enduring wilderness resources.

As of 2005, Great Sand Dunes National Park and Preserve had two designated wilderness areas within its boundaries. The Great Sand Dunes Wilderness Area, comprised primarily of the main dunes within Great Sand Dunes National Park, was established in 1976 by Public Law 94-567 and amended in 1978 by Public Law 95-625. The Sangre de Cristo Wilderness Area was established by the Colorado Wilderness Act of 1993 (Public Law 103-77). In the year 2000, the portion of the Sangre de Cristo Wilderness that is now within the national preserve was administratively transferred from the USFS to the National Park Service (Great Sand Dunes Act of 2000). Total designated wilderness in the national park and preserve amounts to about 75,584 acres.

Wilderness was one of several very important resources identified in the Great Sand Dunes Act of 2000, which authorized expansion of the park. A decision was made to include a wilderness study with the GMP that would review new lands not already designated as wilderness for possible inclusion in the National Wilderness Preservation System. The study consisted of two phases: (1) determining which lands within the expanded park were eligible for wilderness recommendation based on their characteristics, and (2) deciding which of the wilderness-eligible lands identified in the first phase should be recommended for wilderness designation.

WILDERNESS DEFINITION

The Wilderness Act of 1964 (Public Law 88-577) describes and defines a wilderness area as follows:

> *"A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in the Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which 1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; 2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; 3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and 4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."*

BRIEF DESCRIPTION OF THE STUDY AREA

The study area, which is located to the immediate northwest, west, and southwest of the former Great Sand Dunes National Monument, consists of lands that were added to the park unit by the Great Sand Dunes Act of 2000. The area is bounded on the north by the expanded park boundary, on the south by County Rd 6N and SH 150; on the west by the Baca National Wildlife Refuge; and the east by the Sangre de Cristo and Great Sand Dunes Wilderness areas. Land cover types of the area include sand dune shrub complex, greasewood fans and flats, sandy areas, desert shrub, and foothills and mountain grassland.

Except for the narrow Medano Pass primitive road corridor and portions of the Hudson and Medano irrigation ditches, the entire Great Sand Dunes National Preserve, established in 2000, is part of the Sangre de Cristo Wilderness. Thus, there was no need to evaluate the national preserve for wilderness eligibility. Park lands that were originally assessed as unsuitable for wilderness because of nonconforming or incompatible uses must be re-evaluated if the non-conforming uses have been terminated or removed. Land uses within the pre-2000 national monument boundary have not changed appreciably since the Great Sand Dunes Wilderness was established in 1976, so the planning team did not reassess these lands.

The study area includes portions of Medano Ranch and the former Baca Ranch. Most of the study area has been grazed; bison grazing continues on the Medano Ranch portion. Historically there has been little to no public use of the land and there are few formal roads. With the exception of the Closed Basin Project, evidence of human use consists mainly of ranching-related elements such as ranch buildings, fences, stock tanks, and windmills.

WILDERNESS CRITERIA AND ELIGIBILITY

The first phase of the wilderness study was to conduct an initial determination of wilderness eligibility, which is a factual determination of whether a park contains lands that possess wilderness character. The Wilderness Act, departmental regulations at 43 CFR Part 19, secretarial orders, NPS management criteria, and NPS memoranda[9] prescribe the criteria that are used to make an objective determination of whether wilderness-eligible lands exist in a park. In general, roadless areas exhibiting characteristics of the Wilderness Act that are at least 5000 acres in size (or of sufficient size to make management as wilderness practicable) are considered suitable for wilderness. Using these criteria, an evaluation of the study area was conducted by the National Park Service. The evaluation concluded that there are nearly 51,000 acres of wilderness-eligible lands within the study area. Details are provided in the paragraphs below.

Nonfederal Lands or Interests

Nonfederal lands or interests in land within a roadless or undeveloped part of a park do not necessarily disqualify the area from eligibility. The wilderness eligibility assessment should consider whether the nonfederal lands are: (1) a small proportion of the roadless area, (2) dispersed throughout the roadless area, or can they be segregated by prospective boundary shifts, (3) inaccessible or subject to likely

[9] A June 10, 2002, National Park Service memo from the Associate Director, Park Operations and Education, titled "Clarifying the Wilderness Review Process" provided detailed guidance on conducting a wilderness suitability assessment. This memo is an insert to Reference Manual 41: *Wilderness Preservation and Management*.

development, and (4) likely to remain nonfederal indefinitely.

Most of the park expansion area south of the former Baca Ranch is state trust land or private land owned by The Nature Conservancy. This area is part of what is known as Medano Ranch. These nonfederal lands are not likely to remain so indefinitely. There's a good chance that The Nature Conservancy will donate or sell the portion of Medano Ranch within the park boundary to the National Park Service within the life of the GMP. Also, NPS managers are working with the state and the BLM on a land exchange that would transfer state lands within the park boundary to the National Park Service. For these reasons, the National Park Service concluded that most of the Medano Ranch lands located within the national park are wilderness-eligible. Exceptions are discussed in the sections that follow.

The northern portion of the study area is part of what was formerly the Baca Ranch. The National Park Service owns the surface rights, but subsurface mineral rights are held y by a private entity, Lexam Explorations, Inc., which has engaged in gas and oil exploration activities during the past decade. Based on the land's geologic properties, the National Park Service Geologic Resources Division believes that the likelihood of gas and oil production occurring on these lands is relatively low. The National Park Service is likely to eventually pursue purchase of these mineral estates (23,835 acres). For this reason, and because the National Park Service owns the surface rights, the National Park Service concluded that most of this land is wilderness-eligible.

Three additional private parcels totaling 52 acres are located within the national park. One parcel is east of the former Baca Ranch and north of the former national monument. The others are located near the park's main entrance. The National Park Service plans to pursue purchase of these parcels, assuming the owners are willing to sell. Thus, the National Park Service concluded that these lands are wilderness-eligible.

Closed Basin Project

The Closed Basin Project pumps and delivers unconfined groundwater and available surface flows in the Closed Basin to the Rio Grande River via underground pipelines and a 42-mile conveyance channel. A portion of the Closed Basin Project is located within the southwestern part of the study area. The project is likely to remain in operation, and the Bureau of Reclamation will require continued access to pipelines and production/monitoring wells. New wells or pipelines may be needed in the future. The National Park Service concluded that the presence and ongoing operation of the Closed Basin Project renders the Closed Basin portion of the park ineligible for wilderness.

Roads

For the purposes of wilderness eligibility, lands containing unimproved dirt roads or tracks are "roadless areas." Roadless areas include lands containing improved dirt roads that are not passable by four-wheeled vehicles (not four-wheel *drive* vehicles) intended primarily for highways.

Not including roads associated with the Closed Basin Project (see above), there are two improved roads within the park expansion area that are passable by four-wheeled vehicles intended for highway use. The first, referred to in this document as Cow Camp Road, is located in the northwest corner of the park expansion

area, just south of the Baca Grande subdivision. This road, which has an east-west orientation, is associated with oil and gas exploration activities on the former Baca Ranch. Because the area north of Cow Camp Road is less than 5,000 acres in size, the planning team concluded that this portion is not wilderness-eligible. The second road, which has a north-south orientation, bisects the southwest corner of the park expansion area. The southern-most portion of the road is located within the Closed Basin Project area. This road is associated with Medano Ranch and occurs in combination with ranch structures, corrals, above-ground electric lines, and human-made Closed Basin features. The National Park Service concluded that the southwest portion of the park expansion area is not wilderness eligible due to the presence of Medano Ranch Road and a concentration of other human-made features.

Several other roads exist on lands within the expanded park boundary. These roads are not generally passable by four-wheeled passenger vehicle. Most are no more than "two tracks," and others are too sandy to remain passable with any more than occasional use. A small aircraft landing strip, no longer in use, parallels SH 150 in the southeastern corner of the park expansion area. The strip is unpaved and is substantially unnoticeable. The National Park Service concluded that these roads and the abandoned air strip do not disqualify park expansion lands from wilderness eligibility.

Grazed Lands

Lands that have been grazed may be considered eligible for wilderness designation if, at the time of the assessment, the effects of these activities are substantially unnoticeable or if their wilderness character could be maintained or restored through appropriate management actions. Most of the lands within the park expansion area have been grazed by cattle and/or bison. In these areas, a number of stock tanks fed by flowing groundwater wells are present. One well pump is powered by a windmill. Grazing ended on the former Baca Ranch portion with its transfer to NPS management in late 2004. Bison grazing continues on the Medano Ranch portion. The effects of grazing are substantially unnoticeable and wilderness character could be restored through management actions (e.g., capping wells below ground and removing stock tanks), so the National Park Service concluded that grazing and associated features do not render these lands ineligible for wilderness.

Mined Lands, etc.

Lands that have been mined may be considered eligible for wilderness designation if, at the time of the assessment, the effects of these activities are substantially unnoticeable or if their wilderness character could be maintained or restored through appropriate management actions. Historic mine sites (e.g., Liberty) are located at the periphery, or northern edge, of the park expansion area. The mine/prospect sites and pond/quarry sites are located in the far northeast corner of the park expansion area. Although evidence of mining, prospecting, and quarrying is apparent, the effects are generally small in scale and are limited primarily to changes in landform. Structures, concrete foundations, and other obvious human-made features are generally absent. The National Park Service believes that the wilderness character of these areas could be restored if the land's original contours were reestablished. The small flumes or weirs are part of the national park's water rights quantification and monitoring program. The National Park

Service concluded that the mine and prospect sites, ponds, quarries, and flumes/weirs do not disqualify park expansion lands from wilderness eligibility.

Structures and Cultural Features

Areas may contain cultural resource features such as historic buildings and still be included in wilderness, provided the features are not primary attractions for park visitors. Immediately adjacent to and south of the Cow Camp Road is a small area called Alpine Camp. The camp, which dates to the mid-1900s, includes a small cabin, corrals, and fences. The camp does not disqualify the area from wilderness eligibility.

The only other buildings within the park expansion area are the Medano Ranch structures. Most structures on the ranch date to the late 1880s, but others (bison shed, barns, etc.) are much more recent. These structures do not necessarily render this corner of the park ineligible for wilderness. However, the structures occur in combination with an improved road, aboveground power lines, and other human-made features. As discussed above, this combination and concentration of features renders this area of the park ineligible for wilderness.

Fences and earthen ditches are present on some portions of the park expansion lands. As land uses change due to park expansion in the future, some or all of the fences and ditches may no longer be needed. Fences could be removed and earthen ditches could be filled so that wilderness character is restored. The National Park Service concluded that such features do not disqualify park expansion lands from wilderness eligibility.

WILDERNESS OPTIONS ANALYZED IN THIS STUDY

Two wilderness options are analyzed in detail in this GMP: (1) recommend no new lands for wilderness, and (2) recommend most eligible lands for wilderness. A third wilderness option (recommend moderate amount of wilderness) was considered during initial stages of the planning process, but dismissed from detailed analysis when the matching GMP alternative was dropped. The remaining two wilderness options in this study cover the range of impacts that would be expected; impacts of the dismissed option would be somewhere in between.

The two GMP alternatives that include no new wilderness recommendation are the no-action alternative and the three public nodes—new dunes experiences alternative (see chapter 2 for alternative maps and descriptions). The no-action alternative includes this option because it portrays baseline (existing) conditions in December 2004, soon after the Baca Ranch became federally managed. The three public nodes—new dunes experiences alternative includes this option because it proposes more new facilities and public uses in various areas of the park.

The two GMP alternatives that do include a wilderness recommendation are the dunefield focus—maximize wildness alternative and the NPS preferred alternative (see chapter 2 for alternative maps and descriptions). The dunefield focus—maximize wildness alternative recommends wilderness for most eligible lands because it offers the wildest conditions of the four GMP alternatives. The NPS preferred alternative recommends wilderness for most eligible lands because, after studying the various options, the National Park Service concluded that

wilderness designation is the best long-term management strategy for these lands.

WILDERNESS RECOMMENDATION

According to NPS *Management Policies* (2001), a wilderness recommendation may include two categories: (1) lands recommended for immediate wilderness designation, and (2) potential wilderness additions. The former are lands that are wholly federally owned and are fully qualified to become wilderness. The latter are lands that are surrounded by or adjacent to lands proposed for wilderness designation but that do not themselves qualify for immediate designation due to temporary, nonconforming, or incompatible conditions. Potential wilderness additions, if so authorized by Congress, will become designated wilderness upon the Secretary of the Interior's determination that the nonconforming use has ended.

This study recommends that approximately 50,951 acres within Great Sand Dunes National Park be ultimately recommended for wilderness. This includes 4,556 acres recommended for immediate wilderness designation, and 46,395 acres of potential wilderness additions (table G-1 and figure G-1). A narrow corridor of wilderness-eligible land was excluded from the recommendation because the National Park Service believes a setback (200 feet from the centerlines of County Lane 6 and SH 150) is needed to allow for potential future utility, drainage, fence, and roadway improvements.

Wilderness-eligible lands recommended for immediate wilderness designation are those that are wholly in National Park Service ownership (former BLM-managed lands transferred to the National Park Service in 2000).

Wilderness-eligible lands recommended for potential wilderness additions include:

1. Medano Ranch lands currently owned by The Nature Conservancy (possible transfer to the National Park Service within 5–7 years)

2. former Baca Ranch lands owned by the federal government, but for which subsurface mineral rights are privately held (long-term objective for National Park Service to acquire)

3. Medano Ranch lands currently owned by the state of Colorado (land exchange underway; completion expected within 1–2 years)

4. lands held in other private ownership (three parcels, acquisition timeline varies)

Table G-1. Great Sand Dunes Wilderness Status and Recommendations

	Category Subtotals (acres)		Area (acres)
Designated by Congress			**75,584**
Designated Wilderness		73,143	
Potential Wilderness – NPS ownership, not yet converted		750	
Potential Wilderness—private subsurface mineral ownership		1,691	
Wilderness Recommendation			**50,951**
Recommended Designated Wilderness-- NPS ownership		4,556	
Recommended Potential Wilderness		46,395	
The Nature Conservancy ownership	5,611		
Private subsurface mineral ownership	23,835		
State ownership	16,897		
Other private ownership	52		
Total Designated and Recommended Wilderness			**126,535**

Implications of Managing Lands Recommended for Wilderness

Park lands that are recommended for wilderness designation in this GMP are to be managed as wilderness until such time as Congress specifically designates new wilderness for these lands (*NPS Management Policies* 2001). That is, management decisions for lands recommended for wilderness will be made in expectation of eventual wilderness designation. This also applies to potential wilderness, meaning it will be managed as wilderness to the extent that existing nonconforming conditions allow.

Wilderness management plans are typically developed to guide preservation, management, and use of NPS wilderness areas. Such plans are developed with public involvement and contain specific, measurable wilderness management objectives for preservation of wilderness values as specified in the Wilderness Act and NPS Management Policies. Wilderness management plans, which are often combined with backcountry management plans, articulate management actions such as regulations, monitoring, and permit systems.

Management decisions affecting wilderness must be consistent with the "minimum requirements" concept. This is concept is a documented process used to determine whether administrative activities affecting wilderness resources or visitor experiences are necessary in wilderness, and if so, how to minimize impacts from such activities. Parks are to complete a minimum requirements analysis on administrative practices and equipment uses that have the potential to affect wilderness character.

Recreational uses of NPS wilderness are to be of a type and nature that enable the areas to retain their primeval character and influence; protect and preserve natural conditions; leave the imprint of man's work

substantially unnoticeable; provide outstanding opportunities for solitude or primitive and unconfined types of recreation; and preserve wilderness in an unimpaired condition. Public use of motorized equipment or any form of mechanical transport is prohibited, except as provided for in specific legislation. Operating a motor vehicle or possessing a bicycle in wilderness is prohibited.

Scientific activities are to be encouraged in wilderness. Even scientific activities (including inventory, monitoring, and research) that involve a potential impact to wilderness resources or values (including access, ground disturbance, use of equipment, and animal welfare) are allowed when the benefits of what can be learned outweigh the impacts on wilderness resources or values. However, all such activities must be evaluated using the minimum requirement concept.

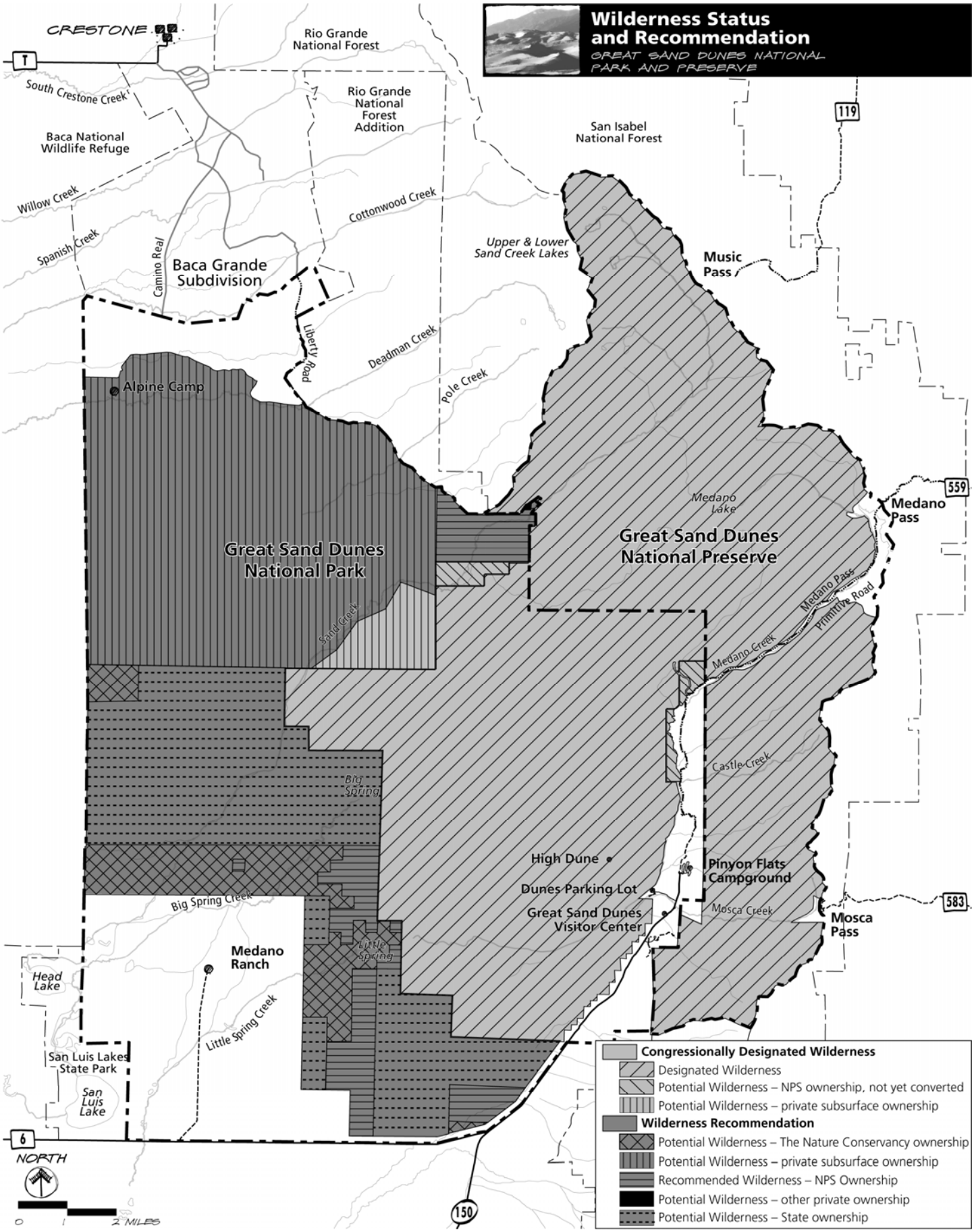
Wilderness designation does not extinguish valid existing private rights such as ownership, grazing, or valid mineral interests. The validity of private rights within wilderness is determined on a case-by-case basis. Valid private rights in wilderness are administered in keeping with the specific conditions and requirements of the valid right.

Grazing is not curtailed in wilderness areas simply because an area is designated as wilderness. Where practical alternatives do not exist, maintenance or other activities may be accomplished through the occasional use of motorized equipment. The use of motorized equipment should be based on a rule of practical necessity and reasonableness. Motorized equipment need not be allowed for activities that can reasonably be accomplished on horseback or foot. Motorized equipment uses are normally permitted in those portions of a wilderness area where they had occurred prior to the area's designation as wilderness or are established by prior agreement, and where such use would not have a significant adverse effect on the natural environment. (Congressional Grazing Guidelines, House Report 96-1126).

The National Park Service will seek to remove or extinguish valid mining claims and non- federal mineral interests in wilderness through authorized processes, including purchasing valid rights. Unless and until mineral interests and mining claims within NPS wilderness are eliminated, they must be managed pursuant to existing National Park Service regulations, policies, and procedures. (See 36 CFR Part 9, Subpart A, for mineral development on mining claims; 36 CFR Part 9, Subpart B, for nonfederal oil and gas development; and 43 CFR Parts 3100 and 3500, for federal mineral leasing.).

Conclusion

Of the approximately 69,164 acres added to Great Sand Dunes National Park in the year 2000, roughly three-quarters was determined wilderness-eligible because it possesses wilderness characteristics and values. Of the wilderness-eligible land, most (50,951 acres total) is recommended for wilderness. This includes 4,556 acres (8.9%) for immediate wilderness designation, and 46,395 acres (91.1%) for potential wilderness additions.


Wilderness Status and Recommendation
GREAT SAND DUNES NATIONAL PARK AND PRESERVE
CRESTONE
T
South Crestone Creek
Rio Grande National Forest
Rio Grande National Forest Addition
San Isabel National Forest
119
Baca National Wildlife Refuge
Willow Creek
Spanish Creek
Camino Real
Baca Grande Subdivision
Cottonwood Creek
Upper & Lower Sand Creek Lakes
Music Pass
Liberty Road
Deadman Creek
Pole Creek
Alpine Camp
Great Sand Dunes National Park
Great Sand Dunes National Preserve
Medano Lake
559
Medano Pass
Medano Pass Primitive Road
Sand Creek
Medano Creek
Castle Creek
Big Spring
High Dune
Pinyon Flats Campground
Dunes Parking Lot
Great Sand Dunes Visitor Center
Mosca Creek
583
Mosca Pass
Big Spring Creek
Little Spring
Medano Ranch
Head Lake
Little Spring Creek
San Luis Lakes State Park
San Luis Lake
6
NORTH
0 1 2 MILES
150
Congressionally Designated Wilderness
Designated Wilderness
Potential Wilderness – NPS ownership, not yet converted
Potential Wilderness – private subsurface ownership
Wilderness Recommendation
Potential Wilderness – The Nature Conservancy ownership
Potential Wilderness – private subsurface ownership
Recommended Wilderness – NPS Ownership
Potential Wilderness – other private ownership
Potential Wilderness – State ownership

APPENDIX H: WILD AND SCENIC RIVER EVALUATION

Introduction

This appendix presents the results of a National Park Service study of potential wild and scenic rivers in Great Sand Dunes National Park and Preserve. The purpose of this analysis was to determine if selected creeks, all or in part, should be recommended for inclusion in the national wild and scenic rivers system, based on their resources and Wild and Scenic Rivers Act eligibility guidelines.

In October 1968, the freshly penned Wild and Scenic Rivers Act pronounced "…that certain selected rivers of the Nation, which with their immediate environs, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environs shall be protected for the benefit and enjoyment of future generations."

The wild and scenic river study process, as described in *the National Wild and Scenic Rivers System: Final Revised Guidelines for Eligibility, Classification, and Management of River Areas* (1982), is composed of three steps:

- Determine if rivers are eligible as components of the national wild and scenic rivers system.
- Determine the appropriate classification of rivers.
- Determine whether the eligible segments would make suitable additions to the national wild and scenic rivers system.

Eligibility Evaluation

To be eligible for inclusion in the national wild and scenic rivers system, a study segment must be free flowing and the stream corridor must exhibit at least one outstandingly remarkable resource value.

"Free flowing" may be defined as existing in a largely natural condition without major impoundments, diversions, or other modifications of the waterway. It should be understood that there are no specific requirements for minimum flow for eligible segments and flows are considered sufficient for eligibility if they sustain or complement the outstandingly remarkable values for which the segment would achieve designation. Rivers with intermittent flows have been included in the national system.

Outstandingly remarkable values are scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values that are professionally judged to be regionally significant – those that stand out as among the best on a regional basis. All resources assessed should be directly river related, or owe their location or existence to the river. Features that are exemplary (outstanding examples of common types), as well as those that are rare or unique, should be considered.

Outstandingly Remarkable Values

An assessment of potential outstandingly remarkable values was made by National Park Service professionals for the major creeks of the park: Mosca Creek, Medano Creek, Castle Creek, Sawmill Creek, Buck Creek, Little Medano Creek, Cold Creek, Sand Creek, Pole Creek, Deadman Creek, Big Spring Creek, and Little Spring Creek. Resources evaluated include biological resources, paleontological resources, cultural resources, as well as scenic and recreational values. The following sections describing the outstandingly remarkable values are very brief. Other sections of this

document (e.g., Chapter 3: Affected Environment) contain more comprehensive information about these streams.

Mosca Creek

Mosca Creek headwaters originate on Mosca Pass and along the drainage there occur numerous prehistoric and historic cultural resources. These include archeological sites, wickiups (temporary shelters made from tree saplings), culturally peeled ponderosa pine trees, ruins of a toll road, and the historic town site of Montville. Mosca Pass was a primary prehistoric and historic route in and out of the San Luis Valley from the east.

The scenic vistas of the Great Sand Dunes are excellent from the Mosca Creek corridor. This corridor also provides recreational opportunities for hiking, camping, birding, and photography.

Mosca Creek's water quality meets standards for the "Outstanding Waters" designation (USGS Publication WRIR #02-4196). The National Park Service holds a federally reserved water right for a designated flow amount for Mosca Creek.

Medano Creek

Medano Creek is essential to the formation, development, and recycling of sand to perpetuate the Great Sand Dunes system as both the impressive east and southeast faces of the Great Sand Dunes are the result of the interaction of Medano Creek and the dunes. Through "surge" or "pulsating flow," the waters return vast quantities of wind-blown sand back to the valley floor. The transport of sand by Medano Creek is a key role of this aeolian/hydrologic system. The mechanism by which Medano Creek transports sand is quite unique and the surging behavior or Medano Creek is considered by U.S. Geological Survey hydrologists to be one of the best examples of this phenomenon in the world. In addition, Medano Pass serves as a "funnel" for air flow and affects wind and sand deposition, which also influence dune formation.

There are numerous prehistoric and historic sites along Medano Creek. One of the largest stands of culturally scarred ponderosa pine tress grows in close proximity to the creek and this grove is on the NRHP. There are several pioneer homesteads along the creek including the Herard homestead, which was settled in the 1870s, and inhabited for many years. Medano Pass was another prehistoric and historic route into the San Luis Valley from the east.

Medano Creek and its floodplain support a diversity of wildlife habitats. The CDOW has reclaimed the drainage for the native species of Rio Grande cutthroat trout and the federally endangered Rio Grande sucker. Since Medano Creek has no outlet, it represents an ideal drainage for a refuge for both rare fish species.

In addition to the plains pocket mouse (*Perognathus flavescens relictus*), which is a mammal subspecies considered rare for the Great Sand Dunes National Park and Preserve area, bighorn sheep, black bear, mountain lion, elk, deer, bobcat, and beaver are also observed along Medano Creek.

The world class surge flow of Medano Creek causes waves that create a beach-like environment for park visitors. During the spring and summer runoff, thousands of visitors derive great enjoyment from playing in the surging waters of the creek. The corridor of Medano Creek provides outstanding recreational opportunities for hiking, camping, sightseeing, four-wheeling,

photography, birding, and fishing and hunting in the preserve.

In addition to the recreational value of the creek's waters, the water quality of Medano Creek has been tested and identified by the USGS (National Water Quality Assessment Program) as attaining the highest water quality in the upper Rio Grande drainage. As such, Medano Creek's water quality meets standards for the "Outstanding Waters" designation (USGS Publication WRIR #02-4196). The National Park Service holds a federally reserved water right for a designated flow amount for Medano Creek.

Castle Creek

Castle Creek flows into Medano Creek and, although Castle Creek is ephemeral, during periods of significant flow it displays remarkable surge flow. In fact, it is the site at which the explanation for surge flow was developed.

The Castle Creek corridor provides exceptional and unique opportunities to view the Great Sand Dunes. Recreation opportunities include hiking and sightseeing. However, these are typical activities for the region.

Castle Creek's water quality meets standards for the "Outstanding Waters" designation (USGS Publication WRIR #02-4196). The National Park Service holds a federally reserved water right for a designated flow amount for Castle Creek.

Sawmill Creek

The Sawmill Creek corridor provides exceptional and unique opportunities to view the Great Sand Dunes. Recreational opportunities include hiking and sightseeing. However, these are typical activities for the region.

Sawmill Creek's water quality meets standards for the "Outstanding Waters" designation (USGS Publication WRIR #02-4196). The National Park Service holds a federally reserved water right for a designated flow amount for Sawmill Creek.

Buck Creek

The plains pocket mouse, which is a mammal subspecies considered rare and endemic for the Great Sand Dunes National Park and Preserve area, was observed by the Colorado Natural Heritage Program at the confluence of Medano and Buck creeks.

The creek corridor provides exceptional and unique opportunities to view the Great Sand Dunes. Recreational opportunities include hiking and sight-seeing. However, these are typical activities for the region.

The National Park Service holds a federally reserved water right for a designated flow amount for Buck Creek.

Little Medano Creek

The channel of Little Medano Creek is located in a sand-filled valley. Therefore, the creek carries a large amount of sand to its confluence with Medano Creek, which has world class surge flows.

Little Medano Creek provides suitable habitat for the rare Rio Grande cutthroat trout. Even though there are times of the year when the creek surface flows are disconnected from Medano Creek, there is a viable population of Rio Grande cutthroat trout in the drainage year-round. There are also frequent sightings of wildlife along Little Medano Creek.

Exceptional scenic values are present along Little Medano Creek, including a waterfall and outstanding views of the Great Sand Dunes. There are frequent opportunities for viewing wildlife along the creek drainage. Additional recreation opportunities include backpacking, hiking, photography, and camping. Natural quiet has been monitored along Little Medano Creek and found to be outstanding.

Little Medano Creek's water quality meets standards for the "Outstanding Waters" designation (USGS Publication WRIR #02-4196). The National Park Service holds a federally reserved water right for a designated flow amount for Little Medano Creek.

Cold Creek

The Cold Creek corridor provides outstanding scenic vistas of the Great Sand Dunes. There are frequent opportunities for viewing wildlife along Cold Creek. There are opportunities for wilderness recreation such as backpacking, hiking, horseback riding, photography, and camping due to the remoteness of the drainage.

Cold Creek's water quality meets standards for the "Outstanding Waters" designation (USGS Publication WRIR #02-4196). The National Park Service holds a federally reserved water right for a designated flow amount for Cold Creek.

Sand Creek

This creek was evaluated in two segments because the character of the drainage changes significantly where it flows west from the Sangre de Cristo Mountain Range.

Sand Creek (from the headwaters to the mountain front)

The upper Sand Creek supports a narrowleaf cottonwood riparian community, designated by the Colorado Natural Heritage Program as globally rare. The narrowleaf cottonwood trees along this drainage represent a pure strain and there is no hybridization with other cottonwoods. The trees are considered some of the oldest cottonwoods in the west, having been dated up to 340 years old. The upper Sand Creek corridor provides outstanding scenic vistas of the Great Sand Dunes. Recreation opportunities include backpacking, hiking, horseback riding, photography, fishing, and camping. Sand Creek's water quality meets standards for the "Outstanding Waters" designation (USGS Publication WRIR #02-4196).

Sand Creek (from the mountain front to where it exits the park)

Sand Creek is the largest drainage in the park and, through the transport of sand, plays an important role in the development of the dunes. Surge flow does occur in Sand Creek, but not as consistently as in Medano Creek. Sand Creek borders the western and northwestern portion of the Great Sand Dunes, forming the western boundary of the dune mass.

There are also important historic resources along this stretch of Sand Creek (e.g., Stamp Mill).

There are frequent sightings of wildlife along lower Sand Creek, which supports high quality wildlife habitat. The lower Sand Creek corridor provides outstanding scenic vistas of the Great Sand Dunes. Recreation opportunities include backpacking, hiking, photography, fishing, and camping.

Pole Creek

The status of Pole Creek was considered eligibility unknown, because there has not yet been enough information gathered to evaluate it for the wild and scenic rivers program.

Deadman Creek

The Colorado Natural Heritage Program has identified the Deadman Creek corridor as a potential conservation site with a biodiversity rank of B2 (Very High Significance). The Deadman Creek corridor provides outstanding scenic vistas of the Great Sand Dunes and Sangre de Cristo mountain front. Recreation opportunities include backpacking, hiking, photography, fishing, camping, and wildlife viewing.

Big Spring Creek

Big Spring Creek flows from Indian Springs, a designated Colorado natural area administered by Colorado State Parks. It is a very unique hydrologic system and critical water source located in the sand sheet west of the Great Sand Dunes. Big Spring Creek is a gaining system in an area where most of the other drainages are losing systems. Groundwater, in the form of seeps and springs, contributes flows and as a result, Big Spring Creek is a non-flooding creek with constant flow.

Big Spring Creek is also an important archeological area.

Big Spring Creek represents an exceptional focal point for wildlife, including waterfowl. Fathead minnow (*Pimphales promelus*) are found in Big Spring Creek. *Cleome multicaulus* (slender spiderflower), a wetlands plant identified as a globally rare species by the Colorado Natural Heritage Program, is found in the riparian habitat along Big Spring Creek.

The Big Spring Creek corridor provides outstanding scenic vistas of the Great Sand Dunes. Recreational opportunities include backpacking, hiking, photography, and camping. Wildlife viewing opportunities along Big Spring Creek are excellent.

Little Spring Creek

Cleome multicaulus (slender spiderflower), a wetlands plant identified as a globally rare species by the Colorado Natural Heritage Program, is found in the riparian habitat along Little Spring Creek. This creek is also an important archeological area. Little Spring Creek has been channelized along most of its length, from its spring origin to where it enters a playa lake, approximately 4 miles.

Summary of Eligibility Evaluation

Ten of the 12 evaluated creeks, or segments thereof, were considered eligible for inclusion in the national wild and scenic river system: Mosca Creek, Medano Creek, Castle Creek, Sawmill Creek, Buck Creek, Little Medano Creek, Cold Creek, Sand Creek on and west of the mountain front, Deadman Creek, and Big Spring Creek. These creeks were found to be free flowing and exhibited at least one outstandingly remarkable value. They are further evaluated for classification and suitability below. The two that were not considered eligible are Pole Creek and Little Spring Creek. Pole Creek is located in the expansion area of Great Sand Dunes National Park. There has not yet been enough information gathered to evaluate its eligibility for Wild and Scenic River designation at this time. Little Spring Creek exhibits outstandingly remarkable values, but is considered ineligible for designation

as a wild and scenic river because it has been channelized along most of its length.

Classification

Classification is based on development conditions existing in the river corridor at the time of designation. The Wild and Scenic Rivers Act provides three classifications defined as follows:

- Wild river areas are generally inaccessible, except by trail. Wild river areas do not contain roads, railroads, or other provisions for vehicle travel within the river area. The existence of a few inconspicuous roads leading to the boundary of the river area at the time of study does not necessarily bar wild river classification. Wild rivers are free of impoundments with watersheds or shorelines essentially primitive and waters unpolluted. These represent the vestiges of primitive America.

- Scenic river areas are free of impoundments, with shorelines largely undeveloped, but accessible in places by roads.

- Recreational river areas are readily accessible by road or railroad, may have some development along their shorelines, and may have undergone some impoundment or diversion in the past.

Table H-2 lists the proposed classification for the 10 creeks considered eligible for inclusion in the national wild and scenic rivers system.

Suitability

The suitability phase of the study evaluates whether designation as a national wild and scenic river would be the best way to manage eligible rivers. Suitability considerations include the environmental and economic consequences of designation and the manageability of the river, if designated.

Each of the above 10 eligible creeks has at least one exceptional natural, cultural, or recreational resource value, and most of the creeks have two to several of these values. Therefore, these creeks would make a valuable addition to the national wild and scenic rivers system.

Conclusion

The above-listed eligible creeks within the Great Sand Dunes National Park are free flowing and contain outstandingly remarkable values that make them eligible for inclusion in the national wild and scenic river system. Their freedom from impoundments and relatively undeveloped character qualify them as either a wild or scenic river area, depending on each individual proposed classification.

Table H-1. Proposed Classifications

Creek	Classification
Mosca Creek	Scenic
Medano Creek	Scenic
Castle Creek	Wild
Sawmill Creek	Wild
Buck Creek	Wild
Little Medano Creek	Wild
Cold Creek	Wild
Sand Creek (from the headwaters to the mountain front)	Wild
Sand Creek (from the mountain front to where it exits the park)	Wild
Deadman Creek	Wild
Big Spring Creek	Scenic

APPENDIX I: CONSULTATION LETTERS

United States Department of the Interior
NATIONAL PARK SERVICE

Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, Colorado 81146-9798
Phone 719-378-6300 Fax 719-378-6310

In Reply Refer to:
1470A16

January 5, 2005

Georgianna Contiguglia
State Historic Preservation Office
Colorado Historical Society
The Colorado History Museum
1300 Broadway
Denver, CO 80203

Dear Ms. Contiguglia:

The National Park Service is in the process of developing a *general management plan* for Great Sand Dunes National Park and Preserve. We are just beginning our scoping and data gathering efforts for this plan. As set forth in 36 CFR 800 and the Programmatic Agreement between the Advisory Council on Historic Preservation, the National Conference of State Historic Preservation Officers and the National Park Service, we would like to initiate the consultation process.

The Great Sand Dunes *general management plan* will provide management direction for resource stewardship, visitor understanding and appreciation, partnerships, facilities, and operations for the next 15-20 years. As part of this planning effort the NPS will conduct a wilderness *review*, which is required by law and National Park Service policy. The *wilderness review* will examine areas within the expanded Great Sand Dunes boundary to determine whether they are suitable for, and should be proposed as, wilderness.

Great Sand Dunes National Monument was established in 1932 to preserve lands containing spectacular and unique sand dunes and additional features of scenic, scientific, and educational interest for the benefit and enjoyment of future generations. The Great Sand Dunes National Park and Preserve Act of 2000 enlarged Great Sand Dunes National Monument from 39,000 acres to over 100,000 acres, and also established Great Sand Dunes National Preserve, which exceeds 40,000 acres. The purpose of the 2000 legislation was to protect the entire Great Sand Dunes natural system.

In fulfillment of requirements of the National Environmental Policy Act, the National Park Service has initiated the preparation of an environmental impact statement (EIS) that will evaluate potential impacts of the planning alternatives on natural and cultural resources, and other relevant topics. The process and documentation required for preparing the EIS will be used to comply with Section 106 of the National Historic Preservation Act. In accordance with section 800(3)(c) of the Advisory Council on Historic Preservation's regulations (36 CFR 800), I am providing your office advance notification of the NPS intention to use the general management planning and EIS process to meet its Section 106 obligations.

To assist Great Sand Dunes National Park and Preserve and the National Park Service Intermountain Region staff in refining issues to be addressed in the *general management plan* and *wilderness review*, please provide us with written comments concerning interests within your agency's responsibilities. A copy of the most recent newsletter is enclosed for your information.

Your response within 30 days from receipt of this letter will be greatly appreciated. Should you have any questions regarding this request or would like to request a specific consultation, please contact me (719) 378-6311 or Fred Bunch at (719) 378-6361 or by electronic mail, at fred_bunch@nps.gov. Thank you for your participation in this planning effort.

Sincerely,

Steve W. Chaney
Superintendent

Enclosure

United States Department of the Interior
NATIONAL PARK SERVICE

Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, Colorado 81146-9798
Phone 719-378-6300 Fax 719-378-6310

In Reply Refer to:
1470 A16

January 18, 2005

Ms. Jane Crisler
Advisory Council on Historic Preservation
12136 Bayaud Avenue
Suite 330
Lakewood, CO 80226

Subject: Consultation for the Great Sand Dunes National Park and Preserve Draft General Management Plan/Wilderness Review/Environmental Impact Statement

Dear Ms. Crisler:

The National Park Service has a *general management plan* and *wilderness review* underway for Great Sand Dunes National Park and Preserve. As set forth in 36 CFR 800 and the Programmatic Agreement between the Advisory Council on Historic Preservation, the National Conference of State Historic Preservation Officers and the National Park Service, we would like to continue the consultation process.

The Great Sand Dunes *general management plan* will provide management direction for resource stewardship, visitor understanding and appreciation, partnerships, facilities, and operations for the next 15-20 years. As part of this planning effort the NPS will conduct a *wilderness review*, which is required by law and National Park Service policy. The *wilderness review* will examine areas within the expanded Great Sand Dunes boundary to determine whether they are suitable for, and should be proposed as, wilderness. Preliminary scoping began in January, 2003. The planning team has been analyzing park resources and developing alternatives with public involvement. The enclosed newsletters document the effort to date. A draft General Management Plan /Wilderness Review/Environmental Impact Statement will be printed and distributed in January of 2006.

Great Sand Dunes National Monument was established in 1932 to preserve federal land containing spectacular and unique sand dunes and additional features of scenic, scientific, and educational interest for the benefit and enjoyment of future generations. The Great Sand Dunes National Park and Preserve Act of 2000 enlarged Great Sand Dunes National Monument from 39,000 acres to over 100,000 acres, and also established Great Sand Dunes National Preserve, which exceeds 40,000 acres. The purpose of the 2000 legislation was to protect the Great Sand Dunes natural system.

In fulfillment of requirements of the National Environmental Policy Act, the National Park Service has initiated the preparation of an environmental impact statement (EIS) that will evaluate potential impacts of the planning alternatives on natural and cultural resources, and other relevant topics. The process and documentation required for preparing the EIS will be used to comply with Section 106 of the National Historic Preservation Act. In accordance with section 800(3)(c) of the Advisory Council on Historic Preservation's regulations (36 CFR 800), I am providing your office advance notification of the NPS intention to use the general management planning and EIS process to meet its Section 106 obligations.

To assist Great Sand Dunes National Park and Preserve and the National Park Service Intermountain Region staff in refining issues to be addressed in the *general management plan* and *wilderness review*, please provide us with written comments concerning interests within your agency's responsibilities. We are continuing consultation with the Colorado State Historic Preservation Officer. Should you have any questions regarding this request or would like to request a specific consultation, please contact me at (719)-378-2312 or by electronic mail, GRSA_Superintendent@nps.gov. Thank you for your participation in these planning efforts.

Sincerely,

Steve Chaney, Superintendent
Great Sand Dunes National Monument and Preserve
11500 Highway 150
Mosca, CO 81146

Encl. newsletters 1-5

1/28/05

COLORADO
HISTORICAL
SOCIETY

The Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137

January 13, 2005

Steve W. Chaney
National Park Service
Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, CO 81146-9798

Re: General Management Plan for Great Sand Dunes National Park and Preserve/1470A16.
(CHS #24811)

Dear Mr. Chaney,

Thank you for your correspondence dated January 5, 2005 and received by our office on January 10, 2005 regarding the above-mentioned project.

After review of the submitted information, we concur with your intent to use the NEPA process and documentation to comply with Section 106, as stipulated in 36 CFR 800.8(c).

In regards to the Dunefield Focus-Maximum Wilderness Concept (page 8 of the National Park and Preserve General Management Plan Newsletter), two possible alternatives are listed for the Medano Ranch. Of the two alternatives, we recommend that the resource be documented and then removed.

If we may be of further assistance, please contact Amy Pallante, our Section 106 Compliance Coordinator, at (303) 866-4678.

Sincerely,

Mark Wolfe

for Georgianna Contiguglia
State Historic Preservation Officer

United States Department of the Interior

NATIONAL PARK SERVICE

Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, Colorado 81146- 9798
Phone 719- 378- 6300 Fax 719- 378- 6310

In Reply Refer to:
1470 A 16

January 5, 2005

Associate Regional Director
Ecological Services
U.S. Fish & Wildlife Service
P. O. Box 25486, DFC
Denver, CO 80225

Dear Sir/Madam:

The National Park Service is in the process of developing a *general management plan* for Great Sand Dunes National Park and Preserve. We are just beginning our scoping and data gathering efforts for this plan. We request the most current list of threatened, endangered, proposed, and candidate species, and designated critical habitat that may be present at the Great Sand Dunes and the surrounding area, which is located within Saguache and Alamosa counties, and adjacent to Huerfano and Custer Counties.

The Great Sand Dunes *general management plan* will provide management direction for resource stewardship, visitor understanding and appreciation, partnerships, facilities and operations for the next 15- 20 years. As part of this planning effort, the NPS will conduct a *wilderness review*, which is required by law and National Park Service policy. The *wilderness review* will examine areas within the expanded Great Sand Dunes boundary to determine whether they are suitable for, and should be proposed as, wilderness.

Great Sand Dunes National Monument was established in 1932 to preserve lands containing spectacular and unique sand dunes and additional features of scenic, scientific, and educational interest for the genefit and enjoyment of future generations. The Great Sand Dunes National Park and Preserve Act of 2000 enlarged Great Sand Dunes National Monument from 39,000 acres to over 100,000 acres, redesignated it as a national park, and established Great Sand Dunes National Preserve, which exceeds 40,000 acres. The purpose of the 2000 legislation was to protect the entire Great Sand Dunes natural system.

To assist Great Sand Dunes National Park and Preserve and the National Park Service Intermountain Region staff in refining issues to be addressed in the *general management plan* and *wilderness review*, please provide us with written comments concerning interests within

your agency's responsibilities. A copy of the most recent newsletter is enclosed for your information.

In fulfillment of requirements of the National Environmental Policy Act, the National Park Service has initiated the preparation of an environmental impact statement (EIS) that will evaluate potential impacts of the planning alternatives on natural and cultural resources, and other relevant topics. In accordance with Section 7 of the Endangered Species Act of 1973, as amended, we are requesting an official list of federally listed threatened or endangered species, which might be affected by the proposed action.

Your response within 30 days from receipt of this letter will be greatly appreciated. Should you have any questions regarding this request, please contact me at 719- 378- 6311 or by electronic mail, GRSA_Superintendent@nps.gov. Thank you for your participation in this planning effort.

Sincerely,

Steve W. Chaney
Superintendent

Enclosure

02/15/05 12:14 FAX 303 275 2371 US FISH & WILDLIFE 001

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES

COLORADO FIELD OFFICE
755 PARFET STREET, SUITE 361
LAKEWOOD, COLORADO 80215

Phone: (303) 275-2370 **FAX: (303) 275-2371**

SENT TO: Steve Chaney PHONE NO. ___-___-____

SENT BY: Donna FAX NO. 719-378-6310

PAGES TO FOLLOW: 9

SUBJECT: Species List

COMMENTS:

MAILING ADDRESS:
755 PARFET STREET, SUITE 361
LAKEWOOD, COLORADO 80215

U. S. Fish and Wildlife Service
Ecological Services
Colorado Field Office

(Effective August 16, 2004)

FEDERALLY LISTED AND CANDIDATE SPECIES & THEIR STATUS IN COLORADO

	COUNTIES	ADAMS	ALAMOSA	ARAPAHOE	BACA	BENT	BOULDER	BROOMFIELD	CHAFFEE	CHEYENNE	CLEAR CREEK	CONEJOS	COSTILLA	CROWLEY	CUSTER	DELTA	DENVER	DOLORES	DOUGLAS	EAGLE	ELBERT	EL PASO	FREMONT	GARFIELD	GILPIN	GRAND	GUNNISON	HINSDALE	HUERFANO	JACKSON	JEFFERSON	KIOWA	KIT CARSON	LAKE	LA PLATA	LARIMER	LAS ANIMAS	LINCOLN	LOGAN	MESA	MINERAL	MOFFAT	MONTEZUMA	MONTROSE	MORGAN	OTERO	OURAY	PARK	PHILLIPS	PITKIN	PROWERS	PUEBLO	RIO BLANCO	RIO GRANDE	ROUTT	SAGUACHE	SAN JUAN	SAN MIGUEL	SEDGWICK	SUMMIT	TELLER	WASHINGTON	WELD	YUMA
Bald eagle, *Haliaeetus leucocephalus*, Listed Threatened		✓	✓	✓			✓										✓			✓		✓									✓																																										
Gunnison sage-grouse, *Centrocercus minimus*, Candidate for Listing			✓				✓											✓																																																									
Gunnison sage-grouse, *Centrocercus minimus*, Candidate for Listing		▲		▲																																																																					
Least tern (interior population), *Sterna antillarum*, Listed Endangered							✓	✓																																																															
Lesser prairie chicken, *Tympanuchus pallidicinctus*, Candidate for Listing								✓																																																															
Mexican spotted owl, *Strix occidentalis lucida*, Listed Threatened		✓	✓	✓																																																																	
Piping plover, *Charadrius melodus*, Listed Threatened		▲		▲			✓																																																															
Southwestern willow flycatcher, *Empidonax traillii extimus*, Listed Endangered			✓		✓																																																																
Whooping crane, *Grus americana*, Listed Endangered		▲		▲			▲																																																															
Yellow-billed cuckoo, *Coccyzus americanus*, Candidate for Listing			✓		✓																																																														
Black-footed ferret, *Mustela nigripes*, Listed Endangered		✓	✓	✓	✓	✓	✓																																																									
Canada lynx, *Lynx canadensis*, Listed Threatened			✓		✓			✓																																																											
Preble's meadow jumping mouse, *Zapus hudsonius preblei*, Listed Threatened		✓						✓																																																											
Boreal toad, *Bufo boreas boreas*, Candidate for Listing					✓																																																															

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U.S. Fish and Wildlife Service
Ecological Services
Colorado Field Office

(Effective August 16, 2004)

FEDERALLY LISTED AND CANDIDATE SPECIES & THEIR STATUS IN COLORADO

COUNTIES:	ADAMS	ALAMOSA	ARAPAHOE	BACA	BENT	BOULDER	BROOMFIELD	CHAFFEE	CHEYENNE	CLEAR CREEK	CONEJOS	COSTILLA	CROWLEY	CUSTER	DELTA	DENVER	DOLORES	DOUGLAS	EAGLE	ELBERT	EL PASO	FREMONT	GARFIELD	GILPIN	GRAND	GUNNISON	HINSDALE	HUERFANO	JACKSON	JEFFERSON	KIOWA	KIT CARSON	LAKE	LA PLATA	LARIMER	LAS ANIMAS	LINCOLN	LOGAN	MESA	MINERAL	MOFFAT	MONTEZUMA	MONTROSE	MORGAN	OTERO	OURAY	PARK	PHILLIPS	PITKIN	PROWERS	PUEBLO	RIO BLANCO	RIO GRANDE	ROUTT	SAGUACHE	SAN JUAN	SAN MIGUEL	SEDGWICK	SUMMIT	TELLER	WASHINGTON	WELD	YUMA
Arkansas darter, *Etheostoma cragini*, Candidate for Listing					✓	✓													✓																																																		
Bonytail, *Gila elegans*, (presumed-historical) Listed Endangered																																																																										
Colorado pikeminnow, *Ptychocheilus lucius*, Listed Endangered			*																																																																					
Greenback cutthroat trout, *Oncorhynchus clarki stomias*, Listed Threatened						✓													✓																																																				
Humpback Chub, *Gila cypha*, Listed Endangered																																																																									
Pallid sturgeon, *Scaphirhynchus albus*, Listed Endangered	▲		▲			▲	▲													▲																																																			
Razorback sucker, *Xyrauchen texanus*, Listed Endangered			*																																																																					
Clay-loving wild buckwheat, *Eriogonum pelinophilum*, Listed Endangered						✓	✓																																																															
Colorado butterfly plant, *Gaura neomexicana* ssp. *coloradensis*, Listed Threatened	✓		✓			✓																																																															
Uinta Basin hookless cactus, *Sclerocactus glaucus*, Listed Threatened																			✓																																																			
Uncompahgre fritillary butterfly, *Boloria acrocnema*, Listed Endangered																																																																					
Ute ladies'-tresses, *Spiranthes diluvialis*, Listed Threatened	✓		✓																																																															

US FISH & WILDLIFE

02/15/05 12:15 FAX 303 275 2371

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U. S. Fish and Wildlife Service
Ecological Services
Colorado Field Office

(Effective August 16, 2004)

FEDERALLY LISTED AND CANDIDATE SPECIES & THEIR STATUS IN COLORADO2

COUNTIES →	DOLORES	DOUGLAS	EAGLE	ELBERT	EL PASO	FREMONT	GARFIELD	GILPIN	GRAND	GUNNISON	HINSDALE	HUERFANO	JACKSON	JEFFERSON	KIOWA	KIT CARSON	LAKE	LA PLATA	LARIMER	LAS ANIMAS	LINCOLN	LOGAN	MESA	MINERAL	MOFFAT	MONTEZUMA	MONTROSE	MORGAN	OTERO	OURAY	PARK	PHILLIPS	PITKIN	PROWERS	PUEBLO	RIO BLANCO	RIO GRANDE	ROUTT	SAGUACHE	SAN JUAN	SAN MIGUEL	SEDGWICK	SUMMIT	TELLER	WASHINGTON	WELD	YUMA
Bald eagle, *Haliaeetus leucocephalus*, Listed Threatened	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	
Gunnison sage-grouse, *Centrocercus minimus*, Candidate for Listing	✓		✓						✓																																						
Least tern (interior population), *Sterna antillarum*, Listed Endangered		▲		▲	▲					▲																																				
Lesser prairie chicken, *Tympanuchus pallidicinctus*, Candidate for List																																													
Mexican spotted owl, *Strix occidentalis lucida*, Listed Threatened	✓	✓			✓		✓	✓					✓																																		
Piping plover, *Charadrius melodus*, Listed Threatened		▲			▲	▲			▲					▲																																
Southwestern willow flycatcher, *Empidonax traillii extimus*, Listed Endangered	✓												✓																																		
Whooping crane, *Grus americana*, Listed Endangered		▲		▲	▲		▲							▲																																
Yellow-billed cuckoo, *Coccyzus americanus*, Candidate for Listing	✓		✓			✓		✓		✓			✓		✓		✓																														
Black-footed ferret, *Mustela nigripes*, Listed Endangered		✓	✓	✓	✓	✓																																							
Canada lynx, *Lynx canadensis*, Threatened	✓		✓			✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓				✓	✓	✓	✓			✓	✓	✓														
Preble's meadow jumping mouse, *Zapus hudsonius preblei*, Listed Threatened		©		✓	✓																																								
Pronghorn, *Antilocapra americana*, Candidate for Listing				✓	✓	✓																																								
Arkansas darter, *Etheostoma cragini*, Candidate for Listing							✓			*	*	*																																		
Bonytail, *Gila elegans*, (presumed-historical) Listed Endangered	*		*						©		*	*	*																																
Colorado pikeminnow, *Ptychocheilus lucius*, Listed Endangered		✓			✓									✓																																
Greenback cutthroat trout, *Oncorhynchus clarki stomias*, Listed Threatened	*		*				✓			*	*	*																																	
Humpback Chub, *Gila cypha*, Listed Endangered																																														

U. S. Fish and Wildlife Service
Ecological Services
Colorado Field Office

(Effective August 16, 2004)

FEDERALLY LISTED AND CANDIDATE SPECIES & THEIR STATUS IN COLORADO

COUNTIES→	DOUGLAS	ELBERT	ARAPAHOE	ADAMS	WELD	LARIMER	GILPIN	JEFFERSON	BOULDER	GRAND	SUMMIT	EAGLE	PITKIN	GARFIELD	MESA	DELTA	MONTROSE	OURAY	SAN JUAN	SAN MIGUEL	DOLORES	MONTEZUMA	LA PLATA	ARCHULETA	RIO BLANCO	MOFFAT	ROUTT	JACKSON	LARIMER	WELD	KIT CARSON	LINCOLN	WASHINGTON	YUMA	PHILLIPS	SEDGWICK	LOGAN	MORGAN	KIT CARSON
Pallid sturgeon, *Scaphirhynchus albus*, Listed Endangered			▲			▲	▲			▲																				▲	▲								
Razorback sucker, *Xyrauchen texanus*, Listed Endangered	*		*					©			*		*	*																								
Pawnee montane skipper, *Hesperia leonardus montana*, Listed Threatened		✓		✓										✓	✓															✓									
Uncompahgre fritillary butterfly, *Boloria acrocnema*, Listed Endangered	✓		✓							✓	✓	✓	✓	✓																✓									
Boreal toad, *Bufo boreas boreas*, Candidate for Listing		✓				✓																								✓									
Colorado butterfly plant, *Gaura neomexicana* ssp. *coloradensis*, Listed Threatened								✓																															
De Beque phacelia, *Phacelia submutica*, Candidate for Listing																														✓									
North Park phacelia, *Phacelia formosula*, Listed Endangered														✓																									
Osterhout milkvetch, *Astragalus osterhoutii*, Listed Endangered								✓																															
Parachute beardtongue, *Penstemon debilis*, Candidate for Listing														✓																									
Penland beardtongue, *Penstemon penlandii*, Listed Endangered								✓																															
Slender moonwort, *Botrychium lineare*, Candidate for Listing								✓																															
Uinta Basin hookless cactus, *Sclerocactus glaucus*, Listed Threatened																														✓									
Ute ladies'-tresses, *Spiranthes diluvialis*, Listed Threatened		✓				✓																																	

Page 5/8

U. S. Fish and Wildlife Service
Ecological Services
Colorado Field Office

(Effective August 16, 2004)

FEDERALLY LISTED AND CANDIDATE SPECIES & THEIR STATUS IN COLORADO

COUNTIES →	LAKE	LARIMER	LAS ANIMAS	LINCOLN	LOGAN	MOFFAT	MONTEZUMA	MONTROSE	OTERO	OURAY	PARK	PHILLIPS
Bald eagle, *Haliaeetus leucocephalus*, Listed Threatened	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gunnison sage-grouse, *Centrocercus minimus*, Candidate for Listing		✓				✓		✓		✓		
Least tern (interior population), *Sterna antillarum*, Listed Endangered			▲		▲				✓	✓		▲
Lesser prairie chicken, *Tympanuchus pallidicinctus*, Candidate for Listing					✓							
Mexican spotted owl, *Strix occidentalis lucida*, Listed Threatened		✓	✓	✓			✓	✓	✓		✓	✓
Piping plover, *Charadrius melodus*, Listed Threatened			▲		▲	✓			✓	✓		▲
Southwestern willow flycatcher, *Empidonax traillii extimus*, Listed Endangered		✓				✓		✓				
Yellow-billed cuckoo, *Coccyzus americanus*, Candidate for Listing		✓				✓	✓	✓	✓		✓	
Whooping crane, *Grus americana*, Listed Endangered			▲		▲	▲				▲		▲
Black-footed ferret, *Mustela nigripes*, Listed Endangered		✓	✓	✓	✓			✓	✓	✓	✓	
Canada lynx, *Lynx canadensis*, Listed Threatened	✓	✓	✓	✓			✓	✓	✓			✓
Preble's meadow jumping mouse, *Zapus hudsonius preblei*, Listed Threatened			Ⓔ						✓			
Arkansas darter, *Etheostoma cragini*, Candidate for Listing				✓	✓					✓		
Bonytail, *Gila elegans*, (presumed-historical) Listed Endangered						Ⓔ	Ⓔ	*			*	
Colorado pikeminnow, *Ptychocheilus lucius*, Listed Endangered		*				Ⓔ	Ⓔ	*	*		*	
Greenback cutthroat trout, *Oncorhynchus clarki stomias*, Listed Threatened	✓		✓									✓
Humpback chub, *Gila cypha*, Listed Endangered						Ⓔ	Ⓔ	*			*	

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U. S. Fish and Wildlife Service
Ecological Services
Colorado Field Office

(Effective August 16, 2004)

FEDERALLY LISTED AND CANDIDATE SPECIES & THEIR STATUS IN COLORADO

COUNTIES →	LAKE	LA PLATA	LARIMER	LINCOLN	LOGAN	MESA	MINERAL	MOFFAT	MONTEZUMA	MONTROSE	OTERO	OURAY	PARK	PHILLIPS
Pallid sturgeon, *Scaphirhynchus albus*, Listed Endangered			▲	▲	▲					▲			▲	
Razorback sucker, *Xyrauchen texanus*, Listed Endangered		*				©	*	©	*	*		*		
Boreal toad, *Bufo boreas boreas*, Candidate for Listing	✓	✓	✓			✓	✓	✓	✓			✓	✓	
Pawnee montane skipper, *Hesperia leonardus montana*, Listed Threatened													✓	
Uncompahgre fritillary butterfly, *Boloria acrocnema*, Listed Endangered	✓	✓					✓					✓	✓	
Clay-loving wild buckwheat, *Eriogonum pelinophilum*, Listed Endangered									✓					
Colorado butterfly plant, *Gaura neomexicana* ssp. *coloradensis*, Listed Threatened			✓											
De Beque phacelia, *Phacelia submutica*, Candidate for Listing						✓								
Knowlton's cactus, *Pediocactus knowltonii*, Listed Endangered		✓												
Mancos milkvetch, *Astragalus humillimus*, Listed Endangered								✓						
Mesa Verde cactus, *Sclerocactus mesae-verdae*, Listed Threatened								✓						
Penland alpine fen mustard, *Eutrema penlandii*, Listed Threatened	✓												✓	
Sleeping Ute milk-vetch, *Astragalus toriipes*, Candidate for Listing								✓						
Slender moonwort, *Botrychium lineare*, Candidate for Listing	✓													
Uinta Basin hookless cactus, *Sclerocactus glaucus*, Listed Threatened						✓				✓				
Ute ladies'-tresses, *Spiranthes diluvialis*, Listed Threatened			✓								✓			

WILDLIFE & US FISH

02/15/05 12:18 FAX 303 275 2371

U.S. Fish and Wildlife Service
Ecological Services
Colorado Field Office
(Effective August 16, 2006)

FEDERALLY LISTED AND CANDIDATE SPECIES & THEIR STATUS IN COLORADO

COUNTIES →	PITKIN	PROWERS	PUEBLO	RIO BLANCO	RIO GRANDE	ROUTT	SAGUACHE	SAN JUAN	SAN MIGUEL	SEDGWICK	SUMMIT	TELLER	WASHINGTON	WELD	YUMA
Bald eagle, *Haliaeetus leucocephalus*, Listed Threatened	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gunnison sage-grouse, *Centrocercus minimus*, Candidate for Listing	✓				✓		✓		✓						
Least tern (interior population), *Sterna antillarum*, Listed Endangered		✓								✓		▲	▲	▲	
Lesser prairie chicken, *Tympanuchus pallidicinctus*, Candidate for Listing		✓													
Mexican spotted owl, *Strix occidentalis lucida*, Listed Threatened	✓		✓		✓		✓		✓		✓	✓		✓	
Piping plover, *Charadrius melodus*, Listed Threatened		✓								✓		▲	▲	▲	
Southwestern willow flycatcher, *Empidonax traillii extimus*, Listed Endangered					✓		✓	✓	✓						
Whooping crane, *Grus americana*, Listed Endangered										▲		▲	▲	▲	
Yellow-billed cuckoo, *Coccyzus americanus*, Candidate for Listing	✓			✓	✓	✓	✓	✓	✓		✓				
Black-footed ferret, *Mustela nigripes*, Listed Endangered		✓	✓	✓			✓		✓				✓	✓	
Canada lynx, *Lynx canadensis*, Listed Threatened	✓		✓	✓	✓	✓	✓	✓	✓		✓				
Preble's meadow jumping mouse, *Zapus hudsonius preblei*, Listed Threatened												◎		✓	
Pawnee montane skipper, *Hesperia leonardus montana*, Listed Threatened												✓			
Uncompahgre fritillary butterfly, *Boloria acrocnema*, Listed Endangered	✓				✓		✓	✓	✓		✓				
Arkansas darter, *Etheostoma cragini*, Candidate for Listing		✓	✓												
Bonytail, *Gila elegans*, (presumed-historical) Listed Endangered	*			*		*	*		*		*				
Colorado pikeminnow, *Ptychocheilus lucius*, Listed Endangered	*			◎	*	*	*	*	*		*				

U. S. Fish and Wildlife Service
Ecological Services
Colorado Field Office
(Effective August 16, 2004)

FEDERALLY LISTED AND CANDIDATE SPECIES & THEIR STATUS IN COLORADO

COUNTIES →	PITKIN	PARK	PUEBLO	RIO BLANCO	RIO GRANDE	ROUTT	SAGUACHE	SAN JUAN	SAN MIGUEL	SEDGWICK	SUMMIT	TELLER	WASHINGTON	WELD	YUMA
Greenback cutthroat trout, *Oncorhynchus clarki stomias*, Listed Threatened			✓												
Humpback Chub, *Gila cypha*, Listed Endangered	*			*		*	*		*		*				
Pallid sturgeon, *Scaphirhynchus albus*, Listed Endangered										▲		▲	▲	▲	
Razorback sucker, *Xyrauchen texanus*, Listed Endangered	*			*	*	*	*	*	*		*				
Boreal toad, *Bufo boreas boreas*, Candidate for Listing	✓			✓	✓	✓	✓	✓	✓		✓				
Colorado butterfly plant, *Gaura neomexicana* spp. *coloradensis*, Listed Threatened			✓											✓	
Dudley Bluffs (Piceance) twinpod, *Physaria obcordata*, Listed Threatened				✓											
Dudley Bluffs bladderpod, *Lesquerella congesta*, Listed Threatened				✓											
Graham beardtongue, *Penstemon grahamii*, Candidate for Listing				✓											
Penland alpine fen mustard, *Eutrema penlandii*, Listed Threatened											✓				
Ute ladies'-tresses, *Spiranthes diluvialis*, Listed Threatened														✓	
White River beardtongue (penstemon), *Penstemon scariosus* var. *albifluvis*, Candidate for Listing					✓										

TABLE TERMINOLOGY

✓	The check mark indicates that the species is present in that county or that the county is within the historical range of the species
*	Water depletions in the Upper Colorado River and San Juan River basins, in these counties may affect these species
▲	Water depletions in the North or South Platte rivers, in these counties may affect these species
©	The species is present in the county and there is designated critical habitat for the species within the county
Candidate	Means there is sufficient information indicating that formal listing under the ESA may be appropriate
Proposed	Means the species is proposed for possible addition to the Lists of Endangered and Threatened Wildlife and Plants under the ESA
Endangered	Means the species could become extinct
Threatened	Means the species could become endangered

M:\Files\Manuals\COSpecialty County1.sr.doc/August 16, 2004

02/15/05 12:19 FAX 303 275 2371 US FISH & WILDLIFE 010

U.S. Fish and Wildlife Service

San Luis Valley National Wildlife Refuge Complex
9383 El Rancho Lane • Alamosa, CO 81101
Phone (719)589-4021• Fax (719)587-0595

January 28, 2005

Steve Chaney, Superintendent
Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, Colorado 81146-9798

Dear Mr. Chaney:

Over the past year I have worked with the National Park Service and Great Sand Dunes National Park Advisory Council in preparation of the General Management Plan for the Great Sand Dunes National Park and Preserve (Park). Based on my participation in this planning process it is obvious that public access to the northern portion of the Park, that formerly owned by the Baca Ranch and Rio Grande National Forest, is an important topic to the public and consequently to your planning process. At least one of the routes that could be used to satisfy this desire crosses the Baca National Wildlife Refuge (Baca NWR). I want to share with you results of my recent discussions with the Regional Fish and Wildlife Service staff in Refuge Planning and Operations about this public access question.

At this time there are two National Wildlife Refuge System policies that will drive how we consider any proposal for access across the Baca NWR. I have spoken to you and the Advisory Council several times about the National Wildlife "Refuge Compatibility Policy." This rule basically requires assessment of a proposed use or activity on a National Wildlife Refuge against the purpose for which a refuge is acquired and managed. If the use is found to materially interfere with or detract from the fulfillment of the mission of the National Wildlife Refuge System or the purposes of the national wildlife refuge, it cannot be approved. A copy of this policy is enclosed.

At the last Advisory Council meeting we discussed the "Appropriate Refuge Uses Policy." This relatively new, draft policy describes several criteria that must be met prior to a refuge manager allowing any non-wildlife dependent recreational use, in addition to those described in the Refuge Compatibility rule. Proposals to access the Park and Rio Grande National Forest across the Baca Refuge need to clearly meet the criteria identified in the policy. Enclosed is a copy of this policy.

We have discussed that initiation of a Comprehensive Conservation Plan for the Baca NWR is not scheduled and is unlikely to be started until after 2012. It is during this planning process we hope to address all foreseeable public uses and assess their impacts on biotic and abiotic processes on the Refuge. The Fish and Wildlife Service recently decided to start the formal planning process in 2008. This will allow two years for baseline data collection to take place

before initiating the plan and provide the Park Service and public information that concerns potential use of the Baca NWR in much more timely fashion.

During this planning process we will assess potential pubic uses of Baca NWR. Any access to the Park or Rio Grande National Forest across Baca NWR must be consistent with Refuge purposes and goals stated in this plan. The plan will actively assess the potential for wildlife dependent public uses. These include hunting, fishing, wildlife observation, wildlife photography, environmental education and interpretation. It will also assess other non-wildlife dependent public uses foreseen and for which we have received requests for consideration. The plan will allow for uses determined appropriate and compatible, and could conceivably include a road or trail allowing access to the Park via some mode of travel if it did not materially interfere with the purpose of the Baca NWR and met standards described in the Appropriate Use Policy.

Much interest has been expressed in use of the "Lexam" or "Cow Camp" road as a means to allow public access to public lands east of the refuge. This road transects, what at this time we view as some of the most sensitive wetland habitats on Baca NWR . The use of this road appears problematic at this time due to its proximity to wetland habitat. We also have to question the very existence of this road and need to assess its impacts on hydrology, wildlife movement and habitat fragmentation. Removal of the road and restoration of the associated habitat will be considered in the planning process along with various modifications and potential uses.

In summary, U.S. Fish and Wildlife Service policies and lack of resources prevent serious consideration of public uses until we gather baseline information on the Baca NWR, have the opportunity to analyze this information and involve the public in formulating a management plan that addresses all aspects of refuge management. We do have serious concerns about the presence and use of the "Lexam" road. The Comprehensive Conservation Planning process for the Baca NWR will start in 2008 and will thoroughly assess this access question.

Thank you for your patience while working on this complex question and I continue to offer whatever help I can provide in your planning process. It has been a pleasure working with the National Park Service and meeting the challenges presented during the General Management Planning process. Please let me know if you have questions or concerns.

Sincerely,

Michael Blenden
Project Leader

Cc: Peter Clark, Supervisor Rio Grande National Forest

Enclosures

1363-1

United States Department of Agriculture | Forest Service | Rio Grande National Forest | 1803 West Hwy 160, Monte Vista, CO 81144, 719-852-5941

File Code: 1900
Date: February 14, 2005

Steve W. Chaney
Superintendent
Great Sand Dunes National Park and Preserve
11500 Hwy 150
Mosca, CO 81146

Dear Steve,

Please consider this my official response to the request for comment on the Great Sand Dunes National Park and Preserve General Management Plan. Decisions made during this planning process could have significant impacts on our ability to manage adjoining National Forest System (NFS) lands and I appreciate the opportunity to comment.

In anticipation of acquisition of the Baca Ranch, we held several multi agency meetings at which potential issues were identified and discussed. I believe that two important issues are not addressed in the proposed alternatives and they both center on public access to NFS lands. The two issues not addressed are the type of access the public will have to NFS lands and the ability to manage the burgeoning elk population proximate to the newly acquired federal lands. These issues are intimately linked and should be addressed in the EIS. Although we have not started the planning process for the newly acquired mountain tract, we believe that the range of alternatives the National Park Service is proposing severely limits our options for managing this portion of the Rio Grande National Forest.

As a multiple use agency we must consider a broad range of objectives when deciding what type of public access to provide on NFS lands. In all alternatives provided, the National Park Service has restricted vehicular access to NFS lands to administrative use only. To better address some management concerns we have for the National Forest, I request you analyze the following in the EIS:

1) Unencumbered vehicular access through the National Park to the Liberty Road and development of a maintenance agreement between NPS and USFS.
2) The vehicle access corridor will allow for the possession of firearms and wild game without a special permit from the National Park Service.
3) Joint opportunities for long distance hiking and equestrian trails across public lands of both agencies.
4) Joint developed recreation sites with the USFS, such as trailhead and camping areas, to maximize visitor satisfaction to the dunes and mountain areas.
5) Providing administrative vehicular access through the National Park to the Rio Grande National Forest.
6) Unencumbered vehicular access to private in-holdings at Liberty, Short Creek and Pole Creek.

1565-2 end

My staff and I have significant concerns with the overpopulation of elk in, and adjacent to the Sangre de Cristo range. We are currently experiencing alarming habitat degradation in portions of the Sangre de Cristo Wilderness. It appears that this over utilization has resulted in sharp declines in mule deer and bighorn sheep numbers in the area. According to the Colorado Division of Wildlife, the current post harvest elk population in Unit 82 is estimated at 6000 animals. This is four times the management objective of 1500 and approximately 80% of these elk winter within the new National Park boundary. The current bighorn sheep population estimate in Unit S-9 is 400, down from 600 over the past 3 years. The current mule deer estimate in Unit 82 is 4000, below the management objective of 4500.

Elk are having obvious negative impacts on other species dependent upon this landscape. We cannot in good conscience tolerate habitat degradation by elk that we would not tolerate from permitted livestock grazing. This shift to elk dominating the landscape at the expense of bighorn sheep and mule deer are of great concern to us.

The Rio Grande National Forest relies on the Colorado Division of Wildlife to manage wildlife numbers. However, their ability is extremely limited if the elk can use the park as a refuge. For all land management agencies, the management of wildlife populations is essential to habitat management.

To help mitigate the current situation of habitat degradation and hopefully strike a balance between ungulate species, I am requesting you consider the following:

1) Unencumbered vehicle access across the park for hunters to the NFS lands on the Liberty Road, Mosca Pass Road, and Medano Pass Road.
2) Having the vehicle access corridor allow for the possession of firearms and wild game without a special permit from the National Park Service.
3) Making the proposed wilderness area of the Dunefield Focus alternative a national preserve to allow hunting.
4) In lieu of item 3) above, consider eliminating this area from wilderness recommendation. This would allow the Colorado Division of Wildlife to employ tools such as hazing to prevent an unreasonable buildup of elk not available for harvest.

I know you are concerned about all public lands both in and around the National Park and Preserve. I appreciate the good working relationship we have enjoyed and I expect that relationship to grow in the future. Thanks you for the opportunity to comment and please contact me if you have any questions or concerns.

Sincerely,

PETER L. CLARK
Forest Supervisor/Center Manager

cc: Suzy Stutzman

United States Department of the Interior

NATIONAL PARK SERVICE

Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, Colorado 81146- 9798
Phone 719- 378- 6300 Fax 719- 378- 6310

In reply refer to:
File Code (1470)L76

November 30, 2004

Ms. Catherine Wilson, Area Conservationist
Natural Resources Conservation Service
Monte Vista Area Office
0881 North Highway 285
Monte Vista, CO 81144

Re: Identification of prime or unique farmland request under the Farmland Protection Policy Act (PL 97- 98; U.S.C. 4201 et seq.) and Prime and Unique Agricultural Lands Act (DOI-ESM94- 7) for the environmental impact statement: Great Sand Dunes National Park and Preserve General Management Plan and Wilderness Study.

Dear Ms. Wilson,

The National Park Service is developing a new general management plan and wilderness study for Great Sand Dunes National Park and Preserve. An environmental impact statement (EIS) will be prepared to address the impacts of the general management plan and wilderness study alternatives. The general management plan will guide resource stewardship, visitor use and services, partnerships, facilities, and operations in the park for the next 15- 20 years. Great Sand Dunes National Park and Preserve is located in the San Luis Valley, in Saguache and Alamosa Counties, Colorado.

We are requesting that the Natural Resources Conservation Service (NRCS) identify prime or unique farmland within the national park and preserve (please see attached map). The information provided by the NRCS will be presented in the environmental impact statement and evaluated relative to effects, alternatives, or mitigation, if warranted. We would appreciate it very much if you could provide your response by January 15, 2005. Please feel free to contact me by phone (719- 378- 6311) or electronic mail (steve_chaney@nps.gov) if you need additional clarification. Thank you for your assistance.

Sincerely,

Steve W. Chaney
Superintendent

United States Department of Agriculture

NRCS
Natural Resources Conservation Service
Alamosa Agricultural Service Center
2205 State Avenue
Alamosa, Colorado 81101
ron.riggenbach@co.usda.gov

719-589-6432 - Office
719-589-0613 - Fax
719-588-2917 - Cell

12/27/2004

Mr. Steve W. Chaney, Superintendent
Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, CO 81146-9798

Re: File Code (1470)L76 Identification of prime or unique farmland request under the Farmland Protection Policy Act (PL 97-98; U.S.C. 4201 et seq.) and Prime and Unique Agricultural Lands Act (DOI-ESM94-7) for the environmental impact statement: Great Sand Dunes National Park and Preserve General Management Plan and Wilderness Study.

Dear Mr. Chaney:

Enclosed with this letter you will find a map outlining prime farmland and unique farmland as requested.

If you have any questions, please feel free to contact me.

Sincerely,

Ronald Riggenbach
District Conservationist
Alamosa Field Office

cc: Catherine Wilson, Area Conservationist
Robert McBride, District Conservationist Saguache County

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

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United States Department of the Interior
NATIONAL PARK SERVICE

Great Sand Dunes National Monument and Preserve
11500 Highway 150
Mosca, Colorado 81146-9798
Phone 719-378-6300 Fax 719-378-6310

In Reply, Refer to:
D18 (1470)

January 5, 2004

Cheyenne & Arapaho Business Committee
Cheyenne & Arapaho Tribes of Oklahoma
Chairman Robert Taylor
P.O. Box 38
Concho, OK 73022

Dear Mr. Taylor,

Great Sand Dunes National Monument would like to consult with the Cheyenne & Arapaho Tribes of Oklahoma regarding a management plan that is now being started for the monument. The National Park Service recognizes that all the lands we now manage are part of the original homelands of many American Indian peoples. With this recognition in mind, it is our sincere desire to involve in the planning process tribal communities who consider the monument an important part of their heritage – both past and present. This initial contact letter is simply a notification of the beginning of this planning process. We will follow this letter with a phone call to discuss with you the tribe's interest in being consulted during all phases of the plan's development. The plan will take three to four years to complete and it is our view that involvement of affiliated tribal communities in this process is essential for its success.

A review of existing literature, and recent consultation with tribes on other issues have revealed that a number of American Indian tribes consider the San Luis Valley and the Great Sand Dunes important to their culture and traditions. The new plan will address a number of natural and cultural resources issues that are likely be of interest to these tribal communities. It is hoped that on- going consultation with your community, and with other tribal communities, will lead to a plan that fully takes into consideration tribal concerns. An overview of this planning project and the need for a new management plan is explained more fully in the enclosed newsletters.

As mentioned above, a member of the planning staff will contact your office soon to discuss the Cheyenne & Arapaho Tribes of Oklahoma's interest in being consulted on this plan. If you have any questions or concerns prior to our phone call to your office please do not hesitate to

call me at (719)- 378- 6311. Our planning team and the monument staff look forward to working with you on this important matter.

You are on the mailing list for the general management plan, and will receive newsletters and drafts of the plan. If you have additional interests or concerns regarding the general management plan or would like to request a specific consultation, please contact me at (719)- 378- 6311 or by electronic mail, GRSA_Superintendent@nps.gov. Thank you for your participation in these planning efforts.

Sincerely,

Steve W. Chaney
Superintendent

Enclosures
- Newsletter #1 and #2
- Park Brochure
- Region map w/physiography

United States Department of the Interior

NATIONAL PARK SERVICE

Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, Colorado 81146- 9798
Phone 719- 378- 6300 Fax 719- 378- 6310

In Reply Refer to:
1470 A1619

January 11, 2005

Chairman Robert Taylor
Cheyenne and Arapahoe Tribes of Oklahoma
P. O. Box 38
Concho, OK 73022

Dear Chairman Taylor:

We would like to invite two members of your tribe to participate in a meeting of the Great Sand Dunes National Park and Preserve Advisory Council in March. We would welcome both a representative of your government, as well as someone with particular traditional interest or knowledge of the Great Sand Dunes area. The Advisory Council was established by the legislation that expanded the park to advise on the general management plan, and members were appointed by the Secretary of the Interior. The National Park Service has a *general management plan* for Great Sand Dunes National Park and Preserve underway. We are developing alternatives for the management of the park and preserve, including the new lands that have been added. The advisory council will be discussing the draft alternatives and their possible impacts, and part of the meeting will be dedicated to listening to the interests and concerns of invited tribal members.

The meeting will be held on March 3, 2005, at the new visitor center for the national park near Mosca, Colorado. The advisory council will meet from 8:30 a.m. to 4:30 p.m., and time for tribal member discussion will be set aside between 2:00 p.m. and 4:00 p.m. We will provide appropriate travel and consultation costs.

Please contact me at (719)-378-6311 or by electronic mail, GRSA_Superintendent@nps.gov with your reply. If you have additional interests or concerns regarding the general management plan or would like to request a specific consultation at another time, also feel free to contact me. Thank you for your participation in these planning efforts.

Sincerely,

Steve Chaney, Superintendent
Great Sand Dunes National Monument and Preserve

11999 Highway 150
Mosca, CO 81146

Enclosures
Newsletter #1, #2, #3, #4, #5
Park Brochure

Tribal Invitations List

Governor Simon Suina
Pueblo of Cochiti
P. O. Box 70
Cochiti, NM 87072

Chairman Wayne Taylor
Hopi Indian Tribe
Hopi Tribal Council
P. O. Box 123
Kykotsmovi, AZ 86039

President Leonard Atole
Jicarilla Apache Indian Tribe
Jicarilla Apache Tribal Council
P. O. Box 507
Dulce, NM 87528

President Albert Hale
Navajo Nation
Navajo Nation Tribal Council
P. O. Box 308
Window Rock, AZ 86515

President William Walksalong
Northern Cheyenne Indian Tribe
Northern Cheyenne Tribal Council
P. O. Box 128
Lame Deer, MT 59043

Governor Gerald Nailor
Pueblo of Picuris
Picuris Pueblo
P. O. Box 127
Penasco, NM 87553

Governor Stanley Pino
Pueblo of Zia
135 Capitol Square Drive
Zia Pueblo, NM 87053

President Evelyn James
San Juan Southern Paiute Tribe
San Juan Southern Paiute Tribal Council
P. O. Box 2656
Tuba City, AZ 86045

Governor
Pueblo of Taos
P. O. Box 1846
Taos, NM 87571

Chairperson Judy Knight- Frank
Ute Mountain Ute Tribal Council
General Delivery
Towaoc, CO 81344

Chairman Robert Taylor
Cheyenne and Arapahoe Tribes of
Oklahoma
P. O. Box 38
Concho, OK 73022

Chairman Johnny Wauqua
Comanche Indian Tribe of Oklahoma
P. O. Box 908
Lawton, OK 73052

Governor Randolph Padilla
Pueblo of Jemez
P. O. Box 100
Jemez Pueblo, NM 87024

Chairman Billy Horse
Kiowa Tribe of Oklahoma
Kiowa Business Committee
P. O. Box 369
Carnegie, OK 73015

Chairman Burton Hutchinson
Northern Arapaho Indian Tribe
Northern Arapaho Business Council
P. O. Box 217
Fort Washaki, WY 82514

President John Steele
Pine Ridge Oglala Lakota Indian Tribe
Oglala Lakota Tribal Council
Pine Ridge, South Dakota 57770

Governor Ron Shutiva
Pueblo of Acoma
P. O. Box 309

Acomita, NM 87034

Governor Earl Salazar
Pueblo San Juan
P. O. Box 1099
San Juan, NM 87566
Chairman Leonard Burch
Southern Ute Indian Tribe
P. O. Box 737
Ignacio, CO 81137

Chairperson Ruby Atwin
Unitah and Ouray Ute Tribe
P. O. Box 190
Fort Duchesne, UT 84026

Chairwoman Mary Yazzi
White Mesa Ute
White Mesa Ute Board
P. O. Box 340
Blanding, UT 84511

THE HOPI TRIBE

Wayne Taylor, Jr.
CHAIRMAN

VICE-CHAIRMAN

March 16, 2005

Mr. Steve Chaney, Superintendent
USDI-National Park Service
Great Sand Dunes National Park and Preserve
11500 Highway 150
Mosca, CO 81146-9798

Dear Superintendent Chaney:

The Hopi Cultural Preservation Office received a copy of your letter date January 11, 2005 addressed to Hopi Tribal Chairman, Mr. Wayne Taylor, Jr., inviting the Hopi Tribe to sent two tribal representatives to attend a meeting regarding the development of a Draft General Management Plan (GMP) for the Great Sand Dunes National Park and Preserve.

We apologize for the delay in providing you with our response and appreciate your invitation to come to Great Sand Dunes National Park and Preserve and consult with you and other tribal representatives on the GMP, and regret that we were not able to send representatives to the March 3rd meeting.

As you might be aware the Hopi Tribe has claimed cultural and ancestral affinity to the prehistoric Hisatsinom, whom are defined archaeologically as the Anasazi cultural group with Hopi Tribal Council Resolution, H-70-94 (enclosure). Furthermore the Hopi Tribe supports the avoidance and disturbance of archaeological sites attributed to the various archaeologically defined cultural groups contained in the resolution. Therefore we would like to request for a copy of the draft General Management Plan for review and comment.

Additionally, at this time the Hopi Cultural Preservation Office is unaware of any specific places which may be of cultural and religious importance to Hopi clans and religious societies. Such a determination would require a site visit to the park and preserve by knowledgeable individuals.

However, our office is aware that the "lakes" situated with in the dunes are important to members of the Tewa people, whom were brought to Hopi by the Walpi Snake Clan, and currently resided at Hopi.

Therefore, the Hopi Cultural Preservation Office would also like to extend an invitation to you and staff members to attend our April Cultural Resource Advisory Task Team (CRATT) to present and discuss potential impacts to historic properties located within the park and reserve as a result of the development of the General Management Plan with Tewa Clan Leaders and our cultural advisors.

P .O. BOX 123 KYKOTSMOVI, AZ. 86039 (928) 734-3000

The meeting has been scheduled for April 21, 2005 in Kykotsmovi, AZ. Please contact Ms. Sharon Sockyma, Secretary at (928) 734-3613 for the place of the meeting and the time for your presentation.

Should you require additional information, please contact Clay Hamilton, Research Assistant at (928) 734-3617 or me at (928) 734-3611. Thank you for consulting with the Hopi Tribe.

Sincerely,

Leigh Kuwanwisiwma, Director
Hopi Tribe
Cultural Preservation Office

APPENDIX J: WETLANDS STATEMENT OF FINDINGS

General Management Plan / Wilderness Study

Great Sand Dunes National Park and Preserve

Wetlands Statement of Findings for the General Management Plan / Wilderness Study

Recommended:

Superintendent, Great Sand Dunes National Park and Preserve Date

Certification of Technical Adequacy and Servicewide Consistency:

Chief Water Resources Division Date

Approved:

Regional Director Intermountain Region, National Park Service Date

INTRODUCTION

The National Park Service (NPS) has prepared and made available the Draft General Management Plan / Wilderness Study/ Environmental Impact Statement for Great Sand Dunes National Park and Preserve ("the park"). The park, which was recently expanded in size nearly fourfold, is located in Alamosa and Saguache counties, Colorado.

Executive Order 11990 (*Protection of Wetlands*) requires the National Park Service and other federal agencies to evaluate the likely impacts of actions on wetlands. NPS Director's Order 77-1: *Wetland Protection* and Procedural Manual 77-1 provide NPS policies and procedures for complying with Executive Order 11990. This statement of findings (SOF) documents compliance with these NPS wetland protection procedures.

PURPOSE OF THIS STATEMENT OF FINDINGS

The purpose of this Wetlands Statement of Findings is to document review of the Draft General Management Plan / Wilderness Study for Great Sand Dunes National Park and Preserve relative to Executive Order 11990 (*Protection of Wetlands*) and NPS Procedural Manual 77-1: *Wetlands Protection*. Specifically, this wetlands SOF:

- Describes effects on wetlands values associated with the NPS preferred alternative.
- Describes how the NPS preferred alternative avoids, to the extent possible, adverse impacts to wetlands.
- Describes mitigation measures developed to achieve compliance with Executive Order 11990 (*Protection of Wetlands*) and National Park Service Procedural Manual 77-1: *Wetland Protection*.
- Describes how the NPS preferred alternative ensures no net loss of wetlands functions or values.

AFFECTED WETLANDS

The Great Sand Dunes Act of 2000 authorized the expansion and redesignation of Great Sand Dunes National Monument to a national park and preserve that is four times larger in area (146,757 acres). Wetlands mapping efforts to date have focused on particular areas of the park, such as the national park's southwestern portion, Sand Creek, and Medano Creek. Wetlands in many new areas of the park (e.g., along Deadman Creek, Cold Creek, and Pole Creek) are not shown on the National Wetlands Inventory map because wetlands surveys for these areas have not yet been conducted. The total area of wetlands within the park is not known.

The park contains 12 primary streams that flow westward from the Sangre de Cristo Mountains and provide wetlands hydrology. The water infiltrates quickly through the sand, adding to the high groundwater levels which typically lie 5 to 15 feet from the ground surface in the shallow aquifer under the park. The high water table of San Luis Valley creates an array of wetlands habitats, including permanent ponds and lakes, playa lakes, seasonal ponds and marshes, seeps, wet

meadows on pond edges, and salt flats. Groundwater flows primarily west and southwest across the park. It emerges in the southwestern portion of the park as a line of springs. The water flowing from these springs creates large areas of lush, productive wetlands around Big Spring Creek and it ultimately flows into San Luis Lake, located immediately west of the park. In addition to these wetlands, wind erosion has removed sand to the elevation of the water table in places, allowing the establishment of interdune wetlands within the sand sheet life zone.

The largest wetlands acreages are distributed along Deadman, Medano, Sand, Big Spring, and Little Spring creeks and their tributaries. They range from sparsely vegetated playas and seasonal mudflats, to aquatic and emergent stands in shallow water and irrigated hay meadows, to streamside shrublands, woodlands, and forests, to high elevation ponds, seeps, and snow glades. Introduced wetlands have become established due to irrigation of natural meadows (which has occurred for over a century) on Medano Ranch and on banks of excavated ponds, ditches, and canals, which are located mostly at lower elevations on gentle slopes and flats. A particularly high concentration of irrigated wetlands occurs in the lower reaches of Sand, Big Spring, and Little Spring creeks on Medano Ranch (figure J-1).

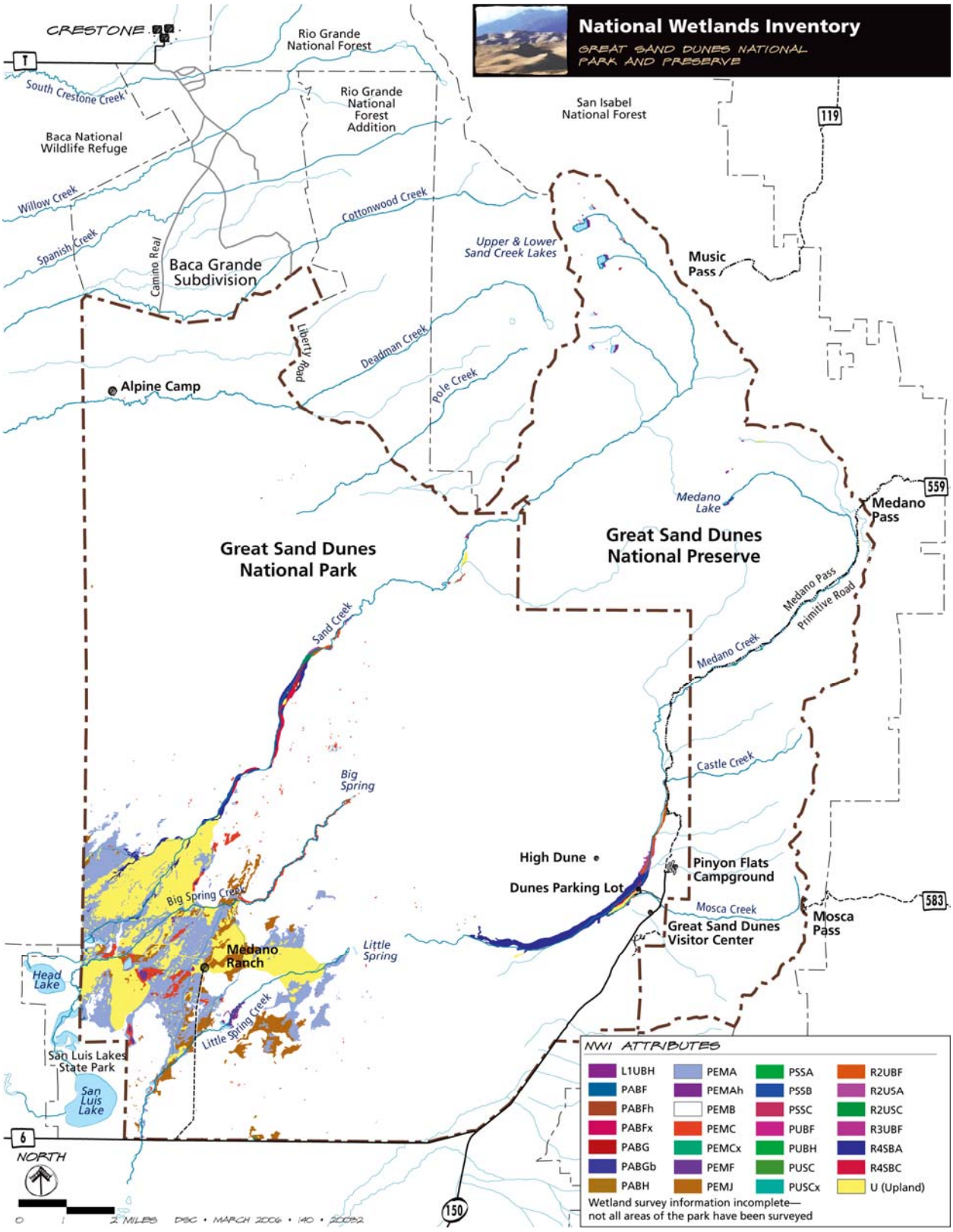
Wetlands occur throughout the seven park life zones, are diverse, and can be broadly characterized in the Cowardin system as riverine (rivers, creeks, and streams), palustrine (shallow ponds, marshes, swamps, sloughs), and lacustrine (littoral zones of lakes and deep ponds). The environmental impact statement section on wetlands (Chapter 3: Affected Environment) describes wetlands functions and values and specific wetlands types in more detail. Chapter 3 also provides wetlands-related information on vegetation, wildlife, ecological critical areas, and water resources.

ENVIRONMENTAL CONSEQUENCES OF THE NATIONAL PARK SERVICE PREFERRED ALTERNATIVE ON WETLANDS

Analysis

Under the NPS preferred alternative, visitation in the frontcountry and dunes play management zones would increase over time, so Medano Creek wetlands in these zones would experience more use. Providing guided hiking and equestrian trails in the guided learning management zone would direct use around sensitive wetland areas and prevent or minimize most direct wetlands impacts in this area. In general, however, visitation increases and visitor use (including horse use) in new park areas could increase the incidence of trampling, encourage establishment of nonnative species, and compact wetland soils and streambanks. Natural chemical and biological processes and wetlands species composition could be affected. The overall result would be minor to moderate adverse impacts to wetlands resources.

A parking area and trailhead in the north part of the national park would encourage more hiker and equestrian use in this portion of the park. The mature narrowleaf cottonwood groves on the banks of Deadman Creek would likely attract some hikers and riders for resting, watering animals, and other passive pursuits. However, most visitors would probably keep to designated trails (e.g., Cow Camp Road), which would avoid this riparian corridor to protect the natural


National Wetlands Inventory
GREAT SAND DUNES NATIONAL PARK AND PRESERVE
CRESTONE
Rio Grande National Forest
South Crestone Creek
Rio Grande National Forest Addition
San Isabel National Forest
119
Baca National Wildlife Refuge
Willow Creek
Spanish Creek
Camino Real
Cottonwood Creek
Baca Grande Subdivision
Upper & Lower Sand Creek Lakes
Music Pass
Liberty Road
Deadman Creek
Pole Creek
Alpine Camp
Medano Lake
559
Medano Pass
Great Sand Dunes National Park
Great Sand Dunes National Preserve
Medano Pass Primitive Road
Sand Creek
Medano Creek
Castle Creek
Big Spring
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Pinyon Flats Campground
Dunes Parking Lot
Big Spring Creek
Mosca Creek
583
Mosca Pass
Great Sand Dunes Visitor Center
Medano Ranch
Little Spring
Head Lake
Little Spring Creek
San Luis Lakes State Park
San Luis Lake
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150
NWI ATTRIBUTES
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U (Upland)
Wetland survey information incomplete—not all areas of the park have been surveyed

resources within it. Improved hiking access to the mountain front might lead to increased use in the upper (USFS) portion of Deadman Creek, which includes a USFS designated Research Natural Area; it includes high elevation wetlands and currently receives little visitation. Visitation increases and visitor use (including horse use) in new areas could increase trampling, introduce nonnative plant species, and compact wetland soils and streambanks. Natural chemical and biological processes and wetlands species composition could be affected. Effects would be long term, minor to moderate, and adverse.

Assuming Medano Ranch is eventually transferred to NPS management, irrigation of hay meadows for bison forage would be discontinued. Wetlands that are not supported by natural surface and groundwater flows (e.g., introduced or artificial wetlands) would be adversely affected by drying. Natural flows in Sand, Big Spring, and Little Spring creeks would increase, at least seasonally, when irrigation is discontinued, and other wetlands types (e.g., ephemeral ponds, playas, mudflats, etc.) would expand and/or become reestablished. Also, more water would probably be delivered to San Luis and Head Lakes in San Luis Lakes State Park and Wildlife Area, stabilizing water levels and providing wetlands support in those areas. Overall, anticipated wetland impacts would be long term, moderate to major, beneficial, and long term moderate adverse. A future study would examine expected impacts in more detail.

Eliminating bison grazing from Medano Ranch lands within the park would benefit some wetlands plant species, particularly the most palatable grasses. Some areas of channel and streambank erosion might gradually stabilize, improving wetlands structure and function. Livestock watering ponds and structures would be removed; some introduced wetlands would probably dry up, but other naturally occurring wetlands would be re-established or expand from restoration of natural flows. The park would identify and manage nonnative plant populations in new park areas, reducing their effects on native wetlands communities or possibly eliminating some nonnative stands from the landscape. Wetlands species composition and habitat quality would improve as a result. Overall, these actions would have long-term, minor to moderate, beneficial, and negligible to minor adverse impacts on wetlands.

Cumulative Impacts. Livestock grazing typically adversely affects wetlands and riparian resources by causing shifts in species composition, erosion of stream banks and bottoms, and browsing of wetland grasses, shrubs, and tree seedlings. Cattle grazing was discontinued on the former Baca Ranch lands in 2004, and some past adverse livestock impacts may gradually be reversed in the future. Under the NPS preferred alternative, beneficial and adverse wetlands impacts would result from higher use levels, new trails and trailheads, establishment of the guided learning zone, removal of livestock-related water control structures, control of nonnative noxious plant populations, and discontinuation of bison grazing and hay meadow irrigation. Combined with past, present, and reasonably foreseeable future actions, the NPS preferred alternative would have long-term, moderate, beneficial impacts and minor to moderate adverse effects on wetlands resources.

Conclusion. Visitation increases in new areas would affect chemical and biological processes and wetlands species composition, resulting in long-term, minor

to moderate, adverse impacts to wetlands resources. Discontinuing irrigation of wet meadows on Medano Ranch is expected to have long-term, moderate to major, beneficial, and long-term, moderate, adverse impacts on wetlands. Eliminating bison grazing, removing livestock water ponds and structures, and managing nonnative plants in new areas would have long-term, minor to moderate, beneficial, and negligible to minor, adverse impacts on wetlands.

ALTERNATIVES CONSIDERED

Alternatives considered in the Draft General Management Plan / Wilderness Study / Environmental Impact Statement (Chapter 2: Alternatives) include no action, dunefield focus—maximize wildness, and three public nodes. These alternatives are briefly summarized below, along with elements that are common to all action alternatives.

No-Action Alternative

The no-action alternative was developed to provide a baseline for evaluating the changes and impacts of the three action alternatives. This baseline is characterized primarily by conditions in December 2004, roughly 2 months after ownership and management of the Baca Ranch was transferred to the U.S. government, and by continuation of current management practices into the future. (There are funded projects planned for very near term; these are included in the no-action alternative). Most visitor use would continue to be focused in or near the eastern part of the dunefield. The developed area east of the dunes (main park road, visitor center, and campground) would remain essentially the same. Some visitors would continue to explore backcountry areas of the park and preserve via designated trails and roads, and cross-country horse and hiking use would also continue. Some people would enter the north part of the park on foot from the Baca Grande subdivision, via the two county roads that end at the park boundary.

No new areas would be recommended for wilderness. New park lands that were not open to public use before December 2004 would be managed in a very conservative manner. That is, there would be no new development, and visitor use would be managed so as to not establish new practices for camping, types and routes of access, etc.

New park areas would be inventoried for natural and cultural resources and managed according to NPS policies that emphasize natural processes (for example, nonnative species, interior pasture fences, and artificial water holes and sources would be removed). Existing trails and trailheads in the park and preserve would be maintained, but there would be no new trails or trailheads. The Nature Conservancy would continue to manage Medano Ranch, including the Medano Ranch headquarters. There would be no public use of Medano Ranch. Bison grazing would continue within the park on lands leased or owned by The Nature Conservancy. Leashed dogs would generally be allowed within the park and preserve.

Elements Common to the Action Alternatives, including the NPS Preferred Alternative

If and when The Nature Conservancy ceased agricultural uses (e.g., bison grazing and forage production) on their owned and leased lands, and transferred the lands to the National Park Service, surface irrigation of meadows would be discontinued and the bison fence would be removed. Before surface irrigation was discontinued, a study would be conducted to better understand

how this action might affect wetlands, groundwater supplies, downstream water users, federal water rights, the Closed Basin Project, and other such factors. Roads that the National Park Service does not intend to use for public or administrative purposes would be abandoned and not maintained. Toilets would be installed if/when visitor use levels are high enough that human waste disposal and sanitation is a concern, and if a more suitable solution does not exist.

Dunefield Focus—Maximize Wildness Alternative

In the dunefield focus—maximize wildness alternative, most visitor use and visitor activities would be focused in or near the eastern edge of the dunefield. Most of the rest of the park and preserve would remain wild and undeveloped, allowing natural processes to continue with minimal human influence. Backcountry areas would be primitive and rugged, providing outstanding opportunities for solitude and adventure. A large portion of the park expansion lands would be recommended for future designation as wilderness.

Existing trails and trailheads would be maintained. Most visitors would continue to visit the main dunefield area (main park road, visitor center, dunes parking lot, and picnic area). Parking and related support facilities, such as restrooms, could be expanded in the frontcountry zone if dunes parking lots filled too often. A new multiuse trail for bicyclists and pedestrians would extend from near the park's main entrance to the visitor center, dunes parking lot/picnic area, and to the Pinyon Flats campground. A gate for horse access would be provided on the north boundary of the national park, and pedestrian access from the Baca Grande subdivision would continue.

The National Park Service would seek acquisition of Medano Ranch and would manage it as a natural/wild area. Ranch structures would not be maintained (or would be removed after documentation). Leashed dogs would be restricted to parking areas, picnic areas, and car campgrounds within the national park—they would not be permitted in the national preserve.

Three Public Nodes Alternative

In the three public nodes alternative, most visitors would gain access to the park and preserve via three areas or "nodes." Visitor facilities and trails would be concentrated in or near the three nodes, and the rest of the park and preserve would remain largely undeveloped. This alternative would provide fairly diverse options for visitors to experience different portions of the dunes system.

The first node, located at the existing developed area east of the dunes, would remain essentially the same. The second node would be located at the Medano Ranch headquarters. The National Park Service would seek acquisition of Medano Ranch and would manage the ranch headquarters as a public day-use area, most historic ranch structures would be maintained, and guided hiking and horseback tours to nearby high interest areas could be provided. The third node, located in the north part of the park, would include a backcountry trailhead and a primitive campground if an appropriate public vehicle access route could be identified via the Baca National Wildlife Refuge or the Baca Grande subdivision.

Dogs would not be permitted in areas where there is increased potential for or a history of conflicts with visitors or with wildlife; otherwise leashed dogs would be allowed. No new wilderness would be recommended

in this alternative. The USFS, in consultation with the National Park Service, may study the need for (and impacts of) providing public vehicle access to USFS lands via Liberty Road or via an extension of Cow Camp Road to the mountain front; these options would be studied in a separate NPS/USFS environmental analysis study.

JUSTIFICATION FOR SELECTING THE NATIONAL PARK SERVICE PREFERRED ALTERNATIVE: FACTORS AND TRADEOFFS

Reasons for selecting the NPS preferred alternative are discussed in detail in the draft GMP, appendix E (see section titled "Rationale for the NPS Preferred Alternative"). In short, this alternative best supports and protects the fundamental resources and values of Great Sand Dunes National Park and Preserve; these resources and values are described in chapter 1 of the GMP. The NPS preferred alternative provides for visitor use in new areas of the park in a way that minimizes harm to wetlands to the greatest extent practicable. The NPS preferred alternative would have adverse impacts on some wetlands, as would all the GMP alternatives, including the no-action alternative. These impacts would be due primarily to visitor use in new areas of the park, and would be largely unavoidable (unless public use was not permitted at all). The NPS preferred alternative also provides wetlands benefits. Actions such as eliminating managed bison grazing, controlling nonnative noxious plants, and reestablishing more natural drainage regimes would have long-term benefits ranging from minor to major depending on wetlands type and location.

HOW THE NATIONAL PARK SERVICE PREFERRED ALTERNATIVE WAS DESIGNED TO MINIMIZE WETLANDS IMPACTS

Various elements of the NPS preferred alternative were included, in whole or in part, to minimize adverse wetlands impacts. Because most adverse impacts would result from visitor use in new park areas, most of these elements are related to visitor use management.

The NPS preferred alternative apportions the park into different management zones (NPS "Preferred Alternative" map). For each management zone, specific resource concerns are described, preliminary indicators of resource condition are outlined, priority areas for monitoring are identified (most are wetlands areas), and potential management actions to address resource threats are listed.

In many cases, specific management zones were applied in particular locations, in whole or in part to minimize wetlands impacts. In the north part of the national park, the backcountry access (brown) zone is located well north of the Deadman Creek riparian corridor for most of the zone's length. It follows Cow Camp Road and does not cross Deadman Creek. This means that the proposed public vehicle use and trailhead would be located primarily in disturbed areas rather than in or near the Deadman Creek corridor. The backcountry adventure (green) zone surrounds the Deadman Creek area, the upper portion of the Sand Creek riparian corridor, and Upper and Lower Sand Creek lakes. Unlike the yellow (natural/wild) zone, the green zone allows new trails to be provided to direct hiking and horseback use away from wetlands areas and discourage more dispersed use that often results in social trails, vegetation damage, and sedimentation of streams and lakes. Similarly, the guided learning zone was

applied to an area that includes the Big and Little Spring wetlands areas. This management zone requires that visitors be accompanied by a certified guide or escort. The intent is to allow visitors to enjoy and learn about special resources areas while protecting such resources at the same time. Guides/escorts and carefully laid trails would help ensure that visitors are guided in such a way that wetlands values are protected.

The NPS preferred alternative includes a wilderness recommendation for nearly all wilderness-eligible lands, amounting to about 75% of lands added to the national park since 2000. Protection of wetlands was among the many considerations that led to this recommendation. Uses of NPS wilderness are to be of a type and nature that enable the areas to retain their primeval character; protect and preserve natural conditions; leave the imprint of man's work substantially unnoticeable; provide outstanding opportunities for solitude or primitive and unconfined recreation; and preserve wilderness in an unimpaired condition. This means that key wetlands areas would be protected in perpetuity from many influences that typically result in adverse impacts. More information regarding the wilderness study and recommendation can be found in appendix G of the GMP.

Mitigation measures common to the action alternatives, some of which address wetlands areas, are listed in chapter 2 of the GMP.

COMPENSATION

Two actions in the NPS preferred alternative would result in loss of *artificial* (introduced) wetlands. The NPS preferred alternative would remove livestock watering ponds and structures on Medano Ranch and former Baca Ranch lands, and it would discontinue hay meadow irrigation on Medano Ranch; both measures are intended to reestablish a more natural hydrologic regime in keeping with NPS management policies. The introduced wetlands that would be lost were created as long as a century ago, when surface water from Sand, Big Spring, and Little Spring creeks was diverted to irrigate natural upland meadows to improve forage production for cattle. According to Procedural Manual 77-1 (Section 4.2A.1.e), activities with adverse impacts on artificial wetlands may be excepted from Statement of Findings and compensation requirements if they are "designed specifically for the purpose of restoring degraded (or completely lost) natural wetlands, stream, riparian, or other aquatic habitats or ecological processes."

The NPS preferred alternative would not result in *loss* of natural wetlands. However, all of the GMP alternatives (including the no action) would adversely affect some natural wetlands. In particular, natural chemical and biological processes and wetlands species composition could be affected due to unintentional introduction of nonnative plant species, and trampling (compaction) of wetland soils and streambanks associated with visitor use. Short of prohibiting visitor use in areas added to the park since 2000, there are no alternatives that would avoid such impacts.

Restoring a more natural hydrologic regime would allow other wetlands (e.g., ephemeral ponds, playas, mudflats, etc.) to expand or become reestablished. Although the acreage of wetlands habitats that would be expanded or reestablished is not known, the areas involved are large enough that beneficial impacts should more than compensate for minor to moderate adverse effects to wetlands from visitor use. Before

surface irrigation of meadows was discontinued on Medano Ranch, a study would be conducted to allow park managers and others to better understand how this action would affect wetlands, wildlife, groundwater supplies, federal water rights, the Closed Basin Project, etc.

CONCLUSION

The NPS preferred alternative was designed to avoid and minimize adverse impacts on wetlands, and to restore lost natural wetlands habitats and ecological processes within Great Sand Dunes National Park and Preserve. No natural wetlands would be lost, although some would be unavoidably affected by visitor use. Restoring a more natural drainage regime in the southwestern (Medano Ranch) portion of the national park would allow natural wetlands to expand or become reestablished.

The NPS finds that this alternative is consistent with the policies and procedures of Director's Order 77–1: *Wetlands Protection*, including the "no net loss of wetlands" policy.

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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 our 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.

NPS D-72 April 2006