

APPENDIX A: LEGISLATION

39. Great Sand Dunes National Monument

Establishment: Proclamation (No. 1994) of March 17, 1932..... Page
207

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

[No. 1994—March 17, 1932—47 Stat. 2506]

WHEREAS it appears that the public interest would be promoted by including the lands hereinafter described within a national monument for the preservation of the great sand dunes and additional features of scenic, scientific, and educational interest;

NOW, THEREFORE, I, Herbert Hoover, President of the United States of America, by virtue of the power in me vested by sec. 2 of the act of Congress entitled "AN ACT For the preservation of American antiquities," approved June 8, 1906 (34 Stat. 225), do proclaim and establish the Great Sand Dunes National Monument and that, subject to all valid existing rights, the following-described lands in Colorado be, and the same are hereby, included within the said national monument:

SIXTH PRINCIPAL MERIDIAN

- T. 25 S., R. 73 W., secs. 31 and 32;
- T. 26 S., R. 73 W., secs. 3 to 11, inclusive;
secs. 14 to 23, inclusive;
secs. 26 to 35, inclusive;
- T. 27 S., R. 73 W., secs. 3 to 10, inclusive;
secs. 15 to 22, inclusive;

NEW MEXICO PRINCIPAL MERIDIAN

- T. 40 N., R. 12 E., secs. 1 and 2;
sec. 11, NE. $\frac{1}{4}$;
secs. 12, 13, 24, and 25;
 - T. 41 N., R. 12 E., sec. 10, lots 1 to 4, inclusive;
sec. 11, lots 1 to 4, inclusive;
sec. 12, lots 1 to 4, inclusive;
secs. 13 to 15, inclusive;
secs. 22 to 27, inclusive;
secs. 34 to 36, inclusive;
- and unsurveyed land which upon survey will probably be described as:
- Fractional T. 40 N., R. 13 E.;
 - Fractional T. 41 N., R. 13 E.;
 - Fractional T. 42 N., R. 13 E.; secs. 30 and 31.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of this monument as provided in the act of Congress entitled "AN ACT To establish a National Park Service, and for other purposes," approved August 25, 1916 (39 Stat. 535-536), and acts additional thereto or amendatory thereof.

208 VIII. NATIONAL MONUMENTS—GREAT SAND DUNES

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this 17th day of March, in the year of our Lord nineteen hundred and thirty-two, and of the Independence of the United States of America the one hundred and fifty-sixth.

By the President:
HENRY L. STIMSON,
Secretary of State.

HERBERT HOOVER.

PROCLAMATION 4100

REVISING THE BOUNDARIES OF GREAT SAND DUNES NATIONAL MONUMENT, COLORADO

WHEREAS the Great Sand Dunes National Monument in the State of Colorado was established by Proclamation No. 1994 of March 17, 1932 (47 Stat. 2565), as modified by Proclamation No. 2681 of March 12, 1945, for the preservation of the great sand dunes and additional features of scenic, scientific, and educational interests; and

WHEREAS it appears that retention of certain lands within the monument is

no longer necessary for such purpose; and

WHEREAS it appears that it would be in the public interest to exclude such lands from the monument; and

WHEREAS certain lands now a part of the Rio Grande National Forest are better suited for national-forest purposes than for national-forest purposes and should be excluded from such forest, and these lands and certain other land adjoining the monument are required for the proper care, management, and protection of the objects of scenic, scientific, and educational interest situated on lands within the monument; and

WHEREAS it appears that it would be in the public interest to reserve such lands as an addition to the monument:

NOW, THEREFORE, I, DWIGHT D. EISENHOWER, President of the United States of America, under and by virtue of the authority vested in me by section 2 of the act of June 8, 1906, 34 Stat. 225 (16 U. S. C. 471), and the act of June 4, 1897, 30 Stat. 24, 18 (16 U. S. C. 472), do proclaim as follows:

1. The following-described lands in the State of Colorado are hereby excluded from the Great Sand Dunes National Monument:

New Mexico Principal Meridian

T. 41 N., R. 12 E.
Sec. 22, SW $\frac{1}{4}$;
Sec. 24, all;
Sec. 27, all;
Sec. 34, all;
Sec. 35, all.

T. 40 N., R. 12 E.
Sec. 2, all;
Sec. 11, NE $\frac{1}{4}$;
Sec. 12, SW $\frac{1}{4}$;
Sec. 12, W $\frac{1}{2}$;
Sec. 24, all;
Sec. 25, all.

Fractional T. 40 N., R. 12 E.
Sec. 19, all;
Sec. 20, all;
Sec. 21, all.

Sixth Principal Meridian

T. 27 S., R. 73 W.
Sec. 15, SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;
Sec. 19, all;
Sec. 20, all;
Sec. 21, all;
Sec. 22, all.

The public lands hereby excluded from the monument shall not be subject to application, location, settlement, entry, or other forms of appropriation under the public-land laws until further order of an

authorized officer of the Department of the Interior.

2. Subject to valid existing rights, the following-described lands in the State of Colorado are hereby reserved as and made a part of the Great Sand Dunes National Monument, and so much thereof as is now within the Rio Grande National Forest is hereby excluded therefrom and the boundaries of the said National Forest are modified accordingly:

Sixth Principal Meridian

T. 26 S., R. 73 W.
Sec. 2, all.
T. 27 S., R. 73 W.
Sec. 2, W $\frac{1}{2}$.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the United States to be affixed.

DONE at the City of Washington this seventh day of June in the year of our Lord nineteen hundred and [SEAL] fifty-six, and of the Independence of the United States of America the one hundred and eightieth.

DWIGHT D. EISENHOWER

By the President:

JOHN FOSTER DULLES,
Secretary of State.

REDEFINING THE AREA OF GREAT SAND
DUNES NATIONAL MONUMENT, COLO-
RADO:

WHEREAS the lands included within the Great Sand Dunes National Monument, Colorado, by Proclamation No. 1994 of March 17, 1932 (47 Stat. 2566), were described therein in conformity with plats then on file in the General Land Office and other maps of the locality:

WHEREAS resurveys by the General Land Office disclose that sections 10, 11, 12, and parts of sections 13, 14, and 15, Township 41 North, Range 12 East, and unsurveyed sections 20 and 21, Township 42 North, Range 13 East, New Mexico Principal Meridian, as described in the said Proclamation, do not exist; and

WHEREAS it appears necessary and desirable in the public interest to re-define the area included within the Monument in accordance with the latest plats of survey:

NOW, THEREFORE, I, HARRY S. TRUMAN, President of the United States of America, under and by virtue of the authority vested in me by section 2 of the act of June 8, 1906, c. 3060, 34 Stat. 225 (U.S.C., title 16, sec. 431), do revise the land description contained in said Proclamation No. 1994 of March 17, 1932, to read as follows:

EIGHTH PRINCIPAL MERIDIAN

T. 25 S., R. 73 W.,
secs. 31 and 32.
T. 25 S., R. 73 W.,
secs. 3 to 11, secs. 11 to 23, and secs. 23 to
35, inclusive.
T. 27 S., R. 73 W.,
secs. 3 to 10 and secs. 15 to 22, inclusive.

NEW MEXICO PRINCIPAL MERIDIAN

T. 40 N., R. 12 E.,
secs. 1 and 2;
sec. 11, NE¼;
secs. 12, 13, 24, and 25.
T. 41 N., R. 12 E.,
secs. 12, 14, 15, those parts south of Luis
Marta Baca Grant No. 4;
secs. 22 to 27, inclusive;
secs. 34, 35, and 36.
Tps. 40 and 41 N., R. 12 E., unsurveyed.
Containing approximately 44,810 acres.

All other provisions contained in the said Proclamation of March 17, 1932, shall remain in full force and effect.

IN WITNESS WHEREOF I have here-
unto set my hand and caused the seal
of the United States to be affixed.

DONE at the city of Washington this
12th day of March, in the year of our
Lord nineteen hundred and
(SEAL) forty-six, and of the Independ-
ence of the United States of
America the one hundred and seventieth.

HARRY S. TRUMAN

By the President:

JAMES F. BYRNES,
Secretary of State.

90 STAT. 2692

PUBLIC LAW 94-567—OCT. 20, 1976

Public Law 94-567
94th Congress

An Act

Oct. 20, 1976
[H.R. 13160]

To designate certain lands within units of the National Park System as wilderness; to revise the boundaries of certain of those units; and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in accordance with section 3(c) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c)), the following lands are hereby designated as wilderness, and shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act:

(a) Bandelier National Monument, New Mexico, wilderness comprising twenty-three thousand two hundred and sixty-seven acres, depicted on a map entitled "Wilderness Plan, Bandelier National Monument, New Mexico", numbered 315-20,014-B and dated May 1976, to be known as the Bandelier Wilderness.

(b) Black Canyon of the Gunnison National Monument, Colorado, wilderness comprising eleven thousand one hundred and eighty acres, depicted on a map entitled "Wilderness Plan, Black Canyon of the Gunnison National Monument, Colorado", numbered 144-20,017 and dated May 1973, to be known as the Black Canyon of the Gunnison Wilderness.

(c) Chiricahua National Monument, Arizona, wilderness comprising nine thousand four hundred and forty acres, and potential wilderness additions comprising two acres, depicted on a map entitled "Wilderness Plan, Chiricahua National Monument, Arizona", numbered 145-20,007-A and dated September 1973, to be known as the Chiricahua National Monument Wilderness.

(d) Great Sand Dunes National Monument, Colorado, wilderness comprising thirty-three thousand four hundred and fifty acres, and potential wilderness additions comprising six hundred and seventy acres, depicted on a map entitled "Wilderness Plan, Great Sand Dunes National Monument, Colorado", numbered 140-20,006-C and dated February 1976, to be known as the Great Sand Dunes Wilderness.

(e) Haleakala National Park, Hawaii, wilderness comprising nineteen thousand two hundred and seventy acres, and potential wilderness additions comprising five thousand five hundred acres, depicted on a map entitled "Wilderness Plan, Haleakala National Park, Hawaii", numbered 162-20,006-A and dated July 1972, to be known as the Haleakala Wilderness.

(f) Isle Royale National Park, Michigan, wilderness comprising one hundred and thirty-one thousand eight hundred and eighty acres, and potential wilderness additions comprising two hundred and thirty-one acres, depicted on a map entitled "Wilderness Plan, Isle Royale National Park, Michigan", numbered 139-20,004 and dated December 1974, to be known as the Isle Royale Wilderness.

(g) Joshua Tree National Monument, California, wilderness comprising four hundred and twenty-nine thousand six hundred and ninety acres, and potential wilderness additions comprising thirty-seven thousand five hundred and fifty acres, depicted on a map entitled

412 NATIONAL PARK SERVICE LAWS

retary of Agriculture shall be deemed to be a reference to the Secretary of the Interior.

* * * * *
 October 20, 1976.

An Act to authorize additional appropriations for the acquisition of lands and interests in lands within the Sawtooth National Recreation Area in Idaho. (92 Stat. 3467) (P.L. 95-625)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE III—BOUNDARY CHANGES

SEC. 301. The boundaries of the following units of the National Park System are revised as follows, and there are authorized to be appropriated such sums as may be necessary, but not exceed the amounts specified in the following paragraphs for acquisitions of lands and interests in lands within areas added by reason of such revisions:

* * * * *
 (8) Great Sand Dunes National Monument, Colorado: To add approximately one thousand one hundred and nine acres as generally depicted on the map entitled "Boundary Map, Great Sand Dunes National Monument, Colorado", numbered 140-80,001-A, and dated November 1974: \$166,000.

SEC. 302. Within twelve months after the date of the enactment of this Act, the Secretary shall publish in the Federal Register a detailed map or other detailed description of the lands added or excluded from any area pursuant to section 301.

SEC. 303. (a) Within the boundaries of the areas as revised in accordance with section 301, the Secretary is authorized to acquire lands and interests therein by donation, purchase with donated or appropriated funds, exchange, or transfer from any other Federal agency. Lands and interests therein so acquired shall become part of the area to which they are added, and shall be subjected to all laws, rules, and regulations applicable thereto. When acquiring any land pursuant to this title, the Secretary may acquire any such land subject to the retention of a right of use and occupancy for a term not to exceed twenty-five years or for the life of the owner or owners. Lands owned by a State or political subdivision thereof may be acquired only by donation.

(b) (1) Lands and interests deleted from any area pursuant to section 301 may be exchanged for non-Federal lands within the revised boundaries of such area, or

NATIONAL MONUMENTS

413

transferred to the jurisdiction of any other Federal agency or to a State or political subdivision thereof, without monetary consideration, or be administered as public lands by the Secretary, as the Secretary may deem appropriate.

(2) In exercising the authority contained in this section with respect to lands and interests therein deleted from any such area which were acquired from a State, the Secretary may, on behalf of the United States, transfer to such State exclusive or concurrent legislative jurisdiction over such lands, subject to such terms and conditions as he may deem appropriate, to be effective upon acceptance thereof by the State.

(c) It is the established policy of Congress that wilderness, wildlife conservation, and park and recreation values of real property owned by the United States be conserved, enhanced, and developed. It is further declared to be the policy of Congress that unutilized, underutilized, or excess Federal real property be timely studied as to suitability for wilderness, wildlife conservation, or park and recreation purposes. To implement this policy, the Secretary, the Administrator of General Services, and the Director of the Office of Management and Budget shall establish a system with appropriate procedures to permit the Secretary full and early opportunity to make such studies and propose appropriate recommendations to disposing agencies for consideration in connection with determinations of further utilization or disposal of such property under existing law. Each affected executive agency is authorized and directed to provide to the Secretary such advice and information relating to such studies as the Secretary may request.

SEC. 304. The authorities in this title are supplementary to any other authorities available to the Secretary with respect to the acquisition, development, and administration of the areas referred to in section 301.

* * * * *

Approved November 10, 1973.

Sec. 202. (a) The Secretary shall administer the property, Site, including personal property comprising the archival collection, acquired for the purposes of this Act in accordance with the Act of August 25, 1916 (39 Stat. 535), as amended and supplemented, and the Act of August 21, 1935 (49 Stat. 666), as amended.

Administration.

(b) The Secretary is authorized to enter into a cooperative agreement with an appropriate entity for the management of the archival collection acquired for the purposes of this Act.

16 USC 461.

(c) Within three years of the date of enactment of this Act, the Secretary shall submit to the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate, a general management plan for the Site pursuant to the provisions of section 12(b) of the Act of August 18, 1970 (84 Stat. 825), as amended. Within six months of the date of enactment of this Act, the Secretary shall submit a written report to the same committees relating the state of progress of his acquisition and provisions for management and permanent protection of the archival collection. He shall submit a similar report within one year of the date of enactment of this Act to the same committees indicating the final management and protection arrangements he has concluded for such collection.

General management plan, submitted to congressional committees. 16 USC 1a-1.

Report to congressional committees.

Sec. 203. (a) Effective October 1, 1979, there are authorized to be appropriated from the Land and Water Conservation Fund such sums as may be necessary for the acquisition of lands and interests therein.

(b) There is hereby authorized to be appropriated, effective October 1, 1979, an amount not to exceed \$314,000 for the acquisition of the archival collection; an amount not to exceed \$200,000 for development; and an amount not to exceed \$1,230,000 for the preservation of the archival collection.

Appropriation authorization.

TITLE III

Sec. 301. Notwithstanding any other provision of law, the Secretary shall permit the late Chief Turkey Tayac to be buried in the ossuary at Piscataway Park in Oxon Hill, Maryland. The Secretary shall select the site in such ossuary at which Chief Tayac may be buried. No Federal funds may be used for the burial of Chief Tayac except such funds as may be necessary for the maintenance of the burial site by the Department of the Interior.

Chief Turkey Tayac, burial in Oxon Hill, Md.

TITLE IV

Sec. 401. The National Parks and Recreation Act of 1978, approved November 10, 1978 (92 Stat. 3467), is amended as follows:

National Park System.

(a) Section 101(8), re: DeSoto National Memorial, is amended by changing the phrase "changing '\$3,108,000' to '\$5,108,000'." to read "by changing '\$175,000' to '\$292,000'."

16 USC 1 note. 92 Stat. 3471. 16 USC 450dd note.

(b) Section 101(20), re: Pecos National Monument, is amended by changing "\$2,375,000" to "\$2,575,000".

92 Stat. 3472.

(c) Section 301, re: revision of boundaries, is amended by changing the words "but not exceed" in the first sentence to "but not to exceed".

92 Stat. 3473.

(d) Section 301(8), re: Great Sand Dunes National Monument, is amended by (1) changing "one thousand one hundred and nine acres" to "one thousand nine hundred acres" and by changing "\$166,000" to "\$265,000"; and (2) by adding the following at the end thereof: "The Secretary shall designate the lands described by this paragraph for management in accordance with the adjacent lands within the monument by publication of a notice in the Federal Register."

Publication in Federal Register.

PUBLIC LAW 106-530—NOV. 22, 2000

114 STAT. 2527

Public Law 106-530
106th Congress

An Act

To provide for the establishment of the Great Sand Dunes National Park and Preserve and the Baca National Wildlife Refuge in the State of Colorado, and for other purposes.

Nov. 22, 2000
[S. 2547]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Great Sand Dunes National Park and Preserve Act of 2000”.

Great Sand
Dunes National
Park and
Preserve Act of
2000.
16 USC 410hhh
note.
16 USC 410hhh.

SEC. 2. FINDINGS.

Congress finds that—

(1) the Great Sand Dunes National Monument in the State of Colorado was established by Presidential proclamation 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;

(2) the Great Sand Dunes, together with the associated sand sheet and adjacent wetland and upland, contain a variety of rare ecological, geological, paleontological, archaeological, scenic, historical, and wildlife components, which—

(A) include the unique pulse flow characteristics of Sand Creek and Medano Creek that are integral to the existence of the dunes system;

(B) interact to sustain the unique Great Sand Dunes system beyond the boundaries of the existing National Monument;

(C) are enhanced by the serenity and rural western setting of the area; and

(D) comprise a setting of irreplaceable national significance;

(3) the Great Sand Dunes and adjacent land within the Great Sand Dunes National Monument—

(A) provide extensive opportunities for educational activities, ecological research, and recreational activities; and

(B) are publicly used for hiking, camping, and fishing, and for wilderness value (including solitude);

(4) other public and private land adjacent to the Great Sand Dunes National Monument—

(A) offers additional unique geological, hydrological, paleontological, scenic, scientific, educational, wildlife, and recreational resources; and

- (B) contributes to the protection of—
 - (i) the sand sheet associated with the dune mass;
 - (ii) the surface and ground water systems that are necessary to the preservation of the dunes and the adjacent wetland; and
 - (iii) the wildlife, viewshed, and scenic qualities of the Great Sand Dunes National Monument;
- (5) some of the private land described in paragraph (4) contains important portions of the sand dune mass, the associated sand sheet, and unique alpine environments, which would be threatened by future development pressures;
- (6) the designation of a Great Sand Dunes National Park, which would encompass the existing Great Sand Dunes National Monument and additional land, would provide—
 - (A) greater long-term protection of the geological, hydrological, paleontological, scenic, scientific, educational, wildlife, and recreational resources of the area (including the sand sheet associated with the dune mass and the ground water system on which the sand dune and wetland systems depend); and
 - (B) expanded visitor use opportunities;
- (7) land in and adjacent to the Great Sand Dunes National Monument is—
 - (A) recognized for the culturally diverse nature of the historical settlement of the area;
 - (B) recognized for offering natural, ecological, wildlife, cultural, scenic, paleontological, wilderness, and recreational resources; and
 - (C) recognized as being a fragile and irreplaceable ecological system that could be destroyed if not carefully protected; and
- (8) preservation of this diversity of resources would ensure the perpetuation of the entire ecosystem for the enjoyment of future generations.

16 USC 410hhh-
1. **SEC. 3. DEFINITIONS.**

In this Act:

- (1) **ADVISORY COUNCIL.**—The term “Advisory Council” means the Great Sand Dunes National Park Advisory Council established under section 8(a).
- (2) **LUIS MARIA BACA GRANT NO. 4.**—The term “Luis Maria Baca Grant No. 4” means those lands as described in the patent dated February 20, 1900, from the United States to the heirs of Luis Maria Baca recorded in book 86, page 20, of the records of the Clerk and Recorder of Saguache County, Colorado.
- (3) **MAP.**—The term “map” means the map entitled “Great Sand Dunes National Park and Preserve”, numbered 140/80,032 and dated September 19, 2000.
- (4) **NATIONAL MONUMENT.**—The term “national monument” means the Great Sand Dunes National Monument, including lands added to the monument pursuant to this Act.
- (5) **NATIONAL PARK.**—The term “national park” means the Great Sand Dunes National Park established in section 4.
- (6) **NATIONAL WILDLIFE REFUGE.**—The term “wildlife refuge” means the Baca National Wildlife Refuge established in section 6.

PUBLIC LAW 106-530—NOV. 22, 2000

114 STAT. 2529

(7) PRESERVE.—The term “preserve” means the Great Sand Dunes National Preserve established in section 5.

(8) RESOURCES.—The term “resources” means the resources described in section 2.

(9) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(10) USES.—The term “uses” means the uses described in section 2.

SEC. 4. GREAT SAND DUNES NATIONAL PARK, COLORADO.

16 USC 410hhh-
2.
Effective date.
Notification.
Federal Register,
publication.

(a) ESTABLISHMENT.—When the Secretary determines that sufficient land having a sufficient diversity of resources has been acquired to warrant designation of the land as a national park, the Secretary shall establish the Great Sand Dunes National Park in the State of Colorado, as generally depicted on the map, as a unit of the National Park System. Such establishment shall be effective upon publication of a notice of the Secretary’s determination in the Federal Register.

(b) AVAILABILITY OF MAP.—The map shall be on file and available for public inspection in the appropriate offices of the National Park Service.

(c) NOTIFICATION.—Until the date on which the national park is established, the Secretary shall annually notify the Committee on Energy and Natural Resources of the Senate and the Committee on Resources of the House of Representatives of—

(1) the estimate of the Secretary of the lands necessary to achieve a sufficient diversity of resources to warrant designation of the national park; and

(2) the progress of the Secretary in acquiring the necessary lands.

(d) ABOLISHMENT OF NATIONAL MONUMENT.—(1) On the date of establishment of the national park pursuant to subsection (a), the Great Sand Dunes National Monument shall be abolished, and any funds made available for the purposes of the national monument shall be available for the purposes of the national park.

(2) Any reference in any law (other than this Act), regulation, document, record, map, or other paper of the United States to “Great Sand Dunes National Monument” shall be considered a reference to “Great Sand Dunes National Park”.

(e) TRANSFER OF JURISDICTION.—Administrative jurisdiction is transferred to the National Park Service over any land under the jurisdiction of the Department of the Interior that—

(1) is depicted on the map as being within the boundaries of the national park or the preserve; and

(2) is not under the administrative jurisdiction of the National Park Service on the date of enactment of this Act.

SEC. 5. GREAT SAND DUNES NATIONAL PRESERVE, COLORADO.

16 USC 410hhh-
3.

(a) ESTABLISHMENT OF GREAT SAND DUNES NATIONAL PRESERVE.—(1) There is hereby established the Great Sand Dunes National Preserve in the State of Colorado, as generally depicted on the map, as a unit of the National Park System.

(2) Administrative jurisdiction of lands and interests therein administered by the Secretary of Agriculture within the boundaries of the preserve is transferred to the Secretary of the Interior, to be administered as part of the preserve. The Secretary of Agriculture shall modify the boundaries of the Rio Grande National Forest to exclude the transferred lands from the forest boundaries.

(3) Any lands within the preserve boundaries which were designated as wilderness prior to the date of enactment of this Act shall remain subject to the Wilderness Act (16 U.S.C. 1131 et seq.) and the Colorado Wilderness Act of 1993 (Public Law 103-767; 16 U.S.C. 539i note).

(b) MAP AND LEGAL DESCRIPTION.—(1) As soon as practicable after the establishment of the national park and the preserve, the Secretary shall file maps and a legal description of the national park and the preserve with the Committee on Energy and Natural Resources of the Senate and the Committee on Resources of the House of Representatives.

(2) The map and legal description shall have the same force and effect as if included in this Act, except that the Secretary may correct clerical and typographical errors in the legal description and maps.

(3) The map and legal description shall be on file and available for public inspection in the appropriate offices of the National Park Service.

(c) BOUNDARY SURVEY.—As soon as practicable after the establishment of the national park and preserve and subject to the availability of funds, the Secretary shall complete an official boundary survey.

16 USC 410hhh-4, 668dd note.

SEC. 6. BACA NATIONAL WILDLIFE REFUGE, COLORADO.

(a) ESTABLISHMENT.—(1) When the Secretary determines that sufficient land has been acquired to constitute an area that can be efficiently managed as a National Wildlife Refuge, the Secretary shall establish the Baca National Wildlife Refuge, as generally depicted on the map.

Effective date. Federal Register, publication.

(2) Such establishment shall be effective upon publication of a notice of the Secretary's determination in the Federal Register.

(b) AVAILABILITY OF MAP.—The map shall be on file and available for public inspection in the appropriate offices of the United States Fish and Wildlife Service.

(c) ADMINISTRATION.—The Secretary shall administer all lands and interests therein acquired within the boundaries of the national wildlife refuge in accordance with the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.) and the Act of September 28, 1962 (16 U.S.C. 460k et seq.) (commonly known as the Refuge Recreation Act).

(d) PROTECTION OF WATER RESOURCES.—In administering water resources for the national wildlife refuge, the Secretary shall—

(1) protect and maintain irrigation water rights necessary for the protection of monument, park, preserve, and refuge resources and uses; and

(2) minimize, to the extent consistent with the protection of national wildlife refuge resources, adverse impacts on other water users.

16 USC 410hhh-5.

SEC. 7. ADMINISTRATION OF NATIONAL PARK AND PRESERVE.

(a) IN GENERAL.—The Secretary shall administer the national park and the preserve in accordance with—

(1) this Act; and

(2) all laws generally applicable to units of the National Park System, including—

(A) the Act entitled “An Act to establish a National Park Service, and for other purposes”, approved August 25, 1916 (16 U.S.C. 1, 2-4); and

(B) the Act entitled “An Act to provide for the preservation of historic American sites, buildings, objects, and antiquities of national significance, and for other purposes”, approved August 21, 1935 (16 U.S.C. 461 et seq.).

(b) GRAZING.—

(1) ACQUIRED STATE OR PRIVATE LAND.—With respect to former State or private land on which grazing is authorized to occur on the date of enactment of this Act and which is acquired for the national monument, or the national park and preserve, or the wildlife refuge, the Secretary, in consultation with the lessee, may permit the continuation of grazing on the land by the lessee at the time of acquisition, subject to applicable law (including regulations).

(2) FEDERAL LAND.—Where grazing is permitted on land that is Federal land as of the date of enactment of this Act and that is located within the boundaries of the national monument or the national park and preserve, the Secretary is authorized to permit the continuation of such grazing activities unless the Secretary determines that grazing would harm the resources or values of the national park or the preserve.

(3) TERMINATION OF LEASES.—Nothing in this subsection shall prohibit the Secretary from accepting the voluntary termination of leases or permits for grazing within the national monument or the national park or the preserve.

(c) HUNTING, FISHING, AND TRAPPING.—

(1) IN GENERAL.—Except as provided in paragraph (2), the Secretary shall permit hunting, fishing, and trapping on land and water within the preserve in accordance with applicable Federal and State laws.

(2) ADMINISTRATIVE EXCEPTIONS.—The Secretary may designate areas where, and establish limited periods when, no hunting, fishing, or trapping shall be permitted under paragraph (1) for reasons of public safety, administration, or compliance with applicable law.

(3) AGENCY AGREEMENT.—Except in an emergency, regulations closing areas within the preserve to hunting, fishing, or trapping under this subsection shall be made in consultation with the appropriate agency of the State of Colorado having responsibility for fish and wildlife administration.

(4) SAVINGS CLAUSE.—Nothing in this Act affects any jurisdiction or responsibility of the State of Colorado with respect to fish and wildlife on Federal land and water covered by this Act.

(d) CLOSED BASIN DIVISION, SAN LUIS VALLEY PROJECT.—Any feature of the Closed Basin Division, San Luis Valley Project, located within the boundaries of the national monument, national park or the national wildlife refuge, including any well, pump, road, easement, pipeline, canal, ditch, power line, power supply facility, or any other project facility, and the operation, maintenance, repair, and replacement of such a feature—

(1) shall not be affected by this Act; and

(2) shall continue to be the responsibility of, and be operated by, the Bureau of Reclamation in accordance with title I of the Reclamation Project Authorization Act of 1972 (43 U.S.C. 615aaa et seq.).

(e) WITHDRAWAL.—(1) On the date of enactment of this Act, subject to valid existing rights, all Federal land depicted on the

114 STAT. 2532

PUBLIC LAW 106-530—NOV. 22, 2000

map as being located within Zone A, or within the boundaries of the national monument, the national park or the preserve is withdrawn from—

(A) all forms of entry, appropriation, or disposal under the public land laws;

(B) location, entry, and patent under the mining laws; and

(C) disposition under all laws relating to mineral and geothermal leasing.

Applicability.

(2) The provisions of this subsection also shall apply to any lands—

(A) acquired under this Act; or

(B) transferred from any Federal agency after the date of enactment of this Act for the national monument, the national park or preserve, or the national wildlife refuge.

(f) WILDERNESS PROTECTION.—(1) Nothing in this Act alters the Wilderness designation of any land within the national monument, the national park, or the preserve.

(2) All areas designated as Wilderness that are transferred to the administrative jurisdiction of the National Park Service shall remain subject to the Wilderness Act (16 U.S.C. 1131 et seq.) and the Colorado Wilderness Act of 1993 (Public Law 103-77; 16 U.S.C. 539i note). If any part of this Act conflicts with the provisions of the Wilderness Act or the Colorado Wilderness Act of 1993 with respect to the wilderness areas within the preserve boundaries, the provisions of those Acts shall control.

16 USC 410hhh-6.

SEC. 8. ACQUISITION OF PROPERTY AND BOUNDARY ADJUSTMENTS.

(a) ACQUISITION AUTHORITY.—(1) Within the area depicted on the map as the “Acquisition Area” or the national monument, the Secretary may acquire lands and interests therein by purchase, donation, transfer from another Federal agency, or exchange: *Provided*, That lands or interests therein may only be acquired with the consent of the owner thereof.

(2) Lands or interests therein owned by the State of Colorado, or a political subdivision thereof, may only be acquired by donation or exchange.

(b) BOUNDARY ADJUSTMENT.—As soon as practicable after the acquisition of any land or interest under this section, the Secretary shall modify the boundary of the unit to which the land is transferred pursuant to subsection (b) to include any land or interest acquired.

(c) ADMINISTRATION OF ACQUIRED LANDS.—

(1) GENERAL AUTHORITY.—Upon acquisition of lands under subsection (a), the Secretary shall, as appropriate—

(A) transfer administrative jurisdiction of the lands to the National Park Service—

(i) for addition to and management as part of the Great Sand Dunes National Monument, or

(ii) for addition to and management as part of the Great Sand Dunes National Park (after designation of the Park) or the Great Sand Dunes National Preserve; or

(B) transfer administrative jurisdiction of the lands to the United States Fish and Wildlife Service for addition to and administration as part of the Baca National Wildlife Refuge.

PUBLIC LAW 106-530—NOV. 22, 2000

114 STAT. 2533

(2) FOREST SERVICE ADMINISTRATION.—(A) Any lands acquired within the area depicted on the map as being located within Zone B shall be transferred to the Secretary of Agriculture and shall be added to and managed as part of the Rio Grande National Forest.

(B) For the purposes of section 7 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-9), the boundaries of the Rio Grande National Forest, as revised by the transfer of land under paragraph (A), shall be considered to be the boundaries of the national forest.

SEC. 9. WATER RIGHTS.

16 USC 410hhh-7.

(a) SAN LUIS VALLEY PROTECTION, COLORADO.—Section 1501(a) of the Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575; 106 Stat. 4663) is amended by striking paragraph (3) and inserting the following:

“(3) adversely affect the purposes of—

“(A) the Great Sand Dunes National Monument;

“(B) the Great Sand Dunes National Park (including purposes relating to all water, water rights, and water-dependent resources within the park);

“(C) the Great Sand Dunes National Preserve (including purposes relating to all water, water rights, and water-dependent resources within the preserve);

“(D) the Baca National Wildlife Refuge (including purposes relating to all water, water rights, and water-dependent resources within the national wildlife refuge); and

“(E) any Federal land adjacent to any area described in subparagraph (A), (B), (C), or (D).”.

(b) EFFECT ON WATER RIGHTS.—

(1) IN GENERAL.—Subject to the amendment made by subsection (a), nothing in this Act affects—

(A) the use, allocation, ownership, or control, in existence on the date of enactment of this Act, of any water, water right, or any other valid existing right;

(B) any vested absolute or decreed conditional water right in existence on the date of enactment of this Act, including any water right held by the United States;

(C) any interstate water compact in existence on the date of enactment of this Act; or

(D) subject to the provisions of paragraph (2), State jurisdiction over any water law.

(2) WATER RIGHTS FOR NATIONAL PARK AND NATIONAL PRESERVE.—In carrying out this Act, the Secretary shall obtain and exercise any water rights required to fulfill the purposes of the national park and the national preserve in accordance with the following provisions:

(A) Such water rights shall be appropriated, adjudicated, changed, and administered pursuant to the procedural requirements and priority system of the laws of the State of Colorado.

(B) The purposes and other substantive characteristics of such water rights shall be established pursuant to State law, except that the Secretary is specifically authorized to appropriate water under this Act exclusively for the purpose of maintaining ground water levels, surface water

levels, and stream flows on, across, and under the national park and national preserve, in order to accomplish the purposes of the national park and the national preserve and to protect park resources and park uses.

(C) Such water rights shall be established and used without interfering with—

(i) any exercise of a water right in existence on the date of enactment of this Act for a non-Federal purpose in the San Luis Valley, Colorado; and

(ii) the Closed Basin Division, San Luis Valley Project.

(D) Except as provided in subsections (c) and (d), no Federal reservation of water may be claimed or established for the national park or the national preserve.

(c) NATIONAL FOREST WATER RIGHTS.—To the extent that a water right is established or acquired by the United States for the Rio Grande National Forest, the water right shall—

(1) be considered to be of equal use and value for the national preserve; and

(2) retain its priority and purpose when included in the national preserve.

(d) NATIONAL MONUMENT WATER RIGHTS.—To the extent that a water right has been established or acquired by the United States for the Great Sand Dunes National Monument, the water right shall—

(1) be considered to be of equal use and value for the national park; and

(2) retain its priority and purpose when included in the national park.

(e) ACQUIRED WATER RIGHTS AND WATER RESOURCES.—

(1) IN GENERAL.—(A) If, and to the extent that, the Luis Maria Baca Grant No. 4 is acquired, all water rights and water resources associated with the Luis Maria Baca Grant No. 4 shall be restricted for use only within—

(i) the national park;

(ii) the preserve;

(iii) the national wildlife refuge; or

(iv) the immediately surrounding areas of Alamosa or Saguache Counties, Colorado.

(B) USE.—Except as provided in the memorandum of water service agreement and the water service agreement between the Cabeza de Vaca Land and Cattle Company, LLC, and Baca Grande Water and Sanitation District, dated August 28, 1997, water rights and water resources described in subparagraph (A) shall be restricted for use in—

(i) the protection of resources and values for the national monument, the national park, the preserve, or the wildlife refuge;

(ii) fish and wildlife management and protection; or

(iii) irrigation necessary to protect water resources.

(2) STATE AUTHORITY.—If, and to the extent that, water rights associated with the Luis Maria Baca Grant No. 4 are acquired, the use of those water rights shall be changed only in accordance with the laws of the State of Colorado.

(f) DISPOSAL.—The Secretary is authorized to sell the water resources and related appurtenances and fixtures as the Secretary deems necessary to obtain the termination of obligations specified

in the memorandum of water service agreement and the water service agreement between the Cabeza de Vaca Land and Cattle Company, LLC and the Baca Grande Water and Sanitation District, dated August 28, 1997. Prior to the sale, the Secretary shall determine that the sale is not detrimental to the protection of the resources of Great Sand Dunes National Monument, Great Sand Dunes National Park, and Great Sand Dunes National Preserve, and the Baca National Wildlife Refuge, and that appropriate measures to provide for such protection are included in the sale.

SEC. 10. ADVISORY COUNCIL.

16 USC 410hhh-
8.

(a) **ESTABLISHMENT.**—The Secretary shall establish an advisory council to be known as the “Great Sand Dunes National Park Advisory Council”.

(b) **DUTIES.**—The Advisory Council shall advise the Secretary with respect to the preparation and implementation of a management plan for the national park and the preserve.

(c) **MEMBERS.**—The Advisory Council shall consist of 10 members, to be appointed by the Secretary, as follows:

(1) One member of, or nominated by, the Alamosa County Commission.

(2) One member of, or nominated by, the Saguache County Commission.

(3) One member of, or nominated by, the Friends of the Dunes Organization.

(4) Four members residing in, or within reasonable proximity to, the San Luis Valley and 3 of the general public, all of whom have recognized backgrounds reflecting—

(A) the purposes for which the national park and the preserve are established; and

(B) the interests of persons that will be affected by the planning and management of the national park and the preserve.

(d) **APPLICABLE LAW.**—The Advisory Council shall function in accordance with the Federal Advisory Committee Act (5 U.S.C. App.) and other applicable laws.

(e) **VACANCY.**—A vacancy on the Advisory Council shall be filled in the same manner as the original appointment.

(f) **CHAIRPERSON.**—The Advisory Council shall elect a chairperson and shall establish such rules and procedures as it deems necessary or desirable.

(g) **NO COMPENSATION.**—Members of the Advisory Council shall serve without compensation.

(h) **TERMINATION.**—The Advisory Council shall terminate upon the completion of the management plan for the national park and preserve.

114 STAT. 2536 PUBLIC LAW 106-530—NOV. 22, 2000

¹⁶ USC 410hhh-
9. **SEC. 11. AUTHORIZATION OF APPROPRIATIONS.**

There are authorized to be appropriated such sums as are necessary to carry out this Act.

Approved November 22, 2000.

LEGISLATIVE HISTORY—S. 2547:

SENATE REPORTS: No. 106-479 (Comm. on Energy and Natural Resources).

CONGRESSIONAL RECORD, Vol. 146 (2000):

Oct. 5, considered and passed Senate.

Oct. 25, considered and passed House.



**APPENDIX B:
INFORMATION REGARDING POTENTIAL CONSERVATION SITES,
COLORADO NATURAL HERITAGE PROGRAM**

The Colorado Natural Heritage Program (CNHP) is Colorado's primary comprehensive biological diversity data center. The program provides comprehensive information on rare, threatened, or endangered species and on natural communities in the state.

CNHP delineates potential conservation sites to successfully protect biotic populations or occurrences. They include ecological processes that are necessary to support the continued existence of elements of natural heritage significance in Colorado. Site boundaries represent an estimate of the landscape area that supports the rare elements and the ecological processes that support them. Factors considered may include (1) the extent of current and potential habitat for the elements present, considering the ecological processes necessary to maintain or improve existing conditions; (2) species movement and migration corridors; (3) maintenance of surface water quality within the site and the surrounding watershed; (4) maintenance of the hydrologic integrity of the groundwater, i.e., by protecting recharge zones; (5) land intended to protect the site against future changes in the use of surrounding lands; and (6) exclusion or control of invasive nonnative species; land necessary for management or monitoring activities (CNHP 1998).

Potential conservation sites are assigned a rank from 1 to 5 to reflect their overall biodiversity significance as follows:

- *B1 - Outstanding Significance:* only site known for an element of an excellent occurrence of a G1 (critically imperiled globally because of rarity or because of some factor of its biology making

it especially vulnerable to extinction) species.

- *B2 - Very High Significance:* one of the best examples of a community type, good occurrence of a G1 species, or excellent occurrence of a G2 (imperiled globally because of rarity or because of other factors demonstrably making it very vulnerable to extinction throughout its range) or G3 (vulnerable through its range or found locally in a restricted range) species.
- *B3 - High Significance:* excellent example of any community type, good occurrence of a G3 species, or a large concentration of good occurrences of state rare species.
- *B4 - Moderate or Regional Significance:* good example of a community type, excellent or good occurrence of state rare species.
- *B5 - General or Local Biodiversity Significance:* good or marginal occurrence of a community type, S1 (critically imperiled state-wide because of rarity or because of some factor of its biology making it especially vulnerable to extinction), or S2 (imperiled state-wide because of rarity or because of other factors demonstrably making it very vulnerable to extinction throughout its range) species.

The methods used to successfully identify potential conservation sites at the Great Sand Dunes followed CNHP's general

approach that has been used successfully in many rare or imperiled species inventories. The basic steps are: (1) collect existing information, (2) identify possible sites, (3)

select and prioritize targeted inventory areas, (4) field surveys, and (5) delineation of potential conservation sites (CNHP 1998).

APPENDIX C: RESOURCE OPPORTUNITY AREAS



SANGRE DE CRISTO MOUNTAINS AND FOOTHILLS	
Location	Upland portions of mountain drainage basins within the park and preserve.
Dunes System	Mountains and passes affect wind patterns, supply creek water, and are the source of some sand in the dunes.
Natural Diversity	Multiple life zones are tied to elevation zones. High vegetative biodiversity. Medano and Little Medano Creek watersheds have a B3 (high significance) biodiversity rating.
<i>Vegetation</i>	Piñon-juniper woodland, montane forest (Douglas-fir, white fir, ponderosa pine, aspen), subalpine forest (Englemann spruce, blue spruce, subalpine fir), krumholz, and alpine tundra plant communities.
<i>Wildlife</i>	Bighorn sheep; deer; carnivores (wolverines, mountain lions, bear); rodents (marmots, pikas).
<i>Water</i>	Snowpack is the source of springtime meltwater runoff in the creeks.
Human Connections	Culturally scarred trees; numerous archeological sites (including wickiups); water diversion; piñon nut and mushroom gathering.
Visitor Opportunities	Experiencing quiet and solitude in a wilderness environment; driving the Medano Pass four-wheel drive road; seeing wildlife in its natural setting; viewing the dune mass from the mountains; serves as backdrop for the dunes. Learning/education opportunities: dunes system and other geology, wilderness values, biodiversity, and habitat.
Wilderness Status / Suitability	Most is already wilderness (exceptions are Medano Road corridor and small exclusion areas near Mosca Pass, the mouth of Mosca Canyon, and diversion ditches).

SANGRE DE CRISTO MOUNTAINS AND FOOTHILLS	
<p>Planning Issues and Opportunities</p>	<ul style="list-style-type: none"> Fire management Access to preserve for hunting and recreation Tundra sensitivity Trans-mountain water diversions Potential for crowding around alpine lakes Human waste management Nonnative species (e.g., leafy spurge) Management of ATV use (currently illegal) on Medano Road Management of illegal off-road ATV use Management of primitive roadside and backcountry camping Opportunities for backcountry-related education, especially for organized groups Wilderness management Management of historic trail corridors



MOUNTAIN LAKES AND STREAMS	
Location	Mountain stream riparian corridors and high altitude lakes.
Dunes System	Headwaters for creeks that transport water and sand.
Natural Diversity	Sand Creek and Deadman Creek have a B2 (very high significance) biodiversity rating. Medano and Little Medano Creek watersheds have a B3 (high significance) biodiversity rating.
<i>Vegetation</i>	Mountain streams: willows, cottonwoods, river birch, aspens, duckweed. Alpine lakes: sedges, spruces, willows.
<i>Wildlife</i>	Native fish refugia (Medano Creek, with potential in others).
<i>Water</i>	Outstanding water quality (Medano Creek). Medano Creek, and to some extent Sand Creek, is an aquatically isolated system.
Human Connections	Archeological sites.
Visitor Opportunities	Seeing wildlife in its natural setting; experiencing quiet and solitude in a wilderness environment; narrow views down onto dunes. Learning/education opportunities: dunes system, riparian systems, biodiversity, history, and wilderness.
Wilderness Status / Suitability	All is existing wilderness except Medano corridor and Deadman Creek. Deadman Creek is suitable for wilderness.

MOUNTAIN LAKES AND STREAMS	
<p>Planning Issues and Opportunities</p>	<ul style="list-style-type: none"> Transmountain water diversion Concentration of visitors Water quality in streams and alpine lakes due to intensity of human use in surrounding areas Impacts of road adjacent to Medano Creek (and crossings) Management of primitive roadside and backcountry camping Visitor access to and along stream corridors Nonnative fish in Sand Creek and creeks north of there Mitigation or management of retention ponds, restoration opportunities Nonnative plants (e.g., Canada thistle, leafy spurge)



LOWER MEDANO AND SAND CREEKS	
Location	Downstream from the point where the water begins to interact with the sand substrate (where the stream cross-section changes from a rectangular to a braided channel).
Dunes System	Surface water flows recycle sand and transport it along margins of the dunefield; critical for vertical growth of dunes; great example of surge flow (rare phenomenon); flow dependent on subsurface aquifer (and vice versa); barrier to eastward sand migration; dramatic slip faces formed by stream-caused sand erosion.
Natural Diversity	Lower Sand and Medano creeks are within a B1 (outstanding significance) biodiversity area, but this significance is due primarily to endemic species that occur outside the stream corridors.
<i>Vegetation</i>	Unhybridized narrowleaf cottonwoods; cottonwood/willow riparian forest.
<i>Wildlife</i>	Heavily used by elk, bison, deer; birds abundant in riparian areas; amphibians.
<i>Water</i>	Creeks are a source of recharge to the aquifers.
Human Connections	Important area to certain contemporary American Indian tribes; local community interest in Medano Creek flow.
Visitor Opportunities	Experiencing surge flow; playing in Medano Creek at the foot of the dunes; slip faces to see and play on; sand play; viewing wildlife and birds in their natural setting (Sand Creek). Learning/education opportunities: dunes system (water cycle, see water flowing into ground, water quality); habitat; biodiversity; history; and wilderness.
Wilderness Status / Suitability	Medano Creek: part is existing wilderness and part is not suitable for wilderness. Sand Creek: part is existing wilderness and part is suitable for wilderness.

LOWER MEDANO AND SAND CREEKS	
<p>Planning Issues and Opportunities</p>	<p>Water quality Horse use Aquifer monitoring Dogs Crowding and congestion at Castle Creek Education opportunities Wilderness management, especially appropriate uses Human waste management Cultural resources not fully surveyed</p>



DUNEFIELD	
Location	Main dune mass.
Dunes System	Active dunefield, including the tall dunes; vertically growing, wind-caused, nonmigratory dunes.
Natural Diversity	Dunefield is within a B1 (outstanding significance) biodiversity area. Opposing elemental interactions within the landscape (contrast between water, wind, sand, and sun).
<i>Vegetation</i>	Mostly unvegetated; some sparse, specially adapted mostly perennial vegetation in dune troughs (e.g., Indian ricegrass, blowout grass, scurfpea, sunflowers).
<i>Wildlife</i>	Endemic insects.
<i>Water</i>	Sand transported around margins of dunefield by creeks; precipitation only—very little infiltration to groundwater aquifer.
Human Connections	Jicarilla Apache collect sand; dunes are a major landmark in contemporary and historic times.
Visitor Opportunities	Climbing and descending high dunes (resilient landscape); free play; experiencing quiet and solitude in a wilderness environment; camping in the dunes; seeing “the heavens” at night; viewing the dunes under changing light conditions; visual focal point of San Luis Valley. Learning and education opportunities: learning about the dunes system; habitat; biodiversity; and wilderness.
Wilderness Status / Suitability	All is existing wilderness.

DUNEFIELD	
<p>Planning Issues and Opportunities</p>	<p>Overcrowding in area between dunes parking area and high dunes Trash Dogs and horses Parking capacity Access to the west side of the dunefield Water quality (human and dog waste) Noise Threatened values mostly relate to visitor experience/opportunities Most natural values not really threatened in this resource opportunity area Visitor exposure to elements: heat, sun, dehydration, lightning, blowing sand Dunefield is a fundamental visitor experience, but it is very difficult for some with limited mobility to get there Dunes parking area is the easiest/only way for many people to get to the dunes Wilderness management (dune wheelchair) Wilderness values in a heavily used area</p>



SAND SHEET AND SABKHA	
Location	Relatively flat western (upwind) portion of the national park; wraps along eastern margin of the dunes.
Dunes System	Vegetated portion of the dune system (some small areas lack vegetation); relatively little sand movement; sand sheet stability is precarious—vegetation is the stabilizing factor; immediate source of sand for the dunefield; near-surface water table is the defining factor for the sabkha (creates mineral deposits).
Natural Diversity	Sand sheet is within a B1 (outstanding significance) biodiversity area. Sabkha is within a B2 (very high significance) biodiversity area. Great wildlife diversity.
<i>Vegetation</i>	Sabkha—salt-tolerant plants like four-wing saltbush, saltgrass, and greasewood; sand sheet—rabbitbrush, prickly pear, yucca, and grasses; irrigated meadows in sabkha and on the Baca Ranch provide forage for bison.
<i>Wildlife</i>	Endemic insects; great wildlife habitat overall.
<i>Water</i>	High groundwater table; seasonal standing water in the sabkha.
Human Connections	One of the oldest known Paleo-Indian (Folsom) sites; numerous archeological sites; culturally scarred trees.
Visitor Opportunities	Experiencing quiet and solitude in a wilderness environment; seeing the heavens at night; viewing the dunes with backdrop of the high peaks; viewing wildlife in its natural setting; driving the Medano Pass four-wheel drive road (east side of dunefield). Learning and educational opportunities: learning about the dunes system; prehistory; habitat; biodiversity.
Wilderness Status / Suitability	Most of sabkha is unsuitable for wilderness. Most of sand sheet is suitable for wilderness.

SAND SHEET AND SABKHA	
<p>Planning Issues and Opportunities</p>	<ul style="list-style-type: none"> Natural gas exploration on the former Baca Ranch lands Boundaries and trespass Future management of Medano Ranch Bicycling opportunities Access to Liberty and Duncan, Sand and Deadman creeks Access to west side of dunes Nonnative plants (e.g., white top, Russian thistle) Effects of ranching, irrigation, and other human uses on vegetation and wildlife Fire management Sensitive archeological resources Free-ranging bison herd?



SPRING CREEKS AND WETLANDS	
Location	Perennial water sources in the western portion of the national park: Big and Little Spring creeks, interdunal wetlands, and small playa lakes.
Dunes System	Groundwater aquifer near surface greatly affects the landscape; biodiversity related to near surface groundwater; presence and amount of flow in springs and wetlands are indicators of aquifer status.
Natural Diversity	Springs and wetlands are within a B2 (very high significance) biodiversity area. Great vegetative diversity.
<i>Vegetation</i>	Rushes, sedges, duckweed, slender spider flower, cattails; other riparian vegetation; emergent wetlands.
<i>Wildlife</i>	Focal point for wildlife.
<i>Water</i>	Gaining stream (groundwater flows into the stream); groundwater becomes saltier as the water moves downgradient; stream geomorphology is tied to San Luis Lakes.
Human Connections	American Indian ties; numerous archeological sites.
Visitor Opportunities	Experiencing quiet and solitude in a wilderness environment; seeing the heavens at night; viewing the dunes with backdrop of the high peaks; viewing wildlife in its natural setting. Learning and educational opportunities: learning about the dunes system (especially groundwater aquifers); prehistory; habitat; biodiversity.
Wilderness Status / Suitability	Upper stretches suitable for wilderness; lower stretches unsuitable for wilderness.

SPRING CREEKS AND WETLANDS	
<p>Planning Issues and Opportunities</p>	<p>Opportunity to restore natural flows (water has been diverted for irrigation) Closed Basin Project has potential to affect aquifer and related natural systems Valleywide dewatering of aquifer from agricultural uses Visitor access Artifacts collecting and location of other sensitive sites Vegetation and water quality susceptible to damage from trespass livestock Nonnative fish and turtles in Big Spring and Big Spring Creek Reintroduction of native amphibians Nonnative species (e.g., Canada thistle and white top) Standing water—possible West Nile virus concern</p>

APPENDIX D: CARRYING CAPACITY STEPS

The carrying capacity process for national parks typically involves the following steps:

1. Identify desired conditions (goals) for resources and visitors.
2. Identify indicators (things to monitor to determine whether desired conditions are being met).
3. Identify standards (limits of acceptable change) for the indicators.
4. Monitor indicators.
5. Take management action as necessary to ensure that standards are met.
6. Regularly evaluate and make adjustments based on new information and lessons learned.

Step 1: identify desired conditions, involves assigning management zones that have different desired resource and visitor conditions to different park areas.

Step 2: identify indicators, often begins with a discussion of park and zone-specific resource and visitor experience concerns (signs that desired conditions are perhaps not being met). Discussing specific concerns helps managers identify potential resource and visitor experience indicators to monitor. Depending on the situation, managers may also consult scientific literature, conduct research, consult other park managers, consult public opinion, and apply management judgment to assist with identifying indicators.

Step 3: identify standards, involves using scientific information, combined with best judgment, to establish the minimum

acceptable condition for an indicator. (A standard does not define an intolerable condition. It is not a condition that managers should strive to achieve, unless intolerable conditions already exist.)

Step 4: monitor indicators, means checking indicators to see if conditions are deteriorating or if standards are being exceeded. Ideally, monitoring involves systematic and periodic measurement of indicators according to a predefined plan. With limited NPS staff and budgets, park managers must focus on areas where there are definite concerns and/or clear evidence of problems. This means monitoring should generally take place where:

- conditions are at or violate standards
- conditions are changing rapidly
- specific and important values are threatened by visitation
- effects of management actions are unknown

Step 5: take management action, means taking corrective steps to address deteriorating or unacceptable conditions. Management action includes things like expanding education or information, requiring visitor guides or permits, delineating trails, extending seasons or hours, expanding facilities, establishing one-way trails, increasing patrols, implementing temporary closures, or redirecting use. Using a combination of strategies provides managers with greater flexibility and allows them to address multiple dimensions and causes of undesired impacts. Reducing use may appear to be the obvious solution to visitor use impacts, but less restrictive strategies may work as well and have fewer undesired consequences.

Step 6: sometimes referred to as adaptive management, means remaining flexible and

“learning as you go.” Park managers rarely have all the information they desire to make decisions. Nonetheless, they are responsible for ensuring that park resources remain unimpaired for the enjoyment of future generations, which may mean taking a

cautious or conservative approach while gathering additional information. Adaptive management also includes using best judgment, trying different things to see what works, and adapting as new information becomes available.

**APPENDIX E:
DEVELOPMENT OF THE GENERAL MANAGEMENT PLAN**

INITIAL PLANNING STEPS

Work on the Great Sand Dunes National Park and Preserve General Management Plan / Wilderness Study / Environmental Impact Statement began in earnest in early 2003. The planning team consisted of Great Sand Dunes staff, specialists from the National Park Service – Intermountain Region, and professionals from the consulting firm engineering-environmental Management, Inc. (e²M).

The planning team was assisted by the Great Sand Dunes National Park Advisory Council. The council has operated in accordance with the Federal Advisory Committee Act (5 USC App.) and other applicable laws. Early in the planning process, council members participated in field trips to learn more about the park, its surroundings, and planning issues. As of fall 2005, the council had met 11 times. Advisory council meetings are open to the public and typically include an opportunity for public comment. Advisory council meeting minutes are available online. The council (see “Preparers and Consultants” for a list of members) participated in each step of the National Park Service planning process, including identifying fundamental resources and values, developing management zones and alternatives, gathering and considering public input, and identifying consequences of alternatives. After completion of the general management plan, the council is to be dissolved.

Early steps in the general management plan planning process included the following (see chapter 1 for details):

- Reaffirm the park’s purpose and significance.
- Identify the park’s fundamental resources and values.
- Consider legislative mandates and constraints.
- Recognize planning issues.

The planning team and advisory council conducted field trips, and gathered and studied information and park resources, visitor use and values, and planning issues. With this information, the team and council developed four preliminary concepts for alternatives (including a no-action alternative) for managing natural and cultural resources and visitor use. These concepts were presented to the public in a newsletter, and comments from the public and other agencies were gathered and reviewed.

Based on public input and further consideration, the planning team developed three draft alternatives, each with an accompanying option for new wilderness, from these preliminary concepts. The team also dismissed certain ideas or actions from further consideration. These draft alternatives were then presented in a newsletter and at public meetings, and again comments were collected and reviewed. Possible consequences of the alternatives were discussed, neighboring agencies were consulted, and additional field trips were conducted. Based on all of this information, certain elements of the GMP alternatives were modified.

DEVELOPING THE NATIONAL PARK SERVICE PREFERRED ALTERNATIVE

The next major step was to identify (develop) a preferred National Park Service alternative. The four revised alternatives, titled “no-action,” “dunefield focus—maximize wildness,” “three public nodes,” and “dispersed use-joint facilities,” were

evaluated. The planning team used an evaluation process called “choosing by advantages.” This process evaluates different choices (in this case, the four management alternatives) by identifying and comparing the relative advantages of each according to a set of criteria. In this case, the criteria were based on the park’s purpose, significance, and fundamental resources and values. The Great Sand Dunes Advisory Council reviewed the criteria and its comments were incorporated.

The criteria area listed below (not in priority order):

- Preserves natural diversity and natural processes (especially fundamental resources and values).
- Preserves human connections (cultural resources), especially fundamental resources and values.
- Provides for visitor opportunities (especially fundamental resources and values).
- Supports the park’s education and research programs.
- Provides for efficient NPS operations and for employee and visitor safety.
- Considers interests of neighboring agencies, communities, and public comments.

The team identified the relative advantages of each alternative for each of the six criteria. Each advantage (not each criterion) was given a point value that reflected its importance. Then, by adding up the scores for each alternative, the team was able to determine how the four alternatives compared overall. Costs of implementing

the alternatives were then compared to examine the relationships between advantages and costs.

The relative advantages of the alternatives for each criterion are summarized below.

Preserves natural diversity and natural processes (especially fundamental resources and values)—The dunefield focus—maximize wildness alternative scored highest for this criterion. This alternative had the greatest amount of new wilderness proposed and the most of the natural/wild management zone. It therefore had the least habitat fragmentation, least wildlife disturbance, and permitted a return to a more natural hydrologic regime. The management zones and minimal access would probably lead to relatively light use of the Baca and Medano Ranch areas, which would mean less spread of invasive plants into biologically special areas.

Preserves human connections (cultural resources), especially fundamental resources and values—The dispersed use—joint facilities alternative scored highest for its protection of cultural resources, archeological resources, historic structures, and cultural landscapes. Its wilderness recommendation, overlaid with the guided learning zone, would help protect sensitive areas by limiting vehicle access. People would not be permitted to drive to areas containing especially sensitive resources. This alternative also would maintain and preserve the Medano Ranch headquarters historic structures and cultural landscape via administrative and related adaptive use. This would provide an additional level of protection to sensitive cultural resources in and near the Medano Ranch area. A relatively large backcountry adventure zone would allow for trails to be constructed to direct use away from other sensitive areas.

Provides for visitor opportunities (especially fundamental resources and values)—The dispersed use—joint facilities alternative scored highest for this factor. It would allow for and could accommodate growth in visitation, and provide for an appropriate range of visitor opportunities. (The quality of visitor experiences was judged more important than having a wide variety of experiences that may not relate to the park’s fundamental resources and values). A modest shuttle system would provide options for transporting visitors to the dunes area during peak visitor use periods. The guided learning zone would encourage a different type of park experience and provides protective measures for especially sensitive resources. A northern access point would be important for addressing neighboring agency needs and providing options for access to the north part of the park.

Supports the park’s education and research programs—The three public nodes alternative scored highest for this criterion because it would permit environmental education and interpretive options at the Medano Ranch headquarters and would not limit vehicle access (no new wilderness recommendation) for researchers and educators.

Provides for efficient NPS operations and for employee and visitor safety—The no-action alternative scored highest for this criterion due to no increase in fire risk and no access limitations (via wilderness recommendation) for administrative purposes. Also, Medano Ranch would be maintained by The Nature Conservancy, which would mean park staff would remain free for other operational needs. Limited visitor access to new lands would keep additional patrol, response, and maintenance needs (and staff) to a minimum. No new services to provide or

facilities to maintain would help keep park operations small and streamlined.

Considers interests of neighboring agencies, communities, and public comments—The dispersed use—joint facilities alternative scored highest for this criterion. It would preserve historic structures and landscapes at Medano Ranch and recommend new wilderness (which may affect management by some other agencies, but also preserves wilderness values that are highly valued by the public). It would provide flexibility to consider various access options to USFS lands and the mountain front. It would also provide some measure of administrative access for park and agency staff, new recreational opportunities for visitors, and partnering opportunities that could enhance socioeconomic interests in the San Luis Valley.

After studying the advantages of the revised alternatives according to the six criteria in the foregoing discussion, the planning team developed the NPS preferred alternative. The dispersed use—joint facilities alternative provided the overall best value (greatest total advantage for the cost expended), so the team started with this alternative, then studied the choosing by advantages results to see where elements of other alternatives could be incorporated to add advantages without adding much additional cost. In this way, certain other elements were incorporated to build the NPS preferred alternative. Having taken this step, the planning team eliminated the dispersed use—joint facilities alternative from detailed analysis and discussion in the GMP/EIS to keep the document manageable and understandable, and because many of its key elements had been incorporated into the NPS preferred alternative.

RATIONALE FOR THE NPS PREFERRED ALTERNATIVE

The following discussion provides the rationale for why various elements were included in the NPS preferred alternative.

Frontcountry Zone

A modest shuttle system for peak visitor use periods was included in the preferred alternative for the following reasons: to minimize the incidence of visitor vehicles parked on road shoulders for safety and resource reasons, to reduce vehicle congestion and visitor frustration because enlarging parking areas within the frontcountry zone would have undesired scenic and resource impacts, and because the frontcountry and dunes play zones can accommodate more visitors (without vehicles) without undue social consequences.

The frontcountry zone was widened slightly along the main park road to provide for future bicycle lanes. Some people ride bicycles along the main park road. To do this, cyclists must share the main park road, which has no shoulders in many places, with large RVs. This is a safety concern, especially when traffic is heavy. Adding bike lanes would improve safety, provide an alternative, more sustainable way of visiting the park (one that does not require a vehicle parking space), and increase recreational opportunities. This option would be less costly and have fewer environmental impacts (e.g., habitat fragmentation) than a multiuse path that is separate from the main road corridor.

A separate biking/hiking path that connects the campground with the visitor center and dunes parking lot/access area) would allow visitors to safely walk or ride bicycles between these areas without creating

additional social trails. Use of such a path would also reduce the amount of traffic on the main park road, and reduce or eliminate danger associated with visitors, including children, sharing this heavily used section of roadway with motor vehicles.

The fee booth would be relocated to near the park boundary. Its current location immediately west of park headquarters presents the following problems: (1) vehicle congestion around the headquarters area, (2) no way for a visitor shuttle bus to bypass the main entrance gate, (3) no way for park staff vehicles to bypass lines of vehicles queuing as they enter or leave the park, and (4) little room for vehicles to turn around in the immediate area (does not provide for redirection of visitor vehicles). The new location would help alleviate these problems and support a modest shuttle system operating out of the Oasis area.

Dunes Play Zone

The dunes play management zone was included to acknowledge and provide management direction for this localized dune and Medano Creek area located just west of the dunes parking lot. The area is special because, although it is located within a designated wilderness area, it receives high concentrations of visitor use during busy summer weekends and holidays. The National Park Service believes that such use is appropriate.

Guided Learning Zone

An area in the south-central portion of the park was zoned guided learning to protect an area of diverse sensitive resources while still allowing public use (guided only). Because Medano Ranch headquarters would not be managed as a public day-use area (see administrative zone below), the planning team felt there was no need to

extend the zone westward to the headquarters as a means of discouraging visitors from wandering into sensitive areas.

Backcountry Access Zone

The Medano Pass primitive road corridor was zoned backcountry access because no big changes in management are needed or desired, and this zone best fits the area.

The backcountry access zone and trailhead in the northern portion of the park provides for future public vehicle access to the north part of the park. The shape and extent of this zone in the northern portion of the park allow maximum flexibility for siting a route either from the refuge or from the Baca Grande subdivision. Similarly, maximum flexibility for public vehicle access to the mountain front—a USFS goal—was retained by including a provision for a joint U.S. Forest Service / National Park Service study of the need for and impacts of: (1) an extension of Cow Camp Road to connect with Liberty Road, and/or (2) access via Liberty Road. Either would require a separate NEPA process.

The backcountry access zone in the northern portion of the park does not include a campground, which was included in another GMP alternative. The planning team felt it best not to introduce noise, visual impacts, night time traffic, and lights in this area. Two campgrounds are located in nearby Crestone. Staff and maintenance requirements for campgrounds far exceed those needed for a trailhead, and this was an agency consideration. There was also substantial concern about encouraging high levels of use near Deadman Creek (a special ecological area) due to the potential for introduction of invasive plant species and damage to streambanks from horse and foot traffic. Risk of wildfire (from campfires) was

a concern, especially with the Baca Grande subdivision in the path of prevailing winds.

Backcountry Adventure Zone

The areas north and south of the frontcountry zone along the main park road and along the southern portion of the Medano Pass primitive road were zoned backcountry adventure. This zoning acknowledges that some visitors wander away from these roads, which are located in the busier frontcountry zone, to explore adjacent areas. Also, the backcountry adventure zone permits the future option to provide hiking or horseback trails from the Oasis commercial area (located just outside the main park entrance) to appropriate dunefield and Medano Creek areas. (Note: there is an established “no public horse use area” located within the main portion of the frontcountry and dunes play zones.) Similarly, it would allow more flexibility in the event that the Oasis served as an alternate base for guided hiking and horseback tours into the Guided Learning Zone.

The planning team felt that the northern portion of the preserve, around Music Pass and Sand Creek Lakes, is an area that already experiences relative high levels of use, and where use may increase substantially in the future. The team zoned this area backcountry adventure to keep management options open for formalizing trails, creating loop trails, providing designated backcountry campsites, and for interfacing with USFS management of the adjacent area.

The National Park Service is in the early stages of learning more about the characteristics and resources of the former Baca Ranch area, located northwest of the dunefield. Thus, this area was zoned backcountry adventure, which gives the

National Park Service future flexibility to define trails and otherwise direct visitor use as needed to protect special or sensitive resources.

Natural/Wild Zone

The dunefield and the area surrounding the Medano Ranch headquarters were zoned natural/wild: the planning team anticipated low use levels in these areas, and trails would be expensive to impossible to build and maintain due to sandy conditions. With the natural/wild zone, it would still be possible, should a trailhead be developed at the San Luis Lakes State Park and Wildlife Area, to access the national park via cross-country foot or horseback travel.

The southern portion of the national preserve was also zoned natural/wild (except for the Mosca Pass trail corridor) because there is a desire to maintain it in a natural, wild condition, the area is unlikely to experience a substantial increase in use, and there are few logical places for additional formal trails.

Administrative Zone

Liberty Road is zoned administrative within the national park to allow for National Park Service and other agency use for administrative purposes. Visitor foot and horseback travel would be permitted, but not general public vehicle use. (Vehicle use by hunters who are accompanied or authorized by agency personnel may be permitted.) If general public vehicle use were allowed on this stretch of road, many people would likely continue by vehicle southward along Liberty Road, spilling into the national preserve and the heart of the national park, both of which are designated wilderness. The planning team felt this might have too many undesired consequences for these NPS areas.

Areas along the eastern boundary of the preserve, near the top of Medano Pass, were zoned administrative to allow access for private entities that own water rights associated with irrigation ditches in the area.

Closed basin pipeline right-of-ways in the far southwest corner of the park were zoned administrative to allow access for agencies to check and maintain these working structures. Certain roads in the southwestern portion of the park were zoned administrative to allow agency access for operational activities such as resource management and monitoring.

The dirt road that accesses Alpine Camp from the north would be zoned administrative to allow NPS vehicle access to the site. Alpine Camp would serve as a base for patrols of the backcountry access and backcountry adventure zones, research and monitoring activities, etc.

The Medano Ranch access road and headquarters are zoned administrative to permit NPS adaptive use of structures for operational and administrative purposes (offices, storage, housing, research activities support, etc.). The area would also be used for scheduled, guided public activities such as interpretive programs, environmental education, a base for guided hiking or horseback tours, and special events; the access road would be gated, and the gate would be opened on a limited, as-needed (scheduled) basis for public vehicle access to the Medano Ranch headquarters area. The planning team decided against zoning the Medano Ranch headquarters as frontcountry, which would have allowed general public use, due to concerns about sensitive resources in this general area of the park, staffing and maintenance costs associated with operating public facilities and visitor safety.

Wilderness Recommendation (see also Appendix F: Wilderness Study and Recommendation)

The general approach to wilderness was to recommend designated wilderness for as much of the wilderness-eligible land as possible to protect wilderness values and provide protection for remote natural and cultural resources over the long term. NPS staff had earnest concerns that designating additional large blocks of wilderness would severely constrain National Park Service and other agency access to monitoring equipment (e.g., groundwater monitoring wells along Sand Creek and at Big Spring) and for research and resource management activities. For that reason, the extent of the wilderness recommendation was hotly debated, as were several wilderness exclusions along two-track roads. Ultimately, the team concluded that the wilderness recommendation should be based on what is best for resources and wilderness values over the long term, not on operational convenience and efficiency.

Wilderness-eligible lands excluded from the wilderness recommendation included narrow strips (approximately 200 feet wide) immediately north of and adjacent to County Road 6N and SH 150. The purpose of these exclusions is to allow future flexibility for road, utility, and drainage improvement in these areas. The Alpine Camp area was also excluded to allow the simple facilities there (one-room cabin, corral and stock loading ramp, tack

building, and privy) to serve as an operational base.

Dogs

Dogs on leashes have always been allowed in the national park. By law, dogs being used for hunting are allowed in the preserve (see chapter 3 “Health and Safety—Dogs” section for details). After considerable discussion of visitor comments and environmental consequences, the planning team decided on a “middle ground” policy: dogs (leashes required) would be permitted only in the national preserve and in the frontcountry and dunes play zones of the national park. The team seriously considered restricting dogs (on leashes) to parking lots, car campgrounds, and picnic areas. However, there was concern based on past experience that visitors would leave their dogs in hot cars or tied to car bumpers if dogs were not allowed in the dunes play zone. Also, dogs on leashes have been permitted everywhere in the park for years. Many repeat visitors (there are many) count on bringing their dogs when they visit the park. The team decided to allow leashed dogs in the preserve because hunting dogs are allowed, and to minimize the dog policy differences between the preserve and the adjacent national forest, where dogs are allowed and must be within voice control of the owner if not on-leash. However, if dogs become more of a problem over time, the National Park Service may consider further limitations under the authority of the Superintendent’s Compendium.

**APPENDIX F:
COST ESTIMATES FOR THE GMP ALTERNATIVES**

Cost Summary: Great Sand Dunes GMP Alternatives				
	No-Action Alternative	NPS Preferred Alternative	Dunefield Focus—Maximize Wildness Alternative	Three Public Nodes Alternative
Annual Costs FY 04 Operations Costs: \$1,450,000	\$1,450,000 – \$1,670,000 This estimate includes payroll for 28 FTEs with benefits, personnel support, utilities, transportation, and maintenance.	\$1,870,000 – \$2,150,000 This estimate assumes 8 additional FTEs, a 20% increase in utility and maintenance costs, and a 15% increase in transportation costs. Potential partnership support at Medano Ranch may partially offset operations costs.	\$1,700,000 – \$1,950,000 This estimate assumes 5 additional FTEs, a 5% increase in utility costs, and a 10% increase in transportation and maintenance costs.	\$1,970,000 – \$2,270,000 This estimate assumes 10 additional FTEs, and a 25% increase in utility, transportation, and maintenance costs. Potential partnership support at Medano Ranch may partially offset operations costs.
Initial Capital Costs (includes construction, exhibits, research support, etc.)	\$5,400,000 – \$6,800,000 Major cost projects include funded expansion / reconfiguration of the dunes parking lot, utilities, and infrastructure improvements (e.g., new water storage tank and distribution lines) and two housing units.	\$16,200,000 – \$21,200,000 Major cost projects include those listed under no action, plus new trails and trailheads, an access road, relocating the fee booth, bike lanes, removal of a bison fence, and structure and utility improvements at Medano Ranch. Costs for the latter may be offset by grants and partnerships.	\$8,200,000 – \$10,600,000 Major cost projects include those listed under no action, plus expansion of parking and restrooms in the frontcountry zone, a multiuse path from the park entrance, and removal of a bison fence.	\$15,800,000 – \$20,600,000 Major cost projects include those listed under no action, plus new trails, an access road, a trailhead, a primitive campground, removal of a bison fence, and structure, and utility improvements at Medano Ranch. Costs for the latter may be offset by grants and partnerships.
Total Life-Cycle Costs over the Life of the Plan	\$28,100,000- \$29,500,000	\$44,600,000- \$49,600,000	\$35,600,000- \$36,700,000	\$46,700,000- \$50,300,000
Important notes and assumptions: <ol style="list-style-type: none"> 1. These cost estimates were developed in 2005; they are very general and are intended to be used for comparing alternatives only. They are not intended for budgeting purposes. 2. Total life-cycle costs also include other costs that recur at intervals longer than annually (e.g., road paving). 3. Initial capital costs were prepared using the NPS Denver Service Center "Class C" estimating guide, and include add-ons of 40% for overhead and profit, 15% for design contingency, 10% for general conditions, a regional location factor of 1.0, and a park location factor of 1.0. 4. Cost ranges reflect uncertainty about future costs, especially costs for capital improvement projects. 5. Life-cycle costs were determined using the NPS Construction Management LCC template, which assumes a discount rate of 7% and a project life cycle of 25 years. 				
The National Park Service develops 5-year deferred maintenance and capital improvement plans. Project proposals are developed at the park level, but projects are evaluated and ranked in priority order nationally, primarily based on critical health and safety and resource protection considerations.				
Capital developments, maintenance, and staffing proposals in this plan will be evaluated in light of competing priorities for this and other units of the national park system. Because the budget process currently emphasizes alleviating the existing maintenance backlog, funding for new development is not likely within the next 5 years. However, development and operational proposals in this plan may be implemented sooner if funding is available from partnerships that do not rely on the National Park Service budget.				

APPENDIX G: WILDERNESS STUDY AND RECOMMENDATION