

CHAPTER 1:

Purpose of and Need for the Plan



To the Reader,

Ha-ho and Hello.

The National Park Service and Oglala Sioux Tribe present the *Final General Management Plan/ Environmental Impact Statement (GMP/EIS)* for the South Unit of Badlands National Park. This General Management Plan (GMP) sets forth a typical 15-20 year plan for the management of resources and visitor use and experience. It is uniquely different because it also proposes the establishment of the nation's first Tribal National Park and a transition from National Park Service (NPS) management to Lakota management by the Oglala Sioux Tribe (OST).

Once the history of how the South Unit came to be incorporated into Badlands National Park is understood, it is possible to understand why promoting the "*NPS idea*" through tribal management is compelling and publicly supported. This GMP brings a cumulative history that begins as far back as the 1942 taking of lands for an aerial gunnery range, followed by the establishment of the South Unit in 1968, and the 1976 Memorandum of Agreement, including the proposed development of the Lakota Heritage and Education Center. There is no transfer of land – it already belongs to the Tribe and already reflects a 30 year commitment of 133,000 acres for use as park land. It will be managed with tribal spirit and tribal pride as a special place—a park of national and world class significance.

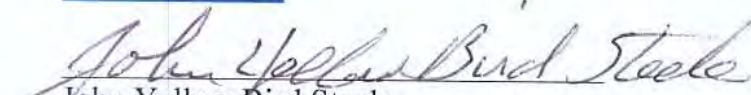
The GMP team from its inception has been composed of National Park Service and Badlands National Park staff, Oglala Sioux Parks and Recreation (OSPRA) staff, OST tribal government leaders, and people of the Oglala Sioux Tribe and reflects the cooperative efforts of both the NPS and OST. The Tribal Council supports *the principles embodied within the General Management Plan, and pursuit of the preferred alternative*. The NPS Directorate also supports this plan. The GMP team's commitment to public process included listening to comments from everyone and every organization that wished to be part of this process—tribal and non-tribal alike.

The National Park Service *idea* is nearly a century old. The Lakota nation's commitment to land stewardship and natural resources reaches back to the *Otakaheya kagapi* (First Beginnings), and is critical to the successful management of the nation's first Tribal National Park. The concept of phased training and management by the OST was initially

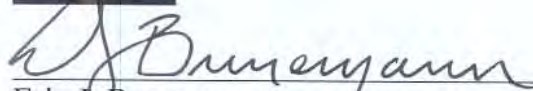
suggested by tribal members at a public meeting. It remains consistent with the stewardship commitment and value system of the National Park idea, and remains true to public comment that overwhelmingly supports management by the OST with NPS assistance. The lands of the *Mako Sica* will build tribal empowerment and opportunity for the Oglala people, and formally recognize a new government-to-government relationship between two great nations.

Ho, hecutu yelo (now we go forward)





John Yellow Bird Steele
President
Oglala Sioux Tribe




Eric J. Brunnemann
Superintendent
Badlands National Park




Birgil Kills Straight
Executive Director
Oglala Sioux Parks and Recreation
Authority

A GUIDE TO THIS DOCUMENT

The South Unit *General Management Plan / Environmental Impact Statement* (South Unit GMP/EIS) is organized into six chapters plus appendixes. Each section is described briefly below.

Chapter 1: Purpose of and Need for the Plan describes the context for the entire document. It explains why the plan is being prepared and what issues it addresses. It provides guidance (e.g., park purpose, significance, fundamental resources and values, special mandates, and servicewide laws and policies) for the alternatives that are being considered. This chapter also describes how this plan relates to other plans and projects.

Chapter 2: Management Options is a discussion of the organizational options that were considered for management of and decision making in the South Unit of Badlands National Park (referred to as the South Unit).

Chapter 3: Alternatives, Including the Preferred Alternative includes a discussion of management zones, user capacity, and the four alternatives for managing resources and visitor experience in the South Unit. Mitigation measures for minimizing or eliminating impacts of some proposed actions are then described. A section on the environmentally preferred

alternative follows. A summary table of the alternatives is included at the end of the chapter. Summary tables of the range of treatments for historic properties and the environmental consequences of implementing the alternatives are also included in this chapter.

Chapter 4: Affected Environment describes areas and resources that would be affected by actions in the various alternatives: cultural resources, natural resources, visitor opportunities and use, wilderness character, regional socioeconomics, and National Park Service (NPS) operations. It also includes a discussion of impact topics that were dismissed from detailed analysis.

Chapter 5: Environmental Consequences analyzes the impacts of implementing the alternatives. Methods used to assess impacts are outlined at the beginning of the chapter.

Chapter 6: Consultation and Coordination describes the history of public and agency coordination during the planning effort; it also lists agencies and organizations who received copies of the document.

The **Appendixes** present supporting information for the document, along with bibliographic references and a list of the planning team and other consultants.

OVERVIEW OF THE SOUTH UNIT

The South Unit of Badlands National Park holds some of the region's most valued natural resources. It contains spectacular scenery, including table mesas offering sweeping panoramas, deep canyons, washes, ravines, and foreboding walls. It also claims large concentrations of mixed-grass prairie and numerous wildlife species.

The South Unit is administered to provide for the care, maintenance, and preservation of prehistoric, historic, scientific, and scenic interest; interpret the history of the Sioux Nation and Lakota people; and develop facilities that will provide for public use and enjoyment. Composed of two largely undeveloped and remote tracts of land, the South Unit offers an experience rich in the history and culture of the Lakota people and the natural heritage and scenery of the White River Badlands.

The South Unit is a landscape of great historical and spiritual significance to the Oglala Sioux. The South Unit is located in part within the Pine Ridge Indian Reservation as established in 1889. The South Unit includes the Palmer Creek Unit.

In 1942, the War Department took 341,725 acres from the Pine Ridge Indian Reservation to establish the Aerial Gunnery Range (Bombing Range) for training purposes during World War II. Most of the South Unit is located within the former Bombing Range.

The lands were acquired through declarations of taking filed in condemnation proceedings under the pressures of a wartime emergency. Individuals and families were forced to vacate the area on very short notice, and the value of the lands was at an all-time low as a result of the Depression. The acquisition of the Bombing Range increased competition for land in the area and inflated the price of replacement sites to the point that the relocated persons were not able to buy substitute land with the compensation they had been paid. In many cases, individuals were forced to dispose of their livestock because their rangeland had been taken. There is evidence that many of the Tribal members were told they

would be given preferential status to repurchase their lands at the end of the war.

In 1968, the range was declared excess by the U.S. Department of the Air Force and returned to the Oglala Sioux Tribe (OST), except for 2,486 acres, which were retained and are still managed by the U.S. Department of the Air Force. Several groups and organizations wanted part or all of this excess land. Many of the former owners, both Indian and non-Indian, wanted to repurchase the lands taken from them; the OST wanted to acquire all of the excess lands; the National Park Service (NPS) wanted to include much of the land in an enlarged Badlands National Monument; the U.S. Fish and Wildlife Service wanted an area set aside for preservation of endangered wildlife; and the U.S. Air Force wanted to exchange some of the excess land for Tribal land it was leasing in its tactical bombing range (Statement of Harry Anderson, Assistant Secretary of the Interior, before the Indian Affairs Subcommittee, August 1, 1967).

In 1968, Congress authorized a land swap between the Departments of Defense and the Department of Interior, creating the South Unit. The land exchange was subject to approval by the OST, but if the Tribe did not approve it, the lands previously held in individual trust would be disposed of under surplus property procedures and permanently lost to the Tribe. Only by surrendering management of the land to the NPS would the land be held in trust for the Tribe (Burnham 2000). In 1976, the Tribe granted an easement to the NPS to manage the lands of the South Unit as part of Badlands National Park.

In 1976, the NPS and OST entered into a Memorandum of Agreement expanding the Badlands National Park by establishing the South Unit (see appendix A). The addition of the South Unit to Badlands National Park has been a contentious issue among the residents of Pine Ridge Indian Reservation since it occurred.

PLANNING BACKGROUND

Between 1982 and 1999, the North and South Units were managed under a Master Plan and Development Concept Plan, but it became clear that a new plan would be needed to address issues and concerns confronting the park in the new millennium. Accordingly, in 1999, the NPS authorized the development of a new plan that would reevaluate the park's needs and desired future conditions for both the North and South Units of Badlands National Park.

Park planning is a decision-making process, and general management planning is the broadest level of decision making for parks. GMPs are required for all units of the national park system and are intended to establish the future management direction of a park (*National Parks and Recreation Act* of 1978, P.L. 95-625). General management planning is the first phase of tiered planning and decision making for national park units. It focuses on why the park was established (its purpose), why it is special (significance, fundamental resources and values), and what resource conditions and visitor experience should be achieved and maintained (desired future conditions). GMPs look years into the future and consider a park holistically, in its full ecological and cultural context, and as part of a surrounding region.

In 2000, the NPS held public scoping meetings as the initial stage of work on a new general management plan (GMP). In 2002, disagreements arose between the NPS and OST regarding plans to complete paleontological activities in the South Unit, ultimately leading to a moratorium on such activities. The NPS, OST, and Bureau of Indian Affairs (BIA) entered into formal negotiations concerning the future management of the South Unit. At that time, the decision was made to continue the GMP process for the North Unit only and postpone the South Unit GMP until 2006.

This GMP/EIS was developed by an interdisciplinary team composed of staff of NPS offices and representatives of OSPRA, the Tribal entity delegated by the OST to work with the NPS on this GMP/EIS. The team consulted with other NPS and OST agencies and entities, other

federal, state, and local agencies, and the general public.

In developing the South Unit GMP/EIS, the OST internal review and approval process shares equal consideration with the NPS process. OST participation should be viewed as a critical, parallel, and cooperative process that must occur throughout planning, development, approval, and execution of the South Unit GMP/EIS. Article V of the OST constitution permits the Tribal Council to consult with the NPS. The OST agreed to use the NPS / *National Environmental Policy Act* (NEPA) process to develop the South Unit GMP/EIS and develop a Lakota Heritage and Education Center (LHEC).

The OST charged the Oglala Sioux Parks and Recreation Authority (OSPRA) with the responsibility to work with the NPS on the South Unit GMP/EIS.

In June 2010, the OST Land and Natural Resources Committee passed a resolution recognizing that the Committee, OSPRA, and the NPS have begun work on the development of the South Unit GMP/EIS and a preferred alternative involving more active and culturally relevant Tribal management and a cultural heritage center.

The Committee resolved to support the process being used and to

- Support the South Unit GMP/EIS, pursuit of the preferred alternative, and the initiation of a public comment period.
- Acknowledge that the process of government-to-government consultation on the issue of the GMP has been initiated and charge the OSPRA to consult with the NPS throughout the South Unit GMP/EIS development process, and to keep the full Tribal Council apprised of developments as they occur so that final approval by the Tribal Council and the people will be well informed.

The OST Tribal Council met in June 2010 and approved the resolution. On January 24, 2011, the OST Land and Natural Resources Committee passed a resolution supporting the finalized GMP/EIS and supporting the process of drafting legislative language for operating and managing the new Tribal National Park. That resolution was referred to the OST Tribal Council for action and was passed on February 22, 2011.

Although a GMP provides the analysis and justification for future funding, the plan in no way guarantees that money will be available. Requirements for additional data or legal compliance, and competing national park system priorities can delay implementation of actions. Full implementation of a plan may extend many years into the future.

PURPOSE AND NEED FOR THE GENERAL MANAGEMENT PLAN

The South Unit GMP/EIS provides comprehensive guidance for perpetuating natural systems, preserving cultural resources, and providing opportunities for quality visitor experiences at the South Unit. The purpose of the GMP/EIS is to ensure that park managers and the public share the same vision of how best to achieve the park's purpose and protect its resources unimpaired for future generations.

The South Unit GMP/EIS responds to a need to provide better management and preservation of the resources of the South Unit. The existing *1976 Memorandum of Agreement* (described in the "Special Mandates" section later in this chapter) has proven to be inadequate to provide for these needs and is now badly outdated. Subsequent NPS plans for management have failed to produce an implementable program for resource preservation and improved visitor experiences. This new GMP/EIS will address resource conditions and visitor experience.

This GMP/EIS describes the general path for park managers to follow in managing the South Unit for the next 20 or so years. The plan does not provide specific and detailed answers to every issue facing the park. Rather, it is a framework to assist South Unit managers in making decisions today and into the future. The GMP/EIS will

- Provide general guidance for how best to manage natural and cultural resources and provide for visitor use.

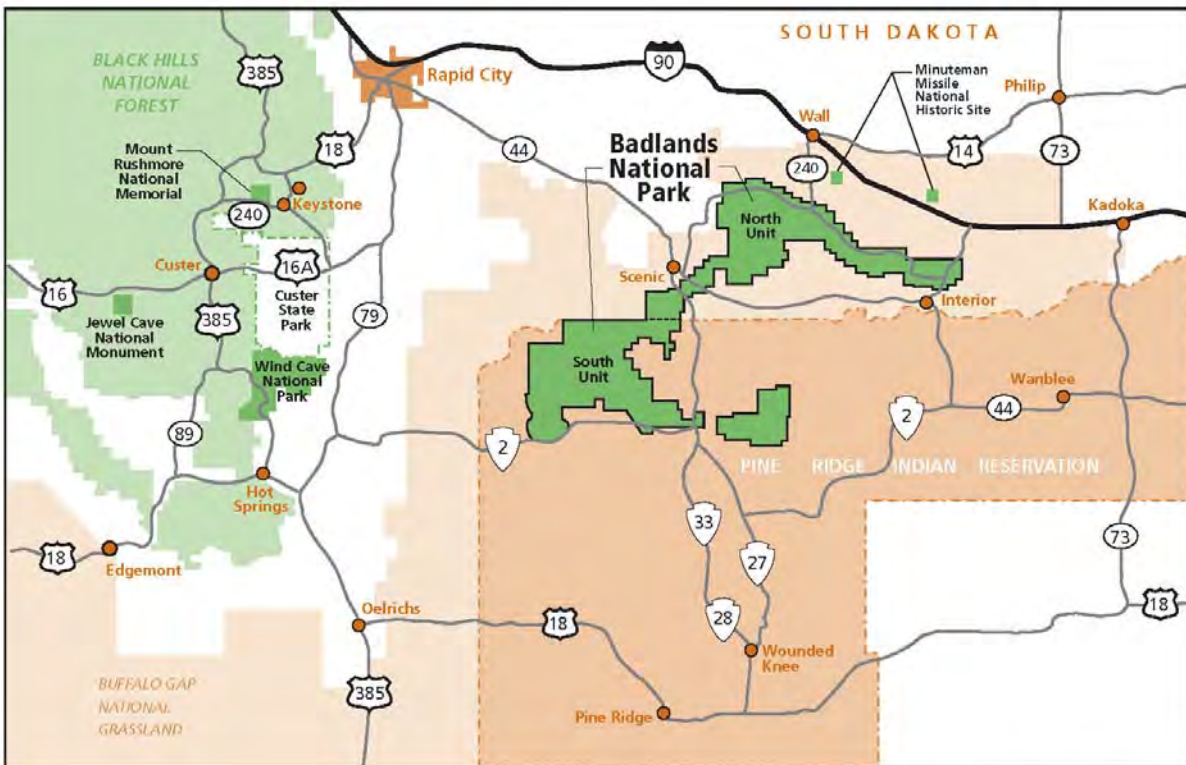
- Clearly define the resource conditions and visitor experience opportunities to be achieved.
- Present a general approach for facilities and access.
- Ensure that the foundation for decision making is developed in consultation with an interested public and adopted by South Unit management after sufficient analysis of the benefits, impacts, and economic costs of alternative courses of action.

This GMP/EIS is needed to guide the future management of the South Unit, ensure that park resources are preserved, and provide opportunities for a diversity of quality visitor experiences in the 21st century. The *Draft General Management Plan Revision / Development Concept Plan / Environmental Assessment for the Badlands South Unit* (NPS 1985) was prepared more than 20 years ago. The 1985 plan is outdated and does not provide a comprehensive plan for managing the South Unit and assisting park managers in making future decisions. Preparing this GMP/EIS has given the NPS an opportunity to reevaluate the unit's needs and the desired future conditions for the unit on the basis of the most current information and regional trends.

REGIONAL CONTEXT

Badlands National Park is one of nearly 400 authorized units of the National Park System. The South Unit is approximately 65 miles southeast of Rapid City, South Dakota. Most of the South Unit is bordered by Buffalo Gap National Grassland and the Pine Ridge Indian Reservation. Private lands, primarily ranches, also lie adjacent to the South Unit. Refer to the Vicinity Map.

The Pine Ridge Indian Reservation, home to the OST, is the second-largest land-based reservation in the United States (3,469 square miles). The South Unit is on Tribal lands and is currently managed through an agreement between the OST and the NPS.



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Vicinity Map

Badlands National Park
United States Department of the Interior
National Park Service

ver. 2011-01-04

PLANNING ISSUES AND CONCERNS

The American public, the NPS, and the OST need to make many important and difficult decisions about the future of the South Unit and its resources, uses, and management. The public and the planning team identified a number of concerns facing the South Unit. The issues generally involve the following:

- The level of OST involvement in the management of the South Unit.
- Natural and cultural resource protection.
- Appropriate types and levels of use within the park.
- Maintaining access to the park.
- Development of appropriate facilities in the park.

These are complex issues, with no easy answers. People who care deeply about the South Unit often hold sharply divided opinions about how the issues should be resolved. In addition, tight budgets combined with increased visitation have put, and will continue to put, an increased strain on the ability of the NPS to maintain facilities, protect natural and cultural resources, provide interpretive and other visitor services, and enforce rules and regulations. The breadth of issues and concerns facing the South Unit illustrates the complexity and difficulty in determining how to manage park resources and visitors in the 21st century and beyond.

The public scoping and consultation process is detailed in chapter 6.

FOUNDATION FOR PLANNING AND MANAGEMENT

PARK PURPOSES FOR THE SOUTH UNIT

Purpose statements convey the reason(s) for which the national park unit was set aside as part of the national park system. Grounded in an analysis of park legislation (appendix B) and legislative history, purpose statements also provide primary criteria against which the appropriateness of South Unit GMP/EIS recommendations, operational decisions, and actions are tested. A park's purpose statement focuses the agency's management role at a particular park unit but does not supersede the NPS *Organic Act* (see "Servicewide Laws and Policies" section in this chapter).

The purposes of the South Unit are based on the purposes in the various pieces of legislation that created Badlands National Park as well as an understanding of the importance of the South Unit to the OST. In light of the need to focus attention on the management of the South Unit, the planning team recognizes that the South Unit of Badlands National Park was established to accomplish the following:

- Preserve and interpret the history, culture, and heritage of the Sioux Nation and Lakota people.
- Preserve and interpret the archeological and contemporary history of use and settlement of lands within the park.
- Protect the unique landforms and scenery of the White River Badlands for the benefit, education, and inspiration of the public.
- Preserve, interpret, and provide for scientific research of the paleontological and geological resources of the White River Badlands.
- Preserve the flora, fauna, and natural processes of the mixed-grass prairie ecosystem.

PARK SIGNIFICANCE FOR THE SOUTH UNIT

Significance statements capture the essence of the national park unit's importance to the nation's natural and cultural heritage. They describe the unit's distinctiveness and describe why an area is important within regional, national, and global contexts. This helps managers focus their efforts and limited funding on protection and enjoyment of attributes that are directly related to the purpose of the park unit. The significance and unique characteristics of Badlands National Park that relate to the South Unit are as follows:

- The park's geological and paleontological resources provide insight into climatic history, biological diversity, evolution, and geological processes particular to the boundary between the Eocene and Oligocene epochs.
- Fossil and geologic records provide a unique opportunity to trace the evolution of the prairie ecosystems of the Great Plains.
- The park contains places of spiritual and historical significance to the Oglala people, including the site of one of the last Ghost Dances, which precipitated the 1890 massacre at Wounded Knee.
- The long history of research in the White River Badlands has contributed greatly to the science of vertebrate paleontology in North America.
- The park contains a substantial remnant of native prairie and mixed-grass prairie.
- The park contains large prairie dog colonies that could provide habitat for the endangered black-footed ferret.
- The park contains spectacular scenery, predominantly highly eroded landforms that comprise a concentrated collection

of rutted ravines, serrated towers, pinnacles, and precipitous gulches.

PRIMARY INTERPRETIVE THEMES

Primary interpretive themes are the most important ideas and concepts communicated to the public about the park. They are the core of all interpretive programs and media provided to park visitors. The *Badlands Master Plan and Development Concept Plan* identifies the following primary interpretive themes:

- The Badlands fossil and geological record reflects changing climates and the great diversity of species existing during various periods; its study provides insight into the survival of species.
- Different cultural groups from historic to present-day American Indians and allottees have had and continue to have spiritual and physical relationships to the resources of the Badlands.
- One of the last Ghost Dances occurred on Stronghold Table and precipitated the 1890 Wounded Knee Massacre, which was the last battle between American Indians and Europeans.
- Families who historically lived on this land sometimes faced difficult choices and made sacrifices when the Bombing Range was created.
- Studying the mixed-grass prairie ecosystem and the human relationship to it helps to understand the changing grassland ecology of the Great Plains and helps us restore and protect this fragile and remarkably diverse ecosystem.
- The Badlands, an evolving landscape formed by the processes of deposition and erosion and forces of the wind and water, offers lessons for all visitors on the impacts of natural forces on our communities and our lives.
- The Badlands offer excellent possibilities for solitude and

contemplation and an unusual opportunity to experience wildness in a prairie setting.

- The science of vertebrate paleontology was born in the Badlands region; paleontology and other forms of science continue to evolve and play an important role in the management of Badlands National Park.

SPECIAL MANDATES

Special mandates are legislative or judicial requirements that are specific to a particular unit of the national park system. They are typically mandated by Congress or by the courts. Special mandates for the South Unit are listed below.

Authorizing Legislation

Congress authorized the creation of Badlands National Monument in 1939 “for the benefit and enjoyment of the people” (45 Stat. 1553). This establishing legislation required the state of South Dakota to acquire certain lands and construct a scenic road to provide public access. Those conditions were met in 1939, and Badlands National Monument was established by presidential proclamation (53 Stat. 2521).

Public Law 90-468 (82 Stat. 663), enacted on August 8, 1968, expanded the boundaries of the monument by authorizing the acquisition of lands of outstanding scenic and scientific character, but limited the total monument area to 242,756 acres. The lands, which were in the Pine Ridge Indian Reservation, were used by the U.S. Air Force as a bombing range. Under the provisions of this act and the subsequent Memorandum of Agreement (1976) between the OST and Secretary of the Interior, 133,300 acres of land in the reservation were added to the monument. The national monument was re-designated as Badlands National Park in 1978. The lands in the reservation, which remain Tribal lands, are administered by the NPS as the South Unit of Badlands National Park. The Memorandum of Agreement between the Secretary of the Interior and the OST provides further guidance on the management of the South Unit.

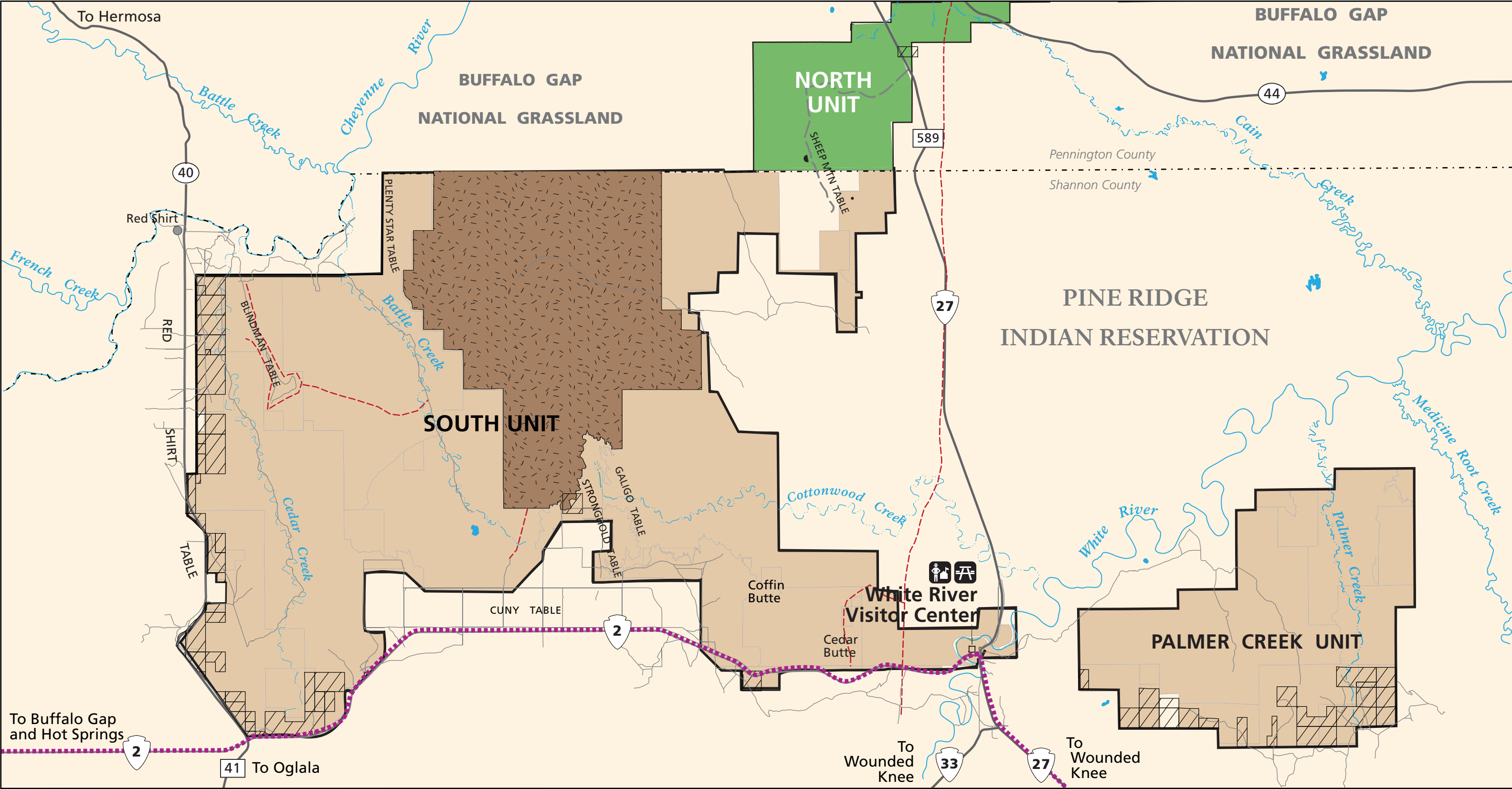
Treaty Rights

The South Unit is located within the Pine Ridge Indian Reservation, home to the Oglala Sioux. The alternatives being considered in this document will not affect any existing Tribal treaty rights.

Bureau of Indian Affairs Range Unit Management

Almost every range unit on the South Unit is leased for livestock use by the BIA. Only one

range unit is leased by the OST Land Office. Leasing is conducted on an allocation basis and renewed every five years without competition. Families could lease the land for a lifetime through the allocation process, which results in multiyear family leases. This intergenerational ability to lease the land creates an expectation of a continued property interest. This will be an important consideration in enacting South Unit park management practices. Refer to the “Leased Grazing Lands within Badlands South Unit” map on the next page.



Pine Ridge Indian Reservation Boundary	Overlook	Ranger station
Crazy Horse Scenic Byway	Park North Unit	Restrooms
Unpaved road	Park South Unit	Picnic area
Unpaved road (passable only when dry)	Private Lands	Self-guiding trail
Paved road	Range Unit 505	Campground
Trail	BIA Leased Grazing Lands	Primitive Campground
	OST Leased Grazing Lands	

North

01 Kilometer5

01 Mile5

LEASED GRAZING LANDS

WITHIN BADLANDS SOUTH UNIT

BADLANDS NATIONAL PARK

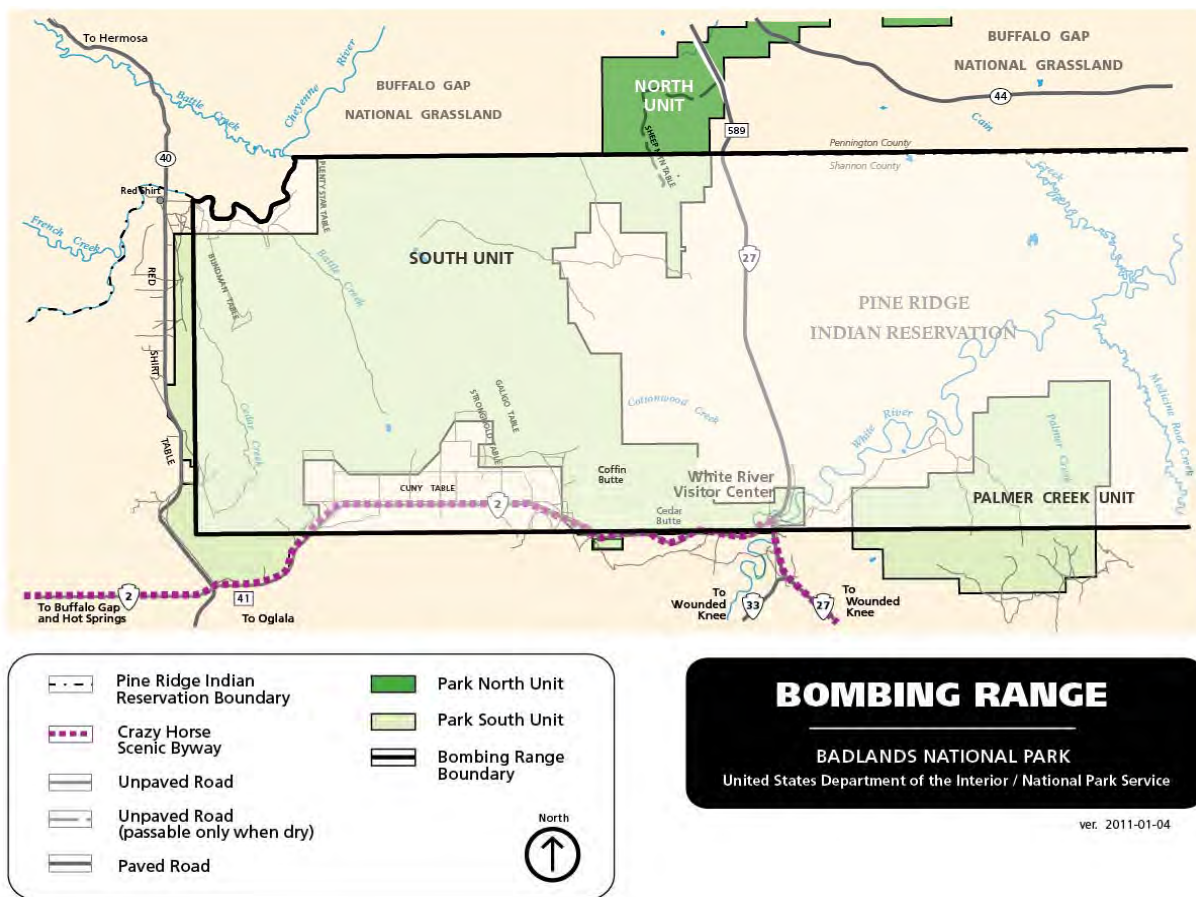
United States Department of the Interior / National Park Service

Bombing Range

In 1942, the War Department took 341,725 acres from the Pine Ridge Indian Reservation to establish the Aerial Gunnery Range (Bombing Range) for training purposes during World War II. In 1968, the range was declared excess by the U.S. Department of the Air Force. Most of that land was returned to the OST. A vast majority of the South Unit is located within the Bombing Range. The cleanup of the former Bombing Range is an ongoing effort by the U.S. Army Corps of Engineers (USACE) and the OST to identify and mitigate public safety concerns relating to the former military use of these lands. The South Unit will probably never

be cleared of unexploded ordnance with today's technology, but some of the more used and passable roads within the South Unit should be cleared in the next few years pending available funding and right of entry from the OST. Refer to the Bombing Range map.

Due to the quantity of unexploded ordnance that continues to litter the areas formally used for bombing practice, visitors are advised to stay on the existing road and trails for their safety. If visitors encounter possible unexploded ordnance or munitions and explosives of concern, they should leave the vicinity and contact emergency services.



SERVICEWIDE LAWS AND POLICIES

Many park management directives are specified in laws and policies guiding the NPS and are therefore not subject to alternative approaches. For example, there are laws and policies about managing environmental quality (such as the *Clean Air Act*, the *Endangered Species Act*, and Executive Order 11990, Protection of Wetlands); laws governing the preservation of cultural resources (such as the *National Historic Preservation Act* and the *Native American Graves Protection and Repatriation Act*); laws protecting paleontological resources (the *Paleontological Resources Preservation Act*); and laws about providing public services (such as the *Americans with Disabilities Act*), to name only a few. In other words, a GMP is not needed to decide that it is appropriate to protect paleontological resources or endangered species, control exotic species, protect historic and archeological sites, conserve artifacts, or provide for access for disabled persons. Laws and policies have already decided those and many other things. Although attaining some conditions set forth in these laws and policies may have been temporarily deferred in the park because of funding or staffing limitations, the NPS will continue to strive to implement these requirements with or without a new GMP. The South Unit GMP/EIS is critical in providing guidance for complying with laws and policies.

There are other laws and executive orders that are applicable solely or primarily to units of the national park system. These include the 1916 *Organic Act* that created the NPS; the *General Authorities Act* of 1970; the act of March 27, 1978, relating to the management of the national park system; and the *National Parks Omnibus Management Act* (1998).

The NPS *Organic Act* (16 United States Code (USC) 1) provides the fundamental management direction for all units of the national park system:

[P]romote and regulate the use of the Federal areas known as national parks, monuments, and reservations ... by such means and measures as conform to the fundamental purpose of said parks ... which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The NPS *General Authorities Act* (16 USC 1a-1 et seq.) affirms that while all national park system units remain “distinct in character,” they are “united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage.” The act makes it clear that the NPS *Organic Act* and other protective mandates apply equally to all units of the system. Further, amendments state that NPS management of park units should not “derogate[e] ... the purposes and values for which these various areas have been established.”

The NPS also has established policies for all units under its stewardship. These are identified and explained in a guidance manual entitled *NPS Management Policies 2006* (NPS 2006b). The action alternatives considered in this document (alternatives B, C, and D (the preferred alternative)), as well as the No-Action Alternative (alternative A, continuation of current management), incorporate and comply with the provisions of these mandates and policies. NPS laws and policies are described further in appendix C.

OGLALA SIOUX TRIBAL ORDINANCES AND RESOLUTIONS

OST resolutions and ordinances that would apply to managing the South Unit are briefly described in appendix C.

DESIRED CONDITIONS AND STRATEGIES

This section focuses on management principles and strategies to guide management of the South Unit in all alternatives, including the No-Action Alternative. The principles and strategies guide actions taken by park managers on such topics as natural and cultural resource, park facilities, and visitor use management. Each topic discussed below has two parts: desired conditions for that topic, and broad strategies that may be used to achieve those desired conditions.

Desired conditions articulate the ideal conditions the NPS and OST are striving to attain. The term “desired conditions” is used interchangeably with “goals.” Desired conditions provide guidance for fulfilling the park’s purpose and for protecting the park’s fundamental resources and values on a unit-wide basis.

A number of guiding principles and strategies are described below. These are based on mandates and NPS policies that would continue to shape the way in which the South Unit is managed under the alternatives being considered in this GMP/EIS. All the alternatives support the purposes and significance of Badlands National Park. Some of these principles and strategies describe approaches currently being taken by park staff. Other principles and strategies are not being implemented at present, but are consistent with NPS policy, and are not controversial, and implementation would require no additional analysis under NEPA. This is not an exhaustive list of strategies. As new ideas, technologies, and opportunities arise, they will be considered if they further support the desired condition.

The unit-wide desired conditions and strategies in this section, combined with the management actions that are specific to the management option ultimately selected for implementation (see chapter 2), will form the complete GMP/EIS for the South Unit.

As described further in chapter 2, the NPS, the OST, or some combination of the two will manage the South Unit. The NPS and the OST have agreed that the entity ultimately responsible for managing the South Unit will be

responsible for carrying out the direction specified in the final GMP/EIS. If the OST becomes the park manager, the OST will coordinate with the NPS on the strategies and principles described in this section. Conversely, if the NPS continues as the park manager, the NPS will coordinate or consult with the OST on the strategies and principles described in this section.

ECOSYSTEM MANAGEMENT

Approaches to ecosystem management are varied and occur at many levels. To achieve the desired future conditions described for park resources, a regional perspective must be considered, and it must be recognized that actions taken on lands surrounding the park directly and indirectly affect the park. Many of the threats to park resources, such as invasive species and air pollution, come from outside the park boundaries. An ecosystem approach is required to understand and manage the park’s natural resources. An understanding of the health and condition of the ecosystem is imperative.

Cooperation, coordination, negotiation, and partnerships with agencies and neighbors are crucial to meeting or maintaining the desired future conditions for the park. This approach to ecosystem management may involve many parties or cooperative arrangements with federal and state agencies, tribes, or private landowners to obtain a better understanding of trans-boundary issues.

The park is managed holistically as part of a greater ecological, social, economic, and cultural system. The following strategies will allow park managers to lead in resource stewardship and in the conservation of ecosystem values within and outside the park. These strategies will allow park managers to maintain good relations with owners of adjacent property, surrounding communities, and private and public groups that affect and are affected by the park. The strategies also will allow proactive management of the park designed to resolve external issues

and concerns and to ensure that park values are not compromised.

Strategies

Park managers will use the following ecosystem management strategies:

- Seek agreements with the U.S. Forest Service and other owners of adjacent property to protect the Badlands ecosystem.
- Work cooperatively to manage nonnative species in the region.
- Act as a partner with the research community to further the knowledge of the natural and cultural resources of the park.
- When feasible, seek partnerships with other public and OST agencies and share orientation, contact stations, and administrative facilities.
- Work with partners to protect species of concern and reintroduce extirpated native species when practical.

RELATIONSHIPS WITH PRIVATE AND PUBLIC ORGANIZATIONS, OWNERS OF ADJACENT LAND, AND GOVERNMENT AGENCIES

Park managers must consider that the South Unit—socially, politically, ecologically, and historically—is part of a greater area and that actions in the South Unit affect the surrounding environment and society. For instance, the management of the park influences local economies through tourism expenditures and the goods and services the park purchases to support operations.

Strategies

Park managers will use the following strategies related to actions that affect the surrounding environment and society:

- Establish partnerships with public and private organizations to achieve the purposes and mission of the park. Seek partnerships for the purposes of resource

protection, research, education, visitor enjoyment, visitor access, and management.

- Foster a spirit of cooperation with neighbors and encourage compatible uses of adjacent lands, inform landowners, land managers, neighboring tribes, local governments, and the public about park management activities. Periodically consult with landowners and communities that are affected by or potentially affected by park visitors and management actions.
- Work closely with local, state, and federal agencies and Tribal governments whose programs affect or are affected by activities in the South Unit. In particular, to meet mutual management needs and maintain a close working relationship with the U.S. Forest Service and the owners of adjacent private land.

RELATIONSHIPS WITH AMERICAN INDIANS

The Badlands area in general and the South Unit in particular have long occupied a prominent position for American Indians in the Great Plains. Park managers will work to ensure that traditional American Indian ties to the South Unit are recognized and the park's cultural significance protected. Park managers will strive to maintain positive, productive government-to-government relationships with the tribes who have current or ancestral ties with the White River Badlands area.

Strategies

Park managers will use the following strategies to enhance relationships with American Indians:

- Consult regularly and maintain government-to-government relations with federally recognized tribes that have current or ancestral ties to resources within the park to ensure productive, collaborative working relationships.
- Identify and deepen the understanding of the significance of the park's

resources and landscapes to American Indian peoples through collaborative research and sharing.

- Once identified, protect and preserve the sites, resources, landscapes, and structures of significance to federally recognized tribes.
- Encourage the participation of these tribes in protecting the park's natural and cultural resources.
- Involve the tribes in the park's interpretation program to promote accuracy of information about American Indian cultural values and to enhance public appreciation of those values.
- Support the continuation of traditional American Indian activities in the park to the extent allowed by applicable laws and regulations.
- Consult and collaborate with tribes concerning issues and proposed actions that might affect American Indians.

MANAGING AND PROTECTING NATURAL RESOURCES

The protection, study, and management of the park's natural resources and processes is essential for achieving the park's purposes and mission goals. The following principles and strategies will help the park managers to retain the ecological integrity of the South Unit, including its natural resources and processes. These actions will help ensure that the South Unit's natural features are unimpaired; the park continues to be a dynamic, biologically diverse environment; and the South Unit is recognized and valued as an outstanding example of resource stewardship, conservation, education, and public use.

Inventory and Monitoring

Knowing the condition of natural resources in a park is fundamental to a park manager's ability to protect and manage parks. The South Unit is confronted with increasingly complex and challenging issues, and the park staff needs

scientifically credible data to make management decisions. Inventories involve compiling existing information as well as collecting new information. Inventories contribute to a statement of the condition of park resources in relation to a standard condition, especially the natural or unimpaired state.

A long-term ecosystem monitoring program is necessary to enable managers to make better informed decisions, to provide early warning of changing conditions in time to develop effective mitigation measures, to convince individuals and other agencies to make decisions benefiting the park, to satisfy legal mandates, and to provide reference data for relatively pristine sites for comparison with areas outside of the park. Monitoring also enables park staff to evaluate the effectiveness of management actions and obtain more accurate assessments of progress toward management goals. Using monitoring information will increase confidence in managers' decisions and improve their ability to manage park resources.

Strategies

Park managers will use the following inventory and monitoring strategies:

- Develop inventories and long-term monitoring programs to address the status and health of the park. Develop key indicators and monitor resource or ecosystem conditions over the long term to record ecosystem health.
- Conduct inventories to identify vertebrate and invertebrate animal species, vascular and nonvascular plant species, and air, water, and geologic resources in the park.
- Participate in the Northern Great Plains Inventory and Monitoring Network. Work with partners and collaborators to inventory resources and monitor vital components of the ecosystem. This will make it possible to better assess the condition of park resources and trends and develop databases, data analyses, and retrieval tools so that the usefulness of natural resource information can be improved.

Air Quality

Badlands National Park is designated a Class I area under the *Clean Air Act*. This designation permits the least degradation of air quality and air quality-related values, including visibility. The following policies and strategies will ensure that the South Unit's air quality will be enhanced or maintained with no significant degradation, and that nearly unimpaired views of the landscape both within and outside the park are available.

Strategies

Park managers will use the following strategies related to air quality and visibility:

- Strive to set a global example of how Class I areas and critical air sheds can be effectively protected.
- Reduce emissions associated with administrative and recreational use of the park.
- Expand baseline information about air quality-related values through research, inventory, and monitoring programs to identify human stressors and general air quality trends.
- Expand programs for sharing air quality information with surrounding agencies and develop educational programs to inform visitors and regional residents about the threats of air pollution to park resources.
- Continue to participate in regional air quality planning, research, and the implementation of air quality standards.
- Protect the park's noteworthy night sky as a natural and cultural resource and as an inspiration for visitor enjoyment.

Natural Sound

Due to its remote location, natural sound predominates in the South Unit. Visitors have the opportunity throughout most of the unit to experience natural sounds. The sounds of modern society are generally confined to developed areas in the surrounding locality.

Strategies

Park managers will use the following strategy related to natural sound:

- Protect the South Unit's natural sounds to the extent possible as an inspiration for visitor enjoyment.
- Reduce sound associated with administrative and recreational use of the park.

Fire Management

Prescribed and wildland fire will be used as a tool to meet park management objectives.

Strategies

Park managers will use the following strategies to ensure that wildland fire will be used in an effective manner to protect park resources:

- Develop and maintain a current fire management plan for the park.
- Collaborate with adjacent communities, groups, state and federal agencies, and tribes to manage fire in the park and the region.
- Support national, regional, and local fire management activities and provide public education on the role of fire management in its historic and ecological context.
- Use fire to maintain and restore native prairie and control nonnative plant species.

Geologic Features

Badlands National Park was established to protect the unique landforms of the area.

Strategies

Park managers will employ the following policies and strategies to ensure that the South Unit's geologic features are not significantly degraded and the scenic views remain unimpaired:

- Inventory, map, and monitor geologic features to assess their condition.

- Allow natural geologic processes to proceed unimpeded.
- Develop interpretive and educational programs to educate visitors and the public about geology.
- Allow intervention in natural geologic processes only when directed by Congress; when necessary in emergencies that threaten human life and property; when there is no other appropriate way to protect natural resources, park facilities, or historic properties; to provide appropriate visitor services; or when an intervention is necessary to restore impacted conditions and processes.
- Actively seek to understand and preserve the park's soil resources and prevent to the extent possible their physical removal or contamination.
- Monitor high-impact visitor use areas and take actions to reduce impacts on geologic and paleontological resources.

Paleontological Resources

The South Unit contains outstanding paleontological resources that have added to the understanding of climatic history, biological diversity, evolution, and geologic processes.

Strategies

The following strategies will be implemented to better understand paleontological resources:

- Expand inventory and monitoring processes to document the status and rate of loss for these nonrenewable resources.
- Develop a paleontological salvage program to ensure these resources are not lost.
- Manage and study paleontological resources in their geologic context, which provides information about the ancient environment.
- In consultation with the Tribal Historic Preservation Office, partner with other

national parks; federal, state, Tribal, and local agencies; and academic institutions, including Oglala Lakota College, to conduct paleontological research in the South Unit.

- Develop interpretive and educational programs to educate visitors and the public about paleontology.
- Manage all fossils collected from the South Unit in accordance with Tribal and NPS research permitting systems and through agreement and consultation with the OST.
- In consultation with the other national parks, museums, and universities, develop fossil exhibits, fossil preparation facilities, and storage facilities according to Tribal and NPS museum standards.
- In consultation with other national parks, museums, and universities, develop a mentoring program for young paleontologists, involving internships and school programs focusing on field, lab, and museum activities.
- Expand opportunities for researchers to use the park's fossil collection to further paleontological knowledge.

Threatened or Endangered Species

The *Endangered Species Act* mandates that agencies promote the conservation of all federally listed threatened or endangered species and their critical habitats within park boundaries. Several federally listed and state-listed threatened or endangered species are known to exist in and around Badlands National Park and use habitats within the park.

Strategies

Park managers will take the following actions to protect threatened or endangered species:

- Work with the USFWS and South Dakota state agencies to ensure that the park's actions help special-status species (state-listed or federally listed threatened, endangered, rare, declining,

sensitive, candidate, or special concern species, and Tribal species of concern) to recover. If any state-, Tribally, or federally listed or proposed threatened or endangered species are found in areas that would be affected by construction, visitor use, or restoration activities proposed under any of the alternatives in this GMP/EIS, consult with the appropriate agencies and try to avoid or mitigate any potential adverse impacts to any state-, Tribally, or federally listed special-status species.

- Cooperate with the USFWS and South Dakota state agencies to inventory, monitor, protect, and perpetuate the natural distribution and abundance of all special-status species and their essential habitats in the South Unit. Specifically consider these species in ongoing planning and management activities.
- Work with the USFWS, U.S. Forest Service, and South Dakota state agencies in the recovery of the black-footed ferret, one of North America's most endangered mammals.

Vegetation

Plant communities and the processes governing them will continue unaltered in most of the park. Communities will include the diverse species, genetic variability, plant associations, and successional stages representative of an ecologically functioning system in the Great Plains.

Strategies

Park managers will take the following actions to manage the park's vegetation:

- Inventory plant communities to determine the species present and monitor to assess their condition. Inventory rare plants.
- Begin efforts to eradicate invasive exotic (nonnative) plants in the park. Continue to work with state and local agencies and private landowners to

prevent the spread of exotic plant species into and out of the park.

- Use fire as a management tool where appropriate for maintaining plant communities.

Wildlife and Fish

The condition of wildlife and fish will be determined through baseline inventories and long-term monitoring programs.

Strategies

Park managers will employ the following policies and strategies to ensure that the park's wildlife and fish are protected:

- Seek to perpetuate the native animal life as part of the natural ecosystem. Emphasize minimizing human impacts on native animals and minimizing human influence on naturally occurring fluctuations of animal populations. Rely on ecological processes to control the populations of native species to the greatest extent practicable.
- Ensure the preservation of populations and habitats of migratory species inhabiting the park, such as birds and mountain lions. Whenever possible, cooperate with others to ensure the preservation of the populations and habitats of migratory species outside the park.
- Develop educational programs to inform visitors and the general public about wildlife issues and concerns.
- Undertake the management of populations of native or exotic animal species whenever such species threaten park resources, public health, or park neighbors and when control is prudent, feasible, and appropriate.
- Work to restore extirpated native species where suitable habitat exists and where it is compatible with social, political, and ecological conditions.

Managing and Protecting Cultural Resources

The protection of the South Unit's cultural resources is essential for understanding the past, present, and future relationship of people with the area. The strategies mentioned below will enable park managers to protect the South Unit's cultural resources. At the same time, these strategies will encourage visitors and employees to recognize and understand the value of the South Unit's cultural resources and allow their integrity to be preserved unimpaired.

Archeological, Historic Structures, Cultural Landscapes, and Ethnographic Resources

Strategies

Park managers will employ the following strategies for managing cultural resources:

- Survey or document or inventory cultural resources in accordance with the *National Historic Preservation Act* and following best management practices indicated by the Secretary of Interior's standards and associated regulations, policies, standards, and guidelines.
- Gather field data regarding archeological resources to develop a more accurate predictive model of prehistoric site distribution and to address related research questions.
- Monitor archeological site conditions.
- Evaluate all identified resources in accordance with the eligibility criteria for the National Register of Historic Places.
- Use avoidance techniques and other measures to prevent impacts on known significant sites from visitors and project-related disturbances.
- Support research and consultation to increase the understanding of all cultural resources.
- As appropriate, consult federally recognized tribes and Tribal Historic Preservation Officers on surveys,

studies, excavations, and actions that could affect cultural resources.

Museum and Archival Collections

Strategies

Park managers will use the following strategies for managing museum and archival collections:

- At present, all park museum specimens are housed off site. With the construction of the LHEC, a museum storage facility would be included. Where feasible and appropriate, transfer any museum materials collected from the South Unit and housed off site to the LHEC facility. Where feasible, make casts of fossils and artifacts to be placed on display. Make efforts to develop a diverse museum collection. The collection would contain historic artifacts; biological, paleontological, and geological specimens; historic images; archival materials; and prehistoric and historic archeological specimens and artifacts.
- Develop and maintain the condition of artifact and specimen exhibits and storage according to OST and NPS standards.
- Provide opportunities for researchers to use the artifacts, specimens, and archival materials in the museum collection.

Orientation, Interpretation, and Education

A variety of methods are used to orient visitors to Badlands National Park, provide information about the park, and interpret the park's resources. Park managers will pursue strategies to ensure that information is available so that visitors can plan a rewarding visit to the South Unit. Outreach and educational programs will help connect diverse audiences with the park's resources, build a local and national constituency, and gain public support for protecting the park's resources. Providing interpretation opportunities will build emotional, intellectual, and recreational ties with the park and its cultural and natural heritage.

Strategies

Park managers will use the following orientation, interpretation, and education strategies:

- Place emphasis on providing information, orientation, and interpretive services in the most effective manner possible. Use appropriate techniques and technologies to increase the visibility of the park and its programs and make people aware of issues facing the South Unit.
- Enhance cooperative efforts and partnerships with local communities, public and private agencies, organizations, stakeholders, and land managers in the region so that visitors can be better informed about the abundance, variety, and availability of the region's recreational and interpretive opportunities. This information will orient visitors about what to do (and what not to do), attractions to see, and how to enjoy the park in a safe, low-impact manner.
- Strengthen partnerships with state parks and other national parks, educational institutions, and other organizations to enrich interpretive and educational opportunities regionally and nationally.

Commercial Services

Commercial services could provide valuable visitor services at the park, such as gift stores, lodging, and food service. These services would add to visitor enjoyment of the park.

Strategies

Park managers will use the following commercial services strategies:

- Manage businesses serving the park through proper instruments subject to the final preferred alternative and any proposed legislation required to implement the final South Unit GMP/EIS. Such instruments might be similar to concession contract and commercial use authorizations used in the NPS.
- Ensure that all commercial activities in the park provide high-quality visitor experiences while protecting important natural, cultural, and scenic resources.
- Before concession contracts and commercial use authorizations are renewed or advertised, ensure that the types of authorized use are necessary and/or appropriate, levels of use are consistent with resource protection and high-quality visitor experiences, and the commercial services program can be managed efficiently and effectively. Prepare a commercial services plan that describes in detail the actions required to achieve goals for commercial services and related visitor experiences.

RELATIONSHIP OF THE GENERAL MANAGEMENT PLAN TO OTHER PLANNING EFFORTS

Several plans for areas in or near the South Unit could influence or be influenced by actions presented in this GMP/EIS and must be considered. These relevant plans and studies are listed below.

NATIONAL PARK SERVICE MANAGEMENT PLANS AND STUDIES

North Unit General Management Plan

The *2006 North Unit General Management Plan* was developed to provide general future guidance and direction for the management of the North Unit of Badlands National Park for the next 15 to 20 years. The plan provides a framework for making decisions about ways to ensure the preservation of natural and cultural resources and provide for a high-quality visitor experience in the North Unit of the park. The completed plan establishes a basis for decision making in accordance with defined long-term goals. The North Unit GMP provides broad direction for resource management and visitor experiences and in most cases does not propose specific actions.

Prairie Dog Management Plan

A *Black-tailed Prairie Dog Management Plan* was completed for the North Unit in 2007. The principal objectives of the management plan are to ensure that the black-tailed prairie dog is maintained in its role as a keystone species in the mixed-grass prairie ecosystem on the North Unit, while providing strategies to effectively manage instances of prairie dog encroachment onto adjacent private lands (NPS 2007b). Plague was detected in the North Unit black-tailed prairie dog population for the first time in 2009. Deltamethrin dusting efforts have been ongoing in the North Unit to protect existing populations of black-tailed prairie dogs, as well as black-footed ferrets (NPS 2009b).

Air Tour Management Plan

Air tours are authorized to fly over Badlands National Park and NPS is preparing an air tour management plan pursuant to the NPS Air Tour Management Act of 2000 to address the noise and other impacts associated with air tours. The NPS Natural Sounds Program provides park managers with technical assistance and national policy development and guidance for a consistent approach to managing acoustic environments. In 2006, the Natural Sounds Program assisted 39 parks with data collection and analysis, monitoring, and planning. Developing soundscape goals, objectives, and standards and identifying appropriate measures for mitigating noise impacts are part of the planning process. Badlands National Park is one of several parks currently developing an air tour management program.

Fire Management Plan

The *Badlands National Park Fire Management Plan* was established in 2004. This plan is a detailed program of action, providing specific guidance and procedures for accomplishing park fire management objectives. The plan defines levels of protection necessary to ensure the safety and protection of facilities and resources; minimizes undesirable environmental impacts of fire management; and defines levels of fire use to restore and perpetuate natural processes given current understanding of the complex relationships in natural ecosystems.

OTHER FEDERAL, TRIBAL, AND STATE AGENCY MANAGEMENT PLANS AND STUDIES

Buffalo Gap National Grassland (Nebraska National Forest and Grasslands) Land and Resource Management Plan

The Badlands National Park is surrounded by the Buffalo Gap National Grassland. The Buffalo Gap National Grassland is administered by the U.S. Forest Service and encompasses nearly 600,000 acres located in scattered tracts in southwestern South Dakota. In 2009, the Nebraska National Forest and Grasslands updated the 2005 Land and Resource Management Plan to reflect changes in acreage and priorities. This Land and Resource Management Plan offers guidance for all resource management activities in the Nebraska National Forest. It suggests management standards and guidelines and describes resource management practices, levels of resource production, user capacities, and the availability and suitability of lands for resource management (www.usda.fs.gov).

Proposed Tony Dean Cheyenne River Valley Conservation Act of 2010

On May 5, 2010, U.S. Senator Tim Johnson (D-SD) introduced the *Tony Dean Cheyenne River Valley Conservation Act* of 2010 to include a portion of the Buffalo Gap National Grassland in the National Wilderness Preservation System. This act has not yet been enacted as a law and still requires Congressional and Presidential approval. The proposed bill is based on an earlier recommendation by the U.S. Forest Service for wilderness protection in the areas of Indian Creek and Red Shirt. The proposed bill includes approximately 48,000 acres within the National Grassland, covering land in the Indian Creek, Red Shirt, and Chalk Hills areas. The act would leave the 6-mile-long Indian Creek Road open to vehicles by excluding it from the wilderness boundaries. Hunting would continue, as would recreational rock collecting. Johnson named this legislation

after the late Tony Dean, a longtime South Dakotan and advocate for hunting and protecting South Dakota's open spaces (proposed Senate Bill 3310).

Nebraska National Forest Travel Management Plan

A Record of Decision was signed in April 2010 on the *Nebraska National Forest Travel Management Plan Final Environmental Impact Statement*. The purpose of this action is to improve management of motorized vehicle use on National Forest System lands within the Nebraska National Forest in accordance with regulations at 36 CFR 212, 251, 261, and 295, and as described in "Travel Management; Designated Routes and Areas for Motor Vehicle Use; Final Rule" (70 *Federal Register* (FR) 216, the 2005 Travel Management Rule). The Record of Decision documents the decision authorized under the U.S. Forest Service 2005 Travel Management Rule. The decision implements a motorized vehicle system for the Nebraska National Forest units on the Pine Ridge and Bessey Ranger Districts, the Samuel R. McKelvie National Forest, the Oglala National Grassland, and the Fall River Ranger District portion of the Buffalo Gap National Grassland. The plan decreases the miles of motorized roads, increases the miles of motorized trails, and reduces the number of cross-country use areas in order to provide users a variety of experiences. This decision will require an amendment to the Forest Plan to implement the proposed action.

ONGOING PROJECTS PLANNED FOR THE NEAR FUTURE

Projects that are ongoing or that are funded and likely to be initiated (or even completed) before this GMP/EIS is complete are listed below. These projects *are not* part of actions proposed in this GMP/EIS and will be (or have been) covered under separate environmental compliance documents. These projects *are* considered in the cumulative effects sections of this document along with the other planning efforts described in the previous section.

Bombing Range

The cleanup of the former Bombing Range located on the Pine Ridge Indian Reservation is an ongoing effort by the USACE and the OST to identify and mitigate public safety concerns relating to the former military use of these lands. The Bombing Range was divided into 28 sectors to facilitate the characterization of ordnance and explosives concentrations, identify safety problems, and study risk management alternatives. A vast majority of the South Unit is located within the Bombing Range. The areas cleared to date include pieces on top of Cuny Table (Engelbart, pers. comm., 2010). Given the current technology, it is unlikely that unexploded ordnance would be cleared within the timeframe of this plan, but some of the more used and passable roads within the South Unit should be cleared in the next few years pending available funding and right of entry from the OST (Engelbart, pers. comm., 2010). The USACE recommended that institutional controls be implemented for the entire former Bombing Range. Institutional controls include elements that inform the public of the site's former use and the potential for unexploded ordnance. Primary populations affected by the former Bombing Range include members of the OST who work in, live on, and use the land for ranching or recreation and visitors to the Pine Ridge Indian Reservation and Badlands National Park.

South Dakota National Guard Training Sites (2010–2015) Environmental Assessment

An environmental assessment is being prepared for a special use management permit authorizing the South Dakota Army National Guard to use portions of the Buffalo Gap National Grassland as a training site (USFS *in prep.*).

Proposed Crazy Horse Scenic Byway

The OSPRA is pursuing Federal Highway Administration approval for the proposed 215-mile Crazy Horse Scenic Byway. As described in an article by Tom Katus in the Lakota Country Times on October 13, 2009,

The 215-mile Crazy Horse Scenic Byway will begin at the eastern gates of Interstate 90 at Kadoka (Exit 150) and Cactus Flats (Exit 131) and will continue through the Badlands, Pine Ridge Indian Reservation and Black Hills, terminating at Crazy Horse Memorial Mountain. The Byway will become the most culturally and naturally relevant interpretive byway in South Dakota and will: link the Badlands Loop State Scenic Byway, the North and South Units of the Badlands National Park through the Pine Ridge Indian Reservation, Wind Cave National Park, the Wildlife Loop in Custer State Park, the Peter Norbeck National Scenic Byway, Mt. Rushmore National Memorial and the Crazy Horse Memorial Mountain; double the visitors to the Badlands National Park from approximately 1 million to 2 million annually, within a decade; and encourage positive race relations between the descendants of the 1800s Oglala Lakota and the American settlers, predominantly white but also including African-, Asian- and Hispanic-Americans.

Mni Wiconi Water Project

The Mni Wiconi water project is a regional water distribution system being built to transport potable water from the Missouri River to the Pine Ridge Indian Reservation. The pipeline is being built along BIA Highway 41 (BIA 41) along the western edge of the park. The construction is primarily within the road prism of existing roads, thus reducing the adverse impacts of the project. The project, which has a statutory completion date of 2013, is expected to be approximately 88 percent complete by the end of fiscal year (FY) 2010. When complete, it will distribute water across 12,500 square miles and will provide a clean, safe, adequate supply of drinking water from the Missouri River to than 52,000 beneficiaries on three American Indian reservations and within a large non-reservation rural water system embracing nine counties. Project sponsors are the OST, the

Rosebud Sioux Tribe, the Lower Brule Sioux Tribe, and West River/Lyman-Jones. The clean water supply will help prevent the many water-related health problems the beneficiaries currently suffer and will spur economic development in the region (U.S. House of Representatives FY 2011 Energy and Water Funding).

Dakota, Minnesota, and Eastern Railroad Line

For 15 years the Dakota, Minnesota, and Eastern Railroad Corporation (DM&E) has pushed a proposal to extend its railroad 278 miles to access surface coal mines in Wyoming's Powder River Basin. The line would be near the South Unit, near Red Shirt Table, and about 6 miles from the wilderness boundary in the North Unit. DM&E received regulatory approval from the U.S. Surface Transportation Board on January 30, 2002, to proceed with the \$1.5 billion project. Although the route has been approved, construction has been delayed by court challenges. If the rail line is built, emissions of soot from the diesel locomotives might cause perceptible deterioration of visibility in the park. Currently, the project is on hold. DM&E spokesman Mike Lovecchio stated that the decision to proceed with expansion will be contingent upon several conditions, such as access to a right-of-way land corridor, mine and utility contracts, and the economic and regulatory environment (Casper Star-Tribune 2009).

Solid Waste Management Facility

The OST operates a solid waste management facility at Red Shirt, near the south boundary of

the South Unit, near BIA 41 and BIA Route 2. The 50-acre landfill facility accepts baled solid waste from the baler at Pine Ridge and from transfer stations located at various communities on the reservation. The landfill, which is lined in accordance with U.S. Environmental Protection Agency (EPA) regulations, uses a leachate collection system. Water quality is monitored through a series of monitoring wells.

Commercial Wind Power Development

On May 27, 2010, the OST Council voted to accept the charter of the OST Renewable Energy Development Authority. This new Authority oversees community and commercial-scale renewable energy development on the Pine Ridge Indian Reservation. The Authority's initial focus is the development of commercial-scale wind power, and it has already identified a number of large sites with outstanding Class 5 winds, including sites adjacent to the South Unit.

Paving BIA Route 2 South of South Unit

The OST, through direct funding from the Federal Lands Highway Program, Federal Highway Administration, has proposed to pave 18.5 miles of BIA Route 2 from the junction with BIA Route 27 at the White River Visitor Center west to a point along BIA Route 2. Because of direct funding to the Tribe, the BIA has no involvement in the project. The OST Transportation Department has indicated the project is in the planning phase and public scoping began in June 2010.