Denali State Park Management Plan





2006

Division of Parks and Outdoor Recreation Alaska Department of Natural Resources



Denali State Park Management Plan

Adopted 2006





STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

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ADOPTION OF THE DENALI STATE PARK MANAGEMENT PLAN

The Commissioner of the Department of Natural Resources finds that the Denali State Park Management Plan meets the requirements of AS 41.21.150-152 and 41.21.022(4) and hereby adopts this plan as policy for the Department of Natural Resources, Division of Parks and Outdoor Recreation which prescribes management of state lands within the boundaries of Denali State Park and Blair Lake, Indian River, and Tokositna State Recreation Areas including permitting and other department programs and activities. This plan supersedes the 1989 Denali State Park Master Plan.

Mike Menge Commissioner

Alaska Department of Natural Resources

Date

STATE OF ALASKA

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June 30, 2006

Dear Alaskan,

The creation of Denali State Park in 1970 and expansion in 1976 was the realization of decades of local, state, and national interest and involvement. Renowned for its wealth of natural resources and recreational opportunities, Denali State Park is one of the jewels of the Alaska State Park System. Sharing a common boundary with Denali National Park and Preserve to the north and the Matanuska-Susitna Borough and state lands to the south, the state park and its surrounding public lands offer limitless outdoor opportunities, spectacular mountain scenery, and an abundance of fish and wildlife.

For the last several years, it has been widely recognized that the northern Susitna Valley is experiencing increasing pressures from private and commercial development as well as by increasing recreational use and tourism. To address these concerns, the State of Alaska along with its partners, the Matanuska Susitna Borough and the National Park Service, embarked on a planning effort to ensure that the increasing development and uses in this area occur in an orderly manner. It was important to the partners to provide for a diversity of uses while being sensitive to the concerns of local residents. Over the course of the planning process, planners made every effort to address and accommodate concerns and desires while fulfilling the mandate of the park's enabling legislation. This plan represents these efforts and we are proud of the results.

This plan is designed to be used over the next twenty years. As resources become available to State Parks, the recommendations in the plan will be implemented in phases. In addition, State Parks will continue to participate in planning efforts for lands along the park's boundaries. We look forward to working together with the public, the State Parks Advisory Board, and the South Denali Steering Committee to address the pressing issues in the region, to help achieve the plan's goals, and to better serve the public.

Sincerely,

Jerry Lewanski Director

Table of Contents

Chapter 1 – Introduction	
Plan Purpose	
Establishment of the Park	
Overview of the Park	
Historical Background	
Management and Facility Recommendations	
Implementation	
Chapter 2 – Goals & Objectives	
Park Mission Statement	
Denali State Park Goals and Objectives	
Regional Goals	
State Park System Goals and Policies	13
Chapter 3 – Issues	
Land Use and Development	
Environmental Protection	
Recreational Activities and Facilities	
Fish and Wildlife Management	
Tourism	
Governmental Coordination/Cooperation	
Commercial Activities	19
Park Operations and Staffing Requirements	
Chapter 4 – Natural Environment	
Climate	2
Geology	22
Soils	
Slope and Slope Aspect	23
Hydrology	
Vegetation	24
Wildlife	25
Chapter 5 – Cultural Environment	
Human History	39
Land Ownership	40
Recreational Demand	43
Chapter 6 – Regional Recreation & Visitor Use	
Recreation and Tourism Trends	45
Preferred Activities	40
Recreation Facilities and Services	40
Resource Attractions	47
Resource Constraints	48

Chapter 7 – Management Recommendations	
Introduction	
Land Use Designation Descriptions	49
Proposed Park Additions and Boundary Adjustments	66
Land Acquisition	68
Wildlife Management	69
Research	71
Proposed Monitoring and Management Recommendations	72
Land Use Regulations	74
Cooperative Management Agreements	76
Management and Staffing Efficiencies	78
Commercial Uses	79
Chapter 8 – Facility Recommendations	
South Denali Visitor Complex	
Regional Visitor Information Stops	
Interpretive Facilities	
Park Headquarters, Storage Yard, Housing, Patrol Cabin	
Camping Facilities	
Public Use Cabins and Shelters	
Developments along the Alaska Railroad	
River Access	
Trails and Trailheads	
Highway Pullouts	
Other Recreational Facilities, Improvements in the Byers Lake and Other Areas	105
Chapter 9 – Implementation	
Management Recommendations	
Phasing of Facility Recommendations	
Implementation Measures for the South Denali Visitor Complex Proposals	
Mitigation	
Site Planning	
Plan Review, Modifications	112
Appendices	
Appendix A – Glossary	
Appendix B – Acknowledgments	
Appendix C – Bibliography	
Appendix D – Statutes, Regulations & Management Agreements for Denali State Parl	د 125

Table of Figures

Chapter 1	
Figure 1: Location Maps	5
Chapter 4	
Figure 2: Bird Checklist for Denali State Park	27
Figure 3: Vegetation	
Figure 4: Wildlife Distribution – Moose, Beaver, Sheep	31
Figure 5: Wildlife Distribution – Bears	
Figure 6: Wildlife Distribution – Bald Eagles, Trumpeter Swans	
Figure 7: Fish Distribution	
Chapter 5	
Figure 8: Land Ownership	43
Chapter 7	
Figure 9: Land Use Designations	51
Figure 10: Land Use Designation	
Figure 11: Guidelines for Activities and Facilities Within Land-Use Designations in	
Denali State Park	55
Chapter 8	
Figure 12: Facilities	87

Chapter 1 INTRODUCTION

Plan Purpose
Establishment of the Park
Overview of the Park
Historical Background
Management and Facility Recommendations
Implementation

Chapter 1 INTRODUCTION

Plan Purpose

This plan provides guidance for management of park lands and development of recreational facilities, consistent with the park's Mission Statement. In addition, the plan discusses trends in recreation and tourism, and provides natural resource information that will simplify the task of maintaining a current resource database as new information becomes available.

Establishment of the Park

The Alaska State Legislature created Denali State Park (AS 41.21.150-152) in 1970, and in 1976 amended the boundary to add the upper reaches of the Tokositna basin, west of the old park boundary (see Figure 1). In both actions, the legislature had a strong interest in tourism related development, as well as providing recreational opportunities for Alaskans and preserving the area's natural resources. In 1994 the Blair Lake and Tokositna State Recreation Areas were established. The Indian River State Recreation area was added in 2002. All three were created through management agreements within DNR.

Overview of the Park

Denali State Park is approximately 324,240 acres in size. The State Recreation Areas include an additional 1,470 acres. Although much smaller than Denali National Park and Preserve to the north (6,028,203 acres), Denali State Park and its associated State Recreation Areas are very diverse area. They afford tremendous views of Denali; contains three major rivers, the Susitna, Chulitna, and Tokositna; and have three glaciers adjacent to or within its boundaries, the Ruth, Eldridge and Tokositna. Vegetation ranges from lowland spruce and hardwood forests to alpine tundra. The George Parks Highway transects the park and opens its scenery, wildlife and other natural resources to the public.

Primary uses of the park are camping, hiking, fishing, viewing Denali, canoeing, rafting, river boating, hunting and trapping.

Historical Background

The Mount McKinley National Park was created in 1917, when the federal government "reserved" a 2 million acre tract around Mt. McKinley as a national park. The national park quickly became one of Alaska's primary tourist attractions.

In 1968 the U.S. and Alaska Departments of Commerce proposed a facility at Chulitna Pass. That was followed by a 1969 proposal by the National Park Service and the Alaska Division of Tourism for a facility on South Curry Ridge (NPS 1969). The location at Chulitna, which is only 70 miles from the main entrance of Denali National Park, and lack of existing infrastructure at both sites made these projects unappealing to many people. Although the designation of Denali State Park in 1970 was intended to provide the land base and protections needed for a major public tourism facility, neither proposal materialized. The later report led the National Park Service to recommend this area for inclusion in the national park, due primarily to the tremendous views of Denali.

The State of Alaska selected these lands and the state legislature created Denali State Park in 1970. With the 1972 opening of the George Parks Highway, the number of visitors to the park increased dramatically. New access to the area also spurred proposals for development, including a Teflon-domed recreational city in the Tokositna area. In 1974, the state completed improvements including a 61-unit campground at Byers Lake and a trail along the Curry-Kesugi ridge system.

State Parks wrote the Denali State Park Master Plan in 1975 with proposals for a variety of developments within the park and intensive development concentrated around Byers Lake. Development was to include a major visitors' complex and downhill ski area. This project was let out for competitive proposals and a contract was awarded; however, the successful bidder never seriously pursued the project.

In 1976, one year after the Denali State Park Master Plan was adopted, 42,240 acres in the Tokositna region were added to the park. This addition was significant because it incorporated into Denali State Park the highest-rated location in the state park for viewing Denali.

Since 1978, there have been several proposals for a major visitor complex in the park. Ambitious plans for a resort city in the Tokositna area and a controversial proposal for a mountain viewing facility on the flank of Curry Ridge were never implemented.

Recognizing that the 1975 master plan was outdated, the Department of Natural Resources, in cooperation with the Alaska Department of Commerce and Economic Development and the National Park Service, contracted with DOWL Engineers to provide recommendations for the update of the plan. That effort resulted in the 1989 Denali State Master Plan.

There were also other various planning processes that addressed the region in the 1980s and 1990s notably the 1997 South Side Development Concept Plan / Environmental Impact Statement that addressed increasing recreation and tourism opportunities on the south side of Denali. Portions of the 1997 plan remained controversial even after substantial revisions were made to address public concerns, particularly about development in the Peters Hills. In 1999 the South Denali Citizens Consultation Committee Final report recommended modifying the developments in the 1997 plan. Some of these developments were built, primarily pullouts and waysides along the George Parks Highway.

In 2004, Denali National Park and Preserve received funding to begin the *South Denali Implementation Plan*. A cooperative agreement was finalized between the State of Alaska, Matanuska-Susitna Borough, and the National Park Service to cooperatively plan for development at specific locations to provide new access and increased recreational opportunities in the South Denali region.

The agencies worked together on development of the Final South Denali Implementation Plan and Environmental Impact Statement (FEIS) which presents proposals for enhanced park and recreational facilities in the area. As part of this process, State Parks amended the 1989 Denali State Master Plan to parallel action alternatives in the FEIS that may occur within the park boundary.

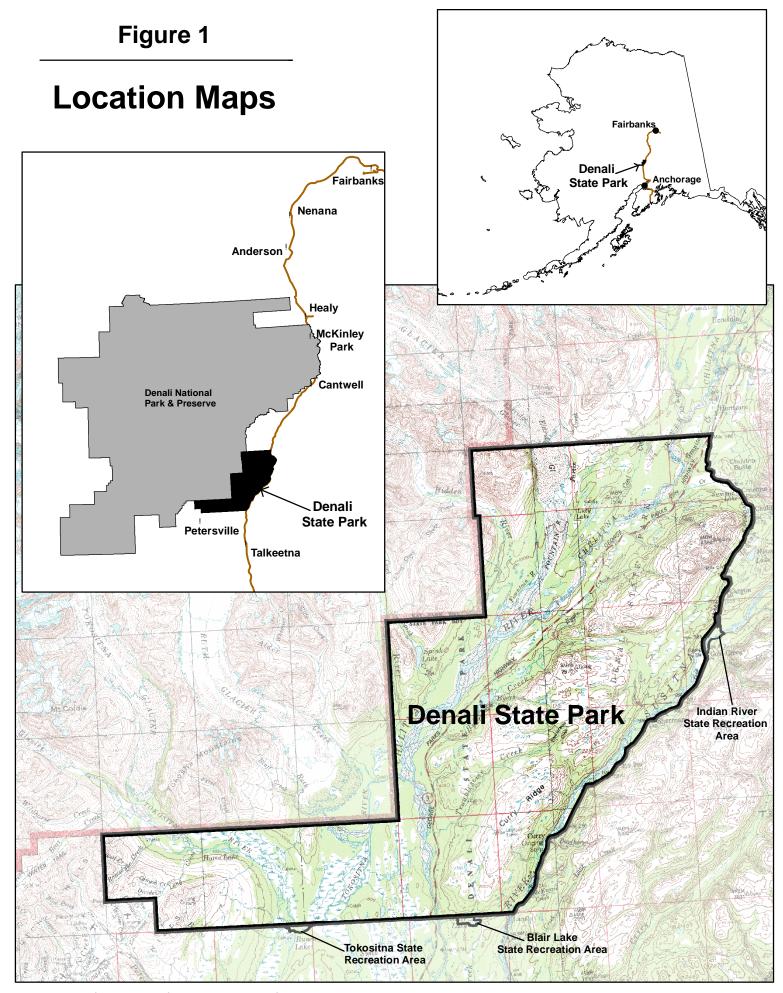
The amendment also reflects changes that have occurred since 1989 including: revised statutes and regulations; facilities that have been built or improved; new information from site planning; and developments under consideration along the Alaska Railroad. The amendment focused on revising Chapters 7-9 of the 1989 plan and two appendices that addressed facility recommendations and plan implementation information. Minor updates were made to the remainder of the 1989 plan including Chapters 1-6, which include background information and planning process. These were updated to be consistent with the information in the FEIS. Some appendices were eliminated because they are no longer relevant or are better addressed in the FEIS.

Management and Facility Recommendations

The final segment of the planning process was the formulation of management and facility recommendations. Management recommendations focus on issues related to the management and public use of the park. Facility recommendations relate to physical improvements necessary to protect the natural resources and provide for recreational use of the park. Facility improvements range from new and rerouted trails to a visitor center. The facilities outlined in the recommendations are those that should be provided over the planning period of 20 years.

Implementation

After adoption of this plan, State Parks and other state, federal and municipal agencies will begin implementing its provisions.



Chapter 2 GOALS & OBJECTIVES

Park Mission Statement
Denali State Park Goals and Objectives
Regional Goals
State Park System Goals and Policies

Chapter 2

GOALS & OBJECTIVES

Park Mission Statement

The park's enabling legislation does not include a formal statement of purpose for Denali State Park. The Division of Parks and Outdoor Recreation, as part of the planning process and in conjunction with the Susitna Valley State Park Citizen's Advisory Board, developed the following "Mission Statement" to serve in the absence of an explicit legislative statement of purpose.

Denali State Park shall be managed and developed in a manner compatible with the following goals:

- I. Protect the natural and cultural resources of the park and ensure that the park's resources are maintained to allow for the public's experience and understanding of the unique natural features that are found in this part of Alaska.
- II. In a manner that is compatible with Goal I, provide for a variety of opportunities for visitors to the park to experience and understand the park's natural and cultural resources, including viewing Denali.
 - Park facilities shall be designed and developed to support the public use and understanding of the park and its resources and not serve as attractions in and of themselves.
- III. In a manner that is compatible with Goals I and II, recognize and accommodate, in so far as reasonable, the diverse needs of different types of visitors to the park. Avoid conflicts between different groups of visitors or between visitors and park resources.

Denali State Park Goals and Objectives

There are a number of goals and objectives to be achieved in the management and development of Denali State Park. This section presents a list of goals, organized into four groups: environmental, cultural, recreational, and tourism. Each goal statement is followed by specific objectives. The objectives are not ranked in terms of priority.

- 1. <u>Protect Natural Resources within the Park.</u> The park's natural resource base consists of two parts: 1) the natural ecosystem with its processes and wildlife, and 2) the visible landscape composed of natural and man-made features.
 - Protect naturally significant areas, such as:
 - o specific habitat areas (such as bear denning and swan nesting areas),

- o sensitive wetlands,
- o sensitive alpine and sub-alpine tundra,
- o wildlife concentration areas, such as along rivers and creeks during salmon spawning season.
- Minimize impact to the park landscape, in general, by:
 - o locating non-recreational activities outside the park,
 - o locating facilities and activities where carrying capacity is adequate,
 - o concentrating development in nodes to minimize the area disturbed,
 - o locating recreation facilities relatively close to the highway to reduce impact to the backcountry,
 - o rehabilitating disturbed areas, such as existing gravel borrow sites, to natural conditions or using them to meet recreation facility objectives,
 - o designing and locating recreation facilities to minimize the need for management controls, and
 - o limiting opportunities for misuse of the park.
- Minimize conflict with natural processes by:
 - o locating facilities and activities on soils that are well-drained, permafrost-free, and not subject to erosion,
 - o locating intensive development on sites that have gentle slopes that will not be subject to erosion,
 - o locating facilities and activities outside floodplains (including glacier outburst floods),
 - o locating recreation facilities where there is adequate water for proposed uses, and
 - o locating facilities where the soil is suitable for waste disposal (Note: a package treatment plant is recommended for intense development sites, such as a lodge).
- Protect the natural character of the landscape by:
 - o protecting the view from the road and the railroad, and keeping major development out of sight,
 - o designing facilities to blend, rather than contrast with, the natural landscape, and
 - o keeping the scale of facilities (including roads, parking, buildings, and other structures) relatively small.
- 2. <u>Protect Historic Sites and Current Land Uses</u>, and contribute to a new sense of community in the Denali Region.
 - Protect historic and cultural sites, such as:
 - o the Curry Lookout, and
 - o any archaeological sites discovered (none are known to exist in the park).

- Minimize impact on existing land uses, both within and adjacent to the park, such as:
 - o inholdings, particularly at the south entrance,
 - o the Tokosha community south of the park,
 - o the Chase community east of the park,
 - o the Peters Hills community southwest of the park, and
 - o the Talkeetna and Trapper Creek communities.
- Develop a sense of community for new development, should it occur, such as:
 - a synergistic relationship between outside development (including Talkeetna and Trapper Creek) and the park,
 - o a village-like community atmosphere for development in or out of the park, and
 - o an overall park ambience that is socially enjoyable for residents and tourists.
- 3. <u>Provide Recreation Opportunities and Facilities</u> for present and future Alaska residents. Denali State Park is a major component of the state park system, which exists primarily to serve Alaska residents. Non-resident and tourist recreation can be provided in Denali State Park to the extent that it complements but does not significantly displace recreation by residents.
 - Provide a wide range of recreation opportunities for people of different ages, abilities, incomes, and recreational interests.
 - Provide opportunities for year-round use, including the summer, winter and shoulder seasons in spring and fall.
 - Provide those recreation facilities and uses that are most in demand given the regional status of the park and the existing recreation facilities in the area, including:
 - o visitor center(s), campgrounds, campsites, and trails;
 - o recreation facilities identified as in demand in the regional overview analysis, including campgrounds, campsites, visitor center, public use cabins/shelters, trails (hiking and cross-country skiing), and fishing access;
 - facilities that complement and support the private recreation industry in the region, most specifically parking and pick-up areas, information centers, and raft launching and pick-up points.
 - Provide those recreation facilities and uses that take advantage of the special natural
 qualities of the park, such as views of Denali, glaciers, wildlife, river corridors, lakes,
 and the Curry-Kesugi Ridge landscape.
 - Provide recreation facilities that are located and designed with human needs in mind, with concern for such factors as:
 - o slope that is suitable for the activity;
 - o southerly aspect for warmth and early snowmelt;
 - o light breezes but not high winds;
 - o attractive vegetation that provides visual scale and separation; and

- o soils that are well-drained with good walking surfaces.
- Provide recreation facilities and uses that encourage compatible recreation use of adjoining land, such as:
 - o trails and bridges to lands owned by the Alaska Railroad and to private and municipal lands to the south;
 - o river access that provides access to adjacent state, federal, borough and private land; and
 - o undeveloped overland access to Denali National Park adjacent to the north border of the state park.
- Provide recreation facilities and uses that enable a certain level of management presence, such as:
 - o permit system on the number of users;
 - reservations and fee collections: and
 - o vegetation management.
- Provide facilities for people approaching from either north or south:
 - o information on recreation opportunities incliding signs and kiosks,
 - o Denali viewpoints, picnic areas and waysides.
- Provide recreation facilities and uses that are highly accessible:
 - o by road, including auto, bus, and RV;
 - o by railroad and boat; and
 - o during all seasons.
- Provide recreation facilities and uses that are not subject to adverse impact from:
 - o mining claims, especially in the Peters Hills;
 - remote subdivisions; and
 - o inholdings.
- Provide recreation facilities that minimize the safety risk to visitors from such sources as:
 - wildlife (especially bears);
 - o landscape dangers, floods, glaciers, cliffs; and
 - o conflict of pedestrian/vehicle traffic.
- 4. <u>Support the State's Tourism Industry</u>, which depends on both resident and non-resident visitors.
 - Provide recreation facilities and uses that feature the natural resources of the park, including:
 - o views of Denali;
 - o wildlife (especially bear congregations at salmon spawning streams);

- o glaciers (especially the Tokositna view);
- o wooded and alpine areas; and
- o river corridors.
- Provide a diversity of recreation opportunities that fit with various tourist groups, such as:
 - Large and small tour groups staying in lodges in the region, or just passing through on their way to Denali National Park who wish to visit the state park for a few hours or a day or more;
 - o independent non-resident travelers who have a more flexible schedule in terms of number of days, activities, and lodging type; and
 - O Alaskan residents, who are perhaps the most flexible in terms of itinerary and who make up the majority if visitors to the park in both summer and the winter.
- Provide a diversity of recreation facilities and opportunities that will encourage people to stay in the region longer, such as:
 - o information centers to inform people of attractions and opportunities;
 - o a major visitor center/interpretive facility featuring the natural and cultural history of the Denali area;
 - o one or more minor interpretive destinations, such as overlooking a glacier or a bear/salmon stream;
 - o gathering points for guided tours, such as for wildlife viewing and river rafting; and
 - o opportunities for self-guided activities, such as hour, half-day, and day hikes.
- Provide opportunities for all seasons, such as:
 - o high demand summer season;
 - o "shoulder season" of spring and fall, which tends to require more protective facilities; and
 - o winter season, which requires the greatest level of protection from weather.
- Provide recreation facilities that complement and support the private sector, in particular:
 - o existing tourist and air charter facilities in Talkeetna;
 - o existing lodges and service stations along the Parks Highway; and
 - o existing lodges and guide services that occur within or near the park, particularly in the Tokosha community south of the park.
- Provide recreation facilities that complement Denali National Park and Preserve, such as:
 - o major viewpoints of Denali;
 - o a major interpretive center for the natural and cultural history of the region;
 - o minor interpretive centers with specific emphasis, such as the Veterans Memorial;
 - o camping and campsites;

- o hiking and other trail-related activities;
- o public use cabins and shelters; and
- o wildlife tours, rafting tours, nature tours.
- Provide recreation facilities that are:
 - close to the main highway and adjacent to the railroad (or accessible by minimal spur; and
 - o have adequate room for parking.
- Provide at least minimal recreation facilities at both ends of the park, for tourists traveling north or south, such as:
 - viewpoints of Denali;
 - o picnic areas or waysides with vault toilet facilities; and
 - o roadside view pull-outs with interpretive signs and kiosks.

Regional Goals

A number of conclusions were drawn from the information presented in the regional analysis (Chapter 6), and they form the basis for the regional goals presented here. They relate primarily to developing the recreation potential of the region. The final two recommendations, however, address development in Denali State Park. Specific goals and criteria for deciding what should be located inside park, and where, conclude this section.

- 1. Prepare a "Denali Recreation Region Study". Federal, state, and local agencies and the private sector should join together to promote the "Denali Recreation Region," extending, at least, from Talkeetna to Healy. The common goal would be to coordinate development so that the natural values of the region, particularly the "view from the road," are protected as development occurs. Experience shows that tourism and recreation decline if an area develops a reputation as a "strip," and that both tourism and recreation are enhanced if development looks coordinated and does not detract significantly from the natural landscape. DNR, NPS, ADOT/PF and the Denali and Matanuska-Susitna Boroughs should prepare a study assessing recreation values both north and south of the Alaska Range and propose alternative mechanisms for protecting visual resources along the highway while still allowing for development.
- 2. <u>Develop a Regional Interagency Cooperative Agreement.</u> Many public agencies are responsible for land management in the region, including the DNR, NPS, ADF&G, BLM, Matanuska-Susitna Borough, Denali Borough, Alaska Railroad, and ADOT/PF. These agencies should meet periodically to coordinate plans, so that the action of one agency does not conflict with, or duplicate, the actions of others.

- 3. <u>Provide Information Centers, North and South of Denali State Park.</u> The centers should be located at Healy, Cantwell, and Talkeetna (or the Talkeetna Junction). The information centers (not visitor centers) would house maps, brochures and other information about both public and private facilities and services in the region. Structures would be low-cost and permit low-cost maintenance, such as kiosks.
- 4. <u>Provide Visitor Interpretive Centers.</u> The Denali region offers an exceptional opportunity for interpretation of natural and cultural resources. There is some merit in having several visitor centers in the region. For example, there might be one large center with a view of Denali in the park, a somewhat smaller facility that focuses on cultural/ historical interpretation in Talkeetna, and one or more smaller "remote" centers near glaciers or wildlife viewing points.
- 5. <u>Limit Development inside Denali State Park.</u> Although there is a need for a variety of recreation facilities, many of these might be provided outside the park on public or private land adjoining the park. In particular, the large tracts of state land north of the park appear to offer a variety of opportunities. There are also public lands south of the park, both state- and boroughowned, that appear to be suitable for recreation development. As a general rule, facilities located within the park should have a higher recreational, educational, interpretive or public safety value than could be achieved if located outside the park.

State Park System Goals and Policies

Overall goals for the State Park System are found in the *Statewide Framework Plan* (DPOR, 1982a) and summarized below:

- 1. <u>Provide for the outdoor recreational needs of present and future generations of Alaskans and visitors.</u> Within the system there will be a variety of park units that offer year-round facilities that are responsive to user demand, and offer a statewide or regional (as opposed to national or local) attraction.
- 2. <u>Preserve and protect areas of natural significance.</u> More specifically, the Division will identify naturally significant areas within its park units and to manage them so the natural qualities, including fish and wildlife populations, are not diminished. Overall, the Division will protect the natural resource base of parks for future generations.
- 3. <u>Preserve and interpret Alaska's cultural heritage.</u> The Division will inventory and manage its units to protect cultural resources, and to provide visitor orientation and interpretive programs and facilities designed to foster understanding and appreciation of historic and cultural resources.
- 4. <u>Protect and manage areas of significant scientific or educational value.</u> Areas of special value should be identified through an inventory process and protected through the planning and design processes.

5. <u>Provide support to the state's tourism industry.</u> This goal will be met by protecting scenic areas, providing recreation and tourism opportunities, providing facilities and services within park units that complement outdoor recreation and natural history interpretation opportunities, and coordinating with other agencies.

The *Statewide Framework Plan* also presents policies applicable to Denali State Park. These policies are also contained in a strategy document entitled *Mission 1990* (DPOR, 1986).

<u>Land Acquisition.</u> The Division will identify land of recreational and resource value which should be added to existing parks or serve as buffers. This land will be acquired on a willing seller - willing buyer basis.

<u>Planning.</u> The Division will plan so that the park system meets needs within the region. Not all parks need to provide for all uses. Facilities should be provided where most appropriate and, in general, they should not duplicate proximate public or private facilities. Through planning, the Division should attempt to prevent loss of future recreational opportunities and it should develop opportunities for special recreation uses where appropriate.

<u>Development.</u> Parks will be resource-based, that is, the development itself should not serve as the attraction. Facilities should not unnecessarily harm the cultural or natural environment, nor should they be designed where they can impact or be impacted by adjacent private lands. Facilities should be given highest priority where crowding is evident. Facilities should be designed, both visually and functionally, to fit the Alaska environment.

<u>Management.</u> Facilities should be arranged and designed for ease and economy of operation, including protection of natural and cultural resources, reduction of hazards for users and staff, and general elimination of distractions from the recreation experience.

<u>Concessions.</u> Concession contracts are encouraged, where consistent with park values, to provide for management and visitor services within the park. Private development of recreational facilities, compatible with park purposes, on private lands outside park unit boundaries, is encouraged.

<u>Visitor Information</u>. Visitor information and interpretation are fundamental aspects of state park system management. Within each park the Division will provide an interpretive program with a particular theme, such as the natural ecosystem. The Division will cooperate with other agencies, the private sector, and volunteers to promote visitor information services.

Chapter 3 ISSUES

Land Use and Development
Environmental Protection
Recreational Activities and Facilities
Fish and Wildlife Management
Tourism
Governmental Coordination/Cooperation
Commercial Activities
Park Operations and Staffing Requirements

Chapter 3

ISSUES

This chapter lists and briefly discusses issues that have been raised during the planning process. Recommendations in Chapters 7 and 8 address many of these issues.

Land Use and Development

<u>Land Use Designations on State Park Land.</u> State park management plans classify state-owned park lands according to an established system: Wilderness, Natural Area, Cultural, and Recreation Development. Designations suggest how specific areas are to be managed, and the type and scale of development that is appropriate. At issue in Denali State Park is the proper mix of classifications, from wilderness to intensely used recreation development areas.

<u>Private Inholdings.</u> There are a number of private inholdings in Denali State Park. The use and development of private lands inside the park boundary has the potential for creating a range of problems including environmental impacts, recreational conflicts, degradation of the view shed and wildlife displacement. Private owners are concerned about the effects on their property from park facility development and recreational uses.

<u>Native Allotments.</u> There are a number of native allotments in the park, in various stages of application, approval, and title conveyance. Most allotments are along the Parks Highway corridor in the southern end of the park. As lands held in trust for Natives by the Bureau of Indian Affairs, allotments are not subject to traditional forms of land use regulation (including zoning) until they are sold. The use and development of allotments, therefore, is of considerable concern.

Management of Adjacent Public Lands. Much of the land adjacent to Denali State Park is owned and managed by other public entities, including the Matanuska-Susitna Borough, Alaska Railroad, National Park Service, ADOT/PF and DNR's Division of Mining, Land and Water. Management of adjacent lands will affect use patterns within the park, and could pose environmental threats. If intensively developed for tourism, for example, there will be extra demands placed on park lands for natural areas and recreational facilities. New residents settling in the area following state land disposals would likely establish local recreational and subsistence patterns that could conflict with other park users. Development of facilities on the park's south boundary, including expansion of the existing hotel and development of a Boy Scout Camp, could result in a significant increase in use of the park's facilities, rivers and trails.

<u>Spillover Development.</u> A question associated with proposals for major recreation and tourism development in the park is whether inappropriate spillover development would be spawned. At present, private holdings inside and adjacent to the park are generally undeveloped. Many people argue that, without new land use controls, private holdings would quickly be developed in response to new recreation/tourism facility development in the park.

Environmental Protection

<u>Wildlife Habitat.</u> Denali State Park supports a variety of wildlife, including large mammals like grizzly bear, black bear and moose. There is concern that proposals for recreation and tourism facilities will damage wildlife habitat and displace sensitive wildlife.

<u>Swan Nesting Areas.</u> The Tokositna River lowlands host a significant number of nesting and fledging Trumpeter Swans. Conflicts between human uses and swans, particularly during the swan nesting and fledging season, is a concern.

<u>Unique and Special Areas.</u> The park contains a number of special areas and resources that warrant special attention, including the Curry-Kesugi Ridge system, river lowlands, and the Peters Hills. Plan issues center on balancing development and use in these areas with the special values that are found in these areas.

Recreational Activities and Facilities

<u>Conflicts Between User Groups.</u> Certain recreational uses have inherent conflicts that can be mitigated, but sometimes with limited success. These include different modes of travel on trails, noise, crowding and aesthetic concerns. Although such situations are rare in the park, as use increases, conflicts too are likely to increase.

<u>Recreational Facilities.</u> Denali State Park is largely undeveloped, which makes it particularly attractive to wilderness advocates and others who enjoy self-sufficient recreation. Others have argued for a greater level of facility development, suggesting that new users would be attracted to the park if new facilities were built. At issue is the appropriate level of facility development that will continue to support existing uses while providing new opportunities.

<u>Motorized Activities.</u> Off-road vehicles, snow machines, motorboats, and aircraft are controversial recreational activities and modes of access. Existing park regulations address these forms of motorized access. Through the planning process, members of the public argued for changing current restrictions.

<u>Flight Operations.</u> Aircraft operations, including take-offs and landings as well as overflights, is an issue. Aircraft are used for recreational and hunting access in several areas in the park. Flightseeing is an increasingly popular activity, currently directed primarily towards the national park. Although aircraft provide access to remote areas, they also have serious noise impacts on other park users and local residents. The Division of Parks and Outdoor Recreation has the authority to regulate and prohibit take-offs and landings, but overflights are the sole jurisdiction of the Federal Aviation Administration.

Fish and Wildlife Management

Fish and Wildlife Management Jurisdiction. During the planning process, many comments were received on fish and game harvest. Some have argued that park wildlife has declined due to hunting pressure, and that non-consumptive activities like wildlife observation and photography have suffered. A planning issue concerns whether certain areas should be designated as wildlife viewing areas, with hunting limitations and restrictions intended to protect and attract wildlife. Except for small closures around roads and developed facilities to protect public safety, the entire park is open to hunting and other consumptive practices. Fish and wildlife in Denali State Park are managed by the state Department of Fish and Game (ADF&G), under regulations adopted by the Board of Fisheries and Board of Game. State Parks does not regulate harvest and can only make recommendations to the Boards. They do, however, work closely with ADF&G and the Bureau of Wildlife Enforcement concerning the implementation of hunting, fishing, and trapping regulations and research. Only a few recommendations to the Boards are contained in the plan.

<u>Lack of Reliable Fish and Wildlife Information.</u> There is very little dependable information on the fish and wildlife of Denali State Park, due in large part to its being situated in two game management units and its distance from the biologists responsible for the area. Questions have arisen whether management unit boundaries should be redrawn, or a separate sub-unit created for the park, to enable a more comprehensive view of park resources and provide regulatory consistency.

<u>Bear Baiting.</u> Baiting bears is a common hunting technique that entails placing edible garbage piles to attract animals. At present, baiting grizzly bears is prohibited, but black bear baiting is legal. There is a concern that this practice teaches bears to associate humans with food sources.

Tourism

Role of Park in Satisfying Tourism Demand. The Denali region is one of the most popular tourism areas in Alaska, and the number of visitors is growing at a steady annual rate. An issue, however, relates to the demand for new tourism facilities in the region, and the type of facilities that are appropriately located in Denali State Park.

<u>Competition with Private Sector Tourism Providers.</u> There is some concern that state, federal and borough efforts to develop facilities that will be used, in part, by the tourism industry will compete unfairly with private tourism firms already operating in the Denali region.

<u>Community Lifestyles, Quality of Life.</u> Concerns were expressed that some of the developments proposed in the plan, increasing development on private lands, and increased use of the entire region will degrade existing community lifestyles. Others see these developments and increased visitation as an opportunity to provide additional jobs and incomes in the upper Susitna Basin.

Governmental Coordination/Cooperation

Parks Highway Right-of-Way and Buffer Management. The Parks Highway is the major means of park access, and most park use occurs within the highway corridor. Consequently, management of the highway right-of-way has a direct effect on recreational opportunities and enjoyment. Some have suggested that, in addition to the primary objective of providing safe and efficient travel, the highway corridor should be managed for scenic values and to provide for recreational access to the park. Large stretches of right-of-way are heavily forested, and distant views to the mountains and lowlands are obscured. Material sites, some still active, are regularly spaced along the highway. These sites are generally hidden by vegetative buffers and invisible from the roadway. They serve as informal campgrounds and access points, creating the potential for litter and waste problems. The design and location of trailheads and waysides is also an issue.

<u>Fish and Wildlife Management.</u> Several specific fish and wildlife management, research and monitoring issues are identified above, pointing to the need for an overall cooperative agreement among the agencies with jurisdiction or an interest in park fish and wildlife.

<u>Boundary Adjustments.</u> Denali State Park and Denali National Park & Preserve share a common boundary, which arbitrarily follows township lines rather than natural boundaries like rivers. Proposals have been made for the state and federal governments to exchange lands to create more manageable boundaries following natural features. Obvious boundaries would clarify management jurisdictions and avoid public confusion over the applicability of different regulations in the two parks.

<u>Recreational Use Regulations</u>. Regulations governing recreation, access, and other activities within the state and national parks are also a source of public confusion. At issue is the ability of the respective agencies to make regulations consistent and compatible, given their particular legal and regulatory mandates. To a lesser extent, there is also an issue of the consistency of state park use regulations with the general regulations governing activities on state lands outside the park.

Research and Monitoring Programs. In addition to the region's land managing agencies, other agencies are responsible for managing fish and wildlife and providing park managers with various types of natural resource information. An issue concerns the level of research and monitoring conducted within the park, and the desirability of agencies coordinating their research and monitoring activities to avoid duplication and provide more comprehensive coverage.

<u>Public Information Programs.</u> Several public agencies and private groups are interested in providing information to park users and tourists. There may be cooperative approaches for providing information on the park and other visitor attractions in the region, including private accommodations and commercial ventures.

Commercial Activities

<u>Guiding/Outfitting.</u> People with detailed knowledge of the park and specialized skills and equipment offer guiding and outfitting services to park users. Commercial guides and outfitters most commonly offer hunting, fishing, river boating, rafting, and wildlife observation services. At issue is the amount and nature of regulation which the state should exert over commercial operators, designed to ensure that safety and quality standards are maintained. There is also concern that commercial operators tend to displace private users through sheer numbers, intimidation tactics, or staking of prime camping/fishing/hunting sites.

<u>Flightseeing</u>. Flightseeing is an increasingly popular attraction in many parks nationwide. In the Denali region, scenic flights are offered over the Alaska Range. Usually based in Talkeetna, flight services offer trips over the state park enroute to the mountains of Denali National Park and Preserve. Flightseeing, however, has sometimes serious impacts on other park users. Noise from fixed-wing aircraft and helicopters travels long distances, disturbing ground-based recreationists seeking quiet and solitude. The Federal Aviation Administration regulates overflights. The Division regulates only ground operations, but can ask the FAA for special regulations for the airspace over the park. The issue of landings within the park by both fixed wing aircraft and helicopters is an issue over which State Parks has jurisdiction.

Park Operations and Staffing Requirements

<u>Funding Shortfalls.</u> Budget cuts over the last 10 years have severely limited the Division's ability to maintain an adequate management presence in the park. Present funding levels force rangers to confine their patrols primarily to the road corridor, limiting their ability to perform research, monitor backcountry uses, and identify potential management problems. Facility maintenance has also been reduced in recent years. There is concern that new programs and facilities proposed in this plan will add major new responsibilities to an already stressed operational budget.

<u>Winter Operations.</u> Winter park visitation is considerably less than in the summer, but there is still a substantial amount of skiing and backcountry use in the winter months. In recent years, however, declining budgets have resulted in staff cutbacks. The park is essentially unstaffed from October through April. Some highway pullouts are left unplowed. Sanitary facilities are closed. Trailheads are unmaintained and trails are ungroomed. An issue concerns whether a winter operational presence is necessary.

Chapter 4 NATURAL ENVIRONMENT

Climate
Geology
Soils
Slope and Slope Aspect
Hydrology
Vegetation
Wildlife

Chapter 4

NATURAL ENVIRONMENT

The natural resources of Denali State Park have not been studied in great detail. Much of the information for this chapter is carried over from the 1975 and 1989 Management Plans. Additional information was summarized from the Final South Denali Implementation Plan and Environmental Impact Statement (2006) and by contacting experts in the respective fields addressed below.

Climate

Denali State Park is located in a transition zone between the maritime climate to the south and the continental climate to the north. Because the area is transitional, it exhibits characteristics of both zones. This is further complicated by the complex topography of the area, which creates a variety of microclimates.

There is little detailed climatic data for the state park itself, however, there are some general indicators that help outline what occurs in the area.

As generally outlined in a "Climatological Summary" prepared by the National Oceanic and Atmospheric Administration (NOAA) in 1976 and supplemented by a 1984 memo on Denali viewing weather, the south side of the Alaska Range is essentially open to weather systems from the Gulf of Alaska. The Denali State Park area receives most of the precipitation associated with maritime weather systems. Due to orthographic lifting, the south side of the Alaska Range receives 2 to 3 times the snowfall that the north side of the Alaska Range receives.

Detailed weather information for the park is very limited, but there are records (1941-1976) for Summit, north of the park. Talkeetna has the longest records in the region, dating from 1931, and the Chulitna River Lodge (Milepost 156.6 inside the park) has been recording weather data since 1975. Talkeetna averages 27 inches of precipitation while the Chulitna River Lodge area appears to average approximately 32 inches annually.

Snowfall for the area averages approximately 180 inches with the snow being relatively deeper (1-2 feet) at the north end of the park than the south end. This relative snow depth increase from south to north is reflected in recent snow depth recordings along the Parks Highway. This is also fairly predictable, from the snow depth differential (noted in the 1984 NOAA memorandum) between Talkeetna (105.8") and elevation 1250' on the Chulitna River (180.1").

Average temperatures in the park are highest in July at about 58 degrees Fahrenheit. June and August are slightly lower, averaging about 53-54 degrees, and September is the last of the obviously warmer summer months, averaging approximately 44 degrees. January and February are typically the coldest months in this area, with average daily temperatures slightly above 0 degrees.

Weather patterns have an obvious effect on views of Denali are very important. However, few viewing-day records have been collected for Denali State Park. The 1984 NOAA memorandum indicates that, based upon Summit weather data, the south side of the Alaska Range generally has nine more poor viewing days June - August than the north side of the Alaska Range. Viewing potential is generally greater during January, February, March and April.

Prevailing wind direction in the summer is from the south, with winds from the north/northeast the remainder of the year. Summit station data indicate that mean wind velocities April to October are fairly low, ranging from 7.4 to 8.3 miles per hour. November through March experience higher mean wind velocities, ranging from 11.1 to 15.1 miles per hour. January has the highest mean wind velocities.

Geology

The landforms and geology of the area are the result of a variety of occurrences. A sea occupied southcentral Alaska in the Paleozoic and early Mesozoic eras. Later, great uplifting and volcanic activity formed the igneous rock core of the Alaska Range. The Jurassic and Cretaceous eras witnessed extensive erosion, which resulted in deposition of sediments in the basins around the mountains. Foothill ridges (such as Kesugi-Curry Ridge) and river valleys (such as the Chulitna and Susitna) were formed later by uplifting, deformation and faulting activity. Most of this geologic activity was complete by the end of the Tertiary period. The current landscape was then created by four major glaciations in the Quartenary period.

Soils

Existing soils information for the South Denali planning area was obtained from existing soils maps for the upper Susitna Valley and regional soils information from the Soil Survey Geographic Database. This information was supplemented by recent aerial photography and satellite imagery. Soil map units were field verified within the planning area in 2004.

The three main areas examined during the 2004 soils survey, and for the purpose of this analysis are located near Peters Hills, Parks Highway (previously referred to as Cari Creek) and the soils surrounding Petersville Road. Only the generalized soils information is summarized below. For a more complete description of soils information, see the Final South Denali Implementation Plan and Environmental Impact Statement (2006).

All the soils in the geographic area are categorized within two primary landforms or geomorphic units: glacial till plains and mountainous uplands.

Glacial Till Plains: Glacial till plains occur between alluvial terraces along the rivers and the adjacent mountains. The hilly terrain within these plain areas is well-drained and supports mixed forests of white spruce and birch, with an understory of alder and ferns. On the sloping terrain of this landform, the following soils are present:

- Kroto and Strandline silt loam soils
- Spenard silt loam soils
- Slikok muck soils: 0 to 5% slopes
- Chichanta peat soils:0 to 8% slopes

<u>Mountainous Upland</u>: The second of the two major geomorphic units in the planning area, mountainous uplands, have soils on higher slopes. These soils are well-drained, except when adjacent to stream drainages and depressions. In this case, the tight glacial till prevents downward flow of water. Subalpine areas, which support grasslands and thick alder shrub communities, are composed of the following soils:

• Puntilla silt loam:7 to 20% slopes

• Kliskon silt loam: 12 to 20% slopes

Typically, Puntilla soils occur on the steeper mountain sideslopes and support communities of Sitka alder, bluejoint reedgrass, ferns, and forbs. Kliskon soils generally occur in poorly drained areas, which are more gently sloping, and support herbaceous meadows of grass and ferns.

Soils in alpine areas at the higher elevations are generally uneven as a result of continual frost heaving and generally consist of the two soil series:

• Chuit silt loam: 3 to 30% slopes

• Nakochna silt loam: 3 to 30% slopes

These soil series are typically classified as "rubble lands" on the available soils maps. These "rubble land" map units consist of barren areas of loose rock, but also includes sizable patches of Chuit and Nakochna soils, and range in slope from 7 to 45 percent.

Slope and Slope Aspect

Slope is an important factor when evaluating areas for development. Slope is measured by rise (vertical gain) over run (horizontal distance). Slopes greater than 15% are considered too steep for development of major facilities, although they may be appropriate for less intense development such as public-use cabins, campsites, and trails.

As slope increases, development-related problems and project costs typically increase as well. The more obvious impacts relate to drainage and erosion, and the cut and fill areas required to create level development pads or road sections.

Slopes in the state park over 15% are generally found in the Peters and Dutch hills, the Alaska Range and the northwest- and southeast-facing slopes of the Curry-Kesugi Ridge system. Milder slopes are found along the Tokositna, Chulitna and Susitna river floodplains, benches and adjacent slopes. The top of Curry and Kesugi ridges also has large areas that are under 15% slope.

"Slope aspect" refers to the general direction a slope is facing. Aspect is important to development, especially in Alaska, because south-facing slopes receive almost twice as much sun as does level ground. South-facing slopes receive more than three times the sun of north-facing slopes.

Generally, facilities on a south-facing slope will be warmer, receive more light, and have a longer operational season. Slopes with a western aspect are rated next best in suitability, followed by eastern aspect, and, last, northern. There are still areas in the park that have permafrost, particularly north-facing slopes, higher elevations, and low-lying areas with black spruce.

Hydrology

Denali State Park has three major rivers within its boundaries, the Susitna, Chulitna and Tokositna. All are glacial, and have the high levels of sediments during summer but run clear in winter.

Within the park, the Chulitna and Tokositna rivers are fairly broad and braided, and are subject to seasonal flooding. Additionally, the Chulitna has experienced glacial out-burst flooding due to periodic glacial damming of the Fountain River at the Eldridge Glacier.

Information concerning subsurface hydrology is essentially non-existent for Denali State Park, however, it is speculated that the sands, gravels and other unconsolidated materials associated with the major drainages within the park would produce adequate quantities of groundwater of suitable quality for major facilities. Published reports estimate that water wells in the areas associated with major surface water sources would yield between 100 and 1000 gallons per minute.

Vegetation

Vegetation in Denali State Park has been divided into five major associations:

- Wetlands (bog muskeg)
- Bottomland, spruce poplar forest upland spruce hardwood forest

- High brush
- Alpine tundra barren

<u>Wetlands.</u> This association is found in river bottom lowlands and upland terraces throughout the park. Cottongrass tussocks, dwarf shrubs and sphagnum moss are the dominant species. This association provides essential habitat to waterfowl, such as trumpeter swans.

<u>Bottomland, spruce - poplar forest.</u> This association is comprised of evergreen and deciduous trees. Dominant species are spruce and poplar. Large cotton-wood trees are located in areas adjacent to river channels or less active flood plain zones. This association provides understory brush used as browse by moose. Moose often congregate in this association for cover and feeding.

<u>Upland spruce - hardwood forest.</u> This association is dominated by white spruce and Alaska paper birch and covers most of the lower elevations within Denali State Park. Understory species provide browse for moose and cover for larger mammals found within the park. This association is most suitable for location of any major facilities.

<u>High brush.</u> The high brush association is typical of the transition zone between treeline and alpine tundra. Vegetation cover in this association ranges from very dense to open with widely scattered spruce trees. Dominant species are willow and alder, with a variety of berry brushes also found. This association is an important habitat area as it provides browse and cover for large mammals. The berries located in this association are heavily used for food by bears, both black and grizzly. This association is also important for beaver.

<u>Alpine tundra - barren.</u> This association is typically found in the higher elevations, above the high brush transition area. It supports a variety of species, including grasses, sedges, dwarf shrubs and lichens. Crowberry, dwarf blueberry and low-bush cranberry attract a variety of animals, including black and grizzly bears. Other wildlife species that inhabit this association at some time during the year are ptarmigan, fox, coyote, ground squirrel and moose.

The alpine tundra association is very fragile. Because it is easily damaged and recovers very slowly, care must to be taken when considering facilities in this association. Harsh environmental conditions, including very thin soils, short growing seasons, high winds and high desiccation value, contribute to the sensitivity of this association.

Wildlife

Denali State Park includes a wide variety of habitat types, and its wildlife is typical of that seen in much of southcentral Alaska. Published information is fairly limited, and has been supplemented by interviews with ADFG biologists, local residents, guides, rangers, and others familiar with the park.

<u>Mammals</u>. There is a variety of mammals within the park, however, their numbers are not well established. References to quantity are relative observations.

Large mammals include moose, grizzly bear, black bear and wolves. Caribou have been observed close to the park's northern boundary and frequently in the Broad Pass area. A small group of sheep have been reported to occasionally cross the Kesugi Ridge area, within the north end of the park. While no wolves are known to den within the park, they have been observed migrating through the park. They may enter the park from the north and/or the west to hunt.

Small mammals include wolverine, otter, mink, red fox, pine marten, lynx, snowshoe hare, red and flying squirrel, porcupine, marmot and coyote.

Moose range widely and have been observed from the river bottoms to the Curry Ridge area browsing for food. The Tokositna and Chulitna river bottoms are important habitat areas and provide good winter cover and browse.

Grizzly bear and black bear overlap in Denali State Park. Salmon streams and berry patches provide a good food source for both species. Most salmon streams are located at the southern end of the park, and probably explain the higher concentrations of bear observed here.

Grizzly bears den in many of the high valleys near the west end of the park. Black bears have been observed denning on well-drained hillside areas adjacent to the Chulitna River. Black bear denning areas, however, are not as specific as the grizzly bears.

<u>Birds.</u> A bird list (Table 4-1) prepared by a state park ranger indicates the variety of birds within Denali State Park. Migratory waterfowl are abundant, with trumpeter swans being of special note. Swans have been observed nesting in a variety of locations within the park, and the Tokositna River lowland area provides very important habitat for nesting and fledging.

The Tokositna River also provides sites for several active bald eagle nests. The nests have been observed in large trees adjacent to the river in lowland areas. Another important raptor, the merlin, has been observed nesting along the Susitna River.

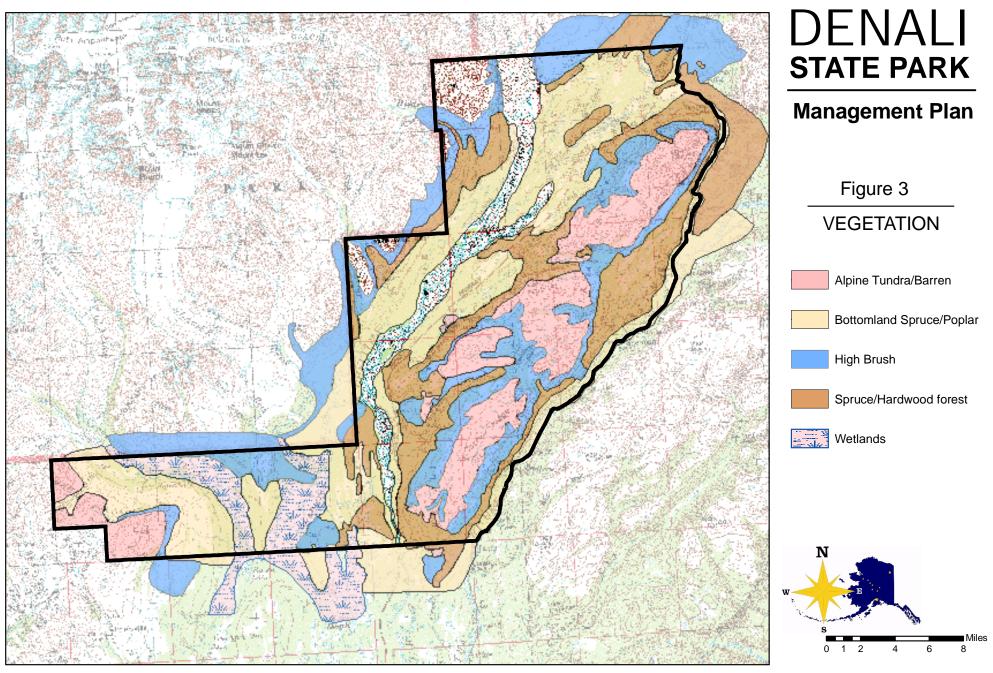
<u>Fish.</u> Five species of Pacific salmon, as well as rainbow trout, Dolly Varden, burbot and arctic grayling, inhabit park waters. Byers Lake has limited numbers of rainbow trout, lake trout and burbot. Spink and Lucy Lakes have very small populations of lake trout.

Figure 2 BIRD CHECKLIST FOR DENALI STATE PARK

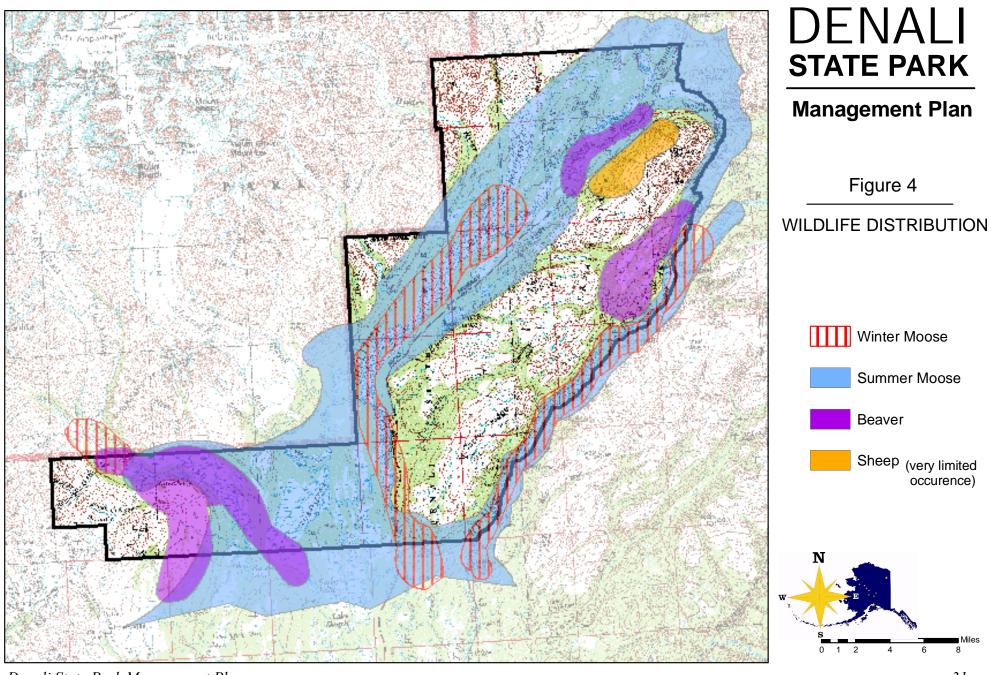
DIRD CHECKLIST FOR DENALTSTATE PARK				
Common Loon, U, S	White-tailed Ptarmigan, U, P	Cliff Swallow, U, S		
Pacific Loon, U, S	Sandhill Crane, C, M	Gray Jay, C, P		
Red-throated Loon R, M	Semipalmated Plover, U, S	Black-billed Magpie, C, P		
Red-necked Grebe, R, S	American Golden Plover, U, S	Common Raven, C, P		
Horned Grebe, R, S	Hudsonian Godwit, R, M	Black-capped Chickadee, A, P		
Tundra Swan, U, M	Whimbrel, U, S	Boreal Chickadee, C, P		
Trumpeter Swan, U, S	Upland Sandpiper, R, M	Brown Creeper, U, P		
Canada Goose, C, M	Greater Yellowlegs, C, S	American Dipper, U, P		
Greater White-fronted Goose, U, M	Lesser Yellowlegs, U, S	American Robin, A, S		
Snow Goose, U, M	Solitary Sandpiper, U, S	Varied Thrush, C, S		
Mallard, C, S	Spotted Sandpiper, U, S	Hermit Thrush, U, S		
Northern Pintail, U, S	Wandering Tattler, R, S	Swainson's Thrush, C, S		
Green-winged Teal, C, S	Red-necked Phalarope, U, S	Gray-checked Thrush, U, S		
Northern Shoveler, U, S	Wilson's Snipe, A, S	Wheatear, R, S		
American Wigeon, C, S	Long-billed Dowitcher, U, M	Townsend's Solitaire, R, S		
Canvasback, R, S	Surf bird, R, S	Arctic Warbler R, S		
Ring-necked Duck, R, S	Western Sandpiper, R, M	Golden-crowned Kinglet, U, P		
Greater Scaup, C, S	Least Sandpiper, C, S	Ruby-crowned Kinglet, A, S		
Lesser Scaup, R, S	Pectoral Sandpiper, U, M	American Pipit, C, S		
Common Goldeneye, U, S	Long-tailed Jaeger, U, S	Bohemian Waxwing, U, S		
Barrow's Goldeneye, U, S	Herring Gull, U, S	Northern Shrike, U, P		
Bufflehead, U, S				
	Mew Gull, C, S	Orange-crowned Warbler, C, S		
Harlequin Duck, U, S	Bonaparte's Gull, U, S	Yellow Warbler, U, S		
Long-tailed Duck, U, S	Arctic Tern, C, S	Yellow-rumped Warbler, A, S		
White-winged Scoter, R, S	Great Horned Owl, U, P	Townsend's Warbler, R, S		
Surf Scoter, R, M	Snowy Owl, R, W	Blackpoll Warbler, C, S		
Black Scoter, R, M	Northern Hawk Owl, U, P	Northern Waterthrush, C, S		
Common Merganser, U, S	Great Gray Owl, R, P	Wilson's Warbler, C, S		
Red-Breasted Merganser, R, S	Short-eared Owl, U, M	Rusty Blackbird, R, S		
Nothern Goshawk, U, P	Boreal Owl, U, P	Pine Grosbeak, U, P		
Sharp-shinned Hawk, U, S	Belted Kingfisher, C, S	Gray-crowned Rosy Finch, R, S		
Red-tailed Hawk, R, S	Rufous Hummingbird R,S	Hoary Redpoll, R, W		
Rough-legged Hawk, U, M	Northern Flicker, R, S	Common Redpoll, C, P		
Golden Eagle, U, S	Hairy Woodpecker, C, P	Pine Siskin, U, S		
Bald Eagle, C, S	Downy Woodpecker, U, P	White-winged Cross bill, U, P		
Northern Harrier, C, M	American Three-toed Woodpecker, U, P	Savannah Sparrow, C, S		
Osprey, U, S	Black-back Woodpecker, R, P	Dark-eyed Junco, A, S		
Gyrfalcon, R, S	Say's Phoebe, R, S	Tree Sparrow, C, S		
Peregrine Falcon, R, S	Alder Flycatcher, A, S	White-crowned Sparrow, A, S		
Merlin, U, S	Olive-sided Flycatcher, R, S	Golden-crowned Sparrow, C, S		
American Kestrel, R, S	Horned Lark, C, S	Fox Sparrow, A, S		
Spruce Grouse, C, P	Violet-green Swallow, C, S	Lincoln's Sparrow, U, S		
Willow Ptarmigan, C, P	Tree Swallow, C, S	Lapland Longspur, C, M		
Rock Ptarmigan, U, P	Bank Swallow, U, S	Snow Bunting, C, M		
Key				
V 1	A = Abundant $P = Permanent Res.$ $U = Uncommon$ $W = Winter Reside$			

M = Migrant

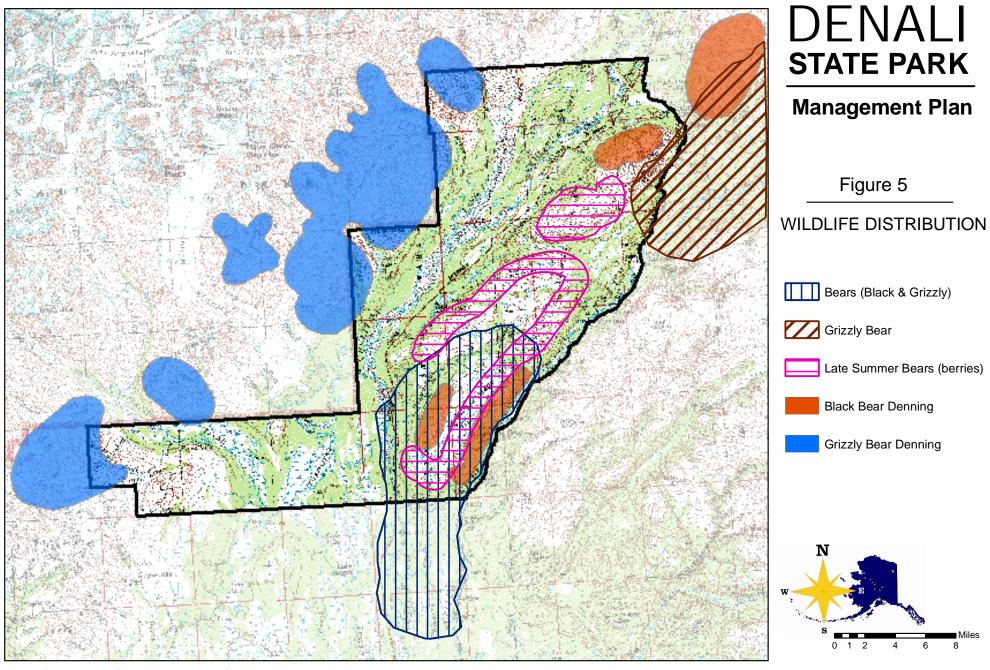
* Prepared by Ranger David K. Porter



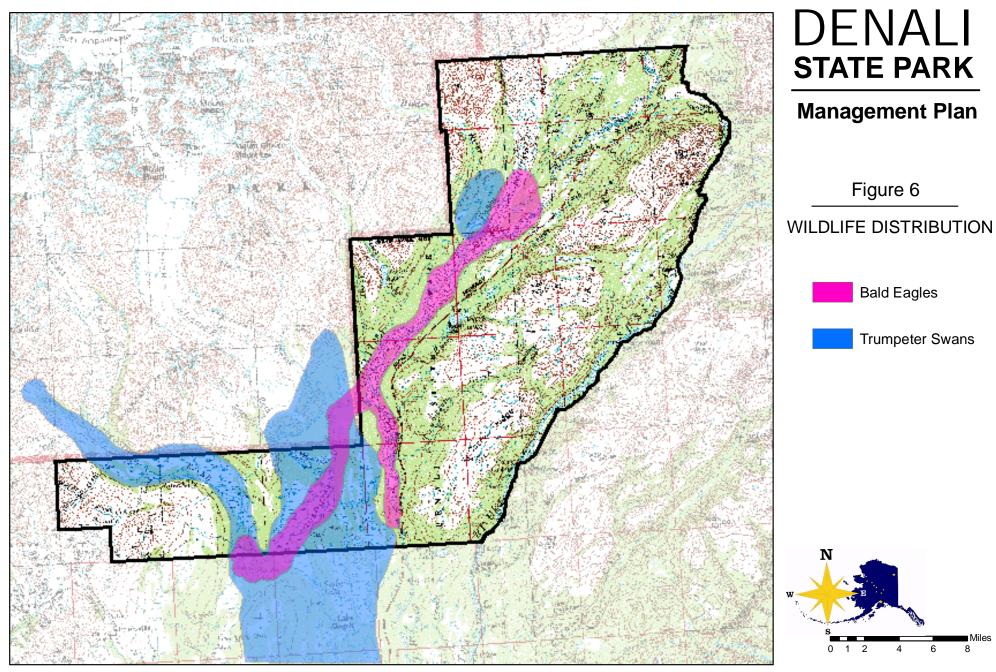
Denali State Park Management Plan



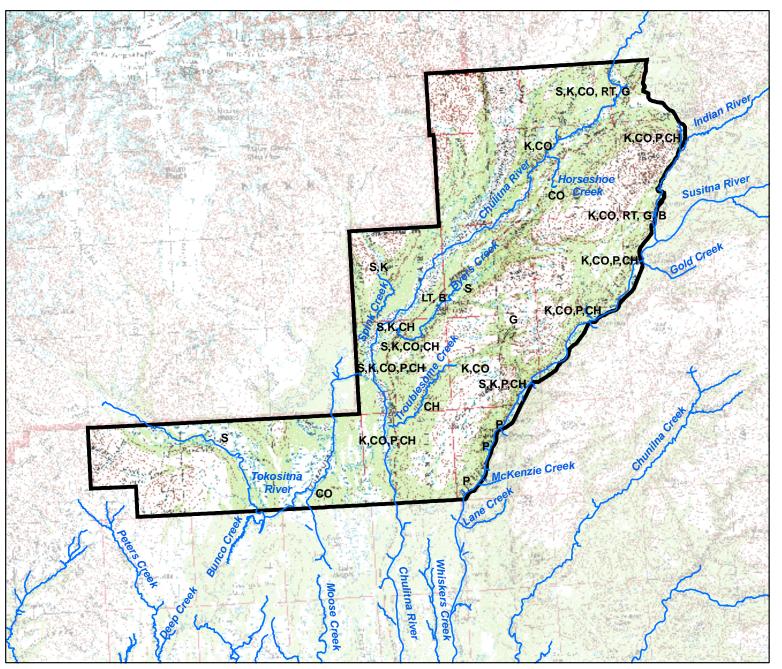
Denali State Park Management Plan



Denali State Park Management Plan



Denali State Park Management Plan



DENALI STATE PARK

Management Plan

Figure 7

FISH DISTRIBUTION

B Burbot

CH Chum Salmon

CO Coho Salmon

G Grayling

K King Salmon

LT Lake Trout

P Pink Salmon

RT Rainbow Trout

S Sockeye Salmon

Anadromous Stream



Chapter 5 CULTURAL ENVIRONMENT

Human History Land Ownership Recreational Demand

Chapter 5

CULTURAL ENVIRONMENT

Human History

Ethnographic accounts note considerable use of the Susitna River Basin by the Dena'ina people, including the lands within Denali State Park. The Dena'ina elder Shem Pete noted that people from Kroto Creek Village would spend late summer hunting caribou on *K'esugi* (the Ancient One), the large ridge north of Blair Lake between the Susitna and Chulitna rivers. Shem Pete also described hunting bear on Curry Ridge (*K'esugi Ken*), the low ridge south of K'esugi. The Susitna and Chulitna rivers were also well-used travel corridors for the Dena'ina and their neighbors to the north.

While several archaeological surveys of sections of Denali State Park discovered no evidence of prehistoric occupants, recent surveys just to the south of the park have discovered important new sites. One site 23 km south of park boundaries has been excavated over several seasons by the Matanuska-Susitna Borough in collaboration with the University of Nevada. Hundreds of artifacts have been recovered from the Trapper Creek Overlook Site (TAL-092), whose multiple occupational horizons span the last 8,000 years. This and other sites in the basin suggest that multiple groups have used the region throughout most of the Holocene.

The ethnographic and archaeological data suggest that parts of Denali State Park may hold substantial archaeological potential. Archaeological survey should be a part of resource investigation and planning efforts for the park. The surveys should take into account Dena'ina hunting and travel patterns in the region, as well as how earlier populations may have used the different environments found in the valley in the early and mid Holocene.

After the purchase of Alaska from Russia by the United States, miners and prospectors journeyed into the park area. Some of the more significant exploratory contributions were made by prospector W.A. Dickey. Dickey, in 1896, traveled up the Susitna River to Susitna Station, where he constructed a boat and navigated the river upstream to Indian River. His name and the names of three others have been found etched in a rock near the mouth of Portage Creek. Mt. McKinley, the name for North America's highest mountain, was proposed by Dickey in his 1897 description of his travels, although many people knew of its existence and had been nearer the peak than his party.

Gold Creek, which was an active mining area with 200-300 residents, was supplied by sternwheeler and tunnel hull barges that traveled up the Susitna River. The area remained remote to most travelers until the construction of the Alaska Railroad. The route for the government-owned railroad, which links Seward to Fairbanks, was selected in 1915. Today, the western boundary of the railroad right-of-way forms the eastern boundary of Denali State Park. After the Curry Hotel was opened in 1923, rail passengers could stay overnight at the

hotel and climb Curry Ridge, 3 miles to the northwest, to view Denali from the Curry Lookout, which remains standing to this day. The hotel burned in 1957 and all that remains of the hotel is an open meadow. The 537-foot long suspension bridge over the Susitna River used to access Curry Ridge was torn down after the hotel burned. The trail from the bridge to the top of the ridge is completely overgrown.

Land Ownership

Land ownership in this area occurs in five major categories: state, federal, borough, Alaska Railroad, and private. The private lands can be grouped into three categories: residential areas (remote parcel and subdivisions) sold by the state, and specific parcels that are typically inholdings or native allotments.

Within the park there is approximately 1,000 acres of private land. Most of this is concentrated near the southern boundary of the park. There are small inholdings scattered along the Parks Highway corridor. In general, the ownership pattern is fairly simple north of the park and is more complex south of the park.

Most of the land north of the park is state-owned. State and borough lands along the park boundaries were "designated" in 1985 by the Susitna Area Plan. The designations guide future management of the land. Most of the lands surrounding the park are classified Public Recreation and Wildlife Habitat; however, smaller areas of significance are designated for Forestry, Mining and Settlement.

There have been several state land disposals already in this area, including state recreational subdivisions and remote parcel sales. On the western boundary of the park is the Yentna Mining District where there are a number of state and federal mining claims. Also, directly north of the park, the Alaska Railroad owns approximately 4,000 acres at Hurricane. This block of land is important since it encompasses a strip about one-mile-wide and extends about six miles north from the park boundary. It is essentially the highway and railroad corridor.

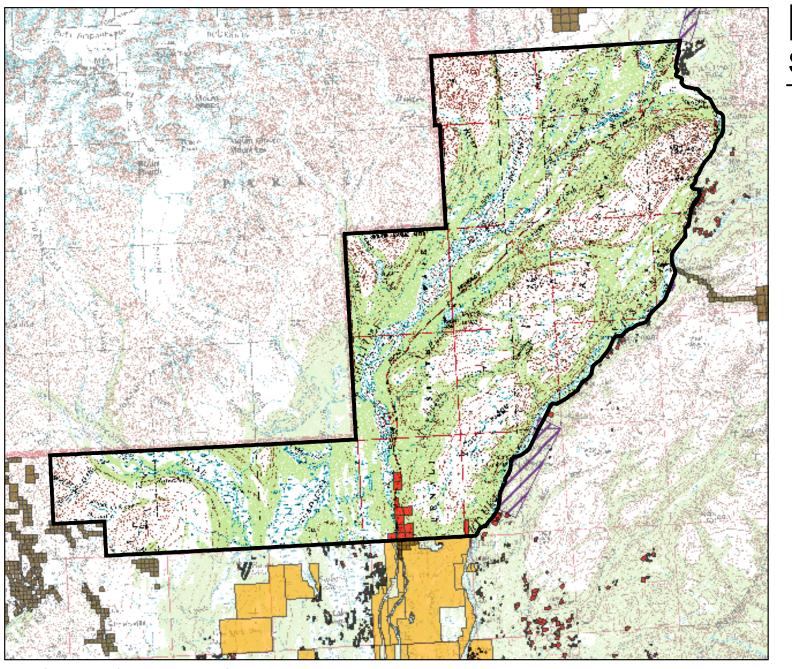
The northwest boundary of Denali State Park abuts Denali National Park and Preserve. The land ownership pattern south of the park is very complex. Most notable are the Tokosha area subdivisions west of the Chulitna River, the Matanuska-Susitna Borough's large holdings along the Parks Highway and between the Chulitna and Susitna Rivers, and the Chase community southeast of the park. Additionally, the Alaska Railroad owns another 4,000 acres (more or less) at Curry.

The three areas that are most likely to be developed are: 1) private lands located mostly along the Parks Highway between Trapper Creek and Byers Lake; 2) the Alaska Railroad's 4,000 acres near Hurricane which extend about six miles north of the park along the highway/railroad corridor; and 3) the large holdings of the Matanuska-Susitna Borough which extend south from the park to Trapper Creek along the Parks Highway.

Recreational Demand

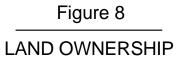
Visitor demand at Denali National Park and Denali State Park has continued to grow and during the summer months, it is common for the number of visitors to exceed the capacity of the developed facilities on a daily basis. Alaska resident use during the summer will continue to grow at a slow but constant rate as the state population increases. Alaskan residents will likely continue to be the majority of visitors during the shoulder season, although out-of-state visitation is increasing as well. The number of out-of-state tourists will continue to grow at a significant rate, concentrated during the peak summer months. The potential for viewing Denali as part of extended tours of Alaska will likely continue to draw large numbers of visitors to the area in the foreseeable future. The growth in users for active trips into the wilderness such as raft, riverboat, flightseeing, etc. has been strong and should continue to show that growth. Detailed visitor projections are included in Appendix E in the Final South Denali Implementation Plan and Environmental Impact Statement (2006).

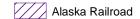
The key to meeting the demand for in-state and out-of-state visitors is to provide a diversity of potential experiences that have associated levels of comfort, and are available to people with a wide range of interests, as well as physical and economic capabilities.



DENALI STATE PARK

Management Plan











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Denali State Park Management Plan

Chapter 6 REGIONAL RECREATION & VISITOR USE

Recreation and Tourism Trends
Preferred Activities
Recreation Facilities and Services
Resource Attractions
Resource Constraints

Chapter 6

REGIONAL RECREATION & VISITOR USE

Management and development policies for Denali State Park should be formulated in the context of the overall Denali region, recognizing the particular role the park plays in serving regional demands for natural resource use, public recreation, and tourism. Analysis of trends in outdoor recreation and tourism, preferred activities, existing recreation and tourism facilities, and resource attractions and constraints enable realistic and appropriate management plan recommendations.

This chapter provides a general summary of trends for the region. The Final South Denali Implementation Plan and Environmental Impact Statement (FEIS), published by the National Park Service, should be consulted for more in depth environmental analysis of the area. The FEIS provides detailed trend and resource information particularly as it relates to development proposals discussed in Chapter 8 of this plan.

Recreation and Tourism Trends

<u>Visitor Demand.</u> Over the long run, the population of Alaska is expected to grow resulting in increased recreation demand by residents. Population growth in the Matanuska-Susitna Borough has been particularly high in recent years. Growth averages 4% per year. Between 1990 and 2000 the population of the borough increased 50% and another 25% between 2000 and 2005. The borough now contains approximately 11% of the state's population. The number of tourists visiting Alaska will also continue to increase at a rate of up to 10% per year. In recent years the proportion of visitors coming to Alaska on package commercial tours has been increasing, especially from the cruise ship industry. In the past, the vast majority of Matanuska-Susitna Borough visitors were independent travelers. However, that started changing when the Mt. McKinley Princess Wilderness Lodge opened in 1997 and the Talkeetna Lodge opened in 1999. One example of the growth in destination tourism activity is illustrated by the more than doubling in the borough's bed tax revenues between 1999 and 2004.

<u>Seasonality of Demand.</u> While most growth in recreation and tourism has occurred in the summer months, the "shoulder season" and winter season have grown as well, particularly with the growth in the number of private cabins and lodging adjacent to the park. Development of facilities and services in the region could help expand off-season recreation and provide more varied opportunities.

<u>Regional Demand.</u> Denali is an international attraction set in a region that has other attractions including Alaska's two largest cities, glaciers, and wildlife. The region forms an important leg of a "tour triangle" promoted by the tourism industry. The region as a whole is an attraction and should be considered as a whole.

<u>Access.</u> The Denali region is special because it can be accessed in a variety of ways including by highway and rail. In recent years, the Alaska Railroad has shown increased interest in providing whistlestops and developing facilities in these locations that provide access to visitors. New visitor facilities in the region will likely take advantage of the improvements to the highway and railway to maximize the accessibility and to ensure their success through dynamic shifts in travel modes in the future.

<u>Proposed Facilities.</u> Denali State Park is the only other major park in the region, and its current facilities are inadequate to meet current and future demand. The private sector has responded to the increasing number of visitors and the unmet demand with new facilities, primarily lodges, and new activities, such as guided trips.

Preferred Activities

<u>Resident Preferences.</u> Residents enjoy the region because of the natural attractions. Compared to tourists, residents are much younger and are more interested in camping, fishing, and hiking. For residents, the future value of the region depends on protection of the resource base.

<u>Tourist Preferences.</u> Tourists, on average, are much older than Alaska residents and much more interested in sightseeing activities, such as viewing Denali, wildlife, and glaciers. There is, however, still strong interest among tourists for camping, fishing and hiking. During the relatively short period of their time in the Denali region, tourists desire a variety of recreation activities.

<u>Services</u>. Both residents and tourists require a variety of basic services to make use of recreation opportunities. Such services include a general store, coffee shop, lodging, modern campsites, cabins and fuel.

Recreation Facilities and Services

Regional Network. A high percentage of the land in the Matanuska-Susitna and Denali boroughs is in public ownership but not designated as either a national or state park. These lands complement Denali State Park and may be suitable for development. Developing a network of recreation facilities on both private and public lands that takes advantage of dispersed recreation attractions throughout the region rather than focusing all development in the state park may be beneficial.

<u>Travel Time and Distance.</u> Denali State Park is about equal distances from Anchorage and Fairbanks and is well within the driving range of residents for weekend trips. Any development in the state park will be well used by residents of Anchorage and Fairbanks. Given the location of the park, about midway between the two cities, both cities will be served about equally. Travel distances for residents of the Matanuska-Susitna and Denali boroughs are much shorter. As the population growth in the Susitna Valley increases disproportionately to Anchorage and Fairbanks, the percentage of visitation from valley residents in comparison to other Alaskan residents is likely to increase.

<u>Recreation Demand.</u> Existing public recreation facilities, primarily in Denali National Park, are at or exceeding capacity. There is a substantial demand for a variety of facilities and services. In particular, there is a demand for opportunities to view Denali and a need for additional campgrounds, trails, waysides, public use cabins and information centers.

<u>Private Sector.</u> The private sector is diverse and capable of providing a wide range of facilities and services. The private sector has demonstrated an ability to respond to recreation and tourism demand, particularly lodging and guided tours. There is some land in the park, immediately outside the park, and in the region on which private facilities might be developed.

Resource Attractions

<u>Denali</u>. Denali State Park and other sites from Talkeetna to Broad Pass, have excellent views of the mountain. Better views of the mountain are found at the north and south boundaries of the state park along the Parks Highway.

<u>Weather</u>. The weather on the south of the mountain is varied. The National Weather Service reports that it is likely to be cloudy three days more per month in Broad Pass than it is on the north side of the mountain. This additional cloudiness is not considered significant in terms of locating facilities.

<u>Glaciers</u>. The terminal moraines of three major glaciers are within the park: Tokositna, Ruth and Eldridge. The Ruth Glacier has carved a spectacular canyon, and the Eldridge Glacier is closest to the highway. From certain locations along the highway, the glaciers are significant attractions even when cloud cover obscures Denali.

Wildlife. In general, sightings of large mammals are not as numerous in the state park as along the Denali National Park road and backcountry on the north side of the Alaska range. Although densities of large mammals are high, particularly for bears and moose, dense vegetation limits viewing opportunities. In addition, caribou and Dall sheep are not found in the park and sightings of wolves by visitors are rare. Some sites, such as where bear catch salmon at the Chulitna River tributary confluences and along Byers Creek, have more frequent sightings and may offer opportunities for viewing. Unfortunately, population densities are not high enough to warrant developing viewing facilities at these sites.

Other Natural Attractions. The park and the region have an array of other natural attractions, including rivers, streams, lakes, waterfalls, peaks and alpine meadows. Existing trails provide access to a sampling of these features, and others are accessible by boat, plane, snowmachine and dog sled. The possibilities for developing trail and other types of access to these attractions, some in remote parts of the park or public land around the park, are many.

<u>Cultural Attractions.</u> The park and region have a rich cultural history that is of high interest to visitors. Archaeological and historical material from the area could easily fill a visitor center. Of particular interest to visitors may be the history of expeditions on Denali, the construction of the railroad, and the early explorations and Native cultures of the area.

Resource Constraints

<u>Natural Resources.</u> Some of the land in the region, and in the park, appears to be suitable for development based on slope, aspects, soils, permafrost, and surface- and ground- water. Much of this land lies along the Parks Highway and is suitable for construction. The majority of the land in the region, however, has one or more natural resource constraints that would make development either costly or impossible. Sensitive vegetation and wildlife areas may exclude large parts of the park from development and heavy uses, including both alpine and wetland areas.

<u>Cultural, Social Factors.</u> Patterns of land ownership and land use in and around the park make some land unsuitable or marginal for some types of development. For example, residential developments, mining claims and traditional-use areas are located near the Tokosha community, near Peters Hills, along the Susitna River, and, to a lesser extent, near Hurricane. To avoid conflicts with local residents, as well as to protect recreational experiences of park users, design and location of development should be sensitive to potential conflicts with these existing uses.

Chapter 7 MANAGEMENT RECOMMENDATIONS

Introduction
Land Use Designation Descriptions
Proposed Park Additions and Boundary Adjustments
Land Acquisition
Wildlife Management
Research
Proposed Monitoring and Management Recommendations
Land Use Regulations
Cooperative Management Agreements
Management and Staffing Efficiencies
Commercial Uses

Chapter 7

MANAGEMENT RECOMMENDATIONS

Introduction

To further clarify how the land and resources in park, the three State Recreation Areas, and proposed park additions will be managed, four types of designations were developed and assigned to each unit. Figure 10 shows the boundaries of these designations. The general intent for these designations derives from the *Statewide Framework* (DPOR, 1982)¹, which established this system to help standardize the language that addresses management intent for state park units. The descriptive characteristics and development activities allowed within the original designations in the *Statewide Framework* were modified to reflect the specific conditions in Denali State Park. The four designations include: Recreational Development, Natural Area, Cultural and Wilderness.

Land Use Designation Descriptions

Described below are the purposes, characteristics, and developments/activities allowed under each designation. The guidelines that apply to each designation are listed in Figure 11 later in this chapter. Specific facility developments are described in Chapter 8.

<u>Recreational Development.</u> Three areas in the park adjacent to the Parks Highway have been designated Recreation Development. Areas with this designation are intended to accommodate facilities recommended in Chapter 8 including the proposed South Denali Visitor Complex.

Lands designated Recreation Development in the park's south end along the Parks Highway are intended to allow for large-scale public recreation and tourism facility development in the future, provided that potential management problems are addressed. Those potential problems include inappropriate spillover development, conflicts with existing recreational uses, and impacts on wildlife and their habitats. Major development in the south end should be addressed by the Matanuska-Susitna Borough adopting effective land use regulations for the area, both inside and outside the park. See the mitigation section in Chapter 9 for measures that will be used to minimize the adverse effects of facility construction and activities associated with the use of the facilities.

<u>Cultural</u>. A small area surrounding the old Curry Lookout is the only area designated Cultural in the park. The lookout, which was used by visitors to the railroad's old Curry Hotel, is the only known area warranting this designation.

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¹ The 1989 Management plan delineated areas of the park in different "zones." The amended plan now refers to "land use designations" to avoid confusion with the borough's Denali State Park Special Land Use District that applies to both public and private property.

<u>Natural Area.</u> Areas designated Natural Area are intended to be relatively undeveloped and provide users opportunities for a high value, natural experience. Additionally, areas with this designation serve as a buffer between larger scale recreational developments and areas designated Wilderness. A significant portion of the park has been designated Natural Area, including the three State Recreation Areas (Tokositna, Blair Lake, and Indian River SRA's), the proposed Tokositna River land exchange area, most of the Chulitna River Valley, the Tokositna River Valley, the west slope of Curry-Kesugi Ridge, and a half-mile wide buffer adjacent to the Susitna and Indian rivers.

To address specific concerns associated with traditional use patterns, and protection of wildlife habitat and natural resources while providing for development of limited recreational facilities, a Special Management designation has been assigned to portions of the Natural Areas. The Special Management designation recognizes the special nature of these areas that require additional protection.

Much of the Tokositna valley lowland area is trumpeter swan habitat and is used for nesting and fledging. This area is also used for boating, snowmachining, dog mushing and cross-country skiing. Currently, existing regulations prohibit airboats upstream from Pirate Lake between April 20th and July 10th unless authorized by the Director. Due to typically heavy snowfall conditions in the Tokositna Valley area, there is often still adequate snow depth for snowmachining in April when the first swans arrive in the area. State Parks will continue to monitor this use to determine if there are significant impacts on swans nesting.

The other Special Management Natural Area is located on the western slopes of the Curry-Kesugi Ridge System. While most of the alpine areas and the eastern slopes of the ridge have been designated Wilderness, the Special Management area includes the ridge trail, including areas that are popular for camping and may have designated campsites in the future. The Special Management designation limits facility development to trails and campsites, including bear caches, toilets, hardened tent sites or tent pads, shelters and public use cabins.

<u>Wilderness.</u> Two large areas of Denali State Park have been designated Wilderness.³ The majority of the Curry-Kesugi Ridge east slope and a large part of the Troublesome Creek drainage have this designation. The alpine ridge area is very fragile and susceptible to damage even by limited activity. The east slope of the ridge, overlooking the Susitna River, is steep and difficult to traverse and, with the exception of the old Curry Ridge Trail, has remained undeveloped. The Troublesome Creek drainage has a high bear population during the salmon run and is designated Wilderness to preserve its natural resource values.

The second area designated Wilderness is the remote area west of the Fountain and Chulitna rivers. This area is remote and difficult to access, adjacent to areas found suitable for Wilderness under the 1986 Denali National Park and Preserve General Management Plan, and contains unique features such as Spink Lake.

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² From 11 AAC 20.415(c)

³ "Wilderness" as used in this plan refers to a State Park administrative designation and has no relationship to federal lands designated "Wilderness" under the Wilderness Act or the Alaska National Interest Land Conservation Act (ANILCA).

Figure 9 LAND USE DESIGNATIONS⁴

Recreation Development

Purposes and Characteristics. Areas designated Recreation Development are established within State Park System units to meet the more intensive recreational needs of the public with convenient and well defined access via roads, railroads, boats, airstrips, and high-standard trails; with more intensively developed recreational facilities such as campgrounds, public use cabins, picnic areas; with guided activities; and with information centers to orient visitors to the unit's special

The landscape within these areas can be modified to support educational and recreational activities and/or to enhance wildlife habitat and scenic qualities. These areas are established where soils, slope, drainage and vegetation can support more intensive recreational activities. Fire suppression and insect and disease control may be used, where appropriate, within this area to maintain or enhance recreational use. Areas designated Recreation Development may already have been influenced by prior developments and are intended to include transition areas between recreation developments and adjacent Natural Areas.

Development and Activities. The highest level of developments and activities are meant to occur in these areas within park units. The developments allowed in these areas include, but are not limited to, roads and trails, private vehicle and public transportation routes or access, campgrounds, picnic areas, visitor and interpretive centers, high standard trails for all ages and abilities, park management facilities and commercial lodges or resorts as provided for within the unit management or site development management or site development plan. High intensity activities related to the use of the developed facilities are generally encouraged. Snowmachines are allowed with adequate snow cover but may be restricted in certain areas or at certain times. Summer off-road vehicle use is generally prohibited by existing park regulations.

Natural Area

Purpose and Characteristics.
Natural Areas are established to provide for moderate-to-low impact and dispersed forms of recreation and to act as buffers between areas designated Recreation Development and Wilderness.

These areas are relatively undeveloped and undisturbed, and are managed to maintain high scenic qualities and to provide visitors with

opportunities for significant, natural opportunities for significant, natural outdoor experiences. An area's natural landscape character is the dominant feature within these areas. Landscape modification may be allowed to enhance, maintain or protect the natural setting according to the unit management plan. Use of fire suppression, insect or disease control, or wildlife habitat enhancement as management techniques in Natural Areas will be defined in the unit management. will be defined in the unit management plan. Portions of Natural Area may be designated Special Management Areas.

Developments and Activities.

Developments in areas designated Natural are intended to provide for the safety of park visitors and to provide for a moderate level of convenience in a high-quality natural setting. Allowable developments include shelters, public use cabins, high standard hiking and bicycle trails (paved or gravel), and bridges and roads where necessary to access development or gravel), and bridges and roads where necessary to access development designations and as provided for in an approved management plan. A medium level of activity is encouraged in these areas. Activities include, but are not limited to, hang gliding, bicycling, backpacking, fishing, hunting, cross country sking, camping, sledding, berry picking and rock climbing. Snowmachines are allowed with adequate snow cover but may be restricted in certain areas or at certain times. Summer off-road vehicle use is generally prohibited by existing park regulations.

Wilderness

<u>Purpose and Characteristics.</u> Areas designated Wilderness are intended to promote, perpetuate and, where necessary, to restore the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration and primitive recreational opportunities.

Areas designated Wilderness are of such size as to maintain the area's wilderness character, tailored to protect associated values and, if possible, defined by watershed boundaries. These areas are characterized by the natural landscape, its vegetation and its geologic forms. Resource modification can occur in these areas only to restore areas to a natural state. Natural processes will be allowed to operate freely to the extent that human safety and public and private property are protected. Insect and disease control as a management technique may occur only through the implementation of a only through the impenientation of a plan approved by the Director. Wildlife habitat enhancement activities such as vegetation manipulation may not occur in this designation.

<u>Developments and Activities.</u> In these areas, no man-made improvements should be provided except for primitive trails with minimum trail maintenance, bridges, and signing. Developments or other improvements will be undertaken only if significant threats to public safety exist or

improvements are necessary to reduce improvements are necessary to reduce adverse impacts on the areas resources and values. Access to and within this designation, for other than management, research and emergency purposes, will be by foot or other non-motorized means except for 1) aircraft and boats consistent with park regulations and Figure 11, 2) situations specifically allowed by law, 3) when there is adequate snow cover for snowmachines. Aircraft landing may be snowmachines. Aircraft landing may be allowed in certain areas or when authorized by the Director. Summer offroad vehicle use is generally prohibited by existing park regulations.

Activities which threaten the character of the area will be monitored and if need be, restricted. Methods of restriction may include measures such as separation and control of use activities through time and space allocation, use/area rotation schemes, and/or a permit system.

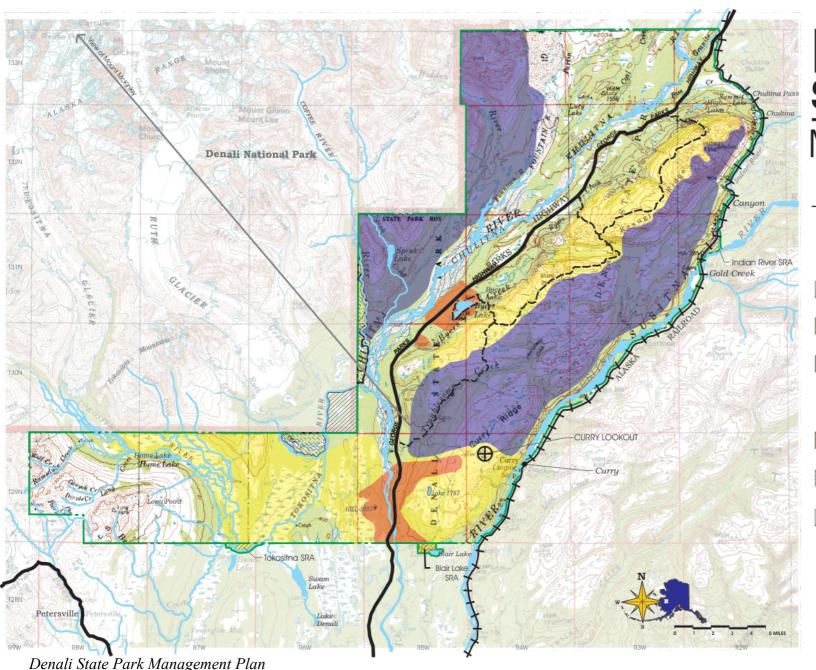
Cultural

Purpose and Characteristics. Areas designated Cultural are established to preserve, investigate, document and interpret Alaska's cultural resources and heritage.

Cultural designations are designated to provide adequate protection of historical, cultural, archaeological, or anthropological resources. These areas may contain a single feature or an assemblage of historic features.

<u>Developments and Activities.</u> Areas designated Cultural are managed to insure that public use in the area does not impair the integrity of historical, cultural, archaeological, or anthropological resources. Any development within areas designated Cultural should have minimal impact on the cultural and historical values within the unit and should involve minimal introduction of artificial features for activities not related to the cultural resource and its values. Development generally will be associated with the necessities of public access, safety, interpretation, and improvements to stabilize and protect cultural resources. Hardened trails, toilets and interpretive displays are examples of such development. Activities in these areas are for educational or scientific are for educational or scientific purposes. Recreation-related facilities are generally secondary and will be separated from the site(s) of cultural resources by sufficient buffers. Activities in keeping with the historical period of the cultural resources may be encouraged. To protect the cultural values for which the area is designated, resource modification fire suppression. resource modification, fire suppression, and insect and disease control management techniques will be utilized only when absolutely necessary in these areas.

⁴ Excerpted, with modifications, from Alaska State Park System: Statewide Framework, 1982



DENALI STATE PARK

Master Plan

Figure 10

LAND USE DESIGNATION



Natural Area



Natural Area (Special Management)



Wilderness



Cultural



Recreation Development



Proposed Park Addition



Proposed area to be traded to National Park Service

$\frac{\text{Figure 11}}{\text{GUIDELINES FOR ACTIVITIES AND FACILITIES WITHIN LAND-USE DESIGNATIONS}}$ IN DENALI STATE PARK 5

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Resource Management ⁶				
Research, Monitoring and Management Studies. Collection of data necessary for park management decisions or to further science. Priority will be given to studies that contribute to the use and management of native fish and wildlife populations and their habitats. Studies may be conducted by the Division or by other researchers under Division permit. A permit is required if natural objects will be disturbed.	Will be encouraged when in accord with established principles and when consistent with the purposes of the park.	Same	Same	Same
Ecological Monitoring. Activities or studies that address how fish and wildlife and their habitats are changing, due to either natural or human causes. Also see Mitigation section in Chapter 9.	Will be practiced as part of normal park operations in cooperation with the Department of Fish and Game, US Fish and Wildlife Service, and other agencies.	Same	Same	Same
Fish and Wildlife Inventories. Using acceptable inventory techniques to obtain information on species distribution, harvests, abundance, habitats, and population dynamics, to meet park management objectives.	Compatible	Compatible	Not applicable	Compatible

⁵ These are general guidelines. In the case of conflict between these guidelines and the specific recommendations in this plan, the specific recommendations will prevail.

⁶ Guidelines on fish and wildlife management are advisory only, and the Division recognizes the authority of the Board of Fisheries, Board of Game, and the Department of Fish and Game to regulate fish and wildlife management.

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
<u>Fisheries Enhancement.</u> Action taken to increase fishery stocks above historical levels, such as building hatcheries and fish passages, artificially incubating fish in streams and fertilizing lakes.	By permit as specifically allowed by law.	Not compatible	Not applicable	By permit as specifically allowed by law.
<u>Fisheries Restoration.</u> Action taken to restore fish access to spawning and rearing habitat or actions taken to restore populations to historical levels. Includes fish ladders, fish passages, and lake fertilization.	By permit as specifically allowed by law.	Same	Not applicable	Same
Wildlife Habitat Manipulation. Modification of habitat to increase target wildlife populations. Includes both enhancement and restoration activities, such as prescribed burning and mechanical manipulation.	Conditionally compatible	Not compatible	Not applicable	Conditionally compatible
Wildlife Introduction. Introduction of non-indigenous or exotic species.	Not compatible	Same	Same	Same
Wildlife Stocking. Used to re-establish native, species within their original breeding range.	Compatible after adequate research to insure there will be no detrimental impact on other resident species.	Same	Same	Same
<u>Predator Control.</u> Relocation or removal of predators to favor other wildlife species or populations, and the protection of re-introduced species.	Not compatible	Same	Same	Same
Pest and Disease Control. The use of poisons or chemicals to control or eradicate insect pests and/or diseases to indigenous animals, plants, or forests.	Not compatible, except to control species not indigenous to the area.	Same	Same	Same
<u>Tree Felling and/or Timber Sales.</u> Actions taken to eradicate pests such as spruce bark beetle, remove fire hazards adjacent to developed areas, or to improve views from developed waysides.	Compatible, as managed by DPOR.	Not compatible	Not applicable	Compatible, as managed by DPOR.

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
<u>Fire Suppression.</u> Actions taken to suppress wildfires.	Compatible, as consistent with the Alaska Interagency Wildland Fire Management Plan and other interagency agreements.	Same	Same	Same
Public Uses				
Walking, Skiing, Snowboarding, Mountaineering. Access may be provided by foot trails or be restricted in the absence of a trail system.	Compatible	Compatible	Compatible	Compatible
Motorized Boats. Includes use of inboard and outboard motorized boats and jet boats on rivers and lakes. Does not include small boats with electric trolling motors. See below for personal watercraft, hovercraft, and airboat restrictions.	The use of powerboats is allowed except on Byers Lake where only small boats with electric motors are allowed. ⁷	Same as Natural	Not applicable	Same as Natural
Airboats. By park regulations, the use of airboats is allowed except on Byers Lake. Airboats must remain on the water column and may not be operated on adjacent wetlands. The Fokositna River is closed to the use of airboats between April 20 and July 10 annually, unless authorized by the director.	Compatible	Compatible	Not applicable	Compatible
Personal Watercraft (jet skis) and Hovercraft. Prohibited by park regulation except on the Susitna River. Hovercraft must remain on the water column of the Susitna River and may not be operated on adjacent wetlands.	Compatible on the Susitna River only.	Not compatible	Not applicable	Compatible on the Susitna River only.

⁷ From 11 AAC 20.415. ⁸ From 11 AAC 20.415 and 11 AAC 20.985. ⁹ From 11 AAC 20.415(d).

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Non-motorized boating. Includes canoes, rafts, rowboats, kayaks, sailboats and sailboards.	Compatible	Compatible	Not applicable	Compatible
Land-Based Motorized Vehicles. Includes motorized devices for carrying persons or objects over land and includes automobiles and off-road vehicles. See other sections that address snow vehicles, aircraft, bicycles and motorized boats.	Not compatible off roads and parking areas. 10	Same	Same	Same
<u>Use of Snow Vehicles.</u> Open when Director finds that snow depth is adequate to protect underlying vegetation. Snow vehicles over 1,000 lbs. allowed by permit only for uses such as grooming, hauling in supplies to inholdings, etc.	Compatible with adequate snow depth.	Same	Same	Same
<u>Bicycles.</u> Allowed only on designated trails west of the Parks Highway, on the Byers Lake Loop Trail and on roads and parking areas. ¹²	Compatible on roads, parking areas and designated trails west of Parks Highway.	Not compatible	Not compatible	Compatible on roads, parking areas, Byers Lake Loop Trail, and parking areas.
<u>Fishing.</u>	Compatible, subject to state fishing regulations.	Same as Natural	Not applicable	Same as Natural

¹⁰ From 11 AAC 12.020. ¹¹ From 11 AAC 20.425 and 11 AAC 20.935. ¹² From 11 AAC 20.437 and 11 AAC 12.020.

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Hunting, Discharge of Weapons.	Compatible, subject to state hunting regulations. The use and discharge of a weapon for the purpose of lawful hunting or trapping is allowed except within one-half mile of a developed facility or the trail around the shoreline of Byers Lake, or within a quarter-mile of the Parks Highway between Mile 132 and Mile 170. Hunting in certain areas may be limited by state hunting regulation to allow for wildlife viewing.	Same	Same	Same
<u>Trapping.</u> Trapping of fur-bearers for private or commercial use.	Compatible, subject to state harvest regulations.	Same	Same	Same. Trapping in certain areas may be limited by state (Board of Game) regulation to allow for wildlife viewing.
Motorized Equipment. Includes all internal combustion equipment (i.e. chainsaws and generators).	Compatible	Not compatible, except for necessary park management, research, and emergency purposes.	Same as Wilderness	Compatible

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¹³ From 11 AAC 20.400.

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Primitive Camping. Camping in undeveloped areas without designated or improved sites.	Compatible, subject to 10-day camping limit. Disturbance of natural materials is prohibited. A person may not camp within one-half mile of a developed campground or within one-half mile of a road except as authorized by the director or as otherwise provided. ¹⁴	Same	Not compatible	Not applicable
Campfires.	Open fires are allowed on the gravel bars in and along the Chulitna, Susitna, and Tokositna Rivers 15 and in structures provide by DNR for campfires.	Not compatible	Not compatible	Conditionally compatible
Camping in Developed Campgrounds.	In a developed campground, camping allowed only at developed campsite or in designated camping spaces. ¹⁶ Camping limited to 15 days unless posted otherwise.	Not applicable	Not applicable	Same as Natural
<u>Dog Sledding.</u> Use of dog teams and sleds as a means of winter access and recreation.	Compatible	Same	Same	Same

¹⁴ From 11 AAC 12.230. ¹⁵ From 11 AAC 20.420. ¹⁶ From 11 AAC 12.230.

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Wildlife Observation. Viewing wildlife and its habitat in natural conditions. Includes photography, bird watching, and educational, interpretive activities and programs.	Compatible	Same	Same	Same
Recreational Gold Panning. Use of simple, non-motorized tools for gold prospecting.	Compatible except as provided in points 1 and 2 below, recreational gold panning is allowed only if the following conditions are met: no motorized equipment is used; only a gold pan or a shovel, or both, may be used; and no chemicals are used. 1: Recreational gold panning in Denali State Park may be conducted on an anadromous fish stream only between May 16 and July 14 annually; and, 2: a person may not extract or disturb natural materials above the ordinary high water line or where live vegetative matter exists. 17	Same as Natural	Not compatible	Same as Natural

¹⁷ From 11 AAC 20.435.

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Horses and Pack Animals. Use of horses, mules, and burros for riding or packing supplies and gear. A group using 10 or more animals must obtain authorization from the director before entering the state park; tethering horses, mules, and burros within 100 feet of fresh water is prohibited; and loose herding of animals is prohibited. Refer to the Land Use Regulations and Proposed Monitoring and Management Recommendations sections of this chapter for additional considerations.	The use of horses, mules, and burros is allowed except for the following areas: designated campgrounds; Byers Lake Trail; Troublesome Creek Trail; Little Coal Creek Trail; Ermine Hill Trail; south of the township line between T29N and T30N, west of the range line between R4W and R5W; and east of the Parks Hwy, except as authorized by the Director. 19	Same	Same	Same
<u>Fixed-Wings Landing.</u> Fixed-wing aircraft that provide access to the park. Practice landings prohibited by park regulation. ²⁰	Except for park management, research, and emergency purposes, landings limited to areas west of the Parks Highway and on Blair and Ermine lakes.	Same as Natural	Same as Natural	Same as Natural. Under Alternative B, one landing strip may be designated in conjunction with the Tokositna backcountry lodge.

¹⁸ From 11 AAC 20.430. ¹⁹ From 11 AAC 20.430. ²⁰ From 11 AAC 20.410(a)-(b).

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Helicopter Operations. Landing and take-off of rotary-blade aircraft to provide access to the park if authorized by the Director. Practice landings prohibited by park regulation.	Conditionally compatible. Except for park management, research, and emergency purposes, landings limited to gravel bars or beaches on the Tokositna, Chulitna, and Susitna rivers if authorized by the Director. Under Alternative B, one helicopter landing zone may be designated in conjunction with the Tokositna backcountry lodge.	Not compatible, except for park management, research, and emergency purposes.	Not compatible, except for park management, research, and emergency purposes.	Same as Natural
Facilities				
Improved Campsites. Permanent site clearings that may include tent platforms, hardened campsites, fire pits, shelters, picnic tables, sanitary facilities, and interpretive displays.	Compatible, as developed and maintained by DPOR. Recreational facilities in "Special Management" area on western portion of Curry-Kesugi ridge limited to those necessary for resource protection, public safety or to avoid conflicts with wildlife.	Conditionally compatible, if developed for public safety, resource protection or to avoid conflicts with wildlife.	Not compatible	Compatible, as developed and maintained by DPOR.

²¹ From 11 AAC 20.410 (b) and (c).

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Public Use Cabins and Shelters. Small, permanent structures available for overnight used by the general public on a reservation basis. No camping within 300' of a public use cabin. ²²	Compatible, as developed and maintained by DPOR. Public use cabins are not compatible in alpine areas.	Same as Natural	Not compatible	Same as Natural
<u>Visitor Information Facilities.</u> Structures where the public can learn about and obtain information on the park, its resources, recreation opportunities, and park regulations.	Compatible, as developed and maintained by DPOR.	Not compatible except for signs and kiosks.	Compatible, as developed and maintained by DPOR.	Compatible, as developed and maintained by DPOR.
<u>Foot Trails.</u> Designated, maintained trails that are restricted to foot traffic. Where suitable, some may be used by snowmachines in winter.	Compatible, as developed and maintained by DPOR.	Same	Same	Same
Commercial Uses				
Commercial Lodges. Privately-owned and operated lodging facilities on park lands.	Not compatible	Not compatible	Not compatible	Allowed only under concession contract and when compatible with park purposes, when consistent with management plan, when enhancing public use and enjoyment of the park, and when experience cannot be provided outside park.
Hydroelectric Power Development. Commercial development of a site, including a dam, impoundment area, powerhouse, tail race, and other forms of associated facilities.	Not compatible	Same	Same	Same

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²² From 11 AAC 12.230.

Activity/Facility	Natural	Wilderness	Cultural	Recreation Development
Guiding and Outfitting. Licensed big game hunting, fishing, mountaineering, and backcountry guiding, outfitting, and all other commercial operations providing services to park users for compensation.	Compatible only by permit or concession contract issued by DPOR.	Same	Same	Same
<u>Grazing.</u> Grazing or loose herding of domestic or wild animals for personal or commercial purposes. ²³	Not compatible	Same	Same	Same
Resource Extraction. Extraction for commercial or personal use. Removal of timber, gravel, rock, sand, minerals, plants, or other park resources.	Not compatible	Same	Same	Same
Resource Extraction by State Parks. Removal of timber, gravel, rock, sand, plants, or other park resources for use by State Parks in the park.	Compatible	Not Compatible	Compatible	Compatible
Utilities, Transmission Lines, Pipelines. Includes telephone and electrical power lines, oil and gas pipelines, communication and wind generation towers and other associated facilities.	Allowed by permit only when no viable alternative exists. Tower heights limited to 85 feet. Use best practices to minimize impacts to viewshed, especially areas within viewsheds of areas with high public use.	Not compatible	Not compatible	Same as Natural

²³ From 11 AAC 20.430.

Proposed Park Additions and Boundary Adjustments

Proposed park additions are intended to protect small areas adjacent to the park boundary that have special features. Some of the proposed park additions are intended to re-align the park boundary along natural features, such as the Tokositna and Coffee rivers. The proposed changes are illustrated in Figure 10.

The proposed land exchange with the National Park Service is intended to adjust boundaries to readily identifiable and enforceable natural features. If implemented, revised boundaries will clarify where different state and federal regulations apply. Boundary realignment will also simplify the management responsibilities of the respective agencies.

Three areas on the boundary of the park were added administratively through Interagency Land Management Assignments (ILMA). They include the Blair Lake, Tokositna, and Indian River State Recreation Areas. They are managed as part of the Denali State Park Unit and are proposed for legislative designation.

Proposal	Management Objectives	Justification
Tokositna State Recreation Area Proposed to be legislatively designated. SRA was added to State Park System through an ILMA and is designated Natural, Special Management. See Figures 10 and 12 and legal description in Appendix C. Approximately 600 acres.	Establish border along obvious natural feature (Tokositna River) and provide active management.	Legislative rather than administrative designation will provide long-term protection. This small segment of the Tokositna River is the only part of the river not currently in a state or national park. Inclusion of the land north of the river in park will preserve natural setting along river and permit active management and enforcement in this area.
Indian River State Recreation Area Proposed to be legislatively designated. SRA was added to State Park System through an ILMA and is designated Natural, Special Management. See Figure 10 and 12 and legal description in Appendix C. Approximately 470 acres.	Provide active management to conserve important natural resources in the area, primarily spawning salmon. Inclusion of important buffer adjacent to the park.	Legislative rather than administrative designation will provide long-term protection. Conserve important natural resources in the area, primarily spawning salmon. Inclusion of important buffer adjacent to the park.
Blair Lake State Recreation Area Proposed to be legislatively designated. SRA was added to State Park System through an ILMA and is designated Natural, Special Management. See Figure 10 and 12 and legal description in Appendix C. Approximately 360 acres.	Provide active management to an area that is receiving high public use.	Legislative rather than administrative designation will provide long-term protection. Protect public access between the park and the lake. Conserve important natural resources in the area.

Proposal	Management Objectives	Justification
Land Exchange with the National	Make management responsibilities	The National Park Service and State
Park Service	and jurisdiction clearer to all parties	Parks have different regulations,
Adjust State Park and National Park	on and along the Tokositna River.	particularly pertaining to hunting.
boundaries along the Tokositna	Improve management efficiencies.	This action would put the entire river
River so that the entire Tokositna		under one jurisdiction.
River below Home Lake is entirely		
in the State Park. The boundaries		
would also be adjusted along Coffee		
River. Would likely require		
legislative and Congressional action		
and affect approximately 6,000		
acres.		

Land Acquisition

Denali State Park has a variety of large and small privately held properties within its boundaries. Acquisition of some inholdings or purchase of development rights should be pursued to help consolidate land ownership patterns and to avoid potential incompatibilities due to differing interests and objectives of the Division and private parties.

Proposal	Management Objectives	Justification
Acquire inholdings along Parks Highway Mile 135-136 (160 acres).	Protect natural setting and viewshed integrity from proposed Parks Highway Visitor Center.	The viewshed integrity is very important to the proposed Parks Highway Visitor Center.
Acquire inholdings by Byers Lake (10 acres).	Protect quiet, undeveloped nature of area. Provide active management.	Consolidate area as campground area. Inholdings are small, but development could have an adverse impact on the park and park experience currently enjoyed.
Acquire other inholdings as they become available. a) Byers Creek	Protect natural resources and avoid potentially undesirable development within the park.	Inholdings, in many cases, may deter appropriate development due to concerns about strip development. Development of inholdings, especially along highly visible
b) Parks Highway corridor c) Pirate, Spink, Lucy, Low and Blair lakes		sections of the Parks Highway, may significantly degrade recreational opportunities.
d) Allotment adjacent to Denali State Park, west of the Parks Highway to permit access to west side of Chulitna River		
e) Others		

Wildlife Management²⁴

The emphasis of these recommendations is to establish a management program that increases the wildlife viewing potential in certain areas of the park and eliminate practices, such as bear baiting that are in direct conflict with recreational use of the park. Educational programs centered on natural history interpretation are a major emphasis of this plan. Efforts will be made to facilitate viewing of wildlife in its natural habitat, without significant impacts to the wildlife or hazard to the viewers.

The Division recognizes the authority of the Department of Fish and Game (ADF&G) regarding management of Alaska's fish and wildlife. Several of the following recommendations entail cooperation with ADF&G.

Proposal	Management Objective	Justification
Propose to Board of Game establishment of Denali State Park as a Game Management Subunit.	Establish more detailed information on hunting and fishing within the park. Provide more focused management of wildlife resources with Denali State Park.	It is difficult to monitor the impact of hunting when the Park is split into two management units that are managed both out of Palmer and Glennallen. If Denali State Park were a distinct unit or subunit, recording of bear and moose harvests could be readily be attributed to having taken place inside or outside of the park. This would facilitate implementation of more specific regulations that reflect the different status of and needs of Denali State Park versus lands outside the state park.
Work with ADF&G and propose to the Board of Game that the park be closed to bear-baiting.	Avoid human-bear confrontations. Eliminate a hunting practice in the park that teaches bears to associate humans with food sources.	Bear baiting involves placing edible garbage piles to attract bears. The bears are then harvested by hunters. The practice has the potential for creating serious human-bear conflicts, by encouraging bears to associate campgrounds and other human congregation points with food sources.
Recommend to ADF&G that the biologists in charge of Denali State Park management subunit be located in Palmer.	Improve park wildlife inventory.	If biologists responsible for this area were stationed closer to the park, they could more easily research and monitor the status and trends of wildlife populations and harvests in the park.

²⁴ This section has not changed from the 1989 plan.

Chapter 7 – Management Recommendations

Proposal	Management Objective	Justification
Work with ADF&G and Board of Game to establish management practices that may lead to enhanced wildlife viewing. May include partial closures and/or limited takes in designated areas.	Provide wildlife viewing opportunities. Designate areas that may be managed to promote higher densities for viewing. This may include limitations or closures in specific areas. Reduce safety problems related to hunting in close proximity to active viewing areas.	Part of any interpretive program is the ability to view wildlife in its natural setting. Creation of designated viewing areas allows for different management practices that lead to higher densities of animals. Additionally, these designated areas reduce possible safety issues related to discharge of firearms near concentrations of people.
Work with ADF&G and the National Park Service to establish a baseline monitoring program.	Gather baseline data to study the effects development has on park resources.	A baseline monitoring program would provide information needed to more accurately manage park resources. Working with the National Park Service would help State Parks with funding and provide staffing efficiencies.
Work with ADF&G and the National Park Service to conduct environmental assessments such as in-depth vegetation surveys and bear habitat assessments prior to construction of the South Denali Visitor Complex.	To reduce wildlife conflicts and displacement and to protect sensitive habitat.	This information will be used in the design and construction phase of the South Denali Visitor Complex project to site and design facilities in a manner that would avoid wildlife conflicts and to minimize long-term impacts of development on park resources.

Research

Very little natural resource or recreational research has been conducted within Denali State Park. Large-scale resource inventories have been carried out in the area, but frequently have excluded Denali State Park. These research recommendations address methods to initiate and provide incentives to promote research programs within the park. Detailed information on park resources and recreation/tourism patterns will be very helpful in future planning and management activities.

Proposal	Management Objective	Justification
Research Programs Provide incentives and support for research programs within Denali State Park. May include provisions for housing or research grant funding.	Promote research that results in an increased understanding of the natural systems or human use of Denali State Park.	Information specific to Denali State Park is very limited. Research projects would help increase the understanding of the natural systems and human usage of the park. This data will obviously be helpful in developing management practices and interpretive programs within the park.
Educational/training program Expand the educational/training program as an extension of several university programs.	Encourage college students studying in fields of natural sciences or recreation to gain field experience and credits for seasonal internship work.	Create a program for seasonal help and provide learning opportunities to students.
Camping monitoring Monitor camping in alpine areas outside of designated remote campsites.	Identify when level of activity directs mandatory use of designated campsites or placement of pit toilets.	Prevent unnecessary impacts on the environment.
Backcountry permits Consider use of backcountry overnight permits if conflicts between users or impacts on the park reach unacceptable levels. Consider first, use of educational techniques, redirecting use, and improved facilities (hardened trails and campsites, pit toilets, bear containers etc.) to reduce conflicts and impacts before implementing a permit system.	Reduce impacts on the park resources and conflicts between users.	Prevent unnecessary impacts on the environment, reduce conflicts between users, increase visitor safety.

Proposed Monitoring and Management Recommendations

These recommendations are intended to address restrictions and limitations on uses necessary to protect and reduce impacts on the natural resources of the park, improve public safety and mitigate conflicts between incompatible uses. Where there is not adequate information to formulate recommendations, the Division will evaluate the uses or conflicts in more detail and formulate management recommendations.

Several of the proposed restrictions in the 1989 plan have been removed from this section because they have since been codified as regulations that apply to the park.

Proposal	Management Objectives	Justification
Trails Trails in areas designated Wilderness will be maintained at primitive standards. Trails in the other three designated areas may be designed, built and maintained to higher standards. Summer uses of pack animals and mountain bikes may be restricted to certain trails that can accommodate this use without unacceptable levels of impact. Develop winter trails and improve selected trails for winter use. Winter uses of the park in some areas may be separated or restricted to minimize conflicts between user groups and protect resources.	Limit impact on areas designated Wilderness. Trails are designated for summer uses that will not cause unacceptable levels of impact. Provide recreational opportunities for a variety of users in winter. Minimize conflicts and protect park resources in winter.	Wilderness should be accessed by minimum improvements. Other trails should be managed so that they can be sustained for the uses they were designed for. Park winter trails are managed to provide for a variety of recreational users. To minimize conflicts between users and to promote public safety, it may be necessary in some areas to separate some user groups.
Hunting, Discharge of Weapons Continue to monitor whether the existing no-shooting areas are sufficient to protect the public.	Protect visitor safety adjacent to developed facilities, Byers Lake and the Parks Highway.	Currently, the use and discharge of a weapon for the purpose of lawful hunting or trapping is allowed within the park except within one-half mile of developed facilities, the trail around the shoreline of Byers Lake, and within a quarter-mile of the Parks Highway between MP 132 and 170. Hunting regulations already prohibit taking game by shooting from, on, or across a highway. ²⁶
Use of snow vehicles Use patterns and vegetation should be monitored to determine if special limitations are necessary.	Protection of vegetation and visitor safety.	Currently, use of snow vehicles in the park is allowed when the Director finds that snow depth is adequate to protect underlying vegetation. ²⁷ Use does not appear to be impacting vegetation at this time.

²⁵ From 11 AAC 20.400. ²⁶ From 5 AAC 92.080. ²⁷ From 11 AAC 20.425 and 11 AAC 20.935.

Proposal	Management Objectives	Justification
Horses and pack animals Evaluate the use and impact of horses and other pack animals.	Determine if horses or other pack animals should be permitted on certain trails, and/or if separate trail systems should be developed.	There is not enough data available at this time to formulate an effective management policy for pack animals.
Mountain Biking Evaluate the use and impacts of mountain biking. Determine whether use limitations are needed.	Protect fragile areas, such as alpine, from the negative effects of off-road biking. Identify and provide suitable areas for this activity.	Mountain biking is a new and growing recreational activity. The Division should assess its impacts to ensure that fragile soils, wildlife concentration areas, and other sensitive areas are protected.
Dog Sledding Dog sledding is permitted throughout the park. Monitor use patterns.	No significant conflicts apparent at this time. Monitor use patterns to track any conflicts. Possibly separate uses by area if necessary. May require separate trail systems.	No need to limit at this time. Data collection is necessary.
Byers Lake walk-in/canoe-in campground cooking/eating/food storage area Restrict cooking, eating and food storage to a central location.	Reduce bear problems.	If a central cooking/eating/food storage area (including food locker(s)) is developed at this campground, campers should be required to cook, eat, and store food at this central location to reduce bear problems. This campground has had chronic bear problems in the past.
River Use Monitor use of navigable rivers for wildlife and social impacts, and assess whether use limitations are needed.	Protect sensitive wildlife congregation areas and habitats while providing for reasonable recreational uses.	Rivers, particularly the upper Tokositna where swans nest, have very high habitat values. They are also attractive for recreationists and serve as access corridors to the backcountry. There is a need to monitor the locations, times, and impacts of motorized boats to ensure that river traffic does not damage habitat, displace sensitive species, or create significant conflict among recreational user groups.
Restrict vehicular access on the visitor center complex access road.	If a shuttle bus system is implemented, summer vehicular access may be restricted to buses and administrative vehicles, particularly during peak-use hours, in order to minimize the effects of traffic on viewshed, wildlife, air quality, and visitor experience.	To protect public safety and minimize the effects of traffic on the viewshed, wildlife, air quality, and quality of the visitor experience.

Land Use Regulations

These recommendations address the need for the Division to coordinate with the Matanuska-Susitna Borough concerning review and possible revision of existing land use regulations affecting the park and adjacent areas, specifically the "Denali State Park Special Land Use District" (SPUD). Development and design standards will help mitigate potential impacts of private or other public agency development on the park and surrounding areas.

Although the Division has zoning authority over private lands within the park (under AS 41.21.025), that authority may not be enforceable on Native allotments until allotments come out of restricted status. Some of the large inholdings in the southern portion of the park are Native allotments, although some are no longer in restricted status under the Native Claims Settlement Act because they have been sold.

Proposal	Management Objective	Justification
SPUD Coordination Coordinate with the Matanuska- Susitna Borough to revise the Denali State Park Special Land Use District (SPUD) that was adopted in 1991 and includes ordinances that apply to private lands in and adjacent to the park. The Borough should notice State Parks as part of the application process for any special use permit in this district.	Avoid non-compatible development within and adjacent to the park.	The SPUD should extend north and south of Denali State Park to encompass development associated with the highway approaches to the park. The SPUD should include subdivision design standards, limited access points to the Parks Highway and conditional use review for any structure larger than a specific dimension in square footage and/or height. Would also require review of all commercial developments and signage.
Tower facilities Revise the SPUD to require permits for the construction of any tower facilities such as communication or wind-generating towers. Tower heights should be limited to 85 feet. Recommend using best practices to minimize impacts to viewshed, especially within areas of high public use.	Provide for consistency and regulation of tower development and promote viewshed preservation.	Application of best practices and tower height limitations would minimize any potential resource impacts and concerns related to the viewshed especially within areas of high public use.

Proposal	Management Objective	Justification
DNR Zoning	Regulate development of private	Because of the high interest in
Consider the exercising of the	lands near proposed park facility	tourism and associated
Division's zoning authority over	development areas. Prevent the	developments, there is widespread
private land inside park boundaries	proliferation of roadside	concern about the potential for
under AS 41.21.025.	development.	spillover development that may
		occur even if the developments
		proposed by this plan are not
		implemented. Application of the
		Division's zoning authority might
		help to control such development
		however, State Parks will work with
		the borough to revise the SPUD first.
Horse & Pack Animals	Provide opportunity for use while	As new trails and facilities are built,
Consider revising 11 AAC 20.430 to	minimizing resource impact.	this regulation will need to be
restrict use in alpine areas and to		revised to identify appropriate trails
clarify, as new facilities are built,		for horse and pack animals. This
which areas are open to horse and		use may not be appropriate in alpine
pack animals.		areas and more information will be
		necessary to determine an
		appropriate management policy. ²⁸

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²⁸ For more information, reference the Proposed Monitoring and Management Recommendations section in this chapter.

Cooperative Management Agreements

Cooperative agreements should be developed between State Parks and the large land owners in the vicinity of the park including the Matanuska-Susitna Borough (MSB), the National Park Service (NPS), the DNR Division of Mining, Land and Water (DMLW), the Department of Transportation and Public Facilities (ADOT/PF) and the Alaska Railroad (ARR). Cooperative agreements provide a common framework that encourages land management and regulatory agencies to inform others of their activities, and avoid incompatible or duplicative efforts.

Proposal	Management Objectives	Justification
Cooperative management agreement between State Parks and the National Park Service for the design, construction, operation, maintenance and staffing of the visitor center and the facilities in the immediate vicinity of the visitor center.	Provides efficiencies in implementation of the South Denali Visitor Complex related projects.	Provide visitors with a world-quality exposure to the Denali Park environs through a well designed and operated visitor center and associated facilities that are operated efficiently.
Cooperative land management agreement between State Parks and other governmental landowners adjacent to the park.	Promote orderly development of these lands to prevent strip development and degradation of the viewshed integrity, and provide for protection of the Chulitna and Susitna rivers.	The DMLW, MSB, ARR and ADOT/PF manage substantial acreages adjacent to the State Park. Without a coordinated effort, unwanted development may occur adjacent to the Parks Highway and Petersville Road. Timber and other resource extraction in close proximity to the park may significantly impact recreational opportunities.
Cooperative management agreement: State Parks and ADOT/PF concerning right-of-way maintenance.	Increase visibility of mountains and Denali from the Parks Highway, particularly at waysides. Coordinate efforts and scheduling of roadside brush cutting. Maintain ROW vegetation buffers where needed to buffer views of development adjacent to the highway.	Alders and other vegetation obscure most views to the west from the highway. A cooperative plan would allow DPOR to maximize the viewing potential yet protect buffers where they are needed. This single action could significantly improve the visitors' experience within Denali State Park.
Cooperative management agreement between State Parks and ADOT/PF concerning gravel extraction sites adjacent to the highway.	Clarify management authority over sites and start a restoration program for those sites no longer in use. Control access to sites to avoid management problems, but permit limited recreation use as appropriate.	Both active and inactive sites are currently open to casual access. Sites could be restored, and utilized as controlled access staging areas for large groups.
Cooperative management agreement between State Parks and ADOT/PF concerning maintenance of the proposed visitor center roads and parking areas.	Develop efficiencies between DNR and ADOT/PF in road maintenance.	Cooperative agreement would be pursued only if either visitor center under Alternatives B or C is built.

Proposal	Management Objectives	Justification
State Parks should continue to coordinate with ADOT/PF to plow parking areas along the Parks Highway particularly at the Veterans Memorial.	Provide for winter recreational use of the park and emergency pull-out areas.	Without plowed pull-outs, the park is relatively inaccessible in winter unless vehicles park on the side of the road (which poses a significant safety hazard to traffic along the highway).
State Parks should work with ADOT/PF, local communities and other agencies to develop and implement a Corridor Management Plan for the Scenic Byway portion of the Parks Highway.	Promote the scenic qualities associated with the State Park and highway corridor and further enhance the visitor experience in the area.	The Parks Highway was designated a State Scenic Byway between MP 132-248 in 1998. ADOT/PF has funding to begin a Corridor Management Plan that, once completed, would allow the Parks Highway to be nominated as a National Scenic Highway.
State Parks should develop a Cooperative Management Agreement or Reimbursable Service Agreement to design, build, maintain and manage some of the facilities proposed along the Alaska Railroad.	Develop high quality visitor facilities along the ARR in and adjacent to the park.	State Parks has the expertise to build and manage park-related visitor facilities. These facilities and their use would be closely associated with access to and understanding of the State Park.
Cooperative management agreement between State Parks, ADF&G and the National Park Service to conduct wildlife and habitat assessments and start a baseline monitoring program.	Gather information necessary for responsible development of the South Denali Visitor Complex and related facilities.	ADF&G is the agency responsible for managing fish and wildlife resources in the park. The National Park Service can provide staff or funding to assist in these studies.

Management and Staffing Efficiencies

These recommendations concern staffing requirements for Denali State Park. Adequate staffing is necessary to ensure public safety and resource protection, provide information to the public, supervise contracted and volunteer help, monitor recreation activities and conduct research into the park's natural resources.

Proposal	Management Objectives	Justification
Develop cooperative agreements with the National Park Service that addresses staffing and management of the proposed visitor center and related facilities. Agreements may also address supplemental funding for staffing and operation of the existing Veterans Memorial Visitor Center.	Establish a long-term management plan that addresses key issues relating to the visitor center and related facilities. Achieve cost efficiencies in the long-term operation of these facilities.	Enable State Parks and the National Park Service to provide for efficient funding, operation, and staffing of the visitor centers and related facilities that provide a world-class experience to park visitors.
Expand summer staffing to include more rangers, maintenance staff and volunteers. Add a winter ranger position to support the increased use the park receives in winter. Seek additional park hosts as waysides and pull-offs become more popular.	Provide better public service during the peak season including improved maintenance and repair of facilities and more opportunities for the public to receive information about the state and national park. Increased monitoring by park personnel. Increased management presence to increase public safety and reduce vandalism.	Existing ranger positions are seasonal. Rangers are performing tasks such as building maintenance, garbage pickup and fee collection. These are activities that could be done by volunteers, technicians, or contractors, so that the rangers could do more park management and supervisory tasks as well as be readily available for emergencies and contacting the public.
Establish regional resource management position and work with the National Park Service to develop a research and monitoring program for the state park.	To monitor and coordinate inventory and research projects. Provide assistance in interpretive programs.	Most effective method of increasing information on the park's uses and resources, information that is essential to the long-term management of the state park.
Develop Reimbursable Service Agreements with local lodges and tour operators for park staff to provide nature walks, evening programs and other interpretive services.	To provide high quality interpretive programs for visitors to the park and guests lodging in and adjacent to the park.	Lodge and tour operators often don't have the staff or training capabilities to provide staff with this expertise. Also provides visitors an opportunity to contact and interact with park rangers that are familiar with park resources.
Continue to expand cooperative agreements with non-profits to provide services and the operation of park facilities.	To provide high-quality, low-cost staffing of facilities such as the Veterans Memorial.	One example is the Friends of Denali State Park, Mat-Su that currently operates the Veterans Memorial Visitor Center at minimal cost to State Parks.
Consider contracting with concessionaires to operate and maintain some of the park facilities.	Could provide more efficient management for some facilities while still providing improved service.	Provide opportunities for local jobs, cost saving to State Parks, and improved services.

Proposal	Management Objectives	Justification
Continue to utilize campground	Reduce staffing costs. Free up	Allows State Parks to provide a level
hosts, park volunteers, the Alaska	rangers for other tasks.	of service and facilities that it
Conservation Corps, and other		otherwise could not afford. Builds
service organizations to staff park		local support and a community sense
facilities and assist with construction		of ownership and responsibility for
and maintenance.		the state park.

Commercial Uses

There are a number of commercial operations in Denali State Park, offering such services as guiding, outfitting, river rafting, and equipment rentals. The Division currently operates a permitting system for commercial operators requiring permittees to carry liability insurance, provide basic equipment, and possess appropriate professional licenses and certificates.

Proposal	Management Objectives	Justification
Continue to implement permit system for guiding/outfitting and other commercial activities in the park. Consider establishing performance standards for permittees.	activities inside the park.	The permit system provides accurate and updated information on numbers, types, locations and possible impacts of commercial activities, and also ensures that firms are qualified and equipped to operate safely.

Chapter 8 FACILITY RECOMMENDATIONS

South Denali Visitor Complex
Regional Visitor Information Stops
Interpretive Facilities
Park Headquarters, Storage Yard, Housing, Patrol Cabin
Camping Facilities
Public Use Cabins and Shelters
Developments along the Alaska Railroad
River Access
Trails & Trailheads
Highway Pullouts
Other Recreational Facilities, Improvements
in the Byers Lake and Other Areas

Chapter 8

FACILITY RECOMMENDATIONS

This chapter presents recommendations for recreational and interpretive facilities. The proposals are designed to rectify management problems, correct for deficiencies in the present number and type of facilities, and to provide opportunities for a variety of park users and visitors, including Alaskans and non-residents. Figure 12 shows many of the facility recommendations.

Most of the recommendations in this chapter call for traditional recreational facilities, such as campgrounds, trails, backcountry campsites, and river access points. Others, particularly the South Denali Visitor Complex, are oriented toward natural history interpretation. Recommendations are consistent with the mission statement and other goals and objectives for the park.

South Denali Visitor Complex

Denali State Park provides excellent opportunities for interpretation of the region's natural history. Tremendous views of the Denali massif and the diversity of surrounding areas make the park an appropriate location for a "South Denali Visitor Complex." The visitor complex will provide a focal point and staging area for the Denali State Park interpretive program.

The National Park Service, through an interagency planning effort with the State of Alaska and the Matanuska-Susitna Borough, developed a Final South Denali Implementation Plan and Environmental Impact Statement (FEIS). That document along with a Denali State Park Management plan Amendment explored possibilities for development of the south Denali region. Through a public process, a development alternative for facilities along the Parks Highway at Curry Ridge was chosen for implementation. Those facility recommendations are described below.

General Concept

This destination facility will serve, Alaskan and out-of-state travelers, local school groups and package tours. The vision is for a high quality facility that offers a range of opportunities for learning and recreating. It will provide visitors of various abilities a chance to experience alpine and subarctic tundra environments and opportunities to view Denali and the Alaska Range.

The visitor center and trail system could engage visitors for an hour, half-day or all day. Diverse opportunities (such as interpretation of natural and cultural resources, viewing Denali, short walks, long hikes, educational programs, hands-on exhibits and viewing films) and information about regional recreational opportunities, safety, and emergency assistance will be provided to accommodate diverse visitor interests and backgrounds. Opportunities for winter activities will be provided, though not at the same level of service as in summer.

Visitor Center

A new visitor complex will be constructed on approximately 4 acres at the Parks Highway site in Denali State Park. The road junction to the facility will be located at approximately mile 134.6. The total building requirement would be approximately 16,000 square feet. A facility this size could accommodate up to 300-400 people at a time. See Figure 2-11, Parks Highway Visitor Center, in FEIS for a conceptual diagram of this facility.

The visitor center will be designed to facilitate park visitors' connection with and understanding of the landscape and natural resources. To the extent practicable, development will be hidden and blended into the landscape. Portions of the visitor center may remain open during the winter. Agencies will limit development to facilities that will be necessary to provide a quality setting for visitors.

Service functions such as housing, maintenance, and storage will be located at the parking area (see description below). A well will be drilled and a wastewater system installed at the site. Generators and maintenance buildings will be located at the parking area. Alternative energy sources (solar, wind) will be used to the extent feasible.

Traffic patterns at the visitor center will allow buses to unload, load, and depart from the site. Parking spaces will be provided for ranger vehicles or to accommodate private vehicles in the off-season or at times of low visitation.

Parking Area

A paved parking area will be constructed on the natural bench across from the Denali View South Wayside near Parks Highway mile 134.6. Lot size will not exceed the space necessary to accommodate 300 automobiles and 150 buses or RVs. A water well will be drilled and a wastewater system will be installed. See Figure 2-12, Parks Highway Parking Area and Campground, in FEIS for a conceptual diagram of this facility.

The office, located in the parking area, will serve as a contact station and will have static displays and information that visitors can read while waiting for the buses. Information will be provided on natural resources, trails and other recreational opportunities in the south Denali region, safety, and "Leave No Trace" principles. During the busiest part of the season, a park volunteer could assist visitors with questions. The contact station will serve as a shuttle transfer site in summer and will accommodate winter visitation. Staffing will depend upon visitation levels.

Potential will exist to include other shuttle bus stop locations in the state park in order to better serve visitors and to reduce the size of the parking lot. The shuttle buses could pick up passengers from nearby sites including Byers Lake campground, Veterans Memorial, Denali View South wayside, Mary's McKinley View Lodge and the Mt. McKinley Princess.

Access Road

An access road approximately 3.5 miles long will be constructed from the parking area to the visitor center. During busy times of the day, private vehicles will park in the parking area and passengers will take a shuttle bus up to the visitor center. The access road will be designed for low volume, low speed traffic (20-25mph), with narrow lanes and tight corners as required to fit the mountainous terrain with minimal cut and fill. Wide spots could be provided for viewing stops. The road will be paved but low profile, with gravel shoulders.

Campground

A campground will be constructed adjacent to the proposed parking lot at mile 134.6 of the Parks Highway. The campground will include restrooms, a camp host site, up to 50 tent sites and 50 RV sites, for a total site requirement of 19 acres. The campground could be built in phases depending on availability of funds and demand. If unacceptable resource damage or conflicts occur as a direct result of this campground, the campground will not be expanded until resource damage or conflicts are mitigated. See Figure 2-12, Parks Highway Parking Area and Campground, in FEIS for a conceptual diagram of this facility. The campground could be privately operated.

Trail Systems

The "hub-and-spoke" trail concept provides the general vision for trail systems in the South Denali region: the main parking area at the highway site at mile 134.6 will serve as the transportation and information hub, with access to trails and rivers occurring at strategic locations. All trails are conceptual and will require additional site investigations to determine exact locations. Estimated tread widths, brushing distances, and trail lengths are listed below. Actual widths and lengths will depend on vegetation, topography, projected volume of use, and purpose. Tread widths will likely be wider closer to facilities and narrower further from the visitor center. Tread widths will likely be less than those listed below, except for the trail listed as ADA accessible.

Approximately 13 miles of trails will be constructed in the vicinity of the new visitor center. Trails will be unpaved.

- A 4-mile interpretive hiking trail will be constructed from the parking area at mile 134.6 of the Parks Highway to the visitor center. This trail will be separated from the visitor complex access road. There will be 2-3 pullouts/bus stops/trailheads along the access road, and loop trails will be constructed from one pullout and return to a second one. See "Trail A" on Figure 2-10 in FEIS that shows a conceptual location for this trail.
- A half-mile developed (ADA accessible) interpretive trail loop will be constructed from the visitor center to the alpine area. This trail will provide a relatively short interpretive trail for visitors. See "Trail B" on Figure 2-10 in FEIS that shows a conceptual location for this trail.
- A 3-mile hiking trail will connect the visitor center with the Curry Ridge Trail. See "Trail C" on Figure 2-10 in FEIS that shows a conceptual location for this trail.

- A 5-mile easy interpretive loop trail will be constructed from the visitor center to Lake 1787 and around the lake. This trail will also connect to the access road. See "Trail D" on Figure 2-10 in FEIS that shows a conceptual location for this trail.
- A trail from the visitor center to private lands located along the southern boundary of the park could be constructed to protect natural resources and enhance recreational opportunities on Curry Ridge.
- The summer hiking trails near the visitor center could be maintained in winter for Nordic skiing.
- Winter trails will be developed and select trails will be improved for winter use. Winter uses of the park in some areas may be separated or restricted to minimize conflicts between user groups and protect park resources.

Regional Visitor Information Stops

A large number of visitors pass through the Denali region, unaware of the recreational opportunities available to them. Small log cabins or covered kiosk stops should be developed to display detailed regional maps, brochures and graphics which clearly depict the region's features and attractions.

Since there is a substantial amount of vehicle traffic north and south through this region, there should be information stops at the north and south ends of the Denali region. Healy, Cantwell, Trapper Creek and Talkeetna junctions appear to be the most appropriate locations.

Proposal	Management Objectives	Facilities	Justification
Visitor information stops at	Inform visitors of variety	Small unstaffed structures	Visitors are often unaware
north and south ends of	of opportunities within	or kiosks with parking.	of the variety of
Denali recreation region:	region.	Areas for maps, brochures,	opportunities within the
Healy, Cantwell, Trapper		and other information.	Denali region. Information
Creek and Talkeetna			centers would promote the
junctions.			regional recreation
			network.

Interpretive Facilities

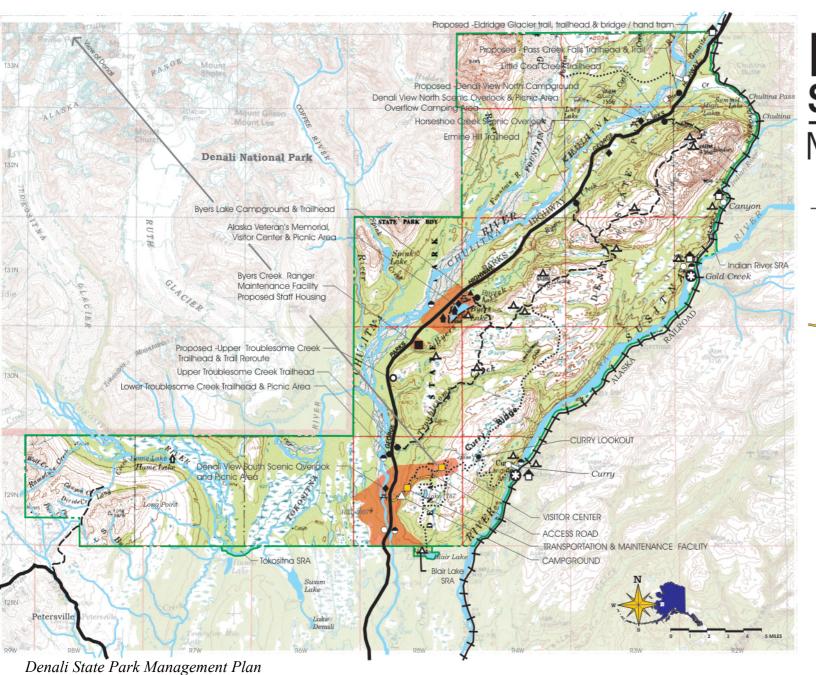
A primary management goal for Denali State Park is to interpret the natural systems and forces that function in this region. The Denali Region owes much of its form and ultimate environs to the work of glaciers that emanate from its peaks.

In addition to the South Denali visitor complex, there are a variety of opportunities to interpret the natural systems of the park and region. This plan makes specific recommendations for the development of smaller facilities designed to form an interpretive network. Proposed facilities include several outlooks along the Parks Highway, a wildlife habitat and a scenic viewing route.

Wildlife Viewing Facilities. Wildlife and habitat viewing are important elements of the overall Denali State Park interpretive program. It is essential, however, that the interpretive facilities not encroach on the habitat to the point of disturbing and displacing wildlife. There are opportunities in the park for viewing wildlife in their natural habitat without disturbing the subject or endangering the viewer. For example, proposed viewing stations are situated on heavily vegetated bluffs that have a substantial vertical separation between subject and viewer. Some of these bluffs overlook clearwater sloughs that flow into the Chulitna River. Salmon congregate in these clearwater sloughs as they return to spawn, and bears gather to feed on the salmon.

Final design of viewing platforms should be developed with guidance from biologists of the Department of Fish and Game and other knowledgeable sources. The facilities should include small parking areas, foot trails, controlled (fenced or railed) overlooks with observation blinds, and possibly, mounted spotting telescopes. These overlooks are directly accessible from the Parks Highway. They should be designated as wildlife viewing areas by the Board of Game to maximize viewing opportunities. Limitations and/or partial closures to hunting may be necessary.

Proposal	Management Objectives	Facilities	Justification
Wildlife and scenic	Provide wildlife habitat	Viewing platforms would	These facilities would be
viewing overlooks along	viewing opportunities.	include small parking	designed to generally
Parks Hwy.		areas, foot trails, controlled	enable wildlife viewing
		overlooks with observation	without habitat disruption
		blinds and perhaps spotting	or wildlife/human
		telescopes. Final design	confrontation.
		will be developed with	
		guidance from ADF&G	
		biologists.	



DENALI STATE PARK

Master Plan

Figure 12

FACILITIES

- Denali State Park Boundary
- Major Development Nodes
- Proposed Facilities
- Proposed Facility Access Roads
- Existing Scenic Overlook
- Proposed Scenic Overlook
- Existina Picnic Area
- Existing Campground
- Proposed Campground
- Existing Park Maintenance Facility
- Existing Trailhead
- Proposed Trailhead
- Existing Trails Recommended Trail
- Proposed Remote Campsites (General Locations)
- Proposed Raft Put- In & Take- Out
- Proposed River Boat Docking
- Proposed Train Shelter
- Existing Public Use Cabin Proposed Public Use Cabin
- Proposed Bridge/ Hand Cable Tram

Park Headquarters, Storage Yard, Housing, Patrol Cabin

If the South Denali Visitor Complex is built along the Parks Highway, then park offices and storage will be accommodated on that site. However, if the South Denali Visitor Complex is not constructed, then park headquarters and storage yard improvements would continue to be needed at the existing Byers Creek facility along the Parks Highway that supports Denali State Park operations.

Some ranger, shop and storage yard facilities are located at the Byers Creek site rather than the Byers Lake campground area in order to reduce noise and visual impacts on visitors. Facilities currently at the site include a rustic headquarters cabin, outdoor storage area, and a shop building with a dry storage area for year-round maintenance, water well, communication facility and generator. These facilities are minimal and improvements are recommended. New facilities should be designed to be in character with the other structures in the headquarters complex. Improvements recommended include:

- Fenced security yard for short- and long-term storage of vehicles, equipment and materials including an area for ADOT/PF equipment and materials.
- Improved outdoor covered storage.
- Improved communications capabilities.
- Individual cabins for full-time rangers.
- A multi-unit dorm-style housing structure for volunteer, seasonal and research personnel.
- Restroom and shower facilities for park personnel.
- Designated helicopter landing zone for emergency, research and park management use.

Should the South Denali Visitor Complex proposals be implemented, then the majority of facilities would be located at the Parks Highway Visitor Complex and the purpose of the Byers Creek facilities will be converted from the park's primary maintenance yard to a facility providing housing for seasonal, volunteer, and research personnel with a limited maintenance area for ADOT/PF equipment and materials storage.

A remote patrol cabin is located on Canyon Creek (a tributary of Long Creek) north of the Peters Hills. This cabin shall continue to be managed and maintained for administrative purposes.

Proposal	Management Objectives	Facilities	Justification
Continue to operate the	Provide necessary facilities	Fenced security yard,	Existing facility does not
Byers Creek headquarters	to support State Park	individual cabins, multi-	meet needs. Storage is not
/maintenance/storage	operations.	unit dorm-style housing,	protected or centrally
yard/hosing complex. If		restroom & shower	located, and encroaches on
the South Denali Visitor		facilities, helicopter	Byers Creek. There is
Complex is built, shift		landing zone, improved	presently no appropriate
some of the functions to		outdoor storage and	housing for volunteer or
that facility.		communication	seasonal help. No well or
		capabilities.	electrical generation.
Canyon Creek remote	Provides administrative	Continue to manage and	Patrol cabin provides
patrol cabin.	site to provide shelter and	maintain small cabin for	shelter and storage site for
	store gear in remote	administrative purposes.	patrol, research and other
	portion of the park.		park staff in this remote
			part of the park.
Create storage area for	Provide centrally located	Secured equipment storage	The Byers Creek facility is
ADOT/PF equipment and	facilities to support	and area for materials such	centrally located for
materials.	ADOT/PF maintenance	as sand.	ADOT/PF purposes.
	activities.		Storage space there would
			create efficiencies for local
			road maintenance of the
			Parks Highway, existing
			State Park facilities, and
			the new visitor facility.

Camping Facilities

Campgrounds in this region are utilized by in-state and out-of-state visitors, with the heaviest use from residents of the railbelt region. In recent years the existing Byers Lake facilities have been used at or above design capacity. Trailheads, waysides, gravel pits and picnic areas have served as spillover campgrounds.

Three major factors have led to the recommendations for camping facilities: demand for campsites continues to grow, exceeding the available supply; existing facilities do not provide the diversity of campsite types desired by park users; and existing facilities are in severe need of rehabilitation.

The following campground improvements and new camping facilities are recommended:

- Rehabilitate Byers Lake drive-in campground.
- Rehabilitate Byers Lake walk-in campsites on east side of lake by providing new picnic tables, developing a covered group cooking facility, and moving food lockers by cooking facility. Campers would be required to cook, store and eat food by the cooking facility to reduce bear problems.
- Develop group campground near Byers Lake with 10-15 tent pads that could be reserved in advance.
- Develop a campground adjacent to the proposed parking lot at mile 134.6 of the Parks Highway associated with the South Denali Visitor Complex. The campground would include restrooms, a camp host site, ten tent sites and 25 RV sites, covering approximately 19 acres total.
- Develop remote campsites at designated locations on the Curry-Kesugi Ridge trail system and at Blair Lake for resource protection and user safety.
- Develop campsites accessible by railroad, riverboat or raft along the Susitna River.
- Develop campground loop road at Denali View North Scenic Overlook with individual sites just north of and connecting to the existing parking area.

Proposal	Management Objectives	Facilities	Justification
Rehabilitate existing Byers	Improve existing facilities.	Campsites need new picnic	Maintenance of existing
Lake campground.		tables, benches, barriers,	facilities has been deferred
		parking signs, fire pits and	due to funding shortfalls.
		tent pads. Access road	Tent areas need leveling
		needs improvement.	and enlargement.

Proposal	Management Objectives	Facilities	Justification
Group campground near Byers Lake.	Provide camping facilities designed for organized groups on a reservation basis. Group campsite would eliminate displacement of other users from single campsites by large groups and reduce noise in the campground.	Integrated campground with multiple tent pads (10-15), central fire pit and grill. Small covered shelter.	There are no existing group campsites in the park. Groups either don't visit the park or use individual sites, which displaces individual users. Proximity to Byers Lake would provide opportunities for water-related activities, such as canoe training. Group campground should not be located on the point.
Byers Lake walk-in/canoe- in campground on east side of lake.	Provide an alternate camping opportunity adjacent to Byers Lake.	Rehabilitate campsites by providing new picnic tables, developing a covered group cooking facility, and moving food lockers by cooking facility. Campers would be required to cook, store and eat food by the cooking facility to reduce bear problems.	Rehabilitate the existing campground and reduce bear problems.
Develop campsites at Denali View North Scenic Outlook. Susitna river remote	Develop additional overnight facilities for car and RV camping along the Parks Highway.	Develop a campground loop road with individual sites just north of and connecting with the existing parking area. See the section	Currently RVs and cars park overnight at this overlook in the large parking area. The current design does not provide for individual campsites in a rustic setting.
campsites.		Developments along the Alaska Railroad later in this chapter.	
Remote campsites on the ridge trail system between the north end of Kesugi Ridge and Blair Lake.	Minimize impact of backcountry camping within the sensitive alpine environment. Control waste disposal. Reduce encroachment into important habitat areas. Improve bear/human safety.	Up to 10 remote campsites, each with 3-4 sites, pit or vault toilets, hardened tent sites or platforms, and anchored metal bear caches.	Alpine areas are very sensitive. Improved or designated remote campsites at appropriate locations along the trail system will minimize environmental damage from random camping. Campsites will have pit toilets (or vault toilets where waste is carried out) intended to reduce signs of human waste and water quality problems along the trail. Where feasible these campsites should be sited so as not to degrade the viewshed.

Proposal	Management Objectives	Facilities	Justification
Campground adjacent to	To provide increased	Develop a 10 tent/25 RV	This campground would
the proposed parking lot at	camping opportunities	site campground with	add to the current
mile 134.6 of the Parks	associated with the South	restrooms and a camp host	inventory of sites in the
Highway associated with	Denali Visitor Complex.	site.	park and enhances the
the South Denali Visitor			South Denali Visitor
Complex.			Complex.

Public Use Cabins and Shelters²⁹

Public use cabins and shelters have been well received in other units of the State Park System by providing a style and quality of overnight accommodations between campgrounds and commercial hotel/motel lodging. They are especially popular in the winter and spring for cross-country ski touring, snowmachining and snowshoeing.

Siting must be done carefully so they are not prominently visible and to avoid detracting from the wilderness experience of other park users. Public use cabins should not be located in alpine areas.

Locations in the table below are preliminary, and subject to further study and review.

Provide variety of	Public use cabins and	D '11' 11'
overnight accommodations. Provide year-round shelters for emergency purposes, research bases, hiking loop trips, winter and spring cross-country ski, snowmachine and snowshoe touring.	shelters in various locations along trails each with pit toilet, fire pit, and possibly bear-proof cache. May also be located in conjunction with raft put-in/pullout points and train stop shelters. General locations: - along Susitna River, some associated with the ARR - along Chulitna River - along the Tokositna River including Home Lake - on bench behind Byers Lake - Lucy and Spink lakes - along Kesugi and Curry ridges, located on spur trails so as to minimize impact to users of the main trail - additional cabins around Byers Lake	By providing public use cabins and shelters, the park is more accessible to a wider range of users. They also provide additional opportunities for overnight stays in the park in remote locations in the winter. A cabin/shelter network would expand cross-country ski touring, snow machining, and snowshoeing in the park. Cabins also support park maintenance, research, and management activities. Public use cabins would be available through a reservation system. Shelters may be on a first-come, first-served basis.
	Byers Lake - along the bluff just north of the Denali View North	
	research bases, hiking loop trips, winter and spring cross-country ski, snowmachine and	research bases, hiking loop trips, winter and spring cross-country ski, snowmachine and snowshoe touring. Description of cache. May also be located in conjunction with raft put- in/pullout points and train stop shelters. General locations: - along Susitna River, some associated with the ARR - along Chulitna River - along the Tokositna River including Home Lake - on bench behind Byers Lake - Lucy and Spink lakes - along Kesugi and Curry ridges, located on spur trails so as to minimize impact to users of the main trail - additional cabins around Byers Lake - along the bluff just north

²⁹ Also see the next section, *Developments along the Alaska Railroad*.

Developments along the Alaska Railroad

The Alaska Railroad (ARR) skirts the eastern boundary of Denali State Park and provides excellent access for hiking, camping, sightseeing, fishing and floating the Susitna River. At whistle stops along the railroad, including at Curry, Gold Creek, Indian River Canyon, and the Parks Highway, facilities are proposed that would enhance visitors' experiences of both the railroad and the park.³⁰ Train stop shelters, boat landings, campsite facilities and trails that are fairly minimal in scale, would facilitate the intermodal exchange of passengers between trains, boats and hiking. Because visitors would be spending time in this location waiting for transport, often in inclement weather, shelters are proposed. Public use cabins might also be built at or adjacent to whistle stops along the railroad. Nature trails and interpretive signs could be developed at these locations. Some of these facilities would be constructed on State Park land located along the Susitna and Indian rivers and some would be within or adjacent to the Alaska Railroad right-of-way. Facilities on ARR land could be designed, built, and operated by State Parks through a cooperative agreement.

Proposal	Management Objectives	Facilities	Justification
Train stop shelters.	Provide small covered facilities to be used as drop-off/pick-up points along rail corridor. Provide staging areas for river and hiking trips. Serve as emergency shelters.	Shelters or small cabins with associated pit toilets. Preliminary locations would be at the four whistle stops mentioned above.	Train shelters can serve a variety of functions year-round, including trip staging, research base, and emergency shelter. Possibly associated with and in proximity to public use cabins.
Nature trails and interpretive facilities.	Develop additional opportunities for short walks and natural/cultural history interpretation adjacent to the ARR.	Develop nature trail and interpretive signs/kiosks at the four whistle stops.	Provide enhanced visitor experience along the railroad.
Public use cabins.	Provide enhanced visitor experience along the railroad.	Public use cabins and associated fire rings and pit toilets at the four whistle stops or other locations along the railroad.	Provide for additional opportunities for overnight stays in and adjacent to the park, both in summer and winter.
Boat landings. Develop a boat landing on east side of the Susitna River at Curry and at Gold Creek.	To provide a safer and more easily accessible facility for visitors to transition between the railroad and boats on the Susitna River.	Develop boat landing and trails by Curry and Gold creeks. Improvements would also facilitate launching of boats carried on the train.	The current lack of good footing along the bank and a level trail between the railroad and the river presents safety concerns that a developed boat landing would alleviate.

³⁰ Locations listed are subject to further study and review.

Chapter 8 – Facility Recommendations

Proposal	Management Objectives	Facilities	Justification
Susitna River remote campsites.	Provide campsites accessible by rail/ boat/raft along the Susitna River. Provide trailheads for spur trails to connect with ridge trail system.	Develop designated campsites along Susitna River at whistle stops and possibly other locations, each with 6-12 tent sites, pit toilet, fire pit, and bear cache. Located to avoid conflict with local residents and wildlife.	The Susitna River is heavily traveled by riverboats, rafts, and canoes. Campsites will offer new camping opportunities while controlling litter, waste, and conflicts with wildlife.
Footbridge or handtram crossing the Susitna River.	To provide additional hiking opportunities on the east side of Curry Ridge.	Develop a pedestrian connection between the railroad stop at Curry and the proposed trail on the west side of the river connecting to the Curry Ridge trail system.	To provide the opportunity to hike from the historic Curry train stop to the Curry Lookout, South Denali Visitor Center and the Curry Ridge trail system.
Trails and trailheads.		See the <i>Trails and Trailhead</i> section later in this chapter for facilities of this type proposed along the ARR.	

River Access

Rivers are among the most dominant natural features in Denali State Park. The Susitna, Chulitna and Tokositna rivers are major elements of the park's landscape and provide a number of recreational and interpretive opportunities.

The Susitna is a large, swift river with good rafting and excellent jet boat opportunities. To realize the river's recreational potential, it may be necessary to develop modest pick-up and drop-off boat landings at the Gold Creek Bridge and at Curry. These would improve river access and provide river recreation opportunities to less mobile or older individuals. Raft take-out/put-ins are also recommended along the Susitna River adjacent to the Alaska Railroad. In particular, combining an improved Lower Troublesome Creek Trail project with a raft takeout would provide the opportunity for floaters to take out earlier than points along the river further south.

The Chulitna River flows the length of the park in a southerly direction, generally parallel to the Parks Highway. It offers excellent river rafting, scenic and wildlife viewing. The Chulitna is presently rafted by some guided tours and individuals, but access to put-ins and take-outs is difficult. For this reason, the number and diversity of users are limited. To expand opportunities for half-day, full-day and overnight raft trips and to protect public safety, raft put-ins and take-outs are recommended at four locations on the Chulitna River.

There is currently an undeveloped river take-out/put-in below the Chulitna River Bridge at mile 132. Unfortunately, the only public land to access this site is on a steep trail within the ADOT/PF right-of-way that requires crossing the guardrail and the Parks Highway to access the parking area on the opposite site of the highway. If the Troublesome Creek river take-out/put-in is developed, no additional improvements to the mile 132 site are recommended. Specific locations for the put-in and take-out points should be selected in coordination with local landowners, river users and guides. River safety and condition information should be made available at major access points.

Proposal	Management Objectives	Facilities	Justification
Susitna River access points at Gold Creek Bridge and Curry.	Provide safe raft pick- up/drop-off and boat docking areas for rafters and riverboat travelers and residents. Enhances multi- modal transportation.	Boat docking facility and river put in/take outs for rafts, with protected eddy and ramp. Utilize train stop structure for staging area.	Would permit safe on- and off-loading, broadening the river recreation opportunities available to park visitors. Encourage use of different transportation modes. Confer with local residents to mitigate impacts.

Chapter 8 – Facility Recommendations

Proposal	Management Objectives	Facilities	Justification
Raft put-in/take-out points	Provide safe access to the	Small parking areas, with	Access to Chulitna River
on Chulitna River.	Chulitna River, located to	hardened trails leading to	for rafting is very difficult
	enhance river safety and	river. Possibly roofed	at this time, inhibiting
	allow partial day or full-	shelters and/or public use	wider use and enjoyment
	day float trip experiences.	cabins. Four sites along	of river. Developed access
	Increase user group access	Chulitna: 1 west of Byers	facilities increase safety for
	to the river.	Lake campground; 1 near	river users and create
		mile 132; 1 at mouth of	multi-seasonal use of other
		Troublesome Creek; 1 at	recreational facilities.
		Honolulu Creek (north of	
		the park).	

Trails and Trailheads

Denali State Park's limited trail system offers some of the best highway-accessible hiking, camping, scenic and wildlife viewing opportunities in Alaska. The ridge system trail, which follows much of the Curry-Kesugi ridge, is truly a wilderness experience. This plan reviews existing trails and trail facilities, recommends necessary changes, and identifies new opportunities for trail-based recreation.

The following modifications and new trail segments are intended to protect areas of significant wildlife habitat and provide a wider variety of opportunities for park users to experience Denali State Park. It is important that a range of day, overnight and longer trail trips are available.

Proposed Trails and Trailheads

Several new trails and trailheads are proposed for the park beginning along the Parks Highway and along the Alaska Railroad. Those associated with the South Denali Visitor Complex along Curry Ridge are described earlier in this chapter.

A trail and trailhead are proposed that would provide access to the Eldridge Glacier. The trailhead would be located north of the Pass Creek Trailhead. A suspension bridge or hand-tram over Coal Creek will be necessary. This proposal is considered a relatively low priority for development at this time. The proposal is subject to further review and study.

A winter trail and trailhead are proposed just inside the southern park boundary that would provide access to the Tokositna area for winter recreation activities. The parking lot would be along the highway and designed to be cleared in the winter.

The next trail would be a relocation of the existing Lower Troublesome Creek Trail that is heavily used for fishing. Because the existing trail is located in the Chulitna River floodplain, it has maintenance problems. The new trail would be relocated, if feasible without causing serious habitat encroachment and disturbance, to an area out of the floodplain and would facilitate launching of hand-carried boats on the river and better access to fishing.

The next new trail would be a replacement of the existing Upper Troublesome Creek Trail. In analyzing wildlife habitats and the history of incidents, it is clear that the Troublesome Creek trail (from the trailhead to the waterfall) transects one of the highest bear concentration areas in the park. Troublesome Creek is an anadromous fish stream that supports several salmon runs. The stream itself is an attractive boulder-strewn waterway. Bears, both grizzly and black, congregate or travel along the creek as they feed on salmon. Noise created by the stream, combined with thick vegetation, make it difficult for both bears and humans to recognize the others' presence. In addition, the trail is difficult to maintain because of thick alders and does not present the shortest route to scenic alpine areas. A new trailhead and ridge connector trail should be developed in the area of the "RCA Tower Hill" just north of the existing trail. This new route directs hikers away from the Troublesome Creek drainage while still enabling

opportunities for two- or three-day loop trip. Utilizing the existing road access to the tower facility reduces the number of driveways onto the Parks Highway and avoids new disturbance to natural areas. If this new trailhead and trail is developed, the Troublesome Creek Trail should be abandoned.

Smaller proposed trailheads along the Parks Highway (see Figure 12) include one that provides access west of Veterans Memorial to a proposed raft put-in/take-out on the Chulitna River and one for the proposed Pass Creek Falls Trail that would originate at a wayside on the west side of the Parks Highway. The Pass Creek trailhead is intended to serve a one-mile trail that would provide viewing of the waterfall on Pass Creek. An overlook should be developed over the creek to permit viewing of the falls.

Three new trailheads and associated trails are proposed along the Alaska Railroad at Curry, Gold Creek and Indian River Canyon that would offer additional trail loop alternatives, as well as provide access to the Curry and Kesugi ridge trail system from the Alaska Railroad. The trailheads at Curry and Gold Creek could also be accessed by boat. The trail originating from the west side of the Susitna River at Curry could also be accessed from a pedestrian bridge or hand-tram across the river. Finally, two loop trails off the northern end of the Kesugi Ridge Trail are proposed that provide access to High Lake and other alpine areas.

Proposed Improvements and Modifications to Trails and Trailheads

Many of the existing trails and trailheads are in need of maintenance and improvements to better serve the growing recreational needs of visitors to the area and to protect the habitat. Improved signage at trailheads and along trails would provide environmental education opportunities and allow users to better follow trails especially in adverse conditions. A map describing allowable activities and depicting recreational opportunities and land ownership in the Peters Hills area would promote park resources while protecting park and private property and help prevent user conflicts.

The Byers Lake and Veterans Memorial area facilities receive heavy use and may need to be expanded in the future. Trailheads at Byers Lake, Coal Creek and north of Ermine Lake will need to be evaluated periodically to insure that they can accommodate growing visitation with adequate vehicle parking and sanitary facilities. Continued upgrades and maintenance for the Byers Lake Trail will be necessary to provide for safety and easy walking. The Byers Lake suspension and outlet bridges receive heavy winter snowloads that cause damage and require repair and necessitate design modifications.

Proposal	Management Objectives	Facilities	Justification
Existing Trailheads. Located at Byers Lake, north of Ermine Lake and Coal Creek.	Continue to maintain, and expand as need arises, these three existing trailheads that provide access to trails connecting with the Curry-Kesugi Ridge trail system.	Adequate parking, vault toilets and information kiosks.	Provide parking, kiosks and sanitary facilities for trail users. Facilities also used by Parks Highway travelers as waysides. In the future, they may also serve as stops for a park shuttle associated with the South Denali Visitor Complex.

Proposal	Management Objectives	Facilities	Justification
Upper Troublesome Creek Trail and Trailhead. Consider abandoning existing Troublesome Creek Trail between Parks Highway and Ultima Pool, waterfall, and relocating it to avoid bear concentrations. Develop new trail and trailhead up	Reduce human/bear confrontations and improve visitor safety. The relocated trail will also provide more direct access to scenic alpine areas.	Existing trailhead has 12 parking spots, vault toilet and kiosk. New trail up RCA Tower Hill: trailhead parking and vault toilet, locked gate, possible revegetation in future. Existing trail: close trailhead, let trail revert to game trail.	The Troublesome Creek Trail travels through bear concentration areas and there have been several human/bear encounters, some resulting in human injuries.
RCA Tower Hill. Veterans Memorial Trail and Trailhead. Trailhead west of Veterans Memorial with trail that provides access to Chulitna River.	Provide safe access to a proposed raft put-in/take-out on the Chulitna River.	Small trailhead with parking area and hardened trail to the river.	This would provide additional recreational opportunities in the Byers Lake area and access to the river for rafting that is currently difficult to achieve.
ARR Connecting Trails. New Indian River Canyon, Gold Creek and Curry rail- accessed trailheads, with new trails connecting to Curry and Kesugi ridge trail system.	New trails would offer additional trail loop alternatives, as well as provide access to the ridge trail from the east via the railroad.	Trails from Indian River and west side of Susitna River across from Curry. Covered shelters at trailheads with backcountry campsites and pit toilets.	Will permit additional ridge trail access, and new options for loop trips. Will enable train passengers to travel the park's trail system.
Byers Lake Trail. Continue to make minor upgrades to the loop trail around Byers Lake.	Trail provided easy and pleasant walking experience around Byers Lake by campground and day users.	Make minor upgrades to the loop trail where the trail is rough, steep, wet or is becoming overgrown.	Provides easy trail around lake, more points for bank fishing.
Byers Lake Suspension Bridge and Byers Lake Outlet Bridge.	Continued upkeep of two bridges, perform major repairs, reduce winter snow damage.	Suspension bridge: significant repairs needed from winter snowloads. Replace decking with new design so snow-loads don't accumulate (or remove decking in winter). Byers Lake Outlet Bridge: minor repairs and maintenance as needed.	Bridges allow for complete loop trail around lake. Both are destinations and scenic viewpoints.
Pass Creek Falls Trail and Trailhead. Trail to Pass Creek Falls and overlook.	Provide short, scenic walking/ hiking opportunity.	Extend existing parking area and develop new medium-standard trail, approximately one-mile long. Develop an overlook over the creek that provides viewing of the falls.	Provides a new opportunity for walking, hiking, and landscape viewing that is accessible to users of all abilities.

Proposal	Management Objectives	Facilities	Justification
Lower Troublesome Ck. Trail relocation.	Provide access to Chulitna River that is out of floodplain and a location to launch hand-carried boats.	Relocate the existing trail if feasible without significant habitat encroachment and disturbance. Develop to a standard that allows transporting hand-carried boats for launching.	Existing one-mile trail is heavily used for fishing, but has maintenance problems due to its location in the Chulitna River floodplain.
Winter Trailhead. Winter trailhead and route west of Chulitna River. Winter parking and pullout along Parks Highway.	Facility supporting cross- country ski touring, snowmachining and snowshoeing in the Tokositna area.	Parking lot and trailhead facility, with 10 parking spaces, designed to be cleared in winter.	Promotes winter recreation activities in this area. Provides good access and views of the mountain. The need for this trailhead may be precluded if a winter trailhead is developed south of the park at Mile 121 or 131.
Improved Signage. Increase signing of trail system.	Provide education and route guidance for trail users.	Signs at trailheads and at intervals that allow users to follow trail in adverse weather conditions.	Well marked trails provide increased safety to users.
High Lake Trail System. High Lakes area, new trail loops and remote campsites.	Provide additional hiking and camping opportunities on Kesugi Ridge.	New trail loops and remote campsites. Accessed by the Little Coal Creek Trail and Kesugi Ridge Trail system.	The north end of Kesugi Ridge provides views of Denali, the braided Chulitna River, Broad Pass, Eldridge Glacier, and the alpine areas of Kesugi Ridge.
Create a map showing existing recreational opportunities in the Peters Hills area including a map of private property and mining claims.	Educate the public on park resources, prevent conflict among users, and avoid trespass.	A map showing land ownership, recreation opportunities, and a description of allowable activities.	Protects resources in and adjacent to the park by concentrating use onto hardened surfaces. Promotes use of the park while protecting private property and mitigating conflicts in the area.
Trails and trailheads associated with proposed Visitor Facility Complex.		See South Denali Visitor Complex section for more information.	
Eldrige Glacier trail and trailhead.	Provide access to the Eldrige Glacier.	Trail, trailhead, suspension bridge or hand-tram.	The Eldrige Glacier provides a unique interpretive opportunity to have an up close experience with a glacier.

Highway Pullouts

A significant amount of the use of Denali State Park will continue to occur at pullouts along the Parks Highway, as travelers enjoy mountain views and take short breaks for rests, picnics and walks. Some of these allow overnight camping, others serve as trailheads, and some include kiosks and nature trails. Since the Management plan was adopted in 1989, additional waysides have been constructed along the highway. Veterans Memorial³¹ facilities have also been greatly expanded during this time. Additional improvements to these waysides and outlooks are proposed in the following table. Some of these proposed improvements would provide for additional overnight parking while others involve minor upgrades. A few new waysides/trailheads are proposed. DPOR will continue to work with ADOT/PF to insure that waysides and pull-outs are located and designed to accepted safety and design standards. Sight distances on the roadway adjacent to pullouts will continue to be maintained through brushing.

Proposal	Management Objectives	Facilities	Justification
Denali View South.	Provides a high-volume	This facility replaced the	This is currently the most
	facility for mountain	Ruth Glacier Overlook	heavily visited scenic
	viewing and camping.	which was located on a	outlook in the park. The
		dangerous turn with	facility is used for both day
		limited sight distances.	and overnight use.
		New facility includes	Because of the large area
		parking spaces for 30	needed to accommodate
		vehicles including pull-	parking, the site has little
		throughs for buses and	additional flat terrain to
		RVs, 9 campsites, 2 vault	build more campsites. No
		toilets, ¼ mile nature trail	major improvements are
		to a panoramic viewpoint	proposed at this time.
		of the Alaska Range,	
		Tokositna Mountains and	
		Chulitna River, interpretive	
		signs/kiosk and	
		campground host site.	
Denali View North.	Provides a high-volume	Facility includes parking	Existing facilities are very
	facility for mountain	spaces for 35 vehicles	popular for both day and
	viewing.	including pull-throughs for	overnight use. Provide for
		buses and RVs, 10 vehicle	additional campsites and
		campsites, 4 tent sites,	possibly public use cabins
		2 vault toilets, short nature	on bluff to north of
		trail, panoramic viewpoint	proposed campground
		of the Alaska Range,	loop.
		Tokosha Mountains and	
		Chulitna River, interpretive	
		signs/kiosk and	
		campground host site.	
		Additional campground	
		loop and public use cabins	
		proposed.	

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³¹ Improvements to the Veterans memorial are included in the next section.

Proposal	Management Objectives	Facilities	Justification
Troublesome Creek Picnic Area.	Provide for a number of day-use activities.	Continue to maintain this popular wayside with large parking area, picnic tables and vault toilets. Serves as a trailhead to the Lower Troublesome Creek Trail. Continue to maintain wayside, install "Noovernight camping" signs.	This is a popular rest stop used for parking, picnicking and access for fishing and launching rafts at the mouth of Troublesome Creek. See Trails section for proposed Lower Troublesome Creek Trail relocation project. Discourage overnight camping because of high bear concentrations during the salmon run.
Horseshoe Creek Scenic Overlook.	Provides scenic view and fish and wildlife viewing opportunities.	This is small site was an old gravel pit with a short connecting road. It's located on the east side of the road and overlooks Horseshoe Creek. Provides bear and salmon viewing opportunities.	This site needs minimal improvements except for brushing.
Plowing of Waysides.	Improve highway safety, facilitate winter use of the park.	Continue to work with ADOT/PF to insure that waysides that receive winter use, particularly the Veterans Memorial, be plowed to provide adequate parking to keep parked vehicles off the highway.	Each winter, the park experiences increased winter visitation, particularly in the Byers Lake / Veterans Memorial areas. Snow accumulations along this section of the Parks Highway can be extreme. Without plowed parking, use of the park and waysides in winter would be significantly reduced.
Brushing of Overlooks and along the Highway.	Maintain vistas along the Parks Highway in the park.	Continue to brush overlooks and along the highway to maintain views of the Denali, the Alaska Range and the Chulitna River.	Enhance viewshed along the highway and outlooks.
Trailheads.		For pull-offs that primarily serve as trailheads, see the <i>Trails and Trailheads</i> section earlier in this chapter.	

Other Recreational Facilities, Improvements in the Byers Lake and Other Areas

There are several facility proposals that would substantially improve recreational access and enjoyment at relatively small cost. Most of these are described in other sections of this chapter. This section recommends improvements in the Byers Lake area that are not addressed under other sections in this chapter.

The Veterans Memorial originated as a wayside adjacent to the Byers Lake Campground and has expanded over the years to include a seasonally staffed visitor center, covered kiosk area, interpretive signs, overlook deck, large parking area, walkways, vault toilets, Byers Lake connecting trail and caretaker facilities. Visitor center staff answer questions, hand out brochures and sell books relating to the area. The facility also has radio communications to facilitate emergency response. The visitor center is run by Friends of State Parks – Mat-Su under a cooperative agreement. The National Park Service funds a portion of the operation.

The Byers Lake beach area below the existing overnight camping area should be rehabilitated with gravel and sand to create a more appealing beach activity area. The boat launch at Byers Lake also should be evaluated to insure that it provides adequate opportunity to launch small boats.

Historic structures in the park should receive regular maintenance. The Curry Lookout is of particular concern, especially if it receives increased visitation if the South Denali Visitor Complex is implemented.

Proposal	Management Objectives	Facilities	Justification
Veterans Memorial.	Meet the demands of increased visitation to the wayside and public inquiries about opportunities along the Parks Highway.	Expand and improve visitor center to meet increasing visitation. Improve traffic flow and parking as needed.	Increase the capacity of this popular wayside and visitor center.
Byers Lake Beach. Rehabilitate Byers Lake beach.	Provide an attractive beach area for lakeside recreation.	New, clean gravel and sand for existing cleared beach area.	After intensive use over a several years, the Byers Lake beach needs rehabilitation. This proposal will improve the beach area and make it more attractive and useable.

Chapter 8 – Facility Recommendations

Proposal	Management Objectives	Facilities	Justification
Protect Curry Lookout and other historic structures.	Protect historic structures while providing opportunities for education and interpretation.	Receive regular maintenance to preserve the historic integrity of these structures. Education/interpretation efforts should focus on the structures' preservation and significance. If a new visitor center is built nearby, agencies would restore the Curry Lookout and stabilize the foundation.	Protect historic structures while providing opportunities for education and interpretation.
Byers Lake boat launch/parking.	Provide opportunities to launch small boats.	Evaluate the need to improve the existing boat launch at Byers Lake.	Some visitors find it difficult to carry boats the 50 yards from the parking area to the water.

Chapter 9 IMPLEMENTATION

Management Recommendations
Phasing of Facility Recommendations
Implementation Measures for the
South Denali Visitor Complex Proposals
Mitigation
Site Planning
Plan Review, Modifications

Chapter 9

IMPLEMENTATION

This plan will be implemented in accordance with a prescribed program and schedule. It should be emphasized, however, that plans are guidelines and are intended to be flexible so as to respond to changing conditions, such as new resource data, shifts in patterns of use patterns and demands, and availability of funds.

Management Recommendations

Implementation of management recommendations should begin immediately and proceed as opportunities allow, with the following proposals given high priority:

- Acquisition of inholdings (see page 68).
- Cooperation with the Matanuska-Susitna Borough to strengthen the provisions of the Denali State Park Special Land Use District (see Appendix D and page 76).
- Cooperative Management Agreements with appropriate entities (see page 76).
- Work with ADF&G and the Board of Game to establish wildlife management practices and regulations for enhanced wildlife viewing (see page 69).

Phasing of Facility Recommendations

The facility recommendations of this plan are intended to be implemented in phases, over a period of several years.

Implementation Measures for the South Denali Visitor Complex Proposals

This section is included to emphasize the importance of coordinated implementation and to illustrate the commitments being made by the planning partners, individually and collectively. Implementation would be closely coordinated to meet state, NPS, borough and local community needs. The partnership team would serve as an implementation and monitoring group, with substantial community involvement, to evaluate the progress of implementation activities and associated mitigation actions and to keep these functions linked. The partnership would be strongly committed to continued citizen/public meetings and other means of public involvement throughout plan implementation.

Implementation would occur under a logical and cost-effective phasing scheme. The partners are committed to developing a feasible funding strategy, which is key to the implementation of a south side plan.

Mitigation

This section describes measures that will be used to minimize the adverse effects of facility construction and later activities associated with South Denali Visitor Complex Proposals. These mitigating measures do not apply to facilities or actions not included under the South Denali Visitor Complex Proposals.

General Considerations

During the main summer season, State Parks will restrict vehicular access on the new access road to the visitor center. Vehicular access will be restricted to buses and administrative vehicles in order to minimize the effects of traffic on the viewshed, wildlife, air quality, and quality of the visitor experience. During off-hours when buses are not running and traffic is expected to be minimal, the road may be open to private vehicles. This option will provide opportunities to off-hour visitors without incurring the expense of running shuttle buses additional hours when demand is low. There are regulations already in place to mitigate impacts from uses that may be associated with the complex such. For example, the area is already protected by a no-camping buffer.³² Vehicles, with the exception of snow vehicles, are not allowed off established roads and parking areas in the park.³³

Construction will be restricted to the minimum area required. During all phases of construction, a project supervisor will review the work to ensure that work methods minimize impacts on lands near the construction site and that mitigating measures written into the contract are followed.

The visitor center and associated facilities will be simple in function, reflecting the wild setting. While detailed design solutions will emerge through subsequent planning, solutions will consider the effects of scale, natural/rustic appearance, materials, color, texture, continuity, furniture, and other factors related to the built environment that will contribute to the visitor experience and minimize visual and natural resource impacts.

Appropriate water and energy conservation technologies, sustainable practices, and materials recycling will be incorporated into the design and construction of the proposed facilities. For example, the visitor facility will be designed to absorb solar energy from the natural surroundings for light, heat and possibly power. To the extent practical, the visitor facility will be constructed with sustainable building materials.

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³² From 11 AAC 12.230.

³³ From 11 AAC 12.020 and 11 AAC 20.425.

Physical Resources and Aquatic Resources

Best management practices (BMPs) will be used during construction to minimize potential erosion and sedimentation. Silt fences and settling ponds will be in place during construction to protect water quality. Proper siting and treatment of human waste will occur to ensure levels of nutrients entering the water are minimal. BMPs to minimize spills and leaks during pumping of sanitary facilities (checking hoses and equipment prior to pumping, ensuring connections are tight, using drip pans or absorbents at connection locations) and checking of holding tanks on a regular basis to ensure integrity will also serve to minimize spills of sanitary waste to nearby water bodies. Construction BMPs such as use of hay bales to block turbid runoff and timing to avoid construction during high flow periods and the presence of anadromous fish will lessen the magnitude of construction impacts.

Impacts to soils may be mitigated by bank and ground stabilization using geotextiles or revegetation. Additional soil testing prior to construction will be required to determine specific construction methods and BMPs.

A program to reduce dust and soil loss will be instituted, as appropriate, for excavation, grading, construction, and other dust-generating and soil-disturbing activities.

Where feasible, local fill material, preferably from the original site, will be used for trail construction activities. Material excavated during trail construction will generally be used as fill in other trail segments or construction areas.

Vegetation and Wetlands

Vegetation removed during construction will be salvaged to the extent possible for use in restoring areas disturbed by construction.

A disturbed area revegetation plan will be formulated that will require the use of native species. Specifications for soil preparation, native plant/seed mixes, fertilizer, and mulching will be provided for all areas disturbed by construction activities. A monitoring plan will be developed and implemented to ensure revegetation is successful, plantings are maintained, and unsuccessful plant materials are replaced.

All facilities will be sited to avoid wetlands to the extent practicable. In areas with sensitive natural resources, such as wetlands, muskeg, or streambanks, increased caution will be exercised to protect these resources from damage caused by construction equipment, erosion, siltation, and other activities with the potential to affect these resources. Measures will be taken to keep fill material from escaping work areas especially near streams or natural drainages.

Trail routing should be designed to reduce the impacts on vegetation. Trails would also be designed and maintained to discourage social (informal, user created) trail development. Trails would be built along the easiest, most conveniently located routes to specific attractions given the natural terrain. The number of people expected to use the trail would also be considered, and the size of the trail adjusted accordingly to reduce the need for people to step off trails to let others pass. Various types of barricades could also be used to keep people on designated trails and, thus, reduce the potential for social trails.

The second aspect of trail development needed to reduce vegetative impacts is a commitment to annual maintenance of the trail system. Annual maintenance will reduce the potential for trail deterioration and additional vegetation loss from erosion, groundwater disturbance, trail widening, and slope failure. Maintenance reviews could also determine whether trail modifications are necessary to reduce the number of social trails that have developed or may develop.

Trails will be designed and constructed concurrently with the other facilities so that social trails will be less likely to form. Fragile wetland and alpine environments must be protected and the use of decks, boardwalks, and railings may be employed.

Wildlife

Agencies will adhere to the statewide timing guidelines for migratory bird nesting which were prepared by U.S. Fish and Wildlife Service. These guidelines represent time periods when vegetation clearing and other site preparation activities should be avoided. These site preparation guidelines will assist the partnership in compliance with the Migratory Bird Treaty Act.

In an effort to reduce wildlife conflicts and displacement, agencies will conduct vegetation surveys and a bear habitat assessment prior to facility construction. This information will be used in the design and construction phase of this project to properly site facilities away from high conflict zones. The agencies will work together to establish a baseline monitoring program for the park to study the effects of development on park resources. The Alaska Department of Fish and Game, the agency responsible for wildlife management in the park, will be an integral part of the design and construction phase of this project to assure that the facilities are sited in such a fashion to minimize the long-term impacts of development on park resources.

Measures will be taken to reduce the potential for bear/human encounters. Visitors will be educated on the proper behavior when recreating in bear country. Wildlife education and interpretation will be provided at the visitor center, campgrounds, and all new trailheads to reduce negative wildlife-human encounters. Use of bear-proof garbage containers will continue to be required around visitor centers, picnic areas, trails, interpretive waysides, and camping facilities in Denali State Park, and use of these containers may be required on private lands within or adjacent to Denali State Park. Backcountry users will be encouraged to carry bear-resistant food containers on state park lands. Trails or trail sections may be closed temporarily or during certain seasons to protect wildlife. As visitation increases, existing trails may be rerouted to further reduce the potential for bear/human conflicts.

To further reduce the chance of bear/human encounters, trail segments in high-density bear habitat will be kept as straight as possible, maximizing sight distances, and brushy vegetation would be cleared from trail edges and in areas around other visitor facilities. Where linear trail sections are not appropriate (e.g., due to an area being too wet to allow for a straight route), less densely vegetated sites will be selected. Areas of highly concentrated bear use such as salmon spawning streams will be avoided.

Cultural Resources

If any previously unknown archeological remains are discovered during construction, all work will be halted in the discovery area until the significance of the finding could be determined by cultural resource staff. For state actions, project planning must comply with state statutes that prohibit the excavation, damage, and removal of archeological and historic resources located on state land without proper permits. All projects should be coordinated through the Alaska Office of History and Archeology.

The Curry Lookout will be evaluated and repaired to ensure that the building is in stable and good condition. Preparation of a building condition assessment following the Secretary of the Interior's Standards for Rehabilitation will be conducted to provide appropriate guidance for making repairs while maintaining the historic integrity. Education/interpretation efforts will focus on the structure's preservation and significance.

The Curry Ridge Trail and associated features will be evaluated for potential eligibility for listing on the National Register of Historic Places.

Historic structures like the Curry Lookout will receive regular maintenance in order to preserve the historic integrity of the structure. Education/interpretation efforts should focus on the structure's preservation and significance. In addition, before a new visitor facility at the Parks Highway site would be opened, agencies would restore the structure and make sure the foundation of the Curry Lookout is stable and solid.

Monitoring

The interagency planning team is committed to improving the long-term protection of natural and cultural resources in the south Denali region. Monitoring is an essential component of resource management because it provides information on the relative success of management strategies.

Monitoring may be accomplished through formal research projects. Monitoring may be coordinated through the Central Alaska Network Monitoring Program and follow the National Inventory and Monitoring guidelines to enhance the efficiency and usefulness of the results. The Alaska Department of Fish and Game, the agency responsible for wildlife management on state lands, will be an integral part of the monitoring program for fish and wildlife resources on state lands. Land and wildlife management agencies will follow these general principles in implementing a monitoring program:

- Monitoring should integrate information about natural and cultural resources, including
 weather, air, land, water, soundscape, geoindicators, exotic plants, and other flora and
 fauna. These broad areas include monitoring for species listed under the Endangered
 Species Act; and activities subject to the Clean Water Act, Clean Air Act, and National
 Historic Preservation Act; and other laws, regulations, and policies.
- Monitoring should measure the impacts of actions on resources as identified in the Final South Denali Implementation Plan and Environmental Impact Statement.
- Monitoring results will provide managers with the information to determine whether a goal has been met and whether to continue or to modify the management direction.

- Monitoring will be periodically evaluated to ascertain whether the monitoring questions and standards are still relevant and would be adjusted appropriately.
- Some monitoring activities and projects may be discontinued and others added as knowledge and issues change with implementation.
- Monitoring should be conducted at multiple levels and scales.
- Existing and previous monitoring activities will be considered for inclusion in this program if they provide appropriate information and employ appropriate protocols.
- The monitoring program should involve a long-term commitment to gathering and evaluating data.
- Monitoring information will be made available using tools such as Synthesis, Geographic Information Systems Theme Manager, Natural Resources Database template, and interconnected web and distributed databases.

Site Planning

Site plans will be prepared prior to the actual construction of many of the facilities recommended in this plan. Detailed site analyses performed during site planning may indicate a need to make minor adjustments or revisions in the number and specific locations of the facilities.

Plan Review, Modifications

The dynamics of recreation use patterns and demands, as well as analysis of site-specific data associated with specific plan recommendations, will result in adjustments to the plan over time. If proposed adjustments are a major departure from the plan's intent, the director may determine the need to initiate a public review process.

This plan reflects the best efforts of the Division of Parks and Outdoor Recreation to analyze the natural resources of the park and to provide recreational/interpretive opportunities that do not significantly compromise the park's natural resources or character.

The planned outlook for the document is 20 years, with the realization that intermediate reviews and modifications may be warranted and are appropriate. The director may initiate a review at any time and it is strongly recommended that the plan be reviewed via a public process at least every 10 years.

The following procedure will be used for plan deviations and modifications:

1. <u>Periodic Review.</u> The division will coordinate periodic review of the Management plan when the Director considers it necessary and so directs. The decision to review the Management Plan may be triggered by:

- written public or agency requests for review;
- policy changes within the Division of Parks and Outdoor Recreation,
- availability of new data;
- availability of new technology, or
- changing social or economic conditions that place different demands on the park or affect the Division's capabilities.

The management plan review will include meetings, as appropriate, with the local advisory board, interested groups, the general public, affected agencies, the area superintendent and other Division of Parks and Outdoor Recreation personnel. The periodic review will lead to one of the following actions:

- no modification of the plan;
- modification of the plan; or the
- granting of a special exception.
- 2. <u>Modification of the Plan.</u> Plan modifications are of two types:
 - Minor changes These are changes which, if accomplished, would not cause a deviation from the original intent of the Management plan. Minor changes may be necessary for clarification, consistency, or to facilitate plan implementation. Minor changes do not require public review but should be coordinated with the area superintendent and appropriate staff.
 - Major changes These are changes which, if accomplished, would cause a deviation from the original intent of the Management plan. Major changes require public notice and review prior to adoption.
- 3. <u>Granting of a Special Exception.</u> Exceptions to the provisions of the Management plan may be made without modification of the plan. Special exceptions shall occur only when compliance with the plan is excessively difficult or impractical, <u>and</u> an alternative procedure can be implemented which adheres to the purposes and spirit of the plan.

The Division of Parks and Outdoor Recreation may make a special exception in the implementation of the plan through the following procedure.

- A. The person or agency requesting the special exception shall prepare a written finding which specifies:
 - the nature of the special exception requested,
 - the extenuating conditions which require a special exception,
 - the alternative course of action to be followed, and
 - how the intent of the plan will be met by the alternative.

- B. The Director will review the findings and issue a determination. If warranted by the degree of controversy or the potential impact, the director will hold a public hearing before reaching a decision.
- C. The decision of the Director may be appealed to the Commissioner of the Department of Natural Resources, whose decision will be final.

APPENDICES

Glossary
Acknowledgments
Bibliography
Statutes, Regulations & Management
Agreements for Denali State Park

Appendix A GLOSSARY

AAC. Alaska Administrative Code that includes state regulations.

ADA. Americans with Disabilities Act of 1990.

ADF&G. Alaska Department of Fish and Game.

ADOT/PF. Department of Transportation and Public Facilities.

APA. Alaska Power Authority.

ARR. Alaska Railroad.

AS. Alaska Statutes.

Airboat. A shallow draft boat driven by an airplane propeller and steered by a rudder (11 AAC 20.990).

Aircraft. Any motorized that is used or intended for flight or movement of people or goods in the air (11 AAC 12.340, 11 AAC 20.990).

BLM. Bureau of Land Management.

Boat or Vessel. A device that is used or designed to be used for the movement of people or goods in or on the water, whether manually or mechanically propelled, but does not include personal flotation devices or other floats such as inner tubes, air mattresses, or surf boards (11 AAC 20.990).

Camp, Camping. To use a vehicle, tent, or shelter, or to arrange bedding, or both, with the intent to stay overnight in a park (11AAC 12.340).

Campground. An area developed and maintained by the division which contains one or more campsites (11 AAC 12.340).

Campsite. Any space designated for camping within a campground (11 AAC 12.340).

Commercial Activity. The sale of, delivery of, or soliciting to provide, goods, wares, edibles, or services in exchange for valuable consideration through barter, trade, or other commercial means; a service offered in conjunction with another sale of goods, wares, edibles, or services, which service involves the use of state park land or water, is a commercial activity whether or

not it is incidental to, advertised with, or specifically offered in the original sale; all guide, outfitter, and transportation services are commercial activities if any payment or valuable consideration through barter, trade, cash, or other commercial means is required, expected, or received beyond the normal and customary equally shared costs for food and fuel for any portion of the stay in the park (11 AAC 12.340).

Developed Facility. Includes a building, a boat ramp, campground, picnic area, rest area, visitor information center, swim beach, trailhead, parking area, and a developed ski area (11 AAC 20.990 and 11AAC 12.340).

DEIS. South Denali Implementation Plan and Draft Environmental Impact Statement.

DNR. Alaska Department of Natural Resources.

DPOR. Division of Parks and Outdoor Recreation, a division of DNR.

Department. The Department of Natural Resources.

Director. The Director of the Division of Parks and Outdoor Recreation, Department of Natural Resources, or the Director's authorized agent (11AAC 12.340).

Division. The Division of Parks and Outdoor Recreation, Department of Natural Resources (11AAC 12.340).

DSP. Denali State Park including three associated State Recreation Areas.

Firearm. Includes a pistol, rifle, shotgun, revolver, or mechanical gas or air-operated gun (11 AAC 20.990 and 11 AAC 12.340).

Firework. An explosive device or combustible material used to produce lights, smoke, or noise for entertainment (11 AAC 340).

Guideline. A specific course of action that must be followed when a DPOR resource manager permits, leases, or otherwise authorizes use of state lands. Guidelines range from giving general guidance for decision-making or identifying factors that need to be considered, to setting detailed standards for on-the-ground decisions.

Hovercraft. A vehicle supported above the surface of land or water by a cushion of air produced by downward-directed fans (11 AAC 20.990).

Hydroplane. A speed boat with hydrofoils or a stepped bottom, so that the hull is raised wholly or partially out of the water allowing it to skim along the water at a high rate of speed (11 AAC 20.990).

Jetski. See "Personal Watercraft."

May. Same as "should." See should.

MSB. Matanuska-Susitna Borough.

Motorized vehicle. A motorized device for carrying persons or objects over land, water, or through the air, and includes automobiles, snowmachines, bicycles, off-road vehicles, boats, and aircraft (11 AAC 21.290).

NPS. National Park Service.

Off-Road Vehicle. A motorized vehicle designed or adapted for cross-country operation over irregular terrain, consisting of more than one drive wheel or track, having a gross vehicle weight less than 1,500 pounds or exerting less than 8 pounds per square inch ground pressure, and which is less than 88 inches wide (11 AAC 20.990).

Ordinary High Water Line. That line on the shore of a non-tidal river or stream that reflects the highest level of water during an ordinary year and is established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding area (11 AAC 20.990).

Park Unit. See "State Park Unit."

Parking Area. See "Road."

Permit. A written authorization to engage in uses or activities that are otherwise prohibited or restricted (11 AAC 18.200).

Personal Watercraft. A vessel that is (A) less than 16 feet in length; (B) propelled by a waterjet pump or other machinery as its primary source of motor propulsion; and (C) designed to be operated by a person sitting, standing, or kneeling on the vessel, rather than by a person sitting or standing inside it (11 AAC 20.990).

Road. For the purposes of 11 AAC 12.020, "road" or "parking area" means the traveled portion of a vehicular way or area maintained by the state for the purpose of allowing access or parking by registered highway vehicles.

Shall. Same as "will." See "will."

Should. States intent for a course of action or a set of conditions to be achieved. Guidelines modified by the word "should" state the plan's intent and allow the manager to use discretion in deciding the specific means for best achieving the intent or whether particular circumstances justify deviations from the intended action or set of conditions.

Snowmobile. A self-propelled vehicle (A) intended for off-road travel on snow; (B) having a maximum width of 46 inches and a curb weight of not more than 1000 pounds; (C) driven by one or more tracks in contact with the snow; and (D) steered by one or more skis in contact with the snow (11 AAC 20.990).

Snow Vehicle. A motor vehicle of 850 pounds or less gross vehicle weight, primarily designed to travel over ice or snow, and supported, in part, by skis, belts, cleats, or low-pressure tires (11 AAC 20.990 and 11 AAC 12.340).

State Park. Any land or water managed by the division (including Denali State Park and the Blair Lake, Tokositna and Indian River State Recreation Areas) (11 AAC 12.340).

State Park Unit. An individual or group of facilities, structures, or natural resources and lands that are managed by the division (11 AAC 12.340). A unit of the state park system (AS 41.21.026).

Structure. Something constructed or built in, or transported to, a state park unit, including a dock, cabin, floatcamp, building, shanty, or facility used for residential or commercial purposes; it does not include a vessel with overnight berthing whose primary use is not as a domicile, but for commercial or sport fishing, general recreational boating, or transportation (11 AAC 12.340).

Unit. See "State Park Unit."

Vehicle. Means a mechanical device for carrying persons or objects over land, water, or through the air, including automobiles, motorcycles, snowmachines, bicycles, off-road vehicles, motorized boats, and aircraft (11 AAC 20.990). "Vehicle" does not include non-motorized sailboats, canoes, kayaks, rafts, sailboards, hang gliders, gliders, or parasails (11 AAC12.340).

Vessel. See "Boat."

Weapon. Includes a bow and arrow, slingshot, crossbow, and firearm (11 AAC 12.340 and 11 AAC 20.990).

Will. Requires a course of action or a set of conditions to be achieved. A guideline modified by the word "will" must be followed by land managers and users. If such a guideline is not complied with, a written decision justifying the noncompliance is required.

Appendix B

ACKNOWLEDGMENTS

The Denali State Park Master Plan is the product of a variety of individuals and groups who deserve recognition.

Susitna Valley State Park Citizen's Advisory Board

Mary Anderson, Chair
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Glenn Goodman
Howard Carbone
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Appendix B - Acknowledgments

Finally, the participation of the public, with a diversity of values and opinions, has been a tremendous asset to this planning process. The vigorous exchange of views by reasonable people of many persuasions has hopefully resulted in a balanced plan which will enhance public use and enjoyment of the park while protecting its many special features.

Appendix C

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Appendix D

STATUTES, REGULATIONS & MANAGEMENT AGREEMENTS FOR DENALI STATE PARK

Park Enabling Legislation³⁴

Sec. 41.21.150. Purpose of AS 41.21.150 - 41.21.152.

The purpose of AS 41.21.150 - 41.21.152 is to restrict state-owned land and water described in AS 41.21.151 to use as a state park. Under AS 38.05.300, state land, water, or land and water containing more than 640 acres may be closed to multiple use only by act of the legislature. Because the area described in AS 41.21.151 exceeds 640 acres, AS 41.21.150 - 41.21.152 are intended to provide for the closing of the described land and water to multiple use in conformity with AS 38.05.300 and its designation as a special purpose area in accord with art. VIII, Sec. 7 of the Constitution of the State of Alaska.

Sec. 41.21.151. Denali State Park established.

The state-owned land and water and that acquired in the future by the state lying within the parcels described in this section are designated as the Denali State Park. This land and water is reserved from all uses incompatible with its primary function as park area. Land covered by AS 41.21.150 - 41.21.152 is that within the following described parcels:

- (1) Township 29N Range 6W, Range 5W, and that portion of Range 4W lying north and west of the Alaska Railroad right-of-way; Township 30N Range 5W and that portion of Range 3W and 4W lying north and west of the Alaska Railroad right-of-way; Township 31N Range 5W, Range 4W and that portion of Range 3W and Range 2W lying north and west of the Alaska Railroad right-of-way; Township 32N Range 4W, Range 3W and that portion of Range 2W lying north and west of the Alaska Railroad right-of-way; and Township 33N Range 4W, Range 3W and that portion of Range 2W lying west of the Alaska Railroad right-of-way, all in the Seward Meridian;
- (2) Township 29N, Range 7W; Sections 1-27 and 34-36, Township 29N, Range 8W; containing approximately 42,240 acres, all in the Seward Meridian.

³⁴ The Alaska State Legislature created a 282,000-acre Denali State Park (AS 41.21.150-152) in 1970, and in 1976 amended the boundary to add the upper reaches of the Tokositna basin, west of the old park boundary. Legislatively designated park acreage now totals around 324,240.

Sec. 41.21.152. Eminent domain prohibited.

The state may not acquire by eminent domain privately owned land for inclusion in the Denali State Park.

State Recreation Areas Managed as Units of Denali State Park

The following three State Recreation Areas (SRA) were added administratively to the Denali State Park Unit through Interagency Land Management Agreements (ILMA's) between the DNR Division of Mining, Land and Water and the DNR Division of Parks and Outdoor Recreation. The three SRA's are managed as part of the state park unit and addressed by this plan.

Blair Lake State Recreation Area

Established by management agreement, ADL 225371, to be managed as an additional unit adjacent to Denali State Park. Area is described in amended legal description of 2-21-1996 as: Township 28 North, Range 5 West, Seward Meridian Section 2: Blair Lake Section 3: N1/2 and Blair Lake, containing 400 acres, more or less. This assignment includes management of the water column of Blair Lake.

Indian River State Recreation Area

Established by management agreement, ADL 225372, to modify Denali State Park boundaries. Area is described by legal description of 10-24-1990 as: land between the Indian River and the Alaska Railroad right-of-way located within section 4, 8 and 9, Township 31 North, Range 2 West; and state-owned land North and West of the Susitna River located within Sections 16, 17 and 20, Township 31 North, Range 2 West, Seward Meridian including approximately 470 acres.

Tokositna State Recreation Area

Established by management agreement, ADL 225373, to be managed as an addition to Denali State Park. Area is described in legal description of 12-15-1994 as: Township 28 North, Range 6 & 7 West, Seward Meridian that state-owned land and water North of the right bank of the Tokositna River located within Section 6, Township 28 North, Range 6 West, Seward Meridian including the Tokositna River; and state-owned land and water north of the right bank of the Tokositna River located within Sections 1 & 2, Township 28 North, Range 7 West, Seward Meridian including the Tokositna River, containing 600 acres more or less.

Other Statutes that Apply Specifically to the Park

Sec. 41.21.022(4). Discharge of firearms.

The discharge of firearms during lawful hunting, trapping, and fishing is permitted within the boundaries of Denali State Park except that all or part of a state park, marine park, wildlife preserve, or recreation area may be closed to the discharge of firearms by regulations adopted by the department for purposes of public safety.

Zoning Statutes³⁵

Sec. 41.21.025. Zoning of private land within state parks.

- (a) The department may adopt, under AS 44.62 (Administrative Procedure Act), zoning regulations governing private property within the boundaries of state parks established under this chapter.
- (b) Land patented to or under interim conveyance to a regional or village native corporation under 43 U.S.C. 1601-1628 (P.L. 92-203, Alaska Native Claims Settlement Act) that falls within a state park boundary is subject to the zoning regulations provided for under (a) of this section only if the affected regional or village native corporation consents to or fails to reject the zoning regulations within 60 days from the date they are submitted to the affected corporation.
- (c) Uses existing on June 25, 1976 are not affected by zoning regulations adopted after June 25, 1976.

Regulations that Apply Specifically to the Park

11 AAC 20.400. Use of Weapons.

The use and discharge of a weapon for the purpose of lawful hunting or trapping is allowed in Denali State Park, except within one-half mile of a developed facility or the trail around the shoreline of Byers Lake, or within a quarter-mile of the Parks Highway between Mile 132 and Mile 170.³⁶

³⁵ Under Matanuska-Susitna Borough Municipal Code 17.17, lands within the state park were designated a Special Land Use District (SLUD). The area within the boundaries of the SLUD is zoned for recreational uses (Ord. 90-125, § 3 (part), 1991).

³⁶ Under 11 AAC 20.980 (1) and (2), the same restrictions apply to the Blair Lake and Tokositna State Recreation areas.

11 AAC 20.410. Aircraft³⁷.

- (a) The use of fixed wing aircraft is allowed in Denali State Park west of the Parks Highway and on Blair and Ermine Lakes.
- (b) Practice landings are not allowed.
- (c) A person may land a helicopter in Denali State Park if authorized by the director under 11 AAC 18.010.

11 AAC 20.415. Motorized Boats.

- (a) Except as provided by (b) through (d) of this section, the use of motorized boats is allowed in Denali State Park.³⁸
- (b) If a motorized boat is used on Byers Lake, the boat may only be powered by an electric motor.
- (c) The Tokositna River upstream from Pirate Lake is closed to the use of airboats between April 20 and July 10 annually unless authorized by the director under 11 AAC 18.010.³⁹
- (d) Jet skis and hovercraft are prohibited, except on the Susitna River.

11 AAC 20.985. Use of motorized boats.

- (a) The use of motorized boats is allowed in the following state recreation sites, recreation areas, and historic sites:
 - (1) Blair Lake State Recreation Area;
 - (12) Tokositna State Recreation Area, except the Tokositna River is closed to the use of airboats between April 20 and July 10 annually, unless authorized by the director under 11 AAC 18.010.

11 AAC 20.420. Campfires.

Open fires are allowed on the gravel bars in and along the Chulitna, Susitna, and Tokositna Rivers.

11 AAC 20.425. Snow Vehicles.

If the director finds that the snow depth is adequate to protect underlying vegetation, the director shall open Denali State Park to the use of snow vehicles.

³⁷Under 11 AAC 20.983(a), the use of fixed wing aircraft is allowed in the Blair Lake and Tokositna State Recreation areas, except for practice landings.

³⁸ Under 11 AAC 20.985, this use is also allowed in the Blair Lake State Recreation Area.

³⁹ Under 11 AAC 20.985, the same restriction applies to the Tokositna State Recreation Area.

11 AAC 20.935. Snow vehicles.

If the director finds that the snow depth is adequate to protect underlying vegetation, the director shall post the following state recreation areas and sites as open to the use of snow vehicles: (9) Blair Lake State Recreation Area; and (10) Tokositna State Recreation Area.

11 AAC 20.430. Horses⁴⁰.

- (a) The use of horses, mules, and burros is allowed in Denali State Park, except for the following areas:
 - (1) designated campgrounds;
 - (2) Byers Lake Trail;
 - (3) Troublesome Creek Trail;
 - (4) Little Coal Creek Trail;
 - (5) Ermine Hill Trail;
 - (6) that portion of Denali State Park south of the township line between T29N and T30N, Seward Meridian; west of the range line between R4W and R5W, Seward Meridian; and east of the George Parks Highway, except as authorized by the Director under 11 AAC 18.010.
- (b) The use of horses, mules, and burros in Denali State Park is subject to the following conditions:
 - (1) a group using 10 or more animals must obtain authorization from the director under 11 AAC 18.0 10 before entering the state park;
 - (2) tethering horses, mules, and burros within 100 feet of fresh water is prohibited;
 - (3) loose herding of animals is prohibited.

11 AAC 20.435. Recreational Gold Panning.

- (a) Except as provided in (b) and (c) of this section, recreational gold panning is allowed in Denali State Park only if the following conditions are met:
 - (1) no motorized equipment is used;
 - (2) only a gold pan or a shovel, or both, may be used; and
 - (3) no chemicals are used.
- (b) Recreational gold panning in Denali State Park may be conducted on an anadromous fish stream only between May 16 and July 14 annually.
- (c) For the purpose of recreational gold panning, a person may not extract or disturb natural materials above the ordinary high water line or where live vegetative matter exists in Denali State Park.

 $^{^{40}}$ Under 11 AAC 20.987, the same restriction apply to the Blair Lake and Tokositna State Recreation Areas.

Appendix D - Statutes, Regulations & Management Agreements

11 AAC 20.437. Bicycles.

The use of bicycles in Denali State Park is allowed only on designated trails west of the Parks Highway and on the Byers Lake Loop Trail.