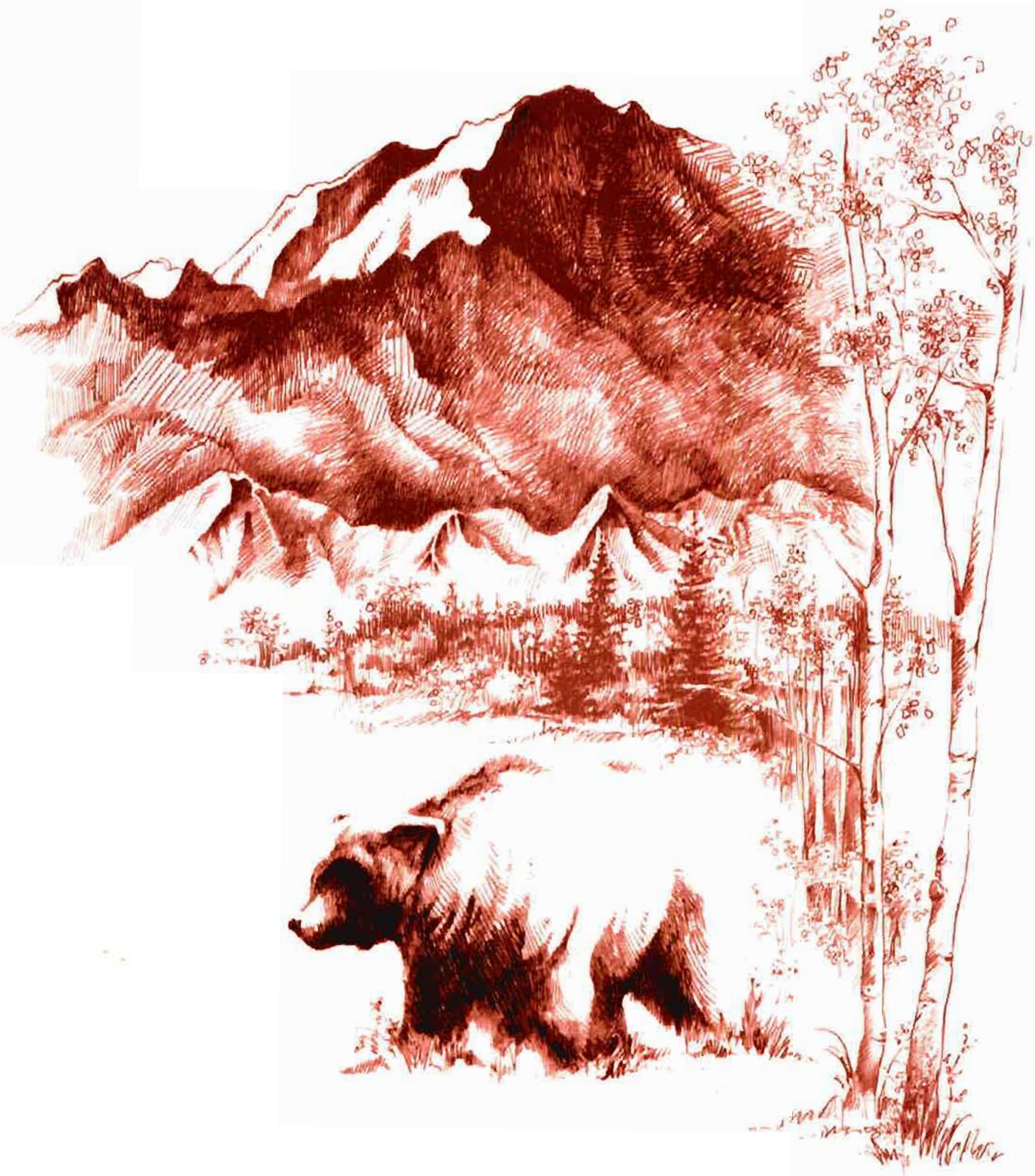

Entrance Area and Road Corridor Development Concept Plan

D E N A L I

National Park and Preserve • Alaska

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Approved:

Robert D. Barbee
Regional Director, Alaska Region

February 24, 1997

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Entrance Area and Road Corridor Development Concept Plan

D E N A L I

National Park and Preserve • Alaska

SUMMARY

This *Development Concept Plan* amends the 1986 *General Management Plan* for the entrance area and road corridor or "frontcountry" of Denali National Park and Preserve to provide specific direction for road management and facility development proposals to meet the current and future needs of the public.

Over the last 10 to 15 years visitor use and administrative functions have increased the need for certain visitor and administrative facilities and services while decreasing the need for others in the frontcountry. Large commercial tour groups now dominate the visitor profile. Increasing numbers of independent travelers are also visiting the park. Growth and changes in the area outside the park have increased the capability of the local community to provide services that were historically located on park lands. These changes in visitor use and administrative functions are not adequately addressed in any existing planning documents for the frontcountry area.

The *Development Concept Plan* includes proposals for visitor use and resource protection and related facility development in the frontcountry of Denali National Park and Preserve. The frontcountry includes all nonwilderness areas along the George Parks Highway, the entrance/headquarters areas, and the park road corridor to the Kantishna airstrip. The plan is based on the recommendations of the Denali Task Force (a committee formed at the request of the secretary of the interior in 1994), proposals received during public scoping, previous plans, planning team work and impact analysis, and comments received from the public during review of the draft plan in 1996.

The plan provides for visitor facilities and services in the frontcountry to meet a wide range of visitor needs and interests. Changes in the frontcountry will be limited to actions in which the National Park Service has traditionally specialized, including developments such as interpretive centers, environmental education opportunities, trails, and campgrounds, and resource protection programs.

The park hotel will be closed, and the National Park Service will encourage the private sector to develop visitor service facilities (accommodations, food service, and other commercial services) outside the park. The existing visitor access center will be remodeled and expanded to serve as an interpretive and discovery center, with an expanded Alaska Natural History Association (ANHA) facility. A new visitor services building and parking lot will be constructed nearby. Camper convenience services will be provided in this same area, and the existing store and temporary shower building will be removed. Some buildings in the former hotel area will be adaptively used to provide an environmental education and science facility. New permanent rest areas will be constructed at Savage and Toklat. Additional trails will be constructed primarily in the Nenana River and Savage River areas. New campsites will be developed in the entrance area, the Nenana River corridor, and in the Kantishna area. Road maintenance and repair will be upgraded to address safety concerns and major structural failures along the park road.

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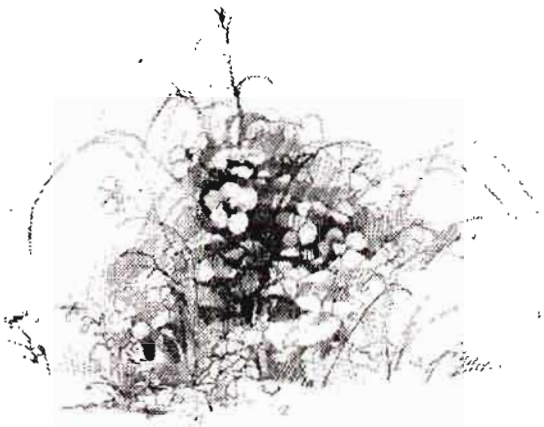
INTRODUCTION



PURPOSE AND NEED

This *Development Concept Plan* serves as a general management plan amendment for the entrance area and road corridor of Denali National Park and Preserve. This "frontcountry" consists primarily of the entrance area and a 300-foot-wide corridor with wider development nodes along the park road that extends approximately 90 miles to Kantishna. The frontcountry includes facilities such as the visitor access center, airstrips, a hotel, employee housing, maintenance facilities, trails, campgrounds, gravel source sites, administrative facilities, and utilities. The entrance area and the road corridor with development nodes form the current park development zone. The study area includes all nonwilderness areas along the Parks Highway, the entrance/headquarters areas, and the park road corridor to the Kantishna airstrip (see the Region and Existing Conditions maps).

Over the last 10 to 15 years the type and level of visitor use and administrative functions in the park have changed. This has increased the need for certain frontcountry visitor and administrative facilities and services while decreasing the need for others. Growth and changes in the area outside the park have increased the capability of the local community to provide services that were historically on park lands for purely practical reasons. These changes in visitor use and administrative functions are not adequately addressed in any existing planning documents for the frontcountry area.

The development concept plan provides specific direction for road management and specific development proposals to meet the current and future needs of individuals and commercial tour groups who visit the park. This document forms the basis for more detailed National Park Service (NPS) decisions on management of the frontcountry of Denali National Park and Preserve and has been prepared according to the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (90 CFR 1508.9). A final environmental impact statement was published for the development concept plan in December 1996.

BACKGROUND

Park Purpose

Denali National Park and Preserve is a vast area that provides visitors of all abilities with opportunities for superlative, inspirational experiences in keeping with its legislative mandates. Over the long term, preservation of the wilderness and its continually evolving natural processes is essential to providing the opportunity for outstanding resource-based visitor experiences.

In 1917 Congress established Mount McKinley National Park to "set apart as a public park for the benefit and enjoyment of the people . . . for recreation purposes by the public and for the preservation of animals, birds, and fish and for the preservation of the natural curiosities and scenic beauties thereof . . . said park shall be, and is hereby established as a game refuge" (39 Stat. 938).

In 1980 Congress passed the Alaska National Interest Lands Conservation Act (ANILCA) and enlarged the park. Section 101 describes the broad purposes of the new and enlarged national parks and preserves. These include the following:

- Preserve lands and waters for the benefit, use, education, and inspiration of present and future generations.
- Preserve unrivaled scenic and geological values associated with natural landscapes.
- Maintain sound populations of, and habitat for, wildlife species.
- Preserve extensive, unaltered ecosystems in their natural state.
- Protect resources related to subsistence needs.
- Protect historic and archeological sites.
- Preserve wilderness resource values and related recreational opportunities.
- Maintain opportunities for scientific research in undisturbed ecosystems.
- Provide the opportunity for rural residents to engage in a subsistence way of life.

Congress renamed and enlarged Denali National Park and Preserve under ANILCA, section 202, to be managed for the following purposes, among others:

- To protect and interpret the entire mountain massif and the additional scenic mountain peaks and formations.
- To protect habitat for, and populations of fish and wildlife including, but not limited to, brown/grizzly bears, moose, caribou, Dall sheep, wolves, swans, and other waterfowl.
- To provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities.

The purpose of Denali is also tied to the traditions of the other parks and preserves added to the system through ANILCA. The park includes several administrative subsets with different legislative histories and legal mandates (original national park, national park additions, national preserve, and designated and proposed wilderness). It is a place where special uses related to subsistence and a frontier-type way of life continue, subject to regulation to ensure they do not jeopardize the integrity of park resources.

The park's administrative history also clarifies the park purpose. The park's origins are loosely linked to the "old-line," large, western parks established during the first two decades of this century. Because of its early designation within the national park system, Denali has evolved to become one of the most well-established national parks.

Outstanding natural resources and accessible wilderness have resulted in Denali becoming the most heavily visited of the national parks in Alaska. Still, development and use have been limited because of the park's remote location (compared with the lower 48 states) and by park plans and management decisions aimed at achieving its legislative purposes.

Denali's legislative mandates and administrative history place the park toward one end of that spectrum with parks that can be characterized as wild, rustic, and expansive. Denali rests somewhere between the extremely remote, lightly used Alaskan national park units and the large, wilderness parks of the lower 48 states that are highly accessible and more developed. This blend of largely pristine conditions and an intense focus on use and access in a relatively small but critical portion of the park, coupled with the unique provisions of ANILCA, creates unusual management challenges and is often the core of most controversial issues.

Park Significance

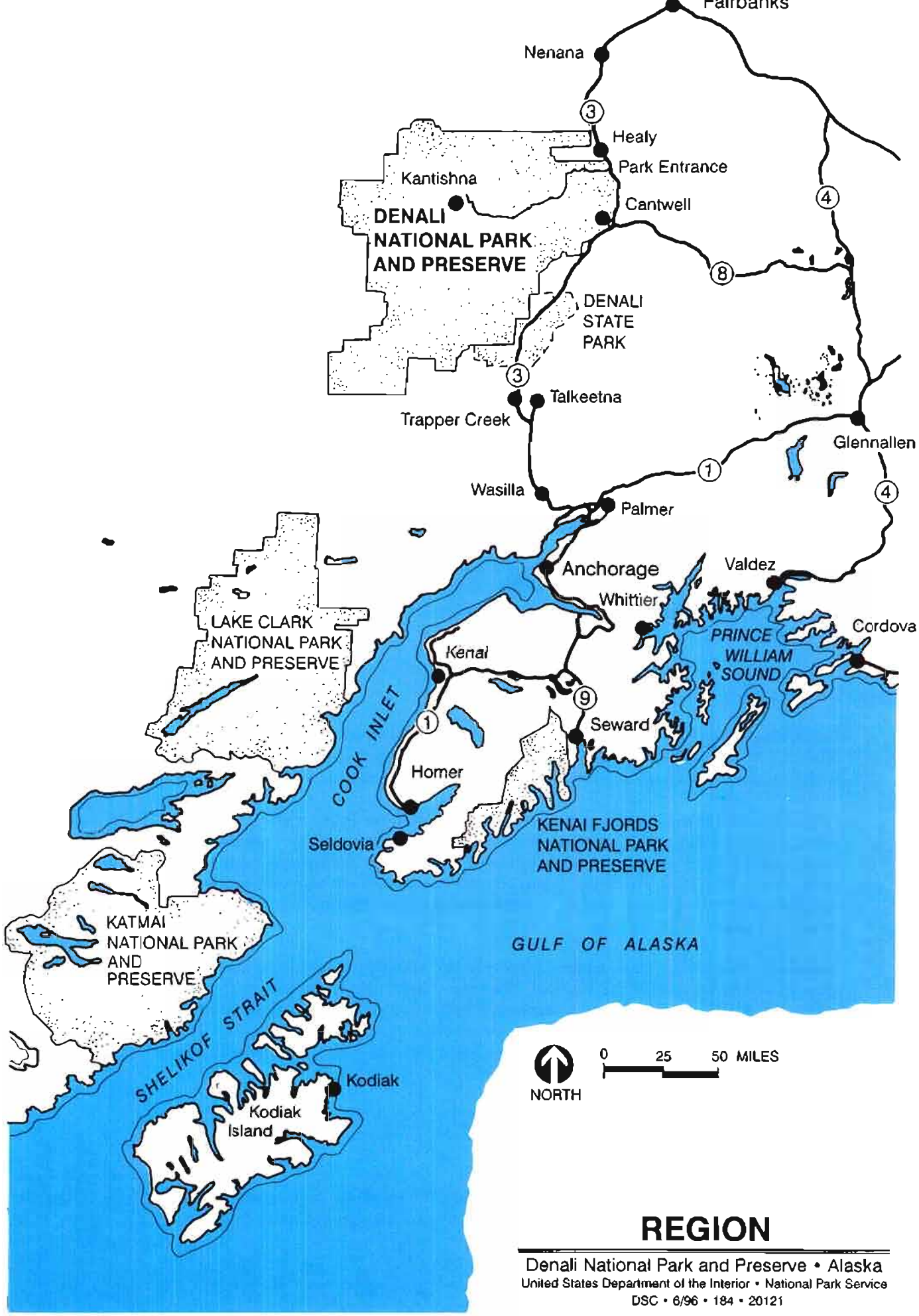
International Significance. Denali National Park and Preserve is a park of international significance. The United Nations proclaimed it a biosphere reserve under its Man and the Biosphere program, significant for its potential for subarctic ecosystems research.

Large Protected Area. The vast protected area of Denali, more than 6 million acres or about the size of the state of Vermont, enables a spectacular array of flora and fauna to live together in a healthy natural system, more than 2 million acres of which has been in a protected status since 1917. This is the largest continuously protected area in the world. The park offers excellent opportunities to study large area natural systems in settings that are primarily undisturbed by humans.

Mountains. The park contains a major portion of the Alaska Range, which is one of the great mountain uplifts in North America. The Denali fault is North America's largest crustal break. The Alaskan Range is dominated by North America's highest peak, Mount McKinley, with its summit at 20,320 feet above sea level. Towering 18,000 feet above the adjacent lowlands, the mountain's dramatic vertical relief rivals any other mountain range in the world, and it exceeds the vertical relief of Mount Everest.

Glaciers. The park contains a number of large, active glaciers and major glacier-fed rivers and streams. Its glaciers are some of the longest in North America, up to 45 miles long and 4 miles wide.

Wildlife. The park was originally established in 1917 as a refuge for large mammals. Dall sheep, caribou, wolves, grizzly bear, moose, and fox are often observed in the park,



REGION

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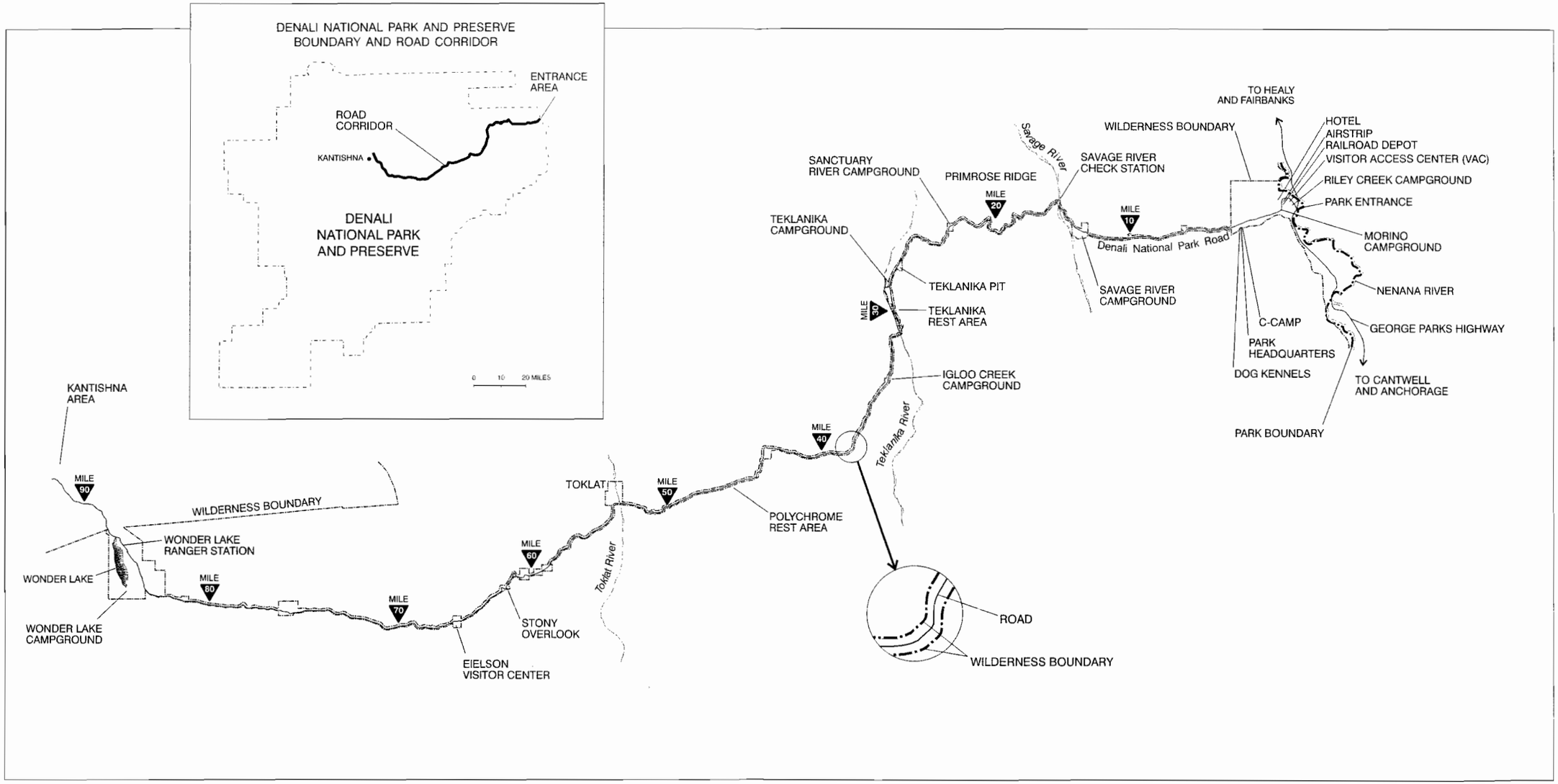

EXISTING CONDITIONS

ENTRANCE AREA AND ROAD CORRIDOR

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especially along the park road on the north side of the Alaska Range. While populations fluctuate, nowhere else in America can such concentrations of these large species of wildlife be observed in a natural setting in so readily accessible a place. The park is also significant for its waterfowl habitat.

Plant Life. Denali contains outstanding examples of subarctic plant communities. Only plants that have adapted to long, bitterly cold winters can survive in the various plant communities in the park. Even with these extreme conditions, more than 650 species of flowering plants inhabit the slopes and valleys of the park. Denali offers extensive opportunities to observe tundra plant life in a natural setting.

Air Quality and Scenic Resources. The exceptional air quality in Alaska and the lack of city lights near the park provide the conditions for outstanding daytime views and excellent night sky visibility in fall and winter. On a clear day, Mount McKinley can be seen from Anchorage, more than 130 air miles to the south. Denali National Park and Preserve is a designated class I airshed. Outstanding views of natural features, including mountains, glaciers, faulting, and other geological processes dominate the park landscape.

Cultural Resources. There are more than 180 known cultural sites and complexes within Denali's boundaries, many of which are listed on the National Register of Historic Places. Because cultural resource inventories have been limited to date, this number most likely represents a fraction of the total sites contained in the park. Known resources include archeological and historic sites associated with Athabascan Indian groups, early explorers, mining history, and the early days of the park. Major prehistoric sites in the park include the Teklanika Archeological District, a property listed on the national register. Many historic structures are found in the park headquarters area (a national historic district), along the main park road, and on the boundaries of the Denali Wilderness (along the original park boundary). These are mainly patrol cabins and other structures dating back to early years of park management, mines, and related mining structures. Historic mining activity dates back to the early 1900s in the Kantishna Hills (which includes the Kantishna Historic District), the Stampede area, and the Dunkle Hills near Cantwell.

Access and Tourism. A convergence of factors puts Denali among the most popular visitor destinations in Alaska, and makes it a symbol of what Alaska offers. The Alaska Railroad links the park with Anchorage, Fairbanks, and the ports of Whittier and Seward, a direct access route that is available to only two national parks in Alaska (Denali and Kenai Fjords). The railroad also links Denali to major international package tours that carry visitors by ship, bus, rail, and air in a route generally running from Seattle, through interior Alaska, and back. The George Parks Highway roughly parallels the railroad, and provides similar access for both out-of-state visitors and Alaska residents. Most visitors to Denali want to travel all or part of the 90-mile road into the heart of the park. The mountain, wildlife viewing, and park road experience are broadly marketed as a "must do" adventure. The park road is, therefore, a significant visitor use resource, offering an experience distinctively different from that found in typical national parks in the lower 48. It offers a unique bus trip that is rustic and that transports people through a narrow corridor into the wilderness, containing prime wildlife viewing areas unlike any other.

Mountaineering. Because it is the highest peak in North America, has a high northern latitude location, and is relatively accessible, Mount McKinley is considered one of the world's premier mountaineering destinations, drawing climbers from all over the world. It is touted as one of the "seven summits of the world." Many other peaks in the park, including Mount Foraker, also offer outstanding climbing opportunities.

Wilderness Recreation Opportunities. Denali offers superlative opportunities for primitive wilderness recreation. Outstanding cross-country hiking, backcountry camping, and winter touring possibilities are available for one willing to approach the area in its natural condition. This huge park contains large areas with almost no trails where evidence of human use is minimal to nonexistent. These conditions are in contrast to most lower 48 wilderness areas where maintained trails, designated campsites, footbridges, and signs are standard.

History of Planning in the Denali Entrance Area and Road Corridor

During the past 30 years, Denali National Park and Preserve has had a complex, controversial planning history. In three decades it has gone from a lightly visited, "old-line" railroad park to a prime international visitor destination. Denali's planning history includes master plans in 1965 and 1973, a general management plan in 1986, and several development concept plans or amendments to those plans during the last 15 years. Each plan tried to offer an orderly vision of how the park will meet needs in a society that held rapidly changing and often contradictory expectations of what national parks should offer.

Since 1965 the park has tripled in size and seen the arrival of highway access, neighboring Native corporation landowners, selection by the state of Statehood Act entitlement lands, development of Alaska as an international visitor destination, and more than doubling of the state's population. The following is a chronological list of completed planning efforts and studies concerning the frontcountry of the park.

Environmental Assessment on the Park Road Rehabilitation Program (1982). This document evaluated a plan to rehabilitate deteriorated sections of the park road within five years, upgrade maintenance levels along the whole road, and identify gravel pits to support those operations. Some authorized borrow sources of gravel were found to have poor quality material, and maintenance activities exhausted the better authorized sources partially by working on projects unanticipated in the environmental assessment.

Development Concept Plan/Environmental Assessment for the Park Road Corridor (1983). This plan presented alternatives for upgrades of visitor and management facilities in the entrance area and along the park road corridor. In addition to the increasing visitation resulting from completion of the George Parks Highway and the attention Denali was getting from the package tour industry, a new 20-year concessions contract was signed in 1981. The contract promised a new bus maintenance facility, a new concession's employee dining facility, a 270-seat auditorium, and other concession operation changes. The passage of ANILCA 18 months earlier had also allowed funding for a number of long-awaited improvements to become available. A long list of proposed projects was approved, including a decision to build a visitor orientation center at the present visitor access center site. A decision was made to renovate the existing park hotel, a collection of railroad cars and modular units assembled onsite after the September 1972 fire that destroyed most of the original building.

General Management Plan/Land Protection Plan/Wilderness Suitability Review (1986). This plan provides comprehensive guidance for all aspects of park management. It creates park zones, identifies resource management needs, summarizes interpretive objectives and the desired visitor experience, identifies incompatible uses on inholdings, and determines the need and general locations for park development. The general management plan is still largely up-to-date. Major concepts in the plan confirm the use of a limited access transportation system for the park road, set a goal to reduce private vehicular traffic, establish a maximum limit on vehicles, enact a "no formal trails" policy for the wilderness

units, and create an objective to allow as many people as possible to view wildlife in the park.

The plan generally adopted the development proposals of the preferred alternative in the 1983 development concept plan, although it did remove some roadside trails and campground expansion from the previous plan. The general management plan remained consistent with the previous plan in not advocating any overnight accommodations in the Wonder Lake area other than the campground. A proposal was accepted to prevent additional lodging in Kantishna, and evaluation of alternatives for the park hotel was reserved for a public process in 1987.

Addendum to the 1983 Development Concept Plan/Environmental Assessment for the Park Road Corridor (1987). This addendum proposed a new park hotel near the existing site within an "activity center" concept. Many structures and functions, such as visitor center, general store, post office, activity expediters, and sled dog demonstrations were to be given space surrounding the hotel. All tour and shuttle bus operations will be consolidated in the existing tour bus barn area behind the hotel.

Environmental Assessment for the Visitor Access Center – Use of Unconsolidated Materials Plan (1987). One of the pieces of the entrance area puzzle left unevaluated was the source of the 40,000 cubic yards of borrow (gravel) material estimated to be necessary to build the visitor center and associated parking lot. This environmental assessment was published to explore this question. A decision was made to procure gravel from outside the park. That resulted in a gravel pit and crusher operation being established within the Village View community. Future gravel acquisition required increased community participation.

Environmental Assessment for the Repair of the Denali Park Road and Associated Visitor Use Areas from Park Entrance to Savage River Bridge (1988). This environmental assessment evaluated repairing subgrade problems and repaving the first 15 miles of the park road (first paved in 1968), constructing an entrance feature and pullout, creating a parking area for bus parking near the kennels, and paving such areas as the new visitor center parking lot, park headquarters parking area, and the auto shop access road.

Newsletter #1 (1990). This newsletter announced location changes for facilities proposed in the 1983 development concept plan and 1987 addendum. The shuttle bus operations and maintenance were proposed for relocation to the sewage treatment lagoons area. The post office, general store, and other camper conveniences were to be located near a new hostel close to a new loop in the Riley Creek campground. Shuttle drivers were to be provided housing at C-Camp. Other campground changes were also proposed but not adopted.

Provisions of the general management plan instituted through this process included removing private vehicle access to Sanctuary Campground and from Teklanika Campground, except for minimum three-night stays. The Savage River check station was to move from the Savage Campground to the Savage River. The newsletter process also originated the idea of a lottery to select the private vehicles allowed past Savage River during the September park road opening. The concessioner was authorized to begin a new tour, the Denali natural history tour, to mile 17.5 on the park road.

Draft Amendment to the 1983 Development Concept Plan/Environmental Assessment for the Park Road Corridor and 1987 Addendum for Riley Creek (1992). A fiscal year 1992 congressional appropriation of $7 million for site work and utilities in the hotel area led to this amendment that changed the layout of facilities in the entrance area. A visitor center

would still be attached to the hotel auditorium, but an administrative wing to house park headquarters would also be attached to the auditorium. A new concession's employee dining facility was to be built, but no site was finalized for shuttle bus driver housing.

Quick Reaction Audit Report on the Proposed Replacement of the Denali National Park Hotel (1992). Reacting to citizen complaints about the high cost of the proposed new park hotel, the Inspector General Office of the Department of the Interior issued this audit in September 1992. The audit found that the proposed $39 million hotel was not needed because sufficient accommodations were available immediately outside the park boundary and that the hotel was not justified because the construction cost per square foot would be 325% higher than the standard for hotels outside the park entrance. This report halted spending on site work, utility upgrades, and changes for visitor facilities in the entrance area.

Borrow Source Inventory (1988) and Environmental Assessment for a Gravel Acquisition Plan (1992). Maintenance of the gravel section of the park road was limited after 1985 due to closure of most of the gravel sources within the park. Potential borrow areas were investigated in 1988 and the criteria for selecting sources were set in 1992. The proposal identified two borrow sources along the Denali park road corridor and keyed development to long-term road maintenance needs. Approximately 7,500 cubic yards of gravel per year would be available for removal from the Toklat River floodplain near the Toklat road camp. One hundred thousand cubic yards of material would be available from an expanded Teklanika pit with a 30-year life expectancy. The plan did not include provisions for individual road repair and rehabilitation.

Road System Evaluation (1994). To help conduct a prioritized road repair and maintenance program, a study was begun in 1986 by the Federal Highway Administration and was completed by the National Park Service in 1994. This study evaluated the condition of the park road, summarized statements on road character, and proposed treatment alternatives ranging from status quo to creating a road of uniform width and improved condition. Decisions regarding changes to road maintenance and rehabilitation were left to the present document.

Environmental Assessment on the Proposed Construction of Visitor Transportation System Facilities (1994). A decision was made to contract the operation of the shuttle bus system to the concessioner and allow them to set a fee schedule so the system would pay for itself. Pursuant to a June 1994 amendment to the 1981 concession contract, an environmental assessment was prepared to evaluate the siting of facilities needed to house the shuttle maintenance and operations in the park. The proposal included a 4-acre parking lot, doubling the size of the bus maintenance facility, a 24-room employee dormitory, a new employee dining facility, a new leachfield for shoulder season operations, moving the recreation courts, and expanding the road network. By terms of the contract amendment, this work was to be completed by September 1996.

Denali National Park and Preserve Statement for Management (1995). The statement for management provides an overview of the park's condition, a refined park vision, and an analysis of major management issues. It is a comprehensive strategy for the park, identifying critical steps needed to manage the area for the next two to four years. The statement for management does not prescribe specific solutions to significant resource protection, visitor use management, or facility development problems. It specifies potential plans and actions needed and indicates cases in which environmental compliance is necessary before implementation.

Environmental Assessment on the Proposed Reconfiguration of the Historic Sled Dog Kennels (1995). This document evaluated modifications to the dog kennels. Visitor safety was enhanced by clustering the dogs on one side of the kennels building, and visitor circulation around the dogs was also improved. Awaiting completion is an inclined viewing area east of the kennels building.

MANAGEMENT OBJECTIVES

Specific Management Objectives

- Provide a range of opportunities for park visitors consistent with park purposes.
- Determine whether visitor use in the entrance area and along the park road can be increased while improving resource protection and the quality of the visitor experience.
- Provide the type, number, and location of facilities and necessary infrastructure to adequately serve park visitor and administrative needs.
- Provide visitor and administrative facilities that are necessary and appropriate for user enjoyment and effective park management.
- Identify resource protection needs in the entrance area and along the road corridor. Integrate resource protection programs with all new development and operational changes, and execute mitigation measures required to implement the plan fully.
- Implement proposals that are consistent with the visitor experience and resource protection goals outlined in the 1986 *General Management Plan* and considering the 1994 Denali Task Force recommendations. Retain existing limits for the road corridor beyond the Savage River.
- Provide public environmental education opportunities with facilities that are aesthetically pleasing and environmentally sustainable.
- Provide appropriate balance in level, type, and location of overnight accommodations and associated visitor services inside and outside the park.
- Provide a comprehensive transportation system management program considering the necessary modes of transportation within the park and coordinating with external transportation systems.
- Provide a variety in length and type of bus tour opportunities.
- Undertake maintenance and safety improvements that maintain the park road and its future reliability.
- Provide adequate maintenance support facilities, administrative offices, and housing.

GENERAL VISION

The general vision for the frontcountry of Denali National Park and Preserve is for an area that, 15–20 years from now, still offers the nation's premier opportunities to observe large wildlife species and the highest peak in North America in a primitive, natural setting. The frontcountry area services and facilities will allow as many visitors as possible to view and experience these resources without degrading the resources or the premier visitor experience. The park's main entrance area will offer greater opportunities for more diverse visitor activities than at present. Visitors of all ages will have access to Denali and feel at the end of their stay that they truly experienced one of the finest national parks in the world. Transportation in the park will be provided on safe, comfortable vehicles that provide efficient movement through the area, an outstanding interpretive experience, and convenient connections to nearby service facilities. Existing temporary and substandard facilities will be gone and, in their place, well-designed, permanent facilities will enhance the visitor experience and help protect park resources. Visitors will also have a greater understanding of the cultural resource values of Denali.

ISSUES CONSIDERED IN DEVELOPING THE PLAN

Visitor Services

Accommodations (food, lodging, and camping):

- The level and type of overnight accommodations necessary and appropriate inside the park should be determined.
- The demand for camping in the park is greater than can be accommodated with existing facilities.
- Camping occurs in pullouts along the Parks Highway that are not designed for that type of use.
- Services such as a convenience store and showers are critical to campers traveling via public transportation.

Information (visitor centers, museums, and wayside exhibits):

- The need for and potential location of visitor center(s), museum(s), auditorium(s), and wayside exhibits to provide for visitor orientation, information, and education should be determined.

Surface Transportation and Bus Tours:

- The appropriate level and type of parking areas in the frontcountry should be determined.
- Existing transportation systems inside the park do not coordinate well with external systems.
- Visitor dependence on private vehicles should be reduced and facilities and transportation systems must be fully accessible.
- Different length bus tour opportunities should be evaluated.
- Safety problems result from the current location of the railroad in the visitor use area.
- Train station location and design result in parking problems and traffic congestion.

Bicycle Use:

- Opportunities for bicycle use within the frontcountry and road corridor should be evaluated.

Rest Areas and Picnic Areas:

- Rest areas and picnic areas in the entrance area and along the road corridor are inadequate to serve current and projected future needs.

Other Concession Operations, Commercial Uses, and Special Uses

- Boating use on the Nenana River is increasing, and there may be some demand for additional river access.
- The appropriate level of other concession operations and commercial services/facilities, including dog sled trips, public use cabins, day trips to Kantishna, and merchandising services, should be determined.

Roads and Trails

- Annual maintenance levels are not sufficient to prevent long-term degradation of the Denali park road. Dust is a continuing problem along the park road.
- The visitor experience along the park road to Kantishna needs improvement; people should be encouraged to get out of buses and have direct contact with the park.
- The appropriate trail network for the entrance area and the road corridor should be determined. There is not a clear connection to external networks and accessibility for special populations is very limited.
- Increased uses of the park road that were not anticipated in the 1986 *General Management Plan* threaten the integrity of the road, result in increased maintenance costs, and jeopardize user safety.

Employee Housing

- The appropriate type and location of NPS, ANHA, and concessioner housing throughout the park should be determined.
- The level of community services that should be provided for employees living inside the park should be determined.

Administrative/Support Facilities

- Office, storage, and shop space is inadequate and restricts operational efficiency. Adaptive use of structures also results in deterioration of historic buildings.
- Collection of entrance fees could be more effective, and the appropriate type and location of an entrance station and check station has not been determined.
- The appropriate location of and need for expansion of the Denali National Park Post Office should be determined.
- The entrance area does not have adequate structural fire protection.

Utility Systems (Electrical, Water, Sewer)

- Utility systems are inadequate to meet current demand and projected future needs.
- The existing entrance area dump station is inadequate to meet current demand and projected future needs. Traffic flow in this area is a problem.

Airstrips

- The existing McKinley Park airstrip may be inadequate for current demand and projected future needs. Its location in a primary visitor use area presents safety problems.

THE PLAN

GENERAL PLANNING CONCEPTS

- Continue cooperative regional planning with state of Alaska agencies, the Denali Borough, Native corporations and groups, the Denali Foundation, Alaska Natural History Association, and the public.

- Meet the guidelines in ANILCA Title XIII, sections 1306 and 1307, regarding working with Native corporations to implement proposals for administrative and visitor facilities and services.

The emphasis of the *Entrance Area and Road Corridor Development Concept Plan* is to provide visitor facilities and services in the frontcountry to meet a wide range of visitor needs and interests. Frontcountry developments will be limited to actions in which the National Park Service has traditionally specialized, such as interpretive centers, environmental education opportunities, trails, resource protection programs, and campgrounds. Improved resource protection will be integrated with development actions throughout the frontcountry. The Park Service will encourage the private sector to develop visitor service facilities (accommodations, food service, and other commercial services) outside the park.

Refer to the Development Concept – Entrance Area and Road Corridor map.

VISITOR USE

- Continue to emphasize access to a high quality wilderness experience for visitors of all ages and abilities.

Under the frontcountry plan, facilities, programs, and services will be added to enhance the visitor experience throughout the park. The concept is to significantly expand day use and camping opportunities in the frontcountry area along with improved resource protection.

Upon arrival at the park, visitors to Denali will encounter an entrance station, creating a sense that they are entering a special place. NPS personnel at the station will greet visitors, collect entrance fees, and provide basic directional information.

Visitors will discover a variety of facilities and services that meet the needs of varied audiences seeking different levels of experience with the park's resources. Existing visitor use opportunities will continue, but additional facilities, programs, and services will be available throughout the entrance area and road corridor. Orientation information at the proposed visitor services building and at the railroad depot will locate park facilities and services and indicate where to obtain additional information. Interpretive and environmental education opportunities will be enhanced by providing facilities offering in-depth interpretation of the park's themes for all visitors.

Interpretive program opportunities in the frontcountry will be expanded. New interpretive programs will include the Teklanika Archeological District, traditional use of the region by Alaska Natives, the Headquarters Historic District, and the Dry Creek Archeological District. Expanded interpretive opportunities including living history, a variety of exhibits, and interpretive programs involving sled dogs will be available at the Savage cabin. Formal sled dog demonstrations will still be provided at headquarters, with a rerouted trail and

better viewing for visitors. Additional interpretive services dealing with regional history will be available in both the Headquarters and Kantishna Historic Districts.

New public transportation from the entrance area to the proposed Savage River rest stop and trailheads will encourage visitors to leave their cars and to explore those parts of the park.

Opportunities for overnight lodging in the entrance area will be eliminated by removal of the Denali Park Hotel and will be available outside the park entrance. The National Park Service will encourage the establishment of small-scale, lower-cost lodging such as a hostel in the Kantishna area.

Additional opportunities for camping in the frontcountry will be provided. The Park Service proposes traditional tent camping, walk in, and backpacker experiences that it has generally provided and that are usually undersupplied by the private sector. Some additional camper services will also be provided in the entrance area, including groceries, fast food/deli service, showers, and laundry. Additional services will be provided by the private sector outside the park.

The Denali visitor transportation system (VTS) shuttle, Denali natural history tour, and tundra wildlife tour will continue as the primary visitor access modes for most visitors to the park interior. Improvements in rest areas along the park road and expanded interpretive facilities and services, including a new Eielson Visitor Center, will significantly enhance the tours into the interior of the park.

Visitor opportunities along the first 15 miles of the park road will be enhanced. Trail construction, wider road shoulders, new picnic areas, and improvements in rest areas will provide additional opportunities for leisurely day use experiences viewing animals and landscapes.

Hiking opportunities will be increased and enhanced through more and better defined trails in the entrance area and at certain locations along the park road corridor. Visitors could escape their ties to mechanical transportation systems for brief encounters with the natural and cultural resources along many short trails, especially in the concentrated visitor use areas between the Nenana and Savage Rivers. Conditions and accessibility of existing trails will be upgraded and maintained. These trails will feature both natural and cultural resources along with splendid mountain scenery.

ROAD MANAGEMENT

Road Use

Conditions and Guidelines. The National Park Service will implement the following actions:

- Retain annual allocation season limits (10,512) for total number of vehicles set in the 1986 *General Management Plan*. The annual allocation season will be defined as the Saturday before Memorial Day through the second Thursday after Labor Day.

- Continue to require operating plans containing tour objectives and detailed management strategies from the concessioner for both tour buses and the visitor transportation system.

- Continue to establish formal limits and guidelines for the visitor transportation system.

- Continue to require comprehensive training for all bus drivers, including those driving buses to Kantishna businesses.

- Keep bus parking and maintenance at the existing locations within the park with no further expansion beyond the limits defined in the 1994 *Environmental Assessment on the Proposed Construction of Visitor Transportation System Facilities*.

- Continue to define the bus transportation operating season as beginning approximately May 15, depending on weather and road conditions, and ending with road closure pending weather conditions in September.

- Retain the current daily limits on the tundra wildlife tour (30 buses per day).

- Implement regulations on rules of the road and oversized vehicles.

- Continue monitoring wildlife behavior, visitor satisfaction, and impacts from visitor use.

- Retain "Rules of the Road" that apply specifically to bicycles traveling west of the Savage River check station and provide this information at all visitor orientation points, including the Savage River check station.

General Vehicles. The National Park Service will implement the following actions:

Phase 1:

- Promulgate special regulations for management of the park road, establishing the GMP limit of 10,512 vehicles during the allocation season in regulation, setting formal "Rules of the Road," and setting an allocation season limit for Kantishna business traffic.

- Complete the three-year study of wildlife behavior and visitor satisfaction initiated in 1996.

- Initiate reductions in professional photography vehicle permits and reallocate to the "annual bus" category on a trial basis. (See phase 2 for details of full implementation.)

- Set the shoulder season (approximately May 15–25 and September 15–closing) vehicle limits for the park road at existing numbers (a maximum limit of 20 buses per day) pending additional information on wildlife behavior and visitor satisfaction gathered during a study initiated in 1996.

- Retain existing allocation season limits for the visitor transportation system (3,394 buses) and the tundra wildlife tour (2,089 buses).

- Establish a daily limit of 20 buses for the Denali natural history tour and 30 buses for the tundra wildlife tour, and set the daily limit for the visitor transportation system at 36 based on data from 1990 to 1996.

- Retain Primrose pullout as the turnaround point for the Denali natural history tour. This tour will not count toward GMP traffic limits.

- Continue to work with the concessioner to improve overall operation and efficiency of the shuttle bus system.

- Designate a "no parking" zone at the north end of Wonder Lake from the ranger station to the former gravel pit approximately 1/4 mile north of the lake outlet.

- Retain the mid-September road lottery limit of 400 vehicles per day for each of the four days of operation.

Phase 2:

Upon adoption of formal regulations for management of the park road, the National Park Service will implement the following actions:

- Evaluate shoulder season limits based on additional information on wildlife behavior and visitor satisfaction gathered during the three-year study initiated in 1996. The length of the shoulder season will continue to depend on weather conditions. Also based on study results and resource conditions, the daily limit for the Denali natural history tour will be reevaluated.

- Continue to evaluate daily limits for the tundra wildlife tour and the visitor transportation system based on information gathered through continued research and monitoring.

- Reduce professional photography vehicle permits by 50%, consistent with direction in the 1986 *General Management Plan* that "private vehicle traffic will be reduced by decreasing vehicle use by campers, professional photographers, NPS employees, and people traveling to Kantishna" (p. 15, 1986 GMP).

- Reallocate the additional vehicles (formerly professional photography vehicle permits) to a new "annual bus" category within the 10,512 seasonal allocation.

- Reallocate available permits as an annual operating decision to retain flexibility between bus systems. At least 400 buses will be available, with up to 150 more depending on the level of traffic in other categories of the overall 10,512-vehicle allocation, which will not be exceeded. This change will be phased in and will depend on study results and resource conditions for full implementation.

- Establish a daily limit of six buses for the new "annual bus" category.

- Adjust the remaining vehicle permits allocated to professional photographers to meet varying demand during the season, with more permits available during early and late summer than during the month of July.

- Continue to work with professional photographers to improve the efficiency and effectiveness of the permit system. Administrative changes such as peer review of permit applications, more stringent standards and enforcement, and implementing a system of reallocating permits when photographers either did not show up or left the park early could be made to improve the system.

- Expand courtesy shuttle service in the frontcountry to connect entrance area facilities with businesses outside the park and to serve the Savage River campground and

trailheads (for proposed new trails) at minimal cost to visitors. This service can be phased in using the existing VTS buses initially and providing separate buses when needed.

Phase 3:

- Upon completion of repairs to the park road west of Eielson Visitor Center, replacement VTS buses for use on that section will be the same as VTS buses used on the remainder of the road.

- Continue monitoring wildlife behavior, visitor satisfaction, and impacts from visitor use. Future changes affecting traffic on the park road will be based on results of this long-term monitoring.

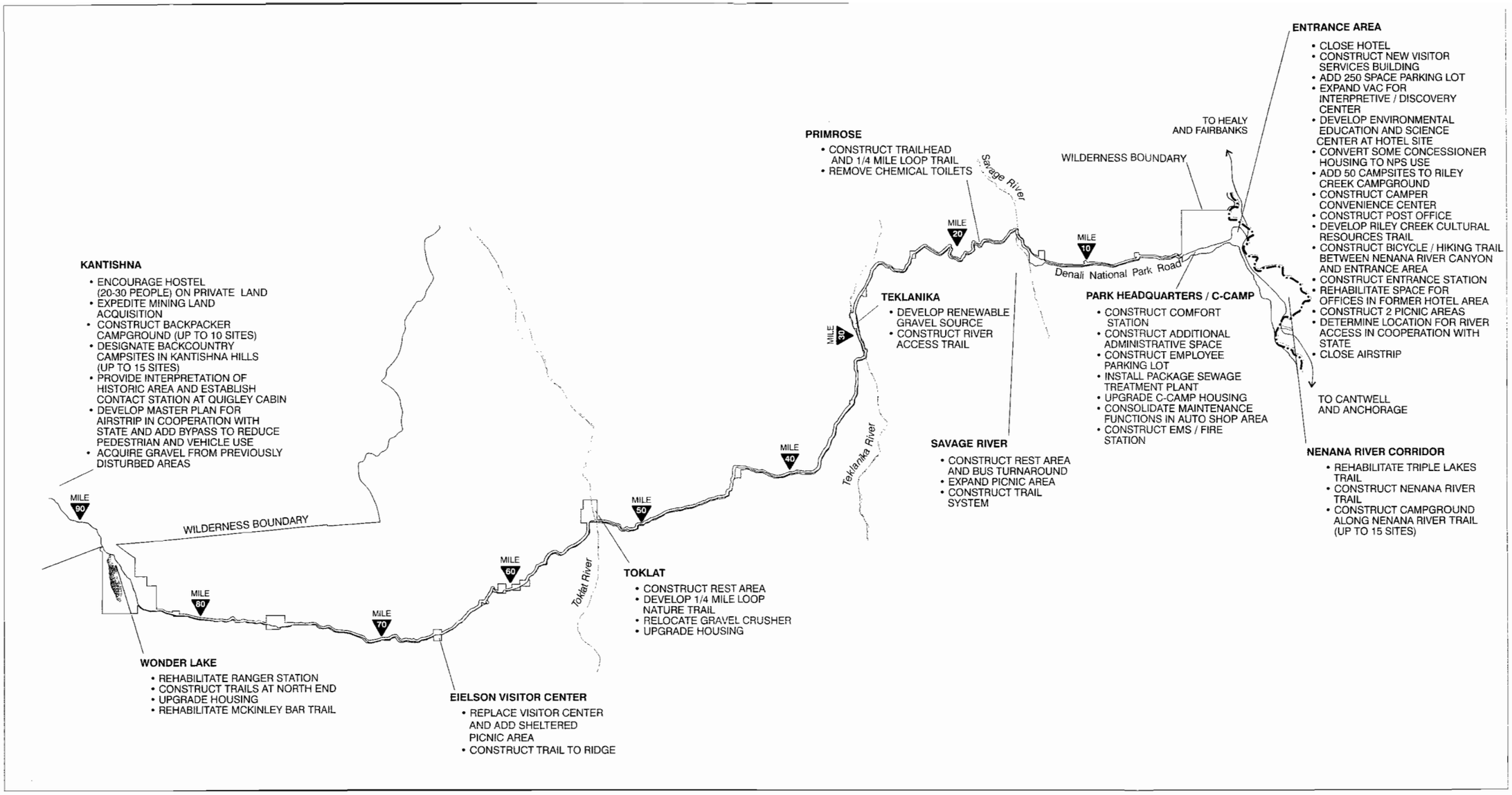
Kantishna Traffic. The following actions affecting traffic to Kantishna businesses will be implemented as part of phase 1. Limits for Kantishna business traffic to provide for adequate access to Kantishna businesses will be within the road traffic limits established by the 1986 *General Management Plan*. Building on the general concepts in the plan to establish more specific limits for Kantishna traffic will help ensure long-term protection of the current visitor experience and of wildlife populations along the road corridor. Kantishna businesses could continue using both the Kantishna airstrip and the visitor transportation system for guest access, and they could run buses and other vehicles on the park road subject to the limits listed below.

Overall limits for Kantishna business traffic will be based on current use levels (1994–96 seasons). New limits will allow for some additional expansion as long as the businesses continued current patterns of transporting guests to and from Kantishna. The following limits for the total number of round trips of any type for the allocation season will be phased in over the next three years.

- Denali Backcountry Lodge: 315
- Kantishna Roadhouse: 420
- McKinley Gold Camp: 210
- North Face/Camp Denali: 315

The businesses could determine the types of vehicles to run, subject to the overall limit and other road use restrictions, to best suit their individual needs. However, RV travel (motor homes, trailers, campers) for the purpose of transporting guests to and from Kantishna businesses will not be allowed. Permits or allocation numbers will not be transferrable from one business operation to another. Business operations that exceeded the above limits in the 1994–96 seasons will be given three years after plan implementation to adjust traffic to the new limits.

Additional permits could be allocated to another Kantishna overnight lodging business based on the criteria in 43 CFR Part 36. This requires the National Park Service to apply the provisions of the National Environmental Policy Act to determine whether an environmental assessment, environmental impact statement, or categorical exclusion applies for each specific permit application. In all cases, the overall allocation season traffic limit of 10,512 vehicles will apply. Therefore, new businesses will have significantly fewer permits available than any of the existing Kantishna businesses. New overnight accommodations such as the proposed hostel will also be encouraged to use the existing transportation system for guest access and to work in partnership with existing businesses for administrative and other travel.



GENERAL DEVELOPMENT PLAN
ENTRANCE AREA AND ROAD CORRIDOR

Denali National Park and Preserve • Alaska

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Up to 1,360 total vehicles may travel to and from Kantishna, comprising 13% of all traffic under the GMP limits. This total includes other Kantishna traffic (individual inholders, mining claim owners, and others), which has averaged less than 100 vehicles per year recently and can be expected to decline slightly as former mining claims are acquired by the federal government.

Bicycles. The National Park Service will establish a permit system for bicycle use west of the Savage River. This will function primarily as a registration system and numbers will not initially be limited, pending continued wildlife monitoring. This permit system will also apply to the Kantishna Hills.

"Rules of the Road" for bicycles will continue, and this information will be available at all visitor orientation points, including the Savage River check station.

A bicycle/foot trail will be constructed and maintained to connect the Nenana River canyon to the entrance area. Gravel shoulders constructed along the paved section of the park road to enhance wildlife viewing will be available to cyclists also.

Road Maintenance

The National Park Service will implement the following actions affecting the park road:

- Continue to implement road repair projects based on site-specific project design and internal review with superintendent approval.
- Implement new methods for improved subgrade drainage systems, structural repairs, and adequate surface material on the park road. (See appendix C of the draft plan for explanation of methods.)
- Repair road failures as they occur.
- Continue to realign road surface in slump areas by importing or using local materials to keep the vertical alignment within safe standards.
- Continue study of road condition, renewable materials sources, and annual gravel loss, and document road character.
- Use the Toklat River and Teklanika Pit as materials sources.
- Maintain road character as defined in appendix C of the draft plan.
- Complete priority 1 and priority 2 repair projects (see appendix C). Priority 1 projects include correcting safety problems by improving site distance, providing for safe vehicle passing, improving road surface friction, repairing culvert crossings, and repairing curve superelevations. Priority 2 projects include repairing shear failures, slumps, active road surface pumping, road rutting, and inadequate subgrade drainage.

Road repairs will treat the underlying causes of road failures to reduce the need for repetitive repairs and minimize gravel use over the long term.

- Purchase gravel from private landowners or acquire from previously disturbed park lands in the Kantishna area, provided that specifications for maintenance and repair on the west end of the park road can be met. Gravel extraction from previously disturbed park land will include subsequent reclamation. Once Kantishna sources are no longer feasible, an additional gravel source could be developed along Moose Creek approximately 2 miles upstream from North Face Lodge.

- Establish an additional gravel source in the Teklanika River near the Teklanika Campground to supplement the existing upland pit nearby, pending additional information on feasibility. The upland site will continue to be the gravel processing location and will not be expanded. Gravel processing and hauling may occur from two different sites at the same time.

- Relocate the gravel crushing operation near the existing Toklat rest stop to the north end of the Toklat road camp.

- Complete the five-year study of dust palliatives and particle binders initiated in 1994 and implement the resulting recommendations. This research includes monitoring of effectiveness, environmental impacts, and safety. The study area will be expanded to up to 15 miles of the park road, with supplemental water treatment for dust control on other selected sections of the road.

- Construct an additional 8-foot gravel shoulder along the paved section of the park road from mile 8 to the Savage River where topography and resource conditions allow. This will provide for safer, more leisurely scenery and wildlife viewing as well as a margin of safety for bicycle traffic. Gravel for this project will be obtained outside the park.

GENERAL DEVELOPMENT

Accommodations

Entrance Area. The park hotel will be closed no later than 2002, and no hostel or other economy lodging will be constructed in the entrance area. See the Development Concept – Entrance Area map.

Kantishna and Wonder Lake. The National Park Service will encourage private sector development of a small-scale hostel facility (20–30 people) on private land in Kantishna and recommend that this structure incorporate alternative energy systems such as photovoltaic. The hostel will include indoor accommodations, showers and restrooms, a central cooking area, and a secure food storage area. If not developed by the private sector, the National Park Service could build the hostel and issue a concessions contract for its operation. Guests will be transported to the hostel via the visitor transportation system or other Kantishna buses.

The National Park Service will implement the 1994 Denali Task Force Report recommendation to acquire development rights and/or property to retain the existing character and approximate level of commercial use at Kantishna.

The Park Service will implement administrative changes to expedite acquisition of Kantishna mining claims.

Campgrounds

Throughout the frontcountry, campground maintenance will be improved and rehabilitation projects completed as necessary.

Entrance Area. A total of 50 sites will be added to the Riley Creek campground, including 25 tent camping sites and 25 walk-in sites similar to those at Morino Campground.

A hike-in campground will be constructed along the proposed Nenana River trail approximately 1 mile downstream from the confluence of the Nenana and Yanert Rivers. This campground may include up to 15 sites, which will be phased in based on visitor demand and resource protection needs.

Park Interior. Private RV access will continue to be allowed to Teklanika with a three-night minimum stay.

A campground will be constructed in the Kantishna area that will be accessible to both hikers and bicyclists. This campground will be located adjacent to a former mining route to minimize new trail construction needed. The campground may include up to 10 sites, which will be phased in based on visitor demand and resource protection needs. Potential locations include the Eldorado and Slate Creek areas, Glen Creek, and along Skyline Drive. Development will depend on progress with acquisition of former mining claims and reclamation work.

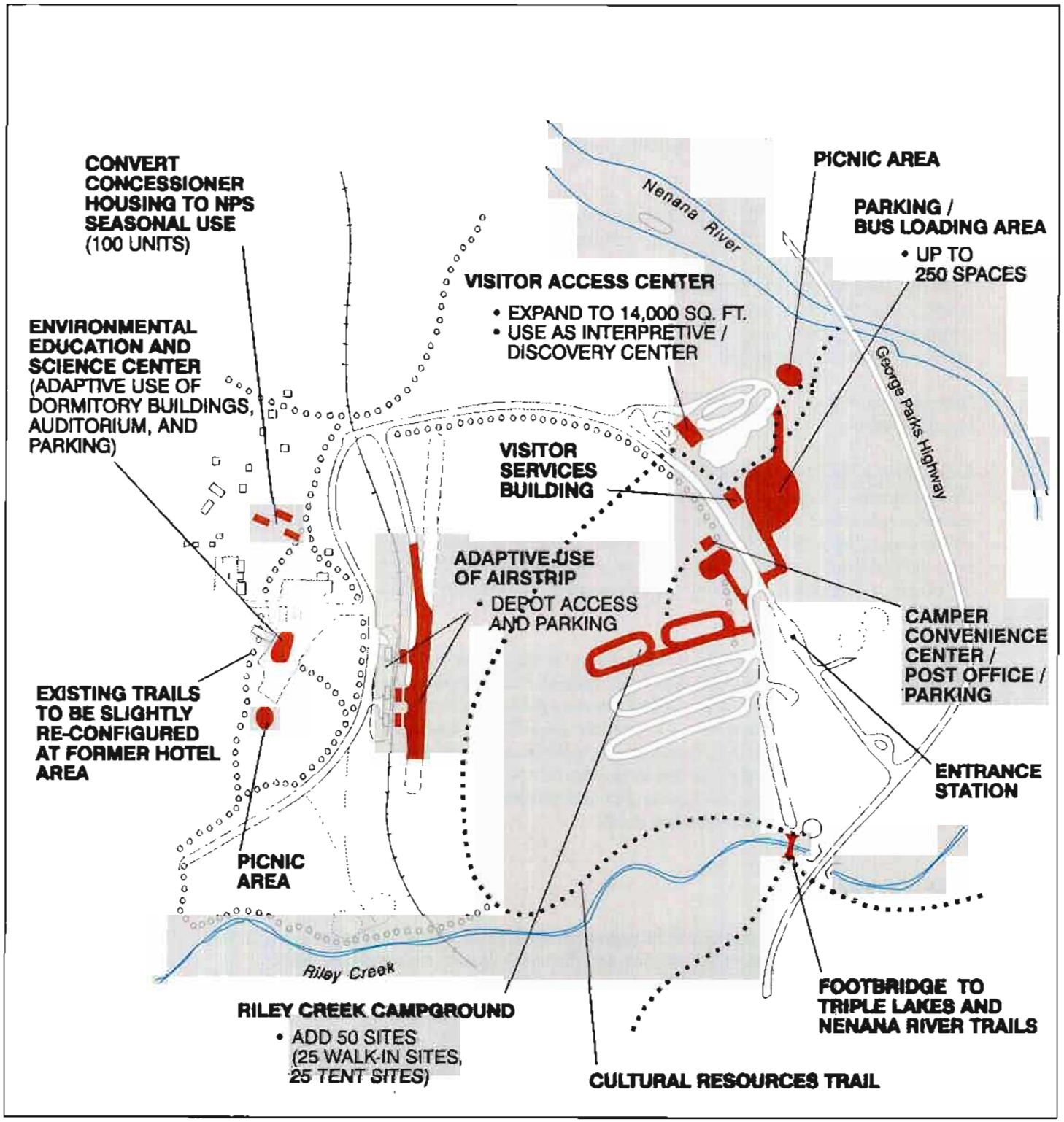
Ten backcountry campsites will be designated in the Kantishna Hills along former mining routes so that new trail construction will be minimal. Five additional campsites may be designated depending on visitor demand and resource protection needs. Potential locations will include the Eldorado and Slate Creek areas, Glen Creek, Caribou Creek, Glacier Creek, and along Skyline Drive. Development will depend on progress with acquisition of former mining claims and reclamation work. Quotas will be adjusted as necessary in backcountry units in which a new campground or new campsites are located depending on visitor experience and resource protection needs.

Visitor Services

The existing visitor access center will be expanded from 7,000 square feet to 14,000 square feet and adapted for use as an interpretive and discovery center. An expanded Alaska Natural History Association (ANHA) sales outlet and the theater will remain in the building, but all other functions will be moved to a new visitor services building to the southeast.

Camper convenience services such as a general store, fast food and deli service, showers, and a laundry will be provided at an expanded facility between the existing visitor access center and the Riley Creek campground. The National Park Service will encourage the private sector to provide additional services outside the park, with shuttle access. The post office will be replaced with a larger building (approximately 2,000 square feet) near the new camper conveniences center. This building could be connected to the camper conveniences facility and will share a common parking lot.

Upon completion of the above actions, the existing buildings will be removed and the area returned to as near a natural condition as possible.



PROPOSED ACTION

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DEVELOPMENT CONCEPT
ENTRANCE AREA

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Interpretive Facilities

The National Park Service will implement the following actions:

- Define the upper limit or carrying capacity for attendance at dog sled demonstrations at park headquarters and implement a management strategy such as a ticket or reservation system as necessary.

- Provide expanded interpretation (signs, wayside exhibits, etc.) of the Headquarters Historic District.

- Complete interpretive plans for new facilities and programs such as interpretation of the Kantishna Historic District, the park road, prehistoric uses in the Teklanika area, the Dry Creek Archeological District, and cultural and historic resources in the entrance area.

As mentioned above, the existing visitor access center will be expanded and adaptively used as an interpretive and discovery center (14,000 square feet total). This building will include a museum, a theater, an expanded ANHA sales outlet, and interpretation of traditional uses by Alaska Native people. The discovery center portion of the building will include "hands on" and interactive exhibits to provide an in-depth orientation to the resources of Denali. The National Park Service will continue working with the Alaska Natural History Association, the Denali Foundation, and the Denali Elderhostel in developing this facility.

Some of the existing buildings in the hotel area, including the auditorium, will be adaptively used as an environmental education and science center after the hotel closes no later than 2002. Overnight accommodations for up to 50 people will be provided in former concessioner housing. The environmental education and science center will be available for extended interpretive and educational programs ranging from a few hours to a week or more. Programs for local and regional school groups will be developed, and science programs for adults will be available as well. In addition to the auditorium, housing, and office space, the center will ultimately include classrooms for activities during inclement weather, a library, a science laboratory, a storage area and workroom, and an ANHA sales outlet for selected background books and other educational materials. An arrangement could be made with the concessioner to provide food service in the existing employee dining area.

Other entrance area actions proposed include improving information and orientation at the railroad depot and highlighting cultural resources in the Riley Creek campground area with a 1-mile, accessible trail. The main entrance sign (currently located along the Parks Highway near the Jonesville Bridge) will be replaced with a simpler sign and moved to the parking area just inside the park entrance.

The Headquarters Historic District buildings and landscape will be rehabilitated to protect these historic resources and to provide new interpretive opportunities including walk-through tours. A year-round visitor contact station could be established in the existing maintenance office near the visitor parking area after consolidation of maintenance functions in the auto shop area. An off-season ANHA sales outlet could be established at this contact station or at the environmental education and science center.

New facilities and programs planned for the park interior include installation of wayside exhibits at all rest areas. Wayside exhibits will not be installed at Stony Overlook; it will continue to function as an undeveloped picnic area.

Eielson Visitor Center will be replaced with a facility of appropriate size and function and will incorporate alternative energy systems such as photovoltaic to supplement or replace the diesel generator.

Interpretive plans will be developed for all new facilities and programs. The park staff will update and implement the 1993 *Wayside Exhibit Proposal for Denali National Park and Preserve* and include more emphasis on cultural and historical resources. The National Park Service will also implement the recommendations of the historic furnishing report for the Pearson cabin. The 1990 *A Plan for the Interpretation of Denali National Park and Preserve* will be updated and amended as necessary.

Interpretive activities at the Savage cabin will be expanded and will include living history, a variety of interpretive exhibits, and the use of sled dogs at designated times. Formal sled dog demonstration programs available at headquarters will not be duplicated. Dogs will still be based at headquarters and transported to the Savage cabin for interpretive programs during periods of higher visitor use. The sled dog demonstration loop trail at headquarters will be reconfigured to improve safety and enhance visitor viewing.

The National Park Service will work in partnership with Kantishna lodge owners to provide interpretation (such as signs and site bulletins) of the historic Kantishna Roadhouse, the Quigley cabin, and the Old Eureka/ Kantishna Historic Mining District. The Quigley cabin will be developed as an interpretive contact center upon resolution of ownership issues.

Entrance Area Transportation and Parking

Private vehicles will arrive at the entrance station immediately after leaving the Parks Highway. Drivers will obtain basic directional information at the station. They will be directed to the new visitor services building for additional park information and to purchase tickets for a bus trip into the park interior. Short-term and long-term parking as well as a bus staging area will be located in this area. The parking area will include about 250 spaces, with 60% for autos and 40% for RV use. Visitors wishing to use the interpretive and discovery center could reach that facility by either walking on a 1/4 mile nature trail from the new parking area or by driving around to the existing visitor access center parking lot.

Private vehicles will be allowed on the park road to Savage River.

Additional parking will be constructed northeast of the kennels at the headquarters area for up to 20 NPS employee vehicles.

Shuttles will continue to provide service to the Riley Creek campground, the new visitor services center, and the headquarters area. These shuttles could also provide service for employees with on-demand stops at C-Camp. Shuttle service will be implemented to connect the new visitor services building with the Savage River campground and rest area, providing access to proposed new trails in that area. As mentioned above, this service will be provided at minimal cost to visitors and could be initiated with the existing visitor transportation system.

The concession-operated tour buses will load and unload passengers at concessioner lodging facilities outside the park with stops in the entrance area as needed. The concessioner courtesy buses will load and unload passengers staying in concessioner lodging at the railroad depot and other locations as necessary. Other lodging and tour operators will provide courtesy shuttle service between the depot/entrance area facilities and their facilities.

Kantishna lodging operators will continue to offer shuttle service from the park entrance to their facilities. Kantishna passengers and employees will park their vehicles in a new parking lot on the former airstrip site.

Existing pedestrian trails will be used with trailhead modifications and new connections to link the new visitor services center, the camper conveniences center, and the interpretive and discovery center. A bicycle/foot trail will connect visitor services inside the park with those outside via a bridge over the Nenana River.

Entrance Station

An entrance station will be constructed between the Parks Highway and the entrance to the Riley Creek campground. NPS employees at the entrance station will check and sell park passes and collect entrance fees. The fee area will be expanded to include the area east of the Savage River. The entrance station area will include expanded traffic lanes, including at least one lane for administrative and post office traffic.

Rest and Picnic Areas

The National Park Service will maintain existing rest areas at Teklanika and Polychrome. Two rest areas will be constructed near the Savage River: one will be located on the west side of the river for use by buses only and another near the campground will be available to the general public (see Development Concept – Savage River Area map). The latter will provide an opportunity for mountain and wildlife viewing. Upon completion of the bus turnaround and rest area on the west side of the Savage River, the chemical toilets at Primrose will be removed.

An additional rest area will be constructed at Toklat, with protection such as sheetpile installed along the river as necessary (see Development Concept – Toklat Area map). Topography, soil type, and other design elements will determine the specific site, which could change by several hundred yards. Site design will also include alternative energy use to the extent practicable to reduce overall electrical demand at the Toklat road camp.

Each rest area in the frontcountry will include interpretive exhibits, a shelter and comfort station, and a short (1/4–1/2 mile) loop trail.

Two new picnic areas with shelters and two to three tables each will be constructed in the entrance area: one near the new visitor services center and another near the environmental education and science center. Another picnic area with two or three tables but without a shelter will be constructed near the Savage River.

A new picnic facility will also be incorporated into the design for the replacement Eielson Visitor Center. A comfort station will be constructed to accommodate visitors to the kennels and to the Headquarters Historic District.

Trails

The existing trail system in the entrance and headquarters areas will be upgraded, accessibility improved, and routine maintenance provided. The National Park Service will reroute the steep portions of the Rock Creek trail and the section near the VTS parking lot

(approximately 1 mile total). Extensive rehabilitation will be completed in the Horseshoe Lake area.

The following trails will be constructed and maintained (also see the Proposed Trails map).

Entrance/Headquarters Areas:

- Triple Lakes trail (7 miles) with footbridge connecting to the Riley Creek campground area (upgrade and relocate as needed).
- Bicycle/foot trail (1 mile) connecting visitor services in the Nenana River canyon to visitor services inside the park.
- Foot trail (8 miles) linking McKinley Village with the entrance area (Nenana River trail) with trailheads at each end.
- Upper section of Mt. Healy overlook trail (1 mile).
- 1-mile, accessible loop trail in Riley Creek campground to highlight cultural resources.

Park Interior:

- A loop trail system in the Savage River area that includes a 1/4–1/2 mile loop located downstream from the proposed bus turnaround, a longer loop extending about 1 mile downstream with a footbridge for the approximately 1-mile return on the opposite side of the river, and a trail up the ridge to the east. This trail will connect to hiking trails extending to the top of the ridge and connecting to the Savage River campground. The trail downstream along the Savage River could possibly incorporate the historic horse trail.
- A 1/4–1/2 mile accessible loop trail at Primrose pullout.
- A 1-mile loop trail to the ridge north of Eielson Visitor Center.
- A 1/4–1/2 mile loop trail at each of the proposed Savage and Toklat rest areas.
- A 1/4 mile river access trail at the Teklanika rest stop.

West End:

- McKinley Bar trail from Wonder Lake campground access road to the river (upgrade and relocate this 2-mile trail as needed).
- A 1/4 mile trail from the designated parking area, south along Lake Creek to the north end of Wonder Lake.
- A 1/4 mile trail to the top of the small hill at the north end of Wonder Lake (between the lake outlet and the ranger station). The trailhead and viewing area at the lake outlet will be rehabilitated.

Employee Housing

The National Park Service will retain the six-plex apartment building for permanent housing. Up to six additional garages in three separate buildings will be constructed in the

headquarters area for housing units that do not currently have them. See the Development Concept – Park Headquarters/C Camp map.

The National Park Service will replace inadequate and below-standard housing such as trailers at C-Camp and Toklat.

C-Camp housing for seasonal and temporary employees will be improved and upgraded for year-round use with no net loss in total beds. The central showerhouse and laundry facility will be remodeled.

In the concessioner housing area, 100 of the 195 beds will be converted for NPS use after hotel closing; 50 of the 100 beds will be allocated to the environmental education facility; and 44 will be allocated for NPS staff, research personnel, and ANHA staff housing.

In the park interior, seasonal employee housing at Sanctuary, Igloo Creek, East Fork, and Toklat will be renovated. Housing upgrades at Toklat will include measures to reduce electrical demand. At Wonder Lake, the National Park Service will upgrade seasonal housing and provide for two additional NPS staff.

Administrative and Support Facilities

The following actions could be implemented during the next 15–20 years. However, the developments outlined in previous sections that directly serve park visitors and protect resources are a higher priority. In the interim, park management will expand administrative space and consolidate functions as practicable to improve overall operational efficiency.

The National Park Service will construct additional administrative space in the headquarters area by replacing the "Outback" building that houses dispatch, the library, and ANHA offices with a new 5,000-square-foot building. This building will be designed to be architecturally compatible with existing rustic buildings in the headquarters area. When completed it will include NPS offices, ANHA office space, and the main park library.

Maintenance functions will be consolidated at the auto shop area in a new 8,000-square-foot building. The vacated space (3,000 square feet) will be rehabilitated for other administrative uses. The National Park Service will rehabilitate all the buildings and the landscape of the Headquarters Historic District. Interpretation division offices, including a multimedia workroom, will be located within space vacated by maintenance and ranger operations or in part of the new 5,000-square-foot building mentioned above. Administration, concessions, and resource management offices will be similarly located, consolidating functions as much as possible. Additional resource management facilities such as a laboratory and curatorial storage will be located in the headquarters area either by constructing a new building or by adaptive use of vacated maintenance space. Greenhouse facilities to support revegetation projects in the park will be developed in cooperation with the University of Alaska-Fairbanks, if practicable. Otherwise, a greenhouse could be constructed near the headquarters area. A parking area for up to 20 employees will be constructed northeast of the dog kennels.

Additional seasonal office space for visitor services staff will be constructed as part of the new visitor services center. Seasonal office space for interpretation division employees will be available in the interpretive and discovery center and at the environmental education and science facility. National Biological Service office space will also be provided for in the environmental education and science facility area.

The National Park Service will relocate and consolidate some functions such as research and administration in Healy and Fairbanks to the extent practicable.

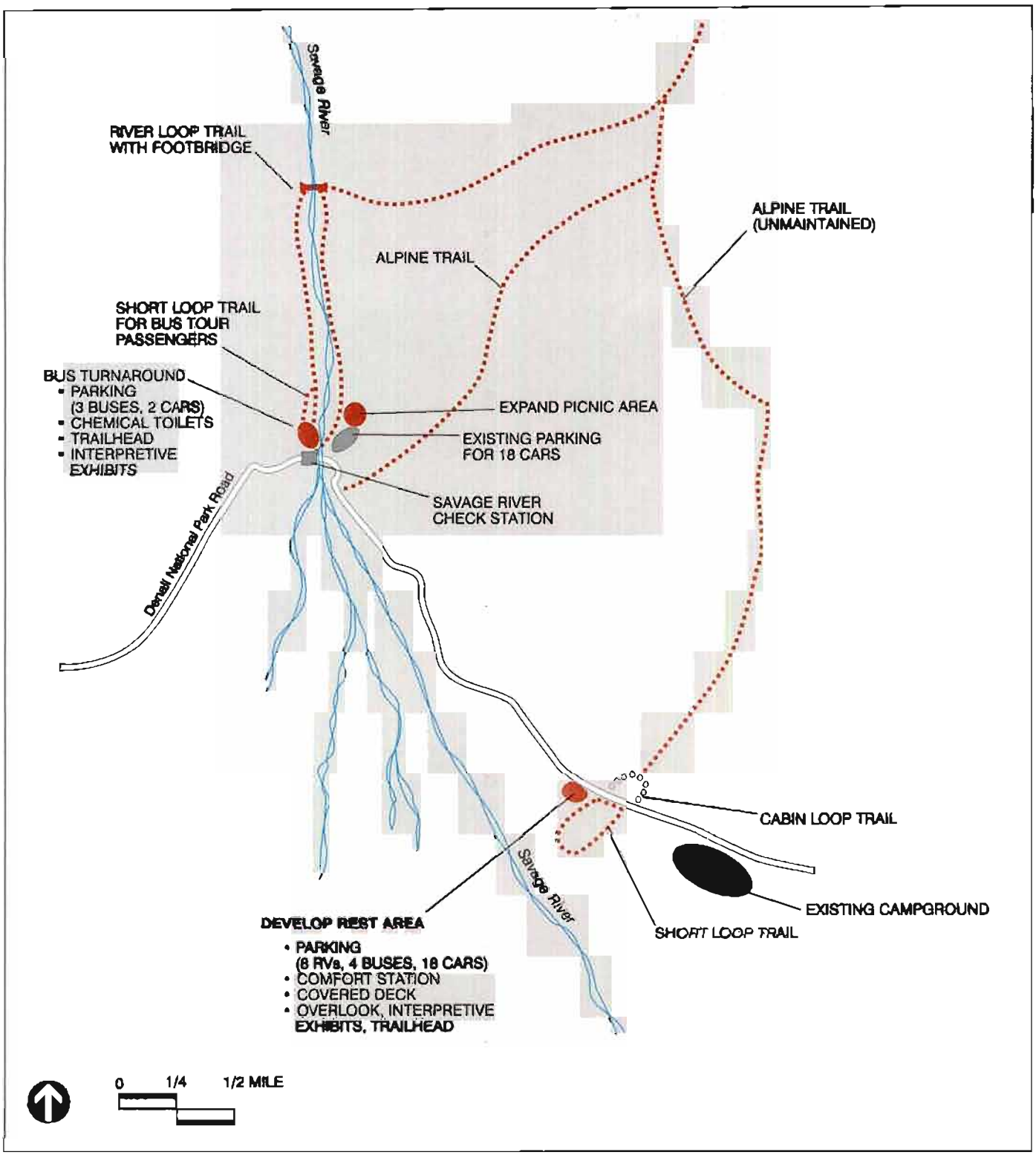
A new EMS/fire station (3,230 square feet) will be constructed in the auto shop area with East District protection offices consolidated there. The dispatch office will also be located in this building. An ANHA warehouse of up to 4,000 square feet will be constructed near or adjacent to the EMS/fire station or near the environmental education and science center on a previously disturbed site. Interim storage for the Alaska Natural History Association will be met with temporary structures within the development subzones.

In the park interior, the National Park Service will upgrade existing administrative space at Toklat, Eielson, and Wonder Lake. At the Toklat road camp, upgrades will include a rebuilt maintenance building of approximately 7,000 square feet. Sheetpile will be installed to protect the facilities there from river erosion. Any upgrades to facilities will also include measures to reduce electrical demand. On the west end, the Wonder Lake ranger station will be rehabilitated.

Utility Systems

The National Park Service will implement the following projects to upgrade electricity, water, sewer, and communications systems in the frontcountry:

- Upgrade utilities in the entrance and headquarters area, including upgrade of electrical and water systems and rehabilitation of sewer systems.
- Expand utility systems in the entrance area to provide for year-round use of portions of the environmental education and science center and the visitor services building. This will include installation of a septic tank and leachfield and development of a water system.
- Replace C-Camp and headquarters leachfields with one package sewage treatment plant (25,000 gallons per day capacity).
- Expand utility systems in the headquarters area to serve additional structures such as the new office building and the comfort station in the kennels area.
- Expand the existing dump station near the Riley Creek campground to improve traffic circulation. A second two-port island will be added and connected to existing water and sewer systems.
- Upgrade water systems at Sanctuary and Igloo Campgrounds by installing dish washing stations and grey water disposal systems (one at each campground). A 5,000-gallon water storage tank will be installed at each campground with a photovoltaic energy system to power the pump.
- Construct an onsite waste water disposal system for the proposed Toklat rest area.
- Upgrade the electrical system serving Toklat, incorporating measures to reduce electrical demand.
- Upgrade the Wonder Lake ranger station water system.
- Provide minimal sewage facilities (pit toilets) for the Yanert Overlook and Kantishna area backpacker campgrounds.



PROPOSED ACTION

DEVELOPMENT CONCEPT
SAVAGE RIVER AREA

Denali National Park and Preserve • Alaska
United States Department of the Interior • National Park Service
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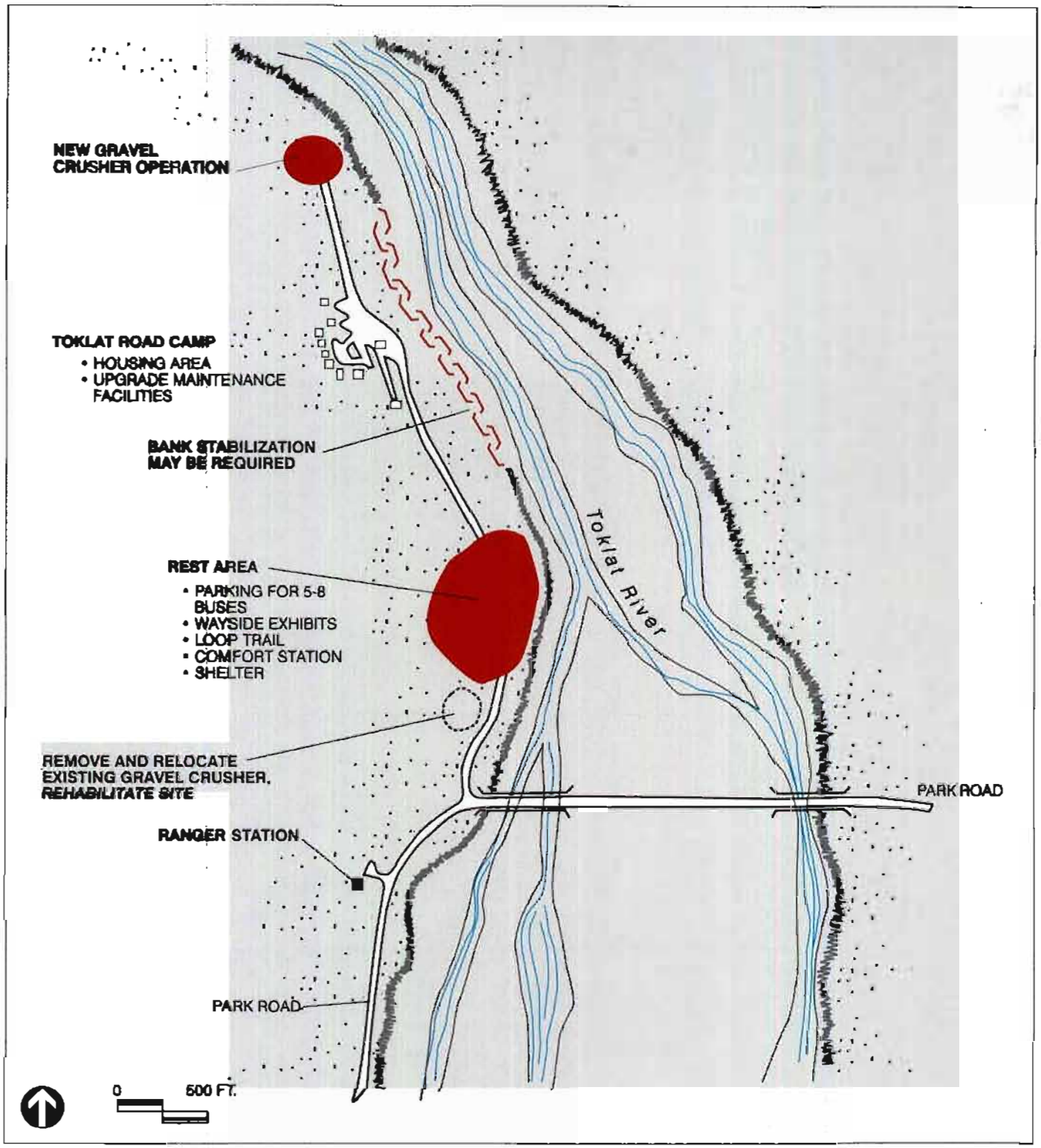
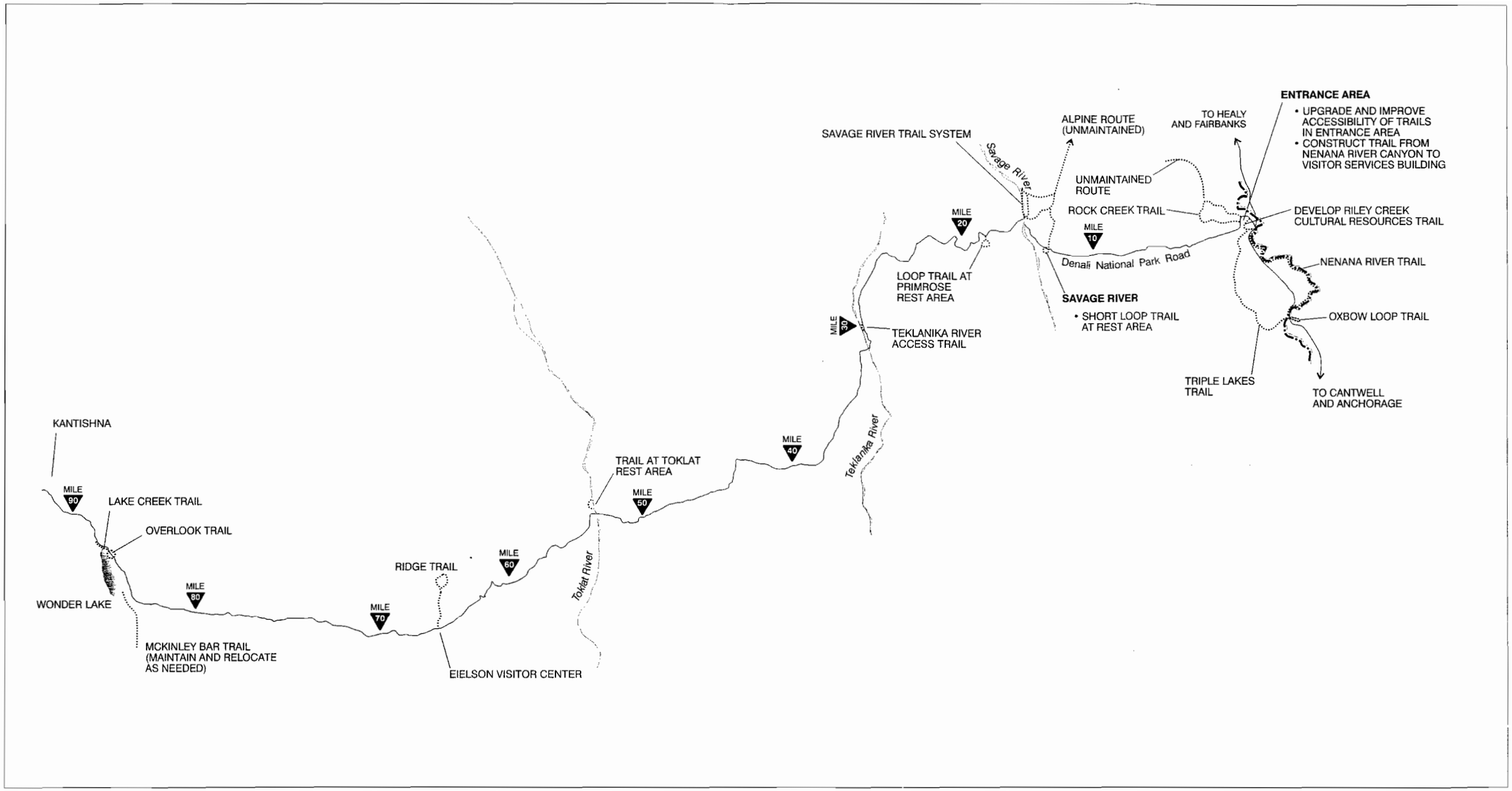


PROPOSED ACTION

DEVELOPMENT CONCEPT
TOKLAT AREA

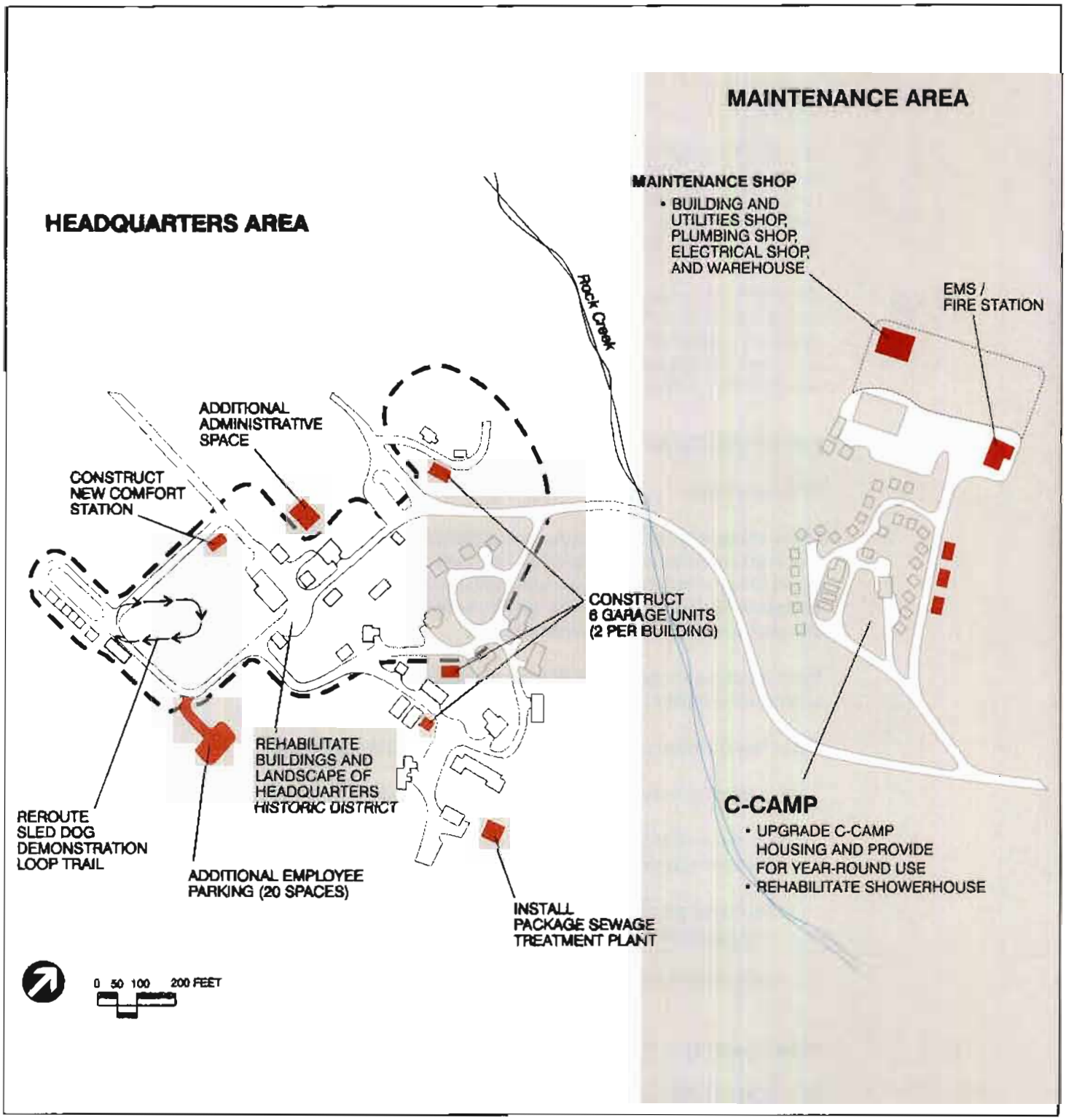
Denali National Park and Preserve • Alaska
United States Department of the Interior • National Park Service
DSC • 6/96 • 184 • 20140



0 1 2 3 MILES

PROPOSED TRAILS
ENTRANCE AREA AND ROAD CORRIDOR

Denali National Park and Preserve • Alaska
United States Department of the Interior • National Park Service
DSC •6/96 • 184 • 20128



PROPOSED ACTION

HISTORIC DISTRICT

DEVELOPMENT CONCEPT
PARK HEADQUARTERS / C-CAMP

Denali National Park and Preserve • Alaska

United States Department of the Interior • National Park Service
DSC • 6/96 • 184 • 20137

Airstrips

The McKinley Park airstrip will be closed to provide for potential expansion of the Alaska Railroad depot and to reduce resource impacts in the entrance area. NPS aircraft operations will be relocated to either the Healy or Denali private airstrips contingent upon availability of hangar space. Remaining flightseeing and air taxi services will also be relocated to the other airstrips. A helipad will be retained in the entrance area for medical evacuations.

No flightseeing or air taxi services will be based at the McKinley Park airstrip. The National Park Service will work cooperatively with the Alaska Department of Transportation and Public Facilities to develop a master plan for the Kantishna airstrip. Uses such as flightseeing by existing Kantishna area lodges will continue. Pedestrian and vehicle use on the airstrip will be reduced by adding a vehicle bypass around the airstrip.

PARK OPERATIONS

NPS Operations

Major changes in park operations under this alternative will include developing a centralized visitor services and interpretive center area and replacing concessioner-operated facilities in the hotel area with an environmental education and science facility. These two changes in the entrance area will enable the National Park Service to provide a full range of interpretive and educational opportunities.

Road maintenance activities will increase significantly for several years until backlogged repairs are complete.

Other major changes to park operations will include the following:

- expanded rest area, campground, and trail maintenance programs
- entrance station operations, which will provide a new opportunity for visitor orientation and information as well as more efficient fee collection
- increased patrols and bear management activities along trails and in backcountry campgrounds
- additional resource monitoring and revegetation projects

Other Concessions Operations, Commercial Uses, and Special Uses

The McKinley Park airstrip will be closed and no longer available for commercial use. Commercial use of the airstrip will be eliminated by relocating all remaining flightseeing and air taxi services to airstrips outside the park. The National Park Service will maintain the existing level of commercial use at the Kantishna airstrip and implement the 1994 Denali Task Force Report recommendation to acquire development rights and/or property to retain the existing character and approximate level of commercial use at Kantishna.

The National Park Service will continue to work cooperatively with the State of Alaska Department of Natural Resources, the Department of Fish and Game, and the Department of Transportation and Public Facilities to determine the best location for improved access to the Nenana River and the appropriate size and type of facility to construct.

The National Park Service will monitor resource conditions on and near Wonder Lake (including loon nesting areas) to minimize impacts from canoe use. Based on this additional resource information, the National Park Service will set limits on canoe use by Kantishna lodges through the concessions permit process.

The National Park Service will also continue to work cooperatively with Kantishna area lodges to develop other visitor opportunities. For example, the Jauhola cabin north of the Kantishna airstrip will be rehabilitated for use by the lodges and the National Park Service. Interpretive activities for small groups (up to 10 people) will be held there with use times allocated among the Kantishna lodges and the Park Service. The access route to the Jauhola cabin will be maintained as a trail, with motorized access by all-terrain vehicles allowed only for major rehabilitation projects.

Guided hiking by the two Kantishna limited concessions permit holders will be allowed in designated areas along the park road west of mile 84, the Wonder Lake campground access road, and the McKinley Bar trail. These guided activities will be available only for overnight guests of the two permit holders. A maximum of two permits will therefore be available for guided hiking. These restrictions will not apply to the historic operator in Kantishna.

VISITOR EXPERIENCE AND RESOURCE PROTECTION

The National Park Service will implement the following actions:

- Complete a resource management plan and other action plans to address issues such as revegetation, fish habitat restoration, bear management, wildland fuel reductions around structures, hazardous tree management, and administrative uses of resources.

- Implement a visitor experience and resource protection program such as that described below to prevent problems resulting from visitor use.

The National Park Service is currently developing a visitor experience and resource protection (VERP) program for addressing carrying capacity based on the U.S. Forest Service limits of acceptable change methodology and NPS management policies. This process will ultimately provide the tools necessary for the National Park Service to fulfill its obligations to address visitor carrying capacity for parks and to safeguard the quality of park resources and visitor experiences.

Carrying capacity at many parks has usually been addressed and defined in terms of physical or facility design limits. The implication was that if these limits were exceeded, carrying capacity was exceeded and the National Park Service will have to develop more facilities. For example, carrying capacities at many parks were often based on factors such as the number of cars and buses that could be parked in the parking lots at one time or on how many people could be accommodated in a visitor center or other facilities at one time.

These traditional definitions of carrying capacity address visitor access to a park and park resources and not the quality of the experience or resource protection issues. When facility limits were reached, vehicles were turned away from entering the park or visitors had to wait in line to enter. Parks were essentially managing for visitor access. The VERP process changes the emphasis from facility capacity to visitor experience and resource protection concerns.

The VERP process defines carrying capacity as "the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions that complement the purposes of the park units and their management objectives." The process emphasizes managing to achieve and maintain predetermined social and resource conditions. Providing for a high quality visitor experience and resource protection are the goals of management as opposed to simply providing for unlimited use of park resources.

In this context, carrying capacity represents a desired set of conditions that are influenced by visitor use rather than a specific number of visitors. This concept can be applied proactively to better manage a park.

Denali National Park and Preserve is under increasing pressure to accommodate more and more visitors while still providing a quality experience and protecting park resources. The VERP program will provide a framework for proactive management of the park to meet these challenges.

The National Park Service is currently testing the VERP process at several parks. This development concept plan provides a basis for beginning to address the carrying capacity of Denali and is being completed consistently with the VERP process. The plan identifies general management goals, management subzones, and management strategies. Specific desired conditions and key impact indicators still must be identified and desired conditions must be compared with existing conditions. Adopting this approach to carrying capacity will also require the park staff to establish monitoring and evaluation procedures to ensure that acceptable resource and social conditions are achieved and maintained.

Upon approval by the National Park Service, the VERP methodology will be fully implemented at Denali. In the interim, park staff will monitor park resources and visitor use to determine whether or not carrying capacity is being exceeded in any subzone. The expected level and types of visitor use and facility development proposed in this development concept plan are not anticipated to result in unacceptable impacts on the desired visitor experience or on the park's natural and cultural resources. However, if monitoring shows that the carrying capacity has been exceeded, the National Park Service will take actions to restore conditions to acceptable levels, such as restricting visitor use or modifying facilities.

For the life of this plan, park visitation is expected to be controlled by limits on road use, by the quantity and quality of facilities, and by park management actions. Use of the VERP program will enable the park to avoid some of the problems that other parks have experienced when visitor use has not been managed to protect the quality of the visitor experience or the resource base.

Under this plan the VERP program will be implemented as described above. Management zoning will be as described in appendix D of the draft development concept plan. (Also see the management subzone maps at the conclusion of the "The Plan" section in this document.)

PLAN IMPLEMENTATION AND PHASING

Implementation

The most important objective of this development concept plan is to outline actions that improve the visitor experience and resource protection in Denali and that can be implemented immediately upon plan approval. Another objective is to provide comprehensive, general guidance for development in and management of the entrance area and road corridor for the next 15–20 years or more.

Funding is the ultimate determinant of when proposed developments, programs, and staffing additions will be implemented. Because of dwindling federal resources, the National Park Service is interested in partnerships to develop cost-effective solutions for carrying out legislated responsibilities. The purpose of this development concept plan is to determine the types of actions necessary and the locations for proposed development, leaving funding options open.

Phasing

Priorities for implementing actions under the plan have been developed and are outlined in the following table. This list is preliminary and may be amended in the future.

DEFINITIONS OF PRIORITIES INCLUDE:

1 = highest priority:
Highest priority projects include those related to immediate health and safety concerns and protection of threatened and endangered resources. Also included in this category are major actions designed to enhance the visitor experience and resource protection in the frontcountry and management actions that can be implemented without additional funding, such as regulatory changes.

2 = second highest priority:
Second level priorities include essential services and NPS functions and actions that are the second phase of a high priority project. This priority level also includes major actions that will enhance the visitor experience and resource protection in the frontcountry but will require additional site-specific environmental compliance.

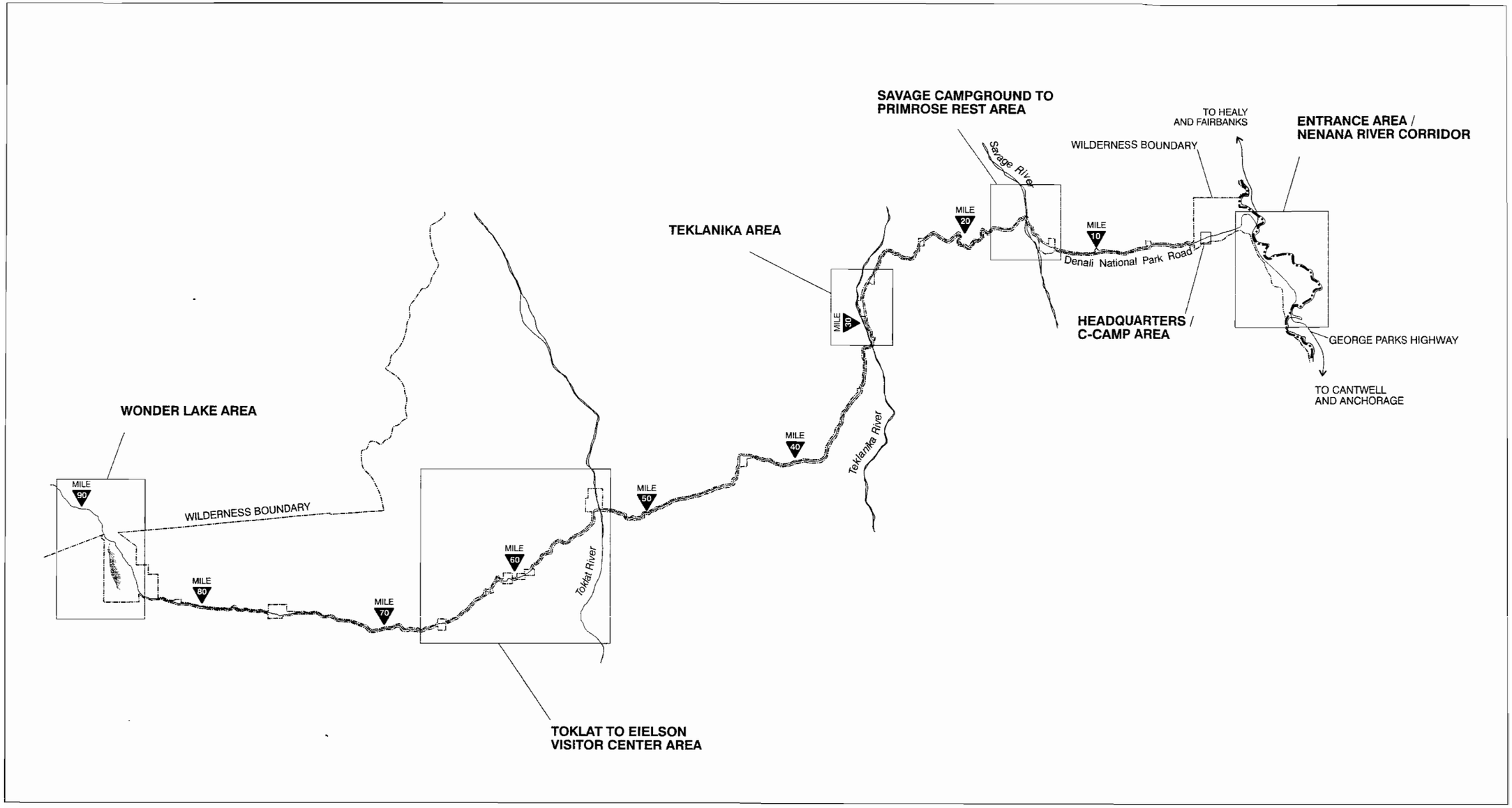
3 = lowest priority:
Lower priority projects encompass the later phases of projects initiated at higher priority levels, smaller projects that contribute to an improved visitor experience and resource protection, and projects that require substantial follow-up site planning and compliance.

Cost Estimates for New Development

The cost for new high priority (level 1) development in the plan is estimated to be approximately $19 million (see itemized cost estimate in the appendix of this document).

IMPLEMENTATION PRIORITIES

Priority	Description of Actions
Level 1: Highest Priority	**Road Use:** Implement phase 1 of traffic limits affecting buses and private vehicles (including Kantishna traffic); construct bicycle/foot trail connecting Nenana River canyon to visitor services center area.
	Road Maintenance: Establish additional gravel sources at Teklanika River and Kantishna; complete road repairs addressing safety issues; expand experimental use of dust palliatives and particle binders.
	General Development: Close park hotel; provide expanded interpretive opportunities at the Savage cabin; construct rest areas and trail system in Savage River and Toklat areas; construct new visitor services building and expand visitor access center for interpretation; construct Triple Lakes trail; construct short loop trail at Primrose and river access trail at Teklanika; construct EMS/fire station in auto shop area; rehabilitate entrance area utilities; install package sewage treatment plant for C-Camp and headquarters; add bypass to Kantishna airstrip.
	Park Operations: Acquire development rights and/or property in Kantishna.
Level 2: Second Highest Priority	**Visitor Use:** Expand interpretive information and programs in entrance area.
	Road Use: Implement phase 2 of changes to traffic limits.
	Road Maintenance: Make road repairs addressing high priority structural failures.
	General Development: Close McKinley Park airstrip; construct additional campsites at the Riley Creek campground; construct Yanert Overlook campground and Nenana River trail; construct environmental education and science facility; construct new camper convenience center; construct entrance station; construct cultural resources trail; install wayside exhibits at all rest areas; replace Eielson Visitor Center; reconfigure sled dog demonstration trail at headquarters; construct trails at north end of Wonder Lake; upgrade C-Camp; convert some concessioner housing in former hotel area to NPS use; consolidate maintenance functions in auto shop area and remodel vacated space for administrative use; provide additional visitor opportunities in Kantishna (guiding, rehabilitate the Juahola cabin).
Level 3: Lowest Priority	**Road Use:** Implement phase 3 of changes to traffic limits.
	Visitor Use: Provide additional interpretive services in the Kantishna area.
	Road Maintenance: Make road repairs addressing second highest priority failures; construct gravel shoulders along sections of paved road.
	General Development: Construct Kantishna area campground and campsites; replace Denali National Park Post Office; construct new picnic areas; construct new comfort station for kennels and headquarters visitors; upgrade existing trail system in entrance area; construct loop trail north of Eielson Visitor Center; upgrade/relocate McKinley Bar trail; upgrade employee housing and administrative space in park interior; construct additional administrative space in headquarters area; expand entrance area dump station; upgrade water systems and electrical systems in park interior.



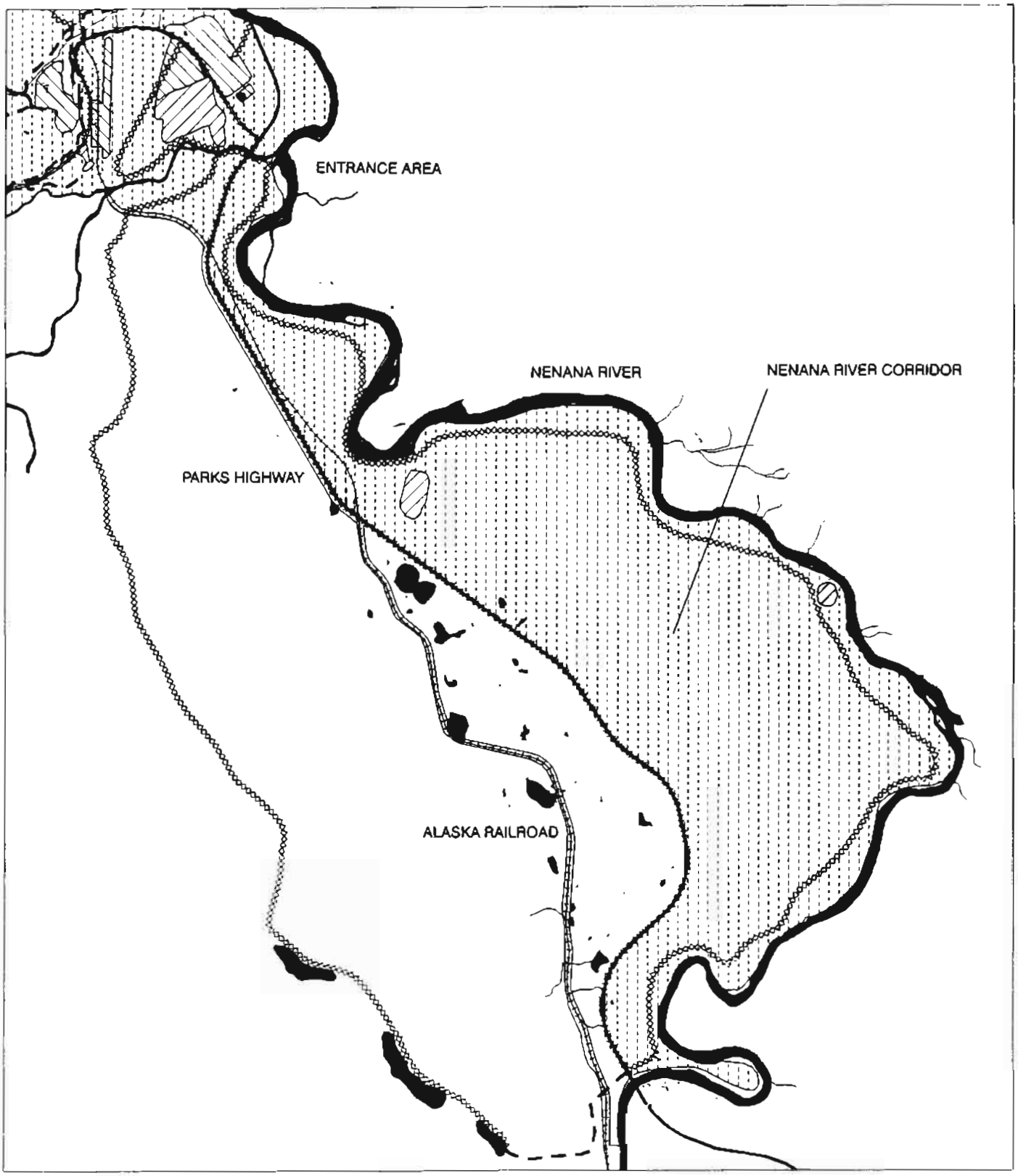
0 1 2 3 MILES

KEY TO MANAGEMENT SUBZONE MAPS

ENTRANCE AREA AND ROAD CORRIDOR

Denali National Park and Preserve • Alaska

United States Department of the Interior • National Park Service
DSC • 6/96 • 184 • 20147



Existing Trails (maintained)

Proposed Trails (Hiker Zone outside of D-1 and D-2 Zones)

Utilities

Motorized Sightseeing Zone 1

Motorized Sightseeing Zone 2

Motorized Sightseeing Zone 3

Motorized Wildlife Viewing Zone 1

Motorized Wildlife Viewing Zone 2

Development Zone (D-1)

Development Zone (D-2)

Backcountry Day Use Zone

Railroad Right of Way

0 1 MILE

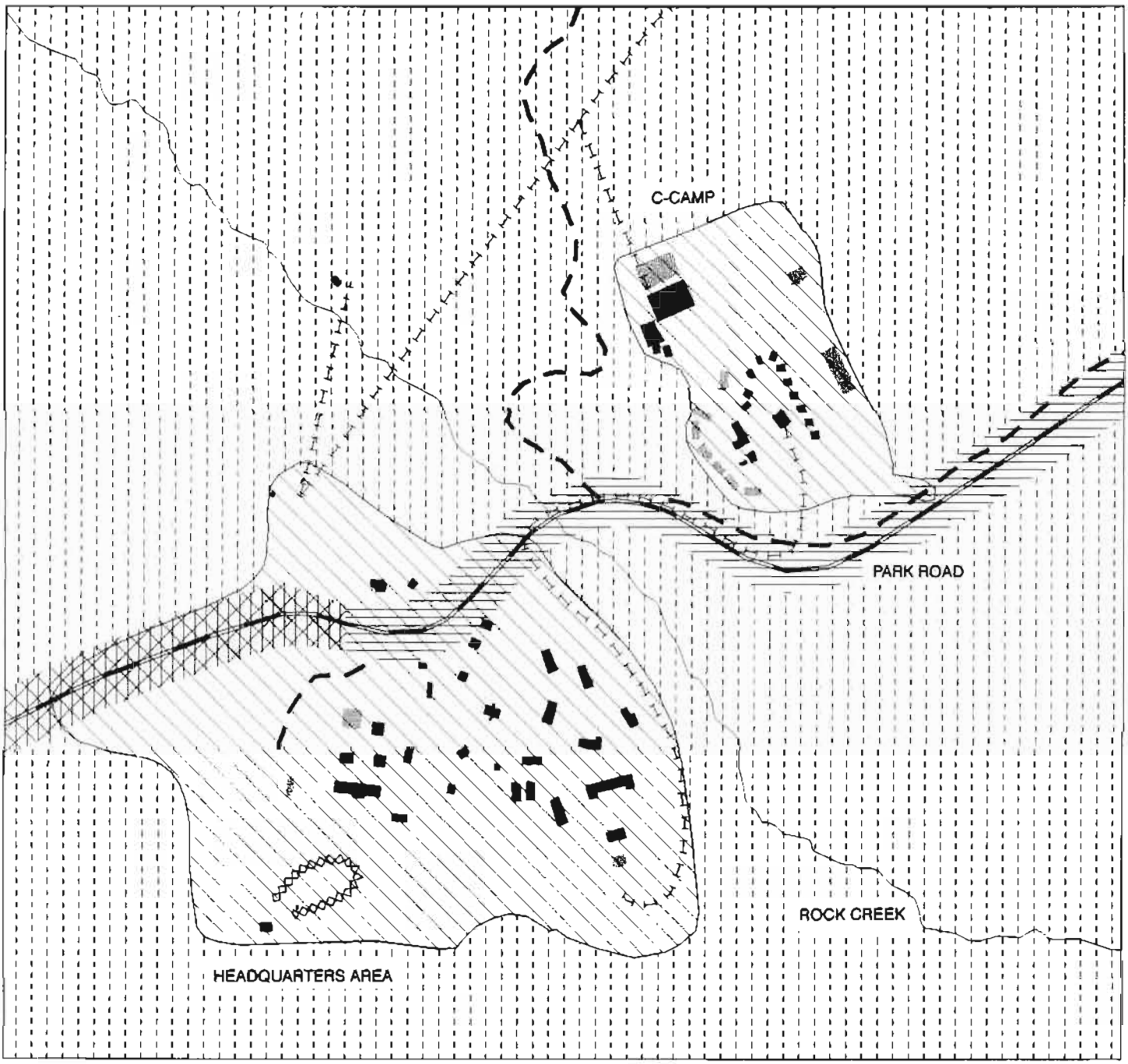
MANAGEMENT SUBZONES

ENTRANCE AREA / NENANA RIVER CORRIDOR

Denali National Park and Preserve • Alaska

United States Department of the Interior • National Park Service

DSC • 3/97 • 184 • 20146A

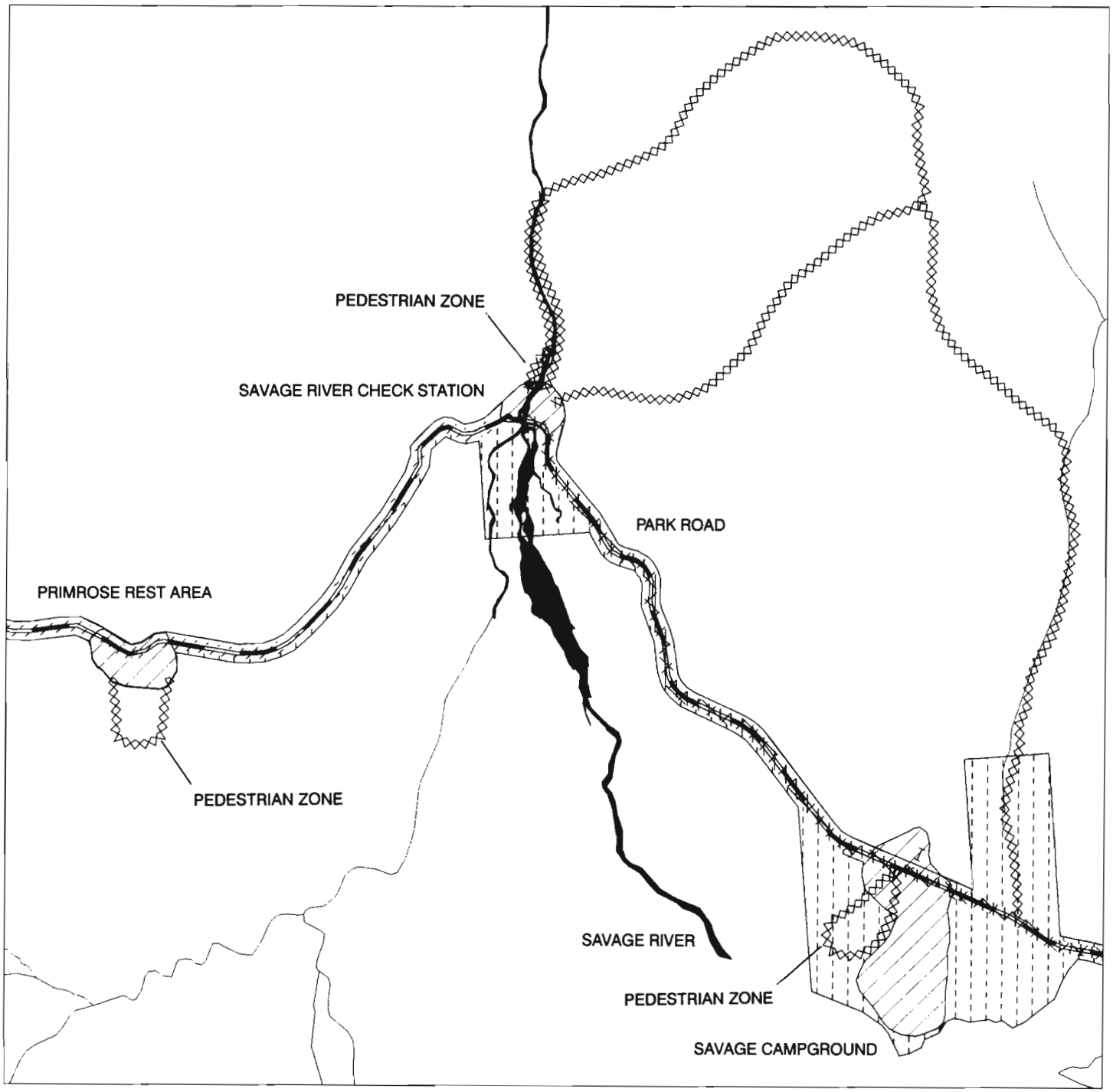


Existing Trails
Proposed Trails
Utilities
Motorized Sightseeing Zone 1
Motorized Sightseeing Zone 2
Motorized Sightseeing Zone 3
Motorized Wildlife Viewing Zone 1
Motorized Wildlife Viewing Zone 2
Development Zone (D-1)
Development Zone (D-2)
Backcountry Day Use Zone
Railroad Right of Way

0 1500 FT.

MANAGEMENT SUBZONES
HEADQUARTERS / C-CAMP AREA

Denali National Park and Preserve • Alaska
United States Department of the Interior • National Park Service
DSC • 3/97 • 184 • 20145A



Existing Trails (maintained)

Proposed Trails and Routes (Hiker Zone unless otherwise indicated)

Utilities

Motorized Sightseeing Zone 1

Motorized Sightseeing Zone 2

Motorized Sightseeing Zone 3

Motorized Wildlife Viewing Zone 1

Motorized Wildlife Viewing Zone 2

Development Zone (D-1)

Development Zone (D-2)

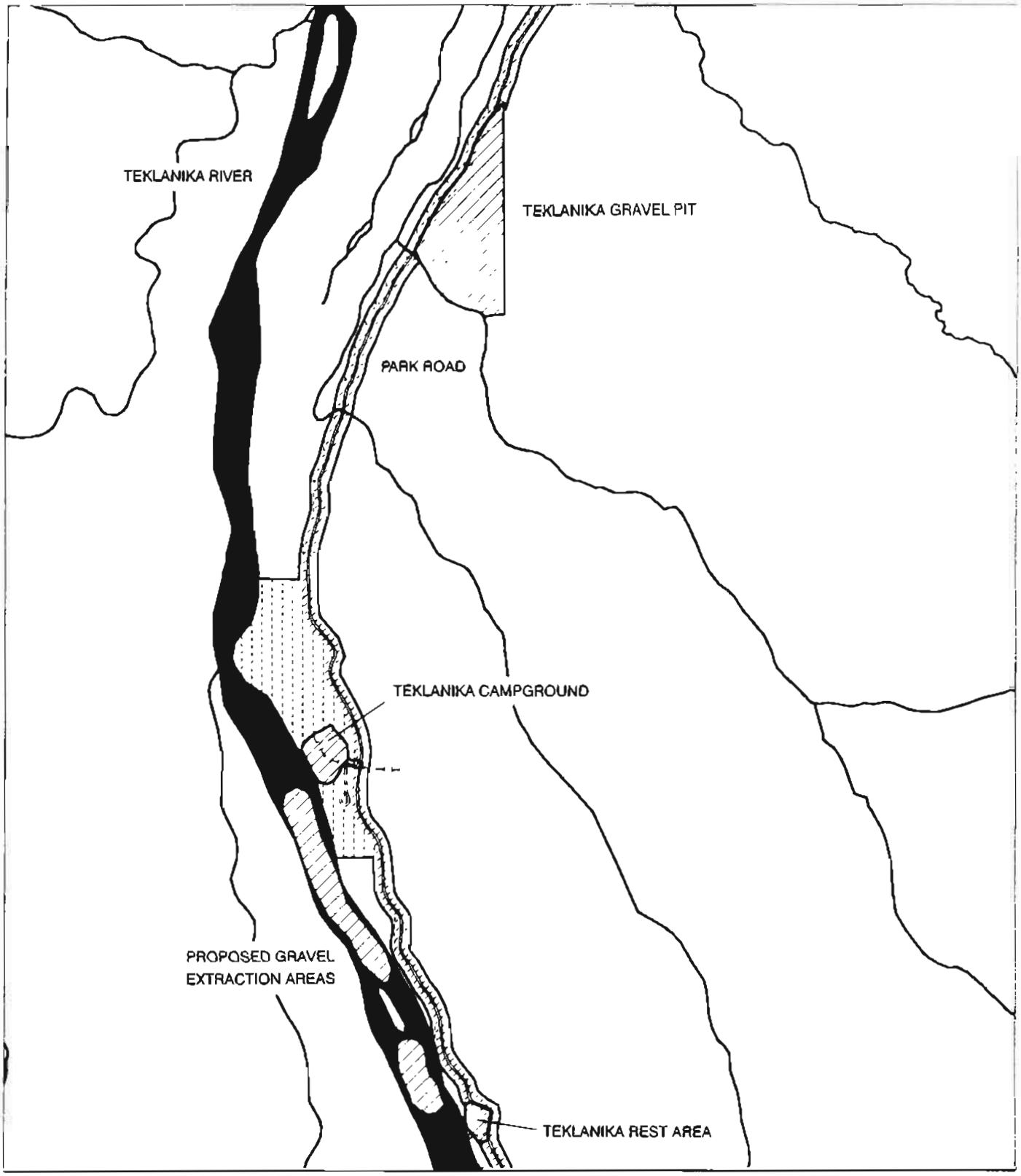
Backcountry Day Use Zone

Railroad Right of Way

0 1/2 1 MILE

MANAGEMENT SUBZONES
SAVAGE CAMPGROUND TO PRIMROSE REST AREA

Denali National Park and Preserve • Alaska
United States Department of the Interior • National Park Service
DSC • 3/97 • 184 • 20144A



Existing Trails (maintained)
Proposed Trails
Utilities
Motorized Sightseeing Zone 1
Motorized Sightseeing Zone 2
Motorized Sightseeing Zone 3
Motorized Wildlife Viewing Zone 1
Motorized Wildlife Viewing Zone 2
Development Zone (D-1)
Development Zone (D-2)
Backcountry Day Use Zone
Railroad Right of Way

0 6000 FT.

MANAGEMENT SUBZONES
TEKLANIKA AREA

Denali National Park and Preserve • Alaska
United States Department of the Interior • National Park Service
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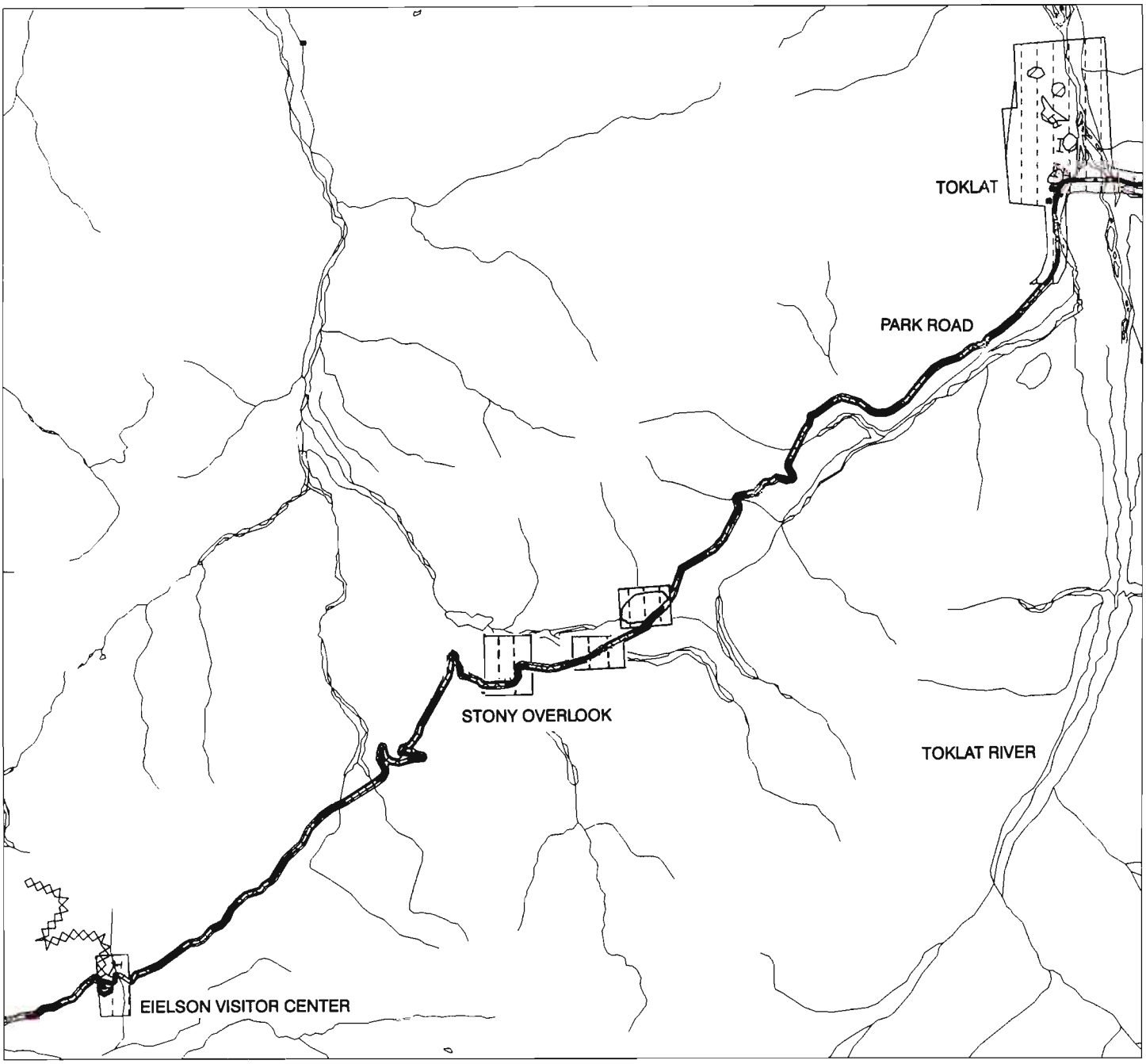


Existing Trails (maintained)

Proposed Trails Hiker Zone

Utilities

Motorized Sightseeing Zone 1

Motorized Sightseeing Zone 2

Motorized Sightseeing Zone 3

Motorized Wildlife Viewing Zone 1

Motorized Wildlife Viewing Zone 2

Development Zone (D-1)

Development Zone (D-2)

Backcountry Day Use Zone

Railroad Right of Way

0 1 2 MILES

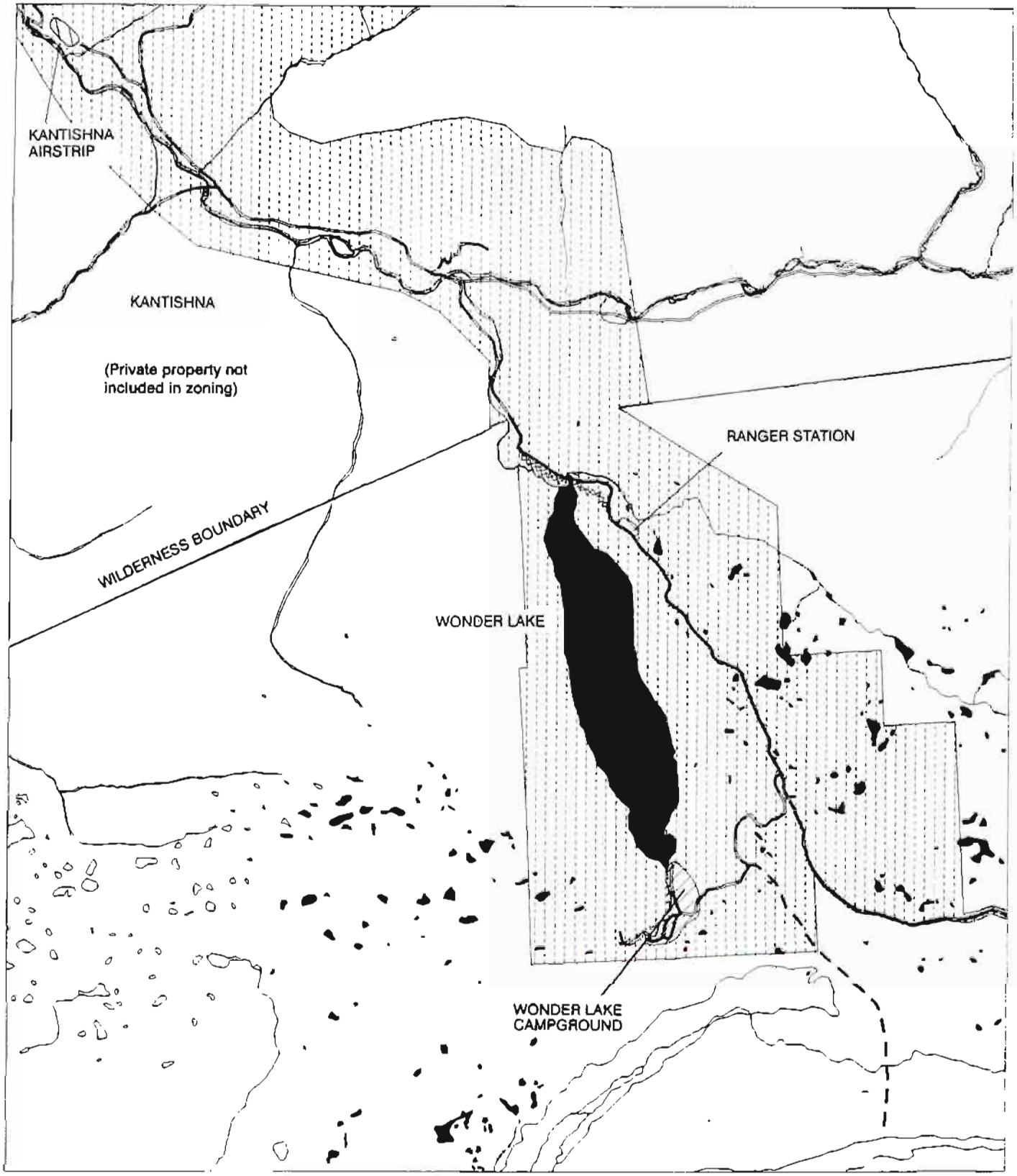
MANAGEMENT SUBZONES

TOKLAT TO EIELSON VISITOR CENTER AREA

Denali National Park and Preserve • Alaska

United States Department of the Interior • National Park Service

DSC • 3/97 • 184 • 20142A



Existing Trails (Hiker Zone)
Proposed Trails (Pedestrian Zone)
Utilities
Motorized Sightseeing Zone 1
Motorized Sightseeing Zone 2
Motorized Sightseeing Zone 3
Motorized Wildlife Viewing Zone 1
Motorized Wildlife Viewing Zone 2
Development Zone (D-1)
Development Zone (D-2)
Backcountry Day Use Zone
Railroad Right of Way

0 1 MILE

MANAGEMENT SUBZONES
WONDER LAKE AREA

Denali National Park and Preserve • Alaska
United States Department of the Interior • National Park Service
DSC • 3/97 • 184 • 20141A

CONSULTATION & COORDINATION

The National Park Service consulted with numerous agencies and organizations and the interested public in developing the development concept plan / environmental impact statement. A "Notice of Intent" to prepare an environmental impact statement was published in the *Federal Register* on July 20, 1995 (60 FR 37470). A newsletter announcing initiation of the planning project was published on August 11, 1995, and a series of public scoping meetings were conducted during the last week in August. A final public scoping meeting occurred in Healy, Alaska, on October 26, and public comments were accepted through November 22, 1995. Numerous informal meetings and telephone contacts with interested parties were also done during this period.

The *Draft Development Concept Plan / Environmental Impact Statement* was released to the public in June 1996, with a 60-day comment period extending from June 21 through August 19, 1996. A series of public meetings were held at various locations throughout Alaska between August 5 and 14, 1996, to receive comments and ideas. A summary of the draft document was also posted on the Internet. Following public review, comments were analyzed, responses developed, and appropriate changes in the plan made and incorporated into the final *Development Concept Plan / Abbreviated Final Environmental Impact Statement*, which was published in December 1996. The National Park Service has continued informal meetings and telephone contacts with interested parties. A Record of Decision on the final plan/impact statement was approved on February 24, 1997.

CONSULTATION WITH THE U.S. FISH AND WILDLIFE SERVICE

Section 7 of the Endangered Species Act, as amended, prohibits federal agencies such as the National Park Service from implementing any action that is likely to jeopardize the continued existence of a federally protected (i.e., endangered, threatened) species. Further, the act requires that the National Park Service consult with the U.S. Fish and Wildlife Service on any action it authorizes, funds, or executes that could potentially affect a protected species or its designated critical habitat.

To help meet its responsibilities under the act, the National Park Service has consulted with the U.S. Fish and Wildlife Service to identify those listed plant and animal species that may inhabit the entrance/road corridor area (see appendix F of the draft plan/impact statement). On October 21, 1996, in a telephone conversation between Natural Resource Specialist Liz Bellantoni of the National Park Service's Denver Service Center and Endangered Species Biologist Virginia Moran of the U.S. Fish and Wildlife Service's Ecological Services Office in Anchorage, Biologist Virginia Moran indicated that the U.S. Fish and Wildlife Service had no threatened and endangered species concerns regarding the draft entrance area and road corridor development concept plan for Denali National Park and Preserve.

A copy of the final plan/impact statement was sent to the U.S. Fish and Wildlife Service in January 1997.

COORDINATION WITH THE ALASKA STATE HISTORIC PRESERVATION OFFICE AND THE WESTERN OFFICE OF THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

The National Park Service has consulted with the Alaska state historic preservation office and the Western Office of the Advisory Council on Historic Preservation since initiating this project. An advance copy of the document was provided for their review. A copy of the published *Draft Development Concept Plan / Environmental Impact Statement* was sent to both of these offices in order to initiate and plan for coordination of survey, eligibility, effect, and mitigation of possible cultural resources in the proposed project areas early in the planning process. All implementation actions that could affect historic properties as defined in the 1965 National Historic Preservation Act will be evaluated through consultation with the state historic preservation officer. These actions include, but are not limited to, proposed changes to historic buildings or districts and ground-disturbing activities.

A copy of the final plan/impact statement was sent to the state historic preservation officer and advisory council in January 1997.

FOLLOW-UP ENVIRONMENTAL / REGULATORY REQUIREMENTS

In instances where resource conditions may have changed or more detailed site design is required, the National Park Service will ensure that the necessary level of impact assessment has been completed prior to implementing any actions described in this plan. Such evaluations may determine the need for more detailed environmental compliance. This may include preparation of project-specific environmental assessments tiered from this plan, obtaining additional clearances and permits from regulatory agencies, or development of further mitigation strategies.

Environmental assessments may be required to fully implement the following elements of the proposed action:

1. Package treatment plant and sewer lines for C-Camp and headquarters
2. Gravel acquisition from previously disturbed park land in Kantishna, with subsequent reclamation
3. 1-mile cultural resources trail, analyzing specific route and completing cultural resources (section 106) compliance
4. Nenana River Trail and Yanert Overlook campground, looking at specific route and location and trailhead development
5. Nenana River access facilities (if constructed inside park)
6. Savage River 2-mile loop trail with bridge, considering exact location and bridge design
7. Savage River short loop trail
8. Savage River bus turnaround
9. Savage River ridge trail (location, connections to other trails)

10. Primrose, Triple Lakes, Mt. Healy, Eielson and Wonder Lake trails; also McKinley Bar trail relocation

11. Kantishna backpacker campground (location, cumulative impacts)

12. Kantishna backcountry campsites (location, road maintenance, cumulative impacts)

13. Kantishna hostel (location, cumulative impacts)

14. New structures at headquarters including a greenhouse and laboratory

15. Replace Eielson Visitor Center (location, loss of functions for two years if on same site)

16. Expansion of C-Camp

17. Gravel acquisition from Teklanika River and access road

18. Park road reconstructions

19. Installation of septic tank and leachfield and development of water system to support winter use of environmental education center and visitor services building

20. Changes to traffic limits such as shoulder season limits and daily bus limits within the overall 10,512-vehicle allocation

A floodplain statement of findings may be required for the following:

- Teklanika River gravel source
- Riley Creek bridge on relocated Triple Lakes trail
- Savage River 2-mile loop trail
- Toklat rest stop, with river protection
- Relocation of Toklat gravel crushing operation, with river protection
- Gravel acquisition from Kantishna area

A wetlands statement of findings may be required for the following:

- Bicycle and foot trail connecting Nenana River bridge to Riley Creek area
- New permanent restrooms for kennels and headquarters visitors
- Relocate Triple Lakes trail
- Relocate McKinley Bar trail

A Clean Water Act, Section 404 permit will be obtained for the discharge of dredged or fill material into waters of the United States. A section 401 water quality certification will be acquired in conjunction with the 404 permit.

A Clean Water Act, Section 402, National Pollutant Discharge Elimination System permit will be obtained for any point source discharge of pollutants into surface waters.

APPENDIX: COST ESTIMATES

Following are development cost estimates for the proposed action as of June 1996. Cost estimates are shown for only high priority (level 1) projects as identified in the text. Most cost estimates are rough NPS class C estimates based on the cost of similar facilities constructed in Alaska through federal government contracts. Actual costs may be higher or lower depending on the final design, site conditions, and the contracting agency. Facilities may be constructed by the National Park Service or some other entity such as a private or nonprofit corporation. Gross construction includes net government contract costs, construction supervision, and contingencies (net construction + 31%). Project planning includes surveys, more detailed site planning, facility design, construction documents, and additional project compliance activities (25% of net).

Most facility costs were developed using the NPS Denver Service Center cost estimating database. These figures were adjusted using data provided by the Alaska Support Office and Denali National Park and Preserve staff. Certain facilities, such as cabins or trails, will be developed using "off the shelf" plans and "day labor" construction; therefore, design, construction supervision, and contingency costs are not identified. In other words, in some cases the project planning cost figure has been reduced below the standard 25% figure. These estimates were intended primarily to assist in comparing the relative cost of the alternatives in the environmental impact statement. Some figures may not add up due to rounding.

ENTRANCE AREA AND ROAD CORRIDOR DEVELOPMENT CONCEPT PLAN COST ESTIMATES PRIORITY LEVEL ONE FACILITIES

Facility/Item	Gross	Project Planning	Total
Accommodations			
Phase out hotel — Site restoration	$380,000	$40,000	$420,000
Interpretive Facilities			
Expand visitor access center/interpretive center (7,000 sq. ft.)	2,725,000	520,000	3,245,000
Interpretive displays	655,000	125,000	780,000
Site work	545,000	104,000	649,000
Construct visitor services building (5,000 sq. ft.)	1,131,000	250,000	1,381,000
Interpretive displays	65,000	13,000	78,000
Site work	164,000	31,000	195,000
Parking			
Expand visitor access center parking 250 spaces	1,633,000	326,000	1,959,000
Bicycle Use			
Construct trail connecting visitor services in the Nenana River canyon with visitor services in the park (up to 1 mile)	200,000	0	200,000
Rest Areas			
Rest area at Toklat	972,000	186,000	1,158,000
Rest are near Savage check station	365,000	73,000	438,000
Rest area near Savage campground	820,000	164,000	984,000
Roads			
New gravel sources in Kantishna	400,000	77,000	477,000
New gravel source at Teklanika (includes reclamation cost)	400,000	77,000	477,000
Trails			
Triple Lakes trail (7 miles, with bridge)	240,000	0	240,000
Loop trail system in Savage River area (2 miles, with bridge)	120,000	0	120,000
Loop trail at Primrose (up to 0.5 mile)	40,000	0	40,000
River access trail at Teklanika rest area (0.25 mile)	40,000	0	40,000
Administrative and Support Facilities			
New EMS/fire station	1,421,000	271,000	1,692,000
Utilities			
Rehabilitate entrance area utilities	5,800,000	0	5,800,000
Replace C-Camp leachfields with a package treatment plant	1,245,000	237,000	1,482,000
Airstrips			
Add vehicle/pedestrian bypass at Kantishna airstrip	17,000	4,000	21,000
Habitat Restoration (Mitigation)	75,000	0	75,000
Resource Data Collection for Proposed Projects	0	100,000	100,000
TOTAL	**$19,453,000**	**$2,598,000**	**$22,051,000**

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PLANNING TEAM

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Linda Buswell, Deputy Superintendent
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