

MASTER PLAN FOR THE PROPOSED WILLOW CREEK STATE RECREATION AREA



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MASTER PLAN FOR THE PROPOSED WILLOW CREEK STATE RECREATION AREA

**Division of Parks and Outdoor Recreation
Alaska Department of Natural Resources**

Matanuska-Susitna Borough

1984



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BOROUGH MANAGER

Dear Park User:

The Matanuska-Susitna Borough is pleased to present the joint planning effort between the Division of Parks and the Borough entitled the "Willow Creek Recreational Area Plan." The Borough is very much aware of the need for increased outdoor recreational opportunities and better access to waterways.

The Division of Parks will manage the Willow Creek State Recreation Area, which comprises 240 acres of Borough and State lands. Nearly all outdoor recreational activities will be permitted within the park consistent with the overall goals of the area.

Once the road is built, fishing enthusiasts, hikers, nature lovers, snow machiners, and others will have new areas to explore. This plan is just an example of what can be done within our Borough to increase the recreational potential of Alaskan lands.

Sincerely,

Gary Thurlow
Borough Manager

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS AND OUTDOOR RECREATION

225A CORDOVA STREET
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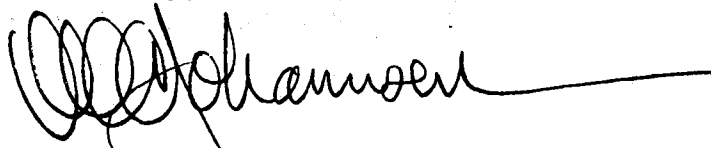
To the Reader:

The area surrounding the confluence of Willow Creek and the Susitna River has long been recognized as a significant recreational attraction. It has all the prerequisites to form a recreational magnet for generations of Alaskans: clear waters teeming with annual salmon runs as well as resident sport fish populations, the tranquility and beauty of a mixed spruce-birch forest, easy accessibility for a majority of Alaskans, and the open spaces characteristic of Alaska. Territorial officials appreciated the stream's potential when they nominated it for park status during the 1950s. Many others have echoed similar sentiments over the years. Recreational pressures have now grown to the point that active management of this area is essential.

This master plan for the proposed Willow Creek State Recreation Area reflects a cooperative effort towards designating the lower stream for public use. The state and Matanuska-Susitna Borough, the two principal landowners, have worked together to develop this plan, backed by widespread public participation and support during the planning program.

The plan calls for the legislative designation of a 3,440 acre unit of the state park system, utilizing lands owned by the borough and state. Facilities to be built include a road to the stream's confluence with the Susitna River, where a boat launch, campgrounds, and an extensive trail network opening large segments of new fishing waters would be constructed. New summer and winter recreation opportunities will be provided to meet regional demand and to help alleviate recreational pressures placed on other areas.

Sincerely,



Neil C. Johannsen
Director

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SUMMARY

This management plan provides general guidance and specific recommendations for the management and development of the proposed Willow Creek State Recreation Area (WCSRA). The proposed park unit is located in the Susitna River basin, accessible via the Parks Highway to the regional population centers of Anchorage, Palmer, Wasilla, and Eagle River (see Figure 1, page 7).

Willow Creek is presently the scene of intensive year-round recreational activity. Summer recreation centers on sport fishing. Alaska Department of Fish & Game records indicate that Willow Creek supports some of the greatest sport fishing effort in the Cook Inlet region, with 29,011 angler days of effort in 1980. (An angler day is defined as any portion of a 24-hour period during which a person is engaged in fishing.) King salmon, pink salmon, chum salmon, and silver salmon are sought at various times during the season. Resident sport fish species include rainbow trout and arctic grayling (see Figure 11, page 25). Winter recreation consists of dog mushing, snow-machining, and cross-country skiing. These

activities are practiced on the area's extensive wetlands and a network of trails.

Legislative establishment as a unit of the Alaska State Park System is recommended (see Appendix B). The proposed boundaries of the recreation area encompass lands owned by the State of Alaska and the Matanuska-Susitna Borough. A central recommendation of this plan is the implementation of a land management agreement between the state and the borough (see Appendix A) which will allow management of borough-owned lands by the Division of Parks.

Willow Creek State Recreation Area will be managed as a year-round recreation area, centering on the activities which presently occur on the site. A key recommendation regarding sport fishing is the establishment of an active fisheries enhancement program, designed to provide an additional harvest of 6,000 coho salmon and 6,000 king salmon. This program will result in an estimated 42,000 angler days of additional fishing opportunity (see page 51).

Facilities proposed for WCSRA include a four mile access road leading from the Parks Highway to the mouth of Willow Creek, a boat launch, vehicle campgrounds, walk-in camping units, day-use parking, and an extensive trail network (see Figure 20, page 46).

The public has participated during every

phase in the formulation of this plan. Four public meetings and an opinion survey have provided valuable information and ideas which have often been converted directly into recommendations (see Appendices C and D). The plan has also been reviewed by the Matanuska-Susitna Borough's Planning Commission and Assembly.

INTRODUCTION

Purpose

Willow Creek has long been recognized as an outstanding recreational resource, with abundant salmon runs, resident sport fish species, and extensive uplands and wetlands suitable for a range of outdoor activities. As a result of recent rapid population growth throughout southcentral Alaska, recreational use of Willow Creek has increased dramatically. In recognition of the stream's importance as a regional recreational resource and of the need for active management brought about by increased levels of use, this management plan provides a framework for the establishment, management, and development of a state park unit at this location.

Goals and Objectives

The state's constitutional and statutory mandates pertaining to the management of the Alaska State Park System are summarized by the following goals, derived from the Alaska State Park System: Statewide Framework Plan, published in 1982:

- To provide for the outdoor recreational needs of present and future generations of Alaskans and visitors to the state through the acquisition, development, and management of the units of the state park system.
- To preserve and protect areas of natural significance as units of the state park system for the benefit of present and future generations.
- To preserve and interpret Alaska's cultural heritage through the acquisition, development, and management of state park system units.
- To protect and manage areas of significant scientific or educational value as state park system units.
- To provide support to the state tourism industry through the acquisition, development, and management of state park system units for residents and visitors to Alaska.

In addition to these statewide goals, a number of objectives relating specifically to Willow Creek have been identified, which this plan seeks to fulfill:

- To analyze present and anticipated demands for public recreation at Willow Creek and determine the appropriate role of the Division of Parks in satisfying those demands.
- To determine specific boundaries for a Willow Creek State Recreation Area, and recommend a procedure for the establishment of such a state park unit.
- To provide general guidelines for the management of recreational activities within the state park unit.
- To make specific recommendations, in priority order, for the development of recreational facilities within the potential unit.

Study Area

The study area is a two mile by five mile corridor extending from the existing Willow Creek State Recreation Site downstream to Willow Creek's confluence with the Susitna River (see Figure 1, page 7).

Regional Setting

Willow Creek is centrally located in south-

central Alaska, accessible to a majority of the state's residents. Anchorage, 71 highway miles south of Willow Creek, and the Matanuska-Susitna Borough together place 250,000 residents within two hours traveling time of Willow Creek.

The southcentral region possesses outstanding recreational resources and opportunities. The area is dominated by the Susitna River, which is framed by the Talkeetna and Alaska Mountain ranges before terminating in the saltwater of Cook Inlet. The surrounding area has several designated recreational areas, including Nancy Lake State Recreation Area. Large areas of the Susitna basin and nearby Matanuska River basin are undesignated but de facto recreation areas, including Hatcher Pass and several westside Susitna River tributaries accessible only by plane or riverboat. These areas are often located on large blocks of land owned by the State of Alaska or Matanuska-Susitna Borough.

Planning Process

Because the State of Alaska and the Matanuska-Susitna Borough both own large amounts of land within the study area, a joint planning approach has been employed, with representatives of both governmental jurisdictions forming the planning team. Figure 2, page 8, illustrates the planning process, with public meetings and other important stages highlighted.

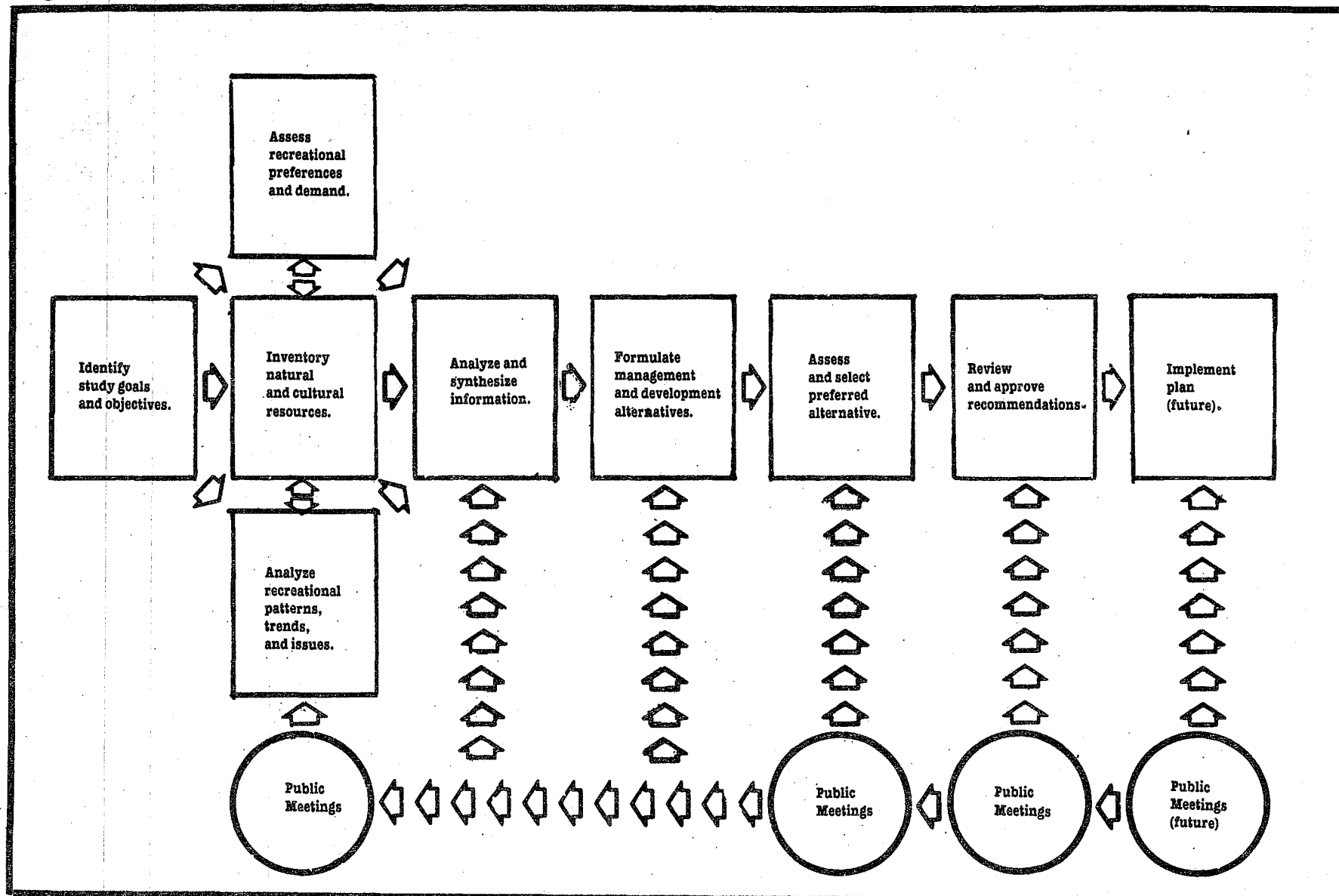
The figure consists of three maps illustrating the location of the study area in Alaska.

The top map shows the State of Alaska, highlighting the Lower Susitna Valley and the location of Fairbanks, Anchorage, and Juneau. The Arctic Ocean and Gulf of Alaska are also labeled.

The middle map shows the Lower Susitna Valley, detailing the Susitna River, Willow River, and various towns including Fairbanks, Anchorage, and Juneau. The map also shows the location of the study area within the valley.

The bottom map is a detailed view of the study area, showing a grid of sections (e.g., T20N, R5W, T19N, R5W, T19N, R4W, T20N, R4W) and a scale bar indicating 5 miles. The map also shows the location of the study area within the valley.

Figure 2. PLANNING PROCESS



Source: Alaska Division of Parks

1 NATURAL ENVIRONMENT

Climate

The study area's climate is typical of the Susitna basin, exhibiting transitional characteristics between the continental zone to the north, west, and east, and the maritime conditions to the south. Temperature ranges between -49°F. and 86°F. , with a July average daily maximum of 70°F. and a January average daily minimum of 2°F.

Yearly precipitation averages 24 inches, with July, September, and October each averaging more than three inches. May averages less than one inch of rain.

Snow accumulation at Willow Creek is more typical of the continental areas. Total snowfall at Willow and Talkeetna (30 miles north) averages 106 inches total annual snowfall, compared to 70 inches in Anchorage.

Prevailing winds reflect the general north-south orientation of the Cook Inlet-Susitna basin. Winter winds are from the north, bringing cold temperatures from the interior

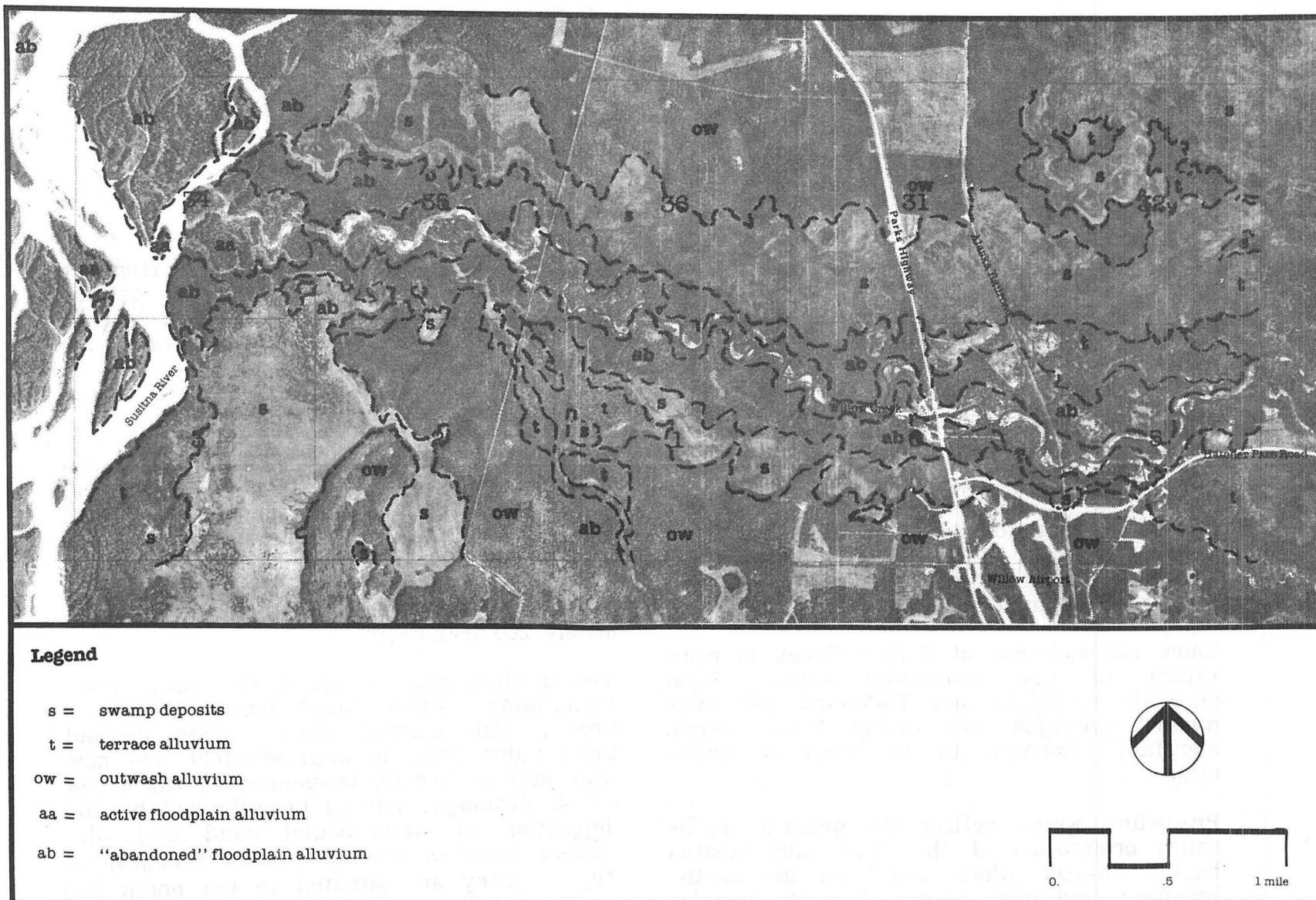
of the state. Summer winds prevail from the south, originating in the large oceanic waters of Cook Inlet and the Gulf of Alaska. Summer winds, therefore, moderate the summer season high temperatures.

Geology, Topography

The Susitna and Matanuska basins are glacial landscapes, with U-shaped valleys and moraine ridges. The area consists of gravel alluvium overlaid by silt, deposited by streams as glaciers receded (see Figure 3, page 10). Ground water studies conducted nearby suggest that bedrock is approximately 200 feet deep.

Two distinct zones comprise the study area's topography. Willow Creek travels through a broad, flat alluvial plain. This lowland topographic zone is approximately one mile wide and is directly influenced by the Willow Creek drainage, having been formed by the deposition of water-bound sand and silt. Upland benches are the second topographic type. They are situated to the north and south of Willow Creek, paralleling the stream

Figure 3. SURFICIAL GEOLOGY



Source: U.S. Geological Survey

and set back an average distance of one-half mile. These benches are elevated an average 50 feet above the streambed lowland. Steep bluffs, often with 50% slopes, connect upland and lowland.

A natural levy borders much of Willow Creek's streambed. This topographic feature is several feet above the stream and typically 300 feet wide. It has formed as high waters have periodically deposited silt and debris along the stream fringes.

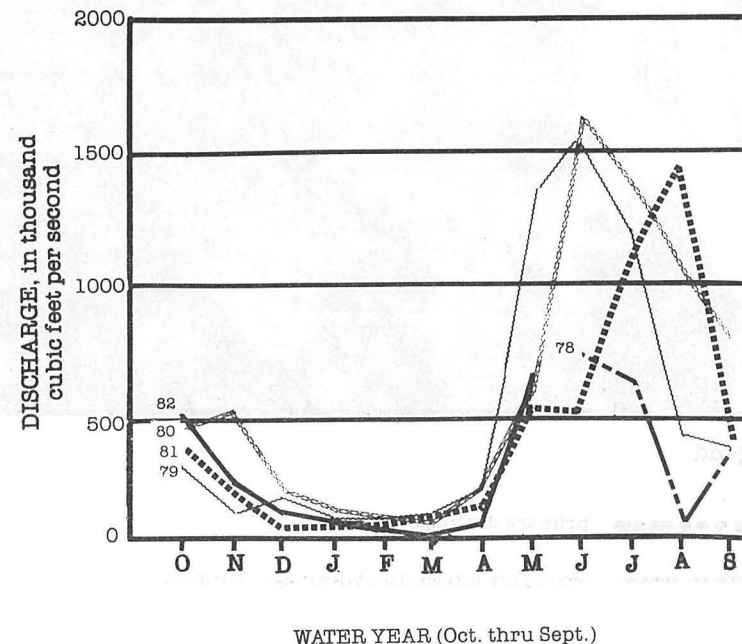
Hydrology, Drainage

Willow Creek is a Susitna River tributary which drains an area of the southwestern Talkeetna Mountains totaling 250 square miles. From its head in Summit Lake, approximately 5,500 feet in elevation, Willow Creek travels 35 miles before contributing its waters to the Susitna River at elevation 100 feet. Mean discharge has ranged between 430 and 599 cubic feet per second since 1978 (see Figure 4, page 11).

Upstream of the study area, Willow Creek is restrained by steep banks and canyons. Upon entering the lowland study area, the stream channel is free to migrate back and forth within a broad alluvial plain, as evidenced by the large number of abandoned meander channels (see Figure 5, page 12). These abandoned channels are slowly being filled in by the land as vegetation invades their fringes and begins the process of eutrophication. During flood conditions, the old channels serve an important function by holding and carrying away excess waters.

The lowlands have a complex surface drainage system. Small drainageways carry run-off into Willow Creek or recharge the area's extensive wetlands. Shirley Creek, the largest of the secondary drainages within the study area, originates in the network of small lakes south of Willow Creek. According to Department of Fish and Game biologists, Shirley Creek provides important fisheries habitat.

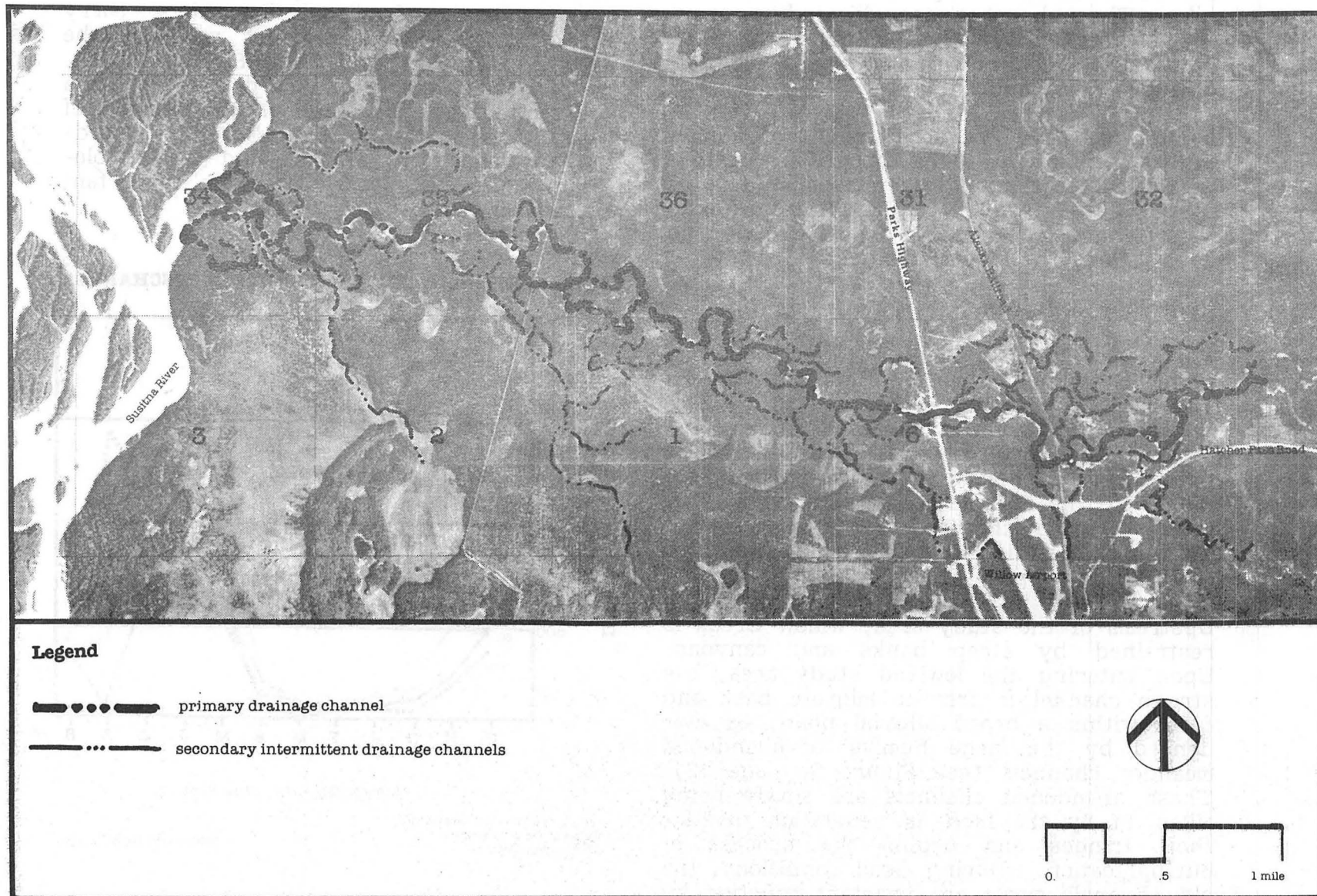
Figure 4. APPROXIMATE WILLOW CREEK DISCHARGES[★]



[★] derived by adding discharges from Willow Creek and Deception Creek gaging stations

Source: Corps of Engineers

Figure 5. DRAINAGE PATTERNS



Approximately one-half mile upstream of the Willow Creek mouth, a small delta has formed. The stream channel splits into three separate branches. At the present time, the middle mouth is navigable by riverboats while the north and south mouths are obstructed by debris or shallow waters.

The gravel bars and banks of Willow Creek are littered with uprooted trees and other debris, sometimes forming impassable log jams. This indicates that the stream is capable of causing heavy damage to adjacent areas during high water conditions or floods. The flood plain is depicted in Figure 6, page 14. Some of the debris is the product of the gradual erosion and undercutting of banks as the stream migrates to and fro.

Soils

On the upland benches overlooking Willow Creek from the north and south, Nancy silt loam is the predominant soil class. This soil is suitable for a range of recreational uses and development activities, due to its level slope and well-drained substratum. The natural levy immediately adjacent to Willow Creek is made up of Susitna soils. These sandy and silt loams are also capable of supporting a range of activities, although a limitation is the danger of occasional flooding. Large areas of Salamatof peat soils are present in the study area, located behind the Susitna soils adjacent to the stream. Salamatof soils are very poorly drained, often standing in water. Recreational enjoyment suffers due to this constraint, which also increases the cost and difficulty

of constructing facilities (see Figure 7, page 15).

Vegetation

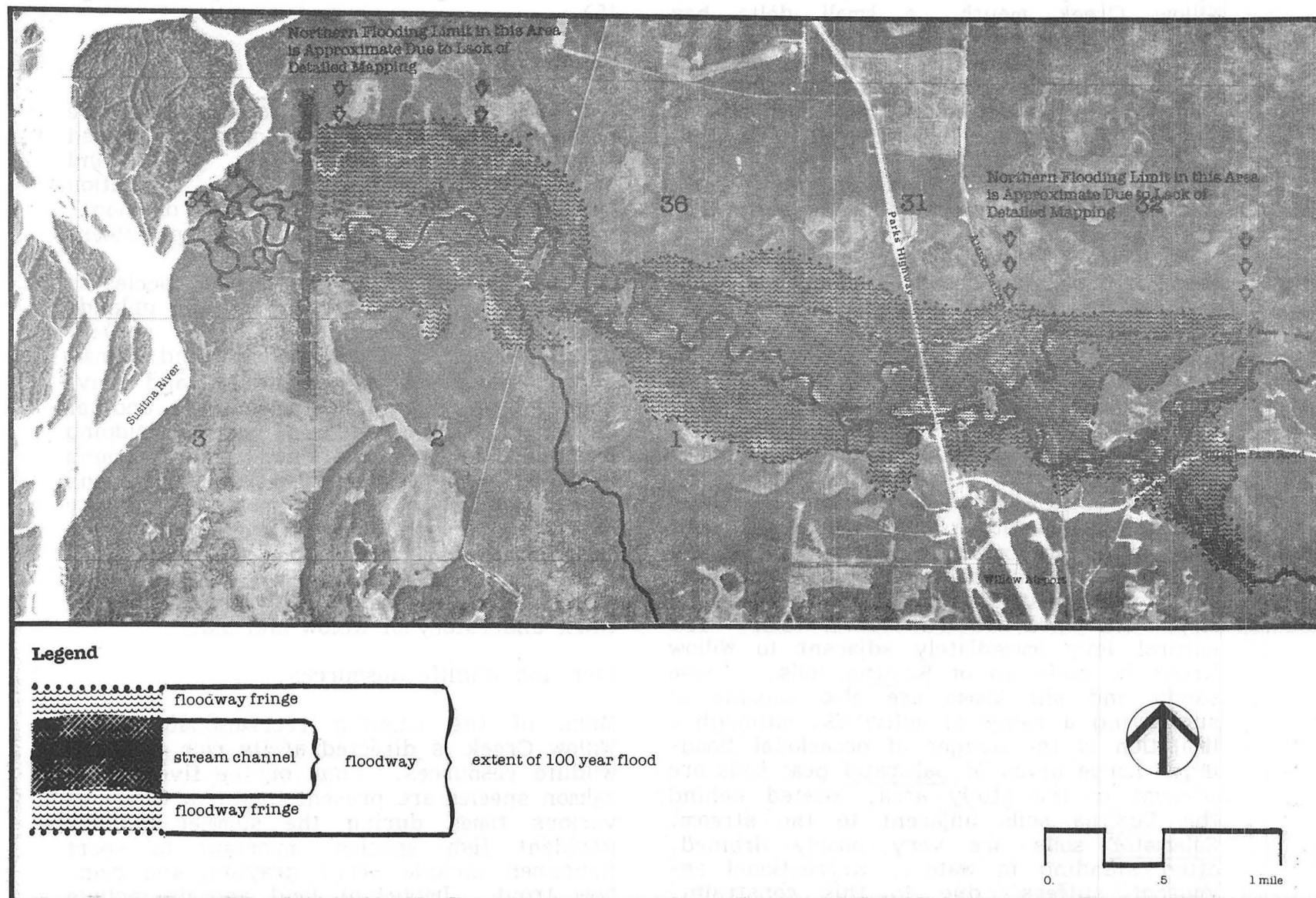
Two distinct vegetative communities are present in the Willow Creek corridor: mixed forest of white spruce/paper birch, and poorly drained muskegs. These vegetation patterns are the result of soils, drainage, topography, and past cutting practices.

On the upland areas, the climax species is white spruce. It is infiltrating the uplands south of Willow Creek as the earlier successional species of birch, aspen, and balsam poplar have reached maturity and have begun declining. Black spruce is another climax species, found on northern-sloping hills and the poorly drained fringes around wetlands. The extensive wetlands north and south of Willow Creek are made up primarily of peat soils with a thick layer of sphagnum moss on the surface. Numerous small surface drainageways feed into the wetlands. These drainages are typically fringed with a thick understory of willow and alder.

Fish and Wildlife Resources

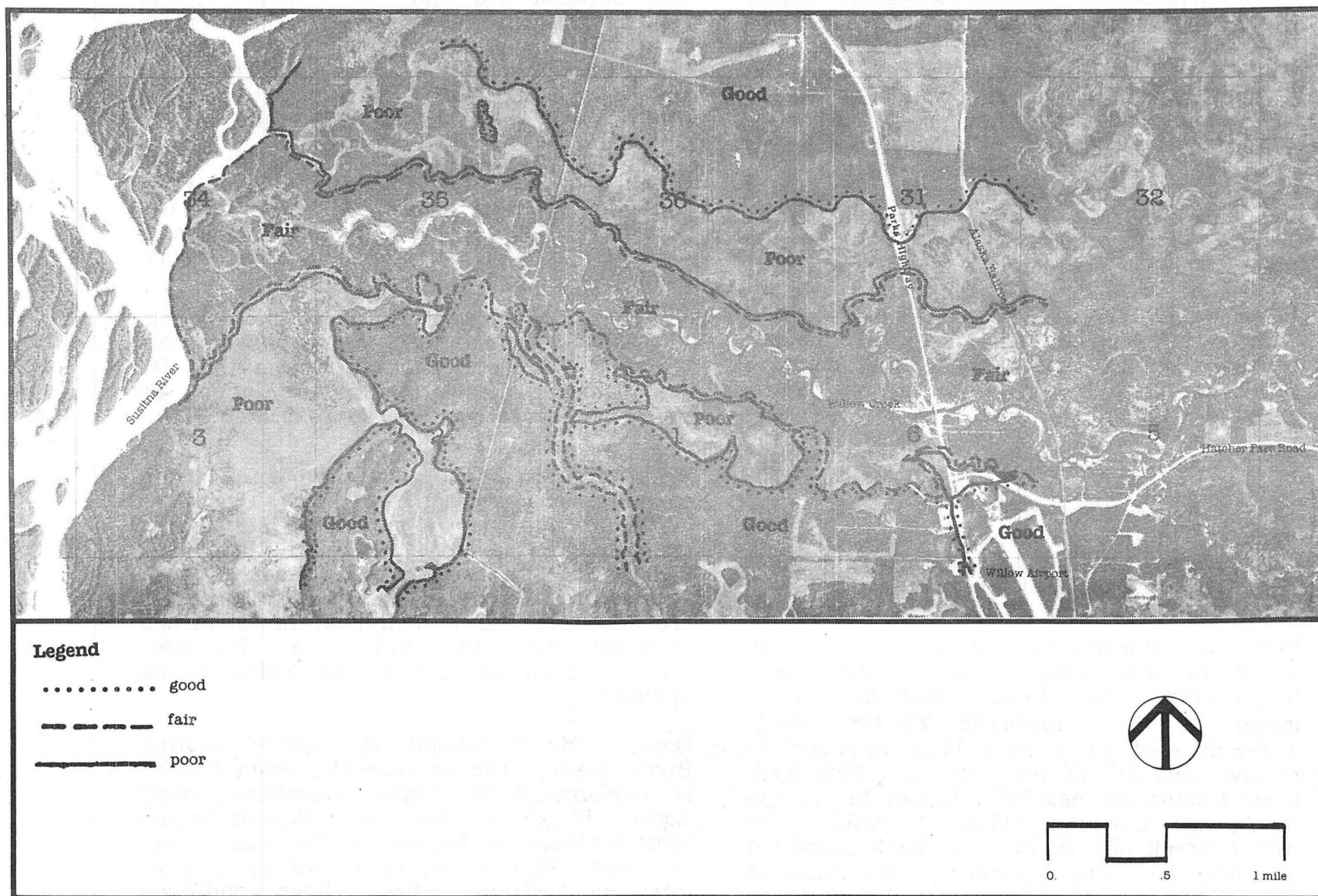
Much of the existing recreational use of Willow Creek is directed at its rich fish and wildlife resources. Four of the five Pacific salmon species are present in Willow Creek at various times during the summer season. Resident fish species important to sport fishermen include arctic grayling and rainbow trout. Important land animals include moose and beaver.

Figure 6. WILLOW CREEK FLOODPLAIN



Source: U.S. Army Corps of Engineers

Figure 7. SOILS: SUITABILITY FOR ROADSIDE SUBGRADE AND HIGHWAY LOCATION



Source: Soil Conservation Service

Salmon. King, or chinook, salmon are the first anadromous species to enter Willow Creek, typically arriving in mid-June and having spawned and died by the end of July. A 1978 survey performed by the Alaska Department of Fish and Game estimated total escapement into the Willow Creek system to be 2000 fish, of which 800 split off into the Deception Creek drainage. The survey showed that most spawning activity took place in a three-mile stretch located several river miles upstream of the study area. The preferred water for spawners was between 1.0 and 2.2 feet deep, velocity between 1.5 and 4.8 feet per second, and with gravel size between 1.9 and 5.5 inches in diameter. Because these conditions are not generally found in the stream as it flows through the study area, fewer spawning nests were located. However, this lower river stretch does appear to serve an important function as rearing habitat. The 1978 survey found that juvenile (fry) king salmon densities in this stretch were the highest in the Willow Creek mainstem, with higher densities occurring only in tributaries.

Pink, or humpback, salmon enter Willow Creek in large numbers in the even-numbered years. The 1978 escapement is estimated to have numbered 220,000, while odd-numbered years have been estimated to receive only 10% of that amount. This odd/even fluctuation has been known to reverse itself, for unknown reasons. Pinks enter Willow Creek late in July and have completed spawning by early September. According to the 1978 study, this species prefers a water depth between 0.5 and 2.4 feet, water

velocity of 2.4 feet per second, and gravel size between 0.8 and 2.6 inches. These conditions are common in lower Willow Creek as it passes through the study area. Twenty-seven percent of all mainstem pink salmon spawning occurs downstream of the Parks Highway, according to the 1978 study.

Chum, or dog, salmon are present in Willow Creek from mid-July to late August, often choosing the slack waters of sloughs and old meander channels for spawning. Eleven percent of chum salmon spawning occurs below the Parks Highway bridge.

Silver, or coho, salmon utilize Willow Creek in small numbers. 1978 escapement in the mainstem was estimated to be less than 50 fish, while Deception Creek was judged to have an escapement of approximately 150.

Trout and Grayling. Rainbow and arctic grayling are present in Willow Creek in sufficient numbers to support a substantial sport fishery. Little is known about the habitat and life cycle considerations of these species in Willow Creek. However, grayling are generally known to inhabit the stretches of water above the study area. Rainbows are dispersed throughout the Willow Creek system.

Moose. Moose inhabit the entire Susitna River basin. During summer, when browse is available in the higher elevations, many moose will migrate into the Talkeetna Mountains foothills to the east of the study area. As winter approaches, moose will move down into the lowlands, where milder conditions and more plentiful browse can be found.

A 1978 moose habitat analysis by the Soil Conservation Service for the nearby proposed new capital site concluded that the area had only marginal moose browse.

Available browse was heavily utilized. In some cases, plants were decaying due to over-browsing. These conditions can also be found in the Willow Creek corridor, where much of the native vegetation is too mature for suitable browse. Nonetheless, because of the study area's natural character and its typical riparian species of alder and willow

found adjacent to the stream, the Willow Creek corridor provides valuable moose habitat.

Beaver. Beaver inhabit all the waterways of the study area. Dams, lodges, and browsed trees can be found on Willow Creek, Shirley Creek, the Susitna River, and other unnamed drainages. As beavers take trees adjacent to flowing water, the soil binding action of the roots is lost. Bank erosion and stream course changes conceivably can result.

2 CULTURAL ENVIRONMENT

Prehistory

Cook Inlet's earliest inhabitants probably arrived approximately 8000 years ago. Two sites - on Turnagain Arm and on the Matanuska River - are known to have been occupied shortly after. Artifacts from these sites are closely related to those found on the Alaska Peninsula and are similar to those of early hunters in Alaska's interior and Brooks Range.

Between 8000 and 4000 years ago, there was an unexplained lack of habitation, and sites dating from those times are extremely rare.

Between 3000 and 4000 years ago, the Cook Inlet area was reoccupied by hunters of sea mammals, almost certainly related to modern Eskimos. Occupation was relatively rare in the upper inlet where marine resources are not plentiful but was relatively common in the rich marine environment of Kachemak Bay. Over time, these marine mammal hunters adapted to the environments of the upper inlet and concentrated on salmon and moose.

At an unknown time in the relatively recent past, Athapaskan Indians replaced the Eskimo populations, for unknown reasons. Settlements have been documented in the Nancy Lake State Recreation Area, located 10 miles south of Willow Creek.

A small site of unknown significance has been located near Willow Creek. Based upon a preliminary assessment by the State Office of History and Archaeology, there is a possibility that other areas within the Willow Creek corridor were settled by Athapaskans.

History

Russians first explored the Cook Inlet country in 1791. By the mid-nineteenth century, a trading settlement, Knyk, had grown up near the mouth of the Knik River. Following the United States purchase of Alaska in 1867, the trading posts at Knyk and other locations supported increasing numbers of gold prospectors.

Mining was a strong impetus for the exploration of the Willow Creek basin. Placer

claims were first staked in the basin in 1897, followed one year later by the establishment of the Willow Creek Mining District (for the purpose of recording claims). Placer activity in the district peaked in 1904-05 and began declining shortly afterwards. Lode (hard rock) claims were first staked in 1906. This type of mining has continued sporadically up to the present time.

An early trail leading into the mining district passes through the study area. The Lucky Shot Trail begins at a Susitna River landing approximately 1500 feet south of the Willow Creek mouth and roughly parallels Willow Creek as it travels east into the Talkeetna Mountains.

Local, Regional Economy

Willow is a loosely defined, unincorporated community generally considered to include the area from Mile 64 (Nancy Lake) to Mile 72 (Willow Creek) of the Parks Highway and the first fourteen miles of the Hatcher Pass Road (to the school bus turn around). There are more than 600 voters registered in the local precinct. Civic organizations include the Willow Area Civic Organization (WACO) and the Willow Community Council.

The Willow economy is diverse. Employment within the community area includes services, government, and retail sales. Forty-six percent of Willow's workers are employed locally, with the remainder being employed

elsewhere within the borough (22%), in Anchorage (14%), or elsewhere (19%). Recreationists visiting Willow Creek contribute to several local businesses, including riverboat charter operations, a campground, lodge/motel, service stations, grocery, and prepared food stores.

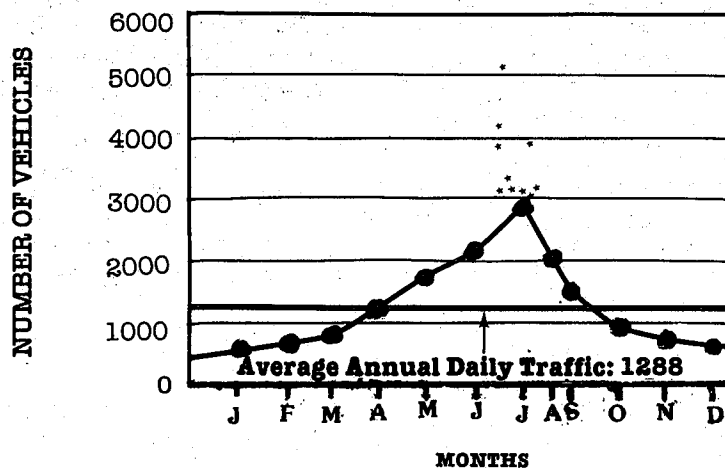
The regional economy is similar to Willow's. Construction, government, and services employ large numbers of borough residents. The borough also is home to large numbers of workers commuting into the metropolitan Anchorage area.

Circulation, Transportation

Within the study area, Willow Creek is bridged by the Parks Highway at Milepost 71.2 (72 miles to Anchorage, 286 to Fairbanks). The highway provides almost all access to the area. See Figure 8, page 21, which shows Parks Highway traffic volumes at a point one-half mile south of the Willow Creek bridge. The Hatcher Pass Road intersects the Parks Highway near the Willow Creek bridge, providing easterly access into the Talkeetna Mountains along with the same alignment as the old Lucky Shot Trail.

The community is served by a high quality gravel airport. There is one scheduled air carrier. Recreationists are known to use the airport as a means of access to Willow Creek, located one-quarter mile away. The Alaska Railroad traverses the area. No scheduled stops are made although whistle stops allow recreationists access to the stream.

**Figure 8. PARKS HIGHWAY TRAFFIC VOLUMES
AT WILLOW, 1980**



Legend

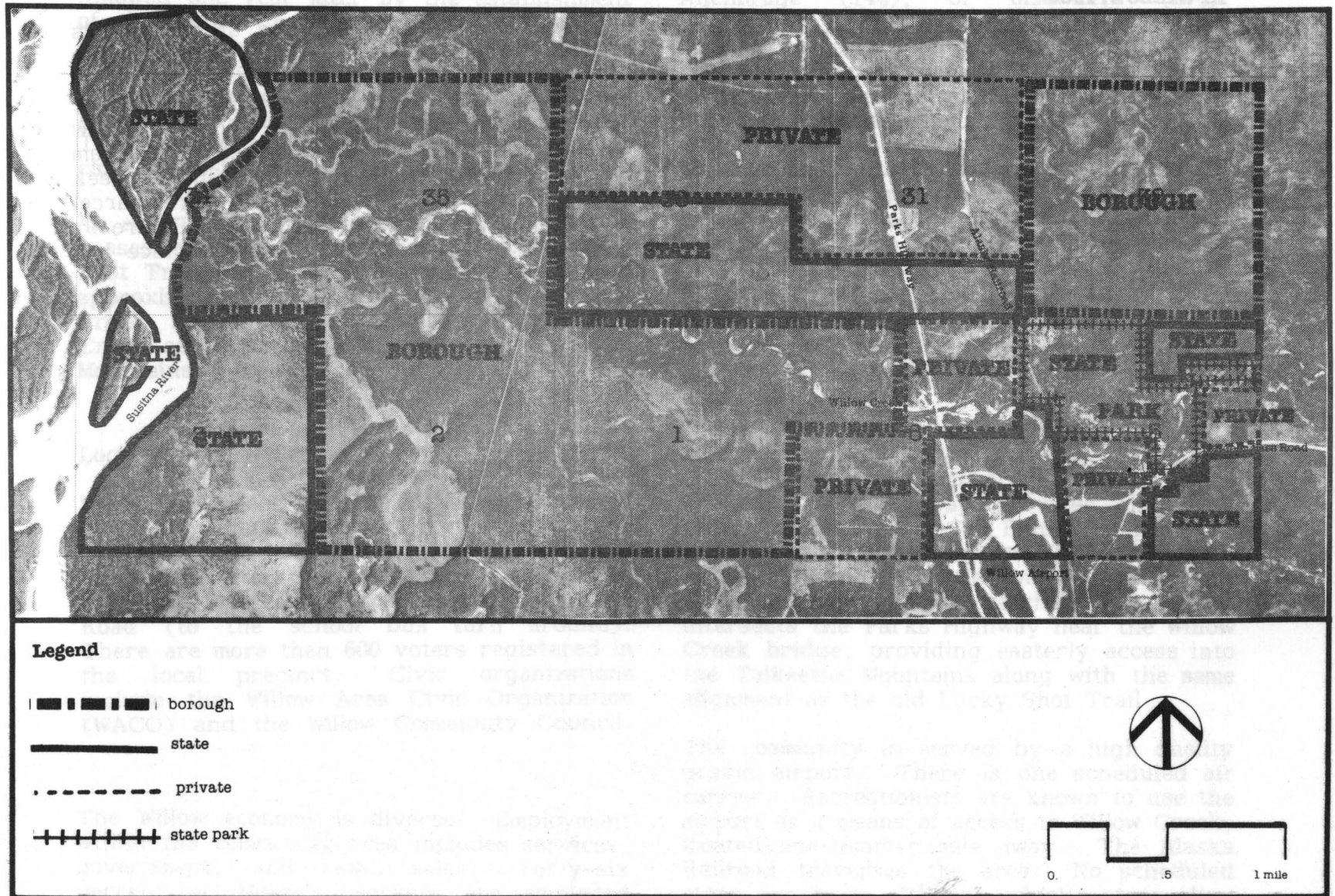
- * 10 peak annual days
- Average Annual Daily Traffic (AADT)
- Average Monthly Daily Traffic (AMDT)

Source: Alaska Department of Transportation and Public Facilities

Land Ownership

Most of the land within the study area is publicly owned. The Matanuska-Susitna Borough and the State of Alaska own large blocks of land west of the Parks Highway. The area around the Parks Highway/Willow Creek junction is privately owned. Upstream of the Parks Highway, the Willow Creek State Recreation Site is a 240 acre parcel surrounded by private lands (see Figure 9, page 22). Ownership of the subsurface has been retained by the State of Alaska.

Figure 9. LAND OWNERSHIP



3 REGIONAL, LOCAL RECREATION

Regional Recreational Opportunities and Providers

Matanuska-Susitna Borough. Organized as a second class borough in 1964, the Matanuska-Susitna Borough has parks and recreational powers which permit it to levy taxes, maintain a staff, and designate areas for recreational purposes. The borough is working to ensure that public access to recreational areas is maintained, particularly along existing and historical trails. It does not maintain an active park operations staff, nor does it actively operate any recreation areas.

State of Alaska. The major provider of recreation areas and opportunities in the region is the State of Alaska, through the Division of Parks. Figure 10, page 24, shows the state park units in the Matanuska District. Willow Creek State Recreation Site is a 240 acre park unit located at the Deception Creek/ Willow Creek confluence. Most of the unit's area is located north of Willow Creek and is therefore inaccessible by road. Existing use at the site includes camping,

picnicking, and some sport fishing. However, sport fishing is limited because most of the site's stream frontage is above the Deception Creek mouth and therefore closed by regulation to the taking of salmon.

Nancy Lake State Recreation Area. Nancy Lake State Recreation Area is located eight miles south of Willow Creek. Its 22,000 acres of lakes, ridges, and lowlands provide a range of opportunities for quiet, peaceful recreation in a natural setting. Facilities at Nancy Lake include campgrounds, picnic areas, canoe trails, upland trails for hiking, skiing, snowmachining, and dog sledding. The recently published Nancy Lake State Recreation Area Master Plan recommends a number of improvements for the area.

Independence Mine State Historic Park. Independence Mine State Historic Park is located within the popular Hatcher Pass area. The park was established to commemorate the area's rich history as a mining district and to preserve some of the original buildings and artifacts of that era. Most of the mountainous area surrounding the his-

Figure 10. REGIONAL RECREATION AREAS

Legend

— state game refuges

■ state park units

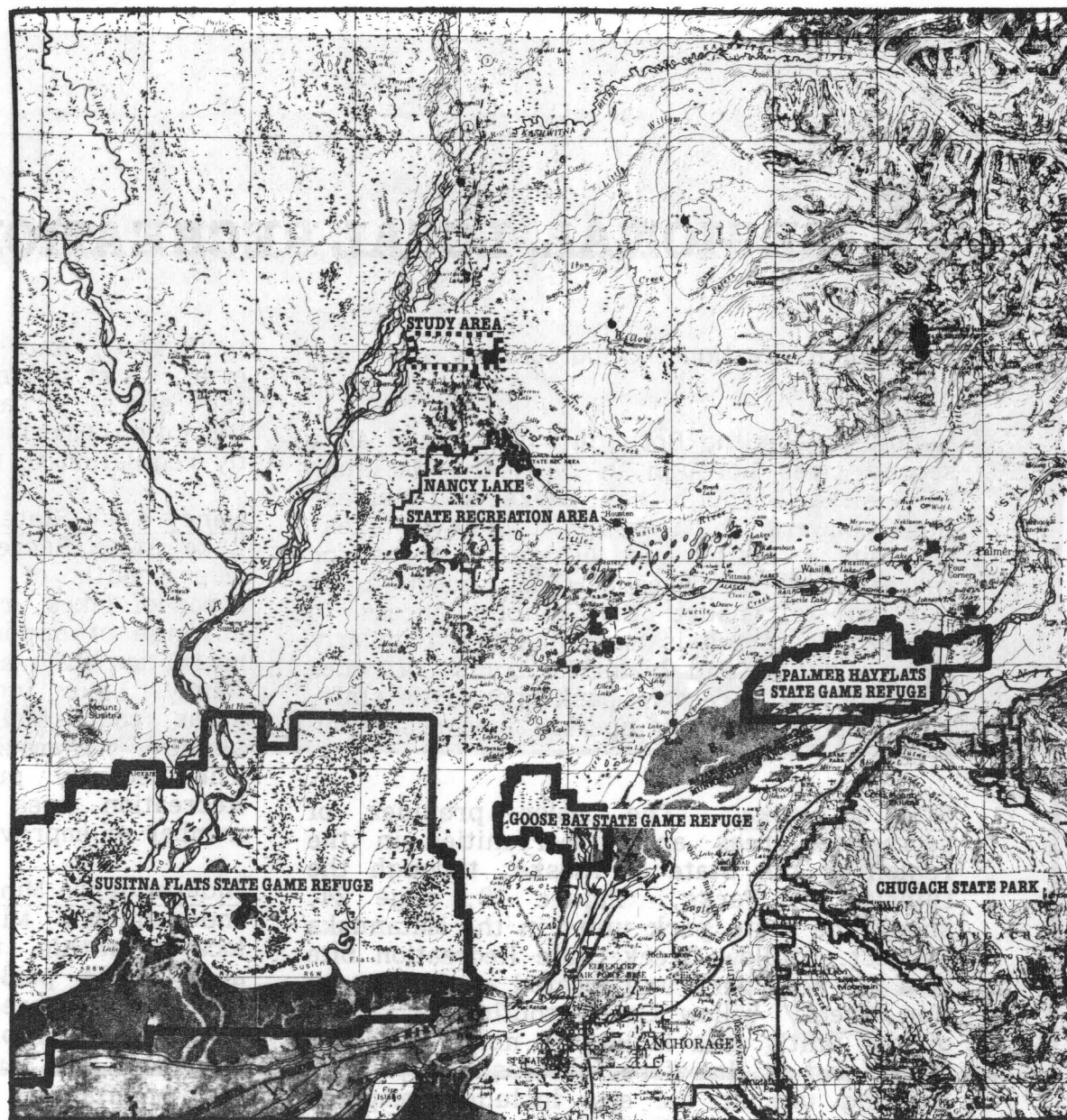
● non-state recreation areas,
campgrounds

..... study area



0. 6. 12 miles

Sources: Alaska Department of Fish and Game
Alaska Division of Parks



toric park is owned by the State of Alaska. It receives year-round recreational use, particularly during the winter season, when skiers and snowmachiners converge. Popular summertime activities include hiking, mountain climbing, and berrypicking.

City of Houston. The City of Houston owns and operates a campground bordering the Little Susitna River and the Parks Highway, located 15 miles south of Willow.

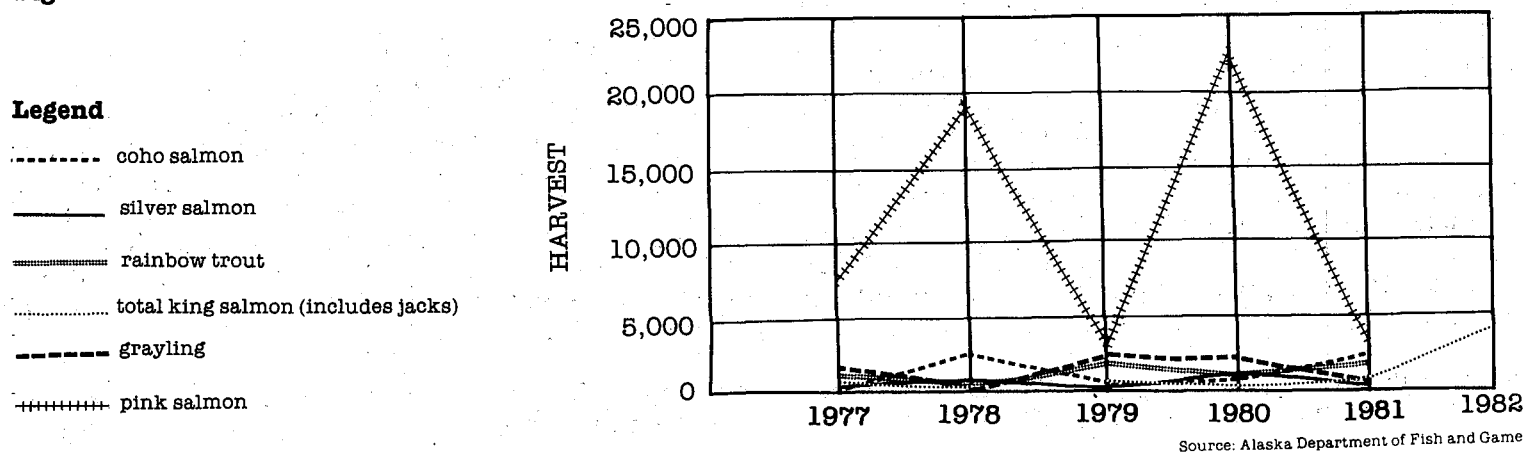
Private Sector. Several privately operated recreational facilities are located within the vicinity. The Willow Island Drive Inn is situated at the northwest corner of the Parks Highway/Willow Creek intersection. Facilities include parking, boat launch, trailer storage area, and camping units. Shore fishing is popular along the area's Willow Creek frontage.

Susitna Landing is a privately owned and operated boat launch located at the Susitna River/Kashwitna River confluence, 11 highway miles north of Willow Creek. From Susitna Landing, boaters travel to points north and south, including the Yentna River, Kroto Creek, and Alexander Creek.

Willow Creek Sport Fishing

Most recreationists visiting Willow Creek are attracted to the stream by its sport fishing opportunities. Willow Creek hosts significant runs of king salmon, chum salmon, and pink salmon. A small run of silver salmon and year-round populations of rainbow trout and arctic grayling are also sport fishing attractions. See Figure 11, page 25 for a historical summary of fishing effort and harvest at Willow Creek.

Figure 11. WILLOW CREEK SPORT FISHERY HARVEST, 1977-1982



Willow Creek waters open for king salmon fishing stretch from the mouth to the Parks Highway bridge. Other salmon species may be taken legally from the mouth up to the Deception Creek confluence.

Fishing occurs at two major activity nodes: near the Parks Highway and railroad bridges; and at the mouth where the stream enters the Susitna River. The road-accessible node receives very heavy use beginning in mid-June as the king salmon enter Willow Creek, and tapering off as the pink salmon run ends in late August. During the busy season, this area will often host several hundred shore anglers. These anglers are often fishing from privately owned land, an issue which is receiving increasing attention (see page 28).

The activity node at the Willow Creek mouth is accessible by riverboat only. Most effort is expended during four consecutive weekend openings during the king salmon run. At the peak of the run, shore anglers will line up elbow-to-elbow along a particularly good 300 foot stretch of the Susitna River immediately downstream of the southernmost Willow Creek mouth. At such times, the number of anglers will exceed 100. There are no sanitary facilities in this area, which has raised concerns about the effects of random and untreated human waste and litter. Fishermen will also anchor their riverboats offshore during these weekend openings and cast into fishing holes.

King Salmon. The king salmon has historically been the most sought-after sport fish

species at Willow Creek and throughout the Susitna River basin. In 1964, due to dangerous declines in fish stocks, king salmon fishing throughout the Susitna basin was prohibited. As the stocks rebounded, fishing was again opened, but on a much reduced basis. Allowable king salmon catch in Willow Creek has been set at 300 fish (over 20 inches in length), although biologists suspect that this number could be raised without endangering the run.

Pink Salmon. Pink salmon enter Willow Creek in very large numbers in even-numbered years, and in moderate numbers in odd-numbered years. This species provides excellent opportunities for family-oriented outings, with much higher rates of fishing success than for other salmon species.

Chum Salmon. Chum salmon is attracting increasing attention as a sport fish species, due to its relatively large size and its fighting abilities. Harvest at Willow Creek increased from 343 in 1977 to 1,533 in 1981.

Silver Salmon. Despite a small run, an important silver salmon sport fishery does occur at the mouth of Willow Creek. Silvers destined for spawning grounds at other streams temporarily hold in the clear waters of the Willow Creek/Susitna River confluence, where they become available for harvest. Figures from 1980 show 1,207 silver salmon harvested in this manner, with a drop in 1981 to 747 fish.

Rainbow Trout. Rainbow trout attract a significant number of anglers to Willow

Creek. Most effort for rainbows occurs early in the season before salmon species arrive, and again after the salmon have spawned. Use is dispersed over a wider area than for the salmon species, extending from the mouth past the Parks Highway bridge and up into the Talkeetna Mountain foothills.

Willow Creek Riverboating

A major recreational use of Willow Creek is as a riverboating corridor. Most boaters launch at commercial facilities near the Parks Highway bridge.

The great majority of riverboat traffic is downstream, and then towards outlying areas within the Susitna basin. Thus, Willow Creek serves as an important transportation corridor by accessing the roadless areas to the west, where dispersed settlements have developed as a result of government land sales, homesteading, mining, and other attractions. As these areas have become more settled, the volume of riverboat traffic on Willow Creek has risen correspondingly. Important destination points include Kroto Creek (Deshka River), the Yentna River, and Alexander Creek.

Recreational Issues

Angler-Boater Conflicts. The most difficult problem concerning use of Willow Creek is the growing conflict between riverboaters and shore anglers. Riverboaters have traditionally traveled between the Parks Highway and the mouth to gain access to

fishing spots and to outlying areas. But as population increases have brought more sport fishermen to Willow Creek, clashes have become more common between the two user groups. Anglers complain that high speed boats create wakes which disturb fishing holes, create safety hazards, and harm spawning grounds. Boaters respond that Willow Creek is the only reasonable access to outlying areas and that high speed operation is required in order to maintain maneuverability. After a State Recreation Area is established at Willow Creek, the Division of Parks will have responsibility for managing the stream's water column and for resolving this conflict.

Fishing Regulations. Because demand for king salmon far exceeds the natural run in Willow Creek, the Department of Fish and Game has regulated sport fishing in order to ensure that escapement goals are met. There are concerns that state park establishment would bring more anglers and place additional pressures on fish stocks, forcing the Department of Fish and Game to shorten the king salmon season.

Winter Recreation Management. Because the Willow area receives abundant snowfall and moderate temperatures, its potential for winter recreation is high. Development of a trail network along Willow Creek will invite skiers, snowmachiners, and dog mushers. These user groups have experienced conflicts at other locations, and the Division of Parks should manage the area to avoid such problems.

Trespass Recreation. "Trespass recreation," the inadvertent or deliberate use of private property by recreationists, is an issue. Trespass situations are increasing, particularly upstream of the Parks Highway bridge. Private owners have posted signs and taken other actions to protect their property interests.

Commercial Activities. At present, commercial riverboat operators have established businesses at the Parks Highway bridge. Clients include those destined only for the mouth and others bound for outlying areas. With establishment of the park unit, state regulations will govern all commercial enterprises within the park boundaries.

Trail Management. Concern has been expressed about difficult foot access to Willow

Creek below the Parks Highway bridge. At present, primitive trails extend a short distance downstream before disappearing. This has the effect of concentrating anglers around the highway bridge in spite of excellent fishing areas further downstream.

Other issues include the following:

- power transmission lines
- hunting and trapping regulation
- sanitation
- fish habitat protection
- preservation of archaeological resources
- handicapped access to fishing areas
- historic trails
- state competition with private recreation providers
- road development within the park
- floodplain or wetlands construction
- regional road network

4 VISITOR PREFERENCES, RECREATIONAL DEMAND

Local Preferences

The Division of Parks distributed a questionnaire in the summer of 1981. It was designed to yield a clear picture of the Willow Creek area, identify recreational issues, and suggest how the stream corridor might be developed to satisfy local and regional recreational demands. Questions were chosen to point out present recreational activities, problem areas, issues, attractive features of the area, and preferences for types of facilities and activities. Following are some of the important and most revealing conclusions of the survey. A complete tabulation can be found in Appendix D.

- ° Seventy-three percent of the respondents lived in the Anchorage area, while 37% were Matanuska-Susitna residents.
- ° Respondents visited Willow Creek an average of almost six times per year. This indicates that many people rely on Willow Creek for a major portion of their yearly outdoor recreation.
- ° Sport fishing is the major recreational attraction. Ninety-seven percent of Anchorage respondents and 86% of the local respondents fish at Willow Creek. Camping is the second most frequent activity, followed by picnicking.
- ° Fishing, camping, hiking, sightseeing, cross-country skiing, and rafting were judged to be the most appropriate activities at Willow Creek. Hunting, riverboating, and snowmachining, although favored by a majority of respondents, received smaller favorable percentages.
- ° Local residents typically stay at Willow Creek less than one day. The mean value for Anchorage area residents was one to two days, suggesting that Willow Creek is a popular weekend destination point.
- ° Only facilities which encourage favored activities were supported. These include trails, campgrounds, parking areas, picnic shelters, boat launch, and access roads.

- Facilities thought to be inappropriate include overnight cabins, lodges/hotels/motels, convenience stores, and playfields.
- Sport fishing is the primary attraction at Willow Creek. Other attractions include its accessibility, pleasant atmosphere, and riverboat access to downstream areas such as the Deshka River.
- Overcrowding was most often mentioned as a negative feature of the area. Anchorage residents next indicated poor maintenance, while local residents complained of boat traffic on Willow Creek. Another problem cited is a lack of developed camping areas.
- When asked what type of overnight accommodations they used, 58% of Anchorage respondents listed some type of vehicle and 56% used tents. (Note that because some people use both types of accommodations, the percentages total more than 100.) Seventy-one percent of Matanuska-Susitna respondents used a vehicle, while 50% used a tent.
- Most people favored locating camping areas within reasonable walking distance, as opposed to streambank development or areas located several miles away.
- Anglers were satisfied with their fishing success rates for most fish species. King salmon fishing brought a mixed response, with 50% of the fishermen being dissatisfied.

Regional Preferences

The Alaska Outdoor Recreation Plan, published by the Division of Parks in 1981, contains detailed information about the preferences of Southcentral Alaska residents. Figures 12, 13, 14, 15, and 16 are excerpted from the plan and lead to the following conclusions relating to the management and development of a Willow Creek State Recreation Area.

- Fishing and tent camping are the two activities which respondents desired to do more often (Figure 12). The Willow Creek area can provide opportunities for both these activities, consistent with the land and water's ability to absorb adverse impacts.

Figure 12. ACTIVITIES THAT SOUTHCENTRAL PARTICIPANTS WOULD LIKE TO DO MORE OFTEN

	Percent of Respondents
Fishing	25%
Tent camping	12%
Hunting	7%
Motorboating	8%
Hiking/walking*	4%
Alpine skiing	4%
Swimming	3%
Flying	3%
Horseback riding*	3%
Sailing	2%
Canoeing/kayaking	2%
Bicycling*	2%
Beach combing	2%
Traveling/sightseeing	1%
Cross-country skiing*	1%
Other	21%
None	0%
* Trail related activities subtotal	10%

Source: Alaska Division of Parks

- The four most popular outdoor recreational activities in the region are fishing, tent camping, hiking/walking/running, and hunting (Figure 13). The Willow Creek corridor is capable of supporting all of these activities, with care taken that increased usage does not spoil the area's natural character.
- Acquisition and development of more backpacking campsites are favored by a majority of southcentral residents (Figure 14). In its extensive lowlands with complex drainage patterns, the Willow Creek corridor is especially suited to these low-impact facilities.
- More and better developed roadside campgrounds and picnic areas are favored (Figure 14). The well drained uplands overlooking Willow Creek are capable of meeting some of this demand, due to their suitability for a range of intensive activities and facilities.
- Southcentral residents want more hiking trails (Figure 14). The Willow Creek corridor is suited for a network of streamside and back-country trails. Such a trail network would serve several user groups, including anglers, hikers, skiers, snowmachiners, and dog mushers.
- More and better developed canoeing, kayaking, and rafting trails are favored in the southcentral region (Figure 14). Comments received during public meetings indicate that the curving and

Figure 13. FAVORITE SOUTHCENTRAL OUTDOOR RECREATION ACTIVITIES††

1. Fishing	24%
2. Tent camping	9%
3. Hiking/walking/running*	5%
4. Hunting	6%
5. Motorboating	5%
6. Beachcombing	5%
7. Baseball/softball	4%
8. Bicycling*	3%
9. Cross-country skiing*	4%
10. Alpine skiing	4%
11. Winter off-road vehicle*	3%
12. Swimming	2%
13. Flying for pleasure	2%
14. Summer off-road vehicle*	2%
15. Traveling/sightseeing	2%
16. Horseback riding*	2%
17. Other**	

* Trail related activities
 ** Twenty-five other activities were listed and represent one percent or less each
 †† Represents first preference given

Source: Alaska Division of Parks

Figure 14. PREFERENCES FOR SOUTHCENTRAL STATE PARK ACQUISITION, DEVELOPMENT AND MAINTENANCE

	More Areas	Develop Areas	Just Maintain	Less Areas
Hiking trails	53%	31%	15%	1%
Roadside campgrounds/picnic areas	61%	17%	20%	2%
Backpacking campsites	48%	29%	21%	2%
Canoeing, kayaking, and rafting trails	41%	33%	22%	4%
Developed recreation areas	51%	23%	24%	2%
Well-accessed natural areas	38%	33%	25%	4%
Historic sites	37%	32%	25%	6%
Wilderness areas	23%	25%	35%	17%

Source: Alaska Division of Parks

debris-strewn waters of Willow Creek are dangerous for canoe operation. Rafting and kayaking, however, are judged to be suitable activities in these waters.

- ° Desired features in out-of-town recreational areas include fishing areas, access to water, facilities such as campsites and picnic tables, and undisturbed natural areas (Figure 15). Willow Creek is capable of meeting some of this demand, in an area within two hours driving time of Anchorage.
- ° For many Susitna valley residents, a park at Willow Creek will serve as a community recreational area. Desired features in community recreational areas - which are also consistent with the mission of the State Park System - include trails, paved roads, water access, and picnic tables, campsites, drinking water, and restrooms (Figure 16).

Recreational Demand

In keeping with Alaska's explosive population growth, demand for outdoor recreation rose dramatically during the decade of the seventies. The number of sport fishing licenses issued increased from 113,394 in 1970 to 206,804 in 1980, according to the Department of Fish and Game. Division of Parks figures indicate that visitation at the Matanuska-Susitna district parks rose from 92,078 in FY73 to 391,923 in FY81, representing a 426% increase in 8 years.

Figure 15. DESIRED FEATURES IN SOUTHCENTRAL OUT-OF-TOWN RECREATION AREAS

Features	Percentage of Southcentral Population in Favor of Features
1. Fishing areas	95%
2. Access to water for swimming or boating	91%
3. Areas for hunting	87%
4. Picnic tables, campsites drinking water, restrooms	91%
5. Undisturbed natural areas	88%
6. Bicycle, walking, skiing or horseback riding trails	84%
7. Motorcycle, snowmachine and other ORV Trails	76%
8. Paved roads	69%
9. Unpaved roads	66%
10. Overnight lodging	66%
11. Electrical hook-ups, showers general store	66%
12. Playfields	60%
13. Lawns & benches	49%

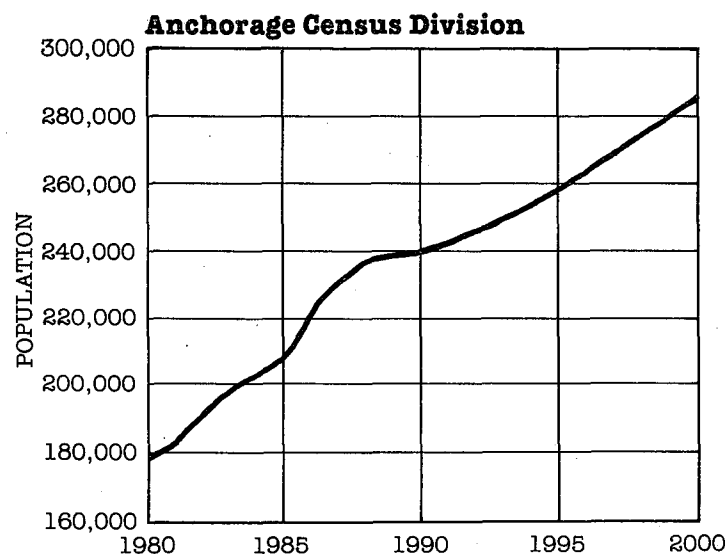
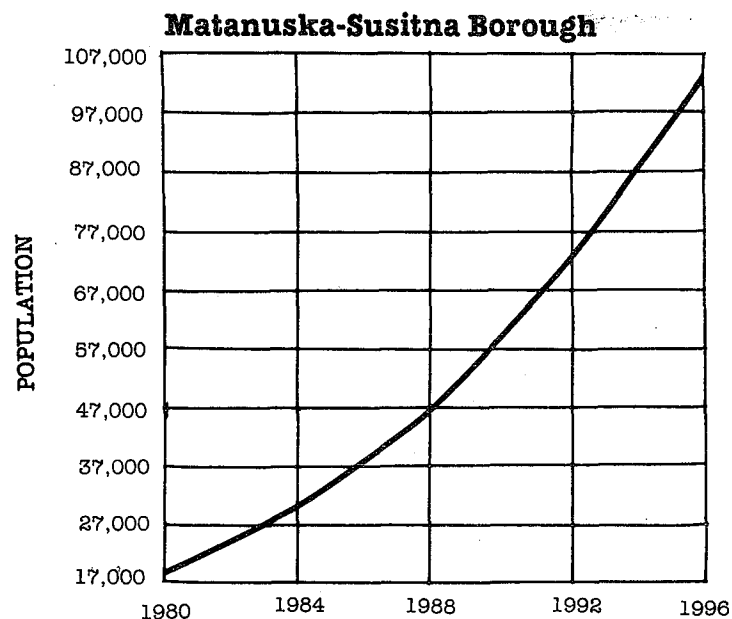
Source: Alaska Division of Parks

Figure 16. DESIRED FEATURES IN SOUTHCENTRAL COMMUNITY RECREATION AREAS

Features	Percentage of Southcentral Population in Favor of Features
1. Playfields	95%
2. Lawns & benches	92%
3. Bicycle, walking, skiing or horseback riding trails	85%
4. Paved roads	85%
5. Access to water for swimming and boating	77%
6. Picnic tables, campsites, drinking water, restrooms	75%
7. Undisturbed natural area	54%
8. Overnight lodging	51%
9. Electrical hookups, showers, general store	51%
10. Fishing areas	55%
11. Motorcycle, snowmachine and other ORV trails	44%
12. Unpaved roads	21%
13. Areas of hunting	9%

Source: Alaska Division of Parks

Figure 17. POPULATION FORECASTS



Source: Institute of Social and Economic Research

Population growth is forecasted to continue into the next century (see Figure 17, page 33), although at slower rates than in the past 10 years. Likewise, demand for recreational opportunities will continue to grow (particularly for such favorite activities as fishing, camping, hiking), but at reduced rates. Consistent with a national trend toward closer-to-home recreational outings, this moderation in demand will be offset somewhat by the Matanuska-Susitna district's proximity to population centers.

For the purposes of this plan, it is assumed by the Division of Parks that recreational demand exceeds the capability of the Willow Creek corridor to provide quality experiences. Therefore, this plan will recommend only those facilities and activities which can be accommodated while maintaining the area's high natural and aesthetic qualities.

5 ANALYSIS AND EVALUATION

A primary objective of this plan is to analyze the Willow Creek corridor's suitability for providing outdoor recreational opportunities and to determine the appropriate role of the Division of Parks in satisfying recreational demands in the area.

Analysis of factors such as natural resources, existing recreational patterns, emerging recreational trends, issues, and public opinion as expressed in workshops and questionnaires can lead to conclusions concerning the area's capability and how the Division of Parks can play a role. In this chapter, information from preceding chapters is synthesized in order to present the specific recommendations in following chapters. Discussion is divided into the following sub-headings:

1. Recreational opportunities and constraints.
2. Role of the Division of Parks.
3. Determination of park unit boundaries.
4. Development opportunities and constraints.
5. Access, internal circulation.

6. Archaeological, historical preservation.
7. Interpretation, outdoor education.

1. Recreational Opportunities and Constraints

Its diverse landscapes and relatively spacious area suggest that the Willow Creek corridor can support a range of recreational activities. The most obvious suitable activities are those which presently occur: sport fishing, picnicking, and camping in summer time; and skiing, dog mushing, and snow-machining in winter.

River-floating. With the proper support facilities, the Willow Creek corridor is capable of supporting activities which do not presently occur. River-floating, with non-motorized water craft such as rafts and kayaks, is an activity with very high demand in southcentral Alaska. Willow Creek's clear water, small scale, and moderate gradient make it well suited for floaters of intermediate skill. A hazard which detracts from the potential for floating activities is

the amount of wood and other debris littering the streambank, sometimes forming dangerous log jams and obstructions. In spite of this hazard, floating should be encouraged at Willow Creek. Launching and take-out stations should be incorporated into the area's trail system. Portages around dangerous obstructions should be constructed. Signs which warn of upcoming dangerous conditions should be located on the streambank, to be visible to floaters on the water's surface.

Upstream portions of Willow Creek have traditionally been used by river-floaters, who enter and exit the stream prior to its passing into the study area. Typically, these recreationists are whitewater enthusiasts interested in only a short segment of the stream. However, there is growing interest in extended floating trips which begin on Willow Creek several miles upstream of the proposed park and end in the lower creek or at some downstream point on the Susitna River. The Division of Parks, Matanuska-Susitna Borough, and others should jointly investigate the potential for establishing put-in/take-out points at various locations along Willow Creek and the Susitna River.

Trail-based Activities. The Willow Creek questionnaire distributed by the Division of Parks (see Appendix D) indicates that trail-based activities are in high demand. This finding is consistent with other public opinion surveys (see, for example, pages 30-32). The Willow Creek study area presently supports only a small amount of trail-based

recreational activity. Primitive waterfront trails on the north and south banks lead downstream from the Parks Highway bridge a short distance before disappearing. These trails are used solely to gain access to fishing spots. The Lucky Shot Trail, located south of the stream, is the only trail within the study area which is enjoyed by recreationists other than anglers. Dog mushing is perhaps the most common activity on the Lucky Shot.

The area is capable of supporting far more trail-based recreation, with little or no adverse impacts. Much of its ground surface is well-drained, forested upland, which is suitable for most year-round trail activities. The sensitive wetlands are excellent for winter activities, once frozen and protected by a snow layer. Taken as a whole, the proposed park's 3,450 acres can provide a diversity of trip distances and experiences, ranging from short improved hiking loops suitable for family outings, to unimproved route-finding experiences reminiscent of true wilderness. The area's trail system should be expanded to provide access to activity areas, as well as to support the demand for skiing, hiking, snowmachining, and dog sledding.

2. Role of the Division of Parks

The Alaska State Park System: Statewide Framework, published by the Division of Parks in 1982, contains specific criteria which determine if establishment as a unit of the state park system is appropriate. The

criteria, with discussion as concerns Willow Creek, include the following:

Criterion. The area possesses, or provides access to recreational, cultural, or natural resources of statewide or regional significance. While state park units may provide for significant use by local residents, units shall not be established solely on the basis of meeting community recreational needs or desires.

Comments. Most of the present visitation at Willow Creek is by residents of the Anchorage area, suggesting that it is of regional significance. This regional significance will continue into the future, due to the stream's abundant fishery resources, which can support significantly increased pressure without undue adverse impacts.

Criterion. The area meets existing or future recreational, educational, or scientific needs and/ or helps to resolve outdoor recreational conflicts and issues.

Comments: Establishment of a state park unit at Willow Creek will allow the construction of needed support facilities such as campgrounds and access trails. These facilities will enable the area to meet existing recreational needs in an improved manner. In addition, establishment of a park unit will enable the Division of Parks to actively manage the area to resolve growing recreational conflicts (see page 27).

Criterion. Management of the area as a unit of the state park system is feasible.

Comments. When developed according to the recommendations of this plan, management of the area by the Division of Parks is feasible and complementary to other recreation areas and state park units within the region. In many cases, the nearby state units at Deception Creek and Nancy Lake can be managed with common staff and equipment pools.

Criterion. The area meets the purpose and characteristics of one of the eight types of state park units.

Comments. A state recreation area should be relatively spacious and possess a diversity of outdoor recreational opportunities. The primary management objective of a state recreation area is to provide a maximum level of recreational opportunities, based on the land's natural values and its ability to sustain use without significant adverse impacts. The Willow Creek corridor meets all of these conditions. It is suited, based upon such factors as existing recreational use, potential use, landscape character, and size, for establishment as a state recreation area.

Criterion. Establishment of the unit will not duplicate opportunities which are more adequately provided by other public agencies or by the private sector.

Comments. At the present time, two private enterprises provide recreational services on

Willow Creek. They are located on the north and south banks immediately downstream of the Parks Highway bridge. The Willow Island Drive Inn provides parking, camping, boat launching, and vehicle storage services. Shore fishing and boat launching are the primary activities. As a sideline to its business as a restaurant, tavern, and motel, the Pioneer Lodge serves as a boat launching and vehicle parking area. Due to their location adjacent to the Parks Highway, these private providers are suited for servicing the needs of vehicle-based recreationists. They complement many of the less intensive services which the Division of Parks customarily provides. They are not able to satisfy demands for the dispersed fishing and trail activities which are better located on the public lands downstream.

Criterion. Public, local government, and/or legislative support exists for establishment of the area.

Comments. Planning for a state recreation area at Willow Creek has been a cooperative project of the Division of Parks and the Matanuska-Susitna Borough. As a show of support for a state park unit at Willow Creek, the borough administration has indicated its willingness to pursue a cooperative land management agreement, with the Division of Parks, which will transfer management authority for borough-owned land within the corridor to the state.

Comments heard at several public meetings held to gather input for this management

plan suggest widespread public support for a state park unit at Willow Creek. In addition, the Planning Commission and Assembly of the Matanuska-Susitna Borough have adopted resolutions supporting the plan and establishment of a state park unit at this location.

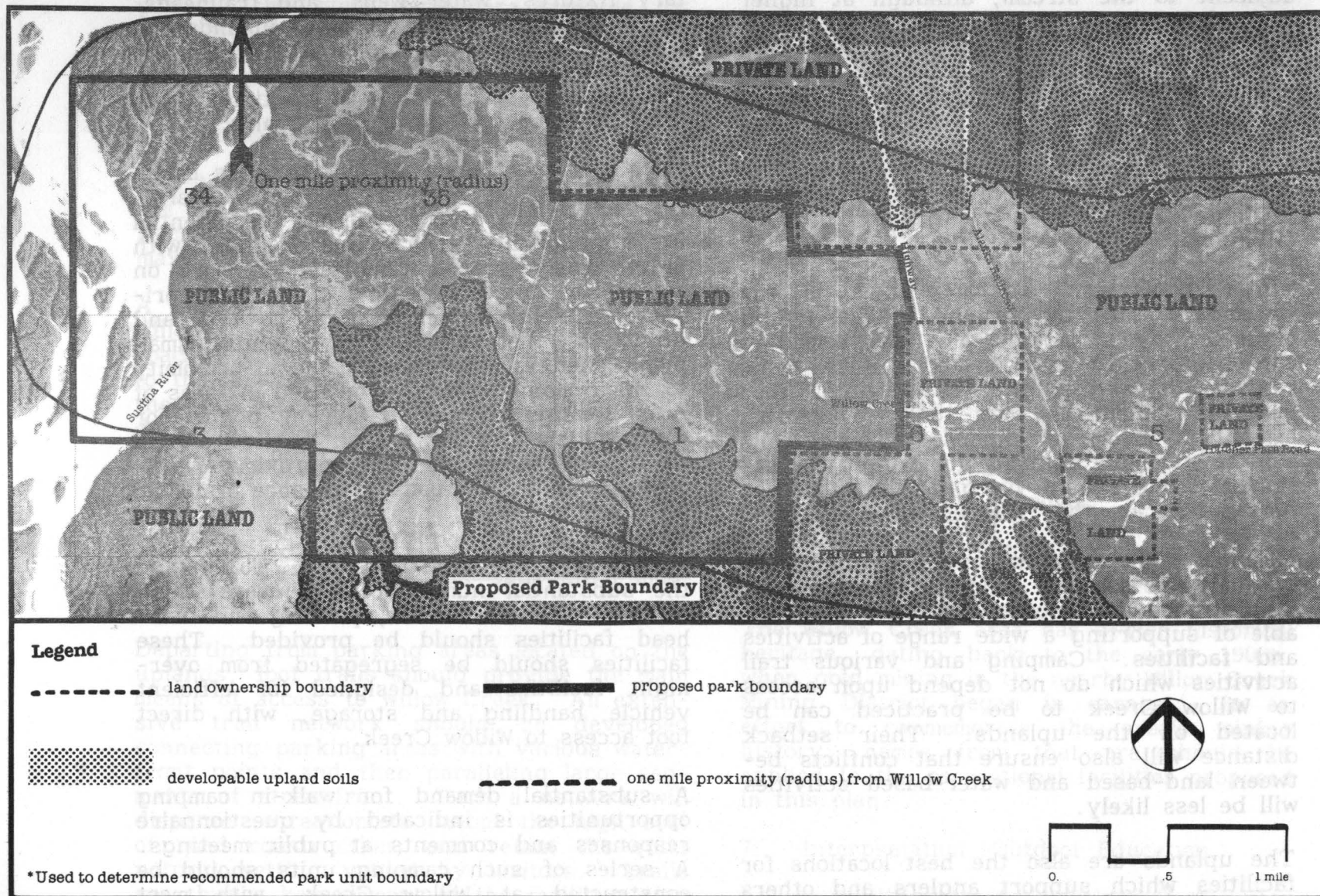
3. Determination of Park Unit Boundaries

The area recommended for establishment as Willow Creek State Recreation Area must be able to satisfy a number of management and development needs and provide a range of opportunities, all within a natural and pleasing setting. The proposed boundaries have been drawn to support intensive facilities such as vehicle campgrounds, dispersed trail-based activities, natural areas for self discovery, and the visual and sound buffers necessary to shield recreationists from surrounding land uses. A graphic summary of the analysis performed to establish recommended boundaries is shown in Figure 18, page 39.

4. Development Opportunities and Constraints

Lowlands. The lowlands adjacent to Willow Creek are limited in their ability to support facilities by a high-water table, poor soils, and flood hazards. Only facilities which relate directly to water-based recreation should be located in the lowlands. These facilities will include stream access trails, boat-in or walk-in camping areas, boat launches, etc.

Figure 18. BOUNDARY ANALYSIS*



Source: Alaska Division of Parks

Trails can be developed in the lowlands adjacent to the stream, although at higher cost than the same standard trail in the uplands. Additional construction costs will be incurred due to the boardwalks, bridges, and additional bed material needed to safely traverse the numerous drainageways and wetlands. Nonetheless, trails are a cost-effective alternative to roads as a means of access to the water, because of the extremely high costs of road construction in such situations.

Winter trails can be constructed in the wetlands. Once the ground is frozen and protected by a snow layer, trail corridors can be brushed and marked. Such trails can greatly expand the area's winter recreational potential, with only a minimal amount of effort or expense. These trails will be available annually for winter recreationists; but should be gated or otherwise barricaded as the summer thaw arrives.

Uplands. The uplands located approximately one-half mile south of Willow Creek are level, well drained, and forested. They are capable of supporting a wide range of activities and facilities. Camping and various trail activities which do not depend upon access to Willow Creek to be practiced can be located on the uplands. Their setback distance will also ensure that conflicts between land-based and water-based activities will be less likely.

The uplands are also the best locations for facilities which support anglers and others bound for the Willow Creek waterfront.

These facilities include parking areas, sanitary fixtures, water wells, and trailheads. Because of the distance between uplands and Willow Creek (average one-half mile), the trail system connecting upland support facilities and the Willow Creek activity areas must be extensive and of high quality.

Much of the spacious upland forest is mixed birch/spruce of medium age and density, with little undergrowth. It has the potential for high quality vehicle campgrounds, with units widely spaced (200 feet or more on center) to create a feeling of maximum privacy. To further enhance the quality and utility of the vehicle campgrounds, small picnic shelters should be located in proximity to the camping units, to be used in times of poor weather or as gathering points for multi-vehicle groups. Each shelter should be equally accessible from approximately six camping units, set back a distance of 100 to 200 feet.

Parking and Trailhead Facilities. To support the substantial number of day users which Willow Creek will attract, parking and trailhead facilities should be provided. These facilities should be segregated from overnight facilities and designed for efficient vehicle handling and storage, with direct foot access to Willow Creek.

A substantial demand for walk-in camping opportunities is indicated by questionnaire responses and comments at public meetings. A series of such camping units should be constructed at Willow Creek, with most located on the uplands a short distance from

parking areas. With adequate design safeguards, the bluff edges are suitable for such facilities. Pit or single vault latrines should be provided within reasonable distance of walk-in units.

5. Access, Internal Circulation

Due to the high costs of road construction, the vehicle network within Willow Creek State Recreation Area should be designed for maximum utility with minimum road distances.

A recommendation for a boat launch at the Willow Creek mouth requires that a four mile road be constructed from the Parks Highway to the launch site. This road should act as the main recreation area arterial, with spurs departing towards campgrounds, parking lots, and other activity areas. This road should be constructed on the level uplands south of Willow Creek to the maximum extent possible, thus avoiding the wetlands and other hazards discussed in preceding sub-headings which would add substantial mitigation costs.

Departing from parking areas located on the uplands, foot trails should provide the main means of access to Willow Creek. An extensive trail network should be developed connecting parking areas with various waterfront points and then paralleling large segments of streamfront. Such a network will disperse recreationists, avoid the high cost of road construction, and retain the quiet natural setting valued by visitors. Trails are thus a key element of the facilities plan at Willow Creek.

6. Archaeological, Historical Preservation

A preliminary assessment by the State Office of History and Archaeology indicates a strong possibility of prehistoric remains being located within the proposed recreation area. In keeping with a basic goal of the state park system, to preserve and interpret Alaska's cultural heritage, every reasonable effort should be made to inventory the area's archaeological resources. Such an effort should be designed to locate, catalog, and assess the significance of prehistoric resources. If the resources are found but not judged to be of particular significance, they should remain in place. Plans for facility development should, where feasible, avoid the known locations of archaeological sites. If there is no reasonable alternative to construction in an area containing such sites, consideration should be given to their scientific excavation and removal. Such a determination will be made in consultation with the State Office of History and Archaeology.

The Willow Creek area has a rich historical heritage, dating back to the early 1900s, when gold mining in the nearby Willow Creek Mining District began in earnest. In an effort to commemorate the area's mining history, names from that era should be applied to the recreational facilities proposed in this plan.

7. Interpretation, Outdoor Education

As the facilities recommendations of this plan are implemented, the types of visitors at

Willow Creek will become more diverse. Groups, families, hikers, skiers, and other recreationists will have a range of interests far more diverse than those of the area's present visitors.

Interpretation Program. Visitor information and interpretation programs are a fundamental aspect of state park system management.

The Willow Creek corridor contains a diversity of natural features and systems. Its land forms, water ways, forests, fish, and wildlife hold fascinating stories which can be enjoyed by park visitors through an active interpretation program. Such an interpretive program should be developed in phases, as demand is exhibited.

6 GENERAL RECOMMENDATIONS

Zoning

To further clarify the intent for management of land and resources within state park units, all lands within each park unit are classified into one or more of the following zones:

- natural zone
- cultural zone
- recreational development zone
- wilderness zone

Figure 19a, page 44, is excerpted from the Alaska State Park System: Statewide Framework, published in 1982. The intent and management considerations for each zone are described.

The proposed Willow Creek State Recreation Area is zoned in Figure 19b, page 45. Only the recreational development and natural zones are applied within this park unit.

Regulation of Commercial Activities

With legislative establishment of the Willow

Creek State Recreation Area, the Division of Parks will become responsible for regulating commercial activities within the park. At the present time, commercial activities are limited to riverboat operators whose charter services are based at the Park Highway bridge. A large portion of the boat traffic on Willow Creek is by commercial operators.

As the facilities recommendations of this plan are implemented, a boat launch will be built at the Willow Creek mouth. At that time, it is recommended that the Division of Parks institute a permit system which will allow commercial riverboat operations to be conducted at the boat launch area. Permits will be issued with appropriate stipulations.

This recommendation is intended to reduce conflicts between boaters and anglers by re-locating the commercial operations to a better location. It is consistent with proposed regulations governing the operation of state park units.

Figure 19a. PARK UNIT ZONES

RECREATIONAL DEVELOPMENT ZONE

Purpose and Characteristics

Recreational development zones are established within State Park System units to meet the more intensive recreational needs of the public with convenient and well-defined access via roads, railroads, boating anchorages, airstrips, and high standard trails; with more intensively-developed recreational facilities such as campgrounds or picnic areas; with guided activities; and with information centers to orient visitors to the unit's special features.

The landscape within this zone can be modified to support educational and recreational activities and/or to enhance wildlife habitat and scenic qualities. These zones are established where soils, slope, drainage and vegetation can support more intensive recreational activities. Fire suppression and insect and disease control may be used, where appropriate, within this zone to maintain or enhance recreational use. A recreational development zone may already have been influenced by prior developments and is intended to provide a transition area to absorb heavy human impacts.

Developments and Activities

The highest level of developments and activities is meant to occur in this zone within park units. The developments allowed in this zone include - but are not limited to - roads and trails, private vehicle and public transportation routes or access, campgrounds, picnic areas, visitor and interpretive centers, high-standard trails for all ages and abilities, park management facilities and commercial lodges or resorts as provided for within the unit management or site development plan. High intensity activities related to the use of these developed facilities are generally encouraged. Summer and winter off-road vehicles (ORV's) and other motorized recreational vehicles may be allowed in this zone within specifically designated areas or through management techniques such as time and/or space allocations.

NATURAL ZONE

Purpose and Characteristics

Natural zones are established to provide for moderate-to low-impact and dispersed forms of recreation and to act as buffers between recreational development and wilderness zones.

These zones are relatively undeveloped and undisturbed, and are managed to maintain high scenic qualities and to provide visitors with opportunities for significant natural outdoor experiences. An area's natural landscape character is the dominant feature within this zone. Landscape modification may be allowed to enhance, maintain, or protect the natural

setting according to the unit management plan. Use of fire suppression, insect or disease control, or wildlife habitat enhancement as management techniques in natural zones will be defined in the unit management plan.

Developments and Activities

Developments in a natural zone are intended to provide for the safety of park visitors and to provide for a moderate level of convenience in a high-quality natural setting. Allowable developments include - but are not limited to - backcountry shelters, public-use cabins, high standard hiking and bicycle trails (paved or gravel), bridges and roads where necessary to access development zones and as provided for in an approved management plan. A medium level of activity is encouraged in this zone. Activities include - but are not limited to - hang-gliding, bicycling, backpacking, fishing, hunting, cross-country skiing, camping, sledding, tobogganning, berry picking and rock climbing. Snowmobiles may be allowed in this zone - within specifically designated areas - depending on resource sensitivities and potential conflicts with other park uses. Other private, motorized off-road vehicle use is generally prohibited within this zone.

WILDERNESS ZONE

Purpose and Characteristics

Wilderness zones are established to promote, to perpetuate and, where necessary, to restore the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration and primitive recreational opportunities.

Wilderness zones are of such size as to maintain the area's wilderness character, are tailored to protect the associated values and, if possible, are defined by watershed boundaries. These zones are characterized by the natural landscape, its vegetation and its geologic forms. Resource modification can occur in this zone only to restore areas to a natural state. Natural processes will be allowed to operate freely to the extent that human safety and public and private property are protected. The use of fire suppression and insect and disease control as management techniques may occur only through the implementation of a plan approved by the director of the Division of Parks. Wildlife habitat enhancement activities, such as vegetation manipulation, may not occur in this zone.

Developments and Activities

A wilderness zone should have no man-made conveniences within its boundaries except for the most primitive of trails with minimum trail maintenance, bridges, and signing. Developments or other im-

provements will be undertaken only if it has been determined by the director of the Division of Parks that significant threats to public safety exist or in order to reduce adverse impacts on the area's resources and values. Access to and within this zone, for other than rescue or management purposes, will be by foot or other non-motorized means except for 1) use of designated aircraft-landing access sites where alternative means of access do not exist, 2) authorized research projects, or 3) situations specifically allowed by law. Aircraft landing for recreational access or research purposes may be restricted by the director as to daily time or season of use. The dropping of people or objects from aircraft is prohibited except by special permit issued by the director. Activities which threaten the character of the wilderness zone will be restricted. If overuse or misuse occurs, the director may restrict entry and use of the area. Methods of restriction may include separation and control of use activities through time and space allocation, use/area rotation schemes, and/or a permit system.

CULTURAL ZONE

Purpose and Characteristics

Cultural zones are established to preserve, investigate, document and interpret Alaska's cultural resources and heritage.

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

Developments and Activities

The intensity of development in a cultural zone is managed to insure that use levels in the area do not impair the integrity of historical, cultural, archaeological, or anthropological resources. Any development within a cultural zone should have minimal impact on the cultural and historical values within the unit and should involve minimal introduction of artificial features for activities not related to the cultural resource and its values. Development generally will be associated with the necessities of public access, safety and interpretation of the cultural resources present. Paved trails, automobile parking, toilets and interpretive displays are examples of such development. Activities in this zone are for educational or scientific purposes. Recreation-related facilities are generally secondary and will be separated from the site(s) of cultural resources by sufficient buffers. Activities in keeping with the historical period of the cultural resource may be encouraged. To protect the cultural values for which the unit was created, resource modification, fire suppression, and insect and disease control management techniques will be utilized only when absolutely necessary in this zone.

Source: Alaska Division of Parks

Figure 19b. WILLOW CREEK SRA LAND-USE ZONES

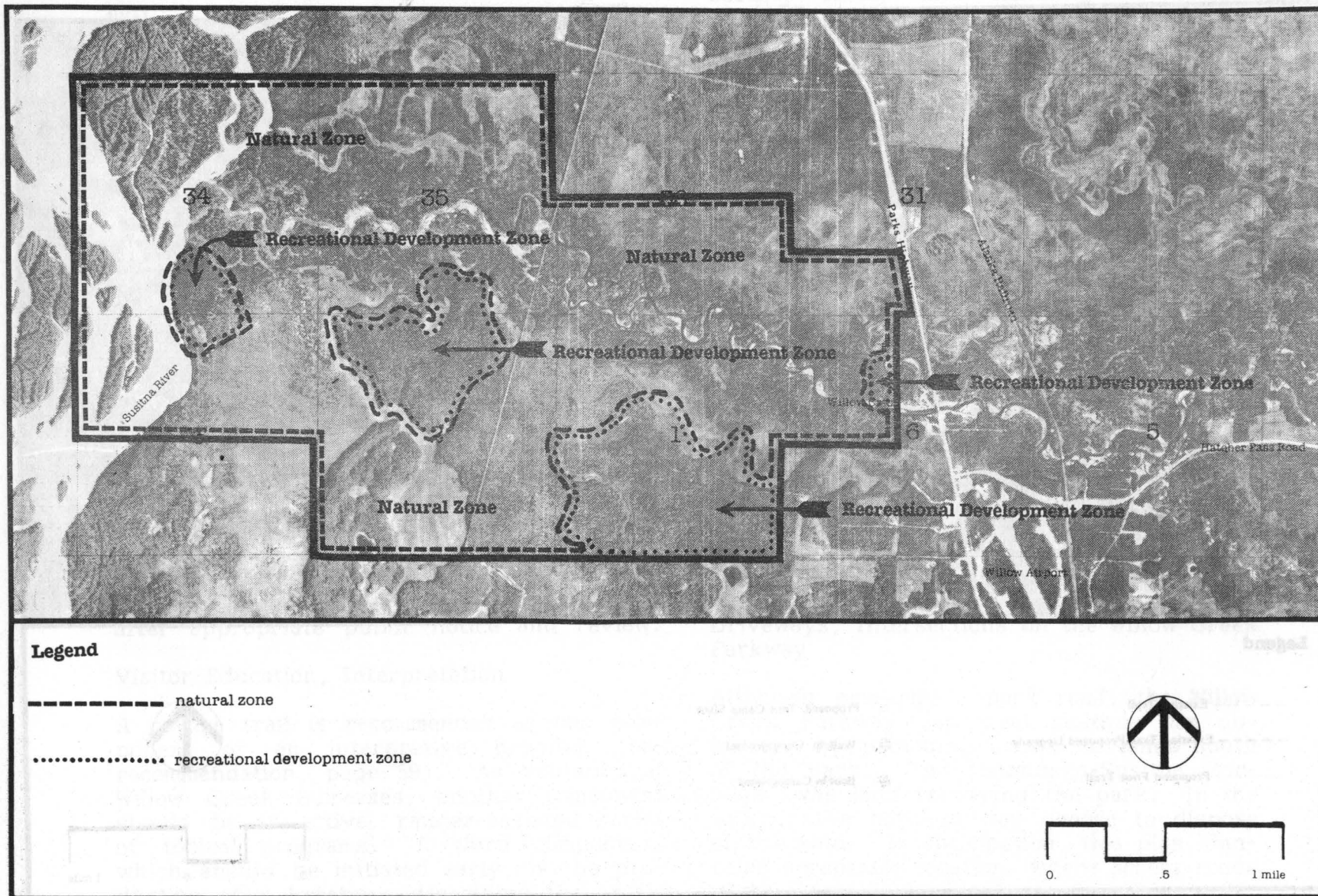
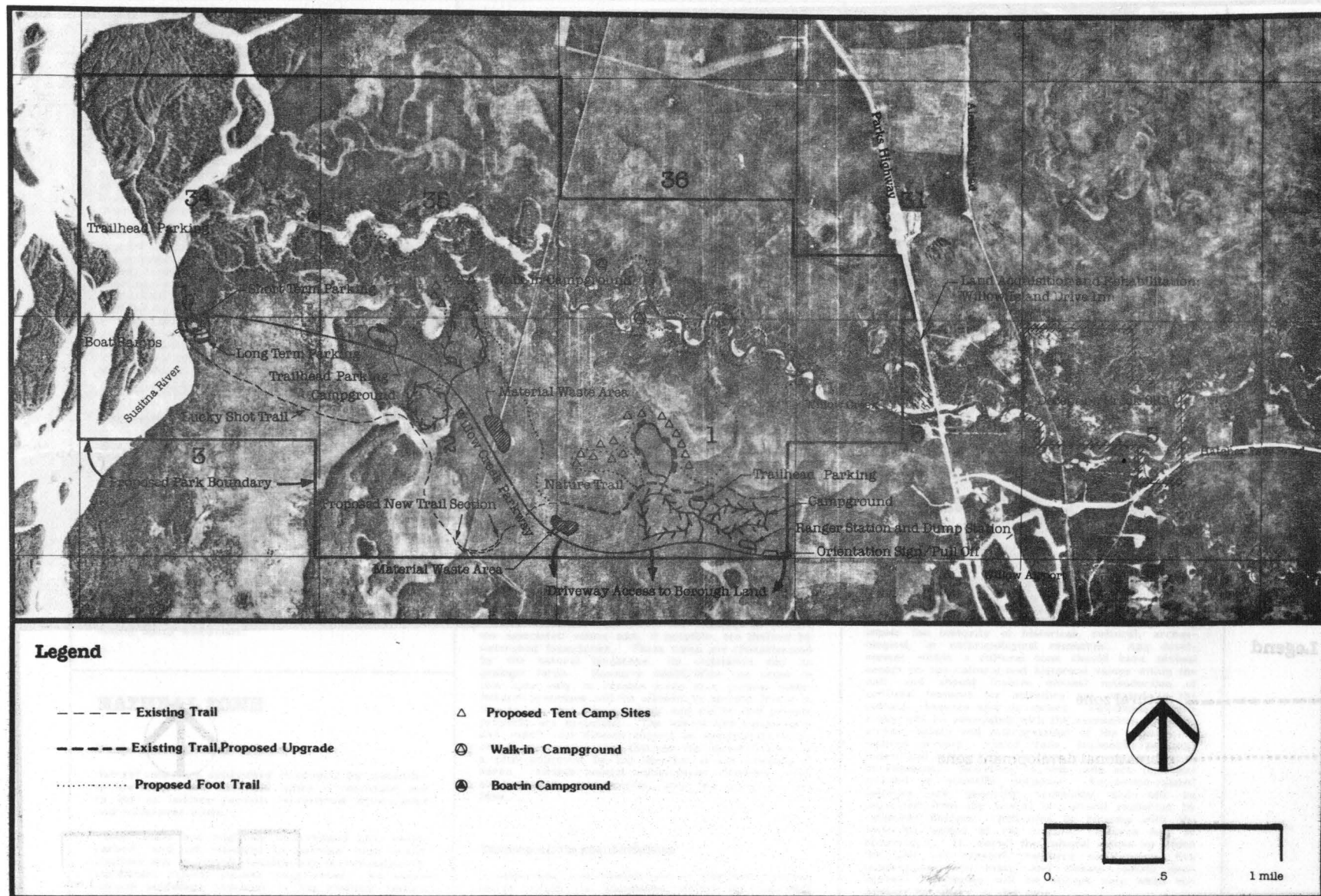


Figure 20. GENERAL DEVELOPMENT PLAN



Riverboating Regulation

With establishment of a state park unit at Willow Creek, Division of Parks will accept responsibility and authority to resolve conflicts and protect the area's natural environment. One management tool is the authority to regulate the various recreational activities.

A major recreational issue at Willow Creek is the growing conflict between riverboaters and other users and increasing concerns about the environmental impacts of riverboating. In an effort to resolve this issue, a new boat launch at the Willow Creek mouth is recommended (see recommendation, page 55).

By providing an alternative to boat launching at the Parks Highway bridge, the new launch is intended to alleviate the problem. If conflicts continue in spite of the alternative launch, it is recommended that the director exercise the Division of Parks' authority and close Willow Creek to motorized boating. Such a closure would take place after appropriate public notice and review.

Visitor Education, Interpretation

A nature trail is recommended as one component of an interpretive program (see recommendation, page 59). As visitation at Willow Creek increases, another component should be an active, ranger-assisted series of topical programs. A third component, which should be initiated early, is the production of a brochure describing the area's natural features and resources.

A final educational subject should concern boating safety and handling techniques. With construction of the new boat launch at the Willow Creek mouth, boaters will be launching into the difficult and potentially dangerous waters of the Susitna River. It is recommended that the Division of Parks take every opportunity to educate boaters, with such devices as bulletin boards, lectures, and demonstrations.

Archaeological Preservation

The locations of facilities in this plan have been selected without the benefit of a comprehensive cultural resources survey (see recommendation, page 53). It is possible that a survey will discover significant resources in an area slated for development. In such a case, the Division of Parks should make every reasonable effort to reroute or relocate the facilities to avoid the prehistoric resources. If rerouting or relocation is not feasible, other efforts to preserve the cultural materials will be explored, including excavation and removal.

Driveways, Intersections on the Willow Creek Parkway

Although primarily a park road, the Willow Creek Parkway can meet multiple use objectives by providing access to lands south of the park. The Matanuska-Susitna Borough owns land bordering the park. In the future, the borough may choose to dispose of the land. In anticipation, this plan identifies acceptable locations where access roads might intersect the parkway (see Figure 20, page 46). These points have been selected

and spaced so as to preserve the natural experience of the parkway while providing reasonable access to outlying areas. Permits for parkway intersections will be issued by the Division of Parks only for those designated points.

Vegetation Thinning, Revegetation

Most of the facilities recommended in this plan will be located on the forested upland benches south of Willow Creek, where vegetation limits distant views of Mount McKinley and the Alaska Range. Selective hand thinning of trees and brush should be performed in certain areas to enhance scenic qualities. Specific areas will be identified by landscape architects during the site planning phase of development and again during construction.

During construction of new facilities, vegetation will inevitably be impacted by heavy equipment. To the extent practical, impacted areas should be reclaimed and revegetated. Road cut and fill slopes should be dressed with surplus topsoil and seeded or planted with native ground cover and brush species. These revegetation efforts will be detailed by landscape architects during the construction phase of development.

Disposal of Construction Waste Materials

Based upon investigations by the Alaska Department of Transportation and Public Facilities, it has been determined that the silty soils found on-site are not acceptable

road construction materials. These organic silts must be excavated, typically to a depth of two feet, and removed before suitable materials can be brought in from off-site.

In order to reduce construction costs, two disposal sites within the park have been identified to receive surplus excavated material (see Figure 20, page 46). In this manner, transportation costs are reduced and these topsoils are available for later use.

The disposal sites will be revegetated according to guidelines set forth by landscape architects during the site planning process. Access will be limited by gates or other barriers.

Signing

Because of the size and magnitude of facilities proposed for the Willow Creek State Recreation Area, a signing plan should be formulated at an early stage to ensure that regulatory and informational signs are both effective and consistent with park values. The sign plan will be particularly valuable during the lengthy period of development, expected to occur in phases over several years.

Trapping

The Willow Creek corridor supports a number of fur-bearing animals, most notably beaver. Trappers have for many years taken furbearers in the corridor, in a sustained yield manner which has not substantially dimin-

ished populations. It is recommended that trapping be allowed to continue, with the understanding that the Department of Fish and Game has authority for managing the area's wildlife resources.

Transportation, Utility Corridors

In anticipation of continued growth in the railbelt region, reconnaissance transportation and utility studies are identifying various corridors for roads, electricity transmission lines, etc. For example, the Alaska Power Authority is studying route alignments for transmission lines which will be necessary if the proposed Susitna hydroelectric project is constructed. One possible alignment bissects the park, traveling over the proposed location of a vehicle campground.

In order to preserve park values and protect recreational resources from intrusion, it is recommended by the Division of Parks that new transportation and utility corridors avoid the boundaries proposed for Willow Creek State Recreation Area.

Operations and Maintenance Staffing

To provide quality public recreation, it is not enough for the state to simply establish new parks and construct new facilities. Equally important is funding for staff personnel, maintenance, repairs, and equipment needs. These are the operational items which are so often neglected as budgets are formulated, yet they provide benefits which accrue directly to recreationists in the form of well-managed facilities and ranger assistance.

As the Division of Parks makes capital funding requests to implement the facilities recommendations of this plan, companion fiscal notes will also be prepared. The notes will detail the support functions, additional staff, special equipment, and other ongoing operational needs which the construction of new facilities will bring. Figure 21, page 50, compiles the phased operational requirements at Willow Creek, designed to coincide with the phases of facility construction.

Hunting

The Alaska Board of Game is responsible for developing hunting regulations addressing such factors as opened/closed areas, seasons, species, and bag limits.

The boat launch area will be heavily used during the autumn big game hunting season by hunters destined for outlying areas. Because of this concentrated use, a real danger would be created by other hunters stalking the surrounding area inadvertently shooting in the direction of the launch. For public safety purposes, it is recommended that the Board of Game close the state recreation area to all hunting during the fall big game season. Afterwards, when boat launching activity has declined, the area would be opened for small game hunting, with small caliber rifles and shotguns.

Failing action by the Board of Game, it is recommended that the Division of Parks exercise its authority to protect public safety by closing the area to the discharge of firearms.

Figure 21. MAINTENANCE AND OPERATIONS REQUIREMENTS:*
corresponding to development phases, figure 24

<p>Phase A</p> <p>no maintenance and operations expenses anticipated</p>	<p>Phase C</p> <p>personnel 1 park technician I (8 months) 1 maintenance worker (8 months)</p> <p>travel travel and per diem for ranger training programs</p> <p>contractual expenses vehicle rentals: ½ ton pickup (8 months) ¾ ton pickup (8 months) miscellaneous contractual expenses</p> <p>supplies firewood janitorial supplies lumber trail-building materials</p> <p>machinery and equipment 1 ½ ton pickup with radios 1 ¾ ton pickup with radios 1 chainsaw 1 3-wheel ATV and trailer (trail maintenance) 1 portable generator power tools paint sprayer</p>
<p>Phase B</p> <p>personnel 1 park ranger I (12 months) 1 park ranger I (8 months) 1 equipment operator IV (8 months) 1 laborer (8 months)</p> <p>travel travel and per diem for ranger training programs</p> <p>contractual expenses vehicle rentals: ½ ton pickup (12 months) ½ ton pickup (8 months) 2½ ton packer truck (8 months) garbage packer unit (12 months) miscellaneous contractual expenses</p> <p>supplies firewood janitorial supplies trail building materials</p> <p>machinery and equipment 2 ½ ton pickups with radios 1 2½ ton packer truck 2 firearms for rangers 1 chainsaw 1 snowmachine and trailer 1 brushcutter 1 raft with outboard motor and trailer</p>	<p>Phase D</p> <p>supplies firewood janitorial supplies</p>

*Subject to change as circumstances and management techniques evolve.

Figure 22. NON-FACILITIES RECOMMENDATIONS

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	JUSTIFICATION, DESCRIPTION
Enabling legis- lation	A	Designation as a unit of the state park system.	State park units larger than 640 acres can be established only by legislative action, according to AS 38.05.300. Because the proposed Willow Creek State Recreation Area encompasses approx- imately 3,450 acres, legislation is required. See Appendix B for a model bill.
Land manage- ment agreement	A	Consolidate land man- agement responsibili- ties within proposed park boundaries.	At present, much of the land within the proposed park boundaries is owned by the Matanuska-Susitna Borough. Therefore, the Division of Parks cannot legally develop or operate a unit of the state park system. A land management agreement in which the borough transfers management auth- ority to the Division of Parks for a period of 55 years will allow the division to establish and enforce appropriate management regulations for the entire 3,450 acre site. The agreement will also permit the state to expend capital improve- ment funding at this site. See Appendix A.
Land acquisi- tion: Willow Island Drive Inn	B	Purchase of impor- tant privately owned recreational land. Continued public access to important recreational resources.	The owners of the Willow Island Drive Inn, located immediately northwest of the Willow Creek/Parks Highway intersection, have expressed an interest in selling their 12 acre parcel to the Division of Parks. A commercial camper park, boat launch, and parking area are presently operated on the site. Acquisition will ensure that important rec- reational services continue to be provided here. The area can also serve as a staging area for foot trails on the north shore of Willow Creek, which will disperse recreationists and reduce over- crowding near the highway.

NON-FACILITIES RECOMMENDATIONS , continued

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	JUSTIFICATION, DESCRIPTION
Fisheries enhancement program	A	Provide additional sport fishing opportunities.	Development of the facilities recommended in this plan will disperse recreationists over a much larger area than is possible at present. This will allow the stream to absorb a portion of the excess demand for sport fishing found throughout Southcentral Alaska. However, the natural stocks of king salmon and coho salmon will not support a large increase in fishing pressure. In recognition of these conditions, the Department of Fish and Game has proposed an active fisheries enhancement program, designed to provide an additional harvest of 6,000 king salmon and 6,000 coho salmon. This plan recommendation supports and encourages the Department of Fish and Game proposal.
Section line easement vacation	B	Protect park and recreational values from incompatible activities and land uses.	It is recommended that section line easements within the park unit's boundaries be formally vacated. Vacation will ensure that roads and trails through the park will be built only with the Division of Parks' express approval, and with appropriate stipulations to protect park values.
Mineral closing order	B	Protect park and recreational values from incompatible activities and land uses.	Due to the extensive landscape modification, noise, heavy equipment travel, and other impacts of mining, it is incompatible with outdoor recreation. In addition, the lower Willow Creek corridor is not considered to contain important mineral resources. Therefore, it is recommended that the Willow Creek State Recreation Area be closed to all mineral entry.

NON-FACILITIES RECOMMENDATIONS , continued

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	JUSTIFICATION, DESCRIPTION
Park unit name change	B	Avoid public confusion over similar park unit names, and more clearly reflect geographic landmarks.	Willow Creek State Recreation Site, a 240 acre park unit already managed by the Division of Parks, is located one mile upstream of the proposed Willow Creek State Recreation Area. Although it contains frontage on Willow Creek, a more important natural feature is Deception Creek as it flows through the site. In order to avoid confusion due to similar names for the two discontinuous and generally unrelated sites, it is recommended that the Willow Creek State Recreation Site be changed to Deception Creek State Recreation Site. This name change is consistent with a Division of Parks policy of naming park units for their prominent geographic features.
Cultural resources survey	B	Preservation of archaeological and historical resources.	According to a preliminary assessment by the State Office of History and Archaeology, several areas within the proposed park unit are potential archaeological sites. Prior to facilities construction in those areas, the Office of History and Archaeology recommends that a cultural resources survey be performed. The survey is a systematic field exploration designed to assess the presence and significance of prehistorical or historical resources.

Figure 23. FACILITIES RECOMMENDATIONS

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	FACILITIES	JUSTIFICATION, DESCRIPTION
Willow Creek Parkway	B	Provide road access to campgrounds, trailheads, parking areas, boat launch, and other activity.	Four miles of two lane gravel road 35 mph speed limit.	This proposal calls for construction of a high quality gravel road designed for asphalt topping at a later date. Its width must be adequate to accommodate large recreational vehicles and trailer rigs, and its design must incorporate techniques to discourage speeding (such as computing right-of-way clearing for 35 mph).
Vehicle campgrounds	B, C, D	Provide overnight camping opportunities for vehicle-based recreationists.	One hundred camping units, with tent pads, fire pits, picnic tables; 12 single vault latrines; 16 small picnic shelters; four water wells, miscellaneous signs, gates, sanitary facilities, as necessary.	Data indicates that the majority of people at Willow Creek camp in or adjacent to their vehicles, and this proposal provides the necessary support facilities. Four separate campground areas will be developed, each with approximately 25 camping units, four small picnic shelters, one water well, and three single vault latrines. This arrangement is on a scale attractive to recreationists and affords maximum flexibility for park managers.

FACILITIES RECOMMENDATIONS , continued

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	FACILITIES	JUSTIFICATION, DESCRIPTION
Boat launch	B	Provide alternative to riverboat launching at Parks Highway bridge and boating on Willow Creek. Provide departure point for riverboaters bound for outlying areas.	One double width launch; 150 pull-through parking spaces (short term); 50 pull-through parking spaces (long term); one double vault latrine; miscellaneous signs, gates, sanitary facilities, as necessary.	<p>Boat traffic is a major issue at Willow Creek. A primary concern is for public safety and the dangers created by numerous boats on a small stream such as Willow Creek. There is concern that the number and type of boats which presently travel the stream will eventually impact the stream environment negatively. Other concerns center on negative aesthetic impacts of motorized boating, including noise, fumes, and wakes interfering with shore anglers.</p> <p>These concerns, coupled with preliminary information which suggests that most riverboaters are destined for outlying areas, indicates that a boat launch located near the mouth of Willow Creek is appropriate. A launch at the mouth will provide an alternative to launching at the Parks Highway bridge, shorten travel time for boaters, and eliminate dangerous conditions and environmental concerns.</p>

FACILITIES RECOMMENDATIONS continued

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	FACILITIES	JUSTIFICATION, DESCRIPTION
Internal trail network	B, C,	Provide non-vehicular travel corridors, connecting campgrounds, parking areas, and other activity areas. Provide opportunities for trail-based recreational activities.	Approximately six miles all-season trail; bridges, board-walks, as necessary.	The most frequent complaint about existing conditions at Willow Creek is that a few locations are overcrowded while others remain inaccessible. This proposal therefore seeks to disperse recreationists throughout the area. The trails will connect most of the campgrounds, parking lots, and day-use areas and will afford access to approximately four miles of William Creek frontage on both the north and south shores.
Trailhead parking areas	B, C, D	Provide necessary support facilities for walk-in campers, anglers, and other recreationists.	One hundred twenty parking spaces; three double vault latrines; one water well; miscellaneous signs, gates, sanitary facilities, as necessary.	Many visitors do not remain overnight. This proposal meets their needs by providing parking facilities and access to the area at large. Development will proceed as indicated in Figure 20, page 46. The parking area next to Lucky Shot Campground will also serve the group picnic site (see recommendation, page 57), and the one next to the boat launch will contain a water well.

FACILITIES RECOMMENDATIONS , continued

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	FACILITIES	JUSTIFICATION, DESCRIPTION
Walk-in campgrounds	B, C	Provide opportunities for walk-in tent camping. Avoid potential waste and litter problems.	Fifty camping units, with tent pads, picnic tables, barbeque pits; six single vault or pit latrines; miscellaneous signs, barriers, sanitary facilities, as necessary.	This proposal responds to the demand (see Appendix D) for walk-in camping facilities while avoiding the litter and waste problems typical of random camping. The units will be from 100 feet to 1.5 miles away from parking areas, and two of them near the streambank will be available to boaters as well as to hikers.
Boat-in campgrounds	C	Provide opportunities for boat-based camping.	Ten camping units, with tent pads, picnic tables, barbeque pits; two pit latrines; miscellaneous signs, barriers, sanitary facilities, as necessary.	As facilities are developed, it is expected that new user groups, such as riverfloaters, will be attracted. This proposal provides two clusters of five camping units for exclusive use by waterborne recreationists. Because these units will be inaccessible by trail and therefore difficult to maintain, a boat-it-in, boat-it-out practice will be encouraged.
Group picnic area	C	Provide diverse range of opportunities at Willow Creek, in addition to stream access for sport fishing. Provide area and facilities for group activities.	Three large picnic shelters, with fire pits; 12 picnic tables; one water well; miscellaneous signs, gates, sanitary facilities, as necessary.	This proposal accommodates the demand for group activity facilities, in particular for picnicking areas. The facilities will be designed and located so as to serve a range of group sizes, from large gatherings to family-sized parties. Parking for the group picnic area will be provided at the nearby trail-head parking area (see recommendation, page 56).

FACILITIES RECOMMENDATIONS , continued

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	FACILITIES	JUSTIFICATION, DESCRIPTION
Lucky Shot Trail	C	Provide opportunity for year-round trail recreation. Commemorate the Lucky Shot Trail as a historical access route into the Willow Creek Mining District.	One and a half miles all-season trail; 1.5 miles winter trail.	The Lucky Shot Trail is a well defined corridor presently used by local residents and recreationists for a variety of activities. In particular, dog sledgers use the trail for training purposes and have recently made improvements to the trail's Shirley Creek crossing. This proposal will allow continued use of this historical trail during all seasons. A portion of the trail will connect campgrounds and other activities. Another portion, traversing the wetlands near the Susitna River, will be passable only during the winter. Still another portion can serve as one leg of the nature trail (see recommendation, page 59).

FACILITIES RECOMMENDATIONS , continued

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	FACILITIES	JUSTIFICATION, DESCRIPTION
Nature trail	C	Interpret the area's natural and human history for park visitors.	One and a quarter miles all-season trail; bridges and boardwalk as necessary; interpretive signs; displays; bulletin boards; brochure dispensing station.	<p>The Willow Creek corridor has a rich natural and human history. This proposal seeks to foster appreciation for the area's values through the use of standard trail-oriented interpretive and educational devices. The trail alignment has been selected to include a range of ecological zones and a portion of the historical Lucky Shot Trail (see recommendation, page 58).</p> <p>The trail will also serve as a leg of the area's internal trail network, which connects campgrounds, parking areas, and other activity nodes (see recommendation, page 56).</p> <p>Creek frontage will be accessible when the trail network is fully developed.</p>

FACILITIES RECOMMENDATIONS , continued

PROPOSAL	PHASE	MANAGEMENT OBJECTIVES	FACILITIES	JUSTIFICATION, DESCRIPTION
Willow Island Drive Inn rehabilitation	C	Rehabilitate existing campground. Redefine camping areas, other activity areas.	Fifty camping units, with tent pads, fire pits, picnic tables; 20 parking spaces; one water well; three double vault latrines; six small picnic shelters; miscellaneous, gates, sanitary facilities, as necessary.	After acquisition of this privately-owned campground (see recommendation, page 51), it will be necessary to rehabilitate selected areas in order to efficiently manage the grounds. For instance, the existing hamburger stand should be converted to a ranger station with equipment storage, bulletin boards, etc. The present boat trailer storage area might be used for additional camping units. Other areas should be revegetated, in order to provide highway and streamside buffers.
Dumping station	D	Provide necessary sanitary facilities. Avoid potential public health problems.	One sewage dump station; one water well; five parking spaces; miscellaneous signs, sanitary facilities, as necessary.	As the facilities recommended in this plan are constructed over the course of several years, demand for a sewage dump station will increase. In the event that the private sector does not satisfy this demand by providing a dump station in the vicinity, this proposal, during the last phase of development, acts to prevent a potential litter and pollution problem within the state recreation area.

7 IMPLEMENTATION

Phasing

The recommendations of this plan are intended to be implemented in phases over a period of several years. Figure 24, page 62, details the phases of development. Four phases are employed, with A, B, C, and D designations. All phase A recommendations should be implemented concurrently, and prior to phase B recommendations. Phase B recommendations should occur prior to C's, and so forth.

Plan Deviations, Modifications

At the time of publication, this plan will represent the best efforts of the Division of Parks to analyze Willow Creek's natural features for their capability to provide sustained outdoor recreational opportunities without significantly compromising the area's natural character, and to recommend a program for management and development of the area. The adopted master plan is a policy statement for the unit, requiring that developments, uses, and management must be in accordance with its directions. However,

the plan must be flexible in order to adapt to changing circumstances and new information. The procedure listed below is developed to permit this flexibility and ensure that the plan continues to be a useful management tool. It is excerpted from the proposed Standard Operating Procedures for State Park Master Planning.

1. Periodic Review.

The planning section will coordinate periodic review of the master plan when the director considers it necessary and so directs. The decision to review the master plan may be triggered by

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

Figure 24. PHASING RECOMMENDATIONS

Proposal	Non-Facility Proposal	Facility Proposal	Described on page ____	Mapped on page ____
Phase A				
Enabling legislation	X		51	--
Land management agreement	X		51	--
Fisheries enhancement program	X		52	--
Phase B				
Land acquisition: Willow Island Drive Inn	X		51	--
Mineral closing order	X		52	--
Park unit name change	X		53	--
Cultural resources survey	X		53	--
Section line easement vacation	X		52	--
Willow Creek Parkway		X	54	45
Boat launch		X	55	45
Vehicle campground		X	54	45
Walk-in campgrounds		X	57	45
Internal trail network		X	56	45
Trailhead parking areas		X	56	45
Phase C				
Vehicle campgrounds (continued)		X	53	45
Walk-in campgrounds (continued)		X	57	45
Boat-in campgrounds		X	57	45
Willow Island Drive Inn rehabilitation		X	60	45
Lucky Shot Trail		X	59	45
Nature trail		X	59	45
Internal trail network (continued)		X	56	45
Trailhead parking areas (continued)		X	56	45
Group picnic area		X	57	45
Phase D				
Vehicle campground (continued)		X	54	45
Trailhead parking area (continued)		X	56	45
Dumping station		X	60	45

The master plan review will include meetings, as appropriate, with interested groups, the general public, affected agencies, the district superintendent, and other Division of Parks personnel. The periodic review will lead to one of the following actions:

- a. No modification of the plan.
- b. Modification of the plan.
- c. Granting of a special exception.

Items "b" and "c" are explained in detail below.

2. Modification of the Plan

- a. Minor changes. These are changes which, if accomplished, would not cause a deviation from the original intent of the master plan. Minor changes may be necessary for clarification, consistency, or to facilitate implementation of the master plan. Minor changes do not require public review but must be coordinated with the district superintendent and appropriate staff.
- b. Major changes. These are changes which, if accomplished, would cause a deviation from the original intent of the master plan. Major changes require public notice and review prior to adoption.

3. Granting of a Special Exception

Exceptions to the provisions of the master plan may be made without modification of the plan. Special exceptions shall occur only when complying with the plan is excessively difficult or impractical and an alternative procedure can be implemented which adheres to the purposes and spirit of the plan.

The Division of Parks may make a special exception in the implementation of the plan through the following procedures:

- a. The person or agency requesting the special exception shall prepare a written finding which specifies
 - the nature of the special exception requested;
 - the extenuating conditions which require a special exception;
 - the alternative course of action to be followed;
 - and, how the intent of the plan will be met by the alternative.
- b. The director will review the findings and issue a determination. If warranted by the degree of controversy or the potential impact, the director will hold a public hearing before reaching a decision.
- c. The decision of the director may be appealed to the Commissioner of the Department of Natural Resources, whose decision will be final.

APPENDICES

A.

Willow Creek State Recreation Area
Management Agreement
Between
Matanuska-Susitna Borough
and
the State of Alaska, Division of Parks

This Management Agreement is made and entered into for the purpose of providing beneficial public use of lands at Willow Creek now under the jurisdiction of the Matanuska-Susitna Borough, hereinafter referred to as "the Borough," with such public use being under the control and maintenance responsibility of the State of Alaska, Department of Natural Resources, Division of Parks, hereinafter called "the State."

WHEREAS, the Borough recognizes the unique natural features of the area and desires to preserve the habitat, protect the stream from any detrimental development, and cooperate in its development as a public recreational area; and

WHEREAS, the Borough has retained and classified as "Public Recreation Lands" the lands near the mouth of Willow Creek; and

WHEREAS, the State of Alaska has the capability to manage this site for the recreational use of the public as a State Recreation Area and has the capacity for improving and maintaining this site for such use; and

WHEREAS, pursuant to Matanuska-Susitna Borough Resolution 81-129 the Manager is authorized to negotiate a Management Agreement with the Alaska Division of Parks subject to final approval by the Assembly;

NOW THEREFORE, the Borough grants to the State a 55 year Management Agreement for use of the described land as a public recreation area, subject to the following terms and conditions:

Section 1 LAND USE AGREEMENT

1. The State and Borough agree that both the State and Borough lands covered by this Agreement shall be

the State for outdoor recreation, wildlife habitat, and open space purposes. Any other use will result in immediate termination of the Management Agreement.

2. The Division of Parks shall manage Borough owned lands as part of the Alaska State Park System and in accordance with the terms and conditions of this Agreement.

3. Borough lands covered by this Agreement are described as follows:

Township 19 North, Range 4 West,
Seward Meridian, Section 6 NW $\frac{1}{4}$

Township 19 North, Range 5 West,
Seward Meridian, Sections 1 and 2

Township 20 North, Range 5 West,
Seward Meridian, Section 35, Section 34 east of a branch of the Susitna River.

4. State lands covered by this Agreement are described as follows:

Township 19 North, Range 5 West,
Seward Meridian, Section 3 N $\frac{1}{2}$

Township 20 North, Range 4 West,
Seward Meridian, Section 31 S $\frac{1}{2}$ S $\frac{1}{2}$
west of the Parks Highway

Township 20 North, Range 5 West,
Seward Meridian, Section 36 S $\frac{1}{2}$,

Section 34 composed of islands within the Susitna River.

Section 2 RESPONSIBILITIES OF THE DIVISION OF PARKS

1. Pursue jointly with the Borough and support the legislative establishment and funding for the development, operation, and maintenance of Willow Creek State Recreation Area.
2. Assign field staff to the operation, maintenance, and management of the recreation area, provide visitor information services, facilities, public safety, and enforcement of park regulations.
3. Budget yearly for maintenance, operations, and staffing costs.
4. Work jointly with the Borough in providing opportunities for summer youth employment and local seasonal employment in accordance with state and local laws.
5. Assume management liability and risk insurance and responsibility for land use, facility repair, replacement, or upgrading. The Matanuska-Susitna Borough shall be held harmless from any liability or claims of whatever kind arising from the management of the lands described in this Agreement.

6. Commit park staff to the planning, design, and engineering of any facilities or development of the proposed Willow Creek State Recreation Area.

Section 3 RESPONSIBILITIES OF THE MATANUSKA-SUSITNA BOROUGH

1. Grant to the Division of Parks management authority for borough owned lands described in Section 1 of this Agreement.
2. Pursue jointly with the State and support the legislative establishment and funding for the development, operation, and maintenance of Willow Creek State Recreation Area.
3. Work jointly with the State in providing opportunities for summer youth employment and local seasonal employment in accordance with state and local laws.
4. Provide technical assistance to the State in cooperative planning, design, and engineering work.

Section 4 SPECIAL PROVISIONS

1. The Borough and the State shall jointly participate in the development of a master plan for the land under this Agreement, including any subsequent amendments to that plan.

2. Management objectives for State land shall consider the impacts on lands under this Agreement and the type and scale of recreational opportunity being provided.

3. The Borough owned lands involved in this Agreement may be used by the State only for the stated purposes under the management of the State of Alaska, Division of Parks. Other uses of these lands by other agencies, bodies, or individuals shall be prohibited except by special use permit issued jointly by the Borough and the State. Incompatible uses shall be defined as those activities which are not related to the character of the site or management objectives for the area as defined in the master plan.

4. No provision of this Agreement shall obligate either party to expend funds in excess of appropriations authorized by law or ordinance.

5. No provision of this Agreement shall prevent the State from instituting a system of user fees, to be collected from visitors to the described land. Revenues from such a fee system shall accrue to the State, the Borough, or to a third party previously approved by the Borough and State.

Section 5 DISCRIMINATION PROHIBITED

The State and Borough agree to comply with Title Six of the Civil Rights Act of 1964 and equal employment opportunities. No person shall, on the grounds of race, color, or national origin be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use or occupancy of the above described lands or of the accommodations, facilities, services, or privileges furnished thereon.

Section 6 TERM

This Agreement shall become effective upon its execution by both parties and shall continue in effect for 55 years unless earlier terminated under the terms of this Agreement. Modifications, renewals, or extensions shall be by written mutual consent of the parties.

Section 7 TERMINATION

1. This Agreement may be terminated for good cause by either party by giving one year written notice. Grounds for termination shall be based on the inability of the State to manage the site for recreational

purposes, or a violation of the terms of this Agreement, or a desire and commitment on the part of the Borough to manage the site for recreational purposes, or emergency or substantial public need to convert the lands covered by this Agreement to other uses.

A proposed conversion of use of the site to other purposes shall require a public hearing and determination of public interest by the borough assembly.

2. If the state legislature fails to establish the described lands as a State Recreation Area within 3 years of the effective date of this Agreement, this Agreement shall be reviewed for reconsideration by both parties.

Section 8 ASSIGNMENT

This Agreement shall not be assigned to any third party without written mutual concurrence of both parties to this Agreement. The Borough and the State shall not establish or dedicate any other interests in the land or its management without mutual written agreement.

IN WITNESS WHEREOF: The parties to this Agreement have in good faith executed this Agreement as testified below:

MATANUSKA-SUSITNA BOROUGH

By: _____
Gary Thurlow
Manager
Matanuska-Susitna Borough

Date: _____

STATE OF ALASKA

By: _____
Neil C. Johannsen
Director
Alaska Division of Parks

Date: _____

B. MODEL ENABLING LEGISLATION

IN THE LEGISLATURE OF THE
STATE OF ALASKA
THIRTEENTH LEGISLATURE -
FIRST SESSION
A BILL

For an Act entitled: "An Act establishing the Willow Creek State Recreation Area; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*Section 1. AS 41.20 is amended by adding new sections to read:

ARTICLE 17. WILLOW CREEK STATE RECREATION AREA.

Sec. 41.20.506. PURPOSE. The purpose of AS 41.20.506 - 41.20.512 is to dedicate the land and water described in AS 41.20.507(c) to use as a public recreation area and to protect and enhance the recreational, natural, cultural, scenic, and wildlife resources of the Willow Creek State Recreation Area and the fishery resources of Willow Creek. Under the provisions of AS 38.05.300, state land, water, or land and water containing more than 640 acres may be closed to multiple purpose use only by act of the legislature. Inasmuch as the area described in AS 41.20.507(c) exceeds 640 acres, AS 41.20.506 - 41.20.512 are intended to except the area described from the provisions of AS 38.05.300.

Sec. 41.20.507. ESTABLISHMENT AND MANAGEMENT. (a) The land and water presently owned by the state and all land and water acquired in the future by the state lying within the parcels described in (c) of this section are designated as the Willow Creek State Recreation Area, reserved from all uses incompatible with the uses

stated in AS 41.20.506 and assigned to the Department of Natural Resources for control, development, and maintenance.

(b) The Department of Natural Resources may agree to manage land owned by the Matanuska-Susitna Borough that is within the parcels described in (c) of this section and that is transferred by ordinance or resolution of the borough to the department for management as a part of the Willow Creek State Recreation Area.

(c) The state land and water presently owned, the state land and water acquired in the future, and the land and water owned by the Matanuska-Susitna Borough and transferred to the Department of Natural Resources for management under (b) of this section that are within the parcels described in this subsection are designated as the Willow Creek State Recreation Area, with a total acreage of approximately 3,440 acres:

Township 19 North, Range 4 West,
Seward Meridian

Section 6 NW $\frac{1}{4}$

Township 19 North, Range 5 West,
Seward Meridian

Sections 1 and 2

Section 3 $\frac{1}{2}$

Township 20 North, Range 4 West,
Seward Meridian

Section 31 S $\frac{1}{2}$ S $\frac{1}{2}$ West of Parks
Highway

Township 20 North, Range 5 West,
Seward Meridian

Section 36 S $\frac{1}{2}$

Section 35

Section 34

(d) By proclamation of the governor, the boundaries of the Willow Creek State Recreation Area may be amended to include state land acquired by the commissioner of natural resources consistent with AS 41.20.512. Such a boundary amendment shall not exceed 80 acres in area.

(e) The commissioner of natural resources shall develop a master plan for the use and development of the Willow Creek State Recreation Area in cooperation with the Matanuska-Susitna Borough and the Department of Fish and Game.

(f) The Department of Fish and Game is responsible for the management of the fishery and wildlife resources in the Willow Creek State Recreation Area consistent with the purposes of AS 41.20.506 and shall consult with the commissioner of natural resources before adopting regulations governing the fishery and wildlife resources of the Willow Creek State Recreation Area.

Section 41.20.508. INCOMPATIBLE USES PROHIBITED. The commissioner of natural resources may prohibit uses of the land within the boundaries of the Willow Creek State Recreation Area if the uses are incompatible with the purposes of the recreation area under AS 41.20.506.

Sec. 41.20.512. PURCHASE AUTHORIZED. The commissioner of natural resources may acquire, by purchase in the name of the state, title to or interest in real property lying within or abutting the boundaries of the Willow Creek State Recreation Area.

*Section 2. This act takes effect July 1, 1983.

C. PUBLIC MEETING SUMMARY

Anchorage, August 5, 1981

The following is a summary of events and comments at the August 5, 1981, public meeting at the Pioneer School House, Anchorage, concerning park development along Willow Creek. Four people attended.

David Stephens introduced himself and other state parks staff working on this project: Sandy Rabinowitch, Linda Cyra-Korsgaard, and Park Ranger Dennis Heikes. Stephens outlined the agenda for the meeting, pointing out that the meeting's intent was to gather information, not to present any formal proposals.

Sandy Rabinowitch reviewed the history of the project, which began as a road and boat launch proposal in 1970. He discussed the need to improve upon the existing Willow Creek Wayside, which had resulted in a 1978 bond appropriation of \$495,000.

Linda Cyra-Korsgaard conducted a slide show to familiarize meeting participants with the stream and study area. Discussion focused on the natural features of the stream corridor.

The original 1970 proposal to build a road on the north shore of Willow Creek and a boat launch at the mouth was discussed and supported by one participant.

One person favored the road/boat launch proposal as a means to protect Willow Creek from riverboat congestion while still providing access to the Susitna River.

Another person agreed that boat traffic is sometimes congested and surely must damage fish populations.

Discussion followed on the land status along Willow Creek and the need to cooperate with the Matanuska-Susitna Borough, which owns much of the land. The present state park wayside was again discussed. Various problems were mentioned, including surrounding private lands, loss of campgrounds due to riverbank erosion, Deception Creek and Willow Creek flooding, and lack of access to park lands north of Willow Creek.

The potential for a trade of land with the borough was pointed out.

There was discussion about the number of old river meander channels and the difficulties of transporting people and vehicles over such channels.

Development of the flood plain areas was discussed, with one person citing a study by the Department of Fish & Game. The Matanuska-Susitna Borough flood plain development ordinance was also mentioned.

One person asked about the soils along Willow Creek and their capability to withstand development of roads and trails.

One person favored road development to the

north of Willow Creek, due to state land ownership and fewer abandoned meander channels.

Another cautioned against direct competition with private businesses and stressed the need for cooperation in developing facilities that complement each other rather than compete.

Participants were asked about the possibility of building camping facilities several miles north of Willow Creek and no camping in the immediate area.

The meeting was adjourned at 10:00 p.m.

Willow, August 6, 1981

The following is a summary of events and comments at the August 6, 1981, public meeting at the Willow Elementary School concerning development along Willow Creek. Twenty-five people attended.

Sandy Rabinowitch introduced himself and other state parks staff: Larry Wilde, Dennis Heikes, David Stephens, and Linda Cyra-Korsgaard. Larry Engel, from the Department of Fish & Game, was also introduced as a member of the planning team assembled to guide the development of the Willow Creek Master Plan.

Mr. Rabinowitch traced the evolution of this project from a proposal originally made in 1970 to build a road north of Willow Creek and a public boat launch at its confluence with the Susitna River. He also explained that the purpose of this first meeting was to

gather general comments and information on Willow Creek rather than any specific draft plan or proposal.

Larry Wilde, Superintendent of the Mat-Su District, discussed the management difficulties now faced at the present Willow Creek Wayside, including flooding, bank erosion, forest deterioration, recreational trespass, and lack of expansion potential due to adjacent private land. He also discussed the possibility of developing wayside lands north of Willow Creek. This would require either bridging Willow Creek or building a road spur from the Parks Highway north of the river.

David Stephens outlined the planning process to be followed on this project, emphasizing that the meeting was part of the initial inventory phase. He explained that a second meeting would be held in late September/early October for review of the draft master plan. The meeting was then opened to general discussion, summarized here.

One person questioned the need for any new development, citing a boat launch at Susitna Landing ten miles north and recreation facilities at Nancy Lake Recreation Area ten miles south. He also stated that improved access to Willow Creek would shorten the king salmon season and damage the local economy.

Another suggested a new easterly road departing the Parks Highway north of Willow Creek, opening existing wayside lands for new development.

One person pointed out that the State Division of Parks would secure management authority over Willow Creek with the establishment of a state recreation area. With that authority, the stream could be closed to river boat traffic while no alternative launches were provided. In effect, this would force boaters to use one of the three launches further north (Susitna Landing, Talkeetna, and Parks Highway Susitna River Bridge).

Another favored State Division of Parks control of both banks of Willow Creek.

Another person spoke in favor of road access to the mouth of Willow Creek and a boat launch.

Another person opposed road development, asserting that access would be too easy and that the quality recreational experience now enjoyed by a few is better than a degraded experience open to many.

It was repeated that a road should be built along the section line from the Parks Highway to existing wayside lands north of Willow Creek. Ranger Heikes pointed out that this might create a problem with unintentional trespass on private property upstream of the park lands. He also indicated that the area is upstream of the Deception Creek confluence and hence closed to salmon fishing.

Another person spoke in favor of a boat launch at the mouth of Willow Creek, saying that 80% of the stream's traffic is bound for outlying areas.

One person said that the presence of a private launching facility at Susitna Landing should not preclude a boat launch at Willow Creek.

One person said that there is a danger of creating a "Russian River North."

Another said that too much access could lead to a complete fishing closure, which would damage rather than improve the local economy.

It was pointed out that airboats are now traveling north of Deception Creek and to king salmon spawning grounds.

One person opposed state park establishment at Willow Creek as a ploy to eliminate boat traffic.

Another said that the ideal situation exists today, with public land ownership along the lower stream and limited access.

A distinction was made between jet boats and air boats, each type having different impacts on the stream environment.

Another person spoke in favor of trail development along both sides of Willow Creek, with tent camping areas.

Another wanted bicycle trails.

One person spoke of the need for a regional analysis of recreational patterns and the possibility of a boat launch at Little Willow Creek. He also said that closure of Willow Creek would eliminate an exciting and challenging riverboating opportunity.

It was indicated that the fishing area at the mouth of Willow Creek could accommodate a maximum of ten boats and 30-40 bank fishermen.

Larry Engel of the Department of Fish & Game spoke about the possibility of fisheries enhancement, indicating that it is technically possible to increase the king salmon run and therefore raise the catch limit.

Another indicated that the plan should also address other recreational activities, including hiking, skiing, dogsledding, and snow-machining. He also said that there should be some trail connection with the Hatcher Pass area.

Discussion followed on floodplain development and the Matanuska-Susitna Borough floodplain development ordinance.

Another person asked about the possibility of bank stabilization efforts along Deception Creek in the present wayside.

Facilities for older or handicapped users were encouraged, including a road and trails to the mouth of Willow Creek.

The meeting was adjourned at 10:30 p.m.

Willow, October 6, 1981

The following is a summary of events and comments at the October 6, 1981, public meeting held at Willow Elementary School concerning development along Willow Creek. Thirteen people attended.

Dave Stephens introduced himself and other State Division of Parks staff: Sandy Rabinowitch, Linda Cyra-Korsgaard, Dennis Heikes, and Daryl Haggstrom. Two representatives from the Mat-Su Borough were present: Nicki Harris and Rodney Schulling.

Mr. Stephens quickly traced the evolution of this project, then turned to our progress since the last meeting. He discussed the results from the questionnaire. Linda Cyra-Korsgaard then presented five alternative development plans. The meeting was then opened to general discussion, summarized here.

The first point brought up was the need for more maintenance and operations personnel if Willow Creek is to be developed.

The next question pointed towards the foot bridge crossing Willow Creek: what type it would be and how it would affect boat traffic. Sandy answered that it would be high enough not to impede boat traffic. Dave mentioned it would be single span, eight feet wide, and structurally built to allow for a three wheel maintenance vehicle.

One person asked why we need to cross Willow Creek. Dennis answered that some of the best camping is on the south side and that the best fishing at the mouth is on the southern channel.

One person asked what kind and how much maintenance is required on a foot trail. Dennis explained he would like to have a "pack it out" policy but knows he will still

have to service the latrines and pick-up ground litter.

Another person asked at what point we would cut off boat traffic. Dave explained that according to our questionnaire results, public meetings, and interviews, the boat ramp would take care of the boat traffic problem on Willow Creek. We wouldn't recommend closing it right off the bat.

Another person asked who has the authority to close Willow Creek to boat traffic -- Fish & Game, Coast Guard? Sandy explained that when and if Willow Creek becomes a state park, the director of the Division of Parks has the power to close the creek to boat traffic.

One person stated that he would like to see a park built but fears it would give rise to violence between boaters and fishermen. He believed we needed to assure boaters we will not close the stream. We stated again that until we had a viable alternative, the stream would not be closed.

One person voiced his concern over the king salmon.

One person supported Plan B but opposed Plan A (bad ground) and Plan C (interference with private sector).

Another person returned to the boat traffic problem. He thought we had not addressed it and believed it would be unfair to invite the public to camp and fish on Willow Creek without being advised of the noise and volume of boat traffic.

One person suggested forgetting Alternative B and building all of Alternative D to avoid boat traffic problems.

A general consensus was then reached that the road and boat ramp are the highest priorities, with establishment of camping facilities and foot trails following. It was also mentioned that this procedure would facilitate building foot trails.

Someone questioned what would happen to the old wayside.

Several people questioned the borough's plans for the south bluff. They believed borough personnel had been surveying there.

One man asked how we determine what plan to use and what our next steps were. Rodney Schulling from the Borough Planning Department outlined the joint planning-management being discussed and explained the Borough Planning Commission's role. Dennis explained that after the land status is resolved the recommendations from the master plans will be used in applying for Capital Improvement Funds (CIP) for construction.

Another man asked if the original CIP funds were designated for the existing wayside and, if so, how they could be switched over to the master plan project.

One man went on record as saying he protests all of the Division of Parks priorities. The problem he sees is insufficient disbursement of hunters and fishermen: The state is spending money on amenities in a few places,

but what it should spend money on are more roads to new places. He said that people will take care of themselves once they get there.

Another man asked if Fish & Game would open the area up to Deception Creek for king salmon fishing.

One person advised that the boat ramp be built as soon as possible after Phase B. This would help resolve the boating issue most quickly.

Another person urged that the entire plan be put into effect simultaneously in order to alleviate the critical situation existing between boaters and streamside fishermen.

There were some questions about the location of the boat ramp. The location on Alternative E was criticized as being on a cut bank, with the stream being too fast to permit launching a boat. He preferred the location to the north.

Someone pointed out that Plan B, if implemented next season, would increase drastically the conflict between fishermen and boaters. His solution was to buy out the private property owners on the southeast side of the Parks Highway bridge for a large camping area, thereby keeping the fishermen upstream from the boaters. He stated that he knew some of the land was for sale. One person mentioned that if the boat launch was located north of the mouth the floaters would not have a take-out point. He suggested an earlier take-out point on Willow Creek.

There was also concern for boater safety on the Susitna River.

Another said that when the river is exposed to more people, it should be closed to boat traffic.

Another man asked what the boundaries of the new park might be.

D.

OPINION SURVEY RESULTS

A total of 209 questionnaires were passed out, broken down as follows. The 29 people attending a first round of public meetings in Anchorage and Willow were asked to participate. Park rangers also passed out 100 forms to fishermen and recreationists at the Willow Creek Wayside. Finally, 80 questionnaires were mailed to people who had previously participated in a Department of Fish & Game survey of Willow Creek. Of the total 209 possible returns, 52 were returned by mail, equaling a 25% return rate.

The following tables report percentage tabulations of the 52 returned questionnaires, separated into Mat-Su and Anchorage groups. In most cases, the percentages are based upon the number of possible responses (38 for Anchorage, 14 for Mat-Su). In other cases (questions five, six, and eleven) the percentages are based upon the number of responses to that question.

1. How many times per year do you fish or visit Willow Creek?

	<u>Mat-Su</u>	<u>Anchorage</u>
average value	4.93	5.03
mean value	5-6	5-6

2. What recreational activities do you now participate in at Willow Creek?

	<u>Mat-Su</u>	<u>Anchorage</u>
___ sport fishing	86%	97%
___ hunting	8%	17%
___ camping	43%	56%
___ picnicking	29%	28%
___ river floating	0%	0%
___ river boating	0%	17%
___ hiking	8%	17%
___ other (dogmushing)	8%	0%
(x-country		
skiing)	8%	0%
(flying)	0%	3%

3. Where do you live?

Mat-Su
27%

Anchorage
73%

4. How long do you typically stay at Willow Creek?

	<u>Mat-Su</u>	<u>Anchorage</u>
<u>less than one day</u>	64%	29%
<u>one to two days</u>	36%	51%
<u>more than two days</u>	0%	20%

5. Which of the following recreational activities and facilities (which may or may not be presently available) do you feel are appropriate at Willow Creek?

<u>facilities</u>	<u>Mat-Su</u>	<u>Anchorage</u>
<u>foot trails, boardwalks, bridges</u>	100%	86%
<u>overnight cabins</u>	25%	32%
<u>campgrounds</u>	100%	88%
<u>access roads</u>	100%	64%
<u>picnic sites, shelters</u>	100%	86%
<u>boat launches</u>	100%	74%
<u>day parking areas</u>	100%	91%
<u>lodges/hotels/motels</u>	17%	0%
<u>convenience stores</u>	43%	29%
<u>play fields</u>	33%	35%
<u>activities</u>		
<u>hunting</u>	57%	80%
<u>fishing</u>	100%	97%
<u>hiking</u>	100%	93%
<u>camping</u>	100%	100%
<u>x-country skiing</u>	100%	90%
<u>rafting</u>	100%	78%
<u>riverboating</u>	50%	63%
<u>snowmachining</u>	75%	55%
<u>photography/sightseeing</u>	100%	92%

6. Which do you believe are inappropriate for Willow Creek?

<u>facilities</u>	<u>Mat-Su</u>	<u>Anchorage</u>
<input type="checkbox"/> foot trails, boardwalks, bridges	0%	14%
<input type="checkbox"/> overnight cabins	75%	68%
<input type="checkbox"/> campgrounds	0%	12%
<input type="checkbox"/> access roads	0%	32%
<input type="checkbox"/> picnic sites, shelters	0%	14%
<input type="checkbox"/> boat launches	0%	26%
<input type="checkbox"/> day parking areas	0%	9%
<input type="checkbox"/> lodges/hotels/motels	83%	100%
<input type="checkbox"/> convenience stores	57%	71%
<input type="checkbox"/> play fields	67%	65%
<u>activities</u>		
<input type="checkbox"/> hunting	43%	10%
<input type="checkbox"/> fishing	0%	3%
<input type="checkbox"/> hiking	0%	7%
<input type="checkbox"/> camping	0%	0%
<input type="checkbox"/> x-country skiing	0%	10%
<input type="checkbox"/> rafting	2%	22%
<input type="checkbox"/> riverboating	50%	37%
<input type="checkbox"/> snowmachining	25%	45%
<input type="checkbox"/> photography/sightseeing	0%	8%

7. What attracts you to Willow Creek?

Sport fishing is the primary attraction at Willow Creek for Anchorage and Mat-Su residents. Other important factors are the area's accessibility and its pleasant atmosphere. Anchorage residents also indicate that the stream provides access to downstream areas such as the Deshka River.

8. What problems discourage you from visiting Willow Creek and decrease your enjoyment?

Overcrowding was most often mentioned as a negative feature. Anchorage responses next shoed poor maintenance, while local residents complained of boat traffic on Willow Creek. Another problem cited is a lack of developed camping areas.

9. What types of overnight accommodations do you use?

	<u>Mat-Su</u>	<u>Anchorage</u>
<input type="checkbox"/> self-contained motor vehicle	64%	39%
<input type="checkbox"/> carside tent camping	21%	28%
<input type="checkbox"/> small travel trailer	7%	19%
<input type="checkbox"/> walk-in tent camping	29%	28%
<input type="checkbox"/> private cabin	7%	14%
<input type="checkbox"/> rent cabin/lodge	0%	0%
<input type="checkbox"/> other (inside car)	0%	3%
<input type="checkbox"/> (boat)	0%	3%

10. If overnight camping areas were to be developed at Willow Creek, where should they be located?

	<u>Mat-Su</u>	<u>Anchorage</u>
<input type="checkbox"/> on the stream bank	36%	22%
<input type="checkbox"/> a short walk from the creek (a quarter mile)	79%	64%
<input type="checkbox"/> a short drive from the creek (one to five miles)	0%	25%

11. Are you satisfied with your fishing success rate at Willow Creek for:

	<u>Mat-Su</u>	<u>Anchorage</u>
<input type="checkbox"/> King Salmon		
Yes	0%	33%
No	50%	50%
N/A	50%	17%
<input type="checkbox"/> Pink Salmon		
Yes	70%	81%
No	10%	6%
N/A	20%	13%
<input type="checkbox"/> Chum Salmon		
Yes	40%	57%
No	20%	19%
N/A	40%	24%

___ Silver Salmon

Yes

56%

57%

No

22%

38%

N/A

22%

5%

___ Resident Species

Yes

0%

48%

No

50%

14%

N/A

50%

38%

The following are miscellaneous comments received, organized according to the respondent's place of residency. They are transcribed literally.

Mat-Su Respondents

- Overcrowding.
- Clean up what you got. Willow Creek Wayside is a mess with trash overflowing the barrels.
- We don't need more traffic/people on the creek causing navigation problems and overfishing.
- Snowmachines should be kept out of the entire area. They keep the animal chased so far back from the road no one else can even see them.
- The most urgent need is for additional parking and foot trails (that could be used by x-country skiers and snowmachines).

- Put in a foot trail to mouth of Willow Creek for hiking, dog mushing and cross-country skiing.

Anchorage Respondents

- More foot trails - and anything that could be done to handle the crowd - more elbow room.
- An access road and possible campgrounds would; keep the bulk of people/pedestrians away from the highway.
- Provide more area for people to "get away."
- Provide more of a camping atmosphere rather than along the highway.
- Give more "plain" people a chance to catch fish and have fun besides boat owners, etc.
- My primary interest is access to

the Susitna River. Fishing is improved at the Kroto, Lake Creek and the Alexander. Crossing Cook Inlet for access is not dependable.

The recent state land disposal programs on the west side of the Susitna River will also increase the need for access.

Are there any plans to extend the Nancy Lake roads on to the Susitna? This would provide a more optimum access point. If Willow Creek were developed with Susitna access followed by Nancy Lake Road access to the Susitna, usage at Willow would be very low I believe.

- This is our first visit and its pouring rain so we're not exploring much. Therefore we're not familiar enough with park to answer fully. Better drainage of area and elevated (and drained) tent pad areas would be great.
- Better stocking of non-spawning fish.
- An enforced time limit should be established on any campsite provided by the State.
- We own 3 acres within a mile that has a rental on it. Also we own a cabin on Willow Lake and we go up for the weekend probably 15 times a year.

- I feel that commercial facilities should be limited along the bank of Willow. Riverboats should be restricted due to the presently crowded conditions. Riverboat operators frequently camp or set up business for the entire summer. They contribute significantly to the garbage and human waste problem. They provide a potential danger to foot campers and fishermen. Their noise level is too much to deal with during a weekend outing.
- Major opportunity is to preserve a relatively undeveloped creek. Treat Big Willow and Little Willow as one system -- develop Little Willow if development is mandatory.
- Airboats upstream of bridge are inappropriate.
- Don't develop - leave rural.
- Develop both sides of Willow Creek from the highway to the Susitna River. Also both sides east of the highway as far as practical.
 1. No cabins, lodges, hotels, restaurants.
 2. Small area for RV's near highway.
 3. Majority of area for tent camping and picnicking.
 4. Open year round - encourage use, small fee acceptable to ensure cleanliness.
 5. Boat launch @ Susitna River.

- I feel that a boat ramp on the Susitna River, near the mouth of Willow Creek would be a very desirable asset.
- Access road to mouth of river.
- Co-op with Borough essential - and with private owners.
- Access road to mouth of river would be very nice!

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