

**WILLOW CREEK  
STATE RECREATION AREA  
MASTER PLAN**

DIVISION OF PARKS AND OUTDOOR RECREATION  
ALASKA DEPARTMENT OF NATURAL RESOURCES

DIVISION OF SPORT FISH  
ALASKA DEPARTMENT OF FISH AND GAME

MATANUSKA-SUSITNA BOROUGH

DECEMBER 1990



# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

### DIVISION OF PARKS AND OUTDOOR RECREATION

WALTER J. HICKEL, GOVERNOR

3601 C STREET  
ANCHORAGE, ALASKA 99503  
PHONE: (907) 561-2020

MAILING ADDRESS:  
P.O. Box 107001  
ANCHORAGE, ALASKA 99510-7001

December 10, 1990

Dear Alaskan,

Willow Creek has served as an important recreation area for many years, with residents in southcentral Alaska and tourist visitors crowding its waters every summer to enjoy its scenic beauty and harvest its abundant salmon runs. In 1987, the Alaska Legislature formalized the stream's status when it created the Willow Creek State Recreation Area. The recreation area encompasses some 3,600 acres of state and borough owned lands, and is the culmination of several years of cooperative work between the Department of Natural Resources, Matanuska-Susitna Borough, and Department of Fish and Game.

Recent events promise to make Willow Creek even more attractive and enjoyable for outdoor recreation. The Department of Fish and Game initiated a successful king salmon enhancement program that dramatically increased the number of fish returning to the stream every year. The Matanuska-Susitna Borough built new road access to the stream's confluence with the Susitna River and State Parks installed new recreation facilities and provided on-site management.

This plan charts the course for the recreation area's future. It makes a number of recommendations for the area's general management and provides a schedule for development of new recreation facilities and amenities. Among the facilities slated for the area are roads, parking, campgrounds, fishing access trails, and a boat launch.

I find that the Willow Creek State Recreation Area Master Plan meets the requirements of AS 41.21.493 and hereby adopt it as state policy.

  
\_\_\_\_\_  
Harold C. Heinze  
Commissioner

## TABLE OF CONTENTS

PLAN SUMMARY . . . . .	1
1. INTRODUCTION . . . . .	2
Plan Purpose	
Goals and Objectives	
Cooperative Management Agreement	
Regional Setting	
Planning Process	
2. NATURAL ENVIRONMENT . . . . .	7
Climate	
Geology, Topography	
Hydrology, Drainage	
Soils	
Vegetation	
Fish and Wildlife	
3. CULTURAL ENVIRONMENT . . . . .	12
Prehistory	
History	
Local, Regional Economy	
Circulation, Transportation	
Land Ownership	
4. REGIONAL, LOCAL RECREATION . . . . .	16
Regional Recreational Opportunities, Providers	
Willow Creek Sport Fishing	
Willow Creek Boating	
Recreational Issues	
5. VISITOR PREFERENCES, RECREATIONAL DEMAND . . . . .	21
Regional Preferences	
Recreational Demand	
6. ANALYSIS, EVALUATION . . . . .	26
Recreational Opportunities, Constraints	
Facility Development Opportunities, Constraints	
Access, Internal Circulation	
Archaeological, Historical Preservation	
Interpretation, Outdoor Education	
7. MANAGEMENT RECOMMENDATIONS . . . . .	30
Zoning	
Operations, Maintenance Staffing	
Boating Recommendations	
All Terrain Vehicles	

Use Closures, Stay Limits  
 Regulation of Commercial Activities  
 Hunting and Trapping  
 Archaeological Preservation  
 Visitor Information, Interpretation  
 Driveways, Intersections of the Willow Creek Parkway  
 Vegetation Thinning, Revegetation  
 Signing  
 Section Line Easement Vacation

8. FACILITY RECOMMENDATIONS . . . . .	40
Camping Facilities	
Boat Launch	
Day Use Facilities	
Trails	
Sanitary Dump Station	
9. IMPLEMENTATION . . . . .	48
Phasing	
Plan Deviations, Modifications	
APPENDICES . . . . .	51
A - Willow Creek State Recreation Area Enabling Legislation	
B - Management Agreement Between State and Matanuska-Susitna Borough	
C - Participants	

### LIST OF FIGURES

1. Vicinity Maps . . . . .	5
2. Willow Creek State Recreation Area . . . . .	6
3. Willow Creek Flood Plain . . . . .	9
4. Land Ownership . . . . .	15
5. Activities That Southcentral Residents Would Like To Do More Often . . . . .	23
6. Favorite Southcentral Outdoor Recreation Activities . . . . .	23
7. Preferences For Southcentral State Park Acquisition, Development, and Maintenance . . . . .	23
8. Desired Features in Southcentral Out-Of-Town Recreation Areas	23
9. Desired Features in Southcentral Community Recreation Areas	24
10. General Zoning Classification . . . . .	32
11. Land Use Zones . . . . .	33
12. Operational Requirements . . . . .	34
13. General Development Plan . . . . .	41
14. Site Development Plan . . . . .	42



## PLAN SUMMARY

Willow Creek State Recreation Area (WCSRA) was established in 1987, following several years of cooperative effort between the State of Alaska and the Matanuska-Susitna Borough. The recreation area encompasses 3,583 acres, with 2,748 owned by the borough and the remainder under state ownership. WCSRA encompasses the lower five miles of Willow Creek and its confluence with the Susitna River. The recreation area is centrally located in southcentral Alaska, accessible to a majority of the state's residents via the Parks Highway (Mile Post 71).

Existing use of WCSRA centers on sport fishing. The stream hosts significant sport fisheries for four salmon species (king, silver, chum, and pink) as well as trout and grayling. The most popular fishery is for king salmon, which has recently grown significantly following an enhancement program by the Department of Fish and Game. Boating on Willow Creek is of two types: local recreational use and transit traffic bound for outlying areas. Winter recreation is dispersed through the area, consisting of dog sledding, snow machining, and cross-country skiing.

This plan makes a series of recommendations to improve the management of WCSRA. A land exchange between the borough and the state will consolidate management authority by returning all land and water within the recreation area to state ownership. The plan also makes several recommendations regarding boating in the waters of Willow Creek and the Susitna River confluence area. If existing conflicts between motorized boating and other forms of non-motorized recreation persist or increase, the division will consider some type of restrictive regulations, such as seasonal, days of the week, or hours of the day allocations. A full closure of Willow Creek waters to motorized boating might also be considered. Due to the limited capacity of the recreation area's facilities, some use closures and limits is also recommended, including a four day camping stay limit during peak periods, a four day boat launch parking limit during the peak season, and "no camping" areas in certain locations.

A number of new facilities is recommended at WCSRA. Several types of camping units will be built at different locations, to accommodate different user groups. A new boat launch is slated for the Susitna River immediately downstream of the Willow Creek confluence, with associated parking and staging area. Parking, latrines, garbage receptacles, trails, and other day use facilities are intended to serve day use visitors.

This plan was developed with an strong public participation program. Two rounds of public meetings and reviews (co-sponsored by the Department of Natural Resources and the Matanuska-Susitna Borough) were conducted, both of which received strong public support for the plan's proposals. The public overwhelmingly supported a boat launch at WCSRA during the final public review, both to reduce safety hazards and to improve access to outlying areas.

## **CHAPTER 1 INTRODUCTION**

### **Plan Purpose**

Willow Creek has long been recognized as an outstanding recreational attraction, with abundant salmon runs, resident sport fish species, and extensive uplands and wetlands suitable for a range of outdoor activities. Recreational use of Willow Creek has increased dramatically in recent years, as salmon runs have increased and access to the stream mouth has been improved.

To reserve Willow Creek and the surrounding area for recreational use and to provide active management, the 1987 Alaska Legislature established the Willow Creek State Recreation Area (WCSRA). WCSRA encompasses approximately 3,583 acres, including about 2,748 owned by the Matanuska-Susitna Borough and the remainder owned by the state. The borough-owned lands are managed by the Division of Parks and Outdoor Recreation under a cooperative management agreement (see Appendix B).

The recreation area's enabling legislation requires the Department of Natural Resources to develop and adopt a comprehensive management plan for the area, in cooperation with the Matanuska-Susitna Borough. This plan also updates and revises the 1984 plan which originally proposed formal state recreation area designation.

### **Goals and Objectives**

The state's constitutional and statutory mandates pertaining to the management of the state park system are summarized by the following goals, excerpted from the Alaska State Park System: Statewide Framework Plan.

- 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 WCSRA have been identified, which this plan seeks to satisfy:

- To provide general guidelines for the management of recreational activities within the WCSRA.
- To designate compatible and incompatible activities, for adoption as implementing regulations.
- To make specific recommendations, in priority order, for the development of recreational facilities.

### **Cooperative Management Agreement**

The Department of Natural Resources (Division of Parks and Outdoor Recreation), Department of Fish and Game (Division of Sport Fish), and the Matanuska-Susitna Borough entered into a three part cooperative agreement in 1988, after formal legislative creation of the WCSRA. The agreement provides for this master plan, and also sets out the respective roles and responsibilities of the agencies in providing for the development and management of the recreation area. The full text of the agreement is found in Appendix B.

The agreement assigns lead responsibility for the development and management to the Division of Parks and Outdoor Recreation. The Borough is to take the lead role in pursuing funding for the plan's implementation. The Department of Fish and Game is to pursue funding for boating and sport angling facilities.

Responsibilities of the Division of Parks and Outdoor Recreation include:

- enforcement of park regulations
- resource protection
- management of recreation activities
- maintenance of recreation facilities
- management of any concession contracts
- site planning, engineering, and construction contracting for facility development
- issuance of park permits for commercial and non-commercial activities
- regulations implementing this plan
- archeological investigations and clearances
- production of informational brochures

Responsibilities of the Matanuska-Susitna Borough include:

- designation of borough-owned land as part of the WCSRA
- formation of the Willow Creek Special Use District

- assignment of borough owned lands to the Division of Parks and Outdoor Recreation for control, maintenance, and development
- technical assistance on planning, engineering, and development activities
- cooperation in the acquisition of private land for public access, facility development, and stream corridor protection

Responsibilities of the Department of Fish and Game include:

- pursuing federal and state funding for boating and fishing facilities
- collection of angler use data and biological information for management purposes
- technical assistance on planning, engineering, and development activities

## **Regional Setting**

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

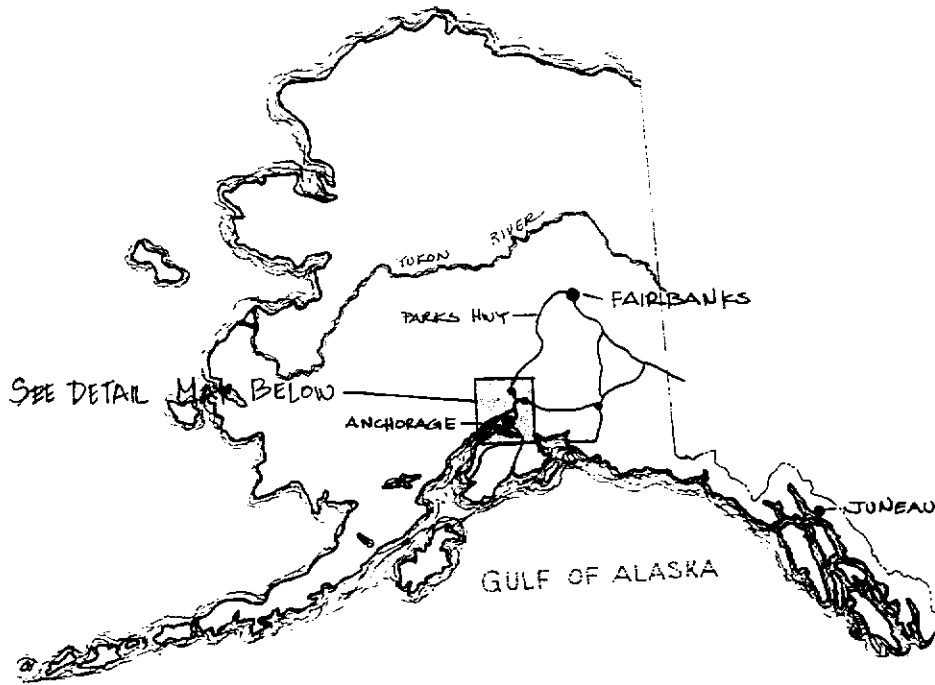
The southcentral region possesses outstanding recreational resources and opportunities. The area is dominated by the Susitna River, framed by the Talkeetna and Alaska mountain ranges and discharging into the salt waters of upper Cook Inlet. The surrounding area has several designated recreational areas, including Nancy Lake State Recreation Area, Hatcher Pass Public Use Area, and recreational river corridors along six Susitna River and Cook Inlet tributaries. Large areas of the Susitna basin and nearby Matanuska River drainage are undesignated but de facto recreation areas.

## **Planning Process**

Because of both state and Matanuska-Susitna Borough (MSB) ownership of the lands within the WCSRA, a joint planning process has been employed, with representatives of both jurisdictions forming the nucleus of the planning team. Other important team members include the Alaska Department of Fish and Game (ADFG) and a designee of the Susitna Valley State Parks Citizen's Advisory Board. Planning team members and other participants are listed in Appendix C.

Major steps in the planning process are as follows.

- Review of 1984 plan for proposed state recreation area
- Literature review and information assembly
- Review and revision of goals and objectives
- Formulation of draft recommendations
- Agency, advisory board review
- Draft plan production
- Public meetings, review
- Review of public, agency comments
- Final plan production
- Plan adoption



# VICINITY MAPS

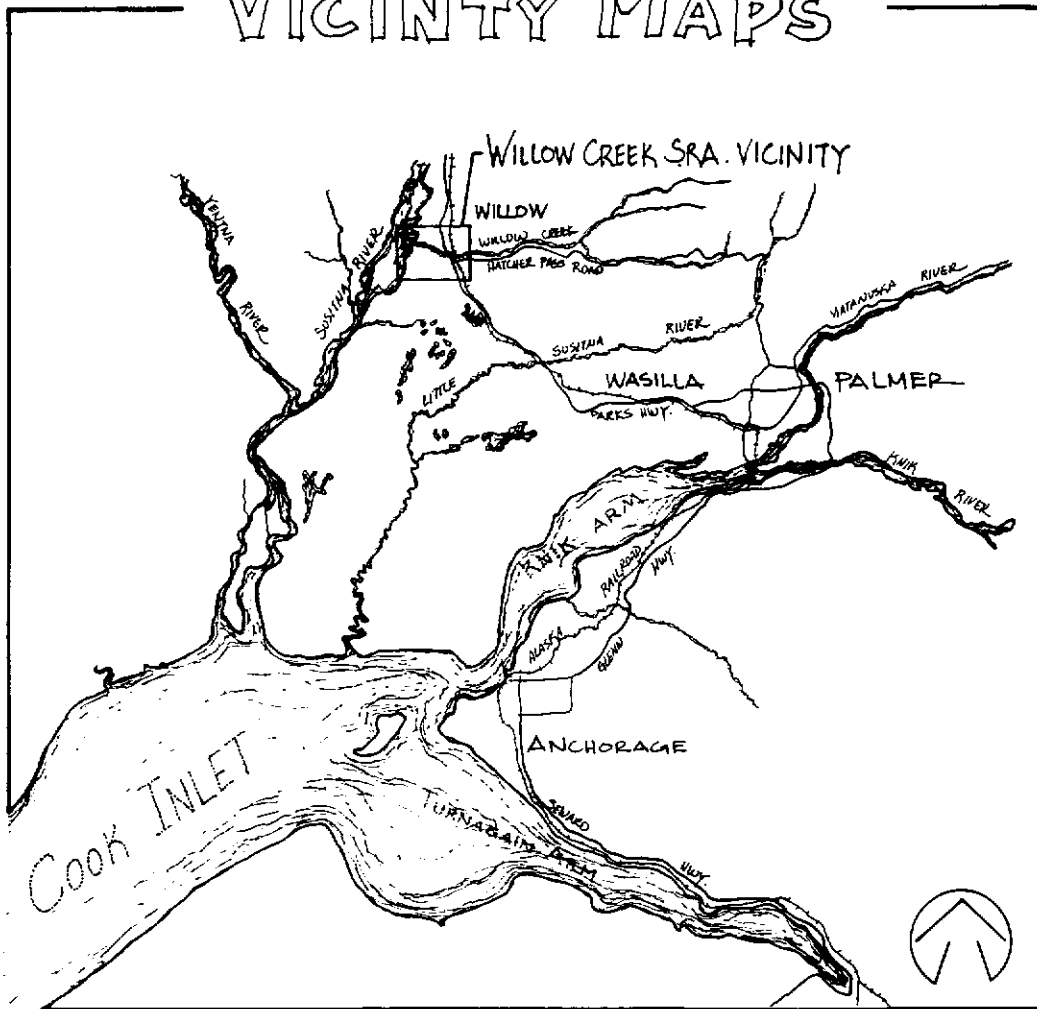
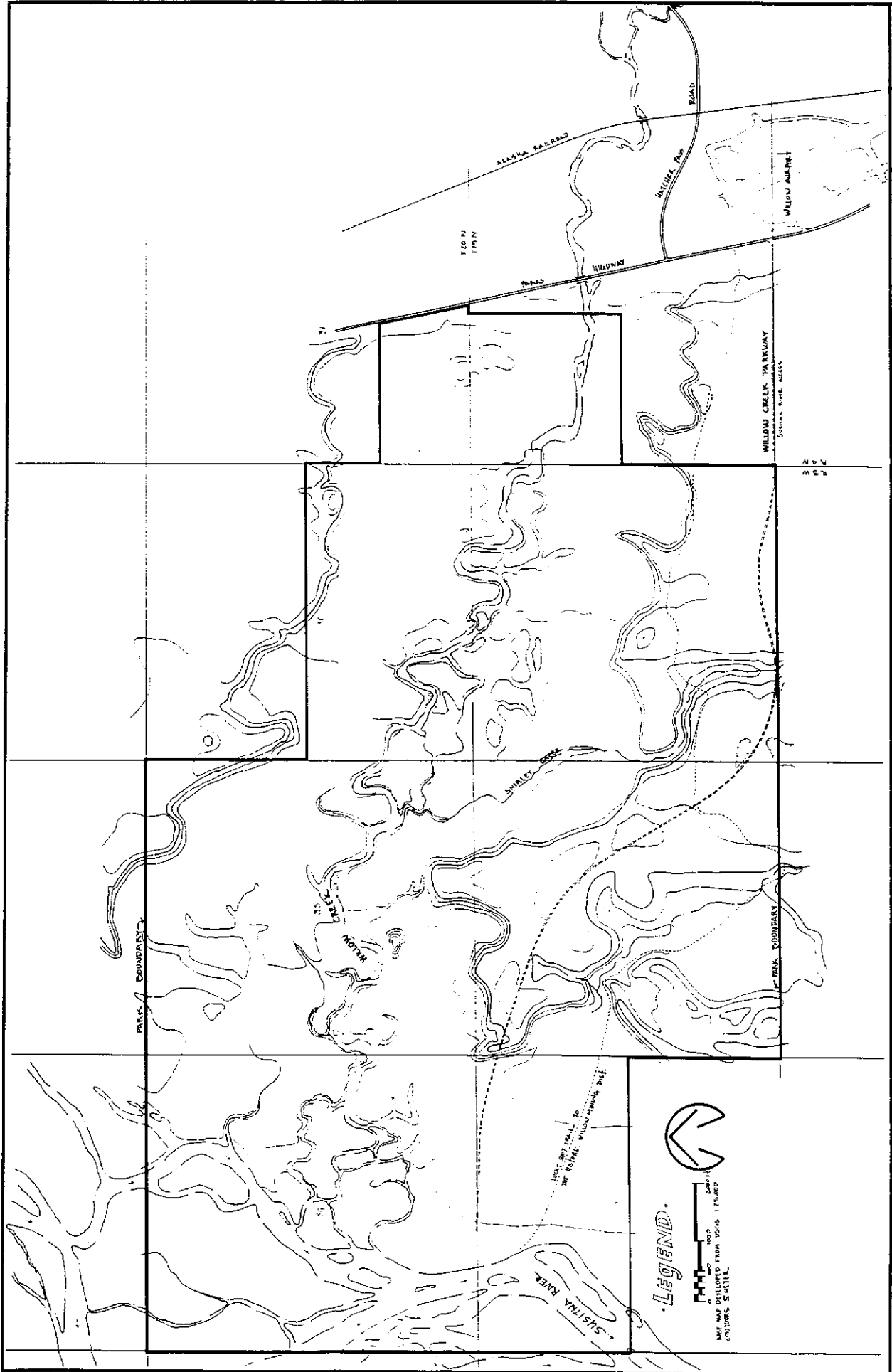


Figure 1



6

PREPARED BY: [ ] SHEET  
 DRAWN BY: [ ]  
 REVIEWED: [ ]  
 DATE: Feb 1970  
 OF SHEETS

Figure 2

WILLOW CREEK S.R.A.

DEPARTMENT OF NATURAL RESOURCES  
 STATE OF ALASKA

DIVISION OF PARKS AND OUTDOOR RECREATION

**LEGEND.**

MAE MAP DERIVED FROM 1964S 1:25,000  
 CONTOURS 5 METERS.

PLEASE REFER TO  
 THE BUREAU OF LAND MANAGEMENT  
 FOR MORE INFORMATION

## **CHAPTER 2 NATURAL ENVIRONMENT**

### **Climate**

The 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. Temperatures range between -49°F and 86°F, with a July average daily maximum of 70°F and a January 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 continental climatic areas. Total snowfall at Willow and Talkeetna (30 miles north) average 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 overlain by silt, deposited by streams as glaciers receded. Ground water studies conducted nearby suggest that bedrock is approximately 200 feet below ground level.

Two distinct zones comprise the WCSRA'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 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 the upland and lowland areas.

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

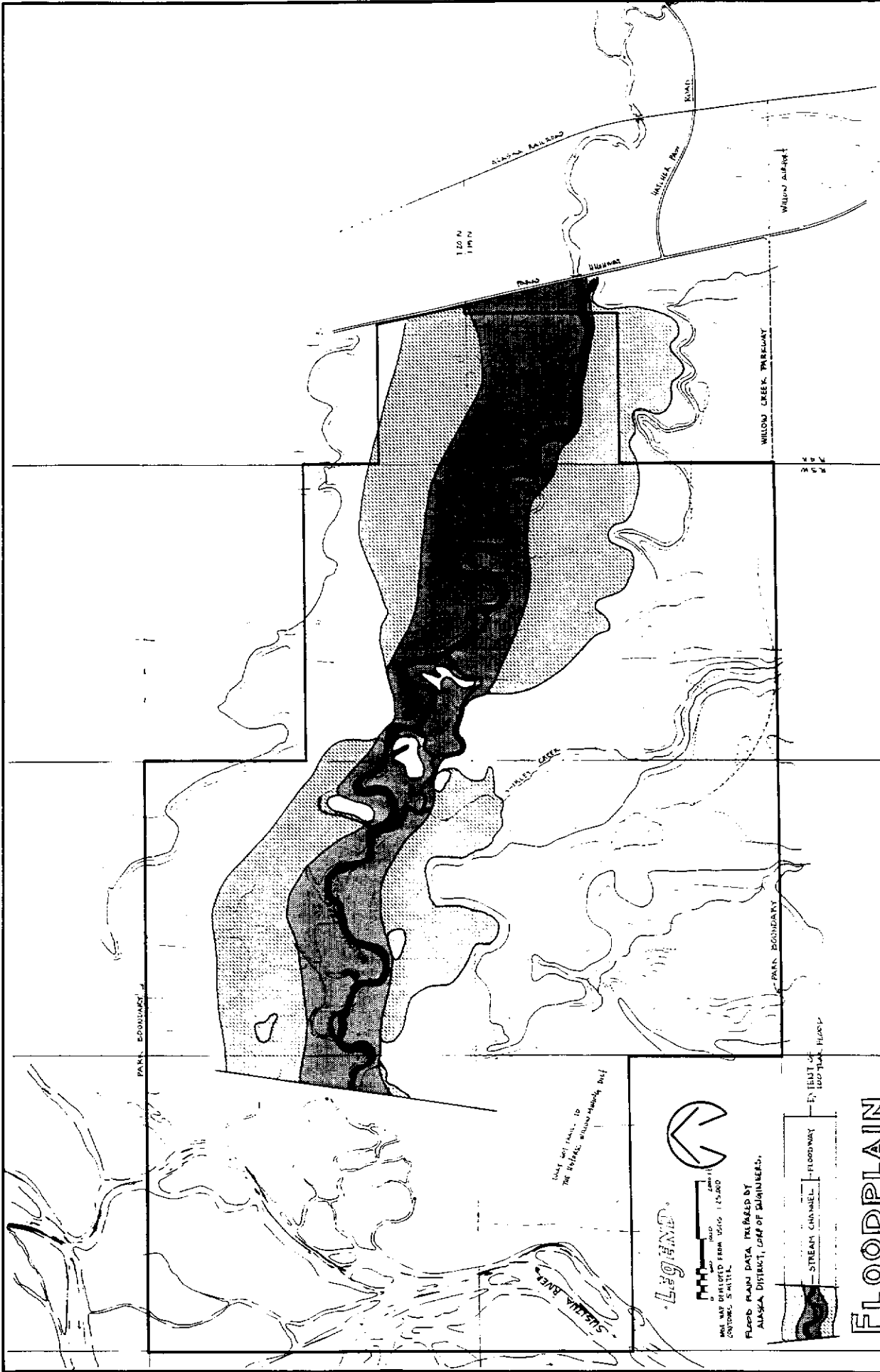
Willow Creek is a Susitna River tributary which drains an area of the southwestern Talkeetna Mountains totaling 250 square miles. From its head in Summit Lake, approximately 3,750 feet in elevation, Willow Creek travels 35 miles before its confluence with the Susitna River at 100 feet elevation. Mean discharge has ranged between 430 and 599 cubic feet per second since 1978.

Upstream of WCSRA, Willow Creek is constrained by steep banks and canyons. Upon entering the lowlands, the stream channel is free to migrate back and forth within a broad alluvial plain, as evidenced by the large number of abandoned channels. These old channels are slowly being filled in 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 WCSRA, originates in the network of small lakes south of Willow Creek. According to Department of Fish and Game biologists, Shirley Creek provides important fish habitat.

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 river boats while the north and south mouths are obstructed by debris and shallow waters.

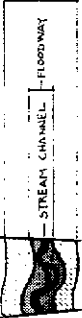
The gravel bars and banks of Willow Creek are littered with uprooted trees and other debris, sometimes forming impassable log jams. This indicates that the stream is capable of causing heavy damage to adjacent areas during high water conditions and floods. Some of the debris is the product of the gradual erosion and undercutting of banks as the stream migrates back and forth. The Willow Creek flood plain is shown in Figure 3.



DO NOT USE PARKS, OR  
THE FEDERAL AIRCRAFT PHOTOGRAPHIC DATA



MAP WAS DERIVED FROM USGS 1:25,000  
CONTIGUOUS 5-METER  
FLOOD PLAIN DATA PREPARED BY  
ALASKA DISTRICT, CHIEF OF SURVEILLANCE



**FLOODPLAIN**

**DEPARTMENT OF NATURAL RESOURCES**  
DIVISION OF PARKS AND OUTDOOR RECREATION  
STATE OF ALASKA

**WILLOW CREEK SRA**

**Figure 3**

REVISION 3 (MAY 1980) SHEET 1  
DESIGN 3 (MAY 82)  
REVISION 1  
DATE 10-15-80 OF 3 SHEETS

## 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 there is a danger of occasional flooding. Large areas of Salamatof peat soils are present in WCSRA, 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.

## Vegetation

Two distinct vegetative communities are present in the Willow Creek corridor: mixed forest of white spruce/paper birch; and muskegs/black spruce forest. These vegetative patterns are the result of soils, drainage, and topography.

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 begun to decline. Black spruce is another climax species, found on north-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 drainages feed into the wetlands. These drainages are typically fringed with a thick understory of willow and alder.

## Fish and Wildlife

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, and resident fish species like rainbow trout and arctic grayling are also important to sport fishermen. Important land animals include moose and beaver.

Salmon. King, or chinook, salmon are the first anadromous fish to enter Willow Creek, typically arriving in mid-June and having spawned and died by mid-August. A 1988 survey performed by the Alaska Department of Fish and Game estimated total escapement into the Willow Creek system to be 3,286 fish, of which 790 split off into the Deception Creek drainage. A 1978 survey was performed in a three-mile stretch located several river miles upstream of the WCSRA. 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 WCSRA, fewer spawning nests were located. However, the lower river does serve as important rearing habitat. The 1978 study found that juvenile (fry) king



salmon densities in the lower stream were the highest anywhere 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. 1978 escapement was estimated to have numbered 220,000, while odd-numbered years have been estimated to receive only 10% of that amount. Pinks enter Willow Creek late in July and have completed spawning by early September. There is no current data available for pink salmon escapement numbers in Willow Creek, as it has not been surveyed since 1978. According to the 1978 study, this species prefers a water depth of 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. Twenty-seven per cent of all mainstem pink salmon spawning takes place downstream of the Parks Highway.

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. Ten per cent of chum salmon spawning occurs below the Parks Highway bridge.

Silver, or coho, salmon use Willow Creek in small numbers. The average escapement figures for the Willow Creek system from 1984-1988 are between 1,000 and 1,500 fish, 35% of which spawn in Deception Creek.

Trout and Grayling. Rainbow trout 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 WCSRA. Rainbow trout are spread throughout the stream.

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 Mountain foothills to the east of WCSRA. As winter arrives, they 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 a nearby area concluded that it 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 area's natural character and its riparian species of alder and willow adjacent to streams, the Willow Creek corridor provides valuable moose habitat.

Beaver. Beaver inhabit most of the waterways of WCSRA. 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.

## **CHAPTER 3 CULTURAL ENVIRONMENT**

### **Prehistory**

Cook Inlet's earliest inhabitants probably arrived approximately 8,000 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 the Brooks Range.

Between 8,000 and 4,000 years ago, there was an unexplained lack of habitation, and sites dating from those times are extremely rare.

Between 4,000 and 3,000 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, Athabaskan Indians replaced the Eskimo populations, for unknown reasons. Prehistoric settlements have been documented in the Nancy Lake area.

A large site, which appears to be eligible for the National Register of Historic Places, is located within WCSRA near Willow Creek's confluence with the Susitna River. Based upon a preliminary assessment by the Alaska Office of History and Archeology, there is a possibility that other areas within the Willow Creek corridor were settled by Athabaskans.

### **History**

Russians first explored the Cook Inlet region 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 WCSRA. The Lucky Shot Trail begins at an old boat landing on the Susitna River approximately 1,500 feet south of the Willow Creek mouth, and then 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 76 (Kashwitna Lake) of the Parks Highway and the first fourteen miles of the Hatcher Pass Road. There are approximately 600 voters registered in the local precinct. The primary civic organization in the Willow Area Community Organization (WACO).

The Willow economy is diverse. Employment within the community area includes services, government, and retail sales. Recreationists visiting Willow Creek contribute to several local businesses, including river boat charters, a campground, lodge/motel, service stations, grocery, and cafes.

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 Anchorage area.

### **Circulation, Transportation**

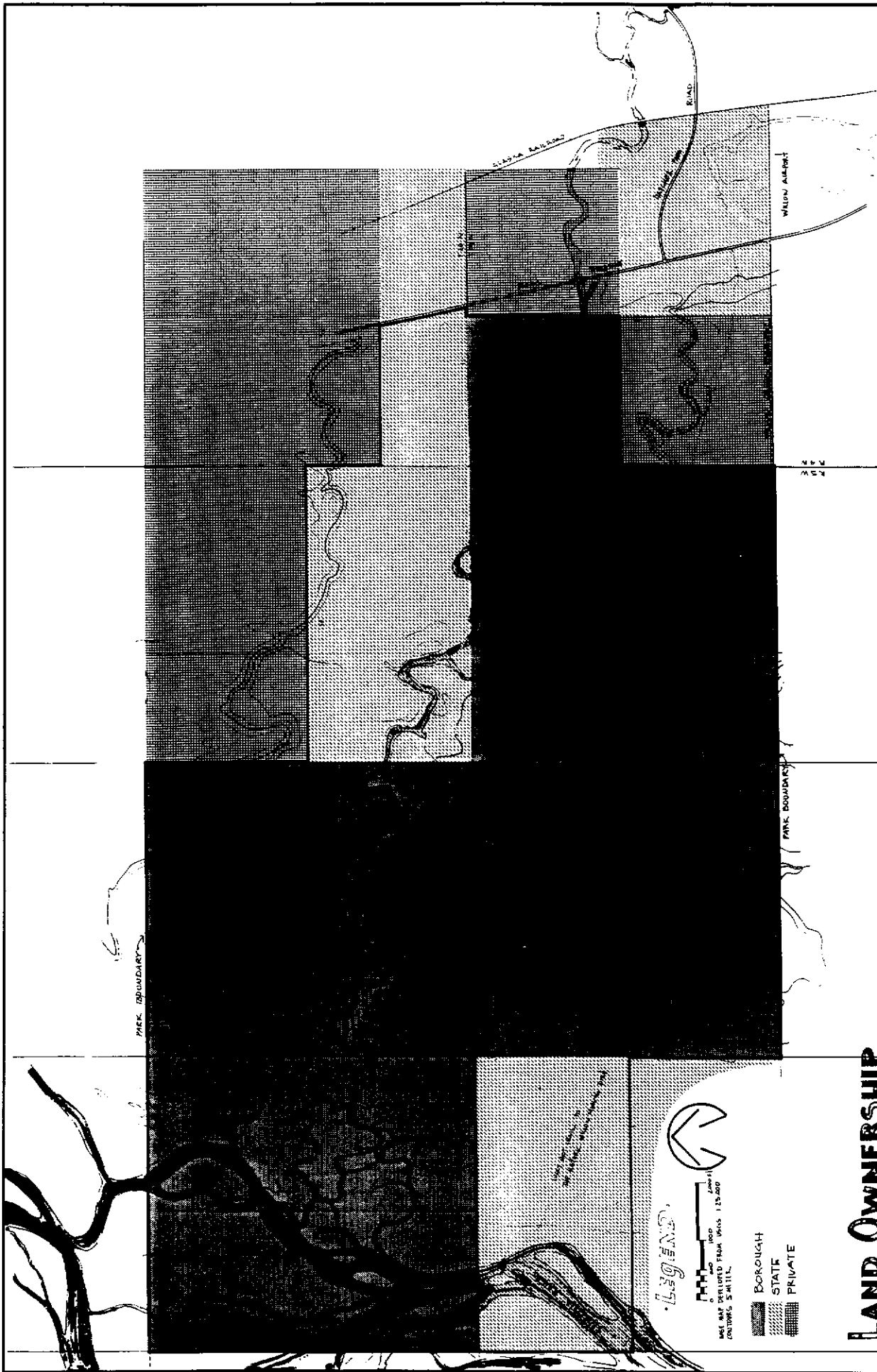
Willow Creek is bridged by the Parks Highway at Mile 71.2 (72 miles to Anchorage, 286 to Fairbanks). The highway provides almost all access to the area. The Hatcher Pass Road intersects the Parks Highway near the Willow Creek bridge, providing easterly access into the Talkeetna Mountains along the alignment of the old Lucky Shot Trail.

The community is served by a high quality gravel airport. There are several air charter operators based in the Willow area (lake and airport). 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 in Willow, although whistle stops provide access to the stream.

The mouth of Willow Creek is accessible by the Willow Creek Parkway. The first two miles of road were built in 1985 by the borough, and a pioneer road extended the remaining two miles to the mouth in 1988. 1990 plans call for improvements to the pioneer road, making it a full two lanes wide, plus parking for a small number of vehicles at the terminus.

## **Land Ownership**

- The Matanuska-Susitna Borough and the State of Alaska own large blocks of land west of the Parks Highway. The area around the highway bridge over Willow Creek is privately owned. Upstream of the Parks Highway, the state-operated Deception Creek campground is a 240-acre parcel surrounded by private lands. Ownership of the subsurface estate has been retained by the State of Alaska, although all forms of mineral entry except oil and gas leasing were closed by the legislation establishing the WCSRA.



PREPARED BY: [Name]  
 ORDER # [Number]  
 DATE: [Date]

**Figure 4**

**WILLOW CREEK S.R.A.**

STATE OF ALASKA

**LAND OWNERSHIP**

DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF PARKS AND OUTDOOR RECREATION

## CHAPTER 4 REGIONAL, LOCAL RECREATION

### **Regional Recreational Opportunities, Providers**

Matanuska-Susitna Borough. Organized as a second class borough in 1964, the Matanuska-Susitna Borough has parks and recreation powers which permits 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. The borough maintains some fishing access sites along the Parks Highway.

State of Alaska. The major provider of recreation areas and opportunities in the region is the state. The Division of Parks and Outdoor Recreation operates several designated recreation areas that accommodate a wide range of activities such as camping, picnicking, boating, fishing, hiking, snow skiing, and dog sledding. The Division of Sport Fish in the Department of Fish and Game operates several areas that primarily serve the recreational boaters and sport angler.

Deception Creek Campground. Deception Creek Campground is a 240 acre area located at Deception Creek's confluence with Willow Creek, upstream of the Parks Highway bridge. It is managed by the Division of Parks and Outdoor Recreation. Most of the campground's area is north of Willow Creek, and therefore has no road access. 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 closed to the taking of salmon (that area upstream of the Deception Creek mouth).

Nancy Lake State Recreation Area. Nancy Lake State Recreation Area is located four miles south of Willow Creek, and managed by the Division of Parks and Outdoor Recreation. 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, snow machining, and dog sledding. The area's master plan recommends a number of improvements for the area.

Hatcher Pass Management Area. The mountains surrounding Independence Mine State Historic Park are part of the 200,000 acre Hatcher Pass Management Area, which was legislatively created in 1986. The multiple-use area offers year round recreational opportunities, including hiking, mountain climbing, berry picking, camping, skiing, and snow machining. A regional downhill ski resort has been proposed for a portion of the management area. The Division of Parks and Outdoor Recreation and the Division of Land and Water Management share management responsibilities in the Hatcher Pass area.

Independence Mine State Historic Park. Independence Mine State Historic Park is located within the Hatcher Pass Management Area. The park was established to commemorate

the area's history as a mining district and to preserve some of the original buildings and artifacts of that era. It is managed by the Division of parks and Outdoor Recreation.

Sheep Creek. Sheep Creek is a sport angler access site at the confluence of Sheep Creek and Susitna River, operated by the Department of Fish and Game. This 11-acre site provides overnight parking and sanitation facilities for sport anglers.

Susitna Landing. This facility is a state-owned boat launching facility that is operated by a private firm under concession contract. It is 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.

City of Houston. The City of Houston owns and operates a campground bordering the Little Susitna River and Parks Highway, located 15 miles south of Willow Creek. A boat launch is also provided.

Private Sector. Several privately operated recreational facilities are located within the vicinity. The Willow Island Campground 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.

Deshka Landing is a new privately owned and operated boat launch located approximately 2.5 miles north of the Susitna/Deshka River confluence and 3.5 miles south of the Susitna/Willow confluence, off the Long Lake Road. This launch generates most of the boat traffic in the Susitna River corridor below the Parks Highway bridge. This is primarily due to its proximity to the most heavily used recreational destination points.

### **Willow Creek Sport Fishing**

Most Willow Creek visitors are attracted by its sport fishing opportunities. Willow Creek has 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 sought after.

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

Most fishing occurs at two spots: near the Parks Highway and railroad bridges, and at the mouth. The bridge area receives heavy use beginning in mid-June as 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 dozen shore anglers.

The congregation area at the Willow Creek mouth receives extremely heavy use during the king salmon season, beginning in mid-June and extending through July. At the peak of the run, shore anglers will line up elbow-to-elbow along an 800 foot stretch of the southernmost Willow Creek branch. At such times, the number of anglers can exceed 300, with another 100 waiting for fishing space. There is also some fishing from boats which are anchored offshore. When the borough completed the pioneer access road to the mouth in 1988, it began providing portable latrines and garbage receptacles at the small parking area.

King Salmon. The king salmon has historically been the most sought after sport fish species at Willow Creek and throughout the Susitna basin. In 1964, due to dangerous declines in fish stocks, king salmon fishing in the entire Susitna basin was prohibited. As stocks rebounded, fishing was again opened, but on a much reduced basis. Allowable king salmon catch was set at 300 fish for several years. In 1983, the ADFG began a king salmon enhancement program in Willow Creek. Beginning in 1988, substantially more fish returned to Willow Creek.

Additional fishing time was again allotted during the 1989 season. The majority of the kings harvested were either the product of ADFG's enhancement program or fish holding in the clearwater of the Willow Creek/Susitna River confluence and destined for other streams. Harvests of king salmon have increased dramatically, from 441 in 1981 to 2,700 in 1989. 37% of the 1989 king salmon harvest was produced through the enhancement program.

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 has traditionally been considered only a marginal sport fishing species, but is attracting more attention for its strength and stamina. Harvest at Willow Creek increased from 343 in 1977 to 1,533 in 1981 and 1,419 in 1988.

Silver Salmon. Despite a small run, an important silver salmon fishery exists at the mouth of Willow Creek. Silvers destined for spawning grounds elsewhere in the Susitna basin temporarily hold in the clear waters of the Willow Creek/Susitna River confluence. Silver salmon harvests have increased considerably at Willow Creek, from 1,207 in 1980 to 4,875 in 1988.

Rainbow Trout. Rainbow trout attract a significant number of anglers to Willow Creek. Most effort for rainbows occurs early in the season, before salmon 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 Boating**

Willow Creek serves as a boat access corridor for roadless areas on the west side of the Susitna basin, as well as fishing access and recreational boating in the immediate vicinity. The great majority of river boat traffic is downstream, and then to outlying areas. A large proportion of vessels are airboats. Most boaters launch at commercial facilities near the Parks Highway bridge.

The volume of boating in Willow Creek has declined in recent years, as alternative launch sites have been developed in the local area. These other sites have reduced travel time to outlying areas, and eliminated the need for the sometimes hazardous trip down the winding and debris-laden Willow Creek.

## **Recreational Issues**

Shore Angler-Boater Conflicts. A management problem at Willow Creek is the conflict between river boaters and anglers. Boaters have traditionally used Willow Creek to gain access to fishing spots and outlying areas. But as population increases and new road access bring more shore anglers to the stream, clashes between the two user groups are occurring. Anglers complain about the noise and aesthetic impacts of power boats, and also argue that boat wakes disturb fishing holes, create safety hazards, and harm spawning grounds. Boaters respond that Willow Creek provides access to outlying areas and that high speed operation is necessary to maintain maneuverability.

This conflict seems to have stabilized recently, as the number of boats using Willow Creek has declined and shore anglers are more concentrated at the Willow Creek/Susitna River confluence.

Motor Boat-Float Boat Conflicts. As the volume of motor boat traffic in Willow has declined, the amount of float boating has increased. Floaters typically use small inflatable rafts and canoes. They launch at upstream locations, and take several hours or longer to travel downstream to the road's end at the mouth, where they take out. The two boating types come into conflict, due primarily to their different operating speeds. Floaters create no noise that might warn others of their presence, so power boats traveling at high speed have little reaction time when meeting floaters on the narrow winding stream. This situation creates a safety hazard.

Fishing Regulations. Large contributions of hatchery fish to the sport harvest, coupled with a better understanding of king salmon behavior in the Susitna basin, have made it possible to relax sport fishing regulations on this system. King salmon destined for other streams temporarily hold in the clear water of the Willow Creek/Susitna River confluence and are harvested by sport fishermen, further contributing to the overall harvest on Willow Creek.

Winter Recreation Management. Because the Willow area receives abundant snowfall and moderate temperatures, its potential for winter recreation is high. A trail network

along Willow Creek would appeal to skiers, snow machiners, and dog mushers. These user groups have experienced conflicts at other locations, and the potential for such problems to occur at Willow Creek should be considered by park managers.

Trespass Recreation. "Trespass recreation" is the inadvertent or deliberate use of private property for public recreational purposes. 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. Commercial activities have decreased recently, compared to levels in the early 1980s. There are two major reasons for the decline: the opening of the Deshka Landing facility and the completion of the Willow Creek Parkway. At present, commercial airboat operators have established businesses at the Parks Highway bridge area. Clients include those destined for outlying areas and others wanting a drop-off between the Parks Highway and the stream's mouth. With new road access to the creek's mouth, and associated facilities including boat launch, parking, and campgrounds, there will be new demands for commercial operations in the area. State regulations require that commercial operators secure appropriate permits from the Division of Parks and Outdoor Recreation, and other state regulations will also apply to commercial enterprises within the WCSRA.

Trail Management. Concern has been expressed about difficult foot access to Willow Creek between the Parks Highway bridge and the road to the mouth. At present, primitive trails extend a short distance downstream before disappearing. This has the effect of concentrating use at the two road access points, in spite of excellent fishing and camping areas in between.

Archaeological Resources. A site (TYO-061) near the Willow Creek contains cache pits and other archaeological resources which have been determined to be eligible for the National Register of Historic Places. State and federal laws require that the effect of any undertaking be assessed prior to development or other disturbance. A 1990 study, still in progress, will determine the best alternatives for avoiding impact to the site in the event that recreational facilities are proposed for the area.

Other issues include the following:

- hunting and trapping regulations
- sanitation
- fish habitat protection
- handicapped access to fishing areas
- historic trails
- state competition with private recreation providers
- floodplain or wetlands development
- regional road network

## **CHAPTER 5**

### **VISITOR PREFERENCES, RECREATIONAL DEMAND**

#### **Regional Preferences**

The Alaska Outdoor Recreation Plan, published in 1981 by the Division of Parks and Outdoor Recreation, is the best and most comprehensive source of information on the recreational preferences of southcentral Alaska residents. Figures 5, 6, 7, 8, and 9 are excerpted from the plan and lead to the following conclusions regarding the management and development of the WCSRA

- Fishing and tent camping are the two activities which residents want to do more often (Figure 5). The WCSRA can provide opportunities for both these activities, consistent with the land and water's ability to absorb adverse impacts.
- The four most popular outdoor recreational activities in the region are fishing, tent camping, hiking/walking/running, and hunting (Figure 6). The WCSRA is capable of supporting all these activities, with care taken that increased usage does not create user conflicts or spoil the area's natural character.
- Acquisition and development of more backpacking camp sites are favored by a majority of southcentral residents (Figure 7). The extensive lowlands adjacent to Willow Creek are especially suited to these low-impact, low-maintenance facilities.
- More and better developed roadside campgrounds and picnic areas are favored (Figure 7). 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 7). The Willow Creek corridor is suited for a network of streamside and backcountry trails. Such a network would serve several user groups, including anglers, hikers, skiers, snow machiners, and dog mushers.
- More and better developed canoeing, kayaking, and rafting trails are favored in the southcentral region (Figure 7). The curving and debris-strewn waters of Willow may be dangerous for canoes, especially beginners. 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 8). Willow Creek is capable of meeting some of this demand, within two hours driving time of Anchorage.

- For many Susitna valley residents, WCSRA will serve as a community recreation area. Desired features in community recreation areas - which are also consistent with the mission of the state park system - include trails, paved roads, water access, picnic tables, campsites, drinking water, and rest rooms (Figure 9).

**FIGURE 5: ACTIVITIES THAT SOUTHCENTRAL PARTICIPANTS WOULD LIKE TO DO MORE OFTEN**

Fishing	25%
Tent camping	12%
Hunting	7%
Motor boating	8%
Hiking/walking*	4%
Apline 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%

**FIGURE 6: FAVORITE SOUTHCENTRAL OUTDOOR RECREATION ACTIVITIES ††**

1. Fishing	24%
2. Tent camping	9%
3. Hiking/walking/running*	5%
4. Hunting	6%
5. Motor boating	5%
6. Beach combing	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. Horse back riding*	2%
17. Other**	2%

\* Trail related activities

\*\* Twenty-five other activities were listed and represent one percent or less each

†† Represents first preference given

**FIGURE 7: PREFERENCES FOR SOUTHCENTRAL STATE PARK ACQUISITION, DEVELOPMENT, AND MAINTENANCE**

	<u>More Areas</u>	<u>Develop Areas</u>	<u>Just Maintain</u>	<u>Less Areas</u>
Hiking trails	53%	31%	15%	1%
Roadside campgrounds/picnic areas	61%	17%	20%	2%
Backpacking campsites	48%	29%	21%	2%
Canoeing, kayaking, 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%

**FIGURE 8: DESIRED FEATURES IN SOUTHCENTRAL OUT-OF-TOWN RECREATION AREAS**

<u>Feature</u>	<u>Percentage in favor</u>
Fishing areas	95%
Access to water for swimming/boating	91%
Areas for hunting	87%
Picnic tables, campsites, drinking water, restrooms	91%
Undisturbed natural areas	88%
Bicycle, walking, skiing or horseback riding trails	84%
Motorcycle, snow machine, and other ORV trails	76%
Paved roads	69%
Unpaved roads	66%
Overnight lodging	66%
Electrical hook-ups, showers, general store	66%
Play fields	60%
Lawns and benches	49%

**FIGURE 9: DESIRED FEATURES IN  
SOUTHCENTRAL COMMUNITY RECREATION  
AREAS**

<u>Feature</u>	<u>Percentage in favor</u>
Play fields	95%
Lawns and benches	92%
Bicycle, walking, skiing or horseback riding trails	85%
Paved roads	85%
Access to water for swimming/boating	77%
Picnic tables, campsites, drinking water, restrooms	75%
Undisturbed natural areas	54%
Overnight lodging	51%
Electrical hook-ups, showers, general store	51%
Fishing areas	55%
Motorcycle, snow machine, and other ORV trails	44%
Unpaved roads	21%
Areas for hunting	9%

## **Recreational Demand**

Alaskans are outdoor-oriented and have always pursued recreational activities in very high numbers. For many types of recreation, participation rates are twice the national average. These include hunting, fishing, hiking, skiing, boating, and camping.

Recreation figures reflect Alaska's very rapid population growth in the 1970s and early 1980s, with 2,326,448 visitors to state parks in 1978 and 2,900,000 in 1980. As Alaska's population growth leveled off in the late 1980s, however, state park visitation continued to grow. 1985 visitation was 6,468,046. In the future, park visitation by Alaska residents is expected to continue to grow 7-10% per year. Non-resident visitation is projected to increase 10-15% annually.

Perhaps the most reliable predictor of future Willow Creek visitation is sport fishing trends. According to the Department of Fish and Game, the number of sport fishing licenses issued increased dramatically in the last decade, from 206,804 in 1980 to 322,934 in 1988. ADFG expects similar annual increases for the foreseeable future.

In 1988, with completion of the access road to the mouth of Willow Creek, angler use of the area increased dramatically. The 1988 creek census counted 27,758 angler-days of effort on Willow Creek as opposed to 13,583 the previous year. The harvest of 7,224 chinook and coho salmon was higher than any other stream that is accessible directly from the Parks Highway.

Other indicators of recreation trends are the visitation figures for other parks in the area. Visitation at state parks in the Matanuska-Susitna region more than doubled in the last five years, from 741,733 in 1984 to 1,528,174 in 1989. In the nearby Nancy Lake State Recreation Area, 1989 visitation was 40,720, 95% of which were Alaskans.

## CHAPTER 6 ANALYSIS, EVALUATION

Analysis of factors such as natural resources, existing recreational patterns, emerging recreational trends, issues, and public opinion can lead to conclusion concerning the management and development of WCSRA. In this chapter, information from preceding chapters is synthesized in order to present specific recommendations for the area in the following chapters.

### **Recreational Opportunities, Constraints**

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

River Floating. 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 is the amount of wood and other debris littering the stream bank, 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 built. Signs warning of upcoming dangerous conditions should be located on the stream banks, 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 several miles upstream of the recreation area. Typically, these recreationists are white water enthusiasts interested in only a short segment of the stream. However, there is growing interest in extended float trips which begin on Willow Creek several miles upstream of the recreation area and end in the lower creek or at some downstream point on the Susitna River. The state, borough, and others should cooperatively investigate the potential for establishing a series of put in/take out points along Willow Creek and the Susitna River.

Trail-Based Activities. Numerous public opinion surveys indicate that trail-based activities are in high demand throughout the region. The Willow Creek area presently supports only a small amount of trail-based recreational activity. Primitive waterfront trails on the north and south banks of Willow Creek lead downstream from the Parks Highway bridge a short distance before disappearing. These trails are used solely by anglers wanting better access to fishing spots. The Lucky Shot Trail, located south of Willow Creek, is the only trail in the recreation area receiving substantial use by other types of recreationists. The trail receives heavy use in winter by dog mushers.



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 recreation area can provide a diversity of trip types and distances, 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, snow machining, and dog sledding.

### **Facility Development Opportunities, 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/walk-in camp sites, boat launches, etc.

Trails can be developed in the lowlands adjacent to the stream, although at higher construction and maintenance costs than trails in upland areas. Additional construction costs will be incurred due to the boardwalks, bridges, and additional bed materials needed to safely traverse the area's numerous drainages and wetlands. Nonetheless, trails are a cost-effective means of accessing the 5 miles of Willow Creek frontage between existing road access points.

Winter trails can be built 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 recreation potential, with only a minimal amount of effort and expense. These trails will be available annually for winter recreationists, but should be gated or otherwise obstructed 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 are not water-oriented should be located on these uplands. Their setback distance will also avoid conflicts between land-based and water-based activities.

Uplands are also the best locations for support facilities for anglers and others bound for the Willow Creek waterfront. These facilities include parking areas, sanitary fixtures, water wells, and trailheads. An area directly south of the Willow Creek mouth is suitable for facility development. Its soils are rated "fair" for facility development, and it provides direct and easy access to the primary activity area in the recreation area.

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 (150 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 groups. Each picnic shelter should be equally accessible from approximately ten camping units, set back a distance of 100 to 200 feet.

**Parking and Trail Head Facilities.** To support the substantial number of day users which Willow Creek attracts, parking and trail head 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 series of walk-in camping units should be provided, with most located on the uplands a short distance from parking areas. With adequate design safeguards, the bluff edges are suitable for such facilities. Single vault latrines should be provided within reasonable distance of walk-in units.

### **Access, Internal Circulation**

Due to the high costs of road construction, the vehicle network within WCSRA should be designed for maximum utility with minimum road distances. The boat launch at the Willow Creek mouth required that a four mile road be constructed from the Parks Highway to the launch site. This road will act as the recreation area's main arterial, with spur roads departing for campgrounds, parking lots, and other activity areas.

An extensive trails network should be developed connecting parking areas with various waterfront points and then paralleling segments of stream front. 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 for WCSRA.

### **Archaeological, Historical Preservation**

Consistent with a basic goal of the state park system, to preserve and interpret Alaska's cultural heritage, every reasonable effort will be made to preserve and protect the area's archaeological resources as recreational facilities are planned and built.

Field work by the Alaska Office of History and Archaeology in 1990 indicates that significant prehistoric remains exist in the vicinity of the Willow Creek mouth (assigned site number TYO-061). Where plans for recreational facilities conflict with cultural features, negation measures will be evaluated and outlined. Plans for facility development will, where feasible, avoid known features. If there is no reasonable alternative to construction which will disturb cultural features, various mitigation measures will be employed to document their characteristics and contents so that their value for researching and interpreting prehistoric peoples and ways is preserved. The determination as to the best negation method will be made in consultation with the Alaska 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. To

commemorate the area's mining history, names from that era should be applied to the recreational facilities proposed in this plan.

### **Interpretation, Outdoor Education**

Visitor information and interpretation programs are a fundamental aspect of state park management. As the facilities recommended in this plan are built, the interests and activities of Willow Creek visitors will become more diverse. Groups, families, hikers, skiers, and other recreationists will have a range of interests more diverse than the area's present users.

WCSRA contains a variety of natural features and systems. Its land forms, waterways, 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.

## **CHAPTER 7 MANAGEMENT RECOMMENDATIONS**

The recommendations in this chapter are concerned with administrative and management issues, and generally do not entail any construction or physical modification of park lands. Facility proposals are contained in Chapter 8.

### **Zoning**

To further clarify the management intent for land and resources within all state park units, a zoning classification scheme is employed. All state park land and water is assigned one of the following classifications:

- Wilderness zone
- Natural zone
- Cultural zone
- Recreational development zone

Figure 10 is excerpted from the *Alaska State Park System: Statewide Framework*. The intent and management considerations for each zone are described.

Land and water within WCSRA will be classified as natural, cultural, or recreational development. The wilderness classification will not be used, because of the recreation area's relatively small size, and the intensive use it receives throughout much of its area. The recreation area's zoning classification is mapped in Figure 11.

### **Land Exchange**

To simplify management responsibilities at WCSRA, a land exchange between the state and borough is proposed, in which the state will receive title to all borough-owned lands within WCSRA in return for equal valued state-owned lands elsewhere. This land trade recognizes that the Willow Creek corridor is of regional significance and therefore should properly be entirely owned by the state and managed as a state park unit. By consolidating land ownership within WCSRA, a trade also improves efficiency by removing overlapping agency jurisdictions and responsibilities. This trade will be coordinated by DNR's Division of Land and Water Management and will depend on mutual adoption by both the state and borough.

### **Operations, Maintenance Staffing**

To provide quality public recreation, it is not enough to simply designate new parks and build new facilities. Equally important is funding for park maintenance and operations. Staff personnel, repairs, equipment, and maintenance are operational items that are frequently underfunded, yet are essential for the provision of quality outdoor recreation. They provide benefits in the form of public safety, resource protection, well managed facilities, and ranger assistance.

As the Division formulates its capital funding requests for the new facilities proposed in this plan, companion fiscal notes will also be prepared. The notes will detail the support functions, additional staff, special equipment, and other ongoing responsibilities which the new facilities will bring. Figure 12 shows the operational requirements at Willow Creek, coinciding with the phases of facility development.

## Development Zone

## FIGURE 10: GENERAL ZONING CLASSIFICATION

**Purposes 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.

**Development 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 the 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 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.

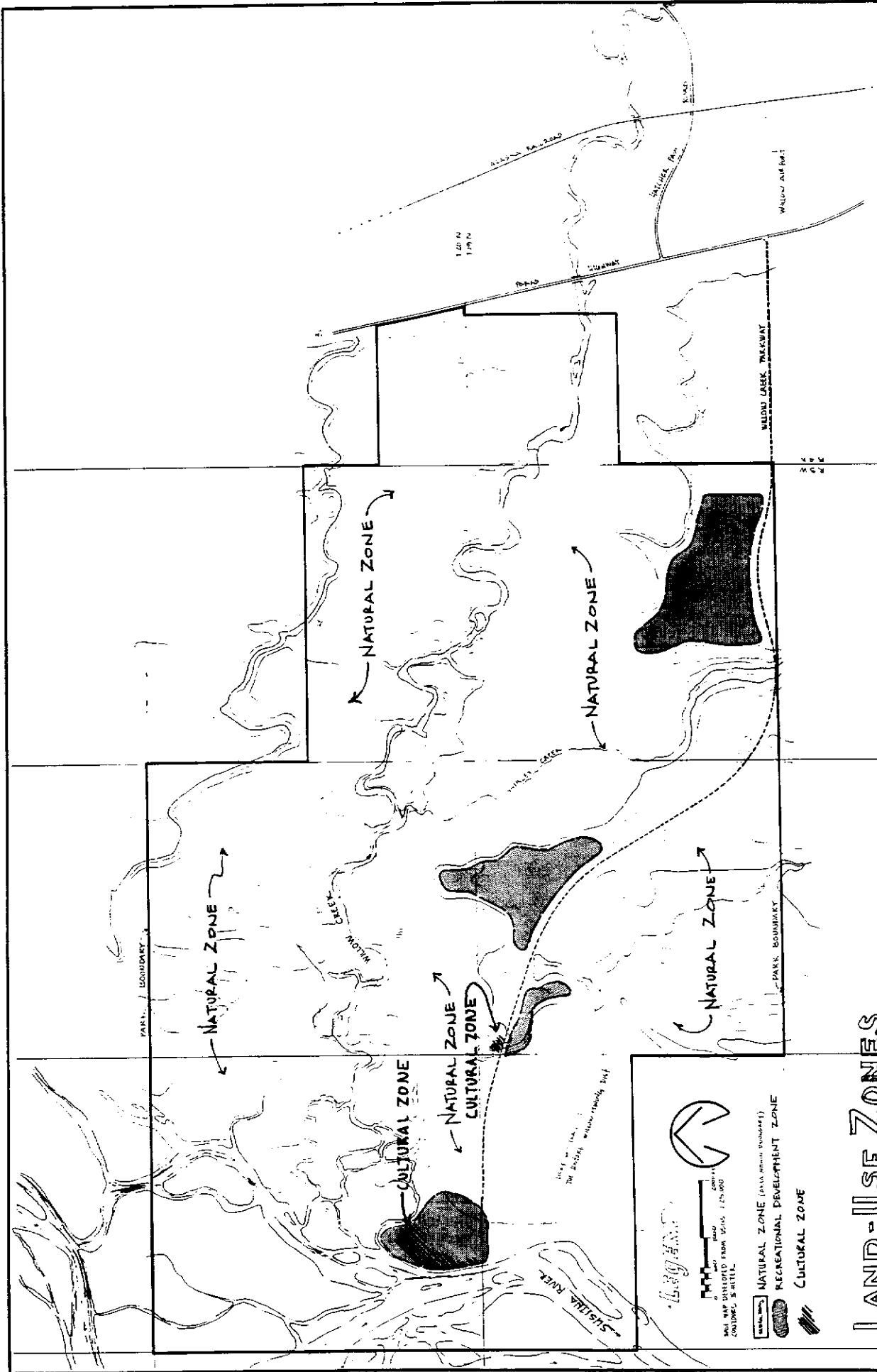
**Developments and Activities.** A wilderness zone should have no man-made conveniences within its boundaries except for the most primitive of trails with minimum trail maintenance, bridges, and signing. Developments or other improvements will be undertaken only if it has been determined by the director 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 resources 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.



**Legend**

- NATURAL ZONE (SEE MAP BOUNDARIES)
- CULTURAL ZONE
- RECREATIONAL DEVELOPMENT ZONE

MAP SCALE: 1:25,000  
 MAP DATE: 1985  
 MAP BY: [unreadable]

# LAND-USE ZONES

DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF PARKS AND OUTDOOR RECREATION  
 STATE OF ALASKA

WILLOW CREEK, S.P.A.

Figure 11

**FIGURE 12: OPERATIONAL REQUIREMENTS**  
corresponding to development phases, page 48

**Phase A**

Personnel

- 1 park ranger I (8 months; new position)
- 1 maintenance worker I (8 months; new position)
- 2 Alaska Conservation Corps enrollees
- 2 volunteer campground hosts

Contractual Expenses

- vehicle rentals (from DOTPF)
- janitorial maintenance contract
- latrine pumping
- dumpster servicing

Supplies

- janitorial supplies
- trail building materials

Machinery and Equipment

- 1 - 3/4 ton pickup with radios
- 2 chainsaws
- 1 snow machine and trailer
- 1 brushcutter
- 1 raft with trailer
- 3 radios (portables)

**Phase B**

Contractual Expenses

- increase in existing contracts to service boat launch

Supplies

- same as Phase A

Machinery and Equipment

- 1 4-wheel ATV and trailer (trail maintenance)

**Phase C**

Personnel

- 2 Alaska Conservation Corps enrollees (work with maintenance worker)
- 2 volunteer campground hosts
- 1 park ranger I (8 months; new position)

Contractual

- increases in existing contracts for new campground, group campground, and dump station

Supplies

- same as Phase A

Machinery and Equipment

- 1 - 1/2 ton pick up truck with radio
- 2 portable radios

steam cleaner for latrine servicing



## **Boating Recommendations**

An important recreational issue at Willow Creek has been conflict between motor boaters and other users, notably shore anglers and floaters. To resolve this issue by providing an attractive alternative for boaters, a boat launch is recommended at the Willow Creek mouth.

After the launch is operational, it is recommended that Division staff monitor boating practices on Willow Creek and determine whether conflicts with other user groups continue to be a problem. If competition between motorized and non-motorized recreationists creates a public safety hazard, regulations closing the waters of Willow Creek to motorized watercraft, under the authority of AS 41.21.494, should be considered. If serious conflict of a social nature continues, various regulatory remedies should be explored, including seasonal, days of the week, or hours of the day allocations. A full closure of Willow Creek to motorized boats should also be considered, given the presence of the boat launch at the stream's mouth. Regulatory changes would be subject to full public review and comment, and being publicized through public notices, signs, and other media.

To provide for separation of potentially incompatible fishing methods and to provide for the most efficient use of the popular shore fishing areas, it is recommended that a new regulation be adopted prohibiting the tie-up of boats to the shore along a designated section of the Willow Creek/Susitna River confluence area. This area will be posted with signs.

To help avoid conflict between different fishing methods, and to enable the greatest amount of access to the most favored fishing areas, a regulation prohibiting the anchoring of boats within 200 yards of Willow Creek's lower mouth is recommended. This regulation will prevent the increasingly common situation of a few anchored boats interfering with the casting and fishing practices of the far more numerous shore anglers. The affected area will be posted with prominent signs.

## **All Terrain Vehicles**

Because of the potential for substantial resource damage from the operation of all terrain vehicles, it is recommended that their use be prohibited except for snow machines. Snow machines will be allowed when the available snow cover is adequate to provide a protective layer over vegetation and bare soils.

## **Use Closures, Stay Limits**

Considering WCSRA's relatively small size, low level of facility development, and very high visitation and demand for access during the short salmon fishing season, a series of use closures and stay limits is recommended. These restrictions will ensure that access to the land and waters of the recreation area and its facilities are available to the greatest number of people.

Camping Stay Limit. Between May 31st (Memorial Day) and July 4th (Independence Day), a four day camping stay limit is recommended for the high density campground at the mouth. Demand for camping spaces near the stream's mouth will be very high during this period, because of the king salmon fishery. A four day limit will promote a certain turnover among the camping spaces and open the area for new users. For the remainder of the year, a seven day limit is recommended, which is consistent with other state park units in the region.

When the "Lucky Shot" low density campground is built during a later phase of development, park managers will analyze use patterns and determine whether a stay limit is warranted there.

Boat Launch Parking Limit. For many of the same reasons as cited above, a four day limit should be considered for the boat launch parking area. A four day limit will prevent the disproportionate use of the parking lot's limited capacity by long term users, who might otherwise "lock up" spaces while on extended trips into outlying areas. A four day limit is also consistent with the limit proposed for the nearby campground, thereby avoiding confusion and the potential for users to merely alternate back and forth between the two areas. A parking limit might be applied on a seasonal basis, corresponding to peak use periods tied to salmon runs and hunting seasons.

Camping Closures. Because of the sensitive vegetation adjacent to the stream and the enormous demand for access to the mouth during the peak season, a camping closure for the mouth area will be imposed. No camping will be allowed within a half mile radius of the Willow Creek mouth, except at designated sites. Boundaries of the closed area will be marked at appropriate locations. In the remainder of the recreation area, boat-in and walk-in camping (in undesignated areas) will be allowed.

Open Fires. Because of sensitive soils and the danger of uncontrolled fires, open camp fires will be prohibited throughout the recreation area, except in designated fire places and on unvegetated gravel bars along Willow Creek more than 1/2 mile from the stream's mouth.

Recreation area managers will monitor camping and determine whether additional limits or restrictions will be necessary to protect natural conditions or to preserve park values.

### **Regulation of Commercial Activities**

When WCSRA was established, the Division of Parks and Outdoor Recreation became responsible for regulating commercial activities within the area. At the present time, commercial operations are limited to airboat charters based at the Parks Highway bridge. A moderate portion of the motor boat traffic on Willow Creek is by commercial operators.

When the boat launch recommended for the Willow Creek mouth is built, the Division of Parks and Outdoor Recreation will institute a permit system allowing commercial

operations at the launch area. A limited number of commercial use permits will be issued through a competitive process, under 11 AAC 18.040.

A limit on the number of commercial use permits is necessary because commercial demand for launching, parking, sanitary, and other facilities at the launch site will likely exceed its capacity, or displace non-commercial users. After the facility is in place, Division staff will analyze its operation and use patterns/volumes before determining the actual number of commercial use permits to be issued, the method to be used in issuing the permits, and the stipulations that will be attached to each permit.

### **Hunting and Trapping**

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

The boat launch will be used during the fall hunting season by hunters destined for outlying areas. Because of this concentrated use, a safety hazard would be created by other hunters stalking the surrounding area inadvertently shooting in the direction of the launch. For public safety reasons, it is recommended that the recreation area be closed to the use of firearms between May 20 and August 31 annually. Use of firearms for hunting between September 1 and April 30 should be prohibited within one half mile of developed facilities.

The Willow Creek corridor supports a number of fur-bearing animals, most notably beaver. Trappers have for many years taken fur animals in the corridor, in a sustained yield manner which has not substantially diminished populations. It is recommended that trapping be allowed to continue, subject to the regulations of the Alaska Board of Game.

### **Archaeological Preservation**

Field work performed in 1990 by the Office of History and Archaeology determined that there are significant cultural resources in the Willow Creek-Susitna River confluence area slated for facility development. To prevent the loss or degradation of significant features, archaeologists will be stationed at construction sites during critical stages to observe ground conditions and assess and document the cultural remains that are affected. These archaeologists will have the authority to stop work and order other remedial actions to prevent unnecessary damage to cultural resources. The Division will be prepared to make field design decisions to reroute or relocate facilities and take other actions to avoid or minimize impacting cultural resources.

### **Visitor Information, Interpretation**

A nature trail is recommended as one component of an interpretive program at Willow Creek. As visitation at the recreation area increases, another component should be an active, ranger-conducted 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 boat safety and handling techniques. Users of the new Willow Creek launch will be entering the difficult and potentially dangerous waters of the Susitna River. It is recommended that the Division take every opportunity to educate boaters, with such devices as bulletin boards and brochures.

### **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 recreation area. The Crystal Lake Road already intersects the parkway, and there may be a need in the future for another such intersection. In anticipation, this plan identifies acceptable locations where other access roads might join the parkway (see Figure 13). These 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 within the recreation area will be issued by the Division only for these designated points, and with appropriate stipulations.

### **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 improve 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 effected by heavy equipment. To the extent practical, impacted areas should be reclaimed and revegetated. Road cut and fill slopes should be dressed with surplus top soils and seeded or planted with native ground cover and brush species. These revegetation efforts will directed by landscape architects during the construction phase of development.

### **Signing**

Because of the size and magnitude of facilities proposed for WCSRA, 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.

### **Section Line Easement Vacation**

It is recommended that section line easements within the recreation area be formally vacated. Vacation will ensure that park and recreational values are protected from incompatible activities and land uses. Roads and trails through the recreation area will be built only with the Division's express approval, and with appropriate stipulations to

protect park values.

## **CHAPTER 8 FACILITY RECOMMENDATIONS**

This chapter presents recommendations for recreational and interpretive facilities. The proposals are designed to rectify management problems, correct for deficiencies in the present number and type of facilities, and to provide opportunities for a variety of park users and visitors, including Alaskans and non-residents. Each proposal is assigned a priority ranking, indicating its relative importance and its order in a phased development program. These phase rankings are shown in Chapter 9. Figures 13 and 14 map the facility recommendations.

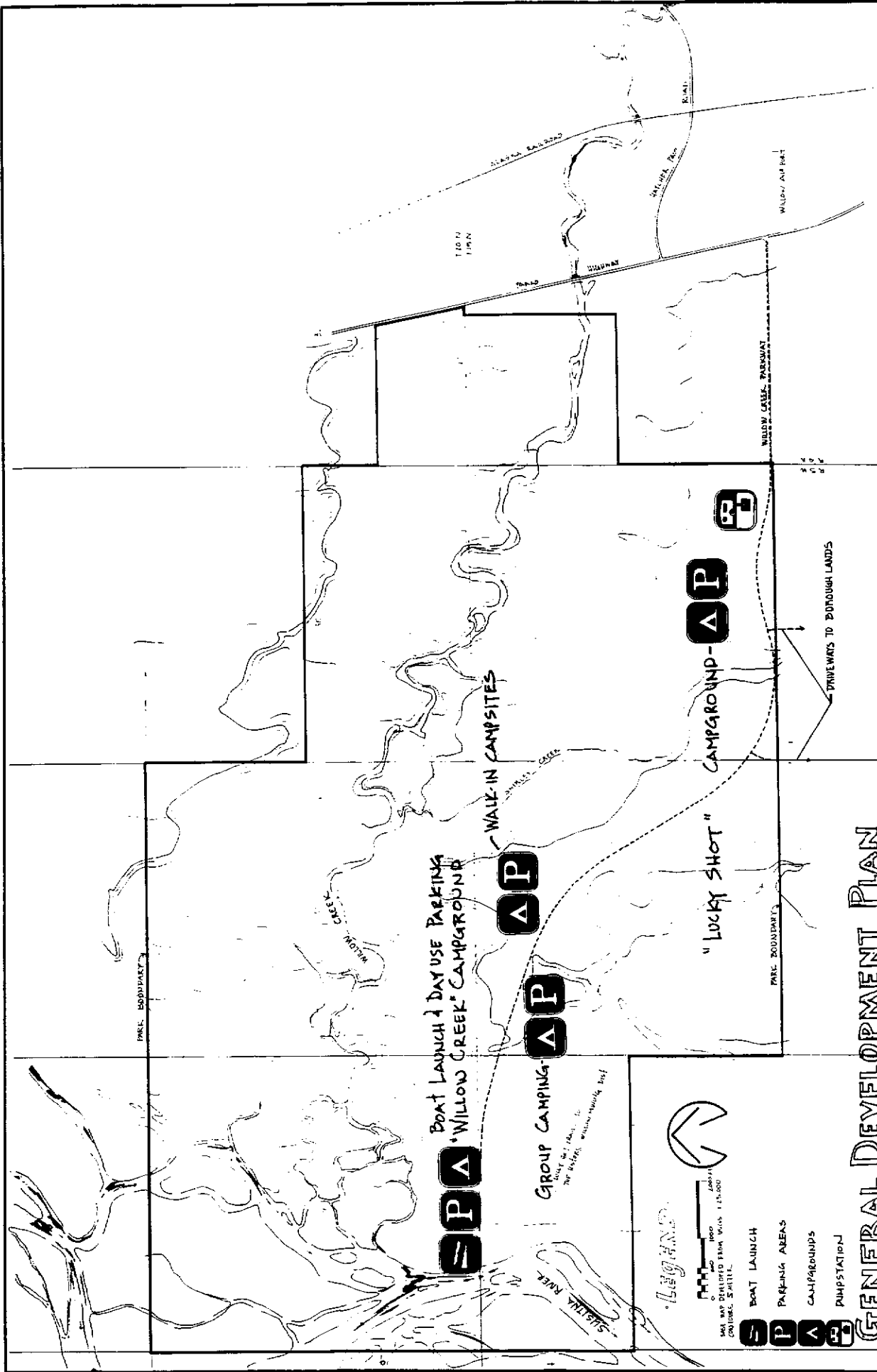
### **Camping Facilities**

Four types of camping will be provided at WCSRA. In the vicinity of the stream's outlet into the Susitna River, high density "campalot" units will provide quick and easy access to fishing grounds near the mouth. Second, lower density camping will be developed on the uplands set back from the stream, appealing to families and others wanting a more private, relaxed experience away from the crowds at the waterfront. Third, a group camping area located on the bluff one mile from the mouth will be available on a reservation basis for organized groups such as the Good Sam Club and Boy Scouts. Fourth, walk-in camping units will be located on the bluff one half mile from the stream and one mile from the mouth.

High density camping near the Willow Creek mouth satisfies the demand for direct access to fishing areas. People using these camping facilities will be able to walk a short distance to the most popular area for Willow Creek salmon fishing area. Other facilities slated for the mouth area, including the boat launch and concession stands, will also be easily accessible. Camping units will be situated in a small-scale parking area, with each unit assigned an identification number for the fee collection system. A picnic table and fire place will be provided for each three to five parking spaces.

Low density camping will provide a more natural setting in the forested uplands set back from Willow Creek. The area slated for campground development is about two miles from the mouth, and would entail a short drive or hike to the stream. Most camping units will be individualized, separated by 150 feet from neighboring sites. Total capacity of the low density campground will be approximately 60 units, each with picnic table and fire place. Water, latrines, and garbage collection facilities will be provided at central locations.

A group camping area is proposed for an existing gravel material site on the Willow Creek Parkway. This site will be used for disposal of waste materials from the construction of parking and campgrounds, and afterwards will be a good area for



GENERAL DEVELOPMENT PLAN  
 DEPARTMENT OF NATURAL RESOURCES STATE OF ALASKA  
 DIVISION OF PARKS AND OUTDOOR RECREATION  
 WILLLOW CREEK SRA  
 Figure 13  
 SHEETS 04 OF 04  
 DATE: 10/19/80

# FACILITIES



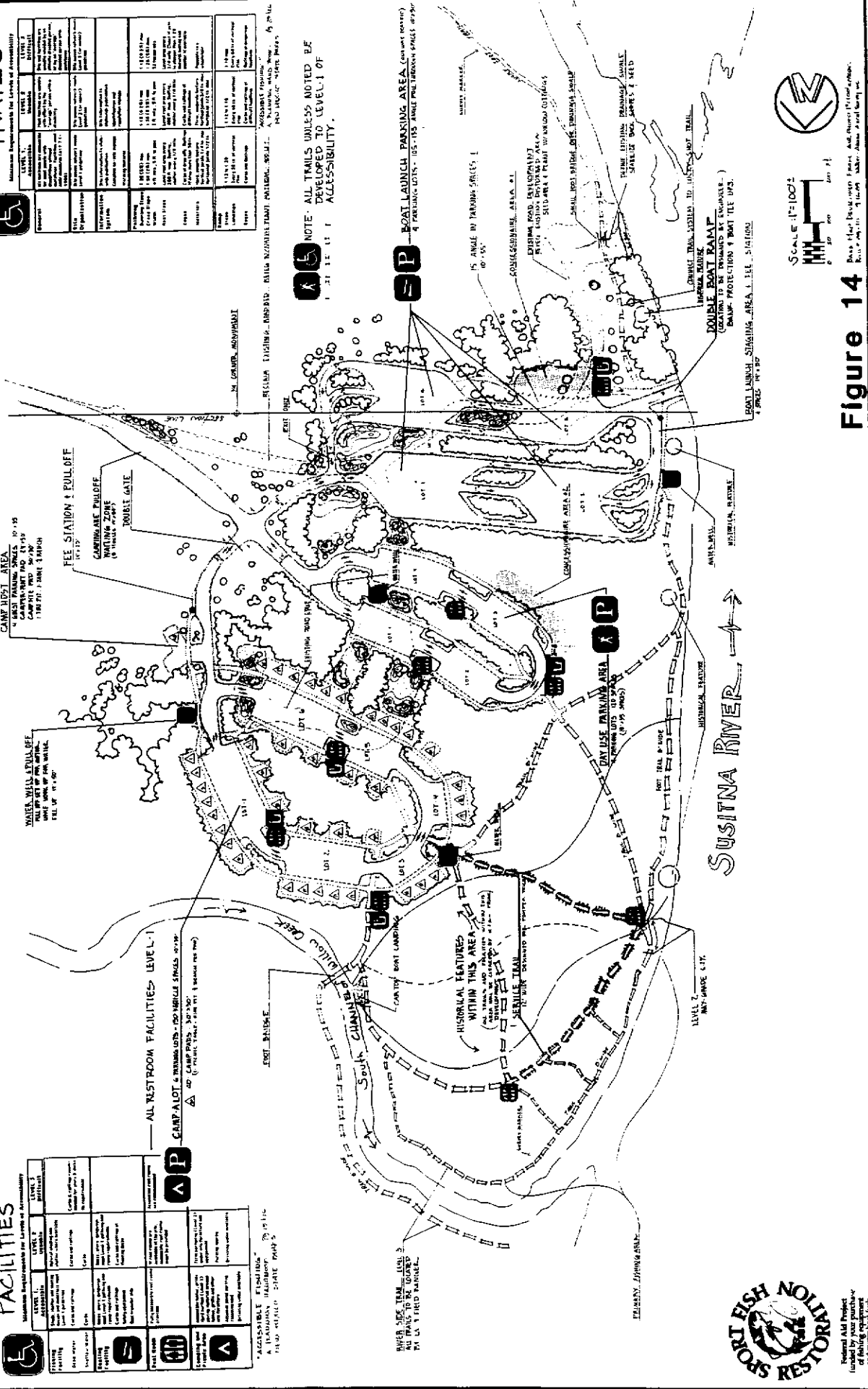
Facility	LEVEL 1 ACCESSIBILITY	LEVEL 2 ACCESSIBILITY	LEVEL 3 ACCESSIBILITY
RESTROOM	...	...	...
DRINKING FOUNTAIN	...	...	...
...	...	...	...

# TRAILS



Trail	LEVEL 1 ACCESSIBILITY	LEVEL 2 ACCESSIBILITY	LEVEL 3 ACCESSIBILITY
...	...	...	...
...	...	...	...

**NOTE:** ALL TRAILS UNLESS NOTED BE DEVELOPED TO LEVEL 1 OF ACCESSIBILITY.



SCALE 1"=100'  
DATE: 11/2/90

**Figure 14**  
SITE DEVELOPMENT PLAN  
WILLOW CREEK STATE RECREATION AREA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF PARKS AND OUTDOOR RECREATION  
STATE OF ALASKA



Prepared by: [Name]  
Checked by: [Name]  
Approved by: [Name]



large groups wanting common camping and recreation facilities separate from other park users. Two picnic shelters, latrines, water, large barbecue pit, and a number of picnic tables and small fire places will be provided.

Walk-in camping units will be provided about midway along the Willow Creek Parkway, accessible from a small parking area that will also serve as a trail head. Initially, fifteen walk-in camp sites will be provided, each with tent pad and picnic table. No fire places will be provided, and open fires in the walk-in sites will be prohibited. Latrines, water, and garbage collection will be located at the parking area.

<b>Proposal</b>	<b>Management Objectives</b>	<b>Facilities</b>	<b>Justification</b>
"Willow Creek" high density campground	Satisfy demand for "campalot" facilities with direct access to favored fishing area, with priority given to capacity rather than quality.	150 parking spaces, each measuring approximately 35'x12'. One picnic table and fire place provided for each three to five spaces. Water, latrines, and garbage collection at central locations.	Many Willow Creek visitors will desire easy access to the stream for fishing, and only minimal overnight facilities. High density camping will appeal to those whose primary purpose is fishing, and want quick access to and from the fishing grounds from their vehicles.
"Lucky Shot" low density campground	Provide camping facilities with reasonable access to Willow Creek and fishing, but with primary emphasis on low density and high quality. Provide camping opportunities in natural setting.	60 pull in camping units, each with parking space, tent pad, picnic table, and fire place. Spaced approximately 150' apart. Water, latrines, and garbage collection at central locations. Space for campground hosts and fee collection station.	Willow Creek has the capacity to provide high quality camping, for visitors who prefer privacy in a natural setting over easy access to the stream. This campground would alleviate a regional deficiency in camping facilities, and also provide overflow camping capacity during the short but intense salmon fishing season.
Group campground	Provide camping opportunities for large groups, set apart from other camping areas, without sacrificing opportunities for small parties and individuals.	Large open area, restored and revegetated from material and waste disposal site at Mile 2.5 of the Willow Creek Parkway. Two large picnic shelters, with barbecue pits. Latrines, water, and garbage collection facilities. Several picnic tables and fire places.	There is significant demand for group camping facilities in this region. This proposal would satisfy demand, without displacing large numbers of regular park campers in more traditional facilities designed for families and small groups. This facility would be available on a reservation basis, and subject to a reasonable fee.

Walk-in camp sites	Provide basic camping facilities, removed from the road system, for visitors wanting a more natural, trail-based experience.	Fifteen walk-in sites, each with tent pad and picnic table. Parking area at trail head, with water, latrine, and garbage cans. Low standard trail loop, with spurs, between sites and parking area.	These facilities will provide hikers and boaters with simple improvements, designed to add convenience and enjoyment. Basic facilities like these occupy an important niche in the recreational opportunity spectrum for Willow Creek, and will protect environmental values by concentrating backcountry use at hardened facilities.
--------------------	--	---	---

## **Boat Launch**

A boat launch is proposed for the Willow Creek confluence with the Susitna River, at the terminus of the Willow Creek Parkway. The launch will serve demand in the immediate Willow Creek area and will serve as a take-out point for Willow Creek floaters. It will also provide a safe alternative for the boaters using Willow Creek as an access corridor to outlying areas in the Susitna Basin, such as Alexander Creek or the Deshka River.

One hundred parking units are recommended for the first phase of development. An additional 50 units should be considered in the future, depending on growth in demand. The limited parking capacity at the launch will likely create the need for stay limits. To provide the greatest use by the greatest number of boaters, a limit of four days parking will be imposed during peak periods. Long term users will need to find off-site parking or use other launch facilities in the region (Susitna Landing and Deshka Landing, for example). Use of the launch will also be subject to user fees, to be established by the director according to state regulations.

Commercial operations at the launch will be allowed, subject to a permit system under state regulations. A limited number of commercial use permits will be issued, since demand for launching, parking, sanitary, and other facilities at the launch site will likely exceed its capacity, or displace non-commercial users. After the facility is in place, Division staff will analyze its use patterns and volumes before determining the actual number of commercial use permits to be issued, the method to be used in issuing the permits, and the stipulations that will be attached to each permit.

The launch area will also contain a designated area for temporary structures belonging to commercial water taxis and other commercial operators. The sites will be approximately 200 square feet, supporting a trailer or other small removable structure for office use or shelter for clients. According to regulations, the rights to these sites will be awarded on a high bid basis, provided that certain minimum standards are met and the permittees agree to abide by permit stipulations.

<b>Proposal</b>	<b>Management Objectives</b>	<b>Facilities</b>	<b>Justification</b>
Boat launch	Provide alternative to boaters destined for outlying areas. Improve public safety by eliminating need for motor boat travel in narrow, winding, debris-laden Willow Creek. Reduce conflict between motor boaters, floaters, and shore anglers.	One double wide, concrete-ramped launch. Up to a maximum of 140 pull-through parking spaces, measuring 10'x50'; built in phases to correspond with growth in demand. 10 angled parking spaces, measuring 10'x35'. Water, latrines, and garbage collection. Designated area for commercial operators.	Boat traffic on Willow Creek is a major management issue, where the primary concerns are public safety and user conflicts. This launch provides an alternative for most present users, and thereby reduces safety hazards and user conflicts.

### **Day Use Facilities**

Much of the visitation at Willow Creek is by day-users. Day users visit the area for a short period, and are most interested in facilities providing quick and access to the stream and fishing areas. Perhaps the most important day use facilities are access roads and parking. At Willow Creek, the existing road provides access to the stream mouth, and new parking is recommended as an early phase of additional development. 120 parking spaces will be built for day users, each measuring approximately 10'x35' to accommodate recreational vehicles. Water, latrines, and garbage collection points will be provided in conjunction with the parking area.

An area will be designated for the use of commercial operators offering goods and services directly related to outdoor recreation at Willow Creek. Examples of possible operations include tackle shops, raft/canoe rentals, food vendors. A limited number of permits will be issued, allowing the erection of temporary structures. The permits will be issued according to state regulations, and the actual number of permits will be determined by the director after more review of use patterns and demand for services.

<b>Proposal</b>	<b>Management Objectives</b>	<b>Facilities</b>	<b>Justification</b>
Parking area, access trails	Provide necessary support facilities for day users.	120 parking spaces, each 10'x35'. Vaulted latrines, water sources, and garbage facilities, as needed. High standard foot trails leading to shore fishing areas and boat launch. Prepared gravel surface for seasonal use by commercial permittees.	Many park users do not remain overnight. These facilities meet their needs for parking facilities and access to the general area.

## Trails

Trails will serve a variety of purposes at WCSRA: fishing access, hiking, dog mushing, skiing, snow machining, camping access, and nature study/appreciation. Trails will depart all parking areas, providing foot access to activity areas. In most cases, these access trails will lead to fishing areas. Sometimes, however, they will lead to camping sites or other points of interest.

The Lucky Shot Trail follows its original alignment through the recreation area, and is presently used primarily by dog mushers in winter. However, as the recreation area is more fully developed, it will also serve hikers, skiers, and other general recreational purposes.

Proposal	Management Objectives	Facilities	Justification
Internal trail network	Provide non-vehicular travel corridors, connecting campgrounds, parking areas, and other activity areas. Provide opportunities for trail-based recreational activities.	Approximately four miles of all-season trail, of varying standards. Bridges, boardwalks, and culverts, as necessary.	This proposal will disperse visitors throughout the recreation area, reducing crowding at certain areas and providing new access to the stream. A portion of trail will follow Willow Creek's south shore, opening new fishing, hiking, and camping areas.
Lucky Shot Trail	Provide general year-round trail-based recreation opportunities. Commemorate the Lucky Shot Trail as a historical access route into the Willow Creek Mining District.	One and one half miles of all season trail, with culverts and bridges as necessary. One and one half miles winter trail.	The Lucky Shot corridor is presently well-defined, and used for a variety of activities. This proposal will allow continued use of this historical trail during all seasons. A portion 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 a leg of the proposed nature trail (see below).

Nature trail	Interpret the area's natural and human history	One and one quarter miles of all season trail, with boardwalks, culverts, and bridges as necessary. Interpretive displays, bulletin boards, and brochure dispensing stations.	WCSRA has a rich natural and human history. This trail will foster appreciation for the area's values through the use of standard trail-oriented interpretive and educational devices. The trail's alignment has been selected to include a range of ecological zones and a portion of the historical Lucky Shot Trail.  The trail will also serve as a segment of the recreation area's internal trail network, connecting campgrounds, parking areas, and other activity nodes.
--------------	--	---	---

**Sanitary Dump Station**

State sanitary regulations require overnight camping facilities to provide sanitary dumps, and the Division is working with the state Department of Environmental Conservation to comply with these regulations. The preferred approach at this time is to provide a centrally located dump facility along the Parks Highway, at approximately milepost 70. This station would serve highway travelers as well as WCSRA and Nancy Lake State Recreation Area users.

If a suitable site and funding/operations agreement cannot be found for a centrally located station, this plan designates an alternative site. Located just inside the recreation area's eastern boundary, the alternative site could be developed in conjunction with a proposed ranger station.

<b>Proposal</b>	<b>Management Objectives</b>	<b>Facilities</b>	<b>Justification</b>
Sanitary dumping station	Provide necessary sanitary facilities. Avoid potential public health problems.	One sewage dump station, one water well, five parking spaces, signs and other facilities, as necessary.	In the event that an arrangement for a centrally located dump station cannot be finalized, this proposal provides an alternative means of satisfying state sanitary regulations.

## CHAPTER 9 IMPLEMENTATION

### Phasing

The management recommendations in this plan are intended for immediate implementation, or as soon as practicable. Facility proposals are intended to be implemented in phases over a period of several years. The phasing schedule is a guideline, and subject to change as conditions change and opportunities arise. As a general rule, however, all phase A proposals should be implemented concurrently, and prior to phase B proposals. Phase B recommendation should occur prior to Phase C.

<u>Phase</u>	<u>Recommendation</u>	<u>Page</u>
A	Zoning Classification	30, 32, 33
A B C	Operations Staffing and Funding	30, 34
B	Boating Recommendations	35
A B	Use Closures, Stay Limits	35
A B C	Regulation of Commercial Activities	36
A	Hunting and Trapping Regulations	37
A B C	Archeological Preservation	37
A B C	Visitor Information, Interpretation	37
A B C	Intersections on the Willow Creek Parkway	38
A B C	Vegetation Thinning, Revegetation	38
A B C	Signing	38
A	Section Line Easement Vacation	38
A	"Willow Creek" High Density Campground	40, 41, 42, 43
C	"Lucky Shot" Low Density Campground	40, 41, 43
C	Group Campground	40, 41, 43
B	Walk-In Campsites	40, 41, 44
B C	Boat Launch	48
A	Day Use Parking, Access Trails	45
A B C	Internal Trail Network	46
C	Lucky Shot Trail	46
C	Nature Trail	46, 47
C	Sanitary Dump Station	47

### Plan Deviations, Modifications

This plan represents the best efforts of the Division of Parks and Outdoor Recreation, Department of Fish and Game, and the Matanuska-Susitna Borough to analyze Willow Creek's natural features and social and recreational patterns and trends and then to recommend a program for management and development of the recreation area. The master plan is a policy guide for the area, requiring that development, uses, and management must be in accordance with its provision.

However, the plan must be flexible in order to adapt to changing circumstances and new information. The procedure described below has been developed to permit this flexibility and ensure that the plan continues to be a useful management tool.

Periodic Review. The area office will coordinate periodic review of the plan when considered necessary. The decision to review may be triggered by:

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

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

- no modification of the plan
- modification of the plan
- granting of a special exception

Modification of the plan. Two types of modifications are possible.

Minor changes. These are changes which would not constitute a significant deviation from the original plan. Minor changes may be necessary for clarification, consistency, or to facilitate implementation of the plan. Minor changes do not require public review, but must be coordinated with the area superintendent and appropriate staff.

Major changes. These are changes which would cause a deviation from the original intent of the plan. Major changes require public notice and review prior to adoption.

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

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

1. The person or agency requesting the exception will prepare a written request which specifies

- the nature of the 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

2. The area superintendent will review the request and issue a determination. If warranted by the degree of controversy or the potential impact, a public meeting will be held before reaching a decision.

3. The decision of the area superintendent may be appealed to the Director of the Division of Parks and Outdoor Recreation, whose decision will be final.



**APPENDIX A**  
**WILLOW CREEK STATE RECREATION AREA ENABLING LEGISLATION**  
**(AS 41.21.491-495)**

**Sec. 41.21.491. Willow Creek state recreation area.** (a) The surface estate in the land and water owned by the state as of June 9, 1987 and all land and water acquired by the state in the future, including shore and submerged land, lying within the parcels described in this subsection is designated as the Willow Creek State Recreation Area:

Township 19 North, Range 4 West, Seward Meridian

Section 5: Lot 3, Lot 4,  $S^{1/2}NE^{1/4}NE^{1/4}$ ,  $SE^{1/4}NW^{1/4}NE^{1/4}$ ,  $SW^{1/4}NE^{1/4}$ ,  $N^{1/2}NW^{1/4}SE^{1/4}$ ,  $S^{1/2}NW^{1/4}$

Section 6: Lot 3, Lot 4, Lot 5,  $SE^{1/4}NW^{1/4}$

Township 19 North, Range 5 West, Seward Meridian

Section 1:  $SE^{1/4}$ ,  $W^{1/2}$ , Tract A, Tract B, Tract C

Section 2

Section 3:  $N^{1/2}$

Township 20 North, Range 5 West, Seward Meridian

Section 34

Section 35

Section 36:  $S^{1/2}$ .

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

(c) Subject to valid existing rights, the land and water described in (a) of this section are designated as a special purpose area under art. VIII, sec. 7, Constitution of the State of Alaska.

(d) Except for oil and gas leasing under AS 38.05.180, the mineral estate in the state-owned land and water described in (a) of this section is closed to mineral entry under AS 38.05.181 — 38.05.275. (§ 2 ch 44 SLA 1987)

**Sec. 41.21.492. Designation of management responsibilities.**

(a) The land and water described in AS 41.21.491(a), including land and water owned by the Matanuska-Susitna Borough and designated by the borough in a management agreement under AS 41.21.491(b), are assigned to the department for control, maintenance, and development, consistent with the purposes of AS 41.21.491 — 41.21.495.

(b) Nothing in AS 41.21.491 — 41.21.495 affects the responsibilities of

(1) the Department of Fish and Game, the Board of Fisheries, or the Board of Game under AS 16 and AS 41.99.010;

(2) the Department of Environmental Conservation under AS 46.03; or

(3) state agencies and municipalities under AS 44.19.145(a)(11) and AS 46.40.100. (§ 2 ch 44 SLA 1987)

**Sec. 41.21.493. Comprehensive management plan.** The commissioner shall develop and adopt a comprehensive management plan for the Willow Creek State Recreation Area with the concurrence of the Matanuska-Susitna Borough. (§ 2 ch 44 SLA 1987)

**Sec. 41.21.494. Regulations.** The commissioner shall adopt regulations under the Administrative Procedure Act (AS 44.62) that are necessary to achieve the purposes of AS 41.21.491 — 41.21.495 and to implement the plan adopted under AS 41.21.493. The regulations shall

(1) designate incompatible uses and prohibit or restrict them;

(2) allow road, railroad, and utility crossing of Willow Creek so as to minimize disturbance to the river's habitat and scenic and recreation values;

(3) allow fishery rehabilitation or enhancement practices under terms that are compatible with AS 41.21.491 — 41.21.495;

(4) allow the legal taking of fur-bearing animals; and

(5) allow for hunting, except where it must be prohibited for reasons of public safety. (§ 2 ch 44 SLA 1987)

**Sec. 41.21.495. Cooperative management agreements.** The commissioner may enter into cooperative management agreements with a federal agency, a municipality, another state agency, or a private landowner to achieve the purposes of AS 41.21.491 — 41.21.495. (§ 2 ch 44 SLA 1987)

**APPENDIX B**  
**MANAGEMENT AGREEMENT BETWEEN THE DEPARTMENT OF NATURAL**  
**RESOURCES, DEPARTMENT OF FISH AND GAME, AND**  
**THE MATANUSKA-SUSITNA BOROUGH**

This AGREEMENT is made and entered into between the Division of Parks and Outdoor Recreation (Parks), the Matanuska-Susitna Borough (Borough), and the Alaska Department of Fish and Game (ADF&G) and outlines the responsibilities of each division and the procedures to be followed in the management of the Willow Creek State Recreation Area.

- I. PURPOSE: This Agreement sets forth the procedures and responsibilities of the parties in cooperatively developing a management plan for Willow Creek SRA, establishing priority actions, defining lead responsibilities and approach to funding the development and management of the area in carrying out the purposes of AS 41.21.491-495.
- II. AUTHORITY: This Agreement is made pursuant to the authority contained in AS 41.21.495.
- III. LEGAL DESCRIPTION: Lands covered by this Agreement are those depicted in AS 41.21.491. Land owned by the Borough as described in AS 41.21.491 shall be included in this Agreement by ordinance or resolution of the Borough to be managed as part of the Willow Creek SRA.
- IV. MANAGEMENT INTENT: It is the intent of this Agreement that Parks will be the lead agency in the design, development and management of Willow Creek SRA. The Borough will take a lead role in pursuing funding for the development of the area. ADF&G will pursue funding for the development of recreational boating and sport fishing facilities.

The three parties will form a design/review and concessions award board that will be responsible for bidding a concession contract under AS 41.21.027 if concession management is deemed appropriate. The concessionaire would be responsible for the operation, maintenance and development of recreation facilities.

V. PARKS RESPONSIBILITIES:

1. Provide for enforcement of park regulations and resource protection.
2. Manage recreation use activities, however, nothing in this Agreement affects the responsibilities of the Department of Fish and Game, the Board of Fisheries, or the Board of Game under AS 16 and AS 41.99.010.

3. Provide for maintenance and operations of recreation facilities through park staff, service contracts, volunteers, inmate labor, cooperative agreements or concession contracts.
4. Manage any concession contracts and be responsible for contract compliance.
5. Develop site plans, design specifications, engineering drawings and bid documents for recreation facility developments under the construction authority of Parks. All plans will be reviewed and approved by the other parties.
6. Issue park use permits for commercial and non-commercial activities.
7. In cooperation with the other parties, develop regulations to implement AS 41.21.494 and the management plan written for the area under AS 41.21.493.
8. Conduct necessary archaeological site investigations and clearances.
9. Develop information brochures, interpretive exhibits and signing. The tri-agency cooperative effort shall be recognized in the public information facilities.
10. All public revenues (i.e., other than Dingle-Johnson funds (D-J) and concessionaire revenues) will be accounted for separately. A mechanism for allocation will be developed by the affected parties.

VI. MATANUSKA-SUSITNA BOROUGH RESPONSIBILITIES:

1. The Borough shall by virtue of this Agreement and by ordinance designate Borough-owned land described in AS 41.21.491 as part of the Willow Creek State Recreation Area and further take appropriate action to form the Willow Creek Special Use District. Land use controls and any amendments, changes or revisions to the Willow Creek Special Use District shall be approved by all parties.
2. Borough lands designated as part of Willow Creek SRA and Willow Creek Special Use District are assigned under AS 41.21.492 to Parks for control, maintenance and development in accordance with the terms of this Agreement and AS 41.21.491-495.
3. The Borough shall not establish or dedicate any other interests in the land or its management without mutual written agreement between the Borough, Parks, and Fish and Game.
4. Provide technical assistance and review of designs, engineering specifications and management activities to include regulatory efforts.

5. Work jointly with Parks in providing, if possible, local seasonal employment, youth employment, volunteer assistance and Borough labor, equipment, materials and technical assistance in cooperatively managing Willow Creek SRA.
6. Provide, at no cost, road fill and gravel material sources if available from adjacent borough land. The donated labor, equipment and materials may be used for potential match with federal-aid LWCF or D-J funds.
7. Cooperate in the acquisition of private land for public access, facility development, and stream corridor protection. Any land or interests acquired shall be included in Willow Creek SRA.
8. Pursue legislative funding for the development, operation and maintenance of Willow Creek SRA.
9. The Borough may reserve for itself any future rights-of-way or easements for use which may be necessary for access to adjacent lands owned by the Borough along the southern boundary. It is the intent of all the parties that non-recreational access through the Willow Creek SRA should be restricted. The preferred access to adjacent borough land shall be considered in the management plan. Priority consideration will be given to the feasibility of accessing borough land along the section line common to Section 12 (T19N, R5W, SM) and Section 7 (T19N, R4W, SM).
10. Jointly develop with the State a management plan for the area.

VII. ALASKA DEPARTMENT FISH AND GAME RESPONSIBILITIES:

1. Apply for federal funds and matching state funds for recreational boating and sport fishing access facilities.
2. Provide the other parties annual angler use data, and biological data for management purposes.
3. Review development plans and specifications and assist in the development of the Willow Creek SRA development plan.
4. Enter into specific cooperative agreement for the development and operation of any facilities funded with D-J funds.
5. Inform all parties of opportunities to participate in Cook Inlet Regional Planning Team activities on management plans, fishery enhancement practices and stream modifications for Willow Creek.
6. Cooperate, if possible, with cooperative hiring of seasonal employees, youth employment, volunteer assistance, equipment, materials and technical assistance to conduct sport fish functions and park operation functions.

VIII. SHARED RESPONSIBILITIES OF ALL THREE PARTIES:

1. Development of a management plan under AS 41.21.493 with joint concurrence of all parties. This Agreement is not an endorsement of the existing 1984 plan but that plan will serve as the framework for developing a public review document. The Borough Parks Recreation Advisory Board and State Parks' Susitna Valley Advisory Board will be jointly involved in the development of the plan and its continual implementation.
2. Prepare a concession operation plan that will result in a Request for Proposals (RFP) for operation, maintenance and development activities under a concession contract administered by Parks.
3. Review site plans and engineering specifications and establish a design/review and concessions awards board that will be responsible for selecting a concession contract award.
4. Cooperate with other agencies and organizations to further the purposes of this Agreement.
5. Meet annually, if possible, to evaluate field operations and provide comments and suggestions for improving management to better serve the public.
6. Each party will solely represent itself and be responsible for the actions of its employees, contractors or agents.
7. Any amendments, changes or revisions to the initially agreed upon management plan adopted under Section VIII(1) of this agreement and any regulations adopted under Chapter 20 of State Park Administrative Manual for Willow Creek State Recreation Area shall be approved by all the parties.

IX. GENERAL PROVISIONS:

1. All parties shall become equally responsible for compliance to restrictions placed on the use of the land associated with any federal-aid LWCF or D-J funding.
2. State Parks is responsible for any construction work and will apply for and be the responsible agent for any necessary U.S. Army Corps of Engineers wetland permits.
3. This Agreement does not obligate any party to spend funds not appropriated.
4. This Agreement may not be assigned without written agreement of all the parties.

5. None of the parties are subject to claims of liability for actions of the other party.
6. Resolution of conflicts and amendments to the management plan shall be defined in the management plan document.

X. TERM:

1. This Agreement and any subsequent amendments shall remain in effect unless Willow Creek SRA is terminated by act of the state legislature, or pursuant to Section XI below.

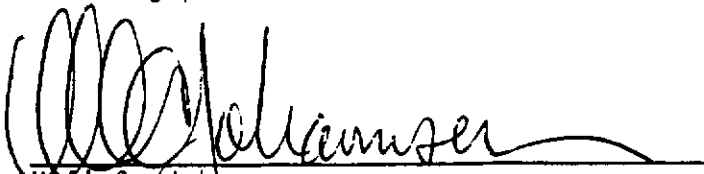
XI. TERMINATION/AMENDMENT:

1. The terms and conditions of this Agreement shall be reviewed annually. A party may terminate its participation by providing notice in writing to the other parties at least ninety days in advance of the date on which its termination becomes effective.
2. Any termination of this Agreement shall not extinguish the use of the area for outdoor recreation purposes.
3. Amendments to this Agreement may be proposed in writing by any party and shall become effective upon approval by all of the parties.
4. A conversion of use of the land and/or disposition of facilities purchased or developed with federal funds shall be in accordance with the regulations governing the program from which the funds were obtained.

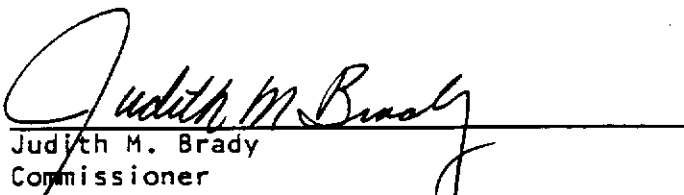
XII. ADOPTION:

This Agreement shall be effective from the date of signature of all three parties and ratification of the Matanuska-Susitna Borough Assembly.

This Agreement has been reviewed, agreed to, and executed by the following parties:

  
\_\_\_\_\_  
Neil C. Johannsen  
Director  
Division of Parks and Outdoor Recreation

4 SEPT 1988  
Date

  
\_\_\_\_\_  
Judith M. Brady  
Commissioner  
Department of Natural Resources

14 Sept. 1988  
Date

Robert H. Jones  
601 John Hale  
Borough Manager  
Matanuska-Susitna Borough

4-10-89  
Date

Norval Netsch  
Norval Netsch  
Director  
Division of Sport Fisheries

0-14-1988  
Date

Don W. Collinsworth  
Don W. Collinsworth  
Commissioner  
Alaska Department of Fish and Game  
ADF&G Coop #89-023

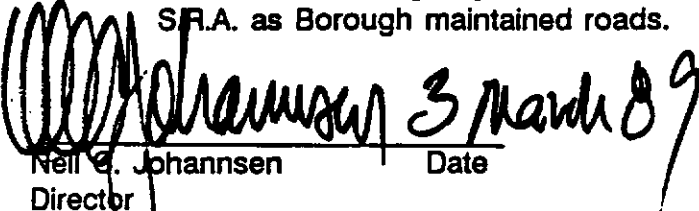
10-19-88  
Date




AMENDMENT NO. 1  
Cooperative Management Agreement  
between  
Matanuska-Susitna Borough  
Department of Fish and Game-Sport Fish Division  
Department of Natural Resources-Division of Parks and Outdoor Recreation  
for  
The Management of Willow Creek  
State Recreation Area

IX. GENERAL PROVISIONS:


7. All parties agree that this management agreement does not foreclose the Borough's right to either:
  - A. Exchange Borough lands within the Willow Creek Recreation Area (WCRA) for State lands outside the WCRA which are available or may become available; or
  - B. Relinquish the selection of Borough lands within the WCRA and have the acreage of such relinquished credited to the Borough selection entitlement.
8. It is understood that the legislative intent on fee collection by the Division of Parks was to make such fees available to the Division of Parks for use within the Park system. In the event that such intent is not followed in the future, Section V10 of this agreement will be interpreted to mean that distribution of revenues will be made to the land owners in the same ratio as land ownership bears to the total acreage within the WCRA.
9. It is understood that signing of the management agreement does not relieve any of the parties for liability for actions taken prior to the date of the last signature on the agreement.
10. The Mat-Su Borough agrees to seek certification for all roads within the Willow Creek S.R.A. as Borough maintained roads.

  
Neil G. Johannsen      Date  
Director  
Division of Parks and Outdoor Recreation

  
Lennie Gorsuch      Date 3-13-89  
Commissioner  
Department of Natural Resources

  
John Hale      Date 4-5-89  
Borough Manager  
Matanuska-Susitna Borough

  
Norvall Netsch      Date 3/22/89  
Director  
Division of Sport Fisheries

  
Don W. Collinsworth      Date 3-23-89  
Commissioner  
Alaska Department of Fish & Game  
ADF&G Coop #89-023

## APPENDIX C PARTICIPANTS

### Department of Natural Resources

Dale Bingham  
Greg Dixon  
Bill Evans  
Dennis Heikes  
Doug Reger  
David Stephens, principal author  
John Wilber  
Jack Wiles  
Tom Young

### Matanuska-Susitna Borough

John Duffy, Borough Planning Director  
Chuck Kausic, Borough Parks and Recreation Director  
Ted Smith, Borough Assembly

### Department of Fish and Game

Kevin Delaney  
Tom Donek  
Larry Engel  
Dave Rutz

### Others

Dave Watsjold, US Fish and Wildlife Service