

Leg. Finance - House & Senate Finance Comte Files (1975-76) 381

HB 220 cont.



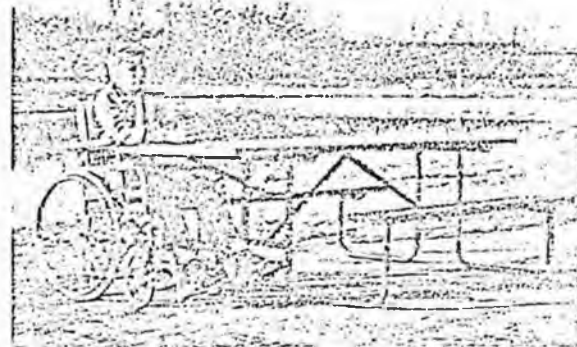
Nature Trails

Try making a short trail with few steep inclines, a few rest stops, and a variety of sensual experiences. If the surface is hard, make it about 4 feet wide and provide access from parking lots to make a multi-use trail for the handicapped and others as well.



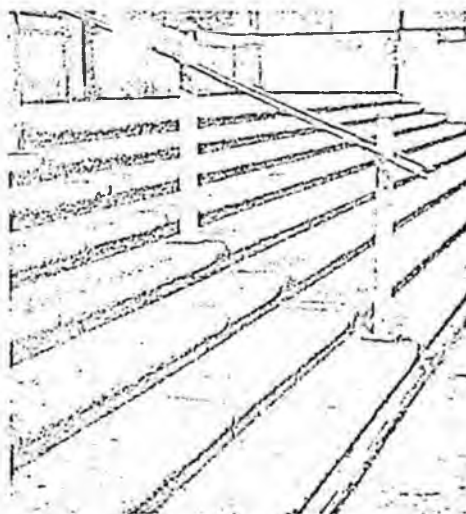
Campsites

Hard level terrain in the woods can serve as an ideal campsite for the handicapped. Shelters should be built level with the ground. Water and toilet facilities should be constructed to accommodate the needs of the handicapped.



Picnic Tables

Very little modification of picnic tables is required. Wheelchair bound people can easily sit at the head of the table if sufficient overhang is provided to bring the table to them. In some recreation areas, specially designed tables have been provided.

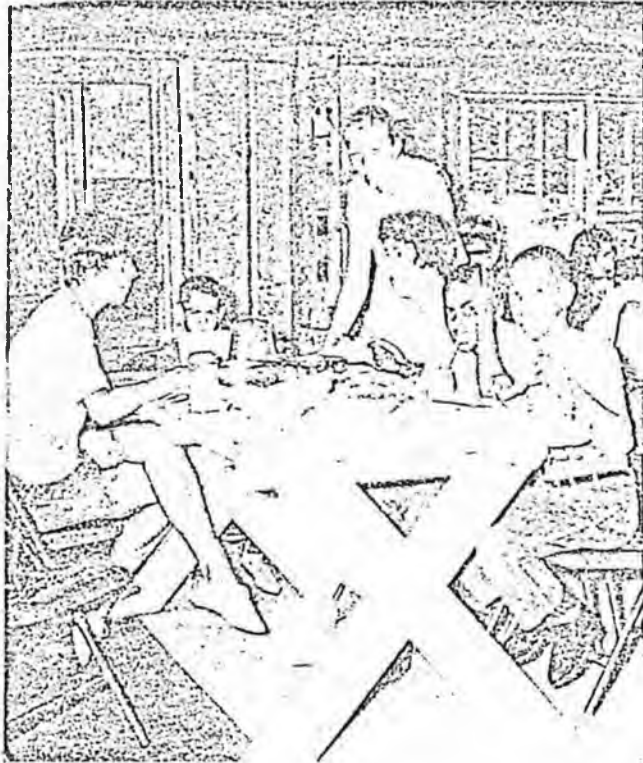


Steps

If steps must be used instead of a ramp, the rise should be 7 inches or less and the steps should not overhang the risers.

Flower and Vegetable Plots

Raised beds for cultivation by nature groups which would allow wheelchair bound people to enjoy the process of plant growth can be both attractive and easy to construct in brick, concrete block, stones, or railroad ties.



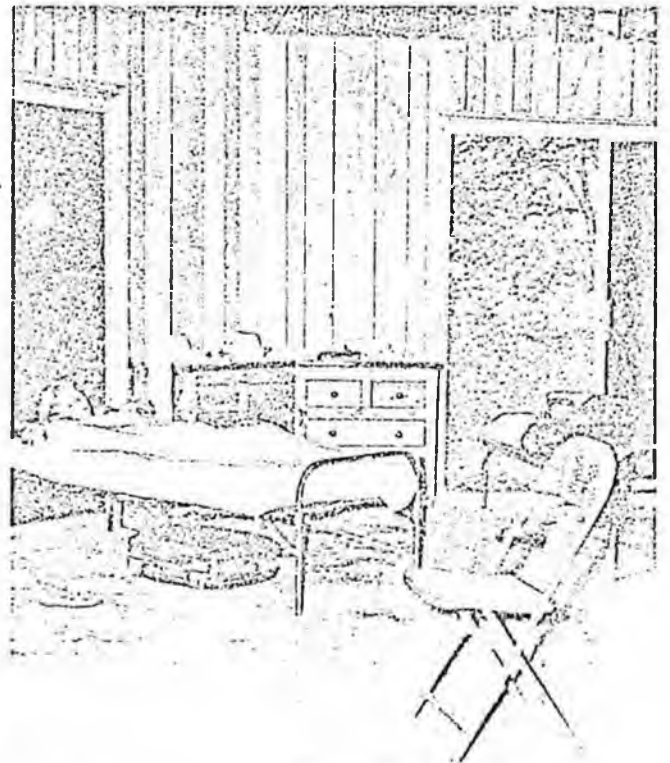
Segregated at one of the dining room tables is a group of retarded boys, shown with Study Coordinator, Sandy Bent. Camp nurse, Lois Ann Leclair and Study Counselor, Jane O'Leary.



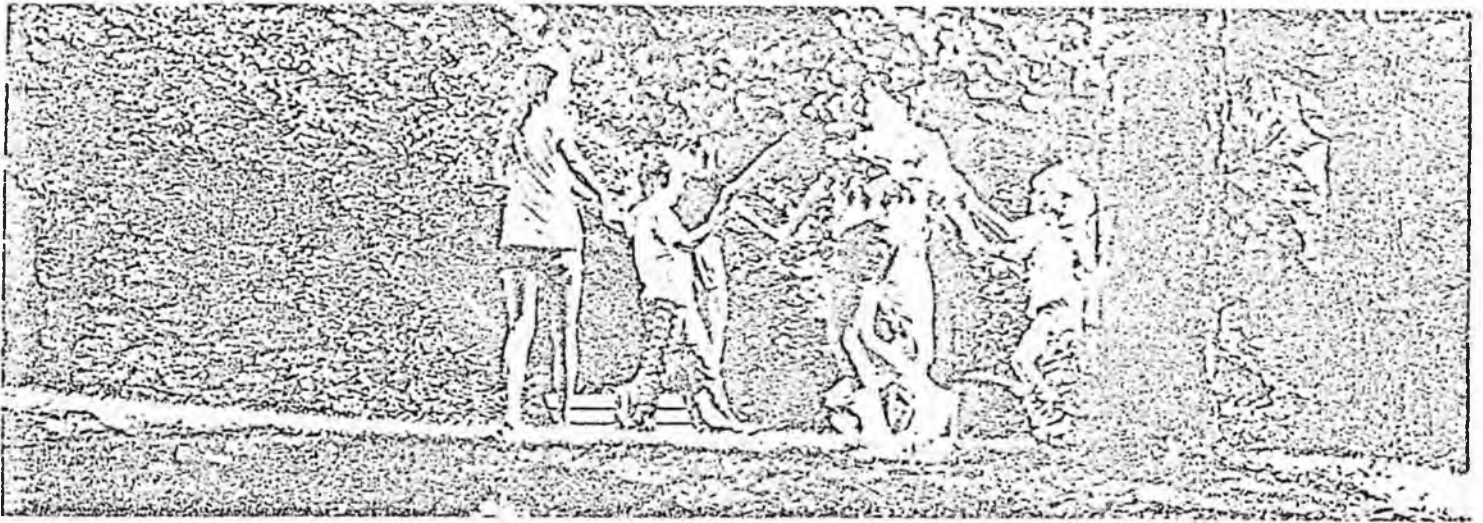
During an integrated session at camp, the retarded and crippled eat side by side, with the retarded camper in many cases helping the crippled camper to eat.



The camp truck is being loaded with crippled and retarded campers. They are going to the overnight camp site where they will cook out and stay in tents.



Two retarded youngsters are pictured in their beds in one of the cabins at Easter Seal Camp Fairlee Manor. This was during one of the segregated Study sessions.

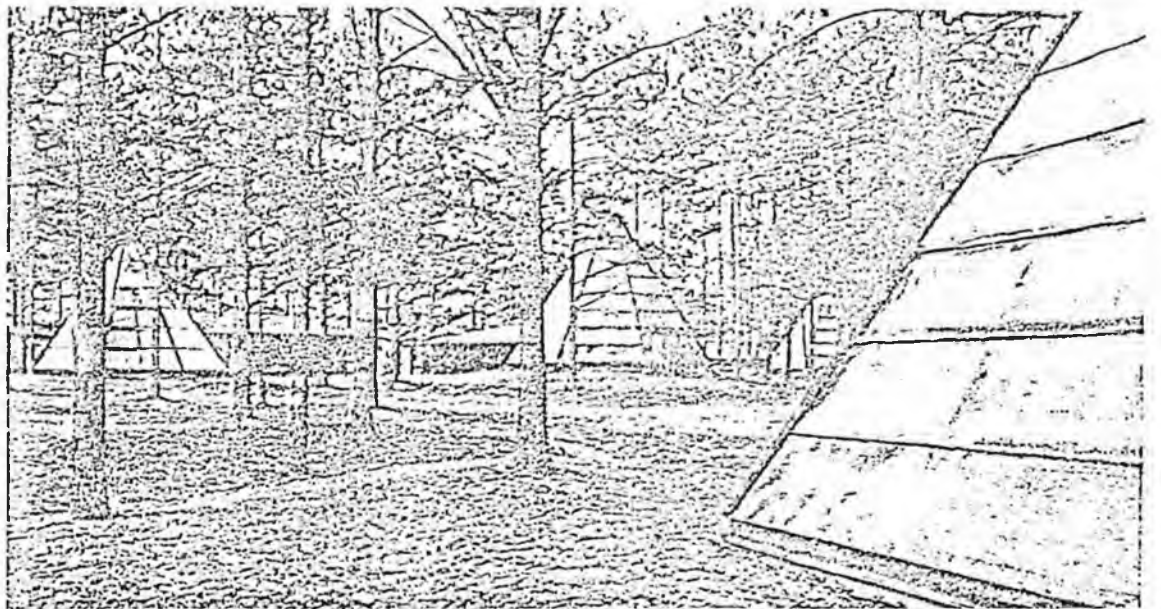
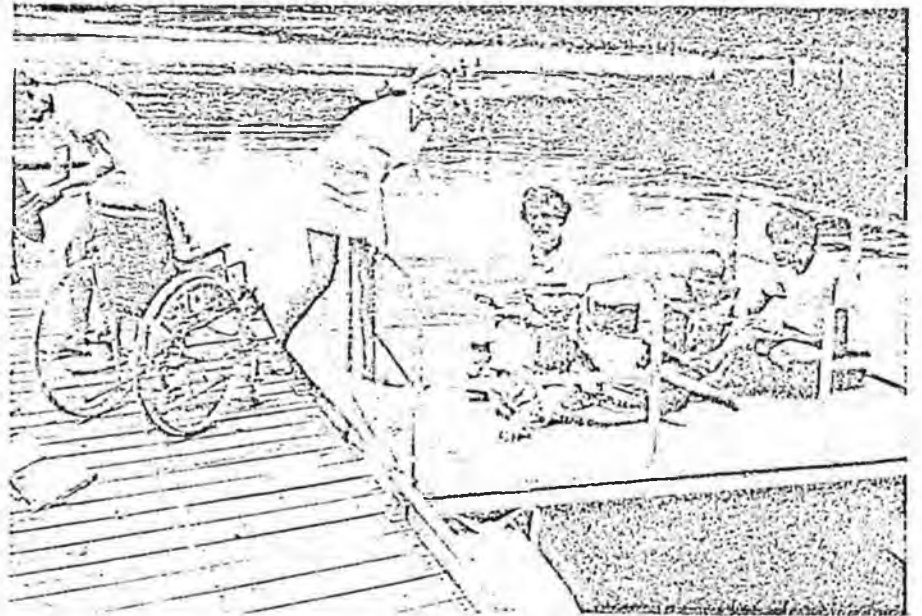


The Day Use Area

The Day Use Area has a visitor center offering food, drink, dressing rooms, first aid and equipment. A picnic area, a nature trail, and a fishing area comprise the facilities offered in the day use area.

The Cottage Area provides rental cottages of two bedrooms with a maximum sleeping capacity of seven persons. The cottages are within easy reach of all day-use facilities and are easily used by handicapped people.

Persons interested in the Will-A-Way approach should write and ask for the Functional Analysis of the Facility which details every aspect of the thought and care which went into the development of Will-A-Way. Write to Siotlia R. Longmure, Recreation Coordinator, Will-A-Way Recreation Area, Fort Yargo State Park, Winder, Ga.

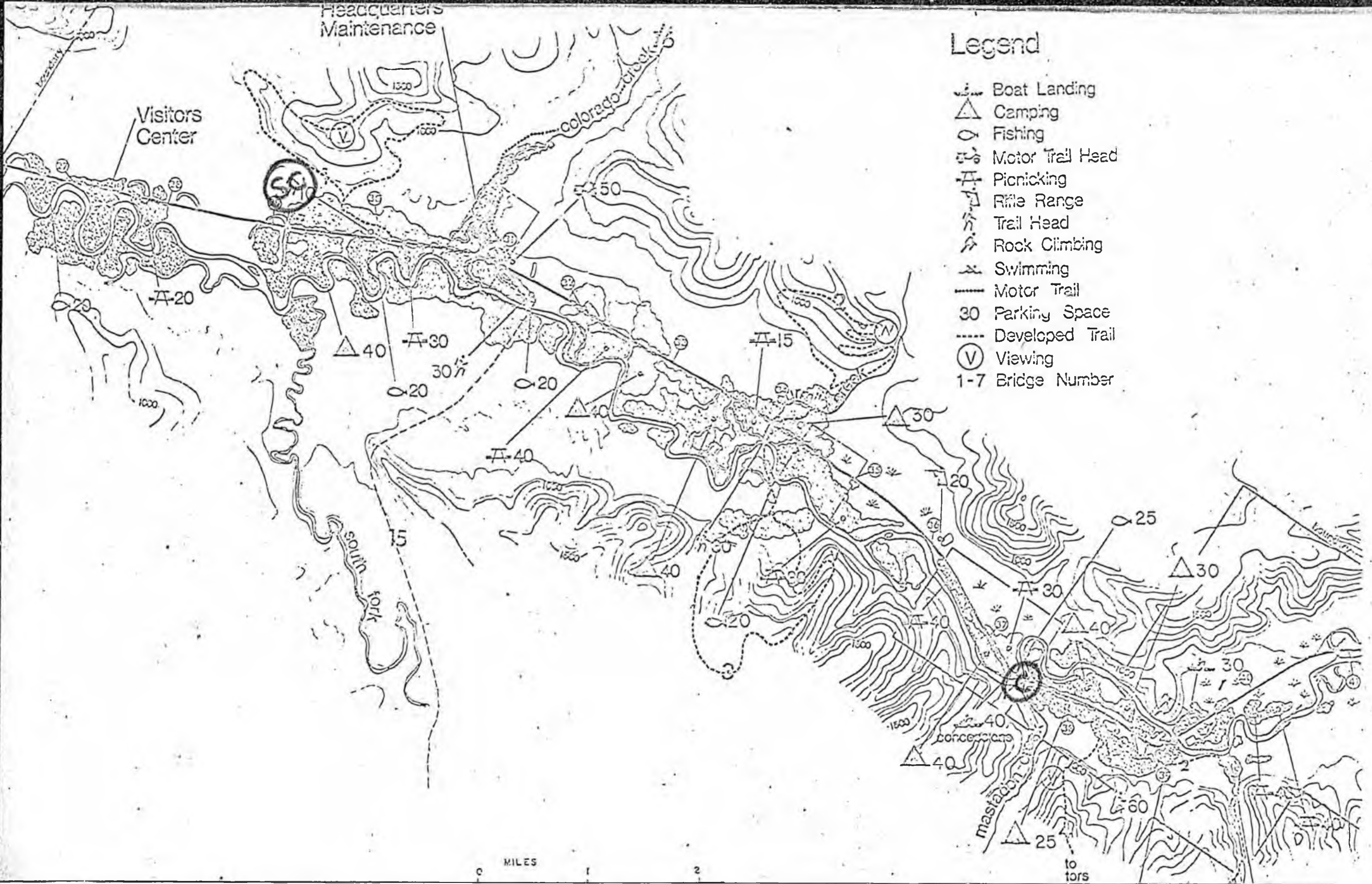


Headquarters
Maintenance

Visitors
Center

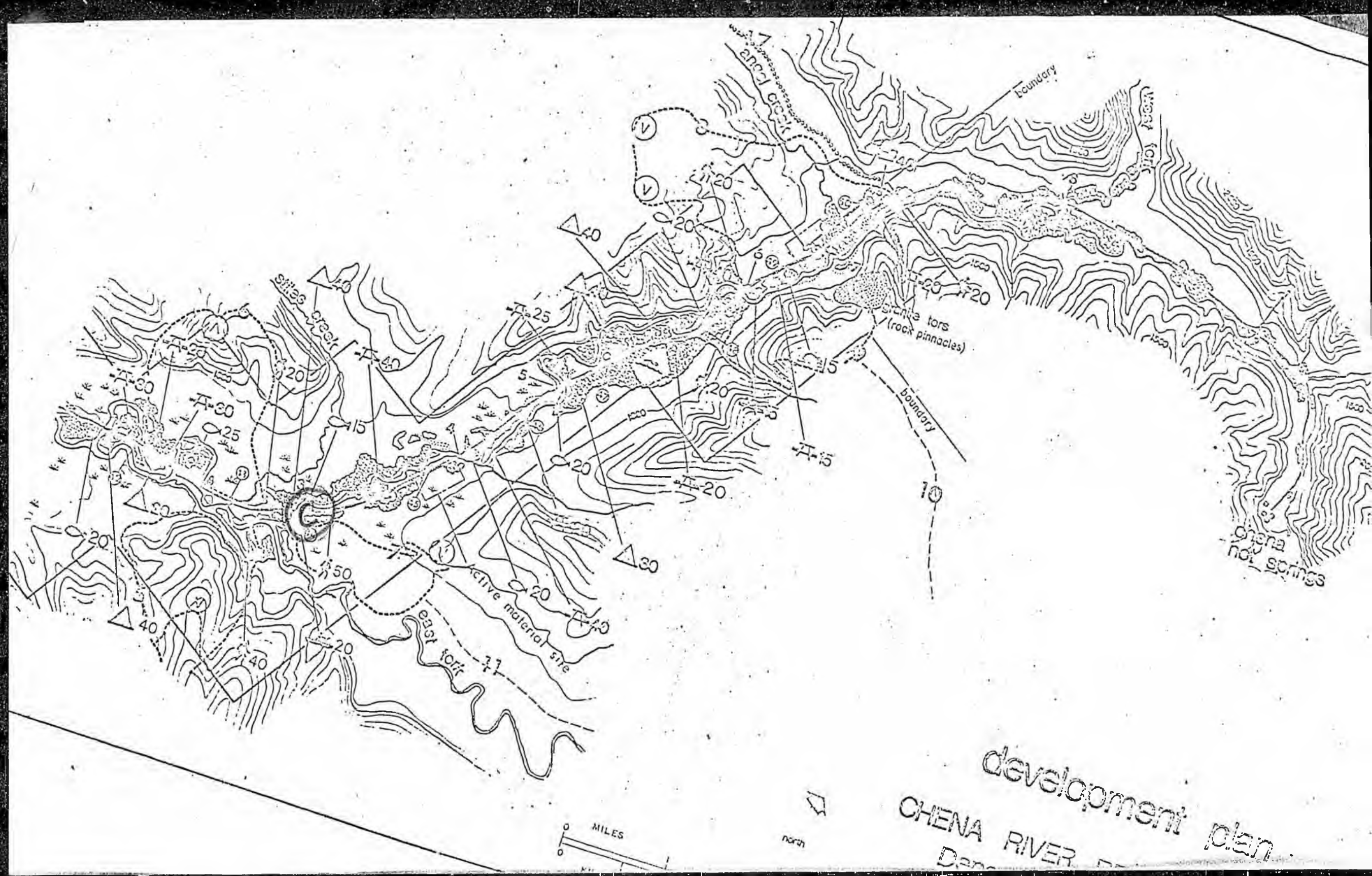
Legend

- Boat Landing
- Camping
- Fishing
- Motor Trail Head
- Picnicking
- Rifle Range
- Trail Head
- Rock Climbing
- Swimming
- Motor Trail
- 30 Parking Space
- Developed Trail
- Viewing
- 1-7 Bridge Number



0 1 2
MILES

to
tors



boundary

West fort

sirnia tors
(rock pinnacles)

boundary

Chena
hot
springs

Siles creek

active material site

East fort

MILES

north

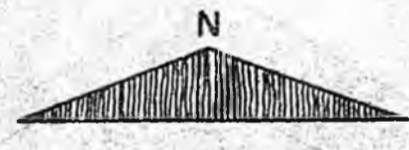
development plan
CHENA RIVER
Dam

SWIM BEACH & BOAT DOCK

ADMINISTRATION, CHOW HALL & CAMPS

NORTH ROLLY LAKE

NORTH ROLLY LAKE GROUP CAMPS



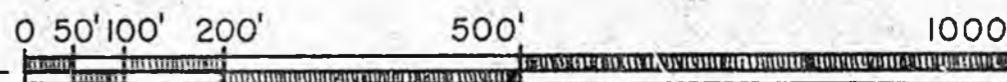
Detail Sheet No. 4

A Part of the Master Plan for the Nancy Lake State Recreation Area
STATE OF ALASKA

Department of Natural Resources - Division of Lands

S J H HEDLESTON
LANDSCAPE ARCHITECT
PLANNING CONSULTANT
67202, RA 2 1711

SCALE - 1" = 200'



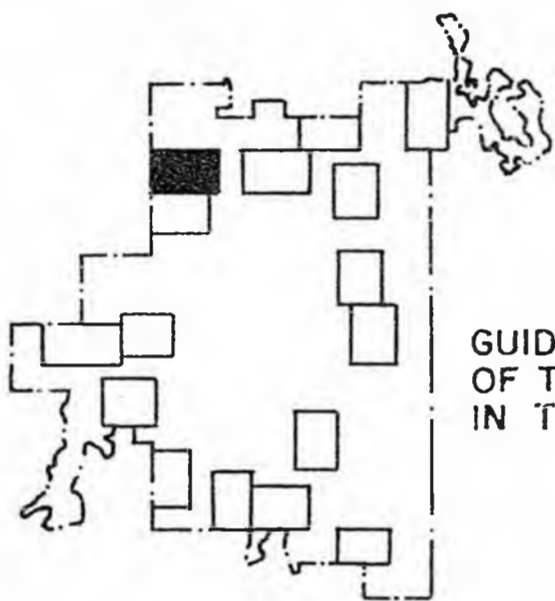
717B-4 2/1/67



ADMINISTRATION, CHOW HALL & CAMPS

SWIM BEACH & BOAT DOCK

NORTH ROLLY LAKE



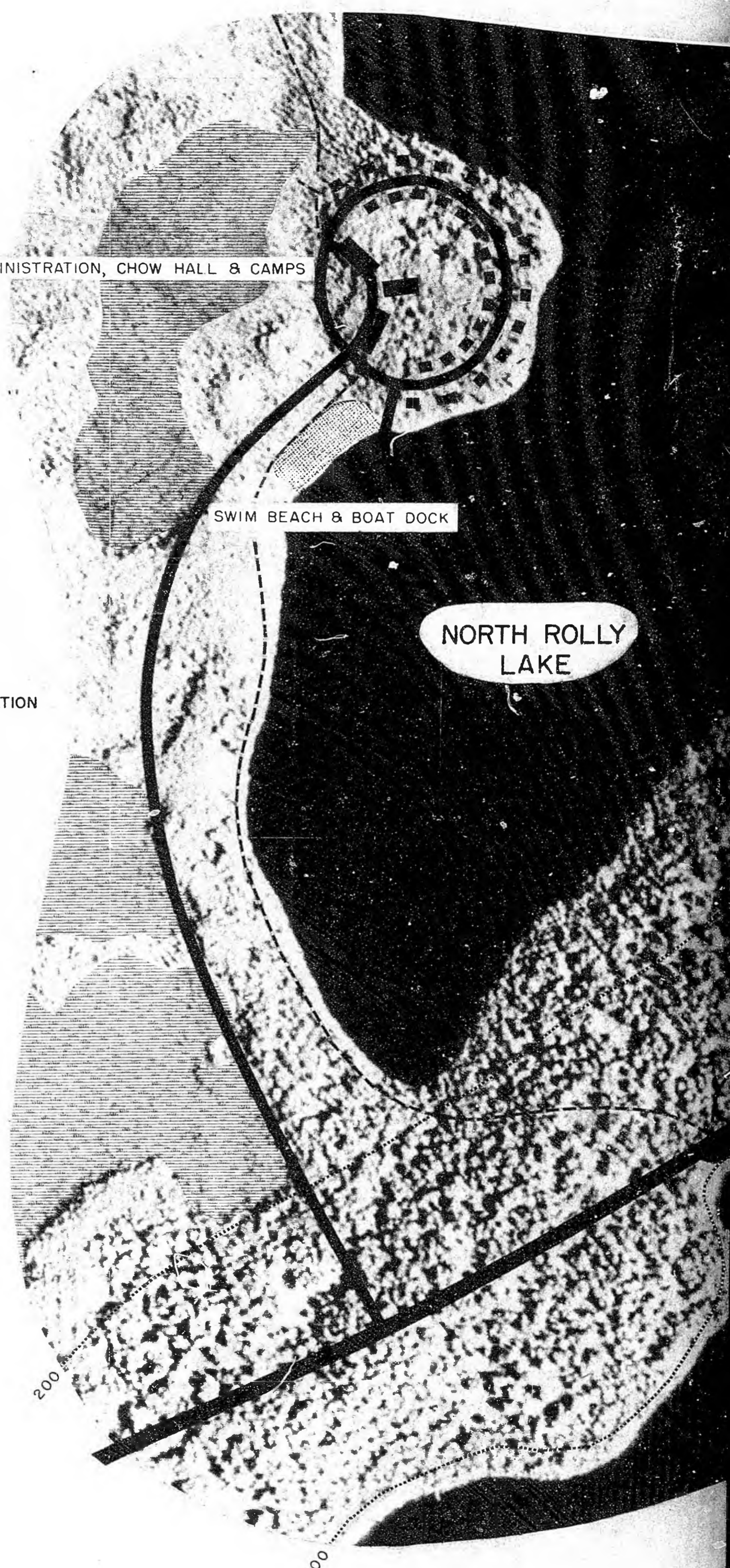
GUIDE FOR LOCATION OF THIS DETAIL IN THE PARK.

Legend

-  Contour
-  Swamp
-  Woods
-  Open Ground (dry)
-  Water
-  Main Road
-  Two-way Facility Access Road
-  One-way Road
-  Boat Launch Ramp & Parking
-  Foot & Horse Trail

NOTE

Detail sheets are schematic, indicating the feasibility and capacity of a facility at the general location shown. They are not intended for use as actual designs.



Chena River Recreation Area

From high tundra covered alpine ridges to gravel bars along the winding river, the Chena River Recreation Area offers a multitude of recreational activities. Summer activities include fishing, canoeing, camping, picnicking, photography, hiking and nature study. During the winter months the snow capped peaks, gently sloping hills, and wide valleys provide excellent cross-country skiing and snowmobiling.

Highlights of the area include the Granite Tors, resembling an army of giant monolithic rock formations marching across the ridge tops; the majestic Chena Dome providing a spectacular view of the surrounding area for hundreds of miles, and the clear blue Chena River with its numerous gravel and sand beaches.

Climatic conditions, recreational opportunities and spectacular scenery make the Chena River recreation Area one of the most inviting sites in the State.

The State of Alaska, Division of Parks, in realizing the vast potential for the Chena River Recreation Area contracted with Bomhoff, Collie & Klotz, Engineers and Planners, Anchorage, Alaska, to prepare a Master Plan for the area development and possible enlargement. The development plan which is proposed is the result of an intensive study by the BCK field team and planning department. Many hours were spent in the field performing studies to assure the best use of building materials, recreational opportunities, flora and fauna, and archeologic and geologic features.

Many individuals and groups have offered comments and suggestions, all of which have been considered in arriving at the plan which is proposed.

We appreciate your comments regarding the plan.

Photograph courtesy Ben West

BOUCH M
LINEAU, ALASKA 99811

★ Fairbanks



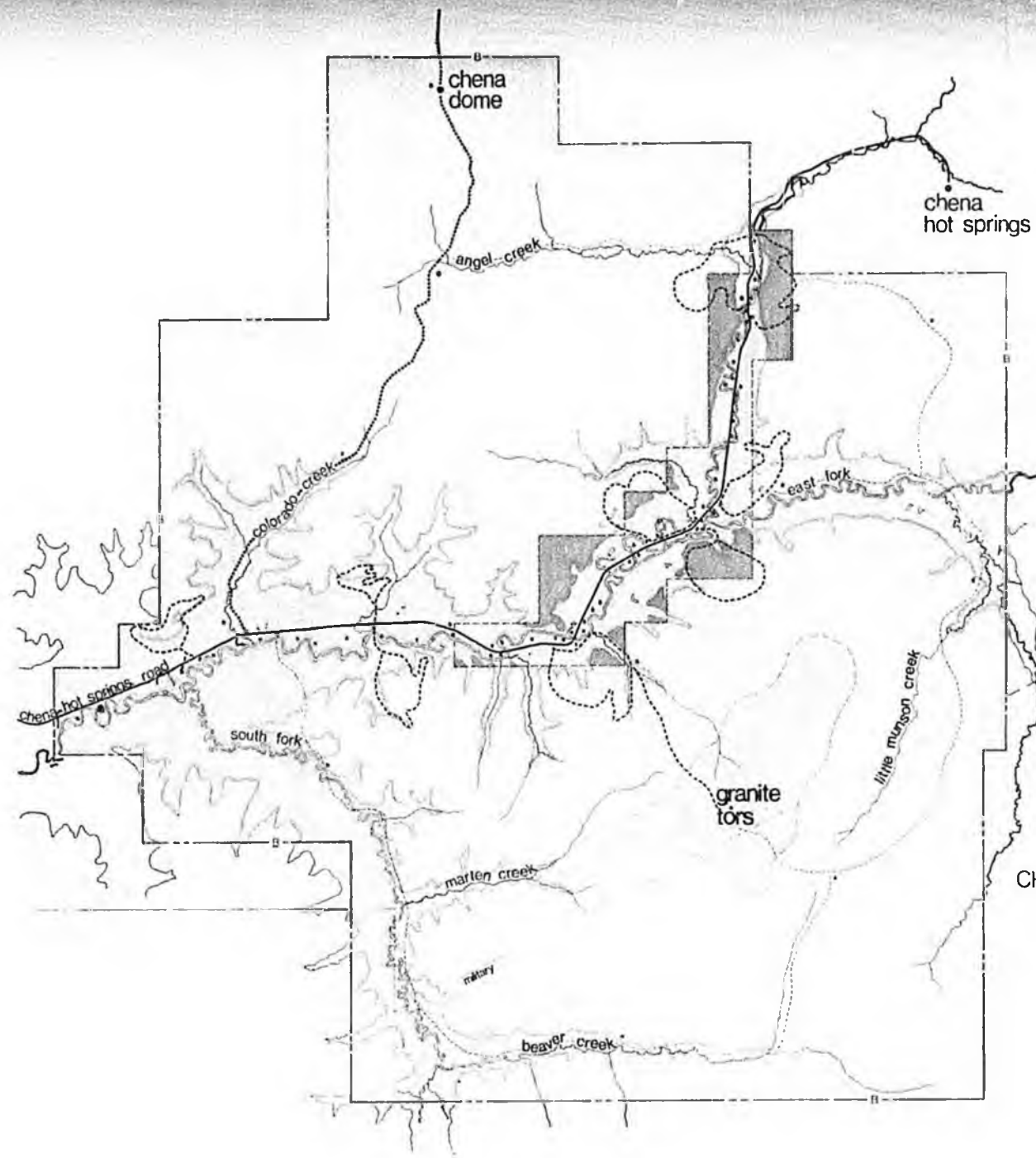
State of Alaska
Department of
Natural Resources

Division of Parks



Chena River
Recreation Area

Bomhoff, Collie and Klotz




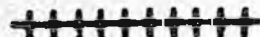







Legend

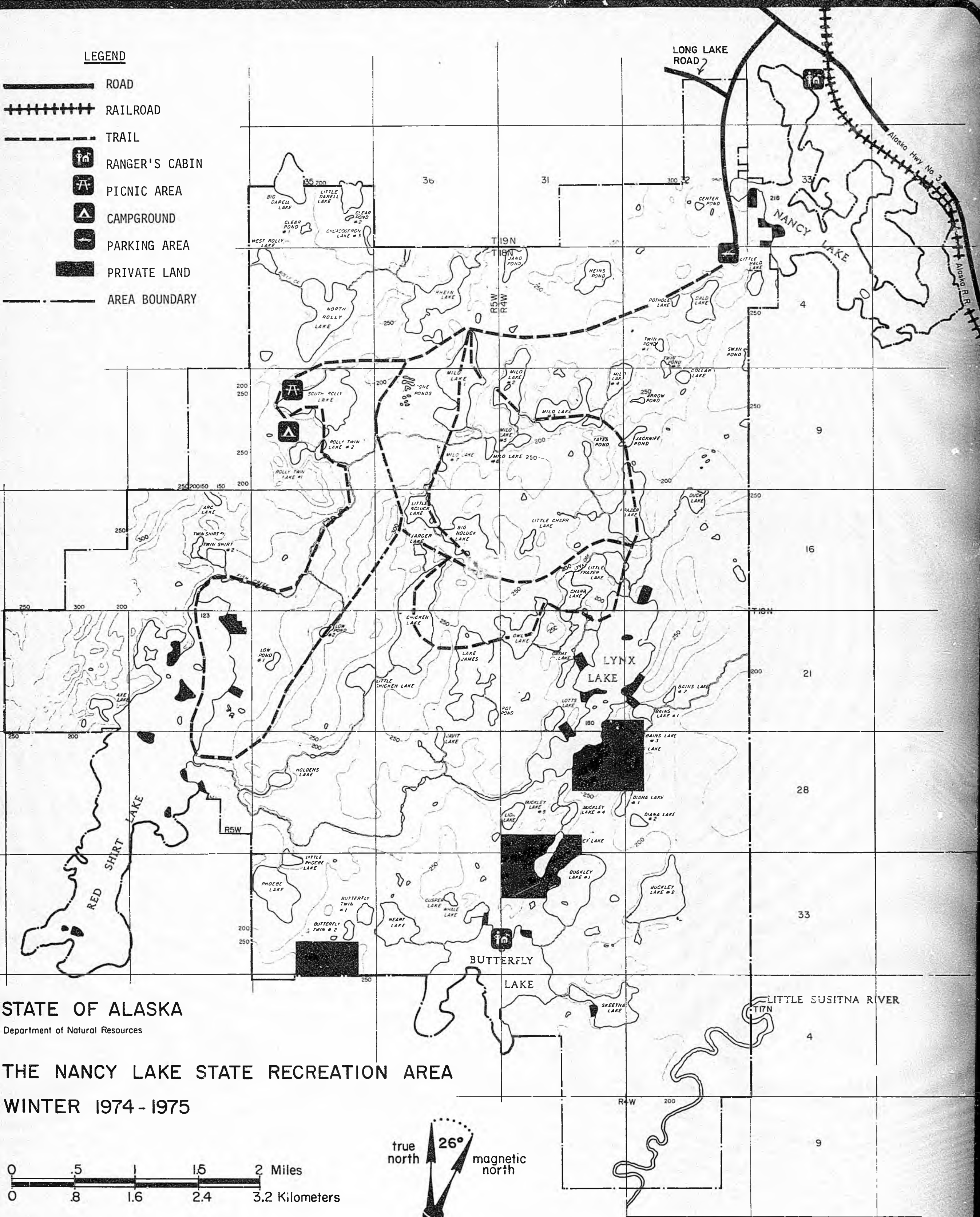
- * Visitors Center
- Recreational Development
- Maintenance - Headquarters
- Primitive Trails (primary system)
- ... Developed Trails
- ... Motor Trail
- ⊔ Proposed Boundary
- - - Present Recreation Area



CHENA RIVER RECREATION AREA
 Department of Natural Resources
 Division of Parks - Alaska

LEGEND

-  ROAD
-  RAILROAD
-  TRAIL
-  RANGER'S CABIN
-  PICNIC AREA
-  CAMPGROUND
-  PARKING AREA
-  PRIVATE LAND
-  AREA BOUNDARY

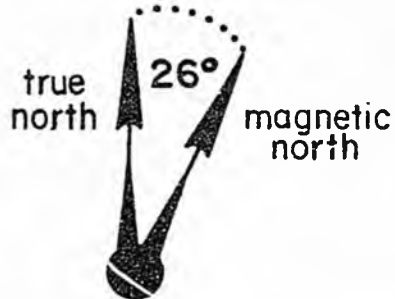
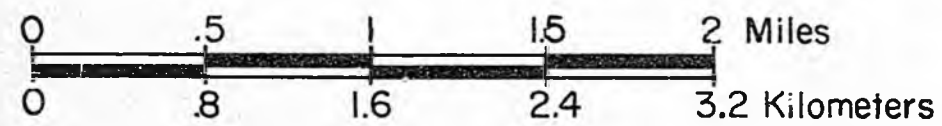


STATE OF ALASKA

Department of Natural Resources

THE NANCY LAKE STATE RECREATION AREA

WINTER 1974 - 1975





SNOWMOBILE

K i



TRAIL SYSTEMS

RED SHIRT LAKE TRAIL. This 15 mile loop trail provides access to Red Shirt Lake, the largest water body within the Recreation Area. From the trailhead parking lot, continue 4.3 miles down the parkway (unplowed from here on) to the campground at South Rolly Lake. On the north side of the campground follow the trail onto the lake surface and continue south via Fish Creek, the stream draining the lake, to Red Shirt Lake. Approximately 1.7 miles south of where Fish Creek enters Red Shirt Lake, the trail leaves the lake surface and continues back to the parkway. Red Shirt Lake offers good rainbow trout and burbot fishing.

LYNX LAKE TRAIL. This 12.5 mile loop trail provides access to 13 lakes, including Lynx Lake, the third largest lake in the recreation area. This route is a part of the summer canoe trail system. From the trailhead parking lot, proceed on the unplowed section of the parkway for 2.5 miles to where Lynx Lake trail leads south across the surface of Milo Lake #1. Note on the map on the opposite side the alternative loop available by traversing from Frazer Lake to Big Noluck Lake. There is also a route leading to the Red Shirt Lake Trail near Jarger Lake (see map for location). Lynx Lake offers fair rainbow trout and burbot fishing.

WINTER SAFETY

Recreationists, particularly during winter months, should be aware of their physical capabilities and the limitations of their equipment. Experienced travelers on longer trips always carry a flashlight, extra food, clothing, first aid kit, fire starting materials, light stove, tent and sleeping bag. Overnight trips require advance planning and training in winter camping techniques.

Winter travelers should use caution for open water, overflow conditions, thin ice and periods of extreme cold. When crossing frozen water bodies, travelers should remain widely spaced. Opportunity for rescue will then exist should a party member break through the ice.

Always inform a responsible person of where you are going and when you intend to return from your trip. Traveling alone is not advisable in winter.

If you become lost or confused, don't panic. Stop and think of your route and look for known landmarks. From many lakes and high points, Mt. Susitna can be seen to the west. The Talkeetna Range, with gently sloping Bald Mountain, can be seen to the east, while the rugged Chugach Mountains may be visible to the south. At night the faint

glow of Anchorage lights may be visible to the south. If you are lost, remain in one place and display a distress signal such as a smoky fire or an SOS signal stamped in the snow. You and your signals will be more visible upon the surface of a lake or pond. Once you stop, remain at that spot until help arrives.

SNOWMOBILERS. In addition to the preparations detailed above, snowmobilers should carry tools, spark plugs and a spare drive belt. For longer trips, extra gasoline and oil will be necessary.

SKIERS. A broken ski can leave you stranded - unless you carry an emergency ski tip. Invest in one and carry it at all times.



Snowmobile

K i



TRAIL SYSTEMS

RED SHIRT LAKE TRAIL. This 15 mile loop trail provides access to Red Shirt Lake, the largest water body within the Recreation Area. From the trailhead parking lot, continue 4.3 miles down the parkway (unplowed from here on, to the campground at South Rolly Lake. On the north side of the campground follow the trail onto the lake surface and continue south via Fish Creek, the stream draining the lake, to Red Shirt Lake. Approximately 1.7 miles south of where Fish Creek enters Red Shirt Lake, the trail leaves the lake surface and continues back to the parkway. Red Shirt Lake offers good rainbow trout and burbot fishing.

LYNX LAKE TRAIL. This 12.5 mile loop trail provides access to 13 lakes, including Lynx Lake, the third largest lake in the recreation area. This route is a part of the summer canoe trail system. From the trailhead parking lot, proceed on the unplowed section of the parkway for 2.5 miles to where Lynx Lake trail leads south across the surface of Milo Lake #1. Note on the map on the opposite side the alternative loop available by traversing from Frazer Lake to Big Noluck Lake. There is also a route leading to the Red Shirt Lake Trail near Jarger Lake (see map for location). Lynx Lake offers fair rainbow trout and burbot fishing.

WINTER SAFETY

Recreationists, particularly during winter months, should be aware of their physical capabilities and the limitations of their equipment. Experienced travelers on longer trips always carry a flashlight, extra food, clothing, first aid kit, fire starting materials, light stove, tent and sleeping bag. Overnight trips require advance planning and training in winter camping techniques.

Winter travelers should use caution for open water, overflow conditions, thin ice and periods of extreme cold. When crossing frozen water bodies, travelers should remain widely spaced. Opportunity for rescue will then exist should a party member break through the ice.

Always inform a responsible person of where you are going and when you intend to return from your trip. Traveling alone is not advisable in winter.

If you become lost or confused, don't panic. Stop and think of your route and look for known landmarks. From many lakes and high points, Mt. Susitna can be seen to the west. The Talkeetna Range, with gently sloping Bald Mountain, can be seen to the east, while the rugged Chugach Mountains may be visible to the south. At night the faint

glow of Anchorage lights may be visible to the south. If you are lost, remain in one place and display a distress signal such as a smoky fire or an SOS signal stamped in the snow. You and your signals will be more visible upon the surface of a lake or pond. Once you stop, remain at that spot until help arrives.

SNOWMOBILERS. In addition to the preparations detailed above, snowmobilers should carry tools, spark plugs and a spare drive belt. For longer trips, extra gasoline and oil will be necessary.

SKIERS. A broken ski can leave you stranded - unless you carry an emergency ski tip. Invest in one and carry it at all times.



DEPARTMENT OF NATURAL RESOURCES
DIVISION OF PARKS
POUCH M
JUNEAU, ALASKA 99811

SMITH
NANCY LAKE

P
PLAN
P
PROGRAM
B
BUDGET

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF PARKS
POUCH M
JUNEAU, ALASKA 99811

State of Alaska Department of Natural Resources Division of Parks and Lands

send proposed
to finance

3/23/76

Returned to HF by Chief
Clerk - These seem to be
proposed amendments, not
adopted.

Pat

The following, constituting a "Planning Advisory Committee," were most helpful in formulation of the Nancy Lake State Recreation Area Plan -

- Dick Almon - Parks Designer - Alaska Division of Lands
- Roscoe Bell - Director - Alaska Division of Lands
- Wayne Boden - Recreation Specialist - U.S. Bureau of Land Management
- Dick Button - Lands Officer - Alaska Division of Lands
- Bill Creighton - Director of Parks & Recreation - City of Anchorage
- Larry Dutton - District Forester - Alaska Division of Lands
- Chris Evans - Planning Director - City of Anchorage
- Scott Harrison - Recreation Planner - U.S. Forest Service
- George Hallett - Area Forester - Alaska Division of Lands
- Joe Lawlor - Acting Area Manager - Alaska Division of Lands
- Mike Leach - Acting Area Manager - Alaska Division of Lands
- Earl Plourde - State Forester - Alaska Division of Lands
- Harold Pomeroy - Chairman - Kenai Peninsula Borough
- Dick Prasil - Research Biologist - U.S. National Park Service
- Bill Scheck - Special Assistant to the Director - Alaska Department of Natural Resources
- Ted Smith - Chief - Parks & Recreation - Alaska Division of Lands
- Dale Tubbs - Area Forester - Alaska Division of Lands
- Bob Vroman - Chairman - Matanuska-Susitna Borough

FISCAL SUMMARY (APPROXIMATION)

Concessionaire -- Lodge, Cabins, Tent Cabins -- based on 80% occupancy -- 75 day season averaged overall rate per person per day -- total of 450 units, 1800 persons -- lodging only @\$10.00 day	\$1,080,000
Restaurant -- lodge patrons only plus 10% drop-in trade -- 480 persons @\$9.00 per day	324,000
Riding Concession -- average 100 hours rental per day -- 75 day season @\$2.50	18,750
Marinas -- average 200 hours boat rental per day -- 75 day season @\$3.00	45,000
Grocery Store and Gas Station Based on total campground, cabin, tent camp units of 1940 - 50% of occupancy (to compensate for grocery stock carried in) for 75 day season expenditure of \$1.50 per person per day -- average party size of 4.	436,500
All other sources	200,000
Gross sales rounded to nearest 10,000	\$2,100,000
Profit 15%	\$ 315,000

INCOME SUMMARY (Rounded to nearest \$1,000)

5% concessionaire profit to State of Alaska	\$ 105,000
*Income from entry charges	
(1) Campers (52,500 parties) all for two day stay.	
25% with boat -- 13,125 @\$3.50	46,000
75% without boat -- 39,375 @\$2.50	98,000
(2) Picnicers (95,700 parties) 10% with boats -- 9570 @\$1.25	12,000
90% without boats -- 27,100 @\$.75c	65,000
Greens fees -- 100 - 18 hole rounds per day -- 175 day season -- @\$5.00	39,000
Total receipts	\$ 365,000

*It is assumed that 10% or less would purchase the season decal. This number would not alter these approximations sufficient to warrant calculation.
 (1) Based on 80% occupancy of all units for 75 day season.
 (2) Based on 100% occupancy of all units Saturdays and Sundays; 10% occupancy week days for 11 week season.

SUMMARY

*Annual costs (Rounded to nearest \$1,000)	
75% Payroll	\$ 264,000
2% Services - contractual	7,000
7.5% Commodities	26,000
8.5% Current charges and obligations	30,000
7% Properties	25,000
Total	\$ 352,000
Receipts	365,000
Total operating profit	\$ 13,000

*AIPE - Bulletin #36 - Budgeting

THE CONSULTANT WISHES TO PARTICULARLY THANK THE FOLLOWING LISTED AGENCIES FOR THEIR DIRECT ASSISTANCE:

Alaska Department of Fish and Game

Alaska Department of Public Works -- Division of Buildings

Alaska Department of Economic Development and Planning

Alaska State Highway Department

U. S. Department of Agriculture

Soil Conservation Service -- Palmer, Alaska

Forest Service -- Regional Office, Juneau, Alaska

U. S. Department of Interior

National Park Service -- Cooperative Activities Branch

Bureau of Land Management -- Anchorage, Alaska

Fish and Wildlife Service -- Bureau of Sport Fisheries and Wildlife -- Kenai, Alaska

IN ADDITION TO THOSE DIRECTLY QUOTED, THE FOLLOWING PUBLICATIONS SERVED AS IMPORTANT REFERENCES FOR THE REPORT:

Alaska Department of Natural Resources, Division of Lands,

Alaska Public Outdoor Recreation Plan -- Sept. 1965

Camping Under the Midnight Sun -- 1966

City of Anchorage -- Parks and Recreation Department -- City Owned Parks 1966 and Parks and Open Space Standards.

City of Anchorage, Planning Commission

Anchorage, Alaska -- 1980 Metropolitan Area General Plan -- Wilsey, Ham and Blair - Consultants

Airports and Urban Planning in the Greater Anchorage Area -- 1961

A Neighborhood Planning Program for Anchorage -- 1965-1970.

U. S. Dept of Interior, National Park Service

Recreation in Anchorage -- 1954

Alaska Recreation Survey -- Analysis of Travel with Special Reference to Tourists -- 1953

Alaska Recreation Survey -- Economic Aspects -- 1953

A Recreation Program for Alaska -- 1955

U. S. Department of Commerce, Census Bureau

Alaska -- General Social and Economic Characteristics -- 1960

Population Estimates -- 1970-1985 -- February, 1966

University of Alaska

Tourist Industry in Alaska

Alaska Sport Fisheries and Wildlife -- Review of Recreational Benefits Derived from Fish and Game Resources -- 1960-2000 -- Nov. 1964.

The consultant is obligated to the Alaska Department of Economic Development & Planning, Travel Division for the photos on pages 12, 13, 19, 42 and 62 and to Mr. Peter Martin, Alaska Division of Lands, Anchorage for the photos on pages 14, 15, 17, 29, 31, 32, 45 and 48.

SAM L. HUDDLESTON & ASSOCIATES
PLANNING CONSULTANTS
LANDSCAPE ARCHITECTS
2395 SOUTH JOSEPHINE DENVER, COLORADO 80216 722-1711

March 23rd, 1967

Mr. Phil W. Holdsworth, Commissioner
Alaska Department of Natural Resources
State Capitol
Juneau, Alaska

Dear Commissioner Holdsworth:

We are most pleased to transmit herewith the final edition of the Master Plan for the Nancy Lake State Recreation Area.

This exhaustive study includes an analysis of outdoor recreation needs and desires of the Anchorage and Valdez-Sitka Boroughs to 1980 and the methodology to be employed to fulfill this recreation demand consistent with effective use of the land of the Recreation Area.

In our opinion, the vision and resourcefulness of the State of Alaska has set the standard for state park planning for the nation. It has been a distinct pleasure to work with the Division of Lands on this project. The enthusiastic cooperation of the Division has helped to make this a most pleasant task.

As has been stated numerous times in various ways, the creation of a Master Plan is only as effective as the ability to follow it through to completion. Now that the trail has been broken and the groundwork laid, the implementation of the proposals recommended herein are of the utmost importance. We are confident that this report will be translated into a plan of action immediately.

Citizens of Alaska should indeed be proud that they live in a state which looks with unblurred vision to tomorrow.

Respectfully submitted,

SAM L. HUDDLESTON & ASSOCIATES

Sam L. Huddleston
Sam L. Huddleston
Consultant

hul/jcn

SAM L. HUDDLESTON • MEMBER AMERICAN INSTITUTE OF PLANNERS • FELLOW AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

STAFF - HOUSING REQUIREMENTS - MINIMUM RESIDENCES

- Superintendent
- Chief Ranger
- Maintenance Foreman
- Assistant Maintenance Foreman
- Golf Course Foreman

FEES AND CHARGES

The single access point of Nancy Lake assures practically 100% control over users. True, a few could come in "over the fence" via float plane or by boat across one of the lakes on the boundary, or even on foot but the total of these would be insignificant.

The most direct, the least costly in overhead and the least objectionable method (to the user) would be collection of one fee at the entrance point. The problem that arises is one of differentiating among users and "selling" a minimum number of "packages."

Concession charges would be collected at the point of sale or service by the concessionaire but the lodge or cabin patron should still pay a single entrance fee. A season ticket in the form of a decal is essential. This would permit repeat users to avoid stopping at the Entrance Station on every visit. They could be waved on through. It is recommended that the season decal be one charge which would permit use of all facilities other than those that are concessionaire operated. It is also recommended that the daily entrance charge be directly related to the vehicle being used.

Tabulated, these charges would be:

Season Decal -- Would permit entry of any vehicle carrying it whether with or without a boat or camping trailer and would permit unlimited use of picnic grounds, camp grounds and launch ramps. \$10.00

Daily Entry Charges -- Vehicles without boat, camping trailer or camping equipment (Party of picnickers, sightseers, swimmers, hikers or concessionaire customers)75
 Same type party with boat 1.25

Camping party in car, camper or with camping trailer but without a boat 1.50

Each additional day 1.00

Same type party with boat 2.00

Each additional day 1.50

Greens fee -- collected at the golf course \$3.00 nine holes
 \$5.00 eighteen holes

*Rebated by the concessionaire if a short term customer only -- e.g., dining room, etc.

CONCESSIONAIRE OPERATIONS

Simple, "high bid" concessionaire contracts should, as a matter of policy, be avoided. The National Park Service has operated on a basis of negotiation of such contracts for many years, finding this method to be best suited to the major concession operations it sanctions in the national parks. The basic purpose of course of concessions is to provide a needed public service.

Having a concessionaire operate such services removes the public agency from the private enterprise field. At the same time it enables the public agency to control the amount of profit, assuring that gouging does not occur and that the public receives its money's worth in all concession purchases.

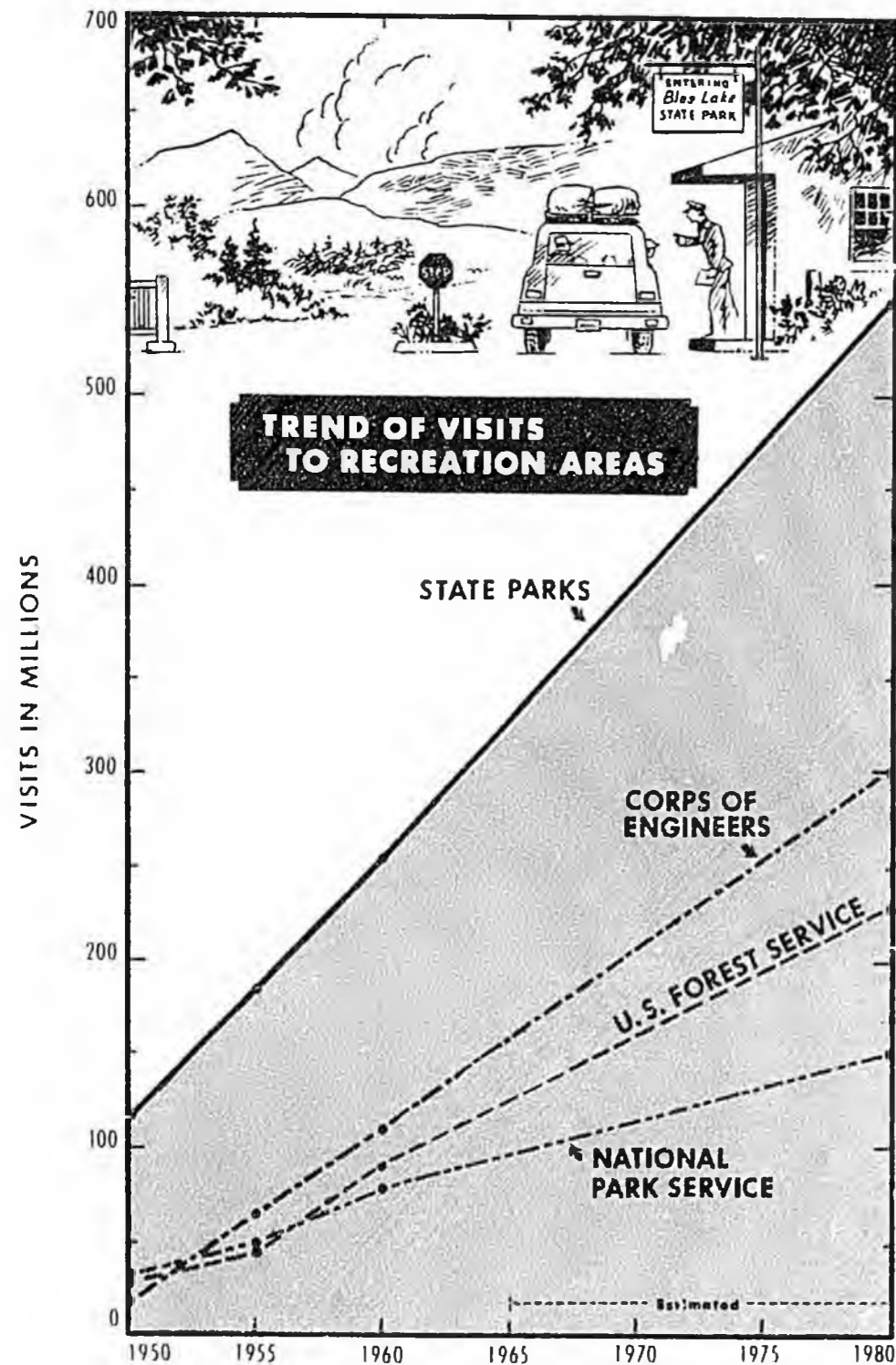
Under his contract the concessionaire, subject to State approval, would establish charges for:

1. Occupancy of the lodge, cabins or tent camps and all charges related thereto.
 - a. Lodge patrons only would be permitted use of the lodge pool.
2. Restaurant.
3. Horse rental and guided or group trail rides.
4. Marina operations including boat rental, slip leasing, boat gas, supplies and equipment.
5. Cruiser rides -- Nancy Lake.
6. Float plane slip leasing, gas and service.
7. Bathhouse basket rental and all elements of the Swim Beach refreshment stand (mostly coin operated machines).
8. Grocery store -- could include fish handling, freezing and packing.
9. Gas Station.
10. Golf Course -- pro shop, golf cart rental but not greens fees.
11. Winter Sports Complex -- warming house, refreshment stand, ski school, ice skates, skis, sleds, toboggans, snow mobiles -- rental.

The Entrance Station would not be manned of course during the winter except, possibly, for major events when it might be used as a ticket booth. The concessionaire should be permitted to make an overall entrance charge for admittance to the Winter Sports Complex. If there is considerable interest in ice fishing, the concessionaire should be enabled to rent fishing huts which he would set up on the ice of any lake that is accessible. Or the huts could be stored (during the winter only) in boat launch ramp parking areas and towed out to locations specified by fishermen. Park maintenance people would plough snow for concessionaire's winter access.

TABLE OF CONTENTS

	Page		Page
Historical Background	1	Group Camps	37
Location Map.	2	Red Shirt Complex	39
PART 1 - Master Plan-Summary & Tabulation		Typical Camp Ground	41
Master Plan	3	Typical Picnic Ground	43
Master Plan Summary.	4	PART 6 - Development Program & First Five Year Budget Including Acquisition Schedule	
Development Program Diagram	5	General Basis and Unit Costs	46
Development Program Summary	6	1968 Budget	49
PART 2 - Analysis - Resident & Tourist Recreation Supply, Demand & Need		1969 Budget	51
Artist's View of Entrance Area	7	1970 Budget	53
Demand and Need - Resident Population	8	1971 - 1975 Program	55
Socio-economic Characteristics	9	1976 - 1980 Program	58
Equivalent Facilities	10	Acquisition Schedule	61
General Facility Analysis	12	PART 7 - Recommendations on Policies; Maintenance & Operations including Fees and Charges; and Fiscal Summary	
Camping Demand & Need - Tourists	13	General and Policies	63
Facility Analysis Table	18	M and O - Staff and Employees	64
PART 3 - Analysis - Land and Landscape		List of Personnel	66
Acreage, High Ground, Water.	21	Basic M and O Equipment	66
Swamps.	23	Maintenance Buildings - Space Requirements	66
Land Slope	25	Staff Housing Requirements - Residences	67
Open, Dry Areas	27	Fees and Charges	67
PART 4 - Climate		Concessionaire Operations.	67
General Weather Table	30	Fiscal Summary	68
PART 5 - Plans & Description - Main Use Areas		Income Summary	68
General.	32	General Summary	68
Entrance, Main Concession Complex and Residence - Maintenance Areas.	33	Bibliography	69
Golf Course	35		



U.S. Public Health Service Publication No. 1195

HISTORICAL BACKGROUND

The rapidly increasing demand for recreation opportunities in urban areas led Division of Lands personnel to examine State land holdings in the Anchorage Service Area for the possibility of developing a multi-activity family recreation area.

Such an area would be water-oriented and should provide a variety of active recreation opportunities. A year round family type development was indicated in an area large enough to provide many diversified activities where there would be available quality outdoor recreation experiences for each member of the family during all seasons of the year.

The search rapidly centered on the Nancy Lake - Red Shirt Lake area. This lake area, being the least developed with private holdings and the last available land of its type in the Service Area, appeared to have the desirable elements needed. After considerable study some tentative boundaries were drawn, a possible development layout prepared, and the package was presented to the Matanuska - Susitna Borough for consideration. Their reaction was enthusiastic.

A bill was introduced in the legislature, and upon its passage, the State's first large recreation area became a reality.

Sam L. Huddleston and Associates of Denver was retained to prepare a master development plan program and budget for this area. Their report is presented herewith.

Assistant Foreman be employed as permanent staff at such time as the first 18 holes are completed. These men would be supplemented by 5 seasonal helpers for the 18 holes or 3 for the first 9 to be constructed.

Lodge, cabin, tent cabin and certain other refuse, though the concessionaire responsibility, must be considered in refuse disposal. Miscellaneous light refuse from the cabin areas, lodge and tent cabins could be handled by the incinerator units which the concessionaire could lease for the purpose. They would be available to him for instance during two shifts of the day. Heavy, wet, restaurant garbage should be handled by heavy duty kitchen disposals and thence into the sewage system.

It is suggested that as many employees as possible be natives for local color and the benefit of out-of-state visitors but, more important, to furnish needed jobs for those people. It is noted, for instance that "50-75% of the adult, native work force is permanently unemployed except for sporadic summer jobs."

In summary, the following is a list of permanent staff and seasonal employees that would be needed to maintain and operate the area, excepting concessionaire operations.

	Gross Pay (if seasonal - 90 days - 540 hrs.)
Superintendent	\$ 17,500
Secretary - receptionist - visitor information	6,000
Radio operator -- Entrance station attendant - 4 seasonal @\$4.50	9,720
On call, part time assistance and relief - 1	1,215
Chief Ranger (qualified helicopter pilot)	15,000
6 seasonal rangers including a qualified helicopter pilot @\$5.00	16,200
Maintenance Foreman (working)	12,000
Assistant Maintenance Foreman (qualified heavy equipment operator)	10,000
Electrician)	
Plumber)	
Carpenter) seasonal @\$7.00	18,900
Painter)	
Mechanic)	
50 "local" attendants - seasonal @\$4.00	108,000
12 lifeguards (swim beach) seasonal @\$4.00	25,920
Golf Course Foreman (working)	12,000
Assistant Golf Course Foreman (working)	10,000
5 golf course helpers, seasonal @\$4.50	12,150
	\$240,170
Division level administration 10%	24,000
	\$264,170

*Rampart Project, Alaska - U.S. Dept. of Interior - Vol. 1

BASIC M & O EQUIPMENT

	Cost
2 man helicopter	30,000
Superintendent vehicle -- station wagon	4,000
Chief Rangers vehicle - station wagon	4,000
2 Ranger automobiles	7,750
Shortwave Radio station and all appurtenances	7,500
Fire truck with suction hose	20,000
Motor patrol and snow plow	25,000
7 pickup trucks - one for each trade; foreman and assistant fireman @\$4,000 equipped	28,000
2 incinerator trailers	30,000
Light bulldozer	7,500
Ford tractor with all attachments - post hole auger, trenching backhoe, etc.	7,500
Emergency inboard patrol boat on trailer	6,000
Work boat for canoe trail maintenance	6,000
Fogging equipment	5,000
Full set golf course maintenance equipment	15,000
Street sweeper	6,000

(Note - road maintenance service should be arranged with State Highway Department)

Portable welding outfit	1,500
Concrete mixer	2,500
1 Stake body truck	5,000
1 Dump truck	5,000
Carpenter shop - equipment	1,500
Mechanic, plumber, painter shops equipment @\$750 each	2,250
	\$227,000

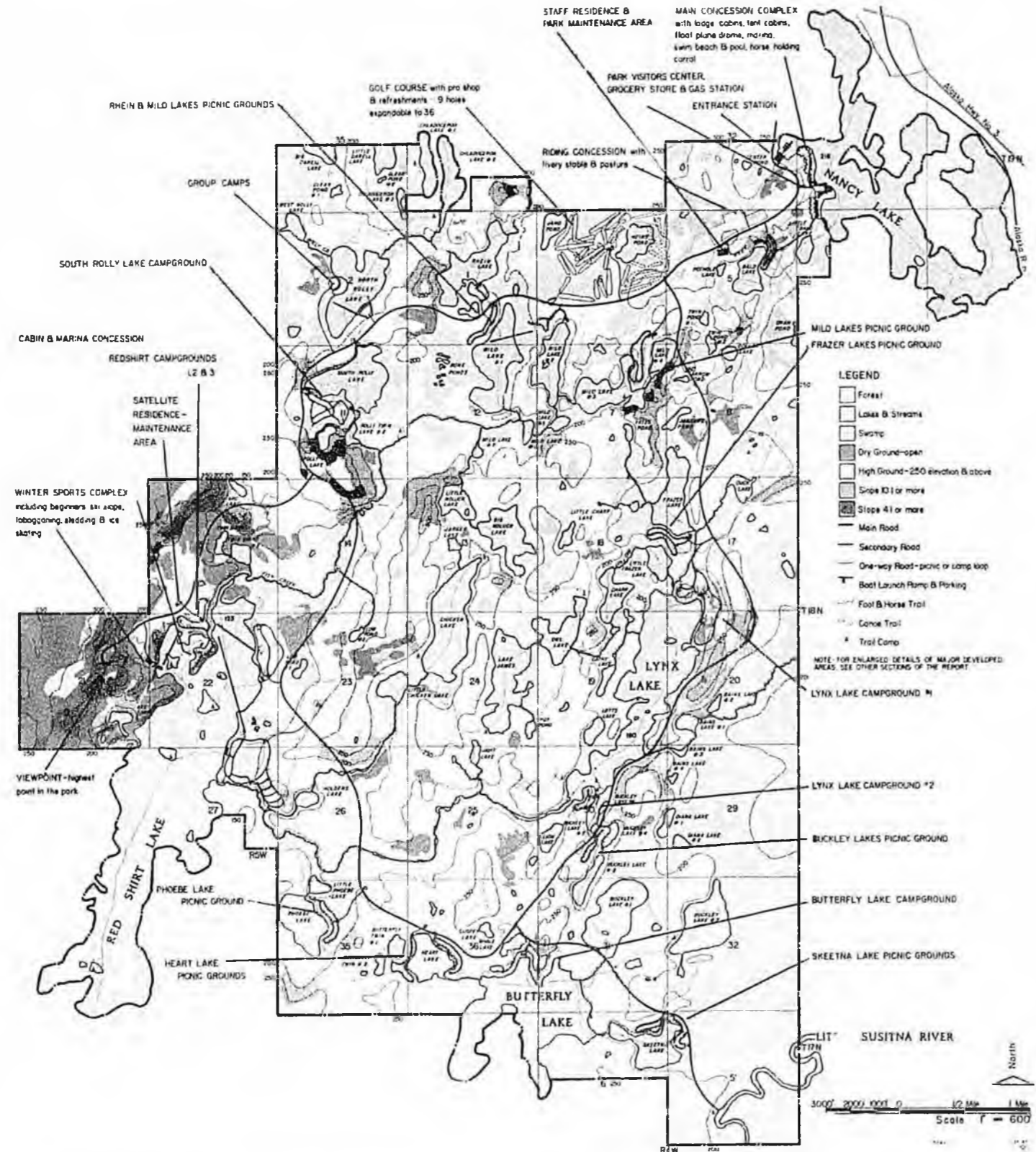
MAINTENANCE BUILDINGS - SPACE REQUIREMENTS

Garage and vehicle storage	7,500
Shops and foreman's office -- carpenter, paint, plumbing, mechanic	3,000
Golf course equipment garage	750
Helicopter hanger	500

Space should be designed into each washateria-shower building and at every other comfort station for small hand tools -- rakes, shovels, etc. Space should be included at each comfort station for 300 feet of garden hose for emergency fire use. A vandal proof storage closet is all that is necessary in these buildings for these purposes.

PART ONE

Master Plan



Some of the use zoning that will be needed has already been accomplished in the planning since campers and picnickers are segregated to different lakes. Campers are more likely to be fishermen, in fact it is estimated that one-third of campers go boating, two-thirds go swimming and three-fourths go fishing. Not only are campers segregated by lake but the camper lakes have a higher fishery quality - all campgrounds except the one on Butterfly Lake (which is No. 2 rated) are on top fishing potential lakes while picnic grounds are on lakes rated "3" and "4" for the most part. In the Rhein Milo Picnic Ground, Milo #1 is rated "1" and Rhein Lake is rated "2", Frazer Lake at the picnic ground of that name is rated "2". This "built in" separation was intended to be used to confine the kind of boating that disturbs fishermen - joyriding or speed boating and water skiing -- to the picnic lakes, Milo #1, Rhein and Frazer Lakes excepted. These three are equipped with launch ramps and should be reserved for the fishing picnicker. All of the other picnic lakes with launch ramps range from a third to three-fourths of a mile in maximum distance across - plenty large enough for water skiing or joyriding.

Another factor of the built-in zoning is that float planes would have no reason to land on the picnic lakes and could literally, be ruled off them. Float planes should be permitted only on Nancy, Butterfly and Red Shirt - because of the owners of lakefront cabins - outside the park boundary on those lakes. An additional reason at Nancy Lake would of course be the lodge - cabin concession and other concession attractions. On these three lakes, landing and taxi zones should be marked by buoys so as to separate the water users.

Since it will be impractical to zone joyriders and waterskiers off Nancy, Red Shirt and Butterfly because of the private ownership of lake shore cabins outside the park boundary, zones for these activities, particularly boating, will have to be designated and incorporated in regulations. This can best be done by a detailed analysis of the particular lake, taking into account location of the lakeshore cabins; best fishing locations; necessary float plane landing and taxi zones in view of wind direction, approaches and so on. Sail boating opportunities should not be lost sight of in the zoning process. For many of the same reasons as discussed above, it is essential that all privately held islands be acquired. The management problem on conflicting water uses will be compounded in direct relation to the existence of such inholdings -- with their planes and boats.

A problem is bound to be encountered with the private holdings as the main road is pushed on into the park. People with inholdings scheduled for acquisition will want access rights to the park road - even if for only the short time until their property is purchased. Others, lying just across the boundary or perhaps near the entrance road will see the park road as a godsend if only they can hook onto it. It should be a firm policy to deny all such requests. Effective management of the Nancy Lake Area will be lost if access to park roads is granted willy-nilly as if they were streets with private frontage.

*Charles Rombold - AIPE Management Aid #34

No particularly large or unique management problems other than the above seem to be posed. A problem somewhat unique to the Area, only because of its size, is trail system in the interior "quiet zone." This remote area is similar to such areas in many national parks. Large animal hazards may exist in it and stream hazards may occur on canoe trails, particularly to visitors from out of state. A policy of requiring registration of destination and length of absence should be required of all those who trek into the area if such hazards are in fact present.

M & O STAFF AND EMPLOYEES

Rangers (enforcement, guidance, protection and public relations) and laborers (housekeeping and cleanup) are the largest personnel costs in most park budgets. However, many new tools and management techniques are available to keep these particular costs at a minimum. The M & O recommendations herein are based on full development of the park, e.g., 1980, and at that time even more advanced methods will of course be available. Management plans should be flexible enough to take advantage of such advances.

It is a must that the Nancy Lake Area be set up for complete radio control, using the Entrance Station as the control center. All users would check through this point - either to pay the entrance fee (see page 67) or to have a season pass validated. Because outdoorsmen (fishermen in particular) may arrive at any time of the day or night, the Entrance Station would have to be manned around the clock. Other reasons for three shifts would be the long summer daylight - permitting 18 hours of golf for instance, a very real break for those on shift as are many air force personnel at Elmsdorf. One fortunate factor of the long daylight would be to spread the time of arrival and departure of vehicles so that concentrations would be more dispersed than in most state or national parks.

Since radio, the obvious communications medium, should be manned at least 16 hours, (with 24 preferable), its location in the Entrance Station, where 24 hour personnel could operate it, is logical. At certain times, weekends for instance, or when a particular event brings about a surge of vehicles, assistance would have to be available to the Entrance Station attendant-radio operator.

The radio system would include not only all patrol and maintenance vehicles but also telephone type units at all comfort stations; all washateria-shower buildings; key concession offices; staff residences and maintenance buildings and remote points such as the Little Susitna River canoe-raft takeout and the Viewpoint. In these locations its use would be dual - for emergency purposes such as reporting of a fire or boat accident by a park visitor as well as the conducting of normal business between men in the field and the control center.

The Entrance Station would also contain a master control board showing occupancy of all camp units. The arriving visitor, on paying his fee, would be given a receipted entry ticket and a set of rules and regulations with a map of the park. His assigned unit would be marked on the map, as explained earlier (see

page 42). He would be assigned by type of vehicle and its sanitary equipment—those fully self sustaining in this respect being sent to parking slips farthest from comfort stations while tent, station wagon, or plain car campers with no sanitary facilities would be assigned the slips closest to comfort stations. This control arrangement would have to be available for periods of maximum use even though it might not be used at certain times — mid-week for instance or early or late season. The same control might be necessary at times on picnic units. Space should be left for such installation if it should become necessary.

The Entrance Station would not be an information center. Those who wished to discuss something or otherwise act to hold up traffic would be sent to the Visitors Center, a few hundred yards up the road. The Center would contain the office of the Park Superintendent, whose secretary would function as receptionist and general visitor information source. The same building would house a small, self-guided, interpretive center to assist the visitor in becoming fully informed on all facilities and natural attributes of the park. In most cases it would not be necessary that he discuss his need with anyone personally. Also included in the Visitor Center would be the office of the Chief Ranger and a small conference room for staff meetings.

The Chief Ranger would have a staff of 6 temporary (seasonal) rangers. So that one ranger would be on duty at all times, one man would work one shift and two men 2 shifts with an additional man for relief. The Chief Ranger and one of his men would be qualified helicopter pilots, a helicopter to be a normal complement of their equipment. At least one daily patrol would be performed in it. By eliminating the need for patrol boats on at least the four major lakes, and for a ranger (at least on standby) for the remote quiet area, the helicopter would cut the ranger force by at least half. Capable of landing dry or wet and equipped with a light boat, strap-on-stretcher and first aid kit; and portable pump with hose and bull horn, it could control boat use on the lakes; spot and possible herd dangerous large animals; conduct rescue missions and fight small fires. Its presence on a landing pad at the visitors center would serve as a warning to rules violators as well as a measure of assurance of protection to those many out-of-staters who are concerned over the presence of dangerous animals in the Alaska bush.

The second large force is that needed for housekeeping. Even though the picnic and campgrounds are planned so that refuse cans will be located at the roadside, these cans still must be emptied frequently and any litter picked up. Comfort stations must be cleaned very often as must the washateria-shower buildings. Parking lots in particular and roadways generally must be swept occasionally. Special areas such as boat launch ramps, the Viewpoint, the Swim Beach, the Marinas and Float Plane Drome must be picked up occasionally. During the winter the road to the Red Shirt Winter Sports area and the Main Loop Road would be maintained open.

Besides the daily housekeeping chores there will be normal problems with

electrical and plumbing installations; with vandalism; and the need for painting, patching and general repair of signs and buildings will be continuous.

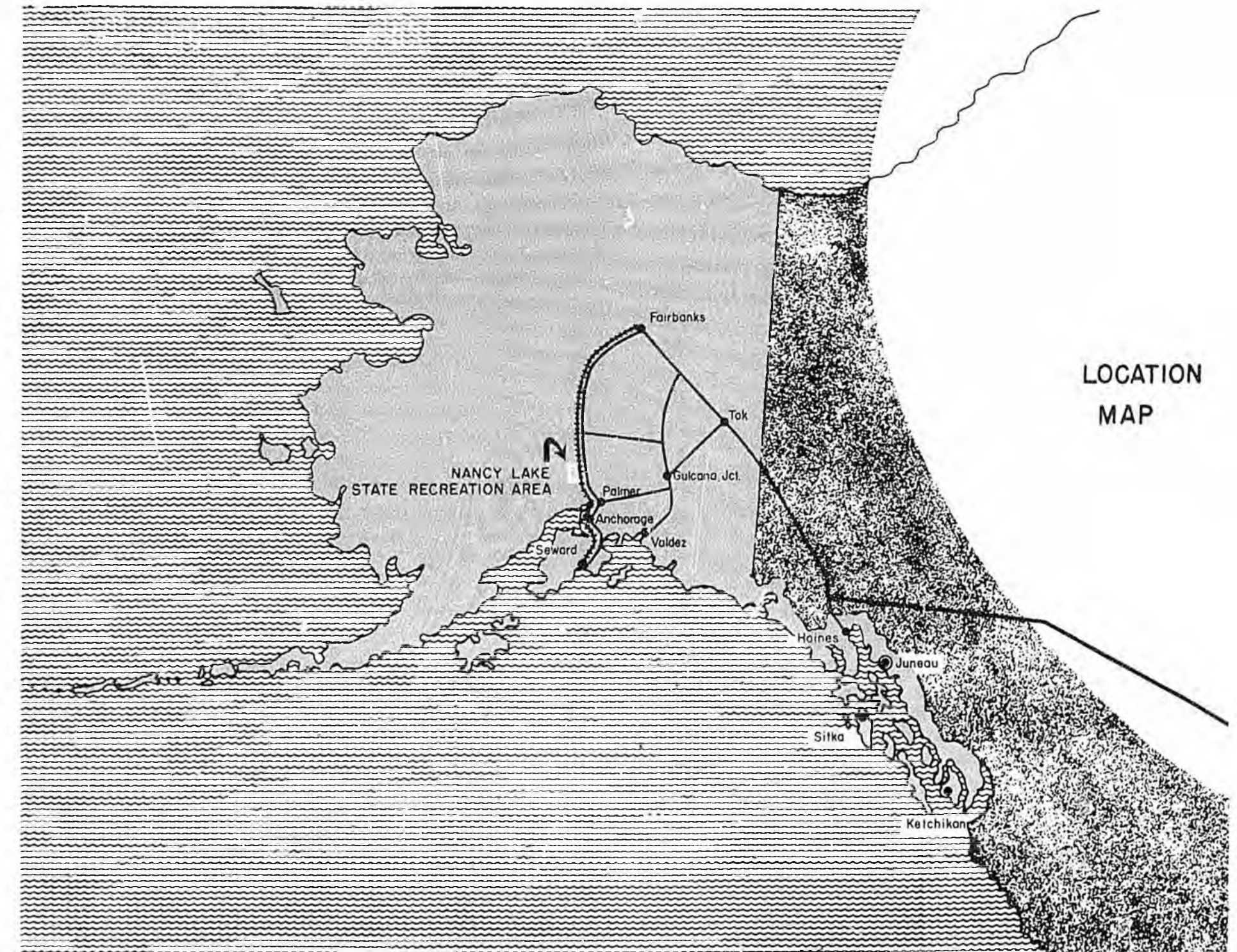
The basic force to handle this segment of M and O would start with a Working Maintenance Foreman. All his help except for an Assistant Foreman would be seasonal. The two foremen would be capable of handling most electrical, plumbing, painting, heavy equipment or carpentry in the off season. During the summer season their force would include an electrician, plumber, carpenter, painter, mechanic and heavy equipment operator. Laborers on the house-keeping detail would consist of 1 man per each 100 picnic or camp units — a total of 46 men. This number of "local" attendants would assure thorough cleaning of comfort stations and washateria-shower buildings once a day and litter pick up and emptying of trash cans at camp and picnic units at least every other day. These people would work over the weekend so as to concentrate activity during and immediately after the period of peak use. Four additional "local" attendants would pick up areas other than camp and picnic grounds — marinas, Viewpoint, etc. One of them would be equipped with a working scooter with tool box for cleanup of trail camps.

All trees from construction clearing operations should be salvaged and stacked at some central location for eventual sawing up and sale by the concessionaire. As discussed earlier, picnickers are generally satisfied with a charcoal brazier (with which picnic units would be equipped) but campers must have wood fire it seems even though they may be traveling in a fully equipped trailer or camper. Since the park would be the concessionaire's source of wood, he should be required to sell it for little more than a handling charge.

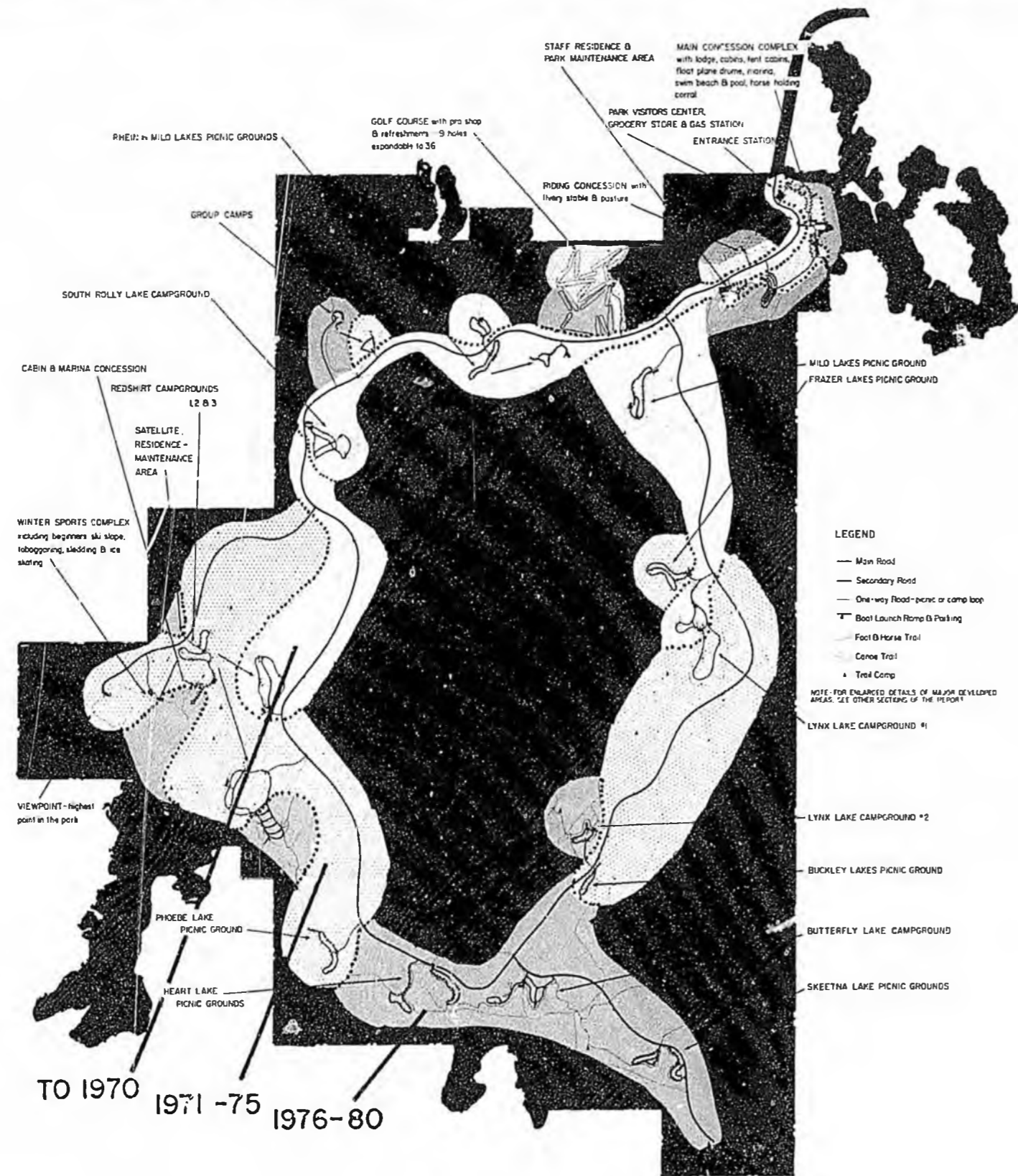
Trash disposal would be accomplished by a newly developed incinerator trailer. This is a forced air, butane furnace on wheels. Trash is thrown into it and converted very quickly into a fine ash. It is clean, quiet and other than a mild, low roar has no objectionable sound. Priced at \$15,000.00 per unit they would pay for themselves quickly by eliminating long hauls to dumps, sanitary fills and sanitation problems at dump sites.

Two of these units towed by dump trucks (to receive the ash from the hopper in the trailer plus noncombustible bottles, etc.) with a driver and two men walking, could empty all cans in picnic and camp grounds plus those at other locations on a schedule of at least once every other day. The task of this team would be to travel down the picnic, camp or other road, remove the filled plastic can liner and throw it in the incinerator. The "local" attendant would previously have emptied any litter into the plastic lined refuse cans and separated out the bottles etc. After the incinerator unit had passed the "local" attendant would place a new liner in the can.

The golf course will of course require a rather specialized maintenance crew. Because of the nature of golf course maintenance and the need for intimate knowledge of the particular course — knowledge that cannot be acquired by seasonal workers, it is recommended that a Golf Course Foreman with an As-



Development
Program



PART SEVEN

Recommendations On Policies; Maintenance And Operation Including Fees And Charges;
And Fiscal Summary

GENERAL

Policies, M and O (Maintenance and Operation) and F and C (Fees and Charges) are inextricably bound up together. They are not easily categorized and should be looked on as parts of the overall management concept. For instance, it is a matter of Policy how much fee will be charged or even whether one will be charged at all. If a fee is charged, a change comes over the Operation - the user expects and, in fact, is entitled to receive a better degree of service than if that service had no direct charge. This then bears on the quality of M and O.

Whether a fee is charged or not is academic to this report. Fee charging at parks throughout the country is now accepted as necessary policy and the question is not whether but, rather, how much.

The State of Alaska has the unique opportunity at the Nancy Lake Recreation Area to conduct some trail breaking that could be extremely rewarding to itself and to the balance of the country. This would be in the matter of Management (a better term than Maintenance and Operation) of the Area.

Most of the State Parks, either through lack of continuity in planning or in development, have not ended up as efficiently functioning units. Nancy Lake is a virgin situation that offers the opportunity to avoid this trap - by establishing and assuring continuity and an interlocking, functioning relationship of Plan Program-Management.

Continuity in development, as a basis for effective management, especially in view of a development program of 13 years, is of the first importance. As a matter of Policy this leads into the ramifications of that subject, with specific recommendations that the following be adopted as basic guidelines:

GUIDELINE POLICIES

1. That the Master Plan for the Nancy Lake State Recreation Area be certified as an accepted and approved Plan (by whatever State or Departmental action is necessary), subject to "revision only when so approved by:

A Nancy Lake Advisory Committee to be appointed by the Governor, with legislative sanction.

2. That the Master Plan includes not only the physical layout but also all written recommendations of the Master Plan document.

3. That Fees and Charges be considered a supplement to tax appropriations as a source of recreation revenue and not the primary source of funds.

4. That the Master Plan including all budget and development program cost estimates be updated annually.

*This would not apply of course to revisions in detail but, rather to those of general concept.

The long range value of the Advisory Committee would be to put a rein on the short range view that too often comes about because of a lack of continuity in administration. The long range development of Nancy Lake there is an ultimate view that must be faced as a sort of unavoidable, inevitable fact. A conflict exists in the planning, design and development of a park like Nancy Lake because on the one hand we are attempting to preserve open space and the natural scene (this is a large part of what people come to the area for) while with the other hand we are introducing man's creations - which, being unnatural, are an intrusive limitation on the natural open space. We know this of course but proceed with the process anyway because we must if we are going to use the land for our purposes. The great and central problem is one of limitation of use - at what point will we have gone over the narrow line that preserves the natural just enough for it to still be enjoyed as such? Conversely, what facility or installation or bit of clearing will make it more of man than of nature? What proportion is right? Our cities are 99% man, our woods 99% nature, our cultivated fields lie somewhere in between.

The Demand Analysis, Part 2, estimated future numbers of people whose recreation needs must be met. This, in effect is the "man" side of the equation or problem posed above. Physiography, Part 3, pointed to the limitations the land imposes because of its particular or even peculiar characteristics. This is the "nature" side of the equation.

The third side of the equation is the solution side which might be called the "design factor." It attempts to amalgamate the needs of man with the characteristics of nature so that the natural environment is made useful to man yet is sufficiently preserved to retain its character.

Another way of stating this is to point out that at some point density of people could destroy the very values for which the park was created.

The Advisory Committee should continually monitor this, as a matter of Policy, so the quality of the basic scenic resource is never lost.

MANAGEMENT PROBLEMS, POLICIES AND RECOMMENDATIONS

As in all areas where water activities are the prime use, there are bound to be conflicts between, A) fishermen of three types, 1) the still fisherman on the shore, 2) the still fisherman in a boat, 3) the trolling fisherman; B) the water skier, C) the paddler in a canoe or rowboat, D) the bather on the beach, E) the joyrider, and in Alaska, a new dimension, F) the float plane plus G) the sailboater.

Rules and regulations to reduce hazardous encounters and to permit each recreationist to enjoy his activity with a minimum of interference will be necessary. Nevertheless, the heavily oriented water use to be expected at the Nancy Lake Area can only result in a major management and enforcement problem.

Summary & Tabulation

LAND*

Gross area	21,127 Acres
Water bodies not including streams 24% --	5,016
Wet land (swamp) 20% --	4,335
Hillside land too steep for development 6% --	1,219
	10,570
	10,557 Net Useable Acres

Forested land	10,576 Acres
Open, dry land	1,200 Acres

WATER

Number of water bodies	131
Number 5 acres or less	64
Gross area not including streams	5,016 Acres
** Fishery potential rated No. 1 -- 6 lakes	2,254
Fishery potential rated No. 2 -- 6 lakes	755
Fishery potential rated No. 3 --20 lakes	902
	3,911

Rated negligible as to fishery potential 1,105
Streams -- 17 miles -- Little Susitna River (1 mile in park) and several other streams rated No. 1 as to fishery potential. However most streams not assessed as to potential.

ROADS

Main Road	16 miles
Red Shirt Complex-Viewpoint spur	2.4 miles
Little Susitna River spur	2.1 miles
	20.5 miles

* Areas are planimetered, not calculated
** By Alaska Department of Fish and Game

TRAILS

Foot-horse (combined)	25 miles
Canoe-maximum if all streams used	17 miles

CONCESSION FACILITIES

Lodge -- up to	160 units
Cabin areas -- 3 -- up to	140 units
Tent cabin area -- 1 -- up to	150 units
Riding concession with stable, corrals	
Refreshment facilities	
2 Marinas (in part)	
Float Plane Drome (in part)	
Grocery store	
Gas Station	
Winter Sports Complex (in part)	

CAMPGROUNDS

7 areas --	1750 individual camp sites
Group camps --	2 sites reserved

PICNIC GROUNDS

7 areas --	2900 individual picnic sites
------------	------------------------------

SPECIAL FACILITIES

Boat Launch Ramps and Parking --	16
Canoe -- raft take-out -- Little Susitna River	
Viewpoint	
Golf Course	
Trail camps -- number	unlimited
Swim Beach	
Winter Sports Complex	
Marinas --	2

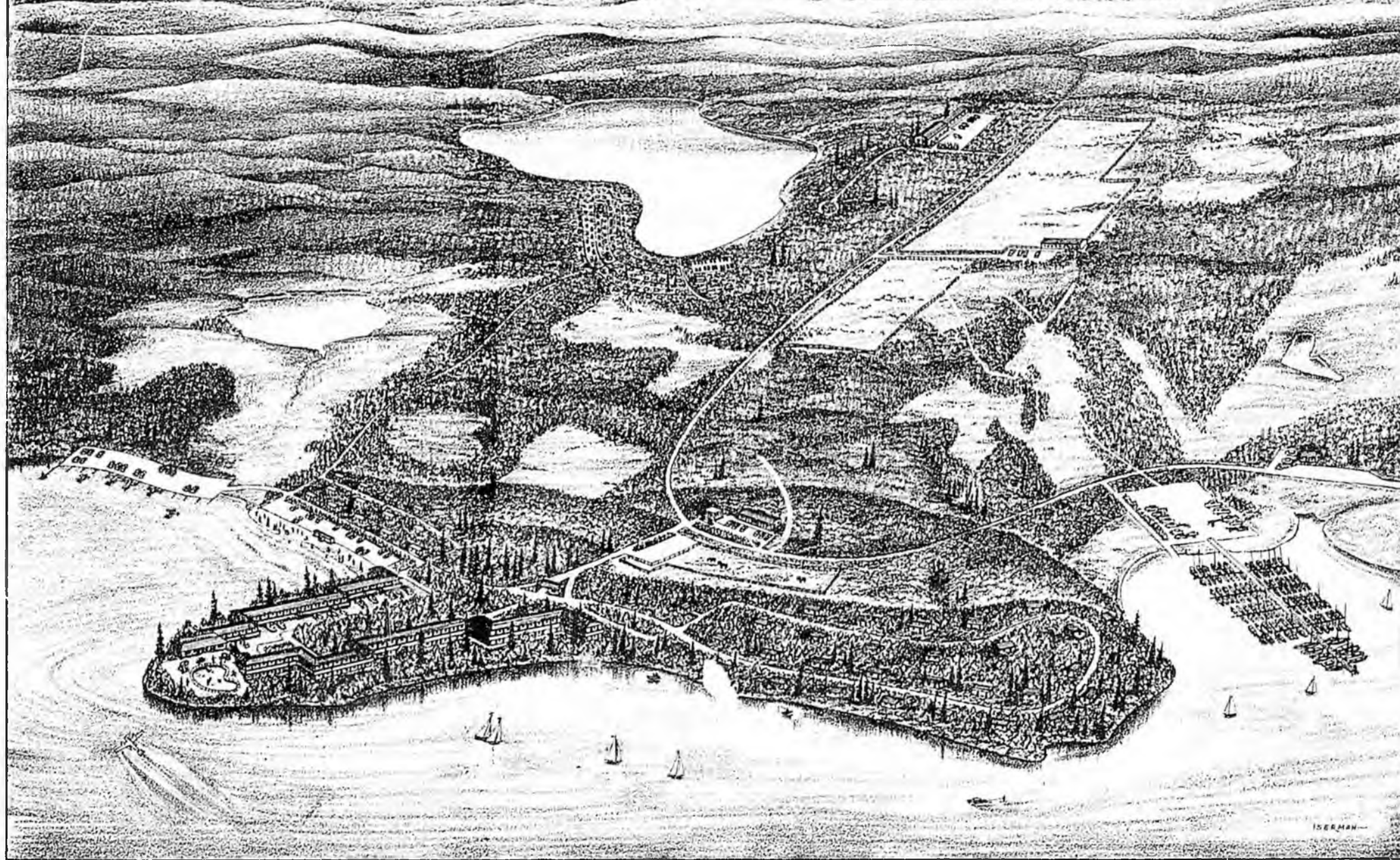
ADMINISTRATIVE, MAINTENANCE AND OPERATIONAL FACILITIES

Entrance Station	
Visitor's Center	
Main staff residence and maintenance area	
Satellite staff residence and maintenance area	

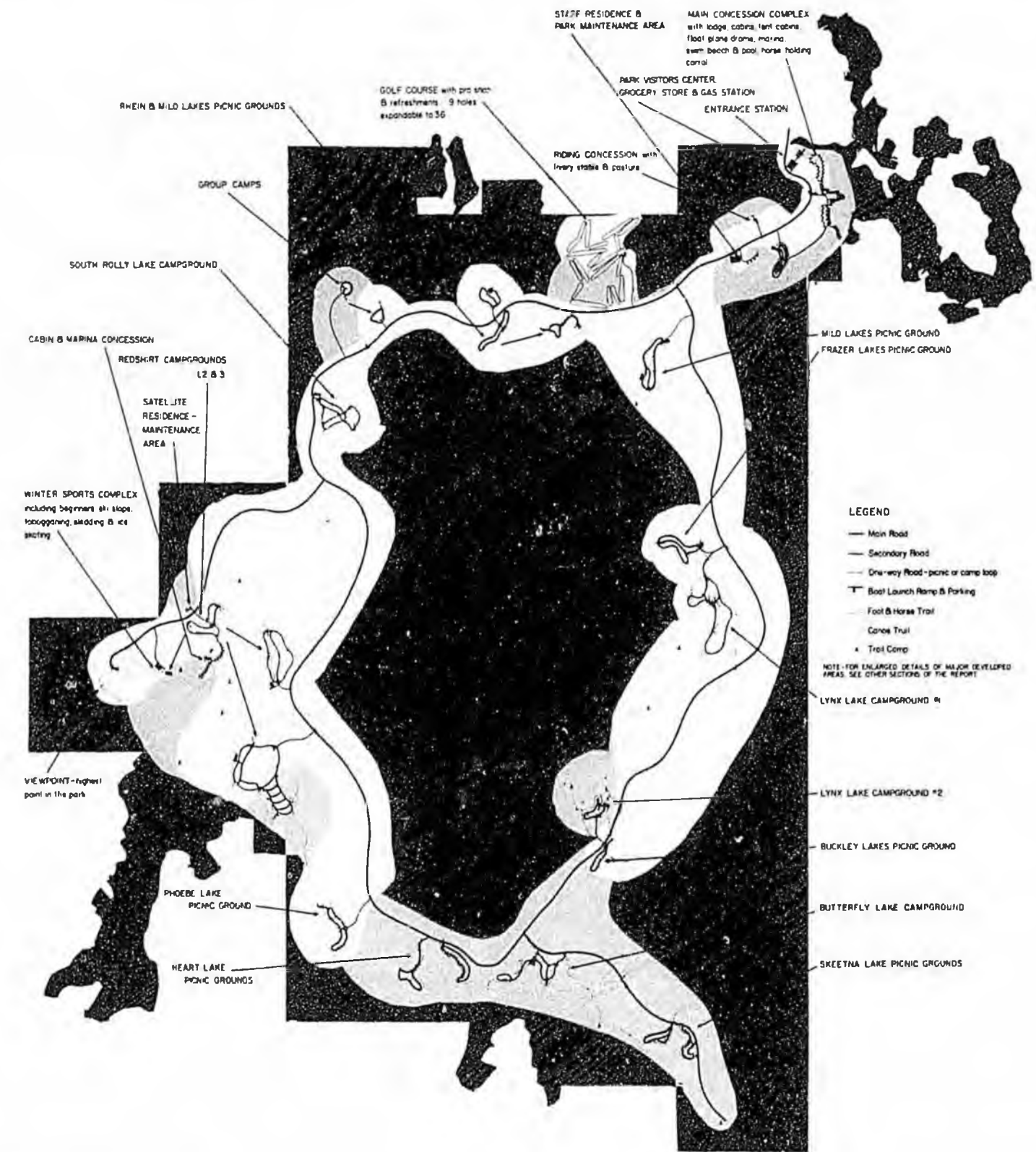
PART TWO

Analysis

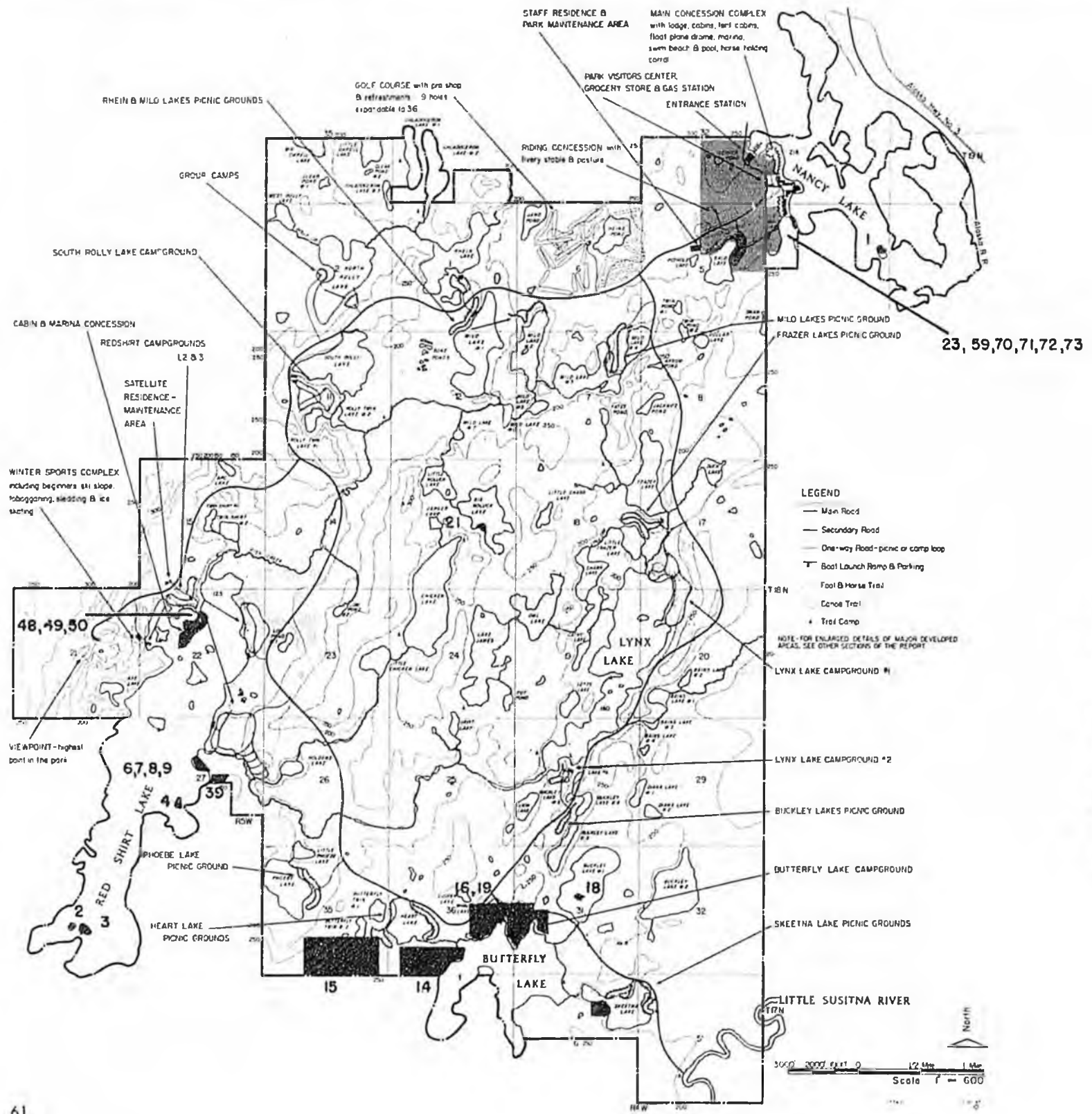
Resident And Tourist Recreation Supply,
Demand And Need



NANCY LAKE STATE RECREATION AREA
Artist's View into Park from Entrance Area



Program
1976-80



Acquisition Schedule

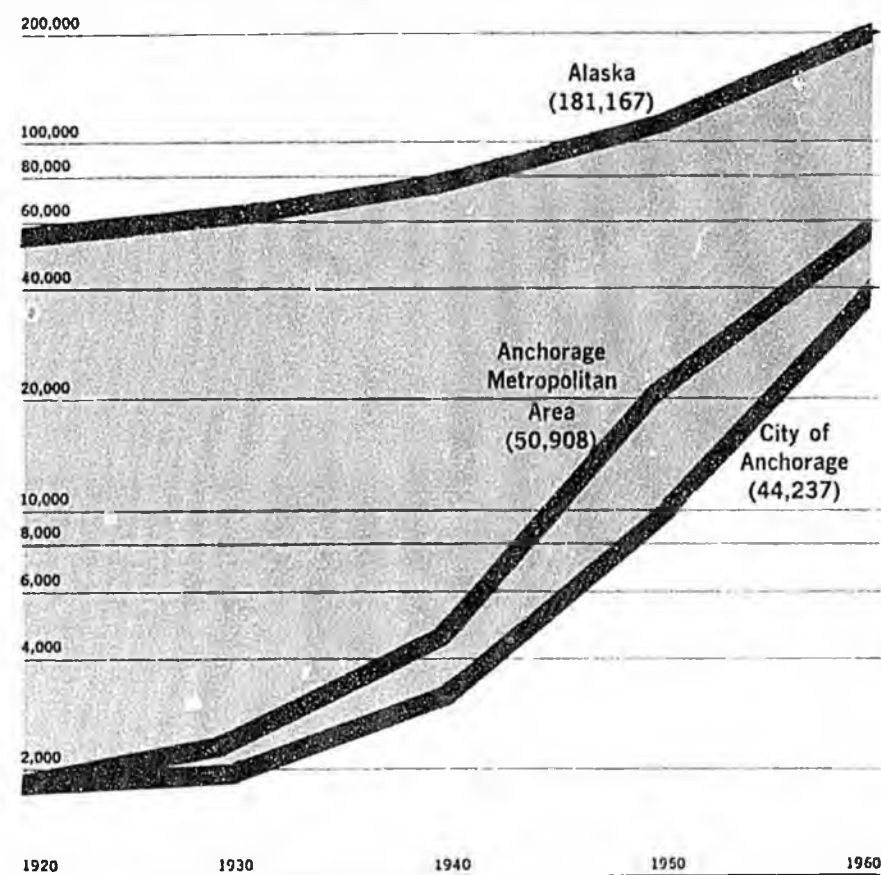
- 1968
- 1969
- 1971-75
- 1976-80

Summary and Tabulation

Year	*Main Road (miles)	Cost	All Trail (miles)	Cost	Camp Ground (Units)	Cost	Picnic Ground (Units)	Cost	Other Facilities	Cost	Land Acquisition Total Cost	Annual Total	Five Year Totals (including annual construction cost increment)
1966 1967 1968	4.6	436,000	5.7	30,000	250	264,000	535	397,000	*1.4 miles main road access from Alaska Hwy. 3	163,000	26,000	1,316,000	
1969	2.4	238,000	5.7	30,000	240	249,000	200	168,000			16,000		
1970	2.0	194,000	5.7	30,000	155	195,000	285	241,000	1 staff residence and part of maintenance building	54,000		701,000	
1971 1975	7.0	659,000	11.4	60,000	555	577,000	980	722,000	225 units - lodge, cabins, tent cabins with restaurant and pool 50% each of 2 marinas Float plane drome and swim beach (50%) Riding concession, grocery store, 9 hole golf course, gas station and access roads for above facilities. Surfacing all roads constructed to date Entrance station, visitor's center, residence and maintenance building (in part) Group Camp - basic site development	1,758,000 47,000 27,000 511,000 767,000 139,000 21,000	291,000	714,000	2,752,000
1976 1980	4.4	407,000	11.4	60,000	550	553,000	900	644,000	Surfacing all roads constructed 1975-80 260 units - lodge, cabins, tent cabins 50% each of 2 marinas Float plane drome and swim beach (50%) Riding concession (50%) Golf Course - 9 holes Winter sports complex 3 staff residences, complete Maintenance Buildings Group Camp - basic site development	308,000 2,181,000 23,000 27,000 15,000 270,000 84,000 186,000 41,000	120,000		5,858,000
	20.5	1,934,000	40.0	210,000	1,750	1,838,000	2,900	2,172,000					5,411,000
										6,622,000	453,000		Grand Total 14,021,000

*Includes Primary Electrical

CIVILIAN POPULATION GROWTH 1920-1960



112,500 to 400,000. For the Alaska Housing Authority in the report "Land Utilization and Marketability Study" - Downtown Urban Renewal Project, the consultants, Real Estate Research Corporation, estimated 1980 Anchorage Metro Area population in a range from 180,000 to 195,000.

Comparing this against state projections, specifically the 46% of state population projected to live in Anchorage Metro in 1980, we find ranges from 323,000 to 605,400 including *ORRRC - 404,500; U.S. Census Bureau - 323,000 to 371,000 and Rogers and Cooley - 373,500 to 407,700. The ORRRC projection was selected as a reasonable estimate for state population as it lies between the extremes of the ranges. 46% of the ORRRC - 404,500 results in an equivalent for Anchorage Metro of 186,000. Feeling this is conservative, the higher figure of 195,000 was arbitrarily selected as the base population of Anchorage Metro for purposes of the Nancy Lake demand analysis.

Added to this number was the population of the Matanuska-Susitna Borough - 5,188 in 1960, growing at the statewide average of 2.5% per annum to a total of 8,500 in 1980. Added also was the projected 1980 traveller population. See Tourism, Need and Demand page 13. Finally, because the recreation participation rates of ORRRC do not count children 12 or under (on the basis they are part of the family group and tag along, not being capable of independent action in the sense of selecting activities), they were deducted from the total. The result of these computations is a population of 221,500 persons over 12 years of age who will constitute the 1980 Nancy Lake user population.

SOCIO-ECONOMIC CHARACTERISTICS

However, the simple total number of prospective users that may exist in 1980 is not enough. That total must be tempered by the socio-economic character of the particular population segment because such characteristics determine how much of what kinds of recreation the individual will participate in.

Age, for instance, is a key characteristic. Obviously, the 70 year old is not likely to water ski.

Income is an even greater determinant than age - the man who cannot afford a boat will not engage in boating.

Education influences choice of recreational pursuits and is closely related to income. Generally, high income and educational levels generate more outdoor recreation. The influence of education appears to be greater in activities like swimming, game playing, sightseeing, walking and driving for pleasure. It is less for some activities like fishing, hunting and camping.

Occupation. There is an overlapping here because occupation reflects income and education. As might be supposed, professional people with greater income, longer weekends, longer vacations, more freedom from regulation, etc. enjoy

*Outdoor Resources Recreation Review Commission

LONG RANGE DEVELOPMENT PROGRAM - 3RD AND FINAL 5 YEARS - 1976-1980 (inc.) (Rounded to nearest \$1,000)

	Item Cost	Sub-Total	5 Year Total
Concession Elements - All remaining portion			
Lodge	\$ 956,000		
Cabin loops - 70 units @600 s.f.	672,000		
Tent cabins - 75 units @120	123,000		
Marina - 75 boats	14,000		
Float Plane Drome	6,000		
Swim Beach	21,000		
Riding Concession	15,000		
9 holes of Golf Course	270,000		
Red Shirt Marina - 50 boats	9,000		
Red Shirt Cabins - 34 @600 s.f.	430,000		
Winter Sports Complex including summer-winter refreshment bldg. - 1,800 s.f.	84,000		
		2,600,000	
Camp Grounds			
Red Shirt No. 2 - complete streamside (southerly) loops - 190 units	170,000		
Butterfly Lake - 270 units	275,000		
Lynx Lake No. 2 - 90 units	108,000		
		553,000	
Picnic Grounds			
Heart Lake - 495 units	366,000		
Skeetna Lake - 405 units	278,000		
		644,000	

continued next page

Main Road and Trail Extensions

Connect remaining leg of loop Phoebe Lake Picnic Ground to Lynx Lake Campground No. 2 - Buckley Lakes Picnic Ground - 12,000 l.f.	120,000	
Primary Electrical - 12,000 l.f.	96,000	
Little Susitna Spur Road - Main loop to Little Susitna River including canoe-raft takeout - 11,400 l.f.	120,000	
Primary Electrical to Skeetna Lake Picnic Ground - 8,700 l.f.	71,000	
Surfacing balance of all roads and parking areas constructed	308,000	
Trail - remaining balance - 4/14ths	60,000	
		775,000
Land Acquisition		
Tracts: Nancy Lake Area - 1	4,600	
Red Shirt Area - 2, 3, 4, 6, 7, 8, 9, 39, 48, 49, 50	48,545	
Butterfly-Skeetna Area - 14, 15, 16, 18, 19, 22	66,461	
Big Noluck Lake - 21	280	
		120,000
Other		
2 Main area residences, 1 Red Shirt residence	102,000	
Main shop, garage, maintenance building - 5,000 s.f. plus satellite garage-shop Red Shirt - 1,000 s.f.	84,000	
Access road to second Group Camp plus 50% of Group Camp Trails	41,000	
		227,000
		\$4,919,000
Plus annual construction cost increment - 10%		492,000
Total cost - second five year development program		5,411,000
GRAND TOTAL COST		14,021,000

INTRODUCTION

It is a paradox that in Alaska - with its limited population and tremendous land area - the outdoor recreation situation is critical. Despite the existence in the State of over 3 million fresh water lakes larger than 20 acres; 10,300 streams and rivers with a total length of 82,000 miles; and 57 million acres of salt water within the 3 mile limit*, Alaska roads provide access to only 264 lakes, streams and salt water fisheries, all within one mile of a highway.**

This example of the problem - a problem completely of access - applies not only to fishing. The same could be said of all water activities including the important ones of boating and swimming. It could be said also of hiking trails, camping, picnicking and so on. Nancy Lake in effect is access - the opening up of a large, varied and sorely needed recreation opportunity.

GENERAL

It is critical to the long range effectiveness of the Nancy Lake Master Plan that the number of users be estimated so that facilities in adequate quantity can be provided. In other words, that supply meet demand over the long term.

There is no alternative to reasonable projections of user numbers. Guesswork results in facilities that are inadequate and become overrun, often to the point where the attractiveness of an area is destroyed, a factor critical to the maintenance of good parks. If not overrun, then facilities may be overbuilt, a waste of the public purse.

Although still not an exact science by any means, it is now possible to reasonably anticipate the facilities that are needed in a particular park to meet the needs of a growing population.

Such an estimate must be based, first, on the total population that can be expected to use the area at some specific future time and, secondly, on the extent to which those particular people engage in the different recreation activities. This estimate for the Nancy Lake Area is limited in time to 1980 for two reasons. First it has been shown to be unrealistic to attempt to project beyond 20 years. Second, most of the basic planning studies on population and socio-economic conditions on which a specific plan such as this must depend for basic data, project only to 1980.

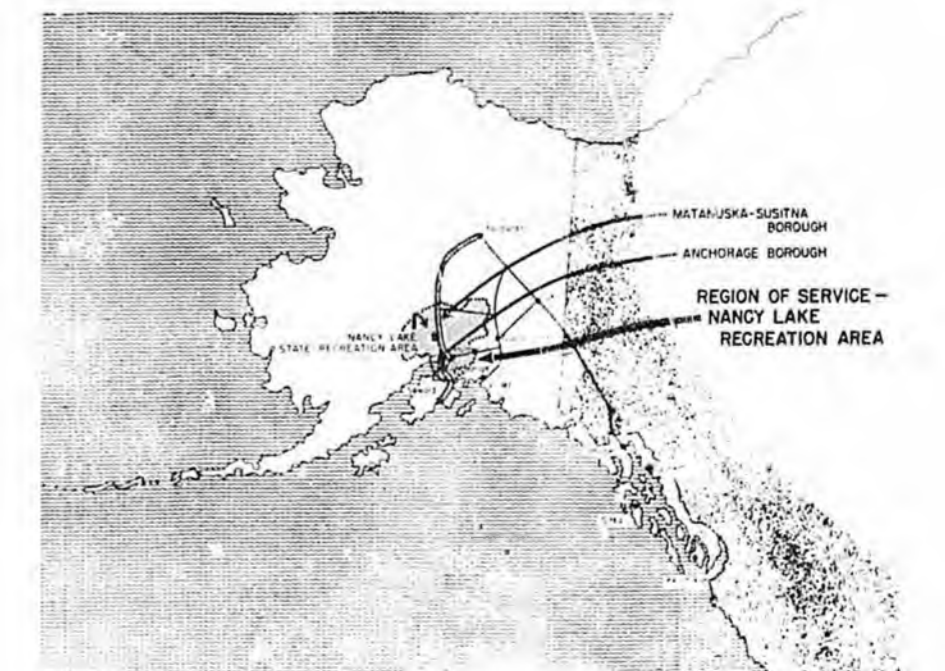
DEMAND AND NEED - RESIDENT POPULATION

All of Alaska's people will not use Nancy Lake - only the segment to which it is most convenient. What is this segment? Obviously the Anchorage Metropolitan

Area since it will be only 66 road miles distant - close enough for a pleasant drive and Sunday picnic. Obviously, also, all of the Matanuska-Susitna Borough which will be even closer - only 28 miles from Palmer for instance. We cannot anticipate significant use by any other major population segments. Seward is 195 miles away and the other Kenai Peninsula towns even further. Another reason people from the Kenai part of the State will not make much use of Nancy Lake is that they have many equivalent facilities in Chugach National Forest and the Kenai Moose Range, both closer to home. North, Fairbanks will be almost 300 miles distant via Alaska 3, the new (under construction) Fairbanks-Anchorage highway.

Even though there will be some use by residents outside the Anchorage area, this will be balanced off by Anchorage people visiting other parts of the State.

Illustrated on the map following, this user area - the Anchorage and Matanuska-Susitna Boroughs is designated as the **Region of Service** of Nancy Lake. These two boroughs coincide with election districts 8 and 10 and also with census districts, enabling use of official population tabulations.



To estimate population of the Region of Service of Nancy Lake in 1980, various projections were examined, not only for the Anchorage area but also for the state as a whole, the latter being used as a rough check on the Anchorage figures. 1980 projections for the Anchorage Metro Area range all the way from

* U.S. Dept. of Interior: Rampart Project, Alaska, Jan. 1965, Vol. 1, page 180

** Alaska Dept. of Fish and Game: Report to Alaska Outdoor Recreation Council, Nov. 1, 1964, page 11

large extension of its equestrian trail system. It also will have an impressive system of canoe trails. The programmed facilities of both these federal areas are scheduled for completion by 1980 or shortly thereafter.

The tabulation of all these equivalent facilities that will serve the Nancy Lake Region of Service enables us to subtract them from the estimates of total need in Nancy Lake itself. This factor, along with the others entering into the determination of actual facility needs are shown on the table on page 18.

EXISTING & PROGRAMMED EQUIVALENT FACILITIES

	Swimming	Picnicking	Fishing	Boating Not Canoeing	Ice Skating	Hiking and Nature Walks	Camping	Horseback Riding	Sledding Tobogganing	Water Skiing	Canoeing	Sailing	Lodges Cabins
ALASKA DIVISION OF LANDS Existing Programmed (except Nancy Lake)	1 Area	24 Units	Extensive	3 Ramps	1 Area	15 Miles (Appx)	278 Units			Extensive		Extensive	
MUNICIPAL Existing Programmed	1 Area	34 Units			6 Areas		30 Units		1 Area				
KENAI NAT'L. MOOSE RANGE Existing Programmed	1 Area	27 Units 44 Units	Extensive	5 Ramps		17 Miles	115 Units 246 Units	80 Miles		Extensive	80 Miles 180 Miles	Extensive	
CHUGACH NAT'L. FOREST Existing Programmed		52 Units	Extensive	2 Ramps		80 Miles	281 Units 429 Units			Extensive	1 Area	Extensive	
COMMERCIAL Existing Programmed			Extensive	10 Ramps (Approx.)			105 Units			Extensive		Extensive	300 Rooms (Approx.)
MILITARY Existing Programmed	2 Areas												
BUREAU OF LAND MANAGEMENT Existing Programmed		12 Units	Existing	1 Ramp	1 Area	NA	42 Units						

NA - Not Available

LONG RANGE DEVELOPMENT PROGRAM - SECOND 5 YEARS - 1971-1975 (inc.) (Rounded to nearest \$1,000)

	Item Cost	Sub- Total	5-Year Total
Concession Elements (50% of all elements except as shown otherwise) (all figures to nearest thousand)			
Lodge -- 80 units @ 400 s.f., restaurant and pool	\$956,000		
Cabin loops -- 70 units @ 600 s.f.	672,000		
Tent cabins -- 75 units @ 120 s.f.	130,000		
Marina inc. launch ramp & parking, 75 boats.	31,000		
Float Plane Drome inc. parking -- 6 planes	6,000		
Swim beach -- 5,000 s.y., including parking, bathhouse - refreshment building.	21,000		
Riding concession.	15,000		
Grocery Store with parking (100%) -- 2,000 s.f.	68,000		
9 holes of golf course with Club and Storage building (100%)	313,000		
Gas Station (100%)	15,000		
Red Shirt Marina inc. boat launch and parking -- 50 boats	16,000		
Access roads (100%) -- 7,900 l.f.	71,000		
		2,314,000	
Camp Grounds			
Complete Lynx Lake No. 1 -- 145 units	158,000		
Red Shirt No. 3 -- 135 units	105,000		
Red Shirt No. 2, Lakeside loop only -- 275 units	314,000		
		577,000	
Picnic Grounds			
Complete Milo Lakes -- 70 units	56,000		
Frazer Lake -- 370 units	275,000		
Buckley Lakes -- 200 units	137,000		
Phoebe Lake -- 340 units	254,000		
		722,000	

continued next page

Main Road and Trail Extensions

West leg of loop -- Red Shirt Campground No. 1 to Phoebe Lake	
Picnic Ground -- 9,000 l.f.	90,000
Primary Electrical -- 9,000 l.f.	72,000
East leg of Loop -- Lynx Lake Campground No. 1 to Lynx Lake	
Campground No. 2 Buckley Lakes Picnic Ground -- 15,000 l.f.	150,000
Primary Electrical -- 15,000 l.f.	120,000
Red Shirt Complex leg complete -- e.g., from junction with loop to	
Viewpoint Parking Area and Viewpoint Area trails -- 12,600 l.f.	126,000
Primary Electrical -- 12,600 l.f.	101,000
Secondary access road to Red Shirt Marina -- 1,800 l.f.	16,000
Secondary access road to Red Shirt Campground No. 3 -- 1,400 l.f.	13,000
50% of balance of foot-horse and canoe trail -- 4/14ths	60,000
Surfacing all roads constructed through 1974	767,000

1,515,000

Other

Entrance station -- 100 s.f.	3,000
Visitors Center -- 1,000 s.f.	32,000
1 Residence -- 1,250 s.f.	34,000
Shop -- garage maintenance building, 5,000 s.f.	70,000
Access road to one Group Camp plus 50% of Group Camp Trails	21,000

160,000

Land Acquisition

Tracts -- Redshirt Area - 5, 10, 11, 12, 13, 37, 38, 40, 41, 42, 43, 44	72,490
Nancy Lake Area - 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69	66,272
Lynx Lake -	
Buckley Lakes Area - 17, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 and one unnumbered improvement.	152,288

291,000

5,579,000

Plus annual construction cost increment -- 5% 279,000

Total cost - Second 5 Year Development Program -- \$5,858,000

the most leisure time for recreation while farm workers, with low pay and long hours enjoy the least.

While income, age, education and occupation are the only factors analyzed in detail for Nancy Lake, other factors deserve passing mention.

Families with Children are significant since outdoor activities are increasingly family activities. This is particularly true of recreational type parks like Nancy Lake where there is a wide range of activities and family members can find something of interest to all, or to the individual -- mother swimming, father fishing, children horseback riding, etc.

Sex is a factor because men participate in certain sports like hunting, fishing or touch football more than women. But the sexes are about equal in swimming, driving for pleasure, picnicking, camping -- again because these are **family activities** particularly in an area like Nancy Lake. Thus while sex is a population characteristic it is not felt to be important in either motivation or opportunity for outdoor recreation generally. Fifty years ago it would have been given great weight in any analysis.

Place of Origin is a factor because choice of recreation activity is partly habit. Also, it is often a matter of skill that, once developed, is not easily discarded to learn something new. However, because Alaskans cannot be easily tagged as to place of origin, unless perhaps the majority are from the northern mid-west, this is not considered an important factor in the Nancy Lake analysis.

To be relatively accurate, participation rates would have to be determined by a careful survey of the Region of Service population. But even this would be somewhat misleading because the **opportunity** to participate to the extent desired may not at present exist. The lack of opportunity is in fact a large part of the basis for creation of the Nancy Lake Recreation Area, not only for present residents but also for those of 1980 and the years beyond.

Lacking such detailed data, participation rates developed by ORRRC for the north-central region of the U.S. have been utilized despite the fact that in the ORRRC report Alaska was included in the western region -- all of the U.S. west of the Missouri River. Except for the north Pacific coast this is arid and/or desert country of few streams or water bodies, meager forest cover and a range of climate from extreme cold to semi-tropical.

The north-central region was chosen because of its similarity in climate and land character to the Nancy Lake Region of Service -- a relatively short summer season and heavily wooded, rolling terrain with many lakes and streams. With these similarities, **opportunity** for recreation pursuits tends to become equivalent.

However the north-central participation rates **have not been used as directly applicable to the people of the Nancy Lake Region of Service.** Rather, all the key socio-economic determinants -- age, income, years of education and occupation index were carefully researched and adjusted so as to relate as closely as possible to the Nancy Lake Region of Service.

Family income, for instance, averaging \$7,305.00 statewide, was adjusted to \$8,873.00 for the Anchorage Metropolitan area, on the basis of statistics in the Land Use and Marketability Study, Downtown Urban Renewal Project, Anchorage. This amount, to get a factor equivalent to the north central states, was then reduced by 25%, (the differential in the cost of living index between Anchorage and Seattle). Age was adjusted to the low 26 (white only) statewide average of 29. Since natives constitute only 10% of the population of south-central Alaska and would constitute a still lesser percentage of park users because of low income and education levels, no separate calculation was made to adjust to this segment of the population.

Years of Education Completed -- in Alaska -- nationally high at 12.1 years for all those over 25 was adjusted upward to 13 years (1 year college) on the basis of the higher level of educational attainment for the south central Alaska region shown in the report, Alaska's Population and Economy, Rogers and Cooley, 1962. Though this was a judgment increase of about eight tenths of a year, it was deemed justified because of the increasing concentration in Anchorage of technical, professional and white collar workers. The Occupation Index was adjusted directly through U.S. census data to the Anchorage Borough. Similar data did not exist for Matanuska-Susitna so no adjustment could be made, a matter of small consequence because of the relatively small number of people involved.

EQUIVALENT FACILITIES

After the gross 1980 need for the Anchorage-Matanuska-Susitna Region of Service was derived, there remained one more major adjustment to make. There are many public agencies - state, federal and local - and some private entrepreneurs providing recreation facilities in Alaska. These facilities may or may not be equivalent to those planned for Nancy Lake but personal preference or even just a change of scene dictates that we consider all of them equal even though major differences in **quality** may exist. One of the major complaints of campers, for instance, was the lack of a potable water supply at many campgrounds. Others complained of the lack of swimming facilities or of places to play games. Nancy Lake will be of such size that amenities not justifiable at small roadside areas will be present. Probably, because of these amenities, and because a wider range of activities will be available, Nancy Lake will tend to attract many away from existing facilities.

Equivalent to those of Nancy Lake, as far as the people in the Region of Service are concerned, will be all of the **other** facilities within the Region plus certain weekend and vacation type facilities on the Kenai Peninsula. These add up to a rather impressive total as shown on the table on the next page.

For weekend or longer term use, both the Chugach National Forest and the Kenai National Moose Range hold attractions that will be directly competitive with Nancy Lake. As the table illustrates, both have or will have extensive camping, picnicking and hiking trail facilities while the Moose Range plans

Flying, a very different feature of Nancy Lake - one that could occur only in Alaska - is provision of a float plane drome. The need for this facility is demonstrated by the statistic that one-third of the total U.S. registry of float planes is based on Lake Hood at Anchorage - some 200 planes - while half of the 1200 (1961) civil aircraft in Alaska were based on Lake Hood and Merrill Field (private). However, this is not an accurate total as many planes are based on other lakes in the vicinity and converted to floats and skis. Merrill Field in Anchorage has, according to the 1961 General Plan for Anchorage, an ultimate capacity of 650 to 800 light planes. This Plan states that eventually an additional field will be required. Mostly used for "flying" recreation, many people can be expected to fly to Nancy Lake, combining their flying fun with picnics or whatever may interest them at the area. The ratio of private aircraft to population in Anchorage in 1961 was 81.3 per 10,000, in Alaska 63.2 per 10,000. Land planes will be able to land 2-1/2 miles north of the park entrance road at the settlement of Willow where there is now a good strip. Such arrivals could easily be picked up by the concessionaire.

Camping is a major recreation activity in Alaska, partly because of the lack of cabins and lodges but also because it is an activity that puts one on the fishing stream, boating lake or hunting ground. Even though it is a recreation very closely related to all outdoor activities except those requiring a stay of a day or less, camping for itself alone, unrelated to other activities, is an important Alaska activity. The demand therefore for camping facilities is very strong as illustrated by the chart, Nancy Lake, by providing amenities not presently justified in the small campgrounds now existing along highways, in the National Forest or the Kenai Moose Range will be an ideal situation for family camping. These amenities, in addition to the usual table and fire-place, will consist of tap water, flush toilets, laundry facilities, showers, and sanitary disposal stations at central locations. Activities will not be limited, as in most of the other campgrounds, but will cover a wide range of activities of interest to all members of the family. Because so many campers are fishermen or vice versa, **campgrounds were given priority of location on prime fishing lakes.** Actually, picnic grounds and campgrounds require the same kind of terrain. The Nancy Lake Plan relegates the picnic grounds to the shores of lakes having a low fishery potential. See Plan and Description - Typical Campground, pages 41 and 42.

CAMPING DEMAND AND NEED - TOURISTS

This section is concerned solely with demand for camping facilities by tourists. Once the tourist is at Nancy Lake, his activities will be indistinguishable from those of resident users. Consequently, the number of tourists at the park is added to resident numbers for facilities other than camping.

Determining the impact of non residents on the park requires careful differentiation among the tourists Alaska attracts. Various they arrive by airline, cruise ship, ferry or highway. Some are vacationers, some are visitors. Still



Campfire Singalong

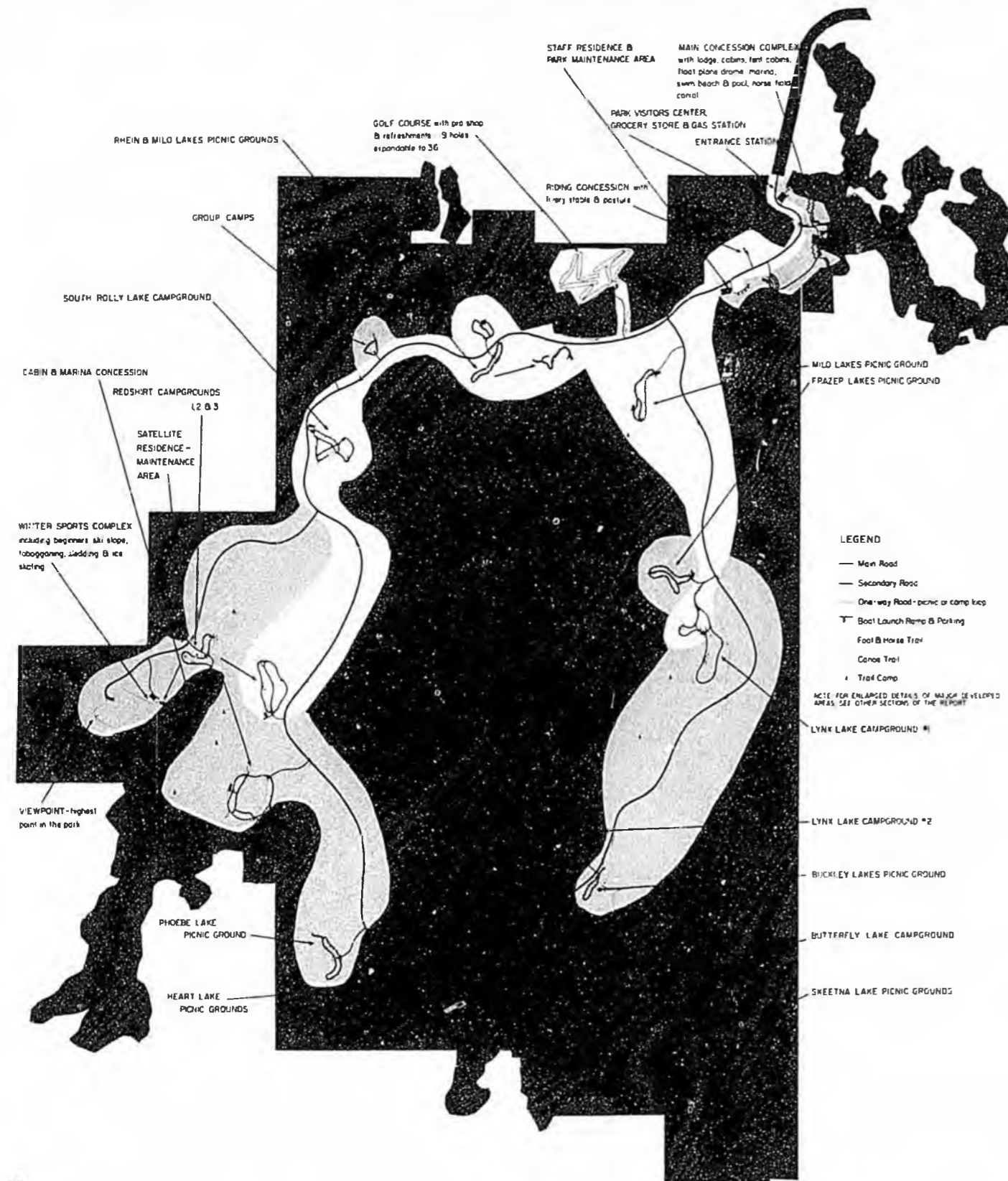
others are business travellers. We can discount the impact the airline vacationer would have on Nancy Lake because he is ill prepared baggagewise and in transportation for camping. Additionally, the low airline "size of party" at 1.9 persons indicates a vacationer not oriented toward the family activities of Nancy Lake. Similarly we can exclude cruise ship passengers since they are highly organized for conducted, group tours. Nor would the business traveler have noticeable impact on Nancy Lake.

Our concern is with the highway traveler, and with the ferry passenger who utilizes a car during his stay. Among these we must differentiate further between visitors and vacationers. In the context of this report, a visitor is one who comes to Alaska to visit an Alaskan. The vacationer on the other hand comes to see Alaska. Even though the visitor spends 30% of his time visiting his host and the other 70% in seeing something of Alaska he was not included in the use projection because of a very different situation on the travel pattern of Alaska residents as compared to citizens of the lower 48. Because of Alaska's isolation and its large number of Federal employees who receive bonus leaves home, about as many Alaskans depart as there are visitors arriving. In fact outward bound Alaskans spend more time away from Alaska than visitors spend in the state.

Survey work accomplished by the Alaska Department of Economic Development and Planning in its "Traveller Profiles, 1963-64" points up some very interesting facts regarding the particular highway and ferry vacationers who can be expected to utilize Nancy Lake facilities:

5TH YEAR BUDGET - 1970

	Item Cost	Sub-Total	Yearly Total
Main Loop Road Extension			
East leg junction southerly to Lynx Lake Campground No. 1 - 10,800 l.f.	\$108,000		
Primary Electrical - 10,800 l.f.	86,400		
		194,000	
Lynx Lake Campground No. 1 (in part) (two northerly loops only)			
Secondary access road - 1,300 l.f.	10,700		
One-way camp road - 4,600 l.f.	57,500		
2 comfort stations - 500 s.f.	15,500		
1 washateria, showers and sanitary disposal station (estimated for fully developed campground) 7,500 s.f.	21,700		
1 Launch ramp	3,500		
Parking - 5,670 s.y.	22,680		
Trail in and adjacent campground - 9,000 l.f.	9,000		
Camp units - 155.	54,250		
		194,830	
Other			
Proportioned amount foot-horse and canoe trail - 1/14th	15,000		
		15,000	
Milo Lakes Picnic Ground (in part) (outside loop only)			
Secondary access road - 1,600 l.f.	14,400		
One-way picnic road - 4,600 l.f.	69,000		
5 comfort stations - 1,600 s.f.	49,600		
1 launch ramp	3,500		
Parking - 1,175 s.y.	4,700		
Picnic units - 285	99,750		
		240,950	
Other			
Proportioned amount foot-horse and canoe trail - 1/14th	15,000		
		15,000	
Residence - Maintenance Area			
Secondary access road - 700 l.f.	6,300		
1 Residence - 1,250 s.f.	33,750		
Shop - garage building in part - 1,000 s.f.	14,000		
		54,050	
			\$713,830
			Plus annual construction cost increment 2% 14,276
			728,106
			Total first 5 year program \$2,751,683



Development Program 1971-75

GENERAL FACILITY ANALYSIS

The following includes not only those activities and facilities shown on the table on page 18 but also others that are pertinent but not analyzed due to lack of ORRRC participation rates.

WATER ACTIVITIES

Swimming at Nancy Lake will be a sport for the young and the hardy. Tolerance to cold water seems to decrease in direct proportion to age. Actual extent or capacity of the beach should be very closely related to the swimming pools (undoubtedly heated) that will ultimately be constructed by the City of Anchorage. On the basis of standards adopted by the Anchorage Parks and Recreation Department, 16 swimming pools will be needed in the Region of Service to serve the 1980 resident and tourist populations. For adults, swimming is not generally on all day activity as it is for children. Swimming facilities, therefore, to provide the most public benefit, are best located in urban areas where they are easily accessible to children. Swimming at Nancy Lake should be looked on as an adjunct to other major, adult activity but perhaps as the **prime attraction to children in the company of adults.**

Fishing, with practically unlimited potential in Alaska is now distinctly restricted by lack of access to most waters. The situation near the population center of Anchorage is particularly critical. Nancy Lake will be of great benefit because it will make available about 5,000 acres of lake and 17 miles of stream previously reached mostly by fly-in fishermen.

On behalf of the Nancy Lake Master Plan project, the Alaska Department of Fish and Game conducted a study in the Nancy Lake Area, classifying water bodies as primary, secondary and tertiary as to fishing potential. According to this survey there are 6 lakes of 2,254 acres classified primary; six lakes of 755 acres classified secondary -- in effect a very good potential with a stocking and rehabilitation program; 20 lakes of 902 acres classified tertiary -- marginal waters that may or may not be important to the fisherman. The report states further that "The balance of, and smaller lakes and ponds, are largely unsuited to cold water fisheries except on a seasonal basis. A certain number of these waters may support summer -- only fisheries. The small, shallow ponds are important to production of waterfowl and are utilized by moose and furbearers." Classification of stream fishing potential was as follows, "There are three known stream fisheries: the Little Susitna River, Fish Creek and Rolly Creek. There are two additional streams that appear as capable sport fisheries, and they are Jarger Creek and Lynx Creek." These streams have a length of about 10 miles in the park.

Fishing, boating (of three types) and water skiing, though separated in the analysis, actually overlap and cannot be clearly defined. The analysis of fishing

is academic and made only to show a relationship of total need to water availability in the Nancy Lake Area, demonstrating that it falls far short of supplying the total need of the Region of Service. The need for streamside and lake fishing can only be satisfied by improved roads and trails to open up new resources. The Nancy Lake Plan takes maximum advantage of the fishing potential of the area. The main road loop reaches all four major lakes -- Nancy, Red Shirt, Butterfly and Lynx. Boat launch ramps are provided on all these lakes with marinas on Nancy and Red Shirt. Launch ramps are provided at all primary and most secondary fishery lakes and all lakes of any quality are accessible either by road or trail. A spur road is planned to extend to the little Susitna River for a canoe-raft takeout point which would provide a float trip of some 12 miles starting at Houston on Alaska Highway 3. As extensive a canoe trail system as proves feasible on detailed field investigation is planned.

Boating analysis like fishing analysis is academic since the total need of the Nancy Lake Region of Service is much greater than can be supplied by even the 4200 effective lake acres of the Nancy Lake Area. And, like fishing, additional boating can be supplied only at other existing lakes or by new access to ones not now on roads. Canoeing, sailing and water skiing fall in the same category as boating (which is for the most part motor boating). Nevertheless provision is made in the Plan for these recreations to the extent of capacity of the park.



Fishing and Boating

*See Summary - page 4 and Map - page 21

*Water bodies 25 acres or larger in size

mer season. The normal 90 day summer season is not applicable to vacationer activity in Alaska as it does not take into account his week of travel at both ends of his Alaska sojourn. The survey, "Alaska Campers, 1964" indicated that the average campground stay of users was two days. This figure, along with the other data, was used to estimate the number of camp units needed in the Nancy Lake area in 1980. It is emphasized that the two day stay is thought to be overly conservative for Nancy Lake campers. In comparison to the campgrounds covered by the 1964 camper survey, Nancy Lake will tend toward a longer stay for reasons previously mentioned. In fact the area will offer sufficient in size, activity and interest for an entire vacation.

The foregoing is the point of beginning for projecting the long range need for camping development of Nancy Lake. Basic to the projection are several projections of future tourists in Alaska. The University of Alaska in its report, "Tourism in Alaska, 1965-1967" states that a conservative estimate of tourists in 1975 would be 450,000 which would be increasing at 18% per annum. This would mean 1,030,000 by 1980. Also, this report states that the lowest 1975 number would be 200,000 if absolutely nothing is done to attract more tourists. This low range would grow to about 275,000 by 1980. The U.S. Department of Commerce has estimated that the number of tourists could reach 650,000 by 1980. The same report showed that Alaska had 75,000 tourists in 1965. Another estimate is that under the most favorable conditions tourism could be developed to a total of 850,000 by 1980.*

The Department of Commerce points out that 650,000 tourists would spend 230 million dollars, resulting in 14,000 new workers who would earn 87 million dollars which would serve as the base for an increase in population of 88,000 persons!

The projections of 1980 tourist numbers and economic benefit are especially striking when compared to a **1953 U.S. National Park Service study which showed that in the year June 1, 1952 to May 31, 1953, 22,500 visitors spent 7 million dollars in Alaska. This report also reveals other comparable factors (illustrated in the table following) that are useful for long range projections.

The important fact of the table, for purposes of this report, is the increase in the number of highway vacationers. The ferry, of course, did not exist at the time of the 1952 or 1960 surveys. The other differences certainly do not indicate that there will be appreciable departures in the future from the two important tangibles - percent of total campers and the percent of those campers who can be expected to visit the Anchorage area in 1980.

Applying the same formula to secure the number of 1980 Nancy Lake campers as was used to derive the 1964 need, against an averaged projected total of 1980 tourists, (700,000) we have a twenty fold increase in that time - to a total of 11,000 campsites.

*Transport Requirements for the Growth of Northwest North America - Vol. 2, Sec. V, pg 260.

**Alaska Recreation Survey Vol. 2, pgs 114, 116.

total of 1100 campsites. This is the total projected need of the Nancy Lake Region of Service for vacationers.

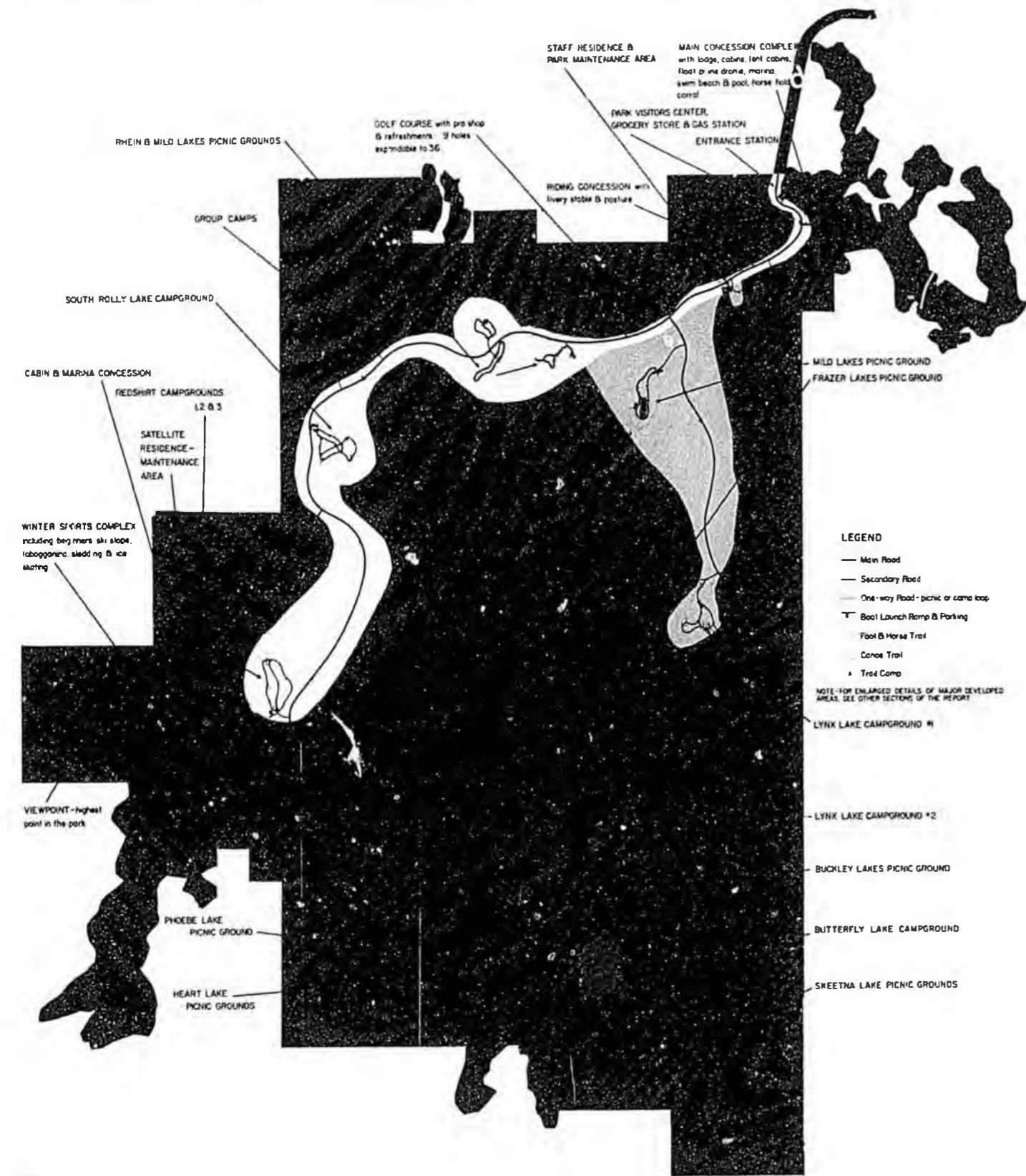
However, solely on the basis of judgement and for reasons noted on pages 13 and 14, this total is felt to be about 50% under the 1980 need. A certain madness seems to seize Alaskans at spring break-up and the self-imposed prescription for relief from the cabin fever of winter seems to be the outdoors and camping. Though participation rates for camping must be assumed, it is believed the rate is much higher in Alaska than elsewhere in the country. This situation applies of course only to residents. Other factors at work on both residents and travelers to increase camping is the great growth in leisure time and the increase in popularity of the activity, partly because of the ease of conducting it in the newer trailers, campers and turtlebacks. A further factor is the concentration of recreationists at Nancy Lake that is bound to occur as a result of completion of Alaska Highway 3. For these reasons the number of camp units to be provided in Nancy Lake for both residents and vacationers, was arbitrarily increased to a total 1750.



Nancy Lake Pond Reflects Mt. Susitna

4TH YEAR BUDGET - 1969

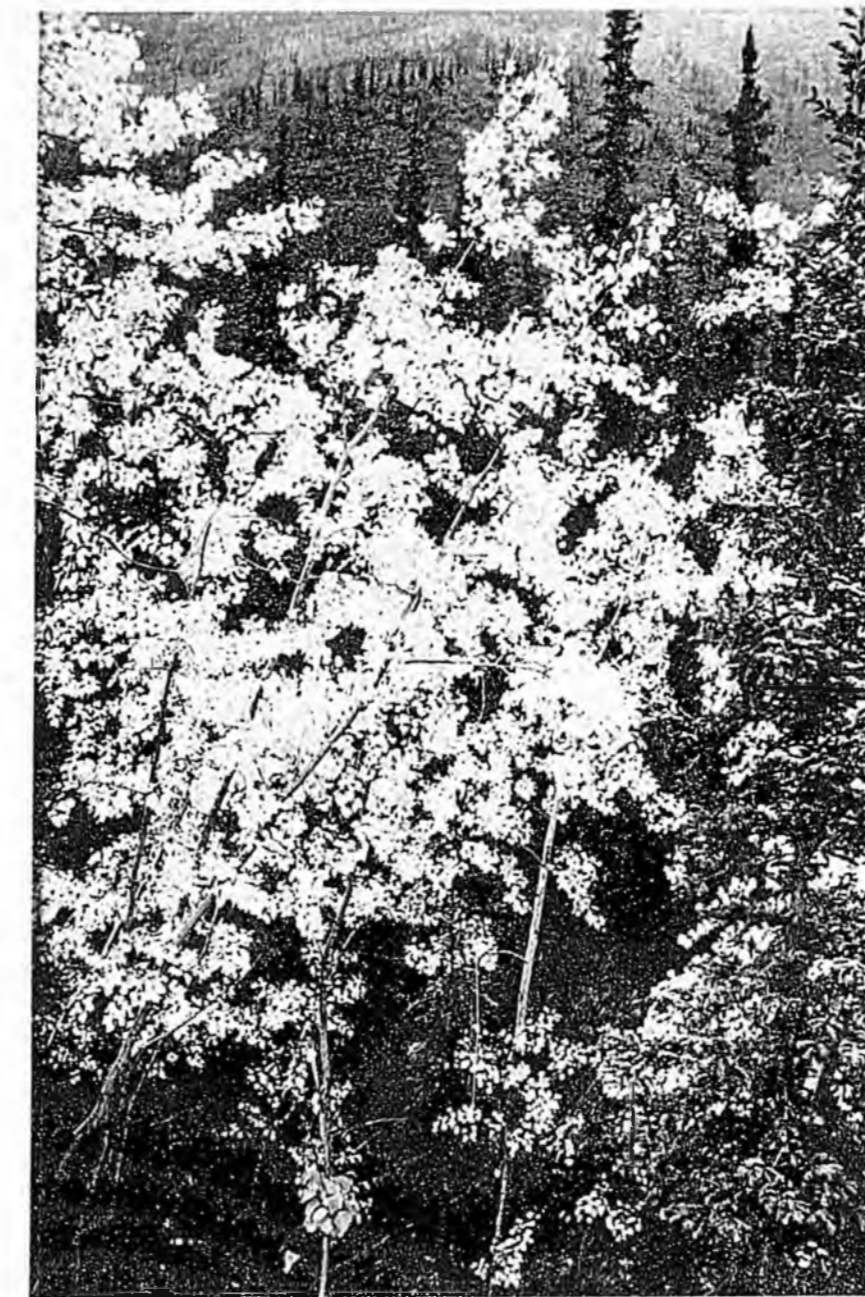
	Item Cost	Sub-Total	Yearly Total
Main Loop Road Extension			
South Rolly Lake Campground to Red Shirt Campground No. 1 - 13,200 l.f.	\$132,000		
Primary Electrical - 13,200 l.f.	105,600		
			237,600
Red Shirt Campground No. 1			
Secondary access road - 600 l.f.	5,400		
One-way camp loop road - 7,300 l.f.	91,250		
5 Comfort stations - 750 s.f.	23,250		
1 Washateria-Shower-Sanitary Disposal Station Building - 600 s.f.	18,600		
Trail in and adjacent campground - 4,800 l.f.	4,800		
1 Launch Ramp	3,500		
1 Launch Ramp Parking - 4,500 s.v.	13,000		
Camp Units - 240	84,000		
			248,800
Other			
Proportioned amount foot-horse and canoe trail - 1/14th	15,000		
			15,000
Rhein and Milo Lakes Picnic Ground (in part)			
(northwest section on Rhein Lake)			
Secondary access road - 300 l.f.	27,000		
One-way picnic road - 3,100 l.f.	46,500		
2 Comfort Stations - 500 s.f.	15,500		
1 launch ramp	3,500		
Parking - 1,350 s.v.	5,400		
Picnic units - 200	70,000		
			167,900
Other			
Proportioned amount of foot-horse and canoe trail - 1/14th	15,000		
			15,000
Land Acquisition			
Tracts 20, 24, 45, 46, 47	15,963		
			15,963
			700,263
		- 1% annual construction cost increment	7,000
			\$707,263



Budget
1970

- LEGEND
- Main Road
 - Secondary Road
 - One-way Road - picnic or canal loop
 - ⌊ Boat Launch Ramp & Parking
 - ⌊ Foot & Horse Trail
 - Canoe Trail
 - Tree Camp

NOTE: FOR ENLARGED DETAILS OF MAJOR DEVELOPED AREAS, SEE OTHER SECTIONS OF THE REPORT.



Early Fall Color - Quaking Aspen

- ... the average highway vacationer spent 9-1/2 days in Alaska out of 39 days away from home.
- ... people who visited Alaska were ones who liked a traveling vacation with only a few days in each spot.
- ... over 50% of all highway vacationers were prepared for almost continuous camping.
- ... 50.8% of Alaska Highway travelers used public campgrounds in the Yukon enroute.
- ... in 1964 there were 5,411 highway vacationer parties amounting to 17,344 people (3.2 persons per party).
- ... in 1964 there were 1,718 ferry vacationer parties amounting to 6,509 people (2.6 persons per party).
- ... of the ferry vacationers, 71.4% used a car as a supplemental method of travel.
- ... 60% of all highway vacationer parties visited the Anchorage-Valdez area and 20% (probably a segment of the 60%) the Kenai Peninsula.
- ... of Ferry vacationers 59% visited Anchorage-Valdez and 10% the Kenai Peninsula.

This data indicates that Nancy Lake will attract practically all the highway vacationers who camp and who visit the Anchorage-Seward-Kenai Peninsula area plus all the ferry vacationers who utilize a car in the same region of Alaska. This indicator is not based solely on the number of campers or Nancy Lakes' location near Anchorage. For many of these people Nancy Lake will be a destination point, particularly when Alaska Highway 3 is completed between Anchorage and Fairbanks. Connecting the two major cities of the state and with Mt. McKinley National Park midway in between, Alaska Number 3 will also serve Nancy Lake.

Vacationers will of course camp at all other campgrounds. However, for the most part, these are of the roadside, overnight type. The attraction of Nancy Lake that will make it a destination point will be not only its extensive recreation facilities but, perhaps more important to the camper who has traveled all the way from Haines or the whole distance of the Alaska Highway, its shower and laundromat facilities and its store where he can provision up. For many campers it will serve as a convenient central location and base for exploration of all of south central Alaska.

Deriving the number of campers from the 1964 figures of "Traveler Profiles" shows that a demand for 54 campground units for vacationers existed in Nancy Lake in that year. This calculation is based not only on the data mentioned but also on the assumption that use of the park will amount to 75 days per sum-

Canoe Trails. Though adequate canoe trail is supplied by Kenai National Moose Range, canoe trails will be essential in Nancy Lake as a supplemental activity to major recreations; to reach areas not on the road system and to fully capitalize on the potential of the water in the Area.

Horseback Trails, despite their nationwide popularity as a major activity, are completely lacking in the Nancy Lake Region of Service. They are extensively provided however in the Kenai National Moose Range. This large gap in the range of activities available in the Region of Service will be made up by the trails and accompanying rental horse concession in Nancy Lake. All trails will serve both equestrians and pedestrians.

Lodge and Cabin Facilities. There is insufficient data for projection of need for lodge and cabins in Alaska since residents and travelers alike come prepared to camp because more sophisticated facilities are generally lacking. The commercial resort cabins are for the most part not equipped with sanitary facilities. There are no lodges in the whole of the south central part of Alaska unless the lodge at Mt. McKinley National Park is included.

It would seem that a lodge-cabin complex in Nancy Lake would be as successful as are those in state parks in the lower 48 where they are, literally, reserved years in advance. Lodging facilities are normal adjuncts to state parks. The Nancy Lake plan proposes inclusion of three types of such facilities - a lodge, cabin areas and tent cabins, the latter a minimum cost shelter that has proven very popular at Grand Teton National Park. The lodge would supply the needs of short term or even overnight visitors off Alaska Highway 3 plus the luxury vacation trade (rooms should not be equipped for cooking). The lodge would have a heated swimming pool. It could be designed to accommodate small conventions in the off season (as is effectively done at the Oklahoma State park lodges). A quality restaurant in the lodge would add a very real attraction, suited to a pleasant afternoon or evenings drive (or float plane flight), from Anchorage. Two cabin areas at Nancy Lake proper and one at Red Shirt would supply the need of families for vacation cabins. The tent cabins would provide a semi-roughing it experience half-way between the tent and cabin. These structures are wall tents in effect - floored and framed up to window level but canvas roofed. Cooking facilities and cots with all necessary bedding etc. are provided but toilets are of the public comfort station type. Such a facility would, it is believed, fill a very great need in Alaska, namely that of low cost accommodations. One of the common complaints of most travelers was the cost of accommodations.

Recent figures are unavailable but according to the 1955 Yearbook on Park and Recreation Progress the five states with the largest capacity in lodges were: Indiana - 1251 persons; Oklahoma - 750 persons; Kentucky - 363 persons, South Dakota - 350 persons and New York - 231 persons. Cabins are provided by all but 12 states with capacities of certain states as follows: New York - 3,094 persons; Oklahoma-1,360 persons; South Dakota-975 persons; Kentucky - 924 persons; Pennsylvania - 796 persons; Ohio - 678 persons and Virginia -

588 persons. Much expansion has of course taken place in the twelve years since this count was made.

GENERAL CONCESSION OPERATION

At present it is planned that the State construct all facilities but certain of these would be leased to one or several concessionaires. Concession operations are illustrated and described in detail on pages 34 and 35.

WINTER SPORTS

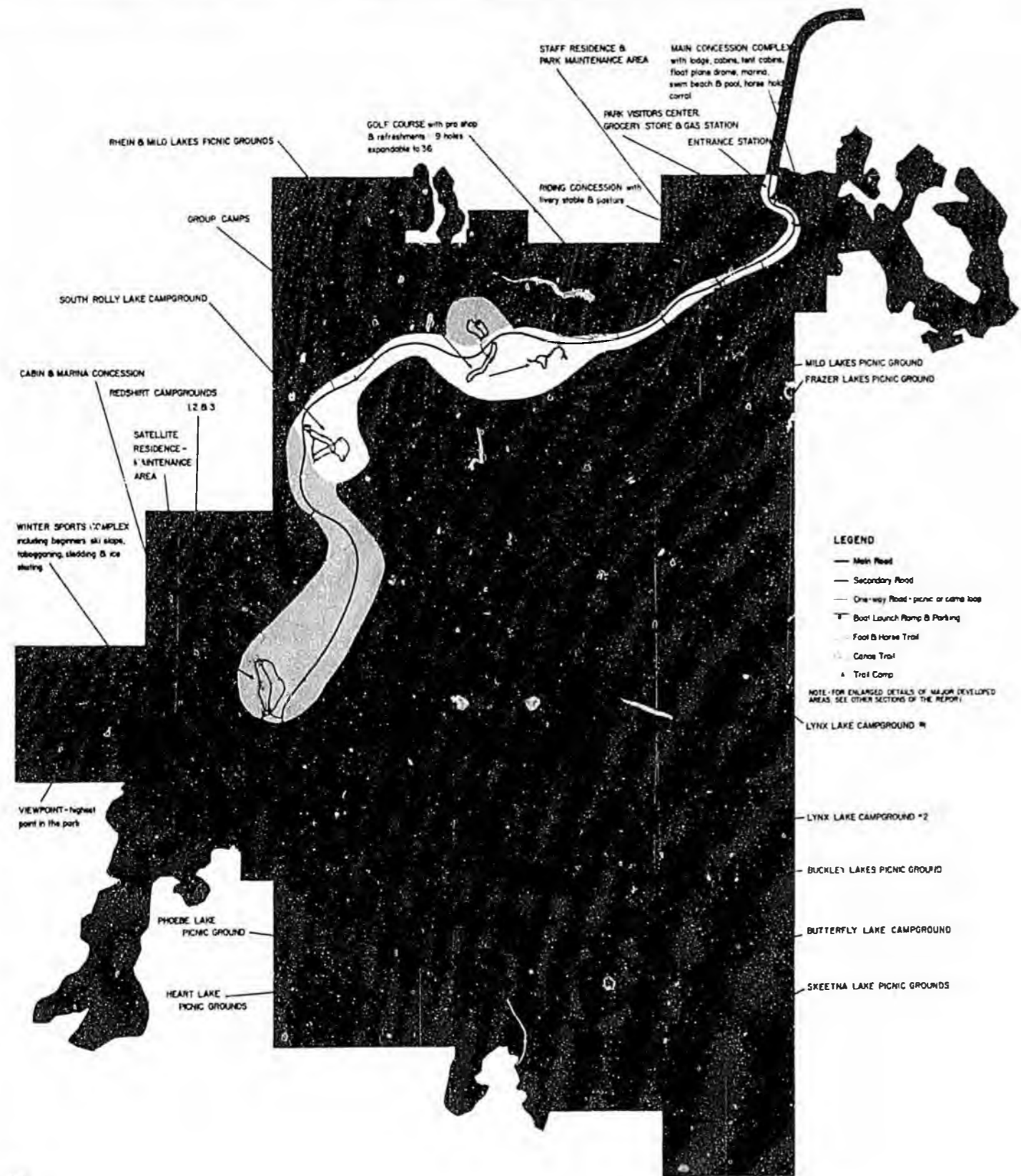
Ice skating can be an important Nancy Lake activity only if other winter sports are developed in conjunction with it. Alone, the limited number of participants would not warrant maintaining the park open in the winter. Ice skating is not usually an all day activity and the greater number of participants are children. However, since the opportunity exists to develop an excellent winter sports complex, the Plan proposes that such a complex be located on and adjacent to Red Shirt Lake. It would include not only ice skating but also sledding and tobogganing, cross country skiing, dog sled racing, skijoring, ice fishing, curling and a beginners ski slope. The pedestrian-equestrian trail system would provide excellent opportunity for the use of snow mobiles. In conjunction with these activities certain limited concession activities would remain open through the winter season. Present winter sports activity in the Region amounts to Intermediate and adult amateur hockey, ice skating, a beginners ski slope and a nordic ski trail system sponsored by the Anchorage Parks and Recreation Department; the Artic Ski Bowl (military along with civilian) 12 miles from Anchorage and the Mt. Alyeska ski development at Girdwood, 30 miles from Anchorage. See Plan and Description, Red Shirt Complex, pages 39 and 40.



Winter Carnival

3RD YEAR BUDGET - 1968 - INCLUDES THEORETICAL (1966-1967)

	Item Cost	Sub-Total	Yearly Total
Entrance Road - Alaska Hwy. 3 to Boundary 7,400 l.f.	\$ 74,000		
Primary Electrical - 7400 l.f.	5,900		
R.O.W. acquisition 60 acres (7,400' x 300') @\$500.00	30,000		
Railroad spur for construction dump and later passenger siding by Alaska Railroad	00		
		163,200	
Main Loop Road			
Boundary to South Rolly Lake Campground - 24,200 l.f.	242,000		
Primary Electrical - 24,200 l.f.	193,600		
		435,600	
South Rolly Lake Campground			
Secondary access road - 500 l.f.	4,500		
One way camp loop road - 7,700 l.f.	96,250		
6 Comfort Stations - 900 s.f.	27,900		
1 Washateria-Shower-Sanitary Disposal Station Building - 600 Sq.	18,600		
Trail in and adjacent Campground - 7,900 l.f.	7,900		
Launch Ramp	3,500		
Parking - 4,500 s.y.	18,000		
Camp Units - 250.	87,500		
		264,150	
Rhein and Milo Lakes Picnic Grounds (in part)			
Includes easterly section on Milo Lake #2 and westerly section south of Main Loop Road on Milo Lake #1			
Secondary access road - 500 l.f.	4,500		
2 way road with picnic parking - 1,500 l.f.	27,000		
One way picnic loop road - 5,600 l.f.	84,000		
Comfort stations - 8 - 2,400 s.f.	74,400		
Launch Ramps - 2 -	7,000		
Launch ramp parking - 3,300 s.y.	13,200		
Picnic Units - 535	87,250		
		397,350	
Other			
Proportionate amount foot, horse and canoe trail - 1/7:h	30,000		
		30,000	
Land Acquisition			
Tracts 23, 59, 70, 71, 72, 73	26,014		
		26,014	
			51,316,314



Budget

1969

COMPARISONS - 1952 - 1963-64

	Time Spent in Alaska	Number of Highway Vacationers (Departures)	% Campers	Size of Party	% Visiting Anchorage	Complained Lack of Campsites	Desired Improved Campsites (Includes trailers)
1952	11 days	5,493	55%	2.6	52%	18.4%	26.7%
1960	13.5 days	N.A.	56.7%	N.A.	80.7%	N.A.	54.3%
1963-64	9-1/2 days	17,344	50%	3.2	60%	N.A.	8%

"From the University of Alaska report, "Tourist Industry in Alaska (1960)" which also makes the following general comments regarding the camping vacationer.

- . . . Campsites and good camping facilities are necessary for increasing the number of highway visitors.
- . . . The United States is becoming more camper minded and Alaska must meet the demand of the camper visitor.
- . . . The state should develop natural recreational areas for campsites and provide camper facilities.
- . . . The importance of campsites is shown by the high percentage that are using the present facilities.

Group Camps

Facilities for group or organized camps in the Region of Service presently consist of a 40 acre area at Russian Jack Springs Park, City of Anchorage, used by the Girl Scouts, Kings Lake Camp, an area of 260 acres at Wasilla which is used by the Girl and Boy Scouts, YMCA, 4H and various churches. This is a highly organized operation with permanent buildings, a recreation hall, directors' residence and an area for water sports.

Undoubtedly, as time goes on, additional group camp facilities will be needed. Since Nancy Lake will serve ideally for this purpose, two locations have been set aside. See Detail Plan of Group Camps, and description, pages 37 and 38.

Picnicking, either a short or long term activity, can suitably be provided in either urban areas or in large, natural parks such as Nancy Lake. Distance is the major factor determining use and the outlying area would receive primarily the all day visitor. His picnic would be associated with any of the other activities that Nancy Lake will provide, but these would be secondary to the picnic itself. Very extensive picnic facilities are indicated in the Nancy Lake Region of Service largely because there is at present a distinct lack of the particular facility. Believing this deficiency will be corrected, especially with more close-in, short term facilities, despite the fact that no specific programs could be shown, Nancy Lake will not attempt to provide for the full shortage that is indicated for 1980. Rather the total demand has been reduced from 3500 to 2900. It is believed this number will be adequate to satisfy the demand of the all-day users of the Region of Service. Also, capacity of the land would seem to have been reached with this number. See Plan and Description, Typical Picnic Ground, pages 41 and 42.

Playing Games

This activity ranges all the way from shuffleboard (usually for the elderly) through the court games all the way to the major game of golf. Some, such as scratch court basketball and/or softball; the court games of tennis, handball, badminton and volleyball are all short term activities entailing an expenditure of less than a half day. For such short term activities, people will rarely travel any distance. They are therefore urban and more logically municipal or borough responsibilities rather than state. They have no real place in areas such as Nancy Lake. People will travel a great distance to play golf and the game would be a major attraction at Nancy Lake, particularly enhancing the lodge operation. An 18 hole course is included on the plans, with possible expansion to 36 holes. However, it is pointed out that, according to the usual standard of 18 holes per 50,000 population, four 18 hole courses will be needed in the Region of Service by 1980. One of the three exists at Elmdorff Air Base serving a population of 25,000 military. Two additional courses should be provided by either the boroughs or the City of Anchorage. For Plan and Description of Nancy Lake Golf Course, see pages 35 and 36.

Hiking Trails and Nature Walks though separated in the ORRRC studies are here combined because there will be little opportunity for the hiker who prefers miles of distance between himself and others. Trails through the Nancy Lake terrain will be easy and suitable for the less rugged type hiker. Isolated trail camps will be provided for families or organized groups who wish a light, backpacking experience.



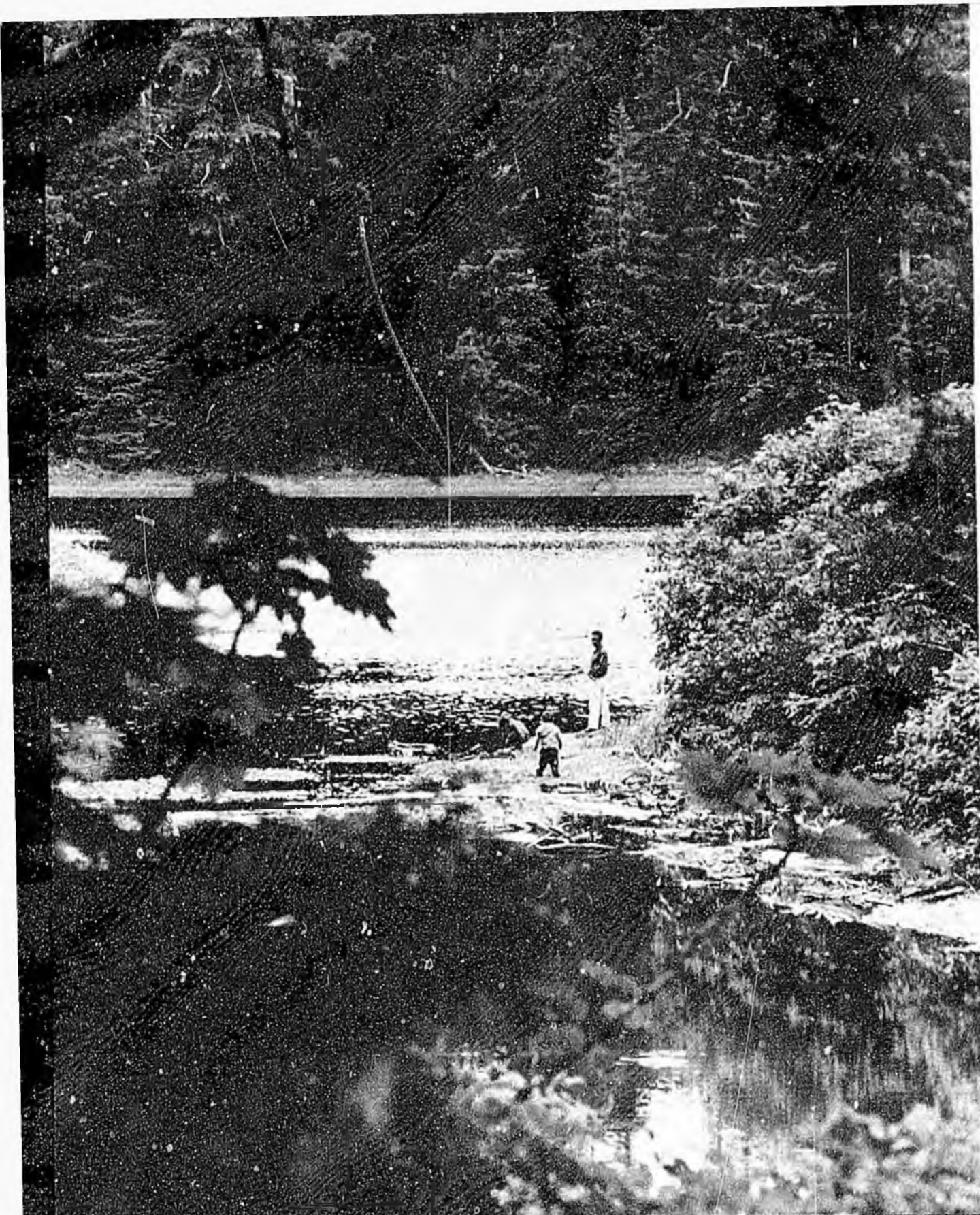
PART THREE

Analysis

Land And Landscape



Arctic Parka Ground Squirrel - Common Denizen of Nancy Lake



PART THREE

Analysis

Land And Landscape



Arctic Parka Ground Squirrel - Common Denizen of Nancy Lake