



Ranger Guided Interpretive Walks Offer Visitors the Chance to Enjoy the Natural Surroundings at NLSRA.

## ANALYSIS AND EVALUATION

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An analysis and evaluation of the Nancy Lake State Recreation Area (NLSRA) looks at the unit in terms of its most appropriate role in providing outdoor recreational opportunities in Southcentral Alaska. The data from the preceding chapters - issues; objectives; cultural and natural resources; current and forecasted demand and; recreational preferences - are all interrelated. When analyzed in light of each other and the goals and policies of the Division of Parks, several conclusions are drawn. The conclusions drawn from the analysis and evaluation of NLSRA, lead to specific recommendations and the process for implementation of the Master Plan objectives.

The analysis is presented under the following seven major headings.

- Recreational opportunities
- Recreational facilities
- Access and circulation
- Historical preservation and interpretation
- Interpretation
- Economics
- Land-use conflicts

## RECREATIONAL OPPORTUNITIES

Camping, boating (includes canoeing), fishing, cross-country skiing, snowmobiling; nature appreciation, and swimming are the most desired and most suited recreational activities for NLSRA. Limits to the amount of public participation in these and associated activities will be set by the amount, location and quality of facility development, fishery enhancement, maintenance of water quality, management practices, maintenance of a park-like environment, the cost of personal or family recreation equipment and the competition for use of leisure time.

The Nancy Lake State Recreation Area is waiting to be discovered. It is a special recreation area, not only valuable because of its proximity to a quarter million people, but because it contains a large diversity of recreational opportunities in one contiguous area that has been set aside for public recreation. The casual visitor to NLSRA may be unaware of the opportunities that lie beyond either side of the Nancy Lake Parkway. They cannot see the 15 mile canoe trail system linking over 20 clear lakes. They can't see the high grassy ridges which yield panoramic views in all directions. They can't see the beaver lodges and dams which abound throughout NLSRA. They can't see the thousands of spawning salmon in the small streams, or the rainbow trout in several of the lakes and streams within the recreation area. Nor can they feel the quiet natural solitude, view wildlife, walk in the birch forests and enjoy the backcountry of NLSRA. People need to experience these recreational opportunities to gain a true feeling for NLSRA.

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A road development, settlement and conversion to private uses remove most of the valley lands from the public domain, the value and use of NLSRA for public recreation, will only increase.

Because of the large size and diversity of land and water forms within NLSRA, many different recreational activities can occur simultaneously without interfering with each other. For example, snowmobiling can go on in one area while in another separated by a ridge line or natural forest buffer, cross-country skiing can be enjoyed in a quiet setting. Water skiing may be occurring on Nancy Lake while on the canoe trails quiet recreation can be enjoyed by others. While 200 people are enjoying themselves and the social interaction with others in a campground, an individual can be not far away at a quiet lake swimming, fishing or canoeing alone. While one person is enjoying a self-guided nature trail, another can be on a self-discovery hike through the back-country.

Because this area has consistently good and predictable snow conditions throughout the winter, cross-country skiing, snowmobiling and dog mushing are well suited activities. Staging and warm-up facilities which enhance the enjoyment of winter recreation will also increase participation in winter use of the recreation area.

Fishing is a popular activity in NLSRA. While rainbow trout do not reproduce in most of the lakes, a successful fishery has been maintained by an active stocking program. Further enhancement can be realized by installing fish traps to prevent stickleback from getting into some lakes, introducing a new trout strain which competes more successfully with the stickleback, and stocking with larger fish. Recent destruction of beaver dams on Fish Creek to allow spawning salmon to return to Red Shirt and other lakes within NLSRA, has also resulted in the migration of northern pike, a predator of rainbow trout, into the lake system. If the trout fishery is to be maintained, an aggressive program must be initiated to block further migration of the pike. The occurrence of pike in Red Shirt Lake has been documented, but not in other lakes within NLSRA.

#### RECREATIONAL FACILITIES

The proper placement, design, type, and amount of facilities are important factors in distributing public use, controlling use patterns and behavior, providing access to and enjoyment of recreation opportunities, protecting the natural environment, creating new opportunities, providing a safe environment and limiting development, maintenance and operation costs. For purposes of this plan, facilities include buildings, boardwalks, trails, signs, fireplaces, campsites, structures, and roads.

Shallow soils, extensive wetlands, a high watertable, the lack of large contiguous areas of dry land, and discontinuous ridges interrupted by wet



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areas, make the placement of facilities very difficult in NLSRA. Most areas such as campgrounds, picnic areas, trails and roads, where intense activities occur, will require special hardening to provide a dry, well-drained surface for people's activities and to protect vegetation, minimize damage from compaction, and to reduce erosion. Hardening materials that should be considered are wood chips, boardwalk, fabric, corduroy, asphalt, sand, and gravel.

The most expensive facility ever built or ever likely to be built within NLSRA, and the one having the most influence on the environment and public use of NLSRA, is the six mile long Nancy Lake Parkway. In lieu of constructing additional roads, this master plan focuses on a more cost-effective approach to facility development. Maximum utilization from the existing parkway is gained by developing additional campgrounds, trailheads and facilities along the existing road 'spine', thereby filling in existing "gaps" and concentrating future development and management. Not only is this approach most cost effective, it reflects a spectrum of opportunities from the public's desire to have more road-accessible campgrounds and associated facilities, to keep the backcountry canoe trails quiet and in a natural state, to have a relatively undisturbed natural area for backcountry trails, remote cabins and wildlife viewing, and to avoid conflicts between private landowners and park users.

#### Land Suitability

Some of the most suitable land for new facilities is along the existing parkway. The amount of suitable land however is very limited and careful soils analysis must precede development of the facilities recommended. An over development of facilities - beyond the capacity of the immediate and surrounding area to withstand anticipated new use - would quickly result in a deterioration of the environment and the quality of the recreational experience. Therefore, the number and size of new facilities should be in a scale in proportion to the carrying capacity of the site and the influence of the recreational development on the use of the area.

#### Location of Sites

Finding suitable new intensive use sites within the parkway "envelope" is complicated by the need to place them in close proximity to the largest possible number of different recreational opportunities. This facility placement is important for increasing the opportunity for visitors to participate in a variety of road-accessible recreational activities. The location of the site is also directed toward increasing visitor satisfaction and avoiding the problems associated with having to pick up and drive down the road two miles from the campground to get to a trailhead, go for a nature walk, go swimming or boating, or just to get out of the campground.

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## Campgrounds

There are two new campgrounds recommended in this plan which will approximately double existing camping capacity. The Shem Pete Campground should be built as soon as funds are available. The Nancy Lake Campground should be built only when demand warrants and after use again approaches the capacity of existing camping space.

Major new campgrounds should be separated from picnic areas but linked together by trails. Campgrounds should have separated vehicle and tent areas, linked by trail. Campground design should permit group camping to occur in an area separated from other campers. Each campground should be linked to a nature trail and one of the trails that is part of the long distance backcountry trail system. Each campground should have one or more shelters for rain protection and foul weather cooking. Each campground should also have a natural environment play area for small children.

Because Nancy Lake, the largest lake in the recreation area, offers such a diversity of recreational opportunity in itself and because there is no existing public recreational facility on the lake that is accessible from the parkway, a campground should be established near the parkway with trail access and a view of Nancy Lake. No vehicle accessible boat launch is recommended since one public boat launch already exists on the north shore of Nancy Lake, and the lake is already crowded with power boats.

## Trails

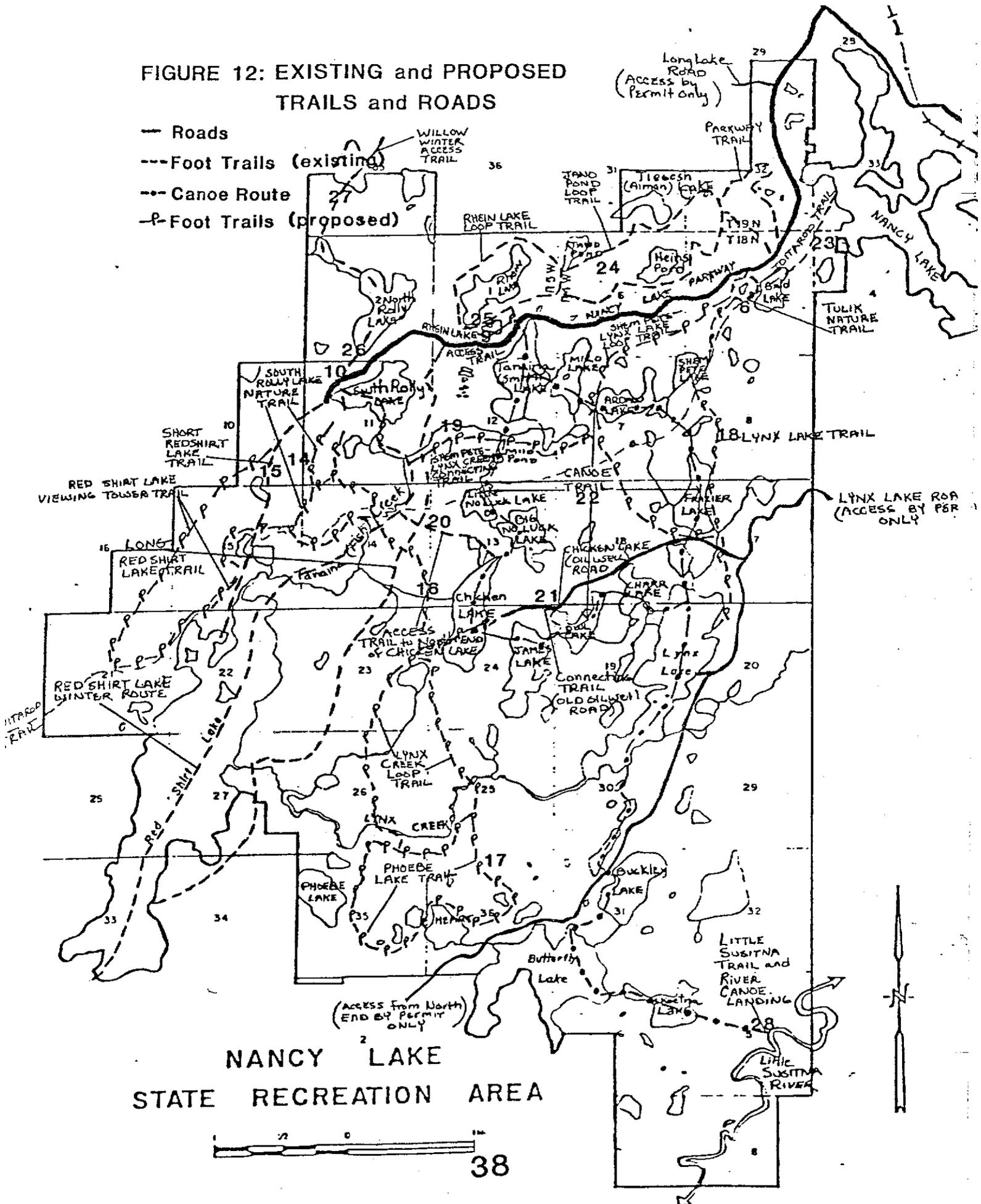
Hiking trails were the most frequently requested facility. Trails are cost effective to construct and maintain compared to other facilities. New trail construction is a high priority of this master plan. Trails will be built as a looping, interconnected system reaching most of the major lakes and creeks within the recreation area, and connecting with other facilities. Surface materials may range from asphalt to soil. The objective will be to maximize access to all areas within NLSRA while minimizing disturbance to the natural environment.

The routing, design and construction of trails will reflect the following six objectives and be in accordance with the Alaska Division of Parks Trail Classification System:

1. Year-round use,
2. multiple use,
3. layout which avoids private property and other potential conflicts,
4. interest and variety of terrain, views, and conditions through which the trail passes,

**FIGURE 12: EXISTING and PROPOSED TRAILS and ROADS**

- Roads
- Foot Trails (existing)
- .- Canoe Route
- P- Foot Trails (proposed)



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5. safety, and
  6. convenience of the user.

Because the canoe trails and overland trails take the trail user far from their departure point where cold temperatures, rain and other adverse weather can catch a person unprepared, hypothermia is a constant threat. Therefore, for the safety and convenience of trail users, backcountry shelters should be strategically placed along the trail system where shelter and warmth can be sought. These shelters should be inexpensive, yet efficient three-sided shelters like the Adirondack type. Not every backcountry trail campsite will have such a shelter. Some campsites should be constructed with one or more fireplaces, a pit latrine, and a place for tents to be pitched - either on a wooden platform if terrain is uneven or wet, or on the ground. Where hiking trails and canoe trails come in close proximity to each other, an effort should be made to either develop joint use campsites, or provide individuals with the choice of moving on to a nearby, yet separate site.

Canoe rests should be constructed at convenient intervals along the canoe trail system to provide people who are portaging boats with an opportunity to rest.

Signing by symbol of trail routes, portage locations, access points and all facilities should be conspicuous but unobtrusive.

#### Canoe Trailhead

The existing canoe trailhead along the parkway is frequently overcrowded. Expansion should include opening up a launch area along the northwest shore for canoe launching and additional parking spaces. This expansion will allow for easier launching of boats. Development of "beach areas" which will encourage high density day-use similar to an urban park setting should be discouraged at this location.

#### Viewing Towers

Viewing towers can greatly enhance the recreational experience, provide a sense of exploration, be a feature of attraction and satisfy people's natural curiosity to view the landscape. Because NLSRA has relatively low rolling hills, there are only a few good vantage points from which long views can be enjoyed. Placed properly and at a sufficient height, towers will provide destinations and new opportunities for visitors where panoramic views can be gained that are equal to or surpass any others in the valley.

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## Group Camp

A full-facility (electricity, sewage, water, showers, heat, phone) group camp with year-round accommodations for approximately 75 people is needed. In a survey of potential user groups within the area that would be served, it was determined that such a facility, if available at moderate cost, would be occupied at least 80 percent of the year. It would be used as an outdoor education support facility. It would extend group-oriented outdoor recreational opportunities in terms of both diversity and year-round availability. To reduce costs for utilities, winter road maintenance, and conflicts with other recreation area users, the group camp should be visually and audibly separated from other facilities, close to the existing parkway, and within one mile of the existing ranger office and maintenance facility where power and phone lines are already in place.

## Public Use Cabins

Presently, as private cabins within NLSRA are purchased, those of suitable quality are offered to the public on a one year competitive bid basis. It has been a popular program over the years, in spite of the fact that the program has not been well publicized, and many of the cabins are old, of poor structural quality and in various states of disrepair. As implementation of this master plan occurs, most of these cabins should be replaced with new cabins. The new cabins should be built with the lessons learned by the U.S. Forest Service in mind, including the following:

They should be located a distance from the road system to reduce the threat of vandalism.

They should be associated with the backcountry trail system or lake system for ease of access and maintenance.

They should be signed and of standard design and materials to be readily identifiable as state park cabins and not private cabins.

At least one of the cabins should be close to the road system and along a hard surfaced trail to be accessible by those with disabilities or otherwise unable to walk long distances.

The public use cabins should be available for reservation on a daily or weekly basis to allow maximum public use.

A reservation system operated by the private sector on a concession contract should be considered for added economy and efficiency. The concessionaire would be responsible for routine maintenance, repair and replacement.

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### Visitor Display

A visitor display is needed along the parkway as an information station for orienting park users as to opportunities that are available. A kiosk, or information display, will be constructed at the existing entrance pull-out. The pull-out will be expanded to hold 15-20 vehicles. Once the area has been expanded it can serve as a winter cross-country skiing and summer hiking trailhead. This would eliminate present and future conflicts at the existing winter trailhead between skiers, dog mushers and snowmachiners by more clearly separating user groups.

### Facility Construction

All structural facilities should be constructed of indigenous appearing stone or wood to blend with surrounding vegetation and be screened from the Nancy Lake Parkway by low hills, mounding or vegetation as possible.

### Trail Bikes

An area for summer use of trail bikes or three-wheelers will not be built in NLSRA. The use of these bikes will be encouraged to take place outside of the park, at some other more appropriate location in the region.

## ACCESS AND CIRCULATION

### Roads

No new access roads, through roads, connection to roads outside of the unit boundaries, or major improvements to existing roads are planned for the life of this master plan. Development of facilities along the Parkway will guarantee greater traffic volumes and lead to deterioration of the roadbed. The anticipated increase of visitors is projected to be 100,000 annual user days when the Parkway is fully developed. To reduce road hazards, dust levels and provide for a more enjoyable visitor experience, the Parkway road should be paved. Such expenditures were not requested during the public involvement process and at this time would be an unnecessary diversion of recreation dollars from projects that would contribute more directly to the enhancement of recreational opportunities.

Extension of the Nancy Lake Parkway to access lands to the west was rejected during the planning process as an unacceptable impact affecting the integrity of the recreation area. The Knik Arm Causeway will link either the Houston or Wasilla/Big Lake areas to Anchorage. The preferred study alternative was the economic and population link to the Big Lake/Wasilla area. A link via the Nancy Lake area was rejected. There remains, however, an interest in obtaining access to agriculture, forestry and residential lands along the Big Susitna River. These lands are best

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accessed from links to the Knik Arm Causeway, Wasilla and Willow rather than a link via Nancy Lake.

Extending the Nancy Lake Parkway would result in a change in the type, volume and loads of traffic, remove Nancy Lake from a recreation destination road to a high speed highway thruway, create safety hazards and change the management character of the recreation area.

#### Tudli Bena Campground (NLSRS) Access

The continued access to Tudli Bena Campground, formerly NLSRS, is dependent upon a lease with the Alaska Railroad of a portion of their right-of-way between the campground and the Parks Highway. The lease expires in 1993. The appearance of this entrance is also a problem. Land acquisition at the entrance is necessary to create a more aesthetically pleasing and inviting entrance for park visitors and to insure long-term physical access.

#### Nancy Lake Parkway

Similarly, the land on either side of the Nancy Lake Parkway for the first three quarters of a mile between the Parks Highway and NLSRA, is in private and Borough ownership. To insure that this entrance remains aesthetically inviting and "parklike", appropriate acquisition action must be pursued.

#### Lynx Lake Access

The Lynx Lake road provides private access to authorized users who lived within and beyond NLSRA and were using the road for access to their property at the time of the recreation area's establishment in 1966. This is not now, nor planned to be, a public access. Use of the unimproved pioneer road by the landowners will be allowed to continue on a permit basis. The gate will be locked and individual keys issued. Entry and use is controlled by the Division of Parks. In addition to limited private use, the road is available for firefighting and stocking of trout in some of the backcountry lakes.

#### Red Shirt Lake Access

A trail from the end of the Nancy Lake Parkway to Red Shirt Lake provides overland access to park visitors and landowners choosing to recreate at Red Shirt Lake or surrounding area. The consensus of the public meeting participants and the Red Shirt Lake Homeowners Association was to upgrade the trail for ease of access. People preferred not to develop a road into the lake so as to maintain the quiet, natural beauty of the recreation area, to protect resource values, to provide more hiking opportun-

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ities, and to keep the lake less developed. Increased vehicular traffic along the existing Parkway and an extension of the road would change the use patterns on the lake, create greater development opportunities and open the lake to motorized activity. The change in management character was not warranted at this time and other regional opportunities such as those at Nancy Lake, Wasilla Lake, and Larson Lake could better meet the more intensive development and use spectrum.

#### Circulation

Dispersion of people off the Parkway spine will be dependent upon an expanded multi-purpose motorized and non-motorized trail system. By emphasizing trail dependent circulation, more people can be absorbed into an area with less impact on each other and the environment - and at relatively low cost. Trails are far more cost-effective than roads, provide a means of association with the physical environment, can access sensitive wetland environments, are useable by all age groups and special populations, require little maintenance costs, can be 'adopted' by volunteer groups and can best meet the backcountry management objectives for NLSRA. Trails could also be built to adequate standards to support vehicle access in case of life threatening emergencies and for firefighting.

#### Access by Air

Four of the major lakes within the recreation area are open to airplane landing - Nancy Lake, Lynx Lake, Red Shirt Lake and Butterfly Lake. The public will continue to have landing rights, and air access will continue to be the homeowners legal access to their land. Should the public recreation experience change, the resource becomes degraded or the public's safety becomes endangered, alternative actions may be needed. The Director of the Division of Parks may close the lakes to airplane landings, or landings may be limited to specific times and locations.

#### Access by River

A canoe portage trail, connecting the Little Susitna River and Skeetna Lake is located 12 miles downriver from MP 57 of the Parks Highway. The linkage of the Little Susitna River to the Nancy Lake canoe trail system allows visitors to experience a wider diversity of recreational opportunities and resource values.

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## HISTORICAL PRESERVATION AND INTERPRETATION

Several Tanaina Indian settlements and activities occurred within and around the boundaries of NLSRA as recently as 75 years ago. Some of the locations are shown in Figure 13, Historic Sites. There is little this early settlement in the area, either in structural remains or in landmarks bearing Indian names. An effort should be undertaken to reestablish historical names, protect and preserve historical sites, and document historical events.

### INTERPRETATION

Interpretation is a means of involving park visitors and enhancing their enjoyment and understanding of the area's natural and cultural resources. To facilitate interpretation at NLSRA, the development and implementation of programs and facilities for year-round public involvement is recommended. Program and facility development will emphasize those features unique or special to NLSRA, including natural, historical and cultural features, include information on seasonal recreation opportunities, enhance public safety and satisfy people's desire to learn while stimulating them on to more self-discovery.

Some of the themes that can be interpreted to the public at NLSRA include the following:

The natural progression of the forest.

The life of the Tanaina within NLSRA. Translations of language and cultural meanings and traditions.

Wildfire - foe or friend? How fire would effect NLSRA.

Water, water. How lake hydrology changes in the surface waters of NLSRA would dramatically effect the area.

A fishy tale. The types of fish within NLSRA and how they interact.

Birds of a feather. Follow the trails of NLSRA to locate a variety of bird life in different habitat areas, and identify common calls.

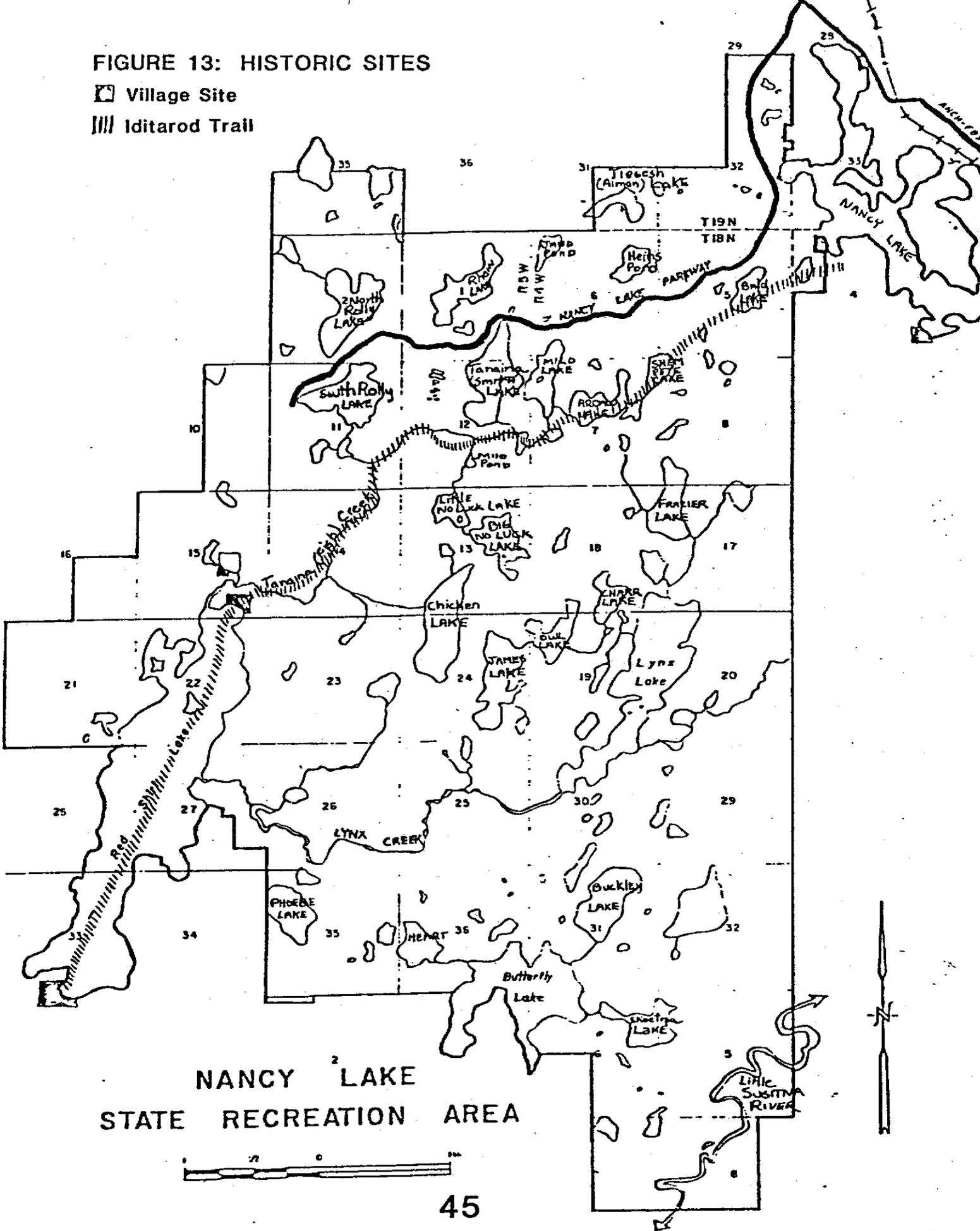
Free food from the forest. An edible foods class.

Sounds in the night. A chance to explore the night environs of NLSRA.

To machine or not to machine? A look at the pros and cons of vehicle use within NLSRA.

FIGURE 13: HISTORIC SITES

- Village Site
- |||| Iditarod Trail



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Back-country know-how. How to deal with the wet, cold, Alaskan weather.

Man and the balance of nature.

Who's land is it? How a person can prevent recreational trespass.

Bountiful beaver. How man and beaver interact within the park.

Life in a lily pond.

Form and function of plants and animals at NLSRA.

Lake formation - reading the landscape.

What is a muskeg?

Natures steam. Exploring the geothermal potential at NLSRA.

Lake ecosystem. Nutrients, temperature stratification and other events found in NLSRA waters.

## ECONOMICS

Based on the questionnaire results obtained as part of this master planning effort, the average visitor to NLSRA in 1981 spent \$19.07 directly attributable to their visit. The average (mean) length of stay per visitor is 2.5 days (Alaska State Park Visitors, 1977). NLSRA receives between 50,000 and 70,000 visitor days (Division of Parks statistics), with visitors to NLSRA contributing to between \$400,000 and \$560,000 per year to the local economy. Although, at present, no fees are paid by the public to use NLSRA, and therefore no money returns directly to the state's treasury, the economic contribution of NLSRA to the private sector is considerable. The possibility of levying visitor use fees could return money directly to the state treasury. An analysis of a campground fee system is recommended.

To defray the costs of construction, operation, and maintenance of the group camp and public use cabins, a charge for their use is recommended. The charge, paid by the users, should be high enough to offset their maintenance and operation costs. Since the private sector does offer similar group camp facilities at various locations in the region, the fees charged to the users should not be so low as to compete with or otherwise interfere with those private facilities. In the event that the public use cabin system is operated by a private concession, the fee charged to the user should be high enough to make the rental system economically feasible to the concessionaire.

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It is expected that the combined effect of adding new facilities and programs recommended herein will result in a possible rapid increase in use of the recreation area. Such additional use will have a positive economic influence on local businesses, possible employment for local residents, potential concessionaires, and influence other segments of the private sector.

## LAND USE CONFLICTS

People who attended the public meetings and responded to the questionnaires placed strong emphasis on retaining one quality of NLSRA above all others - its quiet natural beauty. That management setting will be maintained, in part, by separating motorized and non-motorized activities. The natural beauty will be managed through the careful design of new facilities to blend naturally into the landscape, minimizing facility development on lakeshores and avoiding areas that are sensitive to or would be adversely affected by encroachment of facilities or intense use.

### Land Use

More intensive uses such as the group camp, swimming beach, vehicle camping areas, paved trails, visitor contact sites, parking areas and picnic sites, will be concentrated along the existing parkway. Low impact uses, that is those activities which depend on a quiet natural setting and in turn leave little evidence of their occurrence, will be separated from the parkway and further removed from its influence.

### Private Land

The presence of private land within the boundaries of NLSRA is a management consideration. Conflicts can be reduced by the following:

Acquiring those parcels which are in close proximity to areas planned for intensive public use.

Avoiding public recreation facility development adjacent to private land.

Restricting high impact uses such as power boat, aircraft and snowmobile operations.

Educating park visitors to the rights of private landowners and existing park boundaries.

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## Outside Development

Another potential conflict exists between maintaining a parklike setting within NLSRA and development which may occur on land outside the recreation area. Adjacent private development could result in improved access to private land, obtrusive development along the entrances to NLSRA, undesirable changes in land use, and other encroachment problems that could significantly reduce the value and enjoyment of public recreation. The Matanuska-Susitna Borough will be encouraged to address the issue of land use zoning, development and access to maintain the character of NLSRA.

## Powerlines

Overhead powerlines being planned as part of power delivery from the Susitna and Watana Dams to Anchorage would cause significant impact if routed through NLSRA. Alternative routing should be found which avoids the recreation area.

## Future Roads

Future road networks will be required to serve those areas surrounding NLSRA being planned for agricultural, timber, residential and industrial development. The Division of Parks management of NLSRA could be seriously affected by the location of these future roads. Linkages to new roads could open up undesirable new accesses and introduce visible and audible transportation corridors that would change the management character and public options for recreational development and use of the recreation area. Increased road systems will also increase public safety concerns. Safety of park visitors, who are participating in quiet, recreational activities such as hiking, jogging or berry picking along the road could be jeopardized by increased vehicle traffic. The Nancy Lake Parkway should not be extended to the west end of the park. Opening the road would seriously destroy the quiet nature of the recreation area for which so many visitors cite as the unit's major attraction. The NLSRA is a park, not a highway thoroughfare.

The criteria for extending the Nancy Lake Parkway should meet the following tests:

1. **Compatibility**  
Extension of the Parkway road must show that any change in use patterns, traffic flow, vehicle loads, type of vehicles, noise levels, dust and other vehicular impacts are compatible to the park's character and purpose and management objectives.

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2. Negative Impacts versus Benefits

The social, economic and environmental impacts of the Parkway extension must be assessed. A comparison of the benefit and impact on the park must be made. If the primary benefit of the Parkway extension is to serve user groups outside the park, then alternative access routes outside the park should be developed. An alternate road outside the park which would provide access to other state, borough, and private lands along the entire road corridor should be compared to the existing single purpose use of the Parkway for recreation.

3. Management

Any extension of the Parkway must include an assessment of the resulting change in management of Nancy Lake State Recreation Area. The management assessment should include public safety, maintenance, operations, visitor services, change in visitor use and behavior, investment in new facilities, replacement of facilities, and frequency and intensity of management activities.

4. LWCF Conversion of Use

Any extension of the Parkway must comply with federal Land and Water Conservation standards for conversion of use and with Section 4(f) of the Department of Transportation Act. The LWCF Act provides that "No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and reasonably equivalent usefulness and location.

In accordance with Section 4(f) of the Department of Transportation Act, a project alignment cannot impact significant publicly owned parks, recreation areas...unless a determination is made that (1) there is no feasible and prudent alternative to use of above properties, and (2) the project includes all possible planning to minimize harm to those properties.