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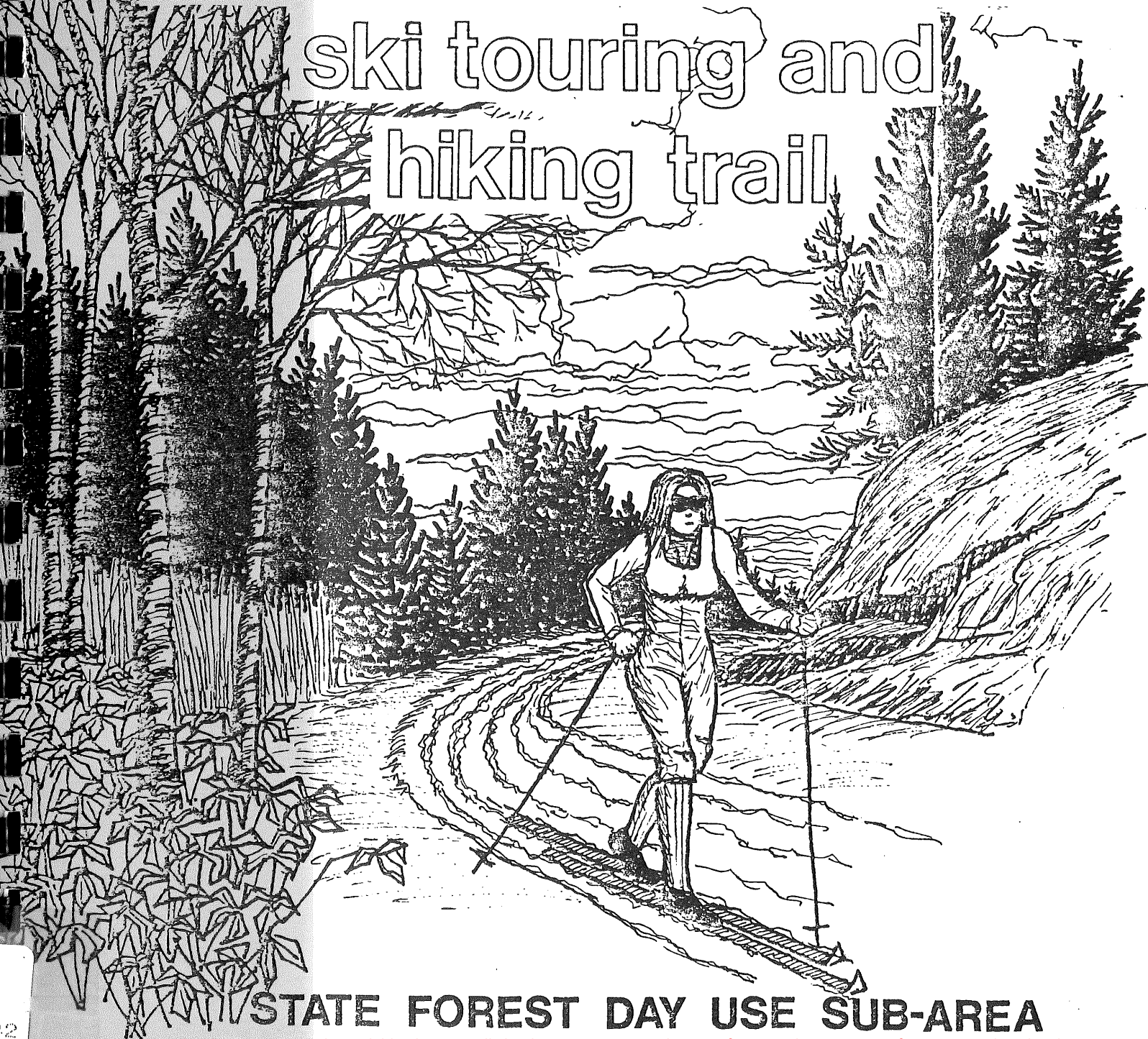


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Kabetogama S.F.
A Management Plan
for the

Ash River Falls

ski touring and hiking trail



STATE FOREST DAY USE SUB-AREA

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Final Plan
June 1979

Minnesota Department
of Natural Resources

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SUMMARY

The major sections of the document are: the Introduction, Description of the Proposed Action, Description of the Environment, and Environmental Impact of the Proposed Project.

The Introduction includes: an overview of pertinent legislation, the authority for state forest sub areas, and the goal and objectives for the state forest ski touring and hiking program. The DNR's overall goal is also revealed.

The Description of the Proposed Action reveals: the location of the project, the unit goal and objectives, existing and proposed development, maintenance, how the plan will be implemented, and whose recreational needs will be served.

The Description of the Environment is an inventory-analysis of the natural and socio-economic resources of the project area. This section attempts to "tie together" the interrelated resource factors that are vital in the planning of this unit.

The final section, the Environmental Impacts of the Proposed Project, deals with the possible affects that the proposed action may incur.

Introduction to the Plan

Multiple Use Concept

It is the policy of the Department of Natural Resources, Division of Forestry, to protect, develop, and administer the renewable resources of Minnesota's fifty-five State Forests so they are utilized in the combination of uses that will best meet the needs of Minnesota citizens. This requires harmonious and coordinated management of the forest resources to bring about their maximum productivity as well as providing other public benefits.

The primary management objective is to maintain a maximum sustained yield of various forest products while utilizing renewable forest resources to benefit the greatest number of people. Renewable forest resources that require management and protection include timber, wildlife, soil, and water. Management practices such as timber production and harvest, watershed protection, wildlife habitat maintenance, and recreational development are carried out on land best suited for each use.

This multiple use approach to management is intended to provide equal opportunity for all citizens to enjoy and utilize our forest resource. This means that the forest is a shared resource that must be utilized by various user groups in harmony with each other.

With this multiple use concept in mind, the legislature included state forests

in Minnesota's Outdoor Recreation System. This system, created in 1975 by the Outdoor Recreation Act (ORA), incorporated all state recreation lands into 11 different kinds of areas, each with its own classification. The eleven classifications are: Natural State Parks; Recreational State Parks; State Trails; Scientific and Natural Areas; State Wilderness Areas; State Forests; State Wildlife Management Areas; State Water Access Sites; State Wild, Scenic and Recreational Rivers; State Historic Sites; and State Rest Areas. Each member of the system is referred to as a "unit".

By passing the ORA, the legislature revealed its awareness of a growing problem in Minnesota: The increasing number of people using state lands each year for more diverse forms of recreation. While some areas could withstand higher levels of use, other areas experienced overcrowding and conflicts between different recreational users.

To insure that the administration of each unit is managed in a manner that is consistent with the purposes for which the unit was authorized, it is required by the ORA that the managing agency prepare a master plan for each unit.

The following day use sub-area plan has been prepared by the DNR to fulfill the requirements of this act as it pertains to state forests. This day use sub-area plan will be incorporated into the overall state forest master plan when that plan is prepared.

Overall Program Goal

The goal of the overall Department of Natural Resources Ski Touring and Hiking Program (which includes Natural and Recreational State Parks, Recreation Areas, and State Forests), is to provide Minnesotans with the finest ski touring and hiking areas possible.

State Forest Ski Touring and Hiking Program Goal

The goal of the State Forest ski touring and hiking program is to provide Minnesotans with the highest possible variety of quality ski touring and hiking areas. These ski touring and hiking trails shall be developed so that they may be enjoyed for years to come.

Objectives for Overall State Forest Ski Touring-Hiking Program

- * To provide ski touring-hiking opportunities in state forests which are accessible to all citizens of Minnesota.
- * To improve the 125 miles of existing ski touring-hiking trails in state forests.
- * To develop 150 miles of new or additional ski touring- hiking trails in state forests throughout Minnesota.
- * To provide a variety of ski touring-hiking experiences in state forests taking advantage of scenic, topographic, historic and recreational areas.
- * To involve concerned citizens in the planning and design of ski touring-hiking trails.
- * To provide complementary facilities along each state forest ski touring-hiking trail to insure the rest and comfort of the trail user.

- * To implement a statewide system of signing design and specifications that is consistent along each state forest ski touring-hiking trail which promotes user enjoyment and safety.
- * To disseminate current, accurate literature about each state forest ski touring-hiking trail for public information and use.
- * To provide interpretation on the cultural, historic and vegetative features along state forest ski touring-hiking trails.

Description of the Proposed Action

Purpose of the Action

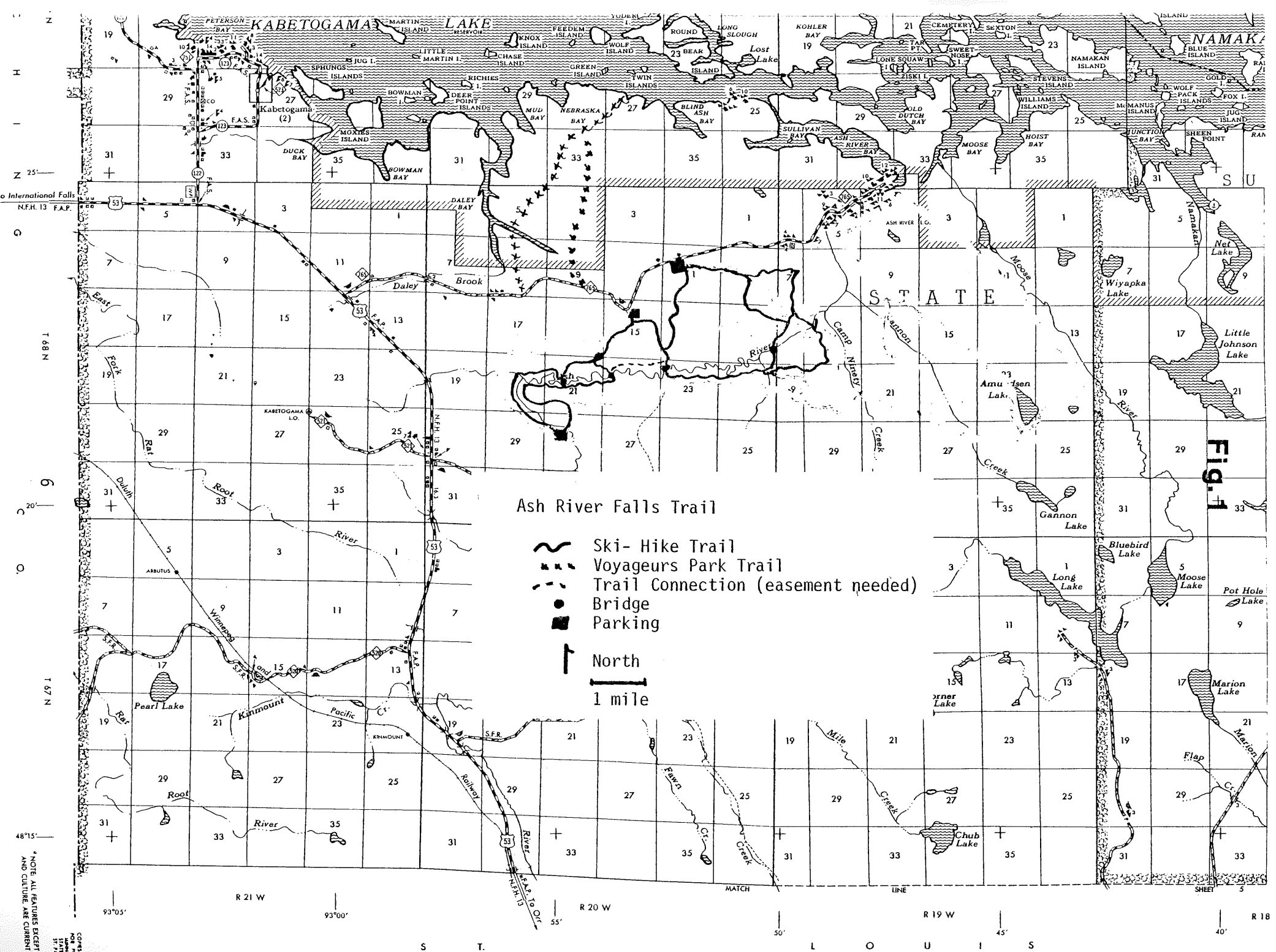
The Ash River Falls Trail is intended to be a 10-15 mile hiking, backpacking, and ski touring trail. The trail will allow users to view a wide variety of natural features from river bottoms to high rocky ridges which offer the visitor many panoramic views of miles of wild land. Along the route are small lakes, streams, and beaver ponds. The trail will also be open to use by hunters and trappers during established seasons.

Location

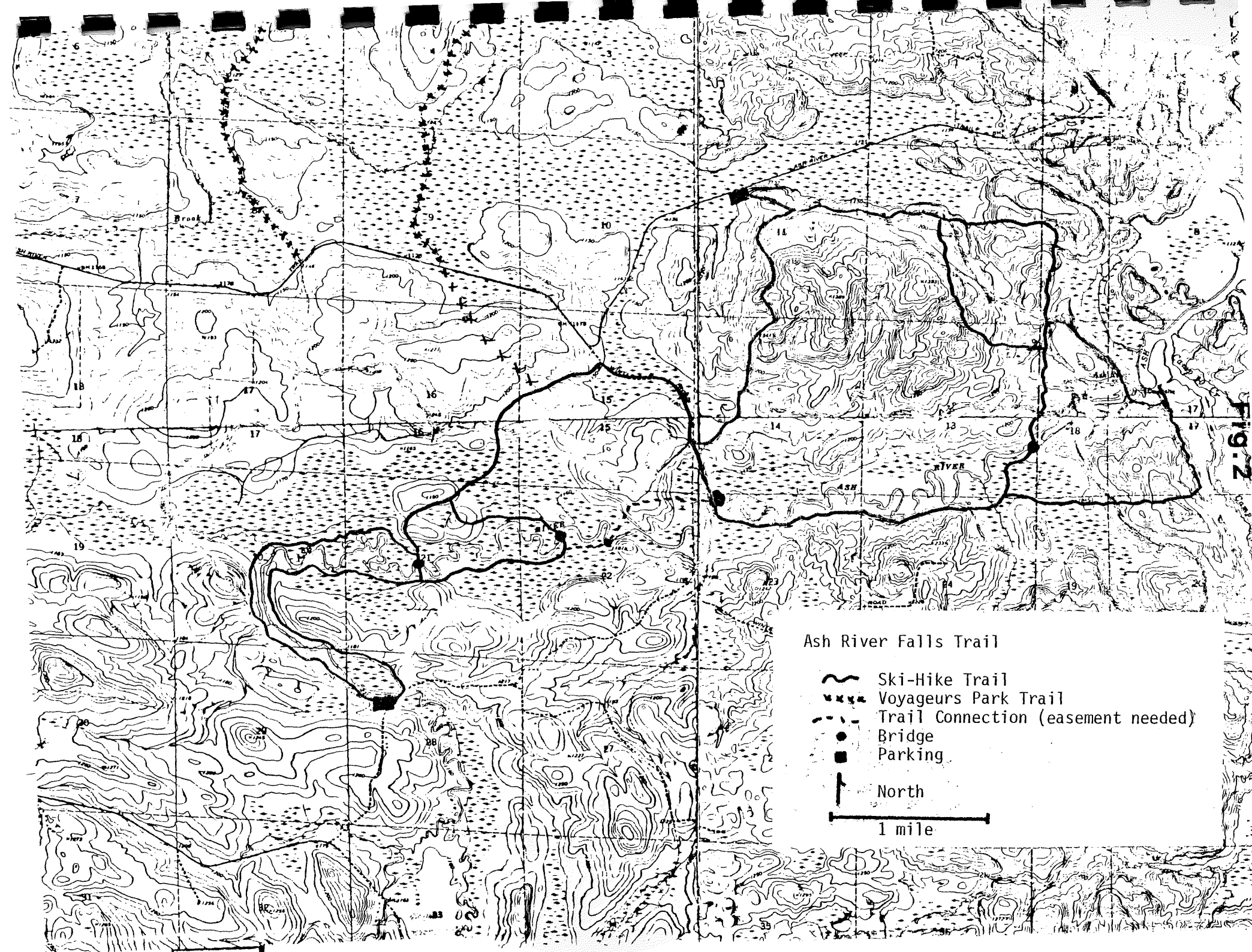
The Ash River Falls Trail is located in northwestern St. Louis County, Townships 68N., R. 20W. and R. 19W. (see figure 1). The trail will start in T 68N., R. 20W., Section 11 and proceed in a loop system throughout the area. Approximately 10-15 miles of trail will be developed (see figure 2)¹. The trail will connect to a Voyageurs National Park ski trail which will be located north of the trail area (see figure 2). Final connections will not be worked out until field alignment is finalized. Portions of the trail are located on federal and city of Tower lands. The Forest Service is currently processing the States request for a special use permit on these lands. The City of Tower has agreed to grant an easement, but negotiations have not been finalized to date. The State is also in the process of contacting Boise Cascade Corporation about a land exchange for the forty acre parcel near the falls. Boise has stated in their correspondence that they might be agreeable to such an exchange.

The trail is located to offer the user a maximum variety of visual experiences.

¹The present map location is preliminary and is subject to revision as development commences. DNR personnel, members of a local ski club and other concerned citizens will inspect this preliminary route and make necessary changes.



FOR PUBLIC
MADISON, WISCONSIN
STATE HIGHWAY
ST. PAUL, MINN.



The trail will visit many lakes and streams and will pass through or adjacent to a wide variety of terrain and vegetation. The appropriate wildlife managers will be involved during final trail alignment to insure that sensitive areas such as deer yards are avoided.

A connection to Voyageurs National Park will be made in the future when their extensive system of foot and ski trails are developed. These trails are presently in the planning stage and have not been constructed. The DNR will keep in contact with Voyageurs National Park personnel so that this connection can be made as the park develops its trail. Whether this connection will be summer or winter use only cannot be determined at this time, because on the ground alignments have not been determined by park personnel. Trails shown in figures 1 & 2 within Voyageurs are only general locations.

The Voyageurs National Park Master Plan states "that the basic trail network will be designed as independent loop systems that will meet recreational needs for hiking and skiing." Since the Ash River Falls trail is also designed for the recreational needs of skiers and hikers the two areas should complement each other well.

When the connection to the park is completed users of the Ash River Falls Trail will be able to connect to the Sullivan Bay area. Sullivan Bay is listed as a primary development site in the VNP Master Plan. Development at this location will include a visitor center, parking facilities, boat launching and docking accommodations, nature trails, limited existing lodging facilities, a park operations base and employee housing.

Since the Sullivan Bay area will be a primary development site, many visitors will be attracted to the Ash River Trail area. Six hundred thousand to 1

million visitors annually are expected to visit the park by 1990. Although most of these visitors will utilize park facilities only a substantial number can be expected to also use the state forest trail.

Unit Goal

It is the goal of the Department of Natural Resources to develop and maintain the Ash River Falls Trail into one of the highest quality "back country" trails in the state.

Unit Objectives

- * To provide Minnesotans with an opportunity to enjoy ski touring and hiking in a relatively undeveloped area.
- * To open a portion of the Kabetogama State Forest so that its wide variety of natural features can be viewed and enjoyed.
- * To develop and maintain a ski touring-hiking trail in light of other on-going management practices.
- * To develop and implement a maintenance program which will sustain the quality of the trail for the future.

Development Specifications

1. Cleared Trail Width - normally 6-8 feet with 10-12 feet cleared on hills. Overhead clearance will vary from 8-12 feet depending on expected snow-depth. Clearing to these heights and widths should reduce ingrowth and overhanging vegetation.
2. Tread - approximately 4-6 feet wide with a smooth travel surface, i.e. - obstacles such as roots, stumps, rocks, holes, and bumps removed.
3. Grade - will normally be 15% or less with some individual sections between 15 and 40%.

4. Drainage - natural ground slope will be maintained where possible so as not to disrupt normal surface water flow. Culverts, bridges, cross drains, corduroy, etc. will be used where the trail crosses water courses and low wet areas. Cut and fill techniques may be used in some areas.
5. Surfacing - native material will be used as much as possible, however, gravel or other fill may also be used.

6. Public Access Points - access to the trail will be provided at the parking area which will be developed along the Ash River Trail. T. 68N., R. 20W. section 11 (see figure 1, page 6). The parking lot will be developed to handle 10-15 cars with room left for future expansion.

A second parking area will be developed in T. 68N., R. 20W., section 28. This lot would be primarily used during the winter (see figure 1, page 6).

A third parking lot will also be developed for winter parking in section 15, T. 68N., R. 20W. (See figure 1). This lot will give easy access to the winter trail from the Ash River Trail (road).

7. Campsites - will consist of a cleared area, firegrate, and boxtype latrine. Campsites will be of primitive design similar to those found on canoe routes in the BWCA. Campsites will be developed in scenic locations near lakes or streams.
8. Rest Areas - simple log benches will be constructed in scenic locations to give the traveler a chance to stop and enjoy the surroundings.

Construction - will start as soon as possible after the management plan has been reviewed by the State Planning Agency². Various methods of construction will be utilized depending upon access, soil condition, and vegetative cover. The first stage of construction will involve cutting of all trees and brush from the right-of-way to the desired height and width. Then a crawler tractor will clear and shape the treadway where feasible. If a crawler tractor cannot be used, clearing, grubbing and shaping will be done by hand. These methods of construction should produce an easy-to-maintain trail. Bridges, board walks, and culverts will be constructed of wood and left natural or stained an earth tone brown. Bridges will be of approved Bureau of Engineering design. Clearing and grubbing debris will be disposed of by topping and scattering outside of the trail treadway. Permits will be obtained from the Division of Waters before any construction is carried out in or along streams, rivers, marshes, lakes or other surface waters. Water bars and diversion structures may be necessary on steep slopes to prevent erosion.

²The trail will be constructed during the snowfree season of 1979. This will allow sufficient time this winter to work out agreements with the forest service and the City of Tower. The majority of the trail is located on State land. The other agencies have been contacted and are willing to work with the state in establishing this trail.

Maintenance - will be performed as necessary to preserve the trail location, and to provide for safe unobstructed travel. Maintenance will involve a variety of techniques ranging from minor hand clearing and brushing, to sign replacement and bridge repairs. Winter maintenance will involve plowing of the parking lots and access roads. To maintain a primitive setting in the area, the ski touring trail will not be groomed by machinery.

Signing - the trail signing system will conform to the State's Standard System when that system has been finalized. The purpose of this signing system is to provide uniform symbols to convey information and direction to the trail user. Sufficient signs will be provided to transmit information, insure user safety, and facilitate enforcement. Signs will be located for maximum visibility and will be kept to the necessary minimum.

Two major types of signs installed will be "You are Here" maps and trail difficulty markers. The former will be located at all trail junctions while the latter will be placed at necessary locations.

Any visible management activities should be interpreted for the benefit of the recreationist. Signs can be utilized to inform the user of management practices which may otherwise be misunderstood. Education through interpretation will help promote better public understanding of timber management which can lead to successful integration of forest management and recreational programs. If any openings are created along the trail for wildlife, an interpretive sign should be placed to explain their purpose as a wildlife management tool.

Maps - the trail map will show lakes, campsites, rest areas, and trail locations so that the user will be able to easily orient himself. The map will also contain interpretive information and explain regulations on fires, camping, etc. Maps will be the responsibility of the Division of Parks and Recreation to develop and print. Input will be received from the Division of Forestry and Trail Project Planning as to their design and content.

Implementation

The structure of the Department of Natural Resources is such that the Bureau of Planning and Research - Trail Project Planning is responsible for coordinating the planning process and general implementation monitoring. After the plan is reviewed for consistency with the Outdoor Recreation Act, development can commence.

The Division of Parks and Recreation - Trails Section has the responsibility for funding the project. They are also responsible for monitoring development and maintenance to insure that funds are spent in compliance with the bonding bill and master plan.

The Division of Forestry implements the plan by assigning appropriate regional personnel to carryout development and maintenance of the trail. This development and maintenance must be in compliance with the management plan. The regional trail coordinator will coordinate other managers' activities within the region. He will also coordinate design of trails and facilities with the

area and district foresters with input from the regional trail coordinator.

Changes to the management plan must be cleared through the Bureau of Planning and Research - Trail Project Planning.

Estimated Cost of Development

Trail construction is estimated to cost between \$600 to \$1,000 per mile.

Estimating 15 miles of trail, total construction cost will be between \$9,000 and \$15,000. Rest areas, campsites, and parking facilities will add an additional \$2,000 to \$3,000 to overall costs.

Maintenance should cost approximately \$50 per mile per year.

Timing of the Project

Sixteen state forest ski touring and hiking areas have been identified as prime areas for development or improvement during 1978. The Ash River Falls Trail is one of these projects.

The proposed developments are scheduled to be constructed during the fall of 1978 and the snowfree season of 1979.

The area will be monitored continually by the district forester and other personnel to access any problems that have occurred and to determine any additional developments which may be necessary.

Future Potential Development

An additional 10-15 miles of trail could be developed east of the present trail area. This area located east of Camp 90 Creek (T. 68N. R19W) was looked at during the planning process and has good potential for future development. Expansion into this area, however, is not recommended until use on the developed trail is sufficient to warrant expansion. If expansion is necessary the proposal will be covered in the overall management plan for the Kabetogama State Forest.

Recreational Needs to be Served by the Project

Ski touring and hiking are two activities that have experienced a tremendous growth in popularity in recent years. The 1974 Minnesota State Comprehensive Outdoor Recreation Plan (SCORP) identified ski touring and hiking as two of the fastest growing recreational activities in the state.

At that time, it was estimated that the number of Minnesotans participating in hiking was 300,000, and it was projected that over 100,000 Minnesotans would be participating in ski touring by 1975. SCORP also emphasized that these activities would continue to grow in popularity in the future.

Use of the Ash River Falls Trail is expected to be considerable although extremely hard to estimate. The upgrading of highway 53 will provide convenient access to the area, which should help to draw users. The development of Voyageurs National Park will also draw people to the area.

Description of the Environment

Topography and Soils

The topography of the area is made up of gently rolling hills and rock ridges, interspersed with small lakes and low wet areas. The major soil series is classified as Cloquet-Taylor-Rock Outcrops. Cloquet is a light colored soil formed from gravelly glacial drift. Taylor is a light colored soil developed from calcareous lacustrine clay. The two most common tree species are jack pine in the gravelly soils and aspen on the clayey soils.

Climate

The Kabetogama State Forest has a suitable climate for year around trail activities. A climate data summary is given below:

Climate Data

Temperature (°F.)

January	-	mean maximum	-	14 ⁰
	-	mean minimum	-	-8 ⁰
July	-	mean maximum	-	80 ⁰
	-	mean minimum	-	52 ⁰

Precipitation

mean annual precipitation - 26"
average annual snowfall - 50-60"
average annual number of days with snowcover of 1"
or more - 140 days

Water Resources

Surface water resources near the trail area include the Ash River, Camp 90 Creek, Gannon Creek and many small streams and lakes. North of the area are two large lakes: Kabetogama and Namakan which are famous for their beautiful scenery and excellent fishing. These rivers, streams, and lakes mixed with the rock ridges make this area one of the most scenic in Minnesota.

Mineral Resources

The Kabetogama State Forest is located in an area of high mineral potential. However, no economic concentrations of minerals have been identified in the trail area at this time.

Land and Timber Resource

The Kabetogama District consists of 15 townships surrounding Lake Kabetogama, twenty miles southeast of International Falls. The district contains approximately 235,600 acres. Of this total 27.4%, or 64,554 acres are state forest land.

The district is presently characterized by large blocks of second growth aspen in contrast to the vast stands of cedar, spruce, and white pine covering the land when logging commenced around 1910. In twenty short years, this district was completely cut over, the slash was burned and along with it most of the non-merchantable species, leaving a vast area of burned snags, stumps and bare rock ridges.

The forest today consists of 45,867 state owned forested acres in the following covertypes: Aspen-Birch 43% (of the forested acreage), Cedar 5.1%, Ash-Elm 4.8%, Balm of Gilead 8.7%, Jack Pine 5.3%, Norway and White Pine 3.3%, Black Spruce 8.1%, Spruce-Balsam 20.9%, and Tamarack .8%. Most of this acreage is in the reproduction to pole size class.

Wildlife

The Kabetogama State Forest is home for numerous species of wildlife. Moose, deer, bear, and wolves are among the larger animals found there. Smaller mammals such as fox, red squirrels, beaver, weasels, otter, and mink can also be observed on occasion. Loons, Canada Jays, ruffed grouse, spruced grouse, and waterfowl are common. Eagles and ospreys may be sighted on occasion.

Most of the lakes have a variety of fish in them. Northern pike, walleye, smallmouth bass and panfish are common. Lake and stream trout are found in some lakes, rivers, or streams.

Air and Water Quality

The Kabetogama State Forest is relatively undeveloped and sparsely populated. Air pollution is not considered a current problem near the trail area. Paper mills located in International Falls and Fort Francis however, do decrease air quality in the area at times. This pollution however, is not considered a problem.

The anticipated increase in visitation to Voyageurs National Park will have a greater effect on the trail area than the industrial pollution sources. A projected threefold increase in the number of motorized vehicles within the park by 1990 will result in a probable localized threefold decrease in air

quality proximal to access roads and other developments.

Water quality is relatively good throughout the trail area. Areas where lower water quality may occasionally occur are the Vermilion River, Ash River and near the towns of Cook, Orr, Kabetogama, and International Falls. Water quality may also suffer near private residences with inadequate utility systems. These reductions in water quality are primarily due to poor treatment of sewage and other waste materials.

Historical and Archaeological Resources

The Minnesota Historical Society will conduct a study of available Cultural Resource records and U.S.G.S. topographic maps for the area. This study will be used to determine whether or not on site archaeological investigation is necessary before construction.

Transportation and Utilities

The trail will be located east of U. S. Highway 53 and south of the Ash River Trail (road). Highway 53 is currently being upgraded into a higher capacity road which will provide excellent access.

No utility lines exist in or around the trail area.

Socio Economic Factors

The Minnesota State Planning Agency (SPA) population projections for St. Louis County and Region 3 reveals an increase up to 1985. The data is given below:

Population Projections

<u>Year</u>	<u>St. Louis County</u>	<u>Region 3</u>
1980	217,100	330,300
1985	216,400	332,600
1990	215,000	332,400
1995	212,900	330,200
2000	210,000	325,400

Four areas of major employment in St. Louis County are: 1) Wholesale and Retail Trade (21.4% of the employed work force); 2) Mining (11.8%); 3) Govern-

ment (7.1%); and 4) Construction (5.6%).

Tourist travel expenditures during 1974 totaled 61,742,091 in St. Louis County, ranking it 20th in the state. These expenditures accounted for 5% of gross sales.

Land Use and Development Trends

St. Louis County General Land Use

(Forty Acre Parcels)

Forested	89,200	Marsh	1,216
Cultivated	1,996	Urban	2,545
Pasture and Open	4,561	Extractive	1,124
Water	8,815	Transportation	104
Total		109,561	

Agriculture

Current agricultural land use within St. Louis County is not intensive or extensive. Crops such as alfalfa, corn for silage, legume grass-hay, vegetables, and small grain are grown where feasible.

Residential

Current residential land use will not affect the Ash River Falls trail because of state and county lands which surround it. Residential use is, however, increasing around the lakes in the county.

Commercial/Industrial

No commercial or industrial developments are located near the trail. Timber harvest is permitted. But this activity will not have an adverse impact on the trail experience.

Facilities in Region 3

Economic Region 3 encompasses all of northeastern Minnesota, a region that has a great number of outdoor recreation facilities. Two national forests, the BWCA, 16 state parks, four state trails, 12 historic sites, 22 state forests, 559 miles of ski trails, and 1,800 miles of snowmobile trails can be found there. One reason for this area's large number of recreational facilities is that over 85% of the land in this region is in public ownership.

Numerous resorts, motels, hotels, and campgrounds can also be found throughout the region. Many of these facilities are open year-around to accommodate the needs of outdoor enthusiasts. Gas stations, repair shops, and ski shops can also be found throughout the region.

Facilities in the Forest

The Kabetogama State Forest has relatively few developments for its vast size. Four campgrounds currently provide recreational opportunities for the outdoor enthusiast. The four campgrounds are: the Ash River campground, the Hinsdale Island campground, the Wakemup Bay campground, and the Woodenfrog campground. A combined total of 100 campsites, nine picnic sites, two swimming beaches,

and four boat accesses have been developed at these campgrounds. Fishing, hunting, boating, and hiking are all popular activities enjoyed in these areas.

The Hinsdale Island and Wakemup Bay campgrounds are located east of Cook on Lake Vermilion. Major activities at these campgrounds are boating and fishing.

The Woodenfrog campground is located north of the proposed trail on Lake Kabetogama. This campground is also used primarily for water oriented activities.

The Ash River campground located east of the proposed trail along the Ash River Trail (road) is also used heavily by fishermen and boaters. The possibility of a trail connection was investigated but found to be unfeasible because of the large number of private parcels inbetween.

Two snowmobile trails, the Pelican Lake Area trail and the Cook Trail are the only designated trails in the forest at this time. A ski touring and hiking trail had been proposed near Orr, but was dropped after easements could not be obtained from private property owners.

The International Falls to Grand Marais Trail, part of the Arrowhead Trail system, will be developed in the forest in the future. This trail will pass very close to the west end of the Ash River Falls trail. This trail will be developed for multiple use, primarily snowmobiling and hiking.

Management Programs within the Forest

Management of the Kabetogama district is based on recommendations outlined in the Kabetogama District Forest Management Plan. These plans are formulated for each forestry district throughout the state and are based on the state "Timber Management Guide." The management program is based on a ten year period, while necessary adjustments are made to fit local conditions.

The management program includes timber, wildlife, soils, water, and recreation. Management of these resources requires a coordinated program which brings about maximum productivity and protection as well as providing other public benefits such as recreation.

Development of the Ash River Falls ski touring and hiking trail will be an integral part of this management program and will not inhibit other forest management practices.

Necessary adjustments will be made in the area to avoid conflicts between other management activities and the trail. Development of the ski touring and hiking trail, however, will not exclude use of administrative vehicles and/or contractors who have been assigned to do work in the area. It will also not exclude automobiles from roads which are normally plowed during the winter.

When timber harvest is recommended in the area, cutting and hauling will try to be scheduled between May 1 and November 1 to avoid conflicts between skiers and contractors. In some instances, such as when swamp conifer types are recommended for harvest, logging operations will have to be performed in the winter to take advantage of frozen ground conditions. In these instances, portions of the trail treadway may have to be closed or rerouted temporarily to permit timber harvest operations to be run efficiently.

Timber sale contracts will be adjusted to insure that trees are not felled blocking the treadway. Provisions will be written so that the trail treadway, if damaged, will be returned to its original condition. Provisions will also be written to insure that slash and other debris are scattered away from the trail.

It should be emphasized at this point that some forest trails will not always

be permanent. As forests change in age, timber harvest will preclude established trail use in some areas. To adjust for these changing conditions, the trail will be rerouted into other areas in the forest. Thus, while trail use will be an established use in state forests, the trail location may not.

All management decisions concerning the area will be made in a manner that insures that the needs of other management activities and recreation are met with the least possible conflict.

Potential Concerns and Considerations

The Ash River Falls Trail should be relatively free of conflicts. No established snowmobile trails exist in the area and existing terrain is quite rugged, making other motorized travel difficult.

The International Falls to Grand Marais corridor trail, when developed, will be routed close to the Ash River Falls Trail. This trail, however, should not have an adverse effect on the ski touring-hiking trail.

Favorable Environmental Effects of the Trail

The Ash River Falls Trail will do nothing to directly improve the natural environment. Favorable environmental effects are limited to broad, general, and mostly intangible assets as:

- A. The trail will satisfy a nationally recognized need for ski touring and hiking in a manner compatible with the environment.
- B. The trail will provide an opportunity for skiers and hikers to enjoy, know, and better understand the natural environment and management of it.

Unfavorable Environmental Effects of the Trail

- A. Soil Compaction - This effect will be minimized through the selection of dry soil locations and the use of surfacing. Bridges, corduroy, and culverts will be used where necessary.
- B. Soil Erosion - Will occur during construction and use. This will be minimized by route selection, retaining natural ground slope, and using cross drains and culverts where necessary. No siltation of streams or lakes is anticipated.
- C. Wildlife Disturbance - Wildlife will be disturbed during construction, maintenance, and use of the trail. This may result in more wildlife

being harvested adjacent to the trail by hunters using the trail for access. These effects will be minimal and may only result in concentrated disturbance rather than dispersed disturbance. Particularly sensitive areas such as deer yards will be avoided.

- D. Increased use of existing facilities - DNR, other public and private facilities will receive increased use by the public attracted to the trail. This is not necessarily unfavorable as few existing facilities are used to capacity. Some economic benefits may be gained through increased tourist-travel expenditures.
- E. Loss of "Back Country" - To some people, the Ash River Falls Trail represents a permanent development in an otherwise undeveloped area, and therefore a loss of "back country". Although this may be unfavorable to some, the trail will provide an opportunity for the recreationist to view some of the most scenic country in Minnesota.
- F. Mitigating effect on management of the forest - Normal management activities will not be affected to accommodate the Ash River Falls Trail.
- G. Impact on DNR organization - The present DNR organization will be affected by development, maintenance, and enforcement made necessary by the non-motorized status of the trail. The more development associated with the trail, the greater this impact will be.

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12. Minnesota Research Bulletin #06, Department of Economic Development.

Land Use

13. Pocket Data Book, 1975, State Planning Agency.
14. State of Minnesota Land Use Map, MLMIS.

Draft Plan Review: Public Meeting

A public information meeting was held on September 27, 1978 in Orr, Minnesota, concerning the Ash River Falls Ski Touring-Hiking Trail. Only one citizen attended the meeting.

The citizen, a newspaper reporter from International Falls, had no immediate concerns. The entire planning process, and what types of development are planned, were explained to him. It was also mentioned that this project would not be implemented until a satisfactory easement or agreement can be worked out with the Forest Service and the City of Tower. One private parcel could also be utilized but is not essential for completion of the trail (see figure 2). The Forest Service and City of Tower have been contacted and are willing to grant easements for the trail. The Division of Forestry is currently working on these agreements.

Frank Ackerman, Naturalist for Voyageur's National Park attended the meeting and requested that the park trails connect to the Ash River Falls trail if possible. This will be done at the time of final field alignment. Sufficient state and federal lands exist between the two areas to make this connection.

