

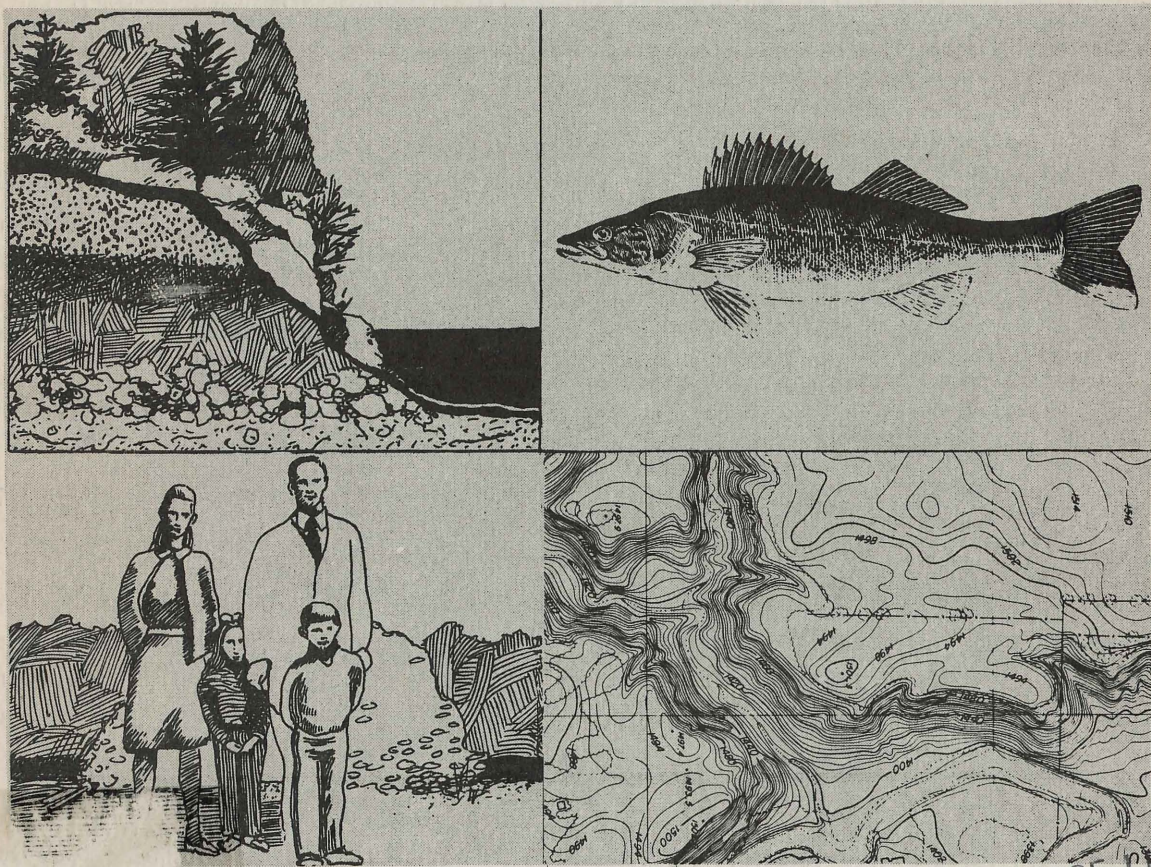
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FINAL

ENVIRONMENTAL IMPACT STATEMENT

August 1976



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Proposed
Saganaga Lodge & Townhouses

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STATE OF MINNESOTA

SAGANAGA LODGE AND TOWNHOUSES

PROPOSED BY:

FARMAKER, INC.

Cook County, Minnesota

FINAL ENVIRONMENTAL IMPACT STATEMENT

Prepared by:

Minnesota Department of Natural Resources

May, 1976

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*Environmental Impact Statement
Presented*

TABLE OF CONTENTS

	<u>Page</u>
List of Tables	iii
List of Figures	iv
I. Description of Proposed Action	1
II. Environmental Impact of Proposed Action	4
A. Natural Environment	4
1. Geology	4
2. Soils and Sewage Disposal	4
3. Climate	6
4. Hydrology	7
5. Vegetation	8
6. Wildlife	9
7. Fisheries	11
B. Human Environment	11
1. Socioeconomic	11
2. Land Use	13
3. Transportation	14
4. BWCA Use	15
a. History	15
b. Recreational Use	16
c. Capacity	18
5. Noise	19
III. Unavoidable Effects and Their Mitigation	20
A. Natural Environment	20
1. Soils	20
2. Hydrology	20
3. Vegetation	20
B. Human Environment	20
1. Land Use	20
2. Transportation	21
3. BWCA Use	21
4. Noise	21
IV. Irreversible and Irretrievable Commitments of Resources	21
V. Relationship Between Local Short Term Uses of the Environment and the Maintenance and Enhancement of Long Term Productivity ...	22
VI. Alternatives to the Proposed Action	22
A. Alternatives	22
1. Canoe Outfitting	22

2.	Campground Development	23
3.	Youth Camp	23
4.	Single Resort Units	23
5.	Lot-block Subdivision	23
6.	No Action	24
B.	Modification of Proposed Action	24
VII.	The Impact on State Government of Any Federal Controls Associated With the Proposed Action	24
VIII.	The Multi-state Responsibilities Associated With the Proposed Action	25
IX.	Organizations and Persons Consulted	25
X.	References	26
XI.	Draft EIS Comments	28

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Average Depth to Ground Water or Bedrock for Proposed Drainfield Areas	5
2. Selected Water Quality Parameters for Saganaga and Seagull Lakes, Cook County	7
3. Birds and Mammals in the Vicinity of Proposed Saganaga Lodge and Townhouses Associated With the Terrestrial Environment	10
4. Birds and Mammals in the Vicinity of Proposed Saganaga Lodge and Townhouses Associated With the Aquatic Environment	10
5. Cook County Employment by Industry, 1970	12
6. The Number of Visits to Saganaga Lake and its Percent of Total BWCA Visits from 1969 to 1975	17
7. Mode of Travel for Groups Entering the BWCA at Saganaga Lake and for the Total BWCA, 1972	17

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Regional Location of Proposed Saganaga Lodge and Townhouse Development	2
2. Site Plan for Proposed Saganaga Lodge and Townhouse Development	3

PROPOSED SAGANAGA LODGE AND TOWNHOUSES
ENVIRONMENTAL IMPACT STATEMENT

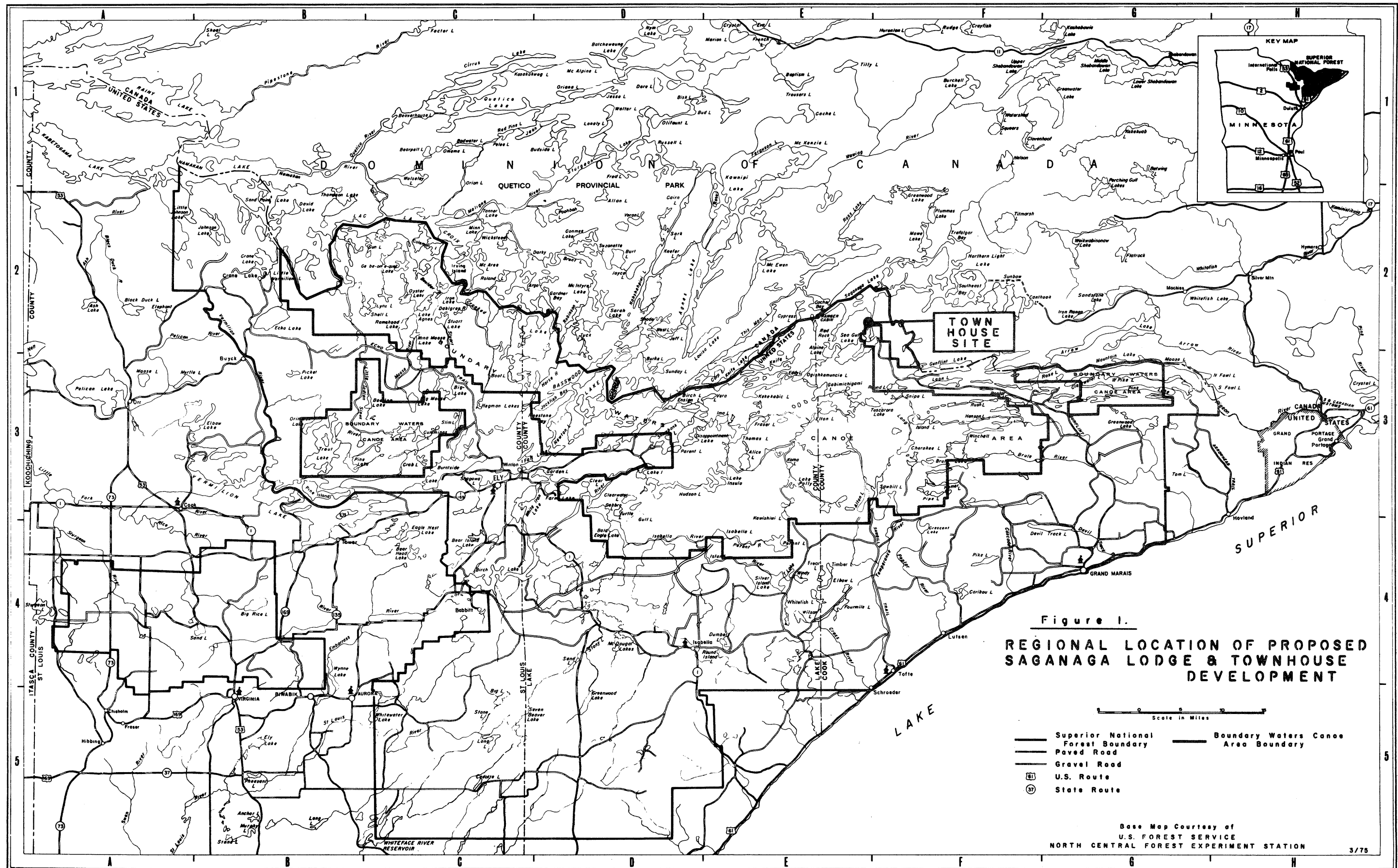
I. DESCRIPTION OF PROPOSED ACTION

The Saganaga Lodge and Townhouse project involves the development of 25 townhouses, two dormitories and a lodge on 9.7 acres of land fronting approximately 1900 feet of shoreline on Saganaga Lake and Seagull River. The project is situated near the end of the well-known Gunflint Trail in Cook County in Government Lot 5, Section 19, Township 66 North, Range 4 West. The tract is entirely private land owned by Farmaker Inc. and lies within the Boundary Waters Canoe Area (BWCA) as shown in Figure 1. The entire proposal represents a 1.5 million dollar investment.

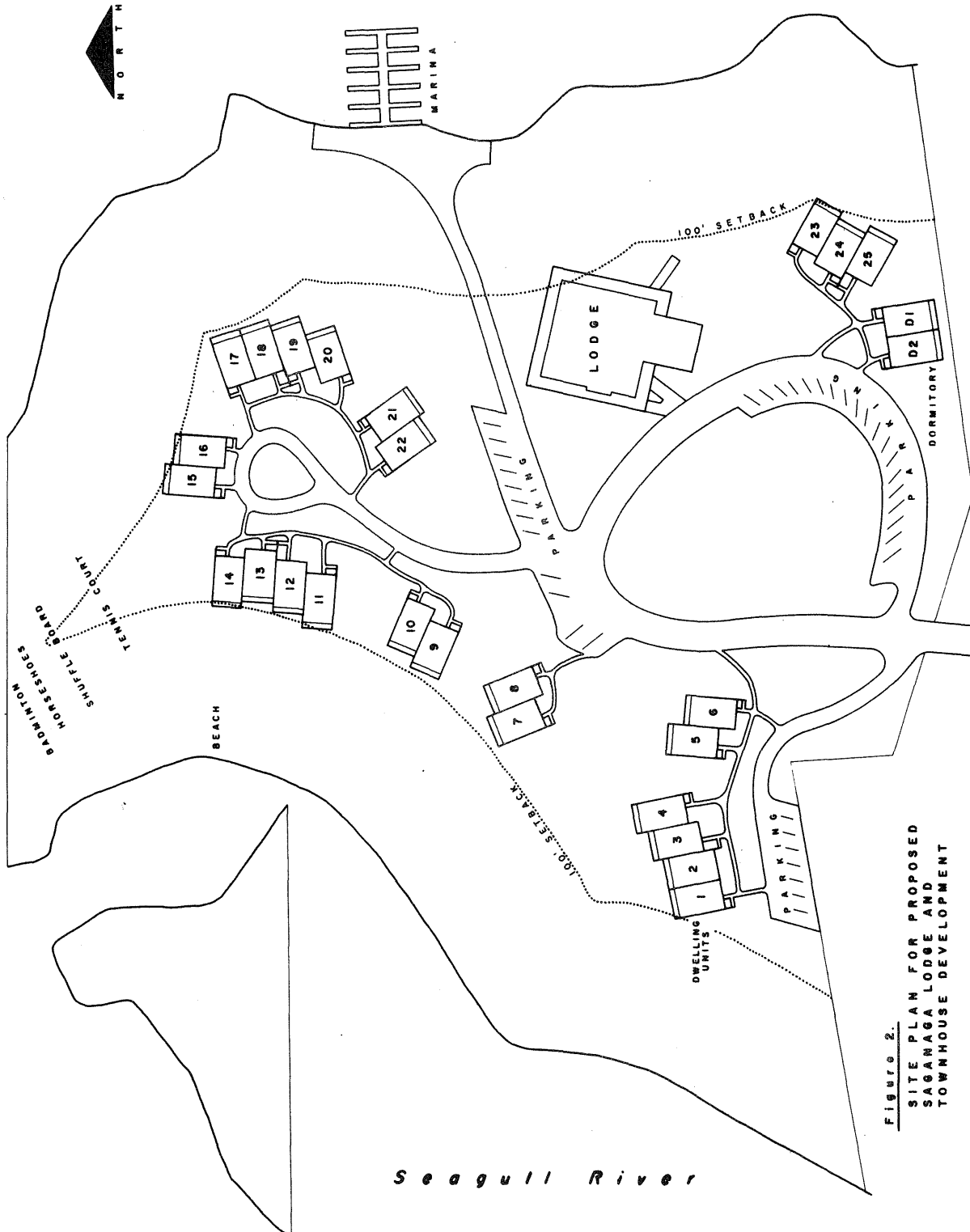
The site plan, found in Figure 2, shows townhouses grouped in clusters of two to four units. The final appearance of individual townhouses may vary since three types of units with six possible floor plans are offered. The structures will be finished in rough-sawn pine and stained a color that blends with surrounding vegetation. The proposed water supply is Saganaga Lake, and to conserve water use, low-flow fixtures are planned for toilets, showers and sinks. Present plans are to construct these units gradually over a three year period. After sale, owners will have the option of renting their units. The 1974 prices varied between \$25,900 to \$38,900 depending upon the plan selected. The two dormitories are designed for 25 staff and employees comprised of ten full time and ten to fifteen seasonal workers. The lodge is designed to hold 80 guests and would contain the following services: two dining rooms, recreation room, cocktail lounge, trading post, sauna and storage rooms.

Approximately 45 to 50 parking spaces are planned which allow 1.5 spaces for each unit, six for staff, and a few for visitors. Electricity will be used for most energy needs except lodge cooking for which propane is planned. Water and telephone lines will be buried on the site. Electricity is presently provided by overhead lines to the center of the tract.

Proposed recreational facilities include: tennis court, horseshoe pits, shuffleboard, badminton, beach and marina (Figure 2). The boat docking facility would be of the floating type and would provide mooring for 20 boats. This dock extends 75 feet into Saganaga Lake at which point the water depth is 23 feet. The marina would be used primarily by residents and boat launching by transients would not be allowed. However, some boat traffic by non-residents is expected to occur while utilizing lodge facilities and purchasing gasoline. Aircraft will not be allowed to land at this site because it lies within the BWCA; however, aircraft may and do land just south of the site outside of the BWCA.



S a g a n a g a L a k e



SCALE: 1" = 100'

Figure 2.
SITE PLAN FOR PROPOSED
SAGANAGA LODGE AND
TOWNHOUSE DEVELOPMENT

11. ENVIRONMENTAL IMPACT OF PROPOSED ACTION

A. NATURAL ENVIRONMENT

1. Geology

Although this portion of Minnesota has been glaciated by four major geologic events dating back to a million years ago, the bedrock features remain the most dominant on this tract. This bedrock is commonly called "Saganaga Tonalite" (granite) and is the oldest intrusive granite in northeastern Minnesota. The bedrock is largely composed of pink to nearly white hornblende granite and aggregates of quartz. Frequently, dikes and other intrusions into the granite are visible. This granite is widely exposed on the proposed site as well as along the shoreline of Saganaga Lake. Both Saganaga and nearby Sea Gull Lakes are believed to be bedrock basins scoured by glacial erosion. These lakes are unlike many of the elongated lakes in the BWCA in that they are irregularly shaped.

The glacial drift which varies in thickness from several inches to a few feet was deposited by the Rainy Lobe of the Wisconsin Ice Stage that occurred approximately 12,000 to 14,000 years ago. This drift is typically red and sandy because the source material was red sandstone and shale to the north and northeast of Minnesota.

Impact

There are no anticipated direct or indirect, adverse or beneficial, impacts on geology that would result from this proposed project. The bedrock exposed along the shoreline has a minor aesthetic value since more spectacular exposures are found elsewhere on Saganaga Lake.

2. Soils and Sewage Disposal

The general soils map for Cook County indicates that the following three major soil types plus minor soils are found on the proposed project area:

<u>Type</u>	<u>Percent of Soil</u>
Conic (gravelly sandy loam)	45
Insula (gravelly sandy loam)	35
Quetico (loam)	10
Minor soils	10

The Soil Conservation Service interpretation sheets for these soils indicate the following limitations for septic tank filter fields:

<u>Type</u>	<u>Limitation</u>	<u>Reason</u>
Conic	Severe	Bedrock at 20 to 40 inches, hardpan
Insula	Severe	Shallow to bedrock
Quetico	Severe	Extremely shallow to bedrock

Since these limitations apply to soils covering a wide general area, more specific information was obtained by a representative of the Soil Conservation Service during a field inspection in October, 1974. The conclusion of this inspection was:

The overall rating for this site for on-land sewage disposal with septic tank filter fields is severe because of the loamy material which will cause slow permeability, shallowness to bedrock, steep slopes and small available areas of soil.

U. S. Forest Service soils information indicates that these soils are highly sensitive to disturbances based upon the following soil characteristics:

<u>Soil Characteristic</u>	<u>Rating</u>
Compactability	Moderate
Stability	Moderate
Fertility	Low
Erodibility	Moderate
Firmness to Windthrow	Low

These soils have been placed in a low capability¹ class because of the high sensitivity and low productivity.

During the summer of 1975, Department of Natural Resources personnel conducted soil borings on the site to further evaluate the suitability of the soils for on-site sewage disposal. Table 1 represents the results of these soil borings.

Table 1: Average Depth to Ground Water or Bedrock for Proposed Drainfield Areas.

<u>Location</u>	<u>Depth to Ground Water or Bedrock</u>			<u>Limiting Factor</u>
	<u>No. Holes</u>	<u>Range(ft)</u>	<u>Average(ft)</u>	
Drainfield No. 1	8	0.8 - 2.3	1.5	Ground Water
Drainfield No. 2	7	1.4 - 3.9	2.3	Ground Water
Drainfield No. 3	6	1.0 - 3.6	2.6	Bedrock & Ground Water
Other possible drainfield areas	17	1.6 - 6.8	2.8	Bedrock & Ground Water

¹The capability class is a measure of an area's ability to support plant and animal life and of its potential to heal itself from externally imposed disturbances.

The Cook County Shoreland Ordinance requires that there be at least four feet between the bottom of the soil absorption system and the highest known ground water table or bedrock. These soil boring results thus show that the site is unsuitable for soil absorption systems in its present form.

During the time between the writing of the Draft and Final EISs, alternative methods of sewage disposal have been proposed, including: holding tanks, mounding, tertiary treatment plant, and hauling to an off-site soil absorption system. All but the last alternative have been rejected by the state agencies with regulatory authority. No information has been available on the location, suitability, and design features of the off-site soil absorption system.

Impact

Since the soils on the tract appear to be sensitive to disturbances, it is anticipated that the proposed action would cause slight erosion during construction by exposing bare mineral soils. Also, compaction of these sensitive soils would result in additional erosion but the volume of material eroded would be small due to the shallow depth of soils. No soil disturbances will occur immediately, adjacent to the shoreline.

Impacts resulting from a sewage disposal system are impossible to evaluate until the complete details of an acceptable proposal are provided.

3. Climate

The nature of precipitation in the vicinity of the proposed action is similar to Minnesota in general in that the major source is the warm moist air from the Gulf of Mexico. However, the influence of nearby Lake Superior modifies this major source. The normal annual precipitation of 29 inches is near the Minnesota normal maximum of 32 inches. Approximately 40 to 50 percent of the annual precipitation occurs in the summer months of June, July and August. The normal annual snowfall of 60 inches is also near the maximum in the state of 70 inches. A snow cover of one inch can be found in this area on the average of 140 days per year.

This area is generally one of the coldest in the state with an average normal temperature of 35° F compared to a normal of 46° F for extreme southern Minnesota. The attenuating effects of Lake Superior on temperature do not extend inland as far as Saganaga Lake. Nearby Babbitt, Minnesota, has recorded a maximum temperature of 103°F and a minimum of -41°F.

Impact

There are no anticipated direct or indirect, adverse or beneficial, impacts on the macroclimate resulting from this proposed project. Impacts on the microclimate will occur from the construction of roads and buildings.

4. Hydrology

The Continental Divide forms the southern boundary of the Rainy Lake watershed in which this proposed action lies. Therefore, drainage flows northerly to the border lakes, then westward to Rainy Lake, and ultimately into Hudson Bay. Saganaga Lake covers a large portion of this watershed, being 19,610 acres (31 sq. mi.) in area of which 7,880 acres occurs in Minnesota. The watershed feeding Saganaga Lake is also quite large, draining 740 square miles of which 205 square miles are in Minnesota.

Saganaga Lake is characterized by many islands with 198 of the total 375 islands being in Minnesota. Saganaga Lake is also the deepest lake in Minnesota, except for Lake Superior, with a maximum depth of 280 feet. The predominantly rocky shoreline is either exposed bedrock or boulder-rubble combinations. Sand and gravel beaches are rare.

The quality of the waters found in Saganaga Lake is indicated in Table 2. Values shown are means and represent Forest Service data collected from 1967 to 1972. Saganaga Lake was sampled in the main lake and Seagull Lake was sampled at the outlet to Seagull River. From inspection of Table 2, it is evident that Saganaga Lake is a very soft-water lake that is presently infertile but may be locally sensitive to increases in nutrient loading. These waters have characteristics common to oligotrophic waters. It should be noted that Seagull Lake is not of equal quality to Saganaga Lake and therefore some nutrient loading may occur from Seagull to Saganaga through Seagull River.

Table 2: Selected Water Quality Parameters for Saganaga and Seagull Lakes, Cook County

Constituent	Saganaga Lake	Seagull Lake
Conductivity (MMhos/cm)	51.1	52.1
pH	7.02	7.03
Total Hardness (Mg/l CaCO ₃)	20.0	18.6
Alkalinity (Mg/l CaCO ₃)	13.1	14.0
Total Nitrogen (Mg/l)	0.352	0.335
Total Phosphate (Mg/l)	0.027	0.035
Total Coliform (No/100 ml)	0.3	4.1
Fecal Coliform (No/100 ml)	0.0	1.0

The 1974 BWCA Management Plan and Environmental Impact Statement indicates that all lakes within the Saganaga watershed are categorized as insensitive. Sensitivity categories were determined by assigning values to the following three factors: volume, color, and flush rate. Color was used to indicate nutrient levels and has been found to correlate highly with phosphorous. The very large volume and flushing rate of Saganaga Lake made this lake insensitive, yet in protected bays this body of water can be sensitive. For Forest Service management purposes, a two percent increase in phosphorous nutrient loading is considered contrary to good management goals and objectives.

Approximately 15 percent of the site will be disturbed by structures, parking lots, roads, and paths. Structures will cover 6.4 percent of the area and create impervious surfaces. Paths, roads, and parking lots will alter 8.6 percent of the area and create semi-pervious surfaces. Based upon a runoff coefficient before development of 0.4 and a composite coefficient after development of 0.45, the proposed action will increase surface runoff on the site by only 5 percent. Most, if not all, of this increase will infiltrate into the soil or will be stored in small depressions rather than reach the lake as surface runoff.

The proposed water supply for this development is Saganaga Lake. A permit for appropriating these surface waters is required from the Department of Natural Resources under the authority granted in Minnesota Statute Section 105.41.

Impact

The water balance for this tract will be only slightly modified by this project due to the effects of impervious surfaces, vegetation removal and compaction. Also, withdrawal of water from Saganaga Lake to serve the needs of the proposed action is not expected to have an adverse impact on the water resource. Possible impacts due to on-site or off-site sewage disposal can not be evaluated until supporting information is supplied. The marina is anticipated to cause adverse local impacts on water quality from gasoline and oil spills and prop wash.

5. Vegetation

The dominant vegetative species found on this tract are over-mature jack pine, white spruce and aspen ranging in heights up to 70 feet. An understory of black spruce, balsam fir and paper birch is replacing mature trees as they die. Balsam fir reproduction is widely spread on this tract and aspen reproduction is scattered. Generally, this site is of little value for timber production due to shallow soils. Also, windfall is a serious problem on this tract due to wind exposure and shallow soils. The previous jack pine stand was probably established by fire before the turn of the century and fire exclusion has prevented this species from perpetuating. There are no known rare or especially unique vegetative species on this tract.

Sufficient vegetation to provide for screening is generally inadequate for units 8, 9, and 10. Units 9 and 10 are approximately 50 percent screened and providing additional screening will be difficult due to bedrock outcroppings. The developer plans to landscape and slant abandoned roads including the road leading to unit 8.

Impact

The vegetation on approximately 15 percent of the tract will be destroyed by the proposed project through the construction of roads and buildings. Additional impacts on vegetation will probably occur through attempts to "brush out" certain areas for view corridors.

Proposed landscaping and planting of abandoned roads will have a beneficial impact on this site by providing screening for unit 8. An adverse aesthetic impact would occur because of insufficient screening for units 8, 9, and 10.

6. Wildlife

This parcel is of little value to most wildlife species because suitable habitat is either lacking or absent. The understory is sparse and the overstory mature. Also, existing development on the remainder of the peninsula limits species to those that can tolerate man and his related activities.

A list of birds and mammals that may make use of this site is provided in Table 3. Use by each species is highly variable.

This tract also lacks suitable habitat for birds and mammals associated with aquatic environments and is of little value to them. Table 4 lists the birds and mammals that may make limited use of the aquatic environment. One osprey nest is known to be located near an unnamed lake in Section 4, Township 66 North, Range 4 West approximately three and a half miles away.

Other mammals that may pass through this parcel but to which this tract is of no particular importance include: deer, bear, moose, timber wolf, pine marten, fisher and lynx. This tract is of no value to these species because the habitat is unsuitable and the development is too dense. Almost all species listed are protected except for some of the small mammals and the lynx. The timber wolf is classified as endangered.

Impact

The proposed action would eliminate some of the remaining habitat on this tract but the number of individuals or species affected would be small. Species intolerant to man will probably no longer visit the site; however, few such species utilize the area now. Also, extensive areas of more suitable habitat exist nearby within the BWCA. Indirect impacts on regional wildlife populations may occur due to increased recreational use of the BWCA and increased vehicular traffic.

Table 3: Birds and Mammals in the Vicinity of Proposed
Saganaga Lodge and Townhouses Associated With the
Terrestrial Environment

Birds

Sharp-shinned Hawk	Tennessee Warbler
Spruce Grouse	Parula Warbler
Spotted Sandpiper	Magnolia Warbler
Long-eared Owl	Cape May Warbler
Saw-whet Owl	Myrtle Warbler
Great Grey Owl	Black-throated Green Warbler
Arctic Three-toed Woodpecker	Black-throated Blue Warbler
Northern Three-toed Woodpecker	Black Burnian Warbler
Traill's Flycatcher	Bay-breasted Warbler
Olive-sided Flycatcher	Pine Warbler
Blue Jay	Evening Grosbeak
Gray Jay	Purple Finch
Boreal Chickadee	Pine Grosbeak
Red-breasted Nuthatch	Pine Siskin
Hermit Thrush	Red Crossbill
Swainson's Thrush	White-winger Crossbill
Golden-crowned Kinglet	Fox Sparrow
Ruby-crowned Kinglet	

Mammals

Chipmunk	Red-backed Vole
Red Squirrel	Bog Lemming
Flying Squirrel	Masked Shrew
Snowshoe Hare	Pygmy Shrew
Woodland Deer Mouse	Short-eared Shrew

Table 4: Birds and Mammals in the Vicinity of Proposed
Saganaga Lodge and Townhouses Associated with the
Aquatic Environment.

Birds

Eagle
Osprey
Loon
Black Duck
Mallard
Great Blue Heron
Herring Gull

Mammals

Beaver
Otter

7. Fisheries

One of Minnesota's best known walleye runs occurs adjacent to this tract in the Seagull River creating heavy fishing pressure in the spring. A portion of this river approximately one mile upstream (south) from this tract is closed annually to protect the spawning run. Very little spawning is known to occur in the bay of Saganaga Lake on the east side of the tract.

Test netting has revealed that the following species are found in Saganaga Lake:

Northern Cisco	Northern Pike
Lake Whitefish	Yellow Perch
Lake Trout	Walleye
White Sucker	Smallmouth Bass
Longnose Sucker	Burbot

Test results from 1964 indicate that numbers and weights of cisco, whitefish and walleye are above statewide averages. Cisco and walleye catch rates were especially high. Lake trout were found to be larger than average but fewer in number. Yellow perch were substantially below averages. White suckers, northern pike and smallmouth bass were found to be below both statewide and local medians. The species and abundance of minnows in Saganaga Lake are unknown.

Walleyes were established by stocking in 1934 and plantings continued until 1946. Lake trout have been stocked almost annually for the past 40 years and are currently the only species being stocked. Commercial fishing was permitted on Saganaga Lake from 1959 to 1964 but only cisco, whitefish, sucker and burbot were allowed to be taken.

Impact

The proposed marina is not anticipated to have an impact on fisheries either locally or regionally since walleye spawning is not known to occur in this bay of Saganaga Lake. Also, there is an abundance of more suitable spawning habitat in the Seagull River. The proposed action will probably add to the already intensive spring fishing pressure.

B. HUMAN ENVIRONMENT

1. Socio-Economic

Cook County, in which the proposed action is located, is substantially different from the average Minnesota County. The county population of 3,423 in 1970 was the lowest in the state as was the density of 2.5 persons per square mile. The low population is easily understood by recognizing that 91.9% of the county is in public ownership.

The large public ownership indicates that recreation is important to the economy of Cook County. The 1970 employment by industry shown in Table 5 supports the hypothesis that recreation is the economic base of Cook County as reflected in the service and retail trade industries. The dependence on recreation is further exemplified by the fact that Cook is the only county in Minnesota that can host more people overnite in its commercial lodging facilities than the county's resident population. As experienced elsewhere, the number of retail establishments is declining while their total sales are increasing.

Table 5: Cook County Employment by Industry, 1970.

<u>Industry</u>	<u>Per Cent of Total</u>
Agriculture, Forestry, Fisheries	5.4
Mining	6.5
Construction	9.8
Manufacturing	7.3
Transportation and Utilities	7.1
Retail and Wholesale Trade	21.0
Services (Finance, Business, Repair, etc.)	32.9
Public Administration	10.0

During the decade of 1960-70, Cook County experienced a net outward migration of 290 persons or about 8.5 percent of the 1970 population. Thus, as expected, projections show a decreasing population over the next 20 years. Arrowhead Regional Development Commission population projections for Cook County from 1970 to 1990 are:

1970	3,423
1975	3,330
1980	3,220
1985	3,120
1990	3,020

Impact

Based upon a projected valuation of 1.5 million dollars for the proposed action, a beneficial impact of an estimated \$26,000 per year in direct taxes would be available for county use. However, it is anticipated that the proposed action will require additional county services, such as police protection, and possibly a better access road, that may absorb this additional revenue. Added economic benefits would be generated by both direct and indirect spending for goods and services by employees and owners.

2. Land Use

The project site is presently zoned C-1, Commercial Recreation District, as are other resorts and canoe outfitters in the vicinity. In a C-1 zone, the lodge is a permitted use while the other structures are conditional uses and therefore require conditional use permits. In addition, this tract lies within the shoreland of Saganaga Lake (16-633) which has been classified as Recreational Development by the Department of Natural Resources. Thus, the minimum requirements, as stated in the Cook County Shoreland Ordinance, include:

Lot Area	40,000 sq. feet
Water Frontage	150 feet
Building Setback from Shoreline	100 feet
Soil Absorption Unit Setback from Shoreline	100 feet

This proposed development is also considered to be "cluster development" since it meets the definition of "... a pattern of subdivision development which places housing units into compact groupings while providing a network of commonly owned or dedicated open space."

As a cluster development, Section 4.14 of the Cook County Shoreland Ordinance applies and reads as follows:

4.14 Smaller lot sizes may be granted for planned cluster development under the provisions set forth in Section 6.0.

6.0 Cluster Development

6.1 Preliminary plans are first approved by the Commissioner of the Department of Natural Resources.

6.2 Central sewage facilities are installed which meet the standards, rules or regulations of the Minnesota Department of Health and the Pollution Control Agency.

6.3 Open space is preserved.

6.4 There is not more than one centralized boat launching facility for each cluster.

6.5 Any attached conditions are met, such as limits on overall density, minimum size of the cluster development, restrictions to residential uses, or minimum length of water frontage.

Thus, as a cluster development, 25 units are proposed where 10.56 units would normally be allowed on this tract under ideal conditions for a typical lot-block subdivision. As shown in Figure 2, six units (1, 11, 14, 15, 16, 23) and the lodge do not meet the minimum setback requirement of 100 feet by relatively short

distances. However, the proposer has indicated that structures will meet all minimum setback requirements when permit applications are made. The proposed action will alter approximately 15 percent of the parcel by development of 6.4 percent of the area for structures, 7.7 percent for roads and parking and 0.9 percent for foot paths. The area that will be disturbed in the vicinity of the marina utilizes an existing clearing (Figure 2). The shoreline at the marina location was created by past filling that also obliterated much of the original shoreline along the tract and encroached on the open waters of Saganaga Lake and Seagull River.

The existing development on the entire 204 acre peninsula consists of 27 cabins plus seven resorts of which six are outfitters. Two of these outfitters are located immediately south of the proposed site and are also within the BWCA. An additional five resorts and/or outfitters can be found within one-half mile of the peninsula. The outfitters on the peninsula are estimated to have approximately 130 canoes available for rental.

Agencies that have regulatory powers regarding the proposed action include: Cook County, Minnesota Department of Health, and the Minnesota Department of Natural Resources. At present, there has been no preliminary approval by Cook County and therefore plans have not been submitted to the Department of Natural Resources.

Impact

The proposed action will almost double the density of development that presently is found on the entire peninsula. However, the proposed action will increase the ability of the peninsula to serve people by only 18 percent. Also, the rental option will result in more people on the site since normally vacant periods would be filled.

3. Transportation

The 55 mile long Gunflint Trail terminates near the site of the proposed action. This road is paved to within seven miles of the end of the trail and construction to upgrade the remainder is presently underway. Traffic counts 15 miles up the Gunflint Trail from Grand Marais in 1974 showed from 100 to over 600 vehicles per day with 500 to 600 vehicles per day occurring during July and August. Over 70 percent of these vehicles reach the end of the trail.

There is one access road that serves the entire peninsula and it is anticipated that an additional 45 to 50 vehicles will be using this road as a result of the proposed action. This gravel road is narrow and contains a number of steep hills and small-radius curves. The parking lot at the county landing on Saganaga Lake often overflows onto this access road during peak periods creating a traffic hazard. Plans for expanding Devil's Track Airport, located near Grand Marais, have been considered for many years. If expanded, some of the potential residents may utilize such a facility.

Impact

The existing road presently serves approximately 50 vehicles for existing development and approximately 40 vehicles for the county landing; therefore, the proposed action would increase traffic on the access road by about one-third. Instances of vehicles meeting on hills and curves would be more frequent. The added residents, patrons, and associated traffic would probably lead to pressures for a new road alignment resulting in numerous environmental impacts.

4. BWCA Use

As shown in Figure 1, the site of the proposed action lies within the BWCA boundary created by the Wilderness Act of 1964, as do two canoe outfitters located immediately south of the proposed site. To understand the significance of this location, a brief history of the BWCA is presented.

a. History

White man's exploration of the area began with the arrival of Pierre Raddisson and Sieur des Grosseilles in 1660. The era of the "Voyageur" or fur trader began about 1731. Prospectors and settlers frequented the region during the "Vermillion Gold Rush" of 1865-66 and evidence of this activity can be found on nearby Gold Island where a shaft was sunk into white quartz in search of gold and silver. Logging of the big pine began in 1893 and rapidly proceeded until the depression of the 1930's. Initial interest for preserving this area developed when logging began. Public involvement led to President Theodore Roosevelt designating the area as the Superior National Forest in 1909.

Following World War I, an influx of recreational visitors resulted in the creation of a primitive area within the Superior National Forest in 1926. Also, in 1930, Congress passed the Shipstead-Newton-Nolan Act that restricted logging and controlled water levels and development. Later, in 1938, the Superior Roadless Primitive Area was established with boundaries similar to the present BWCA.

After World War II, recreational use grew at an increasing rate. These pressures resulted in the Thye-Blatnik Act of 1948, amended in 1956 and 1961, which allowed for the acquisition of lands by purchase or condemnation. Later, in 1948, this unique area was designated as the Superior Roadless Area. The present title of Boundary Waters Canoe Area was adopted in 1958.

Originally it was not intended that the proposed site should be within the BWCA. As stated in the 1972 Superior National Forest Land Adjustment Plan which reads as follows:

This tract is a point of land lying between the Sea Gull River and the south bay of Saganaga Lake. The Boundary Waters Canoe Area lines run along the south side of Lot 5. There are cabins immediately to the south of Lot 5 facing on Saganaga Lake. The Forest Service feels the development of Lot 5 would be no more detrimental to the Boundary Waters Canoe Area than the improvements adjoining the tract just outside the area. Revision of boundary to exclude Lot 5 from Boundary Waters Canoe Area was recommended to the Quetico-Superior Committee by letter of November 14, 1958. The proposed revision of the Boundary Waters Canoe Area was approved by the committee.

However, the revision of the boundary never did occur and thus, this tract is still within the BWCA. Recently, the Forest Service has stated that the Land Adjustment Plan position assumed that the property would be developed for single family cabins.

b. Recreational Use

On a national basis, the Forest Service offers six categories of recreational experience levels ranging from primitive to modern. Only the first three categories of Primitive, Level I and Level II are offered in the BWCA. Saganaga Lake provides the opportunity for Level II experiences which is considered to be a moderate form of recreational use and allows motorized watercraft travel. Level VI allows resorts and similar developments and such recreational facilities are inconsistent with Level II and more primitive experience areas.

The Forest Service administrative travel zone, in which Saganaga Lake is located, is one of the most heavily used zones in the BWCA. In 1972, this zone received the highest use in total visitor days. Saganaga Lake is a popular starting point for canoe trips because it is located near the end of the Gunflint Trail.

There are two direct public accesses to Saganaga Lake. One is the county boat landing approximately three-quarters of a mile south of the proposed development. This access can readily accommodate large boats as well as canoes and has a 40 car capacity parking lot. The second direct access is the Forest Service landing at Trails End Campground that is designed more for canoes than for large boats and has a 60 car capacity parking lot. Indirect access occurs from the Seagull River and other border lakes.

Recently, there has been a steady increase in the recreational use of Saganaga Lake. Table 6 represents the magnitude of this use for the past seven years together with its percentage of total BWCA use. From inspection of Table 6, it is evident that the number of visits has more than doubled within the past seven years and use of this area is comprising an increasing percentage of the total BWCA use. Table 6 also shows that use on Saganaga has tapered off within

the last two years and that the percent of total BWCA use has also declined. This trend is probably due to the recent fuel crisis and its effects on recreational travel.

Table 6: The Number of Visits to Saganaga Lake and its Percent of Total BWCA Visits from 1969 to 1975

<u>Year</u>	<u>Saganaga Visits¹</u>	<u>% of Total</u>
1969	7,510	6.6
1970	8,653	6.8
1971	11,033	7.8
1972	15,113	9.3
1973	17,164	10.2
1974	15,209	9.3
1975	15,953	9.4

It is also interesting to examine the mode of travel for these large numbers of visitors as an indicator of watercraft traffic in the vicinity of the proposed action. Table 7 illustrates the mode of travel for groups entering the BWCA at Saganaga Lake in 1972. Use by motor boats is quite high. This is attributable in part to the large size of Saganaga Lake and also to the relative location of this lake which is mainly "traveled through" rather than "traveled on."

Table 7: Mode of Travel for Groups Entering the BWCA at Saganaga Lake and for the Total BWCA, 1972.

<u>Mode of Travel</u>	<u>Saganaga Lake</u>		<u>BWCA</u>
	<u>Number</u>	<u>Percent</u>	<u>Percent</u>
Paddle Canoe	1,294	34.4	47.5
Motor Canoe	285	7.6	10.8
Motor Boat	2,016	53.6	31.5
Snowmobile	128	3.4	6.6
Hiking	10	0.3	2.7
Other ²	25	0.7	0.9
TOTAL	3,758	100.0	100.0

¹Visits - means an individual who leaves his home to visit the BWCA.

²Includes horseback riding, rowboating, rafting, sailboating, snowshoeing, and cross-country skiing.

Results of a 1971 Forest Service study indicate that while passing through Saganaga Lake, a traveler can expect to encounter three to five parties per hour, or 24 to 40 parties in an eight hour day. These frequent encounters have produced some dissatisfaction. In other research, over 50 percent of paddle canoeists indicated that they were dissatisfied with encountering other parties on Saganaga Lake. Only 10 to 20 percent of motor users indicated such dissatisfaction.

The high recreational use on Saganaga Lake occurs for a number of reasons. Nearby Canadian Customs Station, located in the main portion of Saganaga Lake, concentrates traffic from the south bay of the lake. This traffic passes by the proposed site on the way to Customs. Over 44% of those entering Saganaga Lake pass on to Canada, reflecting, in part, the number of people who have cabins on the Canadian side of Saganaga Lake. Presently, there are two resorts and approximately 40 cabins in Canada that require access across Saganaga Lake. Nearby Trails End Campground contains 30 units which averages 67 percent occupancy from mid-May to Labor Day. Also, the existing development on the peninsula, consisting of 27 cabins and seven resorts, contributes to recreational use on Saganaga Lake. Finally, most other outfitters on the Gunflint Trail and in Grand Marais send parties through Saganaga Lake.

c. Capacity

This travel zone has not yet reached its capacity in overnight use. Only 36 percent of available campsites were occupied in 1972; however, occupancy increased to 50 percent in 1973. Day use is significant on Saganaga Lake with 53.1 percent of the users being day users compared to 43.8 percent for the entire BWCA.

Presently there are 76 developed campsites and an additional 56 user sites on Saganaga Lake. Due to past site deterioration, 23 campsites have been permanently closed. According to the 1974 Forest Service Capacity Study for this travel zone, the aesthetic capacity has been determined to be 95 campsites and the physical capacity is 135 sites. The aesthetic capacity reflects the number of people that can be accommodated without sacrificing a wilderness experience and is based on such factors as line of sight and noise. The physical capacity reflects the number of people that a lake can accommodate as determined by physical characteristics including: the suitability of shoreline, vegetation type, soils type, water quality and the suitability for pit toilets. The Forest Service has indicated that the most serious campsite problem area is along the channel, adjacent to the proposed action, from the county boat landing to the main lake. All sites are occupied during the opening of walleye fishing season and during adverse winds.

Since the proposed action is located within the BWCA, it is useful to know if users would object to the presence of townhouses. A 1970 interview study conducted on high use lakes, including

Saganaga Lake, discovered that 81 percent of the outfitters and 86.1 percent of the campers oppose resorts and homes in the BWCA. The proposer has estimated that 50 percent of the users of the proposed action will be on Saganaga Lake at any one time during the summer season. This amounts to approximately 28 people per day.

Impact

The proposed development of townhouses, dormitories and lodge is totally incompatible with U. S. Forest Service management goals and objectives for providing a Level II recreational experience in the BWCA. The management theme that has dominated since the Forest Service became the custodian of the BWCA is reported in the 1974 Boundary Waters Canoe Area Management Plan and Environmental Statement and reads as follows:

Preserve and perpetuate the primitive character of the area, particularly the lands with unique water-related characteristics in the vicinity of lakes, streams, portages and trails.

Any development on this tract of land that generates more use of the already crowded Saganaga Lake is counter to this objective and would result in a deterioration of the quality of wilderness attached to Saganaga Lake and adjoining portions of the BWCA.

The present condition of the proposed site is essentially undeveloped. Therefore, the marina, dwellings and lodge and the resulting concentration of people will have an adverse aesthetic impact on BWCA visitors that are traveling adjacent waters. This impact is especially evident since an incoming BWCA visitor encounters a sign indicating that he is entering the BWCA prior to his passing the proposed site. There is little doubt that the proposed densities will increase day use on Saganaga Lake and therefore increase crowding and dissatisfaction, ultimately reducing the value of the wilderness experience. It is doubtful that the proposed action would add to the campsite problem along the channel, since these sites are so close to the proposed development. Actually, townhouse owners will probably object to the heavy use of nearby campsites. Aesthetically, the proposed project will be less objectionable than most of the development already existing on the remainder of the peninsula.

5. Noise

Some blasting of rock is proposed during the construction of the lodge. General on-site noises from boats and automobiles would modify the relatively quiet environment.

Impact

The blasting of rock during construction would have an adverse aesthetic impact on users of the BWCA. This impact would be

relatively short-term. Noises associated with the general use of the proposed site would also have an adverse impact on users of the BWCA. Such noises would not be as disruptive as blasting but would continue as long as the proposed development exists.

III. UNAVOIDABLE EFFECTS AND THEIR MITIGATION

A. NATURAL ENVIRONMENT

1. Soils

Since a final soil absorption system and location has not been proposed, potential impacts due to sewage disposal can not be adequately evaluated. It is evident, however, that a conventional on-site sewage disposal system would not adequately treat sewage and would result in adverse impacts on water quality in the vicinity of the site, creating potential health hazards.

Soil erosion during construction is anticipated to be slight and located away from adjacent water bodies. Impacts from such erosion can be reduced by minimizing the area disturbed. Proposed foot paths among structures and between structures and parking areas should mitigate possible environmental impacts due to compaction and the resulting erosion.

2. Hydrology

Since a soil absorption sewage treatment system would not be placed on-site, the previously anticipated adverse impacts on water quality should not occur. Once a final system is proposed, impacts on water quality will have to be identified.

3. Vegetation

The proposed action will eliminate the vegetation on approximately 15 percent of the proposed site by the construction of roads and buildings. Additional vegetation removal will probably occur through attempts to clear areas for view corridors. To mitigate the overall impact on vegetation, a restriction could be added to the property owners association document that would prohibit clear cutting on the entire tract and limit vegetation removal in the 100 foot setback distance to dead and diseased trees.

B. HUMAN ENVIRONMENT

1. Land Use

The impact of nearly doubling the existing development density on the peninsula can only be mitigated by reducing proposed densities. As previously stated, the proposed action will not double the number of visitors that the peninsula can handle, but will increase human activity over that expected if the tract were to be subdivided by typical lot-block subdivision.

2. Transportation

The proposed action is expected to increase traffic on the access road to the site by approximately one-third. This impact can be mitigated by reducing densities or by upgrading the existing access road. However, a new road alignment will create additional environmental impacts on the land resource and reduce the quality of the wilderness experience.

3. BWCA Use

This project as proposed would result in unavoidable adverse impacts on the BWCA. The quality of wilderness would be reduced both by increases in physical use and by adverse impacts on aesthetics.

The adverse aesthetic impact on the BWCA created by the structures and marina can be mitigated by assuring proper vegetative screening and by reducing the proposed density. As previously stated, screening is insufficient for units 8, 9, and 10. Since additional screening is planned for unit 8, the overall aesthetic impact can be reduced by providing adequate screening for units 9 and 10. To mitigate the adverse impact of increased use of the BWCA, townhouse densities could be reduced. Proposed densities are in excess of what would normally be allowed. Since the Forest Service predicts that the normal lot-block development of this tract would not be any more detrimental to the BWCA than existing development on the peninsula, the overall impact of the proposed action could be mitigated by only allowing a density of approximately 10.56 townhouse units. This density would meet state and county minimum standards.

4. Noise

To mitigate the adverse impact of noise from blasting of rock, the period when blasting would be permitted could be regulated. For example, no blasting should take place from Memorial Day to Labor Day which is the normal high use season. The overall impact of general on-site noises could be buffered by providing proper vegetative screening. Also, noise levels would decrease with a decreased townhouse density.

IV. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The site of the proposed action will change from a relatively undeveloped environment to that of a highly developed residential environment. This commitment is largely felt as a change in the pattern of land use rather than a depletion of non-renewable resources. It is probable that this change in land use is irreversible but other resources damaged may be renewable. Specifically, 15 percent or approximately 1.5 acres of vegetation would be lost. Adverse wildlife impacts, both direct and indirect, no matter how large, can be considered irreversible. Additionally the quality of the BWCA, viewed as a unique Minnesota resource, would be irreversibly reduced.

V. RELATIONSHIP BETWEEN LOCAL SHORT TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG TERM PRODUCTIVITY

The major short term environmental gain that the proposed action creates is providing a recreational experience for a select number of people in a manner that is presently not available along the Gunflint Trail. Additional short term gains are largely economic, such as employment, which will be stimulated, especially during construction, as will other economic sectors in Cook County. Short term environmental losses will occur primarily through physical and aesthetic impacts on the proposed site and adjacent areas resulting in adverse impacts to BWCA users. Additional short term losses may occur indirectly if road access is improved.

Long term gains that this project provides could largely be felt as a stimulus to the economy that provides for community stabilization. The potential for establishing a permanent residential population also exists and thus associated impacts would also have permanence. Generally, the proposed action will increase the value of the property and establish a pattern of land use that would be difficult to alter in the future. Considered as an encroachment on the BWCA, wilderness quality will be reduced.

The major trade-off between short and long term gains and losses is that the proposed action provides recreational use for a select number at the expense of reduced quality of experience for users of that portion of the BWCA.

The success of the proposed action will probably stimulate similar proposals elsewhere in Cook County and the State of Minnesota. An increased number of similar proposals could only be beneficial to both the economy and the environment if plans are harmonious with the land and water resource capabilities.

VI. ALTERNATIVES TO THE PROPOSED ACTION

A. ALTERNATIVES

The description and environmental impact of the following six alternatives will be discussed individually:

1. Canoe Outfitting
2. Campground Development
3. Youth Camp
4. Single Resort Units
5. Lot-block Subdivision
6. No Action

1. Canoe Outfitters

For this alternative, the developer has indicated that the property would be split in half and two businesses would be started and later offered for sale. This alternative could result in a greater impact on the BWCA and the land resource depending upon the intensity and diversification of development. The proposed action would result in immediate changes whereas this alternative

could result in a gradual encroachment with unknown consequences. Compared to the proposed action, there are few controls on this alternative that can regulate vegetative removal, number of structures and other alterations. The economic benefits of this alternative would probably be less because of seasonal use. This alternative does not seem practical since twelve other resorts and outfitters are located nearby.

2. Campground Development

This site is not ideally suited for the typical auto-campground since steep topography would be a limiting characteristic. Forest Service research has shown that 77 percent of campers using auto-campground prefer to be near the waterfront and of this amount, 91 percent desire to be close to water because of the view. Thus, user wants would dictate that the shoreline would be extensively developed. A campground would also probably create a larger impact on vehicle traffic than the proposed action. The overall impact of a campground would vary with the density proposed and the willingness of the owner to promote wise conservation measures. Similar to the canoe outfitting alternative, there are fewer controls on density and vegetative removal for a campground. The beneficial impact on the economy would also be less than the proposed action because of seasonal use, even though a substantial demand for campground sites probably exists.

3. Youth Camp

This alternative would be similar to a combination resort-outfitting business. Large groups would be utilizing the BWCA and large numbers of persons would be found on the site. Many buildings are often required for youth camps. Vegetative and density controls for this alternative are similar to resorts and are less restrictive than for the proposed action. The overall adverse impact from this alternative would probably be greater than for the proposed action. Economic benefits would be substantially less than those resulting from the proposed development.

4. Single Resort Units

This alternative would be similar to the proposed action except that units would be located individually rather than in clusters. The units would not be sold and thus the county cluster development controls would not apply. With a resort, open spaces would not be preserved, sewage may not be centralized, and docking facilities would be scattered. It is anticipated that this alternative would have the greatest adverse impact on the land resource.

5. Lot-block Subdivision

This alternative is surprisingly similar to a resort in terms of environmental impact. Approximately 10 clearings, 10 driveways, 10 sewage disposal fields, 10 structures, and 10 docks would be possible with this alternative. A problem with sewage disposal has already

been isolated and would be compounded by attempting to find 10 separate suitable areas for sewage disposal. The cluster development concept provides for more protection, assuming that proposed densities are compatible with the land and water resources, in that vegetation removal is limited to building sites, driveways are combined, sewage disposal is centralized and multiple user docks are required. If developed to the maximum potential, this alternative would significantly alter the existing character of this tract of land with greater impacts on the land resource.

6. No Action

This alternative would reduce all adverse environmental impacts but would also eliminate any beneficial economic impacts. Unless purchased for wilderness use, the development of this tract is imminent.

B. MODIFICATION OF PROPOSED ACTION

The following modifications are presented to reduce unavoidable adverse environmental impacts:

1. Since the Forest Service believes that typical residential development of this tract would not be any more detrimental to the BWCA than adjacent developments, impacts to the BWCA could be reduced by reducing densities to a number more comparable to what would be allowed under lot-block subdivision. This modification will also reduce adverse associated impacts from vehicle traffic. This modification would also reduce the potential economic return to investors and the county. The marina and lodge capacities could be adjusted accordingly.
2. Vegetative cutting provisions should be included in the property owner's association document that would prevent clear cutting in all open space areas and limit vegetation removal within the setback distance to dead and diseased trees. Also, vegetative screening should be added for units 9 and 10. This modification will preserve open space and prevent adverse impacts on aesthetics and vegetation. Also, anticipated noise levels should be minimized by retaining existing vegetation.
3. Blasting of rock should not occur during the summer period of Memorial Day to Labor Day. This reduces the adverse impact of noise on BWCA users. This would modify but not unduly restrict the proposer's development schedule.

VII. THE IMPACT ON STATE GOVERNMENT OF ANY FEDERAL CONTROLS ASSOCIATED WITH THE PROPOSED ACTION

No Federal agencies have any regulatory powers concerning the proposed action except the joint state-federal airspace reservation over the BWCA of 4,000 feet above sea level.

VIII. THE MULTI-STATE RESPONSIBILITIES ASSOCIATED WITH THE PROPOSED ACTION

Minnesota is the only state that has responsibility associated with the proposed action. However, Saganaga Lake is a boundary water to Canada and common interests exist. The added recreational use impacts apply not only to the BWCA but also to the nearby Quetico Provincial Park and the Northern Light Lake area.

IX. ORGANIZATIONS AND PERSONS CONSULTED

Federal

1. U. S. Forest Service
Superior National Forest
2. U. S. Forest Service
North Central Forest Experiment Station
3. U. S. Department of Agriculture
Soil Conservation Service

State

1. Pollution Control Agency
2. Department of Health

Local

1. Arrowhead Regional Development Commission
2. Cook County Zoning Office

Other Individuals

1. Bruce Kerfoot
Farmaker, Inc.
2. Close Associates, Inc.
Consulting Architects

X. REFERENCES

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XI. DRAFT EIS COMMENTS

A public meeting on the Draft Environmental Impact Statement was held in Grand Marais on May 29, 1975, at which time both oral and written comments were submitted. The following pages contain substantive comments submitted on the Draft EIS by:

Ontario Ministry of Natural Resources
U.S.D.A. Forest Service
U.S.D.I. Bureau of Outdoor Recreation
U.S.D.I. Fish and Wildlife Service
Minnesota Department of Highways
Minnesota Pollution Control Agency
Minnesota Historical Society
University of Minnesota Limnological Research Center
University of Minnesota Minnesota Geological Survey
University of Minnesota Agricultural Extension Service
Farmaker, Inc.

In addition, comments on the Draft Environmental Impact Statement were submitted by 61 other individuals and groups of which 57 voiced opposition to the project but did not submit additional detail comments that were not also addressed by federal and state agencies. The Draft Environmental Impact Statement has been totally revised to reflect the comments received, both oral and written.



Ontario

RECEIVED

JUL 10 1975

MINISTRY OF
NATURAL RESOURCES

Ministry of
Natural
Resources

1) on my
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Regional Office
Ontario Government Building
435 South James St.
P. O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Our file number
Your file number

July 9, 1975

Minnesota Department of Natural Resources
Centennial Office Building
St. Paul, Minnesota
55155

Gentlemen:

SUBJECT: Environmental Impact Statement -
Proposed Saganaga and Townhouses
Minnesota Department of Natural Resources

The proposed development of 25 townhouses, 2 dormitories and 1 lodge would certainly have ramifications on the Ontario side of the border for the Boundary Waters Canoe Area, the Northern Light Lake area and Quetico Park.

The proposal indicates that the townhouses would be owned but that the owners would also be able to rent them. From the Environmental Impact Statement we know that the number of residents will be 180 minimum plus 25 staff. If we use only the residents, then the total user days over the four month (June to September) holiday period will be $180 \times 122 \text{ days} = 21,960$ user days and if we take 25 staff $\times 35$ days off the result is an additional 775 user days for a total of 22,735 potential user days.

At the present time we cannot allocate the impact of these user days to either the Boundary Waters Canoe Area or to Quetico. However, they indicate the potential for an increase in impact on both of these areas.

We are also concerned about the Northern Light area. At present, we cannot indicate what effect this development will have, if any.

Page 2
July 9, 1975
Minnesota Department of Natural Resources

The Atikokan District has indicated that the development quota system for Quetico as well as the motor ban should provide adequate controls for increased use and pressures from the U.S. side. However, this will cause a significant increase in enforcement costs.

The Boundary Waters Canoe Area and possibly parts of the Northern Light Area in the Thunder Bay District will receive the greatest pressure from this development. The Management Guidelines for the International Boundary Waters by Remmington indicates in the Goal Strategy - "enjoyment for the people of Ontario" and "ensuring that the type and volume of use does not impair or destroy the quality of the environment or the experience of the visitor" and "to consider the common objectives of the Quetico-Superior Joint Advisory Committee in the management of the Ontario Boundary Waters".

We would suggest that this proposal be placed on the agenda of the next Quetico-Superior Advisory Committee.

Yours very truly,


R. A. Baxter, Regional Director
North Central Region
Thunder Bay, Ontario
(807) 475-1261

JEJackson/dn

c.c. District Manager - Thunder Bay
District Manager - Atikokan

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
SUPERIOR NATIONAL FOREST
P. O. Box 338, Duluth, Minnesota 55801

2320

May 21, 1975



Mr. Terry Lejcher
Division of Soils, Waters & Minerals
Department of Natural Resources
Centennial Office Building
St. Paul, Minnesota 55155

Dear Mr. Lejcher:

We have reviewed the draft E.I.S. for the proposed Saganaga Lodge and Townhouse and offer the following comments:

1. The proposed development is completely incompatible with Forest Service management objectives for the BWCA. We recommend that the proposed action be rejected for the following reasons:
 - (a.) Saganaga Lake and vicinity are already crowded to the point where those seeking a primitive recreation experience are severely disturbed. The increased crowding brought on by this development would further reduce the value of the wilderness experience.
 - (b.) The potential for pollution of Saganaga Lake is really unknown. Only one percolation test has been made, so the information needed to evaluate the probability of pollution is completely inadequate.
 - (c.) The cost benefit ratio for this development has not been fully developed. The benefits to the tax base have been stated, but no attempt has been made to list the costs. It is quite possible that the costs will exceed the benefits in this remote location. The "costs" of this project should include pollution abatement that will eventually be required and increased law enforcement and people regulation costs brought on by the additional crowding as well as those listed on page 14.
 - (d.) The alternatives, some of which appear viable, have only been given cursory attention. No cost-benefit

ratios have been presented and the worst possible situation under each alternative is listed. It is impossible to make an informed decision concerning the environmental impacts of the alternatives as compared to the proposed action from the material presented.

2. Additional specific comments are:

- (a.) There is no projection of the demand for facilities of this type. Many existing resorts in the area are having financial difficulty. The combination of short season, high operating costs, and the effect of probable BWCA user controls should be carefully studied before investments of this type are encouraged.
- (b.) The approval of any drainfield disposal system should be conditional only until further percolation data and soils information is available. If this new information does not show a drainfield is feasible, a list of alternate waste disposal systems the developer may use should be discussed and evaluated in the environmental statement.
- (c.) Sparse understory and mature overstory characterize the habitat of some species. Birds which inhabit sparse undisturbed stands include the least flycatcher and whip-poor-will. Stands with a mature overstory are excellent habitat for many warblers and predatory mammals (page 10, first paragraph).
- (d.) Page 10, fourth paragraph. The timber wolf is officially listed as Endangered.
- (e.) Tables 3 and 4, page 11. The bird and mammal list is incomplete. Birds such as the black-capped chickadee and downy and hairy woodpecker, commonly found here, should be mentioned. Other mammals are the wolf, lynx, bobcat, fisher, marten, moose, deer, little brown bat, red bat, silver-haired bat, black bear, least weasel, short-tailed weasel, mink, skunk, red fox, gray fox, and others.
- (f.) Page 12, Impact of Wildlife, first paragraph. The last sentence of the paragraph is challenged. The regional wildlife populations could be impacted due to the increased recreational use within the region. You could start with the wolf. Any increased development decreases the "remoteness" of the ecosystem and thereby should identify the impact on the 1973 Endangered Species Act.

(g.) Page 12, Fisheries. None of the minnows are listed.

(h.) Page 12, Fisheries Impact. The statement that "probably add to the already intensive spring fishing pressure" is certainly a possibility and this could be expanded. The productivity of the BWCA lakes is low. An objective in fisheries management may be to restrict fishing, not increase use.

The responsibilities of the DNR and Cook County should be more clearly defined. Does the DNR have the authority to approve, modify, or disapprove this project? If so, the Final E.I.S. should conclude with a course of action to be followed. If the county government will make the final decision, the Final E.I.S. should still recommend a course of action.

We hope these comments will help you prepare a Final Environmental Impact Statement that will fully explore the total impact of this proposed development.

Sincerely,


JAMES F. TORRENCE
Forest Supervisor



United States Department of the Interior

BUREAU OF OUTDOOR RECREATION

LAKE CENTRAL REGION
3853 RESEARCH PARK DRIVE
ANN ARBOR, MICHIGAN 48104

IN REPLY REFER TO:

E3053 MN
(BOR 5-166)

July 9, 1975

Mr. Terry Lejcher
Division of Waters, Soils and Minerals
Department of Natural Resources
Centennial Office Building
St. Paul, Minnesota 55155

Dear Mr. Lejcher:

Reference is made to your April 18 request for Bureau of Outdoor Recreation comments relative to the draft environmental impact statement for the proposed Saganaga Lodge and Townhouse development in the Boundary Waters Canoe Area (BWCA), Cook County, Minnesota.

General Comments

After reviewing the information presented in the subject document, we feel the proposed development would not be in the best interest of the Boundary Waters Canoe Area. This land has been set aside in an effort to preserve its wilderness qualities, and we feel that a commercial development of this type would be in direct conflict with the goals and purpose of the BWCA.

II. ENVIRONMENTAL IMPACT OF PROPOSED ACTION

A. NATURAL ENVIRONMENT

2. Soils and Sewage Disposal

On page six it states, "... the amount of area needed for sewage disposal exceeds that which is available. If such systems were installed, failure would be imminent with adverse impacts occurring to water quality and to the public health, safety and welfare."

We question the development of any project that incorporates system failures detrimental to the recreational environment during its initial planning stage. The costs of any such program will be the loss of the "wilderness" effect and recreational water quality in those areas adjacent



to the proposed development. It is indicated on page 19 that this section of Saganaga Lake fills to its camping capacity during walleye fishing season and during adverse wind conditions on the two adjoining lakes. For these reasons, it is very important that the water quality of this area be retained at the highest level possible if the present quality of recreation experience is to be maintained.

B. HUMAN ENVIRONMENT

4. BWCA Use

b. Recreational Use

On page 17 it states that, "The Forest Service administrative travel zone, in which Saganaga Lake is located, is one of the most heavily used zones in the BWCA. In 1972, this zone received the highest use in total visitor days. Saganaga Lake is a popular starting point for canoe trips because it is located near the end of the Gunflint Trail."

Because of the high use of this area as a wilderness experience, we question the development of a townhouse complex in the immediate area. We note that on page 20 the results of an interview study conducted in 1970 show that 81 percent of the outfitters and 86.1 percent of the campers oppose resorts and homes in the BWCA. This study reinforces our concern between development and preserving the wilderness effect of the BWCA.

c. Capacity

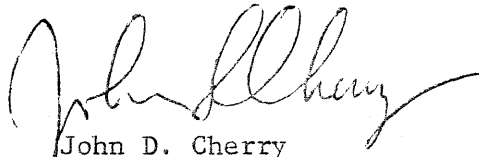
On page 19 it is stated that there are 76 developed campsites and 56 user sites on Saganaga Lake at the present time. On the same page it states that the results of a 1974 Forest Service capacity study indicated that the maximum aesthetic capacity and maximum physical capacity for Saganaga Lake are 95 and 135, respectively. This indicates that this lake is presently developed to within three campsites of its maximum physical capacity and to retain the wilderness quality insofar as camping is concerned some 37 campsites should be removed. A townhouse development on the lake would restrict the number of campsites even further if the natural appearance of the lake was to be retained.

Secondary Impacts

On page 16 it is stated that development of the proposed project would increase traffic to a point where the present Gunflint Trail would probably be inadequate to handle increased traffic loads safely. The statement indicates that pressures would probably mount for construction of a new and safer road. We feel any such improvements would spur further development in this area, once again taxing the entire goal of the BWCA wilderness concept.

We feel the aforementioned areas should be addressed and given careful consideration in any future environmental impact statements that might be written.

Sincerely yours,



John D. Cherry
Regional Director



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Federal Building, Fort Snelling
Twin Cities, Minnesota 55111

IN REPLY REFER TO:

ES-EIR

Lejcher

MAY 30 1975

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JUN 2 1975

DEPARTMENT OF THE INTERIOR

Mr. Robert L. Herbst, Commissioner
Minnesota Department of Natural Resources
Centennial Building - 658 Cedar Ave.
St. Paul, Minnesota 55155

Dear Mr. Herbst:

This responds to your April 18, 1975 request for review and comments on the Draft Environmental Impact Statement for the proposed Saganaga Lodge and Townhouse project. We have reviewed the EIS as it pertains to our areas of jurisdiction and expertise. Our comments are consistent with our obligations under the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the National Environmental Policy Act (NEPA).

General Comments

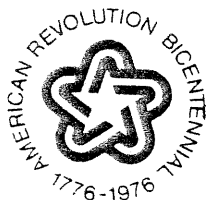
The EIS generally is adequate in coverage of project-caused impacts on the environment. Most sections point out the adverse impacts in a clear, concise and impartial manner. We believe that the EIS adequately points out that:

1. The project does not have sufficient land area available to construct an adequate sewage disposal system for the size of the development.
2. The project would have adverse impacts on the wilderness quality of the Boundary Waters Canoe Area.
3. The project would cause deterioration of water quality in Saganaga Lake.
4. The project would cause an increase in human activity and occupancy in the Boundary Water Canoe Area. This could be detrimental to both the wilderness aspect of the BWCA and to the wildlife that inhabit it.
5. The project may, in the future, cause additional impacts to a wide area of the BWCA and other natural areas through increases in traffic, road construction, human recreational use, residential construction, commercial development, etc.

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JUN 11 1975

Department of Natural Resources
Administration



6. The project is incompatible with U.S. Forest Service management goals and objectives for providing a primitive recreational experience in the BWCA.

These and other impacts discussed in the EIS plainly show that the project is detrimental to the existing fish and wildlife habitat of the BWCA and adjacent areas. With substantial alterations, the project can be made to fit into the proposed site with minimum localized impacts. However, secondary impacts due to expanding development of the area are of such magnitude that they can be neither mitigated nor condoned by this agency.

However, some sentences in certain sections use subjective reasoning almost to the point of being project justification statements. We believe that the EIS should be revised to eliminate the subjective bias that is evident in sentences such as the following:

- (1) "Minor impacts on the microclimate will occur from the construction of roads and buildings; however, these impacts are considered insignificant". (Page 8, paragraph 3) - This could be rewritten as follows: "Impacts on the microclimate will occur from the construction of roads and buildings".
- (2) "Species intolerant to man will probably no longer visit the site; however, this impact is insignificant in that few such species utilize the area now". (Page 12, paragraph 1) - This could be rewritten as follows: "Species intolerant to man will no longer exist on the site".

In these and several other instances in the EIS, a simple statement of known or anticipated impact would be preferable to the author's opinion of significance. The matter of deciding significance or insignificance should be left to the reviewers or decision makers.

Specific Comments

II.A.2. Soils and Sewage Disposal

The impacts portion of this section should contain more information concerning the adverse impacts of poorly treated or raw sewage on a natural lake. The excess untreated effluent from this project and similar developments will accelerate the eutrophication process of a portion of the lake. Given enough time and enough development, this could cause serious impacts to the water quality and fishery of Saganaga Lake.

II.A.6. Wildlife

This section should discuss the secondary impacts associated with the project. As stated in this section, the impacts to the immediate construction site may not be of high magnitude. However, the secondary impacts such as: increased vehicular use; intensified human activity; expanded residential areas; expanded commercial activity; and new roads will be extremely detrimental to wildlife resources. With the type of proposed development, wildlife will disappear except in more remote areas. This could conceivably continue until the entire BWCA is so heavily developed and used that wildlife will exist only in small remnant populations.

We believe some species highly intolerant of man's activities would vanish from the area. We find the statement, "Species intolerant to man will probably no longer visit the site; however, this impact is insignificant in that few such species utilize the area now", to be subjective and unwarranted in this section. This same attitude was prevalent in earlier times when the Gunflint Trail was planned, when Minneapolis was established, when the Iron Range was being developed and during numerous other developmental projects. The Urban-Commercial development problem is now making serious inroads into an area that was originally intended to provide unique, primitive recreational experience for the American people. Wildlife and a wilderness-type habitat are important parts of that experience. Without them, the BWCA will become no more than a park type recreation experience. The EIS states: "Also, extensive areas of more suitable habitat exist nearby within the BWCA". This may be true now; what of the future? Piecemeal development in or adjacent to the BWCA and associated increases in human activity will continue to decrease the habitat base.

IV. Irreversible and Irretrievable Commitments of Resources

This section should list the acreages of existing vegetative types that will be destroyed directly by the project. It should also mention the potential habitat and wildlife losses of a secondary nature that are associated with further development and human habitation of the area.

V. Relationship Between Local Short-term Uses of the Environment and the Maintenance and Enhancement of Long-term Productivity

The second sentence in this section is unclear to us as written and needs further explanation in the final EIS. Does this infer that immediate and complete removal of vegetation from a construction site is less detrimental than gradual removal. Or does it mean that planned vegetation removal is less destructive than piecemeal removal?

Sincerely yours,

Charles A. Hugliett

Acting Regional Director

LEGISLATIVE REFERENCE LIBRARY
STATE OF MINNESOTA

DEPARTMENT

Extension 300-

Office Memorandum

TO : Robert Herbst
Commissioner
Department of Natural Resources

DATE: May 9, 1975

FROM : Frank D. Marzitelli
Commissioner

SUBJECT: Environmental Impact Statement on
Saganaga Lodge & Townhouses
Cook County, Minnesota

5/21
To: V. Hagen
T. Lejcher
- Jip
Chetwell
Allen
V. Hagen
Please pursue
& advise.
Zab

The Highway Department has reviewed the referenced environmental impact statement. While we do not anticipate any impact to the trunk highway system as a result of the Saganaga development, we are interested in the comments offered on pp 15-16 and p 23 regarding the existing county road system. We agree with your statement about the probability of pressure for a new road alignment to serve the peninsula.

This is an excellent example of a project with cumulative effects. It is our opinion that the EIS on the Saganaga project should deal with the potential environmental impacts of a new road alignment. Omitting consideration of such impacts is in fact in conflict with MEQC 22(b) which states that an EIS "enables environmental constraints and opportunities to be considered in the development of an action." The environmental and economic feasibility of road improvements should be considered a constraint unless proven otherwise. We encourage you to pursue this matter with the Cook County Engineer.

Frank D. Marzitelli
Frank D. Marzitelli
Commissioner

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MAY 13 1975

COOK COUNTY ENGINEER
JULY 1975

DEPARTMENT Minnesota Pollution Control Agency*Office Memorandum*

TO : Terry Lejcher, Senior Hydrologist
Division of Waters, Soils, and Minerals
Minnesota Department of Natural Resources

DATE: May 23, 1975

FROM :  Lovell E. Richie, Deputy Executive Director

RECEIVED**MAY 29 1975**

Division of Waters, Soils & Minerals

SUBJECT: Draft EIS on Proposed Saganaga Lodge and Townhouse Project,
Farmaker, Inc., Cook County.

Agency staff have reviewed the draft impact statement, and have the following comments and questions concerning the project:

1. One of our major concerns is with waste disposal. The developer proposes to use septic tank and drain field systems for waste water treatment. The information presented in the draft EIS is insufficient to determine if the site is suitable for this type of sewage disposal. No other disposal alternatives are presented. The calculations for the areas of the drainfields required are based on only one percolation test, which is inadequate. As the statement indicates, at least 24 percolation tests are recommended to provide sufficient data.

There is only very general information about soil type and depth to bed rock, and no information on water table depth. Page 4 indicates that soil thickness ranges from several inches to a few feet, but there is no indication of depths at the drainfields, and the locations of the drainfields are not shown. The draft EIS proposes that the number of units be reduced by one half to ensure availability of sufficient area for drain fields, however, it has not been established that any of the area is suitable for septic tank and drainfield systems.

If depth to bedrock and/or the water table is insufficient for drainfields, does the developer plan to haul in fill? If so, what are the impacts of this alternative? Even if the sewage system met departmental standards, what is the possibility of nutrients leaching into the lake? During winters of little snowfall,

and severe cold, what is the possibility of the systems freezing?

There appears to be at most only 15 inches of moderately permeable soil before encountering either fragipan or bedrock (see Soil Conservation Service evaluation sheets) on most of the property. Further, soils investigations revealed that all observation holes had water accumulation after only 24 hours, indicating the likelihood of a perched water table over much of the property.

Given the dearth of soil in the area, conventional soil absorption systems of any size would not seem appropriate. Effluent could receive little, if any, treatment in the shallow soil, and may travel along the bedrock or fragipan (due to slopes of 6-18%) into the surrounding bodies of water. Or it may come up onto the surface or into the buildings.

We agree with the departmental estimates that too little area is available for sewage disposal. But, even if sufficient area were available through implementation of one of the alternatives, the use of conventional soil absorption systems for sewage disposal is inappropriate in this instance, and should not be allowed.

Preferable alternatives might include mound systems for which additional soil would be brought in to raise the bottom of the system at least 3 to 4 feet above bedrock, or the use of storage tanks and trucking of the accumulated wastes to a municipal sewage plant for disposal. Will water conservation measures to reduce the sewage volume be considered?

Failure of the sewage systems could result in direct discharge of sewage to the lake which could pose an immediate esthetic nuisance and potential health hazard to users of the beach and lake in the vicinity. What measures are to be provided to ensure that such episodes do not occur?

2. The impermeable area created by the buildings and roads may cause a significant increase in runoff. The effect of this runoff should be addressed from the point of view of water pollution and erosion. How will site runoff from such areas as parking

lots, roads, tennis courts, etc. be collected, treated and disposed of? Will air conditioning be provided and, if so, what will be the treatment and disposition of the water? If there is to be a discharge of air or water conditioning wastes, how will it be treated and disposed of? How will soil erosion during construction be handled? Will the developer follow an SCS approved erosion control plan and program?

3. Will the proposed lodge have facilities for bands, or dancing? With 3 sides of the property surrounded by water, sounds are likely to carry long distances. The sounds of a modern band may be quite disturbing to nearby campers and canoeists who are seeking the solitude of the North Woods.

4. The persons who could use a facility such as this may be likely to prefer air travel. Will this development stimulate expansion of the Devils Track Airport to accommodate larger aircraft?

Your consideration of these comments in preparing the final environmental impact statement on this project will be appreciated.



To: V. Hagen
Jenny Hagen
5/17

MINNESOTA HISTORICAL SOCIETY

690 Cedar Street, St. Paul, Minnesota 55101 • 612-296-2771

13 May 1975

Mr. Robert L. Herbst, Commissioner
Minnesota Department of Natural Resources
Centennial Office Building
St. Paul, Minnesota 55155

RECEIVED
MAY 19 1975
ASST. COMMISSIONER
FOR PLANNING

Dear Commissioner Herbst:

RE: Draft Environmental Impact Statement
Saganaga Lodge and Townhouse Project
Boundary Waters Canoe Area
Cook County, Minnesota

The Draft Environmental Impact Statement for the Saganaga Lodge and Townhouse project has been reviewed by the Survey and Planning and Archaeology sections of the Minnesota Historical Society as per your request of 18 April 1975. It is the finding of this review that the historical documentation is primarily based upon twentieth century developments. Little indepth study is indicated regarding early exploration, trading, and settlement. Further, no reference is made to existing or potential prehistoric occupation of the area. Experience in the study of prehistoric peoples indicates that beach areas in the northern lakes region exhibit high potential for occurrence of cultural sites. Therefore, it is requested that a survey of an archaeological nature be incorporated within the overall planning for this project.

For further information on this matter, please contact Alan R. Woolworth, Chief Archaeologist, Minnesota Historical Society.

Respectfully,

Russell W. Fridley
Russell W. Fridley

State Historic Preservation Officer

RWF/fr

cc: Alan R. Woolworth, Chief Archaeologist; Minnesota Historical Society;
Building 27, Fort Snelling; St. Paul, Minnesota 55111; Phone 726-1630

Charles W. Nelson, Supervisor - E.I.S.; Minnesota Historical Society;
Building 25, Fort Snelling; St. Paul, Minnesota 55111

LIMNOLOGICAL RESEARCH CENTER
PILLSBURY HALL • MINNEAPOLIS, MINNESOTA 55455
PHONE 373-4508 • AREA CODE 612

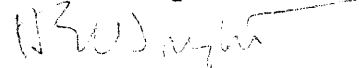
June 3, 1975

Mr. Terry Lejcher
Division of Waters, Soils, and Minerals
Department of Natural Resources
Centennial Office Building
St. Paul, MN 55155

Dear Mr. Lejcher,

In my opinion, the Environmental Impact Statement for the Saganaga Lodge and Townhouses in Cook County adequately considers most of the environmental aspects of proposed development. It is clear from numerous statements that the introduction of such a concentrated and elaborate operation is completely incompatible with the administration of the BWCA, in which the site is located. A development of this type should not be permitted so close to major access to a designated wilderness area that is supposed to be dedicated to primitive use. If the site must be developed, a much smaller and simpler style would be more appropriate. But I submit that a site such as this one, actually within the limits of the BWCA, should not be developed at all, and that the land should be purchased for incorporation into the protected area of the BWCA. This alternative is only casually mentioned (p. 26, item 6), but the costs and legal arrangements for such a step should be presented, so that the only really compatible alternative can be evaluated against the several proposals for development.

Sincerely,


H.E. Wright
Professor

HEW/kd



UNIVERSITY OF MINNESOTA
TWIN CITIES

Minnesota Geological Survey
1633 Eustis Street
St. Paul, Minnesota 55108
373-3372

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APR 24 1975

Division of Waters, Soils & Minerals

April 22, 1975

Mr. Terry Lejcher
Division of Waters, Soils & Minerals
Department of Natural Resources
Centennial Office Building
St. Paul, MN 55155

RE: Draft Environmental Impact Statement, Saganaga Lodge & Townhouse

Dear Sir:

We have reviewed the Draft Environmental Impact Statement forwarded to us. We are in general concurrence with the statements made with respect to the geology of the site. We also concur with the finding that the soil conditions at the site place severe limitations on the use of the site for sewage disposal through septic systems. We believe it is likely that further investigation will show that the soils are even more variable in depth to bedrock and in physical properties than present information suggests. We would recommend that any plan for the use of the soils as a sewage disposal medium should be very conservative and scaled well below the capacity of the site based on the usual empirical formulations.

We also believe that control of erosion with heavy use of the site will prove to be a problem. Plans for the mitigation of this problem throughout the life of the site should be a part of the design.

Sincerely,

Matt Walton
Director

MW/nb



UNIVERSITY OF MINNESOTA

AGRICULTURAL EXTENSION SERVICE

Department of Agricultural and Applied Economics
St. Paul, Minnesota 55108

June 27, 1975

TO: Robert Herbst, Commissioner
Department of Natural Resources

SUBJ: Comment on Draft Environmental Impact Statement for the
Proposed Saganaga Lodge and Townhouse project.

Dear Commissioner Herbst:

This comment is offered to the Department of Natural Resources and the Environmental Quality Council in the spirit of making a positive contribution. For the sake of brevity the comment is not balanced; rather it focuses upon the positive aspects of resorts in the Cook County and Saganaga Lake/BWCA area. This is done because these aspects appear understated in the Draft EIS, and because Dr. L. R. Simonson who assisted in this statement, and I feel professionally qualified to contribute this type of information.

The comment bases upon the following principles upon which we believe there to be broad support among Minnesota citizens:

1. The overall purpose of the EQC/EIS procedure is to insure the continuing delivery over time of living quality to citizens, through assurance of natural environmental quality.
2. While natural environment is a focus of the Department of Natural Resources and Environmental Quality Council, the institutional and economic settings (or environments), are equally important to citizens' living quality.
3. Access to the environment is clearly an intent. Access to recreating and living experiences has many forms, and requires many kinds of institutional arrangements.
4. The Saganaga Lake/BWCA area has major capacity to contribute a high quality wilderness experience. Such quality, includes not only the water, but also aesthetic and visual qualities plus compatibility of human uses to

its basic character. Any personal, commercial, or governmental user of the area should not only follow regulations regarding its management but should be expected to respect its spirit.

I. Is there a problem of obsolescence in our attitude toward development and use?

- There appears a bias toward dispersed small developments in wilderness areas.
- Scale is clearly important in a commercial operation. Too large scale will overpower the site and intrude. However it is proposed that medium scale be considered as a superior alternative to small scale commercial operations.
 - (1) Small scale operations have limited economic viability. Thus they are not a realistic long-range alternative. (See also comments III and IV).
 - (2) A smaller number of medium-scale operations can be designed and managed to intrude less upon the area physically than many small operations.
 - (3) The manager of a larger, more profitable operation, not only depends upon natural area quality for customer appeal but can better afford to manage to this end.
- One effect of attitudes developed in earlier days of plentiful, high-amenity sites is the trend to wide spread second house development. It is submitted that these now represent a form of special privilege. In terms of high amenity resource use they have a relatively low level of social productivity. Some settings approach the point at which second-home owners demand of governmental agencies the maintenance of a private preserve. In an earlier era such uses presented fewer problems.

II. Who has access to the area?

- Is there adequate provision for access to Saganaga for those who appreciate its wilderness setting but who:
 - (1) do not have the good fortune of owning private property abutting the area.

(2) do not wish, or cannot by reason of health, undertake a canoe-camping experience

(3) do not trailer a boat into the area?

- It is proposed that resorts perform the major role of providing an important part of the access to Minnesota's outdoor recreation resources. They can provide this access to a wider range in types of citizens than most other accomodation types. Resort restriction will ration access, which in certain cases may be desirable; but it may also increase discrimination.

III. The Cook County Economy is dependent upon resort operations.

- The extent to which this is true is noted in the fact that Cook is the only county in Minnesota that can host more people overnite in its commercial lodging facilities than the number of its citizens.^{1/} Forestry and wood products is its only other major industry, and the county has serious locational disadvantage in developing other industries such as manufacturing.
- In order that the Cook County resort industry adequately performs its role as generator of income for tax base and employment it must tap a high income market. The lodge proposed would aim at such a market for high dollar sales for resort services. It is in contrast to camping and canoe rental operations. These, while fulfilling a vital role, are low dollar volume operations.

IV. The Resort Industry is Undergoing a high rate of attrition. This increasingly restricts its capability for providing access to recreational experiences.

- Over the 1966 to 1973 period there was an average decline in the number of resorts of more than 100 per year. This attrition was due mainly to poor profitability resulting from (1) rapidly rising costs and (2) the small scale of most resorts.

^{1/} Minnesota's Lodging Industry, Statistics and Characteristics, Univ. of Minn. Extension Bulletin 386. see page 8.

- Only well-managed operations of adequate scale can continue as economically viable units.
- By "adequate" scale is meant a modest number of units adapted to each given setting. Clearly 100s of units in a multi-story lodge is inappropriate to a wilderness setting, but a scale of 25 to 100 units is environmentally manageable on many sites and has longer-range survival capabilities.

V. Well-managed resorts provide a special access to Minnesota's natural resources settings and demonstrate considerable adaptation to the situation of resource conservation.

Here two pieces of research are cited.

- (1) The first demonstrates adaptiveness of resorts; consider the following data, reporting "activity indexes" of resort guests only in the following three Northeast Minnesota settings. ^{1/}

<u>Location</u>	<u>Activity Attraction Index</u>	
	<u>Activity rated highest</u>	<u>2nd highest</u>
Lake Kabetogama	Fishing 55	Water activities 12
Gunflint Trail	Fishing 34	Wilderness 28
Ely Area	Fishing 30	Wilderness 25

(The larger the "activity attractions index" the relatively more important the given recreational activity as reported by resort guests)

Please note that "Fishing" as an activity is important in all three areas. But, whereas the second most popular activity was rated only one-fourth as important as "fishing" by Kabetogama resort guests, "Wilderness activities" were nearly as popular as "fishing" in both the Gunflint Trail and Ely Resort areas. All three areas have similar physical attributes.

^{1/} Uel Blank, "A Concept of Recreation Focal Areas", Proceedings Compendium of Papers, Institute of Traffic Engineers, Minneapolis 1975.

It is suggested that these data reflect the long period of management of the BWCA as a Wilderness area, to which Ely and the Gunflint Trail resorts are adjacent. It represents a shift in offerings of activities by managers of resorts and a change in guests' images and expectations concerning how they will enjoy themselves in the area.

- (2) The second piece of research data demonstrates that well-managed larger-scale resorts offer, within themselves, recreational activity opportunities thus putting less pressure upon the natural environment.

1974 data, Lake Minnewaska (No publication is available - reports are in process.)

Proportion of guests from 10 resorts studied who fished as a major recreational activity - 82%

Proportion of guests from one resort (Included in the above 10) who fished - - - - - 24%

The latter resort provided other activities (an adequate central lodge where guests could mingle, golf, tennis, shuffleboard and other activities). All the others or older-style, small operations emphasizing Lake Minnewaska and its fishing.

It is noted that earlier concepts of resorts are as "fishing camps". As such they are exploitative -- dependent upon the natural resource provided by public resource-managing agencies. But newer resorts adapt to management of resources for other purposes. Further they contribute positively by providing, within themselves a range of recreational activities. Guests come because they are attracted by the appeal of the natural area, but they often engage to a much less extent in consumptive uses of the environment than an earlier generation of resort guests (or those who are guests of the older-generation operations).

Robert Herhst, Commissioner
June 27, 1975
Page 6

The complex nature of the issues in the Saganaga Lodge Proposal is appreciated. It is urged that due consideration be given to the comments and questions raised herein. Further information that may be helpful in your deliberations will be gladly supplied.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Uel Blank".

Uel Blank
Extension Resource Economist

UB:cf

Lepher

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JUN 10 1975

Division of Waters, Soils & Minerals

SAGANAGA LODGE AND TOWNHOUSES

PROPOSED BY:

FARMAKER, INC.

Cook County, Minnesota

RESPONSES TO DRAFT ENVIRONMENTAL
IMPACT STATEMENT

Submitted by:

Farmaker, Inc.

Bruce T. Kerfoot
its President

Richard W. Swanson
its Attorney

Grand Marais, Minnesota 55604

Attachments:

Exhibit A - Memo of Close Associates, Inc. Architects, May 28, 1975

Exhibit B - General Response of Close Associates, Inc. Architects, May 7, 1975

Exhibit C - Photographs Depicting Current Development of the Peninsula
(limited to Department of Natural Resources of Minnesota)

RECEIVED

INTRODUCTION

It is difficult to be charitable to the preparers of the Draft Environmental Impact Statement. The draft purports to reach intelligent conclusions concerning the Saganaga Townhouse Project and makes recommendations for drastic modifications to the scope of the proposal. Yet the draft is based upon obviously inadequate data and distortions and results in discrimination against the proposer.

The reasons for this performance by the preparers of the draft are not clear. They do seem concerned that this proposal offers some hidden damage to the environment throughout Minnesota and that similar proposals should be carefully watched. It is almost as if they are making this a "test case" when they say on page 25 that "the success of the proposed action will probably stimulate similar proposals elsewhere in Cook County and the State of Minnesota."

However, in spite of the indications to the contrary, we will assume that the efforts of the preparers were well motivated and that they reached conclusions they felt were supported by the evidence. It is our purpose in this document to provide responses to the claims and conclusions by the preparers and to affirmatively show how the environmental concerns can be met and why the proposal is a perfectly reasonable alternative use for the land involved.

Although there are many separate environmental concerns expressed in the draft, most of which will be dealt with later, the most important areas seem clearly to involve sewage disposal plans and the impact on the BWCA.

SEWAGE DISPOSAL

In the natural environment section of the draft the most serious questions are raised under the headings of "Soils and Sewage Disposal" and "Hydrology." The concern, naturally, is that the proposal will result in pollution of the clear waters of Lake Saganaga. The first response to this concern is to state simply that this is a matter of primary importance to the proposers and that it has fully expected to meet the necessary requirements of DNR and the Health Department to insure a safe disposal system.

There can be no doubt that there either is or is not sufficient soil on the site to construct an adequate soil absorption system. It is simply an engineering problem, albeit not an easy one, to determine how a safe system can be built. At the time of freeze-up last fall, when the work was begun on the EIS, there was only one percolation test available for evaluation of the site. It perhaps would not have been improper for the preparers of the draft EIS to make some tentative projections and to conclude that further data was needed to adequately assess the sewage system possibilities. However, the preparers instead flatly conclude that an adequate sewage disposal system cannot be constructed and suggest that the only alternative is to reduce the size of the project by one-half.

Such a naive approach almost defies comment. Especially after the proposer was assured by Commissioner Herbst at a November 1974 meeting that no attempt would be made to reach a final conclusion on the sewage system until further tests were available and that final resolution of the matter would be left to the Department of Health, where the ultimate responsibility lies for permit issuance.

Further percolation tests have now been conducted and sufficient information is now available to show that the engineering problem of sewage disposal can be solved. A separate report on this matter is being prepared by Close Associates, architects for the proposer, and will be submitted along with this response.

The proposer has indicated all along that it will meet all existing requirements to insure a pollution free sewage disposal system even to the extent of installing holding tanks which can be pumped for hauling to the new sewage treatment plant in Grand Marais. At any rate, this engineering problem should not be allowed to stand in the way of the project as proposed. It is certainly a great overstatement to attempt to alarm readers by including in the draft EIS a statement that the size of the project must be cut in half "so that impairment of the public health does not occur by probable deterioration of water quality." (page 27) Such inflammatory rhetoric is uncalled for in view of the arguments noted above and in view of the fact that there is no evidence that "public health" would be endangered even if the system did fail in some respect. This issue was never addressed in the draft. At one point it was noted that Saganaga Lake might be sensitive to increases in nutrient loading (page 8), but nothing further was discussed. Even this is contrary to the classification of Saganaga by the U. S. Forest Service as an "insensitive" lake in Exhibit A-7 of the BWCA Management Plan of 1974.

The point is that the language and conclusions of the draft are completely uncalled for in a document of this nature.

BWCA IMPACT

The second significant issue raised by the draft EIS relates to the impact of the proposal on the Boundary Waters Canoe Area, namely on Saganaga Lake as a part of, and entry to, the BWCA. Here it is particularly difficult to put aside one's emotions and preconceived notions and deal rationally with the facts. Unfortunately, the preparers of the draft EIS have not succeeded in this difficult task. They have taken a very narrow view of the problem which has resulted in a position which unfairly discriminates against the proposer.

First of all, the reader of the draft is made to feel that the land involved is a part of the trackless wilderness, unspoiled by man, and that it would be aesthetically blasphemous to allow commercial development. Nothing could be more misleading. It is true that the proposer's tract, and two canoe outfitting businesses immediately to the south of the tract, are on the tip of a peninsula which was included within the physical boundaries of the BWCA. But the peninsula involved has had road access for some time and has long been used for commercial and private purposes, now having seven resorts and 27 cabins and homes. To suggest that the proposal will drastically change the area is ludicrous.

Further, the U. S. Forest Service has repeatedly said that this land is not considered to be within the BWCA for administrative and management purposes. In fact, as the draft points out on page 17, the BWCA boundary was to have been revised to exclude the proposed tract from the BWCA, but for some unknown reason the proposed exclusion was never acted upon. Now it is claimed by the preparers of the draft that the Forest Service assumed all along that the point would be developed for single family cabins and not for commercial use. Yet when the land was zoned for commercial use by the County in recognition of a pre-existing use pattern, no objection was raised by the Forest Service. Nor has any objection been raised to the other two adjacent commercial uses within the BWCA.

At any rate, the conclusion reached by the preparers of the draft is that the proposed use is "totally incompatible with the U. S. Forest Service management goals and objectives for providing a primitive recreational experience in the BWCA." The preparers then go on to quote from the 1974 BWCA Management Plan and Environmental Statement to the effect that the goal of the Forest Service is to preserve the primitive character of the area. It is finally concluded that "any development" on the tract which generates more use of Saganaga Lake is contrary to the Forest Service objective. (page 20). Such sweeping conclusions and obvious distortions lead one to wonder if the preparers ever read the BWCA Plan or were even on Saganaga Lake or other such lakes in the BWCA.

If one reads the 1974 BWCA Plan one is informed that there are three levels of recreational uses promoted in the BWCA, not all of which are the primitive uses alluded to by the draft. Page 23 of the 1974 Plan describes the three types of uses which range from the very primitive to the use classified as Recreational Experience Level II, which "satisfies some needs for adventure and challenge, but allows motorized access." This is precisely the type of experience for which Saganaga Lake is managed. It is one of only two lakes in the entire BWCA on which outboard motors of unlimited size are allowed. In fact, motors of limited size are allowed on the entire border chain of which Saganaga is a part. It is quite clear

that this management is in deference to the long-standing traditional use of these particular lakes. (1974 BWCA Plan, page 25) Further, the Plan states that the policy is to provide "facilities and access compatible with the level of recreation experience being offered." (page 29) With this information, concealed by the preparers of the draft, it can be seen how misleading it is to conclude that the proposed use is "totally incompatible" with the BWCA management plan. In fact, the worst that can be said about the proposal is that it is totally consistent with the present and traditional use of Saganaga Lake and that it will add some further motor boat and canoe usage of the Lake.

The question then becomes one of determining whether Saganaga Lake is being used to capacity and, if so, is it appropriate to conclude therefore that the government should limit the size of this development to help resolve the problem? It is quite clear from the statistics in the draft EIS (page 19) and from conversations with Forest Service officials that Saganaga is not being used to capacity, except on isolated occasions and in isolated areas. In fact, the most serious problem cited by the Forest Service was campsite crowding, particularly the campsites in the channel near the proposed development during the opening week-end of the fishing season. Obviously, this type of use would not be exacerbated by the occupants of the proposed townhouses.

Even if we assumed that Saganaga was at or near its reasonable capacity, for motor boat and canoe use, is it reasonable to single out the proposer of this use for sanctions designed to control the situation? Most assuredly any fair-minded person would have to recognize the discriminatory aspect of such an idea. Surely the proposers of this use have the same rights that others currently have to use the waters of Saganaga?

If overuse of Saganaga is truly a problem then the solution clearly lies in a system of user regulation that would be applicable to all potential users. There is presently such a use limitation and distribution plan being developed by the Forest Service for implementation in 1976. The proposer of this use is certainly willing to comply with any new regulation that would be applicable to all property owners and commercial interests in the area. It makes no sense to single out this proposal for special scrutiny when no limits are placed on the numbers of canoe parties that can be put out by the adjacent outfitters or the number of boats that can be launched from the public landings.

It is also suggested that the BWCA use is being threatened by an adverse aesthetic impact (page 20) by virtue of the visual impact of the development. Again, when one considers the existing uses on the peninsula this objection becomes almost insignificant. The townhouse units will have a one-storey design facing the water, be green and/or brown in color, and will present a minimum visual impact to water users who have just passed almost two miles of uninterrupted home development with various cabins, homes, shacks, and docks built within ten feet of the water and variously painted orange, green, white, rust and other conspicuous colors.

It is hardly illuminating to cite statistics showing that canoeists prefer not to sight motor boats, buildings, other people, etc. This is understood. But it is now virtually impossible to provide a truly primitive experience on Saganaga Lake and the Forest Service makes no pretense at attempting such a feat. That type of use is reserved for other more appropriate areas of the BWCA.

MISCELLANEOUS OBJECTIONS

Aside from the two most important issues raised above, the draft EIS deals with a variety of other relatively minor matters. For example, the preparers note that the "cluster development" will result in more units on the parcel than would otherwise be allowed if there were a lot-block subdivision. That may be partially true, but, of course, the gains in planned development and centralized sewage and utilities offset this consideration. Further, there is no prescribed or recommended number of units per acre of a cluster development. Certainly the proposed townhouse density is not in excess of what would normally be allowed for a cluster development, since there is no single definitive regulation on allowed densities and each proposal is apparently judged by some undisclosed standard.

It is also unfair to suggest that the proposed use will "double the existing development" on the peninsula. (page 23) Presently the peninsula has facilities, between commercial businesses and homeowners, to serve about 450 people. This proposal will serve approximately 80 people during short periods of maximum use.

Several other suggestions made under the section of "Human Environment" are unfair and misleading. No fire protection is available now in the area and hence no additional economic impact will occur. The County portions of the road leading to the site are adequate and would not have to be improved. Townhouse owners would not be permanent residents and so any impact on the school system would be limited to a manager's family if he had young children.

Finally, all of the buildings meet the 100-foot building set-back requirements, contrary to the assertion made at page 15 of the draft EIS. As indicated in the site plan, all building foundations are 100 feet or further from the shore, as required by the ordinance. The protrusions mistaken for set-back violations are open balconies or terraces which may permissibly project beyond the set-back lines.

MODIFICATIONS AND ALTERNATIVES

In considering the alternatives to the proposed townhouse use, the preparers of the draft EIS seem to conclude legitimately that all other alternative uses offer potential for greater environmental impact. Yet, in an effort to modify and blunt the impact of the proposed use, the preparers suggest that the proposal should be modified in several respects.

The first response to the suggested modifications is simply to note that our previous comments show that the various anticipated environmental impact either will not occur or can be dealt with so that the impact is minimized and the project may continue as proposed. However, specific comment will be made on each suggested modification.

The first modification proposal is that the size of the project should be cut in half by eliminating 12.4 townhouse units and scaling down the marina and lodge capacity accordingly. The primary justification for this modification is that the preparers feel it is necessary to protect against failure of the sewage disposal system. Incidentally they note that the modification will "reduce adverse impacts on vegetation, land use, vehicle traffic and BWCA use, both physically and aesthetically." The sewage disposal fears are allayed above and in the attached Exhibit A. The other impacts have also been dealt with above. What remains for comment is the effect this modification would have on the overall feasibility of the project.

It is the belief of the proposer that the deletion of 12.4 units (however the fractional deletion would be accomplished) would make the project totally impossible. To delete 12.4 units would reduce the project investment by nearly \$500,000 and necessarily result in increasing the price of the remaining 12.6 units by over 30%. This size development simply could not maintain a year-round business and would therefore twist the economics of the overall project and turn it into a losing proposition. To delete the 12.4 units is thus to do more than cut the project in half; it is to effectively eliminate the proposal.

Modification proposal No. 2, calling for vegetation screening and protection against removal of same, is basically acceptable to the proposer. The proposer believes that the screening of units in this development will be the best in Northeastern Minnesota for units of this nature. The preparers incorrectly suggest that the proposer's plan provides inadequate screening for units 7, 8, 9 and 10. (page 10) Unit 7 will have complete screening with present tree cover. Unit 8 will be screened with stated proposed plantings. Units 9 and 10 will only be about 50% screened since they are on a rock outcropping with a vertical face to the West.

Modification proposal No. 3 is anticipated in the normal construction schedule and will create no problem for the proposer. At any rate, during a three-year construction schedule, a total of three to five blasts can be expected.

Modification proposal No. 4 is unnecessary because building set-back requirements are already met as noted above.

Modification proposal No. 5, calling for a turn-around loop for access to the marina, would seem to have a greater impact than the design

suggested in the proposal. The area disturbed will be kept to a minimum by not using a loop design; and because a minimum of use is planned for boat launchings, a loop will be unnecessary. Further, no parking will be allowed in the marina area.

CONCLUSION

In summary, it is contended that the draft EIS is correct in concluding that the proposed use is the best of the alternative uses for the area, but is incorrect in suggesting that the proposal be drastically modified. The final EIS should thus be modified to recognize the arguments raised herein.

There is no question but that development of the tract in one form or another is imminent, as noted in the draft EIS (page 26). It is important that the correct decision be made at this time to avoid the consequence of the area being saddled with one of the undesirable alternatives listed in the draft. Recreational users will be coming to the area seeking to purchase land, vacation homes, or related services so that they may enjoy the area. We must decide how best to provide for them. We may either provide for the users in a planned and reasonable fashion or we may allow them to overflow the public landings, use all of the campsites and build on scattered sites throughout the area. With such a limited amount of private land available the choice is crucial for Cook County.

If one of the other alternatives is forced upon the proposer here, perhaps there will be a dozen or more owners of separate parcels on the proposed tract. Will they carefully comply with all sanitation and building requirements? How many children might they send to school in Grand Marais? Will their numerous cabins, docks, woodsheds, garages, etc., all colors of the rainbow, contribute to an aesthetically pleasing scene? Finally, would it not be far better to have this area developed and used rationally by a conscientious local firm headed by a man who was born and raised in this wilderness area and who may be easily held accountable now and in the future?

EXHIBIT "A" - Memo of Close Associates, Inc. Architects
Review of Modifications Concerning Sewage Disposal

MEMO

DATE: 28 May 1975

cc: C. Settle
B. Kerfoot

RE: Environmental Impact Statement
Saganaga Lodge and Townhouses
Grand Marais, Minnesota

Review of Modifications Concerning Sewage Disposal

BY: Gar Hargens

At the inception of this project, we reviewed with the State Health Department the possible means of sewage disposal on this site. We explored on-site disposal and various techniques for storage and removal of waste from the site. Since that time, we also received some preliminary percolation data. Prior to the drafting of the Environmental Impact Statement we had one percolation test which gave us a reading of thirty minutes, which with the area available did not allow for on-site disposal. The owner just completed a more thorough set of tests that seem to show that on-site distribution is possible (assuming four persons per unit and the gallon quantities specified in the impact draft).** The point is that neither of these figures can be relied upon at this time. Without a complete set of percolation tests it is impossible to say just what combination of sewage disposal techniques will be necessary. This is the position of the State Department of Health has taken in our meetings with them. It is the position which we wish to take, and we think it is the only right position for the Environmental Impact Statement to take. Therefore it is improper for item number one under modification of proposed action to state that the number of units must be reduced "so that impairment of public health does not occur by probable deterioration of water quality."

I met with Chuck Settle of the State Health Department this morning to again review his and our position in this matter. I showed Mr. Settle the new percolation tests given us by the owner. We also discussed the use of the Envirovac System which Mr. Settle said he had seen demonstrated. This vacuum system can reduce by 40% the amount of water required in the total sewage system. Mr. Settle reiterated his position that this and other holding tank systems might be acceptable if conditions do not prove as favorable as the owner's recent percolation tests would indicate. He indicated that these tests should be performed by as neutral a party as possible and until they were performed there was no way that a final evaluation of sewage disposal needs could be made.

**See attached calculations

27 May 1975

Percolation tests for Saganaga Lodge and Townhouses within the areas designated for sewage disposal.

1. 4.5 minutes per one inch drop

2. 8 " " " " "

3. 4.5 " " " " "

4. 5.5 " " " " "

62.5 divided by 7 = 8.9, assume 10 =
required absorption area of .65

5. 14 " " " " "

6. 12 " " " " "

7. $\frac{14}{62.5}$ " " " " "

4 persons per unit

Area 1 - 56 persons x 50 gallons = 2800 gallons

2800 gallons x .65 square feet per gallon = 1820 square feet

1820 square feet divided by 3 = 606.6' of 3' trench

606.6' x 7.5' = 4550 square feet

Area 2 - 32 persons x 50 gallons = 1600 gallons

1600 gallons x .65 square feet per gallon = 1040 square feet

1040 square feet divided by 3' = 346.6' of 3' trench

346.6' x 7.5' = 2600 square feet

Area 3 - 12 persons x 50 gallons = 600 gallons

25 persons x 50 gallons = 1250 gallons

80 persons x 12 gallons = 960 gallons

2810 gallons

2810 gallons x .65 square feet per gallon = 1826.5 square feet

1826.5 square feet divided by 3' = 608.8' of 3' trench

608.8' x 7.5' = 4566.2 square feet

Total area required - 11,716

Total area available - 12,112

EXHIBIT "B" - General Response of Close Associates, Inc. Architects
re Draft Environmental Impact Statement, 7 May 1975

We are dealing with 9.7 acres of land within the BWCA, roughly the northerly 200 yards at the tip of a 204 acre peninsula. The zoning of the entire peninsula is C-1, Commercial-Recreational District. Existing development consists of 27 cabins and seven resorts, six of which are also outfitters. Most, if not all, fail to meet present day requirements of the Cook County Shoreland Ordinance.

The zoning and established uses make the site inconsistent with BWCA objectives. A revision of the boundary to remove the tip of the peninsula from the BWCA was recommended to the Quetico-Superior Committee by the U. S. Department of Agriculture Forestry Service on November 14, 1958, and approved by the Committee. That was prior to the establishment of the BWCA boundaries by Federal Law. It is not clear why the revision was not implemented, certainly it should have been.

When man sets foot in a natural area, he damages it. Yet, as M. J. Forrester points out in the Sierra Club Bulletin of November-December 1974, "It is hardly useful to suggest that for the sake of sparing virgin continent, our forefathers should have stayed in Boston". Rather, among competing land uses, a selection should be made based on economic viability and optimal long-term preservation and enhancement of the environment. The Arrowhead country is a scenic recreational area, relying on construction and extractive industries for less than 30% of its employment. It is sparsely populated, and has a high governmental expenditure per dollar of personal buying power*. It is a high cost area from the point of view of both the local and state taxpayers. Thus, the aspect of economic viability is of prime importance in evaluating competing land uses.

The Department of Natural Resources has made a conscientious review of the pros and cons of the Saganaga Project. With respect to climate, hydrology, vegetation, wildlife and fisheries, they see no significant adverse impact. The assumption with respect to percolation areas for on land sewage disposal are subject to further study and confirmation. If percolation areas prove to be inadequate, the alternatives of a treatment plant, holding tank, or Envirovac System should be explored, subject of course to the concurrence and approval of the State Department of Health.

Under several categories, the Statement refers to the positive impact of the project on the economic situation of Cook County. A major reduction in scope would diminish this benefit, and at some point make the project financially impossible. The anticipation of additional schooling seems unwarranted. At Lutsen Sea Villas, a considerably larger and more accessible development, there is no added school load. Nor is it likely that owners of the cluster homes would want or agree to upgrading the access road, since their purpose in a vacation home is to enjoy the natural character of the area.

The setbacks shown on the site plan indicate the building line at or inland from the 100 foot setback line, for all structures. The Housing and Urban Development Standards were used as a guide. Section 304-2.8 states that "The projection of open balconies, bay windows, and uncovered porches into the open spaces is acceptable". All overlaps of the setback line represent such open balconies or terraces.

*Minnesota Land Use and Settlement. 1985, pp. 37, 28, 19.

On page 14 of the Draft, the minimum setback of soil absorption unit from shoreline for Recreational Developments is listed at 100 feet. The site plan is based on this figure, but the January 1974 First Annual Report on the Quality of the Environment, page 121, sets this at 75 feet. If this figure is correct, the available absorption area is substantially larger than tabulated in the Draft.

The customary loop drive at the marina was not indicated because public launching will not be encouraged. The final design will make use of the existing trail, with a minimum of clearing, and without inviting vehicular traffic to the waterfront.

The Forest Service is on record to the effect that the development of Lot 5 (the project site) would be no more detrimental to the Boundary Waters Canoe Area than the improvements adjoining the tract just outside the area.

It seems puzzling and inconsistent that a planned unit development should be considered incompatible with U. S. Forestry Service management goals, when a lot-block subdivision is acceptable and anticipated. The comparison of alternatives used on pages 25 and 26 of the Draft shows conclusively that with the exception of no action (and no economic benefit) the P. U. D. has minimum adverse impact, and that the lot-block subdivision with its separate driveways, docks, and scattered disposal fields is second only to single resort units in creating a maximum adverse impact.

The suggestions contained in the Draft to limit tree and brush cutting, to restrict blasting, to meet all setback requirements, and to minimize clearing at the marina (and elsewhere) are in accordance with our intent in each instance.

We share the concern of the Forestry Service about excessive use of the BWCA. Their initiation of a user control system is a reasonable way to deal with the problem. We believe that the owners of the Saganaga Lodge houses will support such a program, and that it will not adversely effect the economic feasibility of the proposed development. We would like to underscore the observation of the Forest Service that other types of development on the peninsula could have as great or greater impact on the area than this development.

Architect's Note:

The opportunity is rare to plan a project where buildings blend into, and become a part of the site itself. For Saganaga Lodge we were authorized and instructed to do just that. Our 3-dimensional studies show that with a minimum of judicious tree planting, Saganaga Lodge will make little change in the outward appearance of this beautiful site. And even from within the project there will be a strong sense of individual privacy and unity with nature.

As long-time conservationists and members of the Sierra Club, we have made our share of protests against thoughtless planning. At Saganaga our goal was to demonstrate that cluster housing at moderate density can be satisfactorily blended into a natural environment. We even hoped that the Sierra Club would support this goal. Unfortunately their legislative counsel wrote to the State Planning Agency that they oppose "any commercial development, regardless how aesthetically appealing, on land, located within the BWCA". This, despite the fact that the peninsula is zoned for and long established in such use, and remains in the BWCA only because of an unexplained failure to implement U. S. Department of Agriculture Forestry Service recommendations that it be removed. It seems both unrealistic and discriminatory at this time to consider the last 200 yards of the peninsula to be wilderness, or to be subject to controls not applied elsewhere within the zoned area.

We believe that conservation minded groups should oppose ill-conceived projects, and by the same token they should support sound and aesthetically appealing ones. Then the probable stimulation of similar proposals elsewhere, referred to on page 25 of the Draft, could indeed be beneficial to both the economy and the environment of Cook County and the State.

We recognize the importance of a total solution to the problems of water supply and waste disposal. With more adequate data on percolation rates and available areas, and in cooperation with the State Department of Health, we can conclusively establish any limitations which may exist.

Recreational activities and vacation houses are of growing social and economic importance in our State. Cluster development offers a far sounder basis for planning than the wasteful and ecologically damaging pattern of detached houses. It is our hope that Saganaga Lodge, like Sea Villas at Lutsen, will set new directions for the aesthetic and ecological development of our remaining natural area.

W. A. CLOSE