Minnesota Natural Resources Department: Environmental Assessment Files Regarding State Parks

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Version 3
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STATE OF
MINNESOTA
DEPARTMENT OF NATURAL RESOURCES
CENTENNIAL OFFICE BUILDING • ST. PAUL, MINNESOTA • 55155

DNR INFORMATION
(612) 296-6157

September 12, 1977

TO : EQB Distribution List

FROM : Vonny Hagen,
Environmental Review Coordinator

SUBJECT: Environmental Assessment Worksheet,
Itasca Park Pine Restoration Project

Attached is an Environmental Assessment Worksheet on the Itasca State Park Pine Restoration Project, submitted pursuant to EQB rules MEQB 24 B.1.2.

VH:mh

Attachment

MINNESOTA ENVIRONMENTAL QUALITY COUNCIL
ENVIRONMENTAL ASSESSMENT WORKSHEET (EAW)
AND NOTICE OF FINDINGS

DO NOT WRITE IN THIS SPACE
E.R. # _____

NOTE: The purpose of the Environmental Assessment Worksheet (EAW) is to provide information on a project so that one can assess rapidly whether or not the project requires an Environmental Impact Statement. Attach additional pages, charts, maps, etc, as needed to answer these questions. Your answers should be as specific as possible. Indicate which answers are estimated.

I. SUMMARY

A. ACTIVITY FINDING BY RESPONSIBLE AGENCY (PERSON)

[X] Negative Declaration (No EIS) [ ] EIS Preparation Notice (EIS Required)

B. ACTIVITY IDENTIFICATION

1. Project name or title Itasca State Park Pine Restoration

2. Project proposer(s) Dept. of Natural Resources - Parks and Recreation

Address 196 Centennial Office Building

Telephone Number and Area Code (612) 296-4781

3. Responsible Agency or Person Dept. of Natural Resources

Address 196 Centennial Office Building

Person in Responsible Agency (Person) to contact for further information on this EAW: Frank Knoke Telephone 296-4781

4. This EAW and other supporting documentation are available for public inspection and/or copying at: Location 196 Centennial Office Building

Telephone 296-4781 Hours 8:00 - 4:30

5. Reason for EAW Preparation

[X] Mandatory Category -cite MEQC Rule number(s) 24-B-1-Z [ ] Petition [ ] Other

C. ACTIVITY DESCRIPTION SUMMARY

1. Project location

County Becker Clearwater and City/Township name Savanna and un-organized

Township number _____ (North), Range Number _____ East or (West) (circle one),

Section number(s) _____ Street address (if in city) or legal description:

T142N, R36W, Section 5, 6 & 8
T143N, R36W, Section 17, 18, 19, 20, 29, 30, 31 & 32

2. Type and scope of proposed project: Removal of 3474.83 acres of hardwood timber over a 15 year period and replanting red, white and jack pine.

3. Estimated starting date (month/year) December 1977

4. Estimated completion date (month/year) December 1992

5. Estimated construction cost NA

6. List any federal funding involved and known permits or approvals needed from each unit of government and status of each:

Unit of Government (federal, state, regional, local)	Name or Type of Permit/Approval or Federal Funding	Status
Minnesota DNR	Informal Timber Sale Permit	To be applied for as needed.
Minnesota DNR & PCA	Burning Permit	To be applied for as needed.

7. If federal permits, funding or approvals are involved, will a federal EIS be prepared under the National Environmental Policy Act? X NO ___ YES ___ UNKNOWN

II. ACTIVITY DESCRIPTION

A. Include the following maps or drawings:
1. A map showing the regional location of the project.
2. An original 8½ x 11 section of a U.S.G.S. 7½ minute, 1:24,000 scale map with the activity or project area boundaries and site layout delineated. Indicate quadrangle sheet name. (Original U.S.G.S. sheet must be maintained by Responsible Agency; legible copies may be supplied to other EAW distribution points.)
3. A sketch map of the site showing location of structures and including significant natural features (water bodies, roads, etc).
4. Current photos of the site must be maintained by the Responsible Agency. Photos need not be sent to other distribution points.

B. Present land use.
1. Briefly describe the present use of the site and lands adjacent to the site.

The land is within Itasca State Park and adjacent to the White Earth State Forest.

2. Indicate the approximate acreages of the site that are:

a. Urban developed NA acres
b. Urban vacant NA acres
c. Rural developed NA acres
d. Rural vacant NA acres
e. Designated Recreation/Open Space 4649.34 acres
f. Wetlands (Type III, IV, V) 1110 acres
g. Shoreland NA acres
h. Floodplain NA acres
i. Cropland/Pasture land NA acres
j. Forested 3539.34 acres

3. List names and sizes of lakes, rivers and streams on or near the site, particularly lakes within 1,000 feet and rivers and streams within 300 feet. Twin Island Lake 71 acres
Twin Lake 89 acres
None of the other bodies of water in the project are listed in "An Inventory of Minnesota Lakes." Bulletin No. 25

C. Activity Description

1. Describe the proposed activity, including staging of development (if any), operational characteristics, and major types of equipment and/or processes to be used. Include data that would indicate the magnitude of the proposed activity (e.g. rate of production, number of customers, tons of raw materials, etc). This project is being conducted to reestablish the former pine stands in Itasca State Park. Man's activities such as logging and fire suppression in this area have eliminated pine regeneration. By removing the hardwood, control burning and replanting pine, these stands will once again occur. Commercial logging is the only economical means of removing the present hardwood stands. The logging will occur over a 15 year period with each year's cut to be between 169 and 297 acres (Table #1) Following the timber removal each treatment unit will be control burned and replanted to pine. Hand, mechanical and chemical means of reducing competition from deciduous vegetation will be considered for use if the control burns are not sufficiently effective.

2. Fill in the following where applicable:

a. Total project area 4649.34 acres
or
Length -- miles

b. Number of housing or recreational units --

c. Height of structures -- ft.

d. Number of parking spaces --

e. Amount of dredging -- cu. yd.

f. Liquid wastes requiring treatment -- gal/da

g. Size of marina and access channel (water area) -- sq. ft.

h. Vehicular traffic trips generated per day 15 ADT

i. Number of employees 8

j. Water supply needed -- gal/da
Source:

k. Solid waste requiring disposal -- tons/yr

l. Commercial, retail or industrial floor space -- sq. ft.

III. ASSESSMENT OF POTENTIAL ENVIRONMENTAL IMPACT

A. SOILS AND TOPOGRAPHY

1. Will the project be built in an area with slopes currently exceeding 12%? ___ No X Yes

2. Are there other geologically unstable areas involved in the project, such as fault zones, shrink-swell soils, peatlands, or sinkholes? ___ NO X YES

3. If yes on 1 or 2, describe slope conditions or unstable area and any measures to be used to reduce potential adverse impacts.

On slopes greater than 25% no mechanical equipment will be used. The slopes will be replanted to pine.

The small peat areas in the project area will not be logged. There will be no impact on them from this project.

4. Indicate suitability of site soils for foundations, individual septic systems, and ditching, if these are included in the project.

NA

5. Estimate the total amount of grading and filling which will be done:
_____cu. yd. grading _____ cu. yd. filling
What percent of the site will be so altered? NA %

6. What will be the maximum finished slopes? NA %

7. What steps will be taken to minimize soil erosion during and after construction?

NA

B. VEGETATION

1. Approximately what percent of the site is in each of the following vegetative types:

Woodland	77 %	Cropland/ Pasture	NA %
Brush or shrubs	NA %	Marsh	23 %
Grass or herbaceous	NA %	Other (Specify)	NA %

2. How many acres of forest or woodland will be cleared, if any? 3474.83 acres

3. Are there any rare or endangered plant species or areas of unique botanical or biological significance on the site? (See DNR publication The Uncommon Ones.) ____ NO X YES
If yes, list the species or area and indicate any measures to be used to reduce potential adverse impact. Areas where Lady's Slipper and other orchids are found have been set aside as sensitive areas and no logging will occur in them - Lady's Slipper and other orchids. A 50 to 200 foot buffer will be established around these areas where no action will be taken.

C. FISH AND WILDLIFE

1. Are there any designated federal, state or local wildlife or fish management areas or sanctuaries near or adjacent to the site? ___ NO X YES

2. Are there any known rare or endangered species of fish and wildlife on or near the site? (See DNR publication The Uncommon Ones.) ___ NO X YES

3. Will the project alter or eliminate wildlife or fish habitat? ___ NO X YES

4. If yes on any of questions 1-3, list the area, species or habitat, and indicate any measures to be used to reduce potential adverse impact on them.

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D. HYDROLOGY

1. Will the project include any of the following:
If yes, describe type of work and mitigative measures to reduce adverse impacts.

	NO	YES
a. Drainage or alteration of any lake, pond, marsh, lowland or groundwater supply	X	
b. Shore protection works, dams, or dikes	X	
c. Dredging or filling operations	X	
d. Channel modifications or diversions	X	
e. Appropriation of ground and/or surface water	X	
f. Other changes in the course, current or cross-section of water bodies on or near the site	X	

2. What percent of the area will be converted to new impervious surface? 0 %

3. What measures will be taken to reduce the volume of surface water run-off and/or treat it to reduce pollutants (sediment, oil, gas, etc.)?
The Squaw Lake study area has the similar topography and soils as the project area. Based on an unpublished study by William Patterson (University of Minnesota, College of Forestry) it is not felt that any special mitigating measures are necessary for sediment run-off from this project. In the study Patterson found no detectable impact on water quality from a two hundred acre cut and burn at Squaw Lake, two miles north of the project.

4. Will there be encroachment into the regional (100 year) floodplain by new fill or structures? X NO ___ YES

If yes, does it conform to the local floodplain ordinance? ___ NO ___ YES

5. What is the approximate minimum depth to groundwater on the site? 0 feet

E. WATER QUALITY

1. Will there be a discharge of process or cooling water, sanitary sewage or other waste waters to any water body or to groundwater? X NO ___ YES
If yes, specify the volume, the concentration of pollutants and the water body receiving the effluent.

2. If discharge of waste water to the municipal treatment system is planned, identify any toxic, corrosive or unusual pollutants in the wastewater.

NA

3. Will any sludges be generated by the proposed project? X NO ___ YES
If yes, specify the expected volume, chemical composition and method of disposal.

4. What measures will be used to minimize the volumes or impacts identified in questions 1-3?

NA

5. If the project is or includes a landfill, attach information on soil profile, depth to water table, and proposed depth of disposal.

F. AIR QUALITY AND NOISE NA

1. Will the activity cause the emission of any gases and/or particulates into the atmosphere? ____NO __X__YES
If yes, specify the type and origin of these emissions, indicate any emission control devices or measures to be used, and specify the approximate amounts for each emission (at the source) both with and without the emission control measures or devices. These burns are of a small size and will not have any significant impact on the air quality. Gases and particulates will be released during control burns.

There will be emission of exhaust gases from chain saws and logging equipment. The amount of exhaust from this equipment will not require any special controls.

2. Will noise or vibration be generated by construction and/or operation of the project? ____NO __X__YES
If yes, describe the noise source(s); specify decibel levels [dB(A)], and duration (hrs/da) for each and any mitigative measures to reduce the noise/vibration. Chain saws, skidders and trucks during daylight hours, Monday - Saturday. This area of the park is not presently used by park visitors so no mitigation will be required.

3. If yes on 1 or 2, specify whether any areas sensitive to noise or reduced air quality-(hospitals, elderly housing, wilderness, wildlife areas, residential developments, etc.) are in the affected area and give distance from source. The project is within Itasca State Park. There are no public use facilities within the project area. A park road, Wilderness Drive is adjacent to the NE corner and the project. The two spot trail on the north boundary of the project is a snowmobile trail.

G. LAND RESOURCE CONSERVATION, ENERGY

1. Is any of the site suitable for agricultural or forestry production or currently in such use? ____NO __X__YES
If yes, specify the acreage involved, type and volume of marketable crop or wood produced and the quality of the land for such use.
The project area is suitable for timber production but it is a park, by state law, and timber production for fiber is not a park goal.

2. Are there any known mineral or peat deposits on the site? ____NO __X__YES
If yes, specify the type of deposit and the acreage.
Small peat bogs are present throughout the project areas but are not large enough for commercial use. The project will not impact or impair these areas. The project is within a state park so no commercial use of these peat bogs is possible.

3. Will the project result in an increased energy demand? _X_ NO _____ YES
Complete the following as applicable:

a. Energy requirements (oil, electricity, gas, coal, solar, etc.)

Type	Estimated Annual Requirement	Peak Demand (Hourly or Daily) Summer	Peak Demand (Hourly or Daily) Winter	Anticipated Supplier	Firm Contract or Interruptible Basis?

b. Estimate the capacity of all proposed on-site fuel storage.

NA

c. Estimate annual energy distribution for:

space heating NA % lighting NA %

air conditioning NA % processing NA %

ventilation NA %

d. Specify any major energy conservation systems and/or equipment incorporated into this project.

NA

e. What secondary energy use effects may result from this project (e.g. more or longer car trips, induced housing or businesses, etc)?

NA

H. OPEN SPACE/RECREATION

1. Are there any designated federal, state, county or local recreation or open space areas near the site (including wild and scenic rivers, trails, lake accesses)? _____ NO _X_ YES
If yes, list areas by name and explain how each may be affected by the project. Indicate any measures to be used to reduce adverse impacts.
Itasca State Park This project will enhance the aesthetics of the park for future users. This park was established to conserve and perpetuate the pine stands. This project is being undertaken to fulfill this mandate. The short term impact on aesthetics may be negative depending on the individual park user.

H. TRANSPORTATION

1. Will the project affect any existing or proposed transportation systems (highway, railroad, water, airport, etc)? ___X___ NO _____ YES
If yes, specify which part(s) of the system(s) will be affected. For these, specify existing use and capacities, average traffic speed and percentage of truck traffic (if highway); and indicate how they will be affected by the project (e.g. congestion, percentage of truck traffic, safety, increased traffic (ADT), access requirements).
The truck traffic generated by this project will not be routed through the main use areas of the park.

2. Is mass transit available to the site? ___X___ NO _____ YES

3. What measures, including transit and paratransit services, are planned to reduce adverse impacts?

NA

J. PLANNING, LAND USE, COMMUNITY SERVICES

1. Is the project consistent with local and/or regional comprehensive plans? _____ NO _____ YES
If not, explain:

NA

If a zoning change or special use permit is necessary, indicate existing zoning and change requested.

2. Will the type or height of the project conflict with the character of the existing neighborhood? ___X___ NO _____ YES
If yes, explain and describe any measures to be used to reduce conflicts.

3. How many employees will move into the area to be near the project? None
How much new housing will be needed? None

4. Will the project induce development nearby--either support services or similar developments? No
If yes, explain type of development and specify any other counties and municipalities affected.

5. Is there sufficient capacity in the following public services to handle the project and any associated growth? NA

Public Service	Amount required for project		Sufficient capacity?
water		gal/da	
wastewater treatment		gal/da	
sewer		feet	
schools		pupils	
solid waste disposal		ton/mo	
streets		miles	
other (police, fire, etc)			

If current major public facilities are not adequate, do existing local plans call for expansion, or is expansion necessary strictly for this one project and its associated impacts?

NA

6. Is the project within a proposed or designated Critical Area or part of a Related Actions EIS or other environmentally sensitive plan or program reviewed by the EQC? X NO ___ YES
If yes, specify which area or plan.

7. Will the project involve the use, transportation, storage, release or disposal of potentially hazardous or toxic liquids, solids on gaseous substances such as pesticides, radioactive wastes, poisions, etc? ___ NO X YES
If yes, please specify the substance and rate of usage and any measures to be taken to minimize adverse environmental impacts from accidents.

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8. When the project has served its useful life, will retirement of the facility require special measures or plans? _____NO _____YES
If yes, specify:

NA

K. HISTORIC RESOURCES

1. Are there any structures on the site older than 50 years or on federal or state historical registers? __X__NO ____YES

2. Have any arrowheads, pottery or other evidence of prehistoric or early settlement been found on the site? __X__NO ____YES
Might any known archaeologic or paleontological sites be affected by the activity? __X__NO ____YES

3. List any site or structure identified in 1 and 2 and explain any impact on them.

L. OTHER ENVIRONMENTAL CONCERNS
Describe any other major environmental effects which may not have been identified in the previous sections.

IV. OTHER MITIGATIVE MEASURES
Briefly describe mitigative measures proposed to reduce or eliminate potential adverse impacts that have not been described before.

Logging Contract Regulations and Restrictions

Page 2 and 3 of Addendum

V. FINDINGS

The project is a private ( ) governmental (X) action. The Responsible Agency (Person), after consideration of the information in this EAW, and the factors in Minn. Reg. MEQC 25, makes the following findings.

1. The project is ( ) is not (X) a major action.
   State reasons:

2. The project does ( ) does not (X) have the potential for significant environmental effects.
   State reasons: Although there will be some immediate adverse impacts, these are excepted to be minor. An experimental cutting done in 1973 in the Squaw Lake area (on a larger area than any of the proposed cutting units) showed no significant adverse effects. The purpose of the project is to simulate the natural disturbance provided by lightning fires prior to the white man's influence. Disturbance is essential to the regeneration of the pine stands which are one of the primary attractions of Itasca State Park. Thus the temporary "adverse" effects are necessary to achieve the long-term beneficial effects.

3. (For private actions only.) The project is ( ) is not ( ) of more than local significance.
   State Reasons:

IV. CONCLUSIONS AND CERTIFICATION

NOTE: A Negative Declaration or EIS Preparation Notice is not officially filed until the date of publication of the notice in the EQC Monitor section of the Minnesota State Register. Submittal of the EAW to the EQC constitutes a request for publication of notice in the EQC Monitor.

A. I, the undersigned, am either the authorized representative of the Responsible Agency or the Responsible Person identified below. Based on the above findings, the Responsible Agency (Person) makes the following conclusions. (Complete either 1 or 2).

1. X NEGATIVE DECLARATION NOTICE
   No EIS is needed on this project, because the project is not a major action and/or does not have the potential for significant environmental effects and/or, for private actions only, the project is not of more than local significance.

2. ____ EIS PREPARATION NOTICE

An EIS will be prepared on this project because the project is a major action and has the potential for significant environmental effects. For private actions, the project is also of more than local significance.

a. The MEQC Rules provide that physical construction or operation of the project must stop when an EIS is required. In special circumstances, the MEQC can specifically authorize limited construction to begin or continue. If you feel there are special circumstances in this project, specify the extent of progress recommended and the reasons.

b. Date Draft EIS will be submitted: ____________ (month) (day) (year)

(MEQC Rules require that the Draft EIS be submitted within 120 days of publication of the EIS Preparation Notice in the EQC Monitor. If special circumstances prevent compliance with this time limit, a written request for extension explaining the reasons for the request must be submitted to the EQC Chairman.)

c. The Draft EIS will be prepared by (list Responsible Agency(s) or Person(s)):

____

William Kane Signature

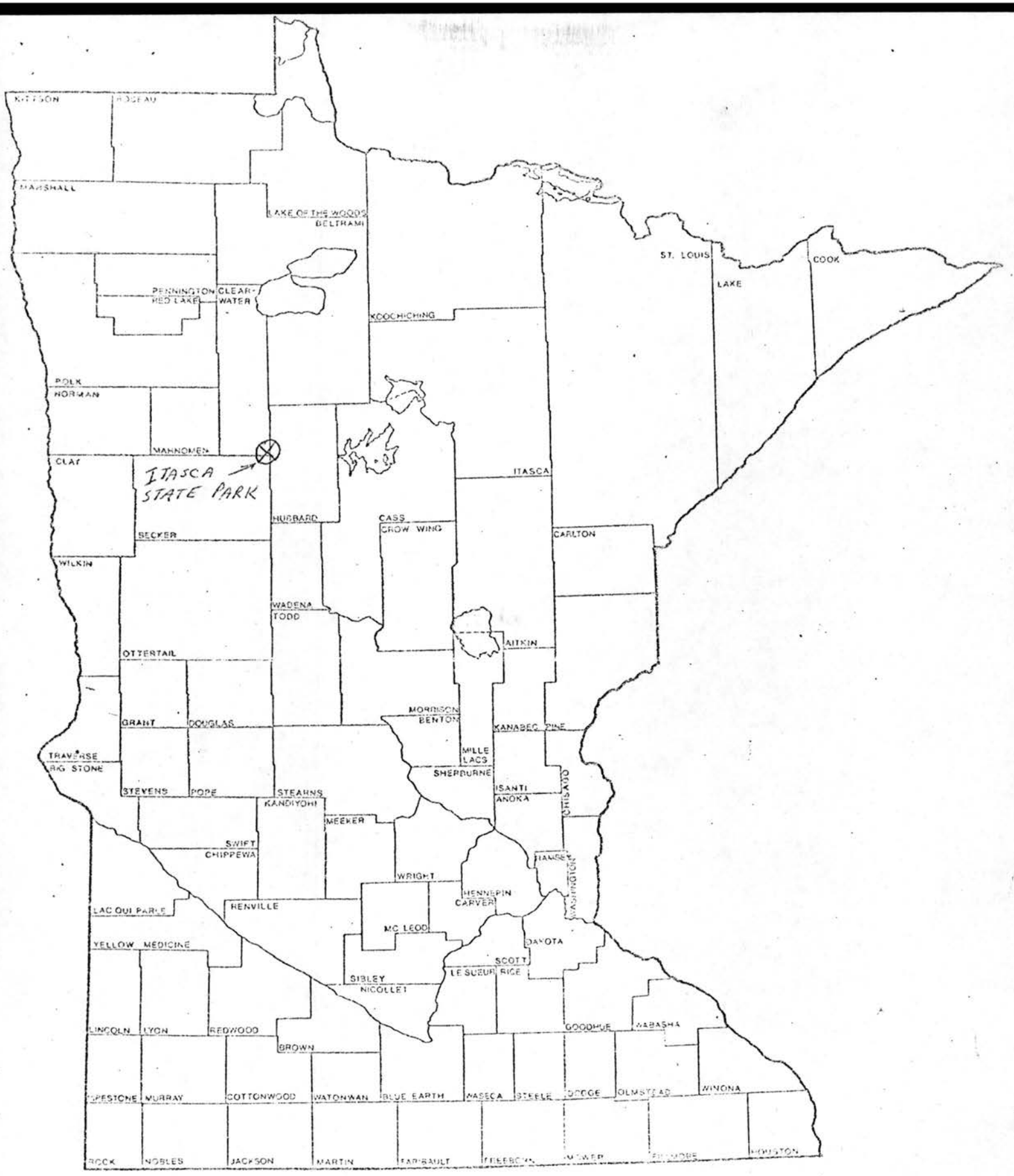
Acting Director Title

Sept 12, 1977 Date

B. Attach an affidavit certifying the date that copies of this EAW were mailed to all points on the official EQC distribution list, to the city and county directly impacted, and to adjacent counties or municipalities likely to be directly impacted by the proposed action (refer to question III.J.4 on page 9 of the EAW). The affidavit need be attached only to the copy of the EAW which is sent to the EQC.

C. Billing procedures for EQC Monitor Publication

State agency ONLY: Attach to the EAW sent to the EQC a completed OSR 100 form (State Register General Order Form--available at Central Stores). For instructions, please contact your Agency's Liaison Officer to the State Register or the Office of the State Register--(612) 296-8239.


KITTSON
ROSEAU
MARSHALL
LAKE OF THE WOODS
BELTRAMI
ST. LOUIS
COOK
LAKE
PENNINGTON
RED LAKE
CLEAR-WATER
KOOCHICHING
POLK
NORMAN
MAHNOMEN
CLAY
ITASCA STATE PARK
ITASCA
HUBBARD
CASS
CROW WING
CARLTON
BECKER
WILKIN
WADENA
TODD
AITKIN
OTTERTAIL
GRANT
DOUGLAS
MORRISON
BENTON
KANABEC
PINE
TRAVERSE
BIG STONE
MILLE LACS
SHERBURNE
ISANTI
CHISAGO
STEVENS
POPE
STEARNS
KANDIYOHI
ANOKA
MEEKER
SWIFT
CHIPPEWA
WRIGHT
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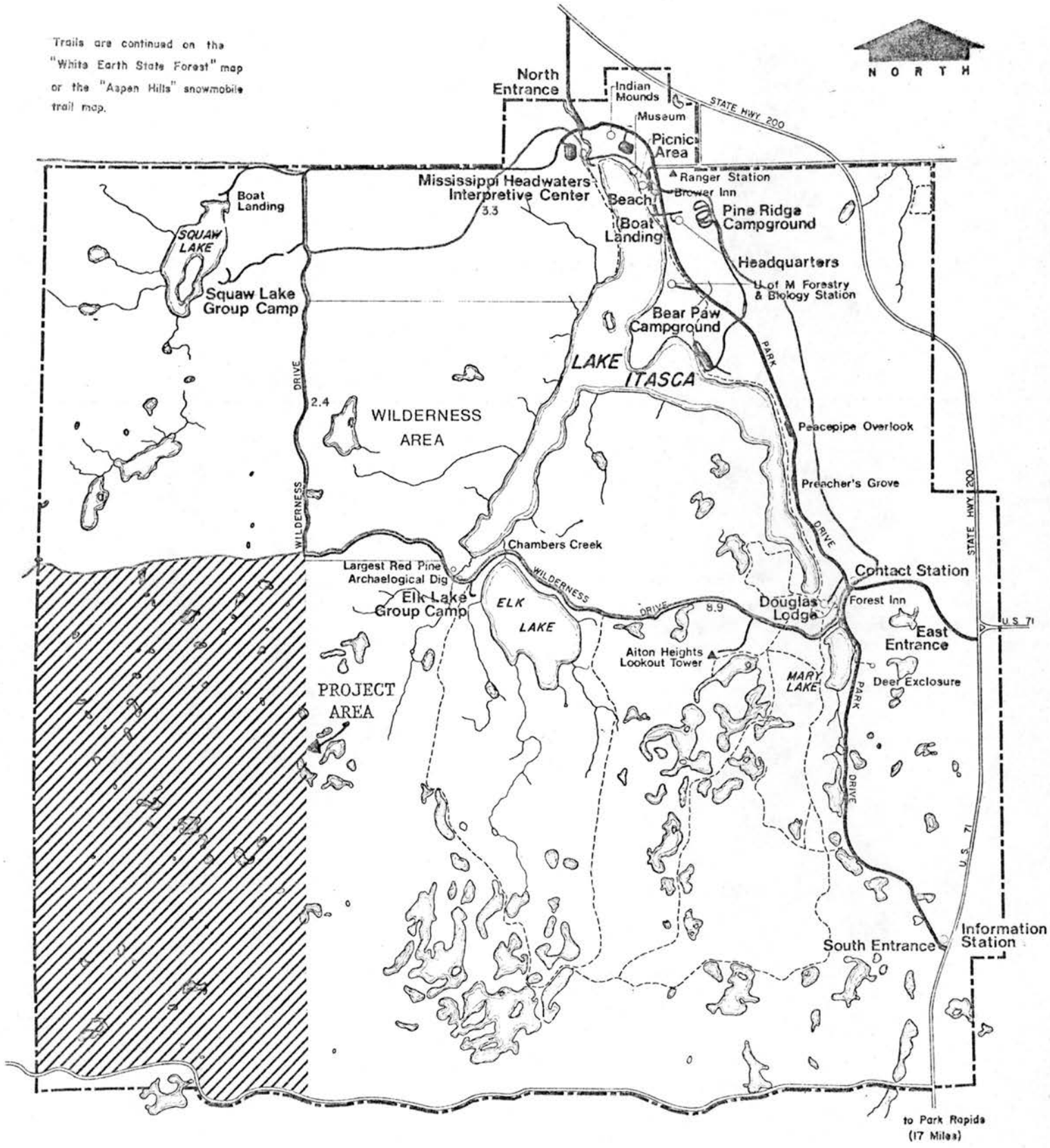
CARVER
WASHINGTON
LAC QUI PARLE
RENVILLE
MC LEOD
DAKOTA
YELLOW MEDICINE
SCOTT
LE SUEUR
RICE
SIBLEY
NICOLLET
LINCOLN
LYON
REDWOOD
GOODHUE
WABASHA
BROWN
PIPESTONE
MURRAY
COTTONWOOD
WATONWAN
BLUE EARTH
WASECA
STEELE
DODGE
OLMSTEAD
WINONA
ROCK
NOBLES
JACKSON
MARTIN
FARIBAULT
FREEBORN
MOWER
FILLMORE
HOUSTON

Itasca State Park

Clearwater County



STATE PARK

*RULES AND REGULATIONS

PARK HOURS: Open each day from 8:00 A.M. to 10:00 P.M. However, snowmobiles may be used on designated trails which have adequate snow cover from daylight to 11:00. In overnight camping areas, it is unlawful to participate in any activity which disturbs other campers after 10:00 P.M.

SNOWMOBILES: Permitted only on designated areas and posted trails under the conditions of snow cover considered adequate for park protection by the park manager. Snowmobile operation is subject to all rules promulgated by the Commissioner of Natural Resources.

CROSS COUNTRY SKIING AND SNOWSHOEING: Ski touring and snowshoeing are allowed in all state parks and are not confined to marked trails.

PERSONAL BEHAVIOR: It is unlawful for any person to engage in any conduct tending to create a breach of the peace or to distrub or annoy other members of the public. It is unlawful to be intoxicated or consume intoxicating liquors within a state park.

ENVIRONMENTAL PROTECTION: It is unlawful for any person to destroy, or damage any property of the state, including but not limited to trees, vegetation, ruins, relics and geological formations. It is unlawful for any person to injure or molest any wildlife within a state park.

FIRES AND REFUSE: Fires are permitted only in fireplaces or fire rings provided for that purpose. It is unlawful for any person to dispose of garbage, refuse, sewage or trash of any kind except in receptacles provided for that purpose.

PETS: Pets are permitted in state parks, provided no person shall allow any dog, cat or other pet animal to enter any building or bathing beach; or permit any dog, cat or other pet animal to be unrestrained. Such animals shall be attended and effectively restrained by a leash not exceeding six feet, and such animals shall not deprive or disrupt the enjoyment or use of any area by other persons.

HORSES: Permitted only on trails posted for such use.

PICNICKING AND CAMPING: Permitted only in designated areas. Motor vehicle parking restricted to facilities provided for that purpose.

MOTOR VEHICLE TRAVEL: Permitted only on designated roads or parking areas. It is unlawful for any person to operate an unlicensed motor vehicle in a state park.

'LISTED IN PART' COMPLETE RULES AND REGULATIONS POSTED IN MAJOR USE AREAS OF PARK.

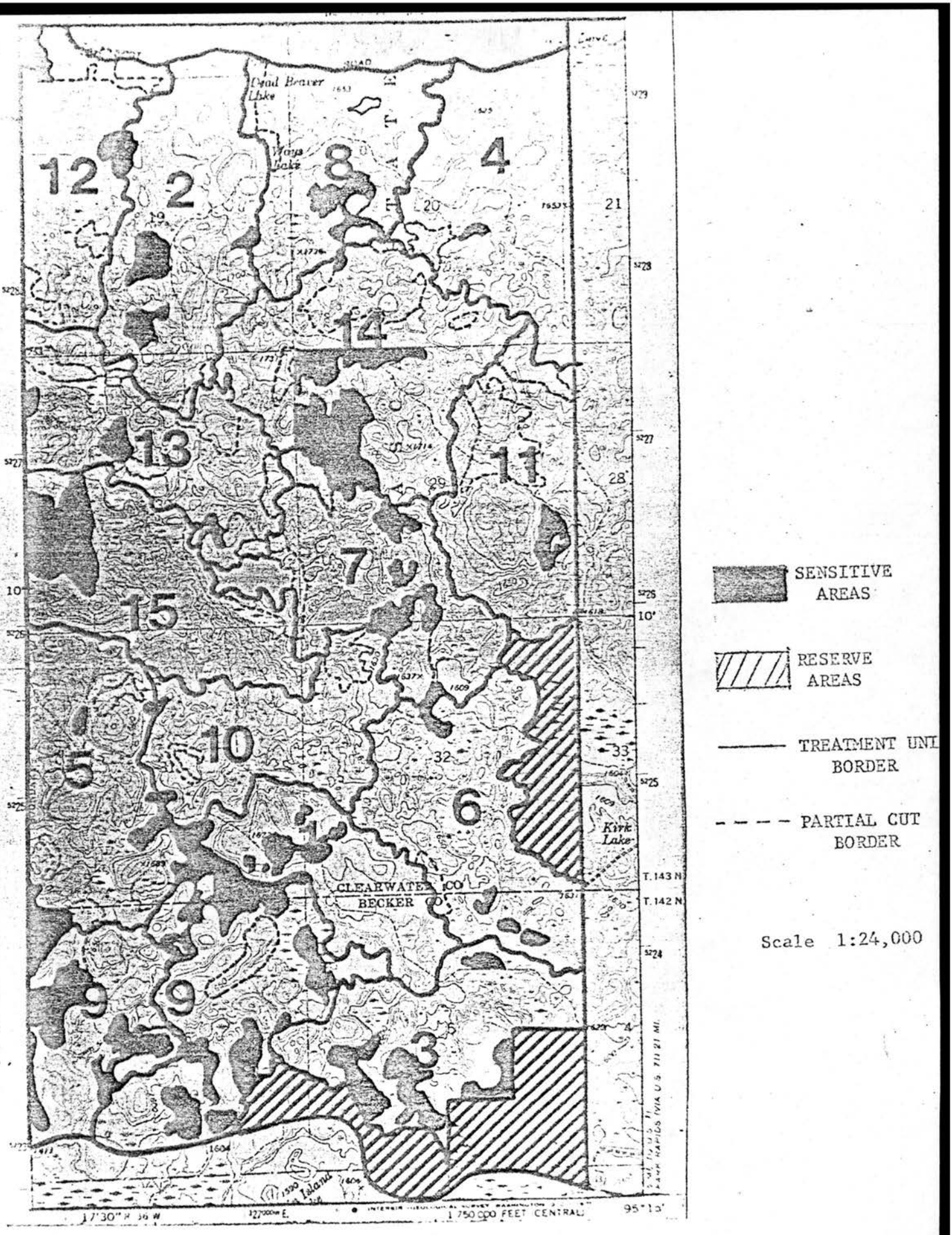


Figure 3. Treatment Units of the Development Management Zone

Apco Hor Hill Quad.

Table 1

Acres Treated Per Unit

Treatment Unit	Total Acres/Unit[1]	Acres Reserved	Acres Treated[2]
1	191.01	22.04	168.97
2	348.00	106.52	241.48
3	296.61	72.55	224.06
4	325.10	96.42	228.68
5	325.08	69.79	255.29
6	328.75	47.75	281.00
7	299.37	110.20	189.17
8	270.90	60.61	210.29
9	539.04	242.43	296.61
10	237.84	36.73	201.11
11	275.49	31.22	244.27
12	235.08	37.65	197.43
13	274.57	45.92	228.65
14	402.22	126.73	275.49
15	300.28	67.95	232.33
Total Acres	4649.34		
Total Reserve Acres		1174.51	
Total Treated Acres			3474.83

[1]Acreages computed from 1:24,000 U.S.G.S. Topographic Map.

[2]Treated acreages include areas to be partially cut.

III. C. 1. The project is in Itasca State Park.

2. Bald Eagle and Osprey nest within the park. The nearest nest is about 1.5 miles from the project. There will be no impact on these nests from the project.

The project will provide nesting sites for these birds in the long run. The project will also provide habitat for fisher and pine marten as the pine stands mature.

3. This project will be beneficial to wildlife. It will increase the vegetative diversity thus increasing the number of species in the project area.

III. J. 7. The herbicide to be used is 2-4-D. It will be applied as per labled instructions. The size of treatment areas will be limited to 40 acres.

AERIAL SPRAY

The application of herbicide to the foliage of competing vegetation during the peak of maximum growth. When applied at this time, excellent control can be achieved at a low cost. Application by helicopter.

Guidelines:
1) Weather Conditions
- wind less than 6 mph
- relative humidity more than 50%
- temperature less than 80° F
- no spray in rainy or foggy weather
- no spray when air turbulence is so great to affect the normal spray pattern

2) Other
- 100' buffer strap along private land
- 100' buffer strap along roads
- 200' buffer strap along water (lake, river or stream)
- 100' buffer along wet swamps or potholes
- 100' buffer along sensitive and reserve areas

GROUND SPRAY

Application of herbicide to foliage of competing vegetation by ground applicators (mist blowers, power sprayers, backpack sprayers, etc.) This method is feasible where the acreage is small (10 acres), the treatment required is variable, or the height of the vegetation to be controlled is low.

Guidelines:
1) Weather Conditions (same as for aerial spray)
2) Other (Same as for aerial spray)

BASAL SPRAY

Application of herbicide to the stems of woody plants at the ground line or just above it. Hand method.

Hand Injection

Application of herbicide to the tree by means of cuts, frills, holes or nothches. Herbicide is applied to the tree after the cut

or frill has been made or can be done in one operation when using the Hypo-Hatchet injection tool.

IV. Other Mitigative Measures

Logging Contract Regulations & Restrictions

1) Clear-cut all merchantable timber as indicated in the appraisal report;

2) Fell trees away from swamps;

3) Utilize aspen and birch to 4" top diameter or less;

4) Certain areas shall be reserved from treatment and so indicated in the appraisal report;

5) Some stumpage may be excluded after harvest operations have begun;

6) Non-merchantable trees of non-reserve species shall be cut or pushed down and flattened to facilitiate burning;

7) Cutting of non-commerical stands may be required;

8) Limbing can be done where the tree is felled, but topping must be done at a convenient site and the tops pushed into piles for burning;

9) Slash shall be flattened with a skidder or the like and kept out of swamps;

10) Slash shall be removed from reserve pine stands and kept away from pine tree bases;

11) Stumps shall not be higher than six inches from the ground, or stump heights shall be regulated for given conditions;

12) Roads: all shall be to minimum specifications:

a) Main haul roads will be set up by the Division of Forestry and Parks. No deviations will be allowed without permission;

b) Road construction debris shall be shoved well off the road and flattened. None shall be shoved into swamps or drainage ways;

c) Roads shall be constructed so as not to impede drainage;

d) Truck turnouts for passing will be marked out along access roads;

e) Minor maintenance and snow removal will be the responsibility of the timber operator;

13) Timber landings will be located a minimum of 200 feet off the main haul road, according to the Forester's directions and to the minimum Division of Forestry specifications;

14) Any solid waste or equipment residue must be kept picked up and a garbage can provided for this purpose;

15) Oil from equipment oil changes must be drained into a receptacle for removal from the park;

17) All buidlings and equipment must be removed from the permit area within the specified 90-day period;

18) Time of day or day of week or season for cutting may be restricted;

19) If there is some doubt or question about some environmental problem, the operator is requested to contact the District Forester at the Itasca Ranger Station.

ADMIN 1000

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT Natural Resources

TO : Dr. Henry Hansen
University of Minnesota

DATE: 3-7-80

FROM : Paul Rundell PR

SUBJECT: Jack Pine Problems Meeting, Itasca State Park

We will have a meeting on the Jack Pine Problems in Itasca State Park on March 14, 1980. We will meet at the Park office at 2 p.m.

Enclosed is some of the information I have been able to collect thus far. I look forward to seeing you there.

PR:vb
Enc.

cc: Frank Knoke ✓
Milt Krona
John Rodewald
George Miller
Alan Jones
Gene Wroe
Joe Ludwig
Merle DeBoer
Jack Herhusky
Bryce Anderson
Merlyn Wesloh

Itasca is losing a valuable component of its forest at an accelerating pace, mainly due to its extreme age. The stands average over 70 years old with only a few (six stands) under 50. These young stands comprise 116 of the remaining 1162 acres of jackpine in the park. Below listed is the number and acreage of each age group:

No. of Stands	Age Years	Size Acres	Probable Condition
11	80	164	Poor
24	70-79	598	Poor
13	60-69	253	Fair
3	50-59	31	Good to Fair
3	40-49	64	Good
3	40	52	Good
57		1162	

From this it becomes apparent that we are rapidly approaching a crisis in these stands.

Others have been aware of this for many years with most emphasis being placed on the other pine species.

Dr. Hansen's report on the Itasca State Park forest shows a progressively larger amount of salvaged pine from 1941 to 1955. Comparisons of the 1966 vegetation of Itasca State Park map prepared by Professors W. H. Marshall and M. P. Meyer with the timber inventory data collected during 1976-77 shows a change in composition of Jack Pine from over 1500 acres to less than 1200 acres now. A total of nineteen stands have been lost during that period.

Several factors are involved in this process but all related to the age of these stands. Several have been overtopped by other species as they mature speeding the decline of Jackpine in these stands. Three were lost due to insect and animal injury. Porcupine have girdled most trees in one stand but

examination of the trees showed they were under severe insect stress.

Several acres have changed to Norway-Jackpine co-dominant stands. These are normal successional changes but with future loss of these jack-pine we may end up with more open Norway stands allowing heavy upland brush development.

why not mix white with jack?

Insects are causing severe injury in many areas due to the age stress on the stands. I have not observed undue budworm problems yet but seven miles east of the park the problem is evident.

In the draft management plan for the park we show 1203 acres of jackpine. Under action #2 in the specific recommendations for vegetation management we specify harvest of overmature jack pine. This is to be followed by prescribed burning to provide a good seed bed. With the 3-10 acre size recommendation some of the stands would take nearly 20 years to complete this restoration.

Some of the questions that must be faced are:

1. Can we proceed with this type of program?
2. What will be the public's response to these projects?
3. Can we be sure of an adequate seed source?
4. How are we to maintain the fire lines?
5. How many years must we burn to get successful regeneration?
6. Will we have adequate personnel to man the fire lines?
7. What type of fire lines will be needed?

These are just a few of the questions we must face if we are to perpetuate this component of the parks forest.

I have included tables of the location of the various stands concerned along with a small scale vegetation map for your use.

JACKPINE STANDS BY TOWNSHIP IN ITASCA STATE PARK

Township 143N, Range 36W

Section	Stand No.	Stand Size in Acres	Stand Age
2	4	9	75
3	11	14	80
3	19	5	34
4	1	16	71
4	3	2	66
6	1	25	81
8	3	5	71
12	7	48	48
14	11	13	72
20	2	7	71
20	3	3	84
25	3	24	73
32	5	3	40
34	1	30	75
34	6	14	73
35	2	17	62
36	1	174	78
		409	

Township 142N, Range 36W

1	23	17	75
4	8	56	79
5	1	5	87

Township 144N, Range 36W

Section	Stand No.	Stand Size in Acres	Stand Age
34	2	11	78
34	5	13	44
34	6	42	31
35	1	106	64
35	9	5	24
		177	

Township 143N, Range 35W

6	2	14	79
6	3	4	74
6	17	5	78
6	18	7	68
6	19	6	76
7	1	13	80
7	5	9	78
7	6	8	81
7	13	3	73
7	17	6	75
17	2	35	65
17	4	7	84
18	1	18	58
18	2	30	77
18	3	11	65
18	5	5	58
18	6	40	71
18	8	9	65
19	1	9	65

Township 143N, Range 35W

Section	Stand No.	Stand Size in Acres	Stand Age
19	2	43	85
19	13	21	63
19	14	5	65
30	1	5	82
31	1	97	70
32	1	16	69
32	6	4	66
32	7	11	66
32	10	8	55
		449	

Township 142N, Range 35W

6	20	2	74
6	21	6	77
6	24	27	91
6	25	14	87
		49	

Total Jackpine acreage 1162

CODOMINENT OR SUBDOMINENT JACKPINE

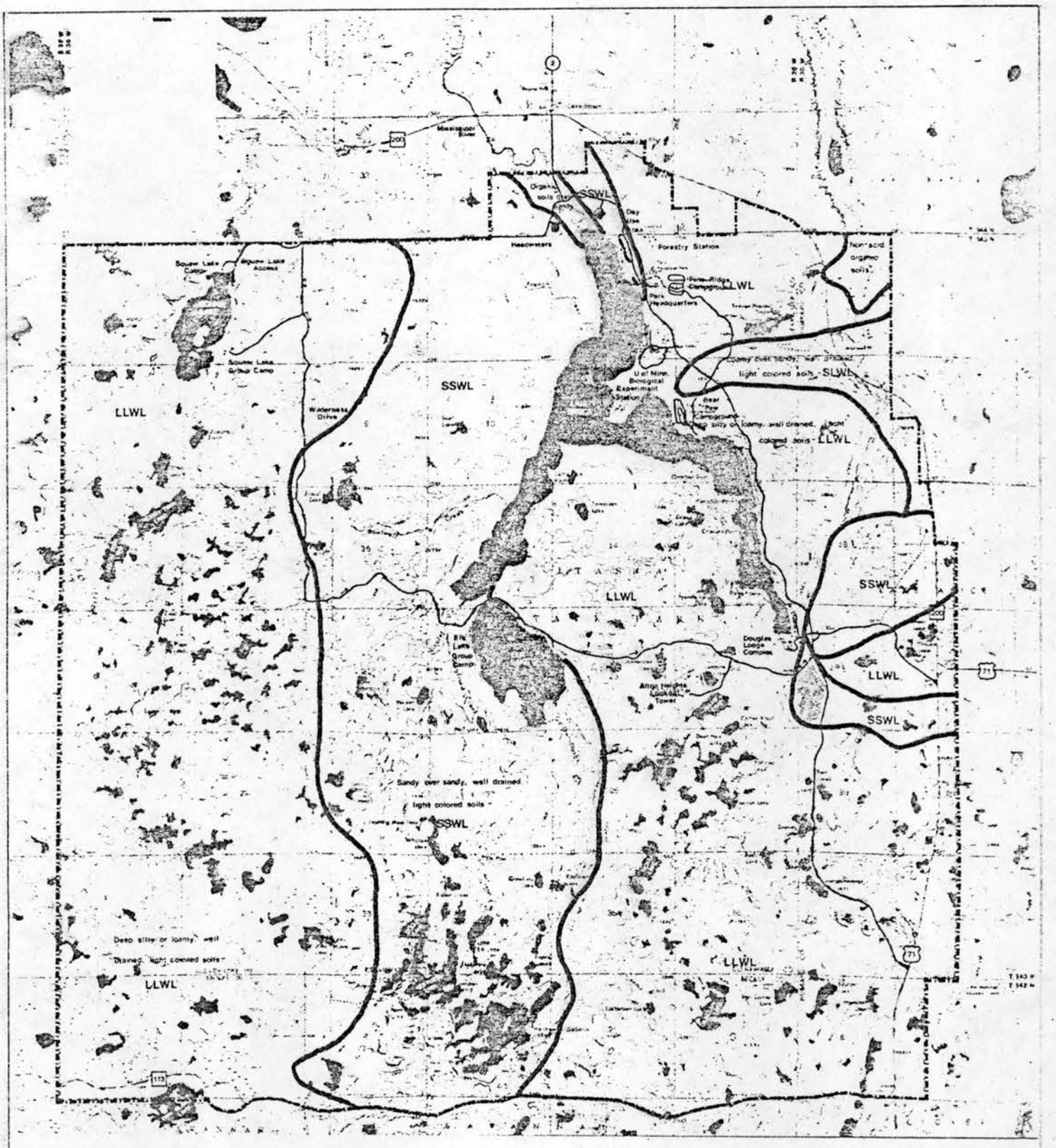
Township 143N, Range 36W

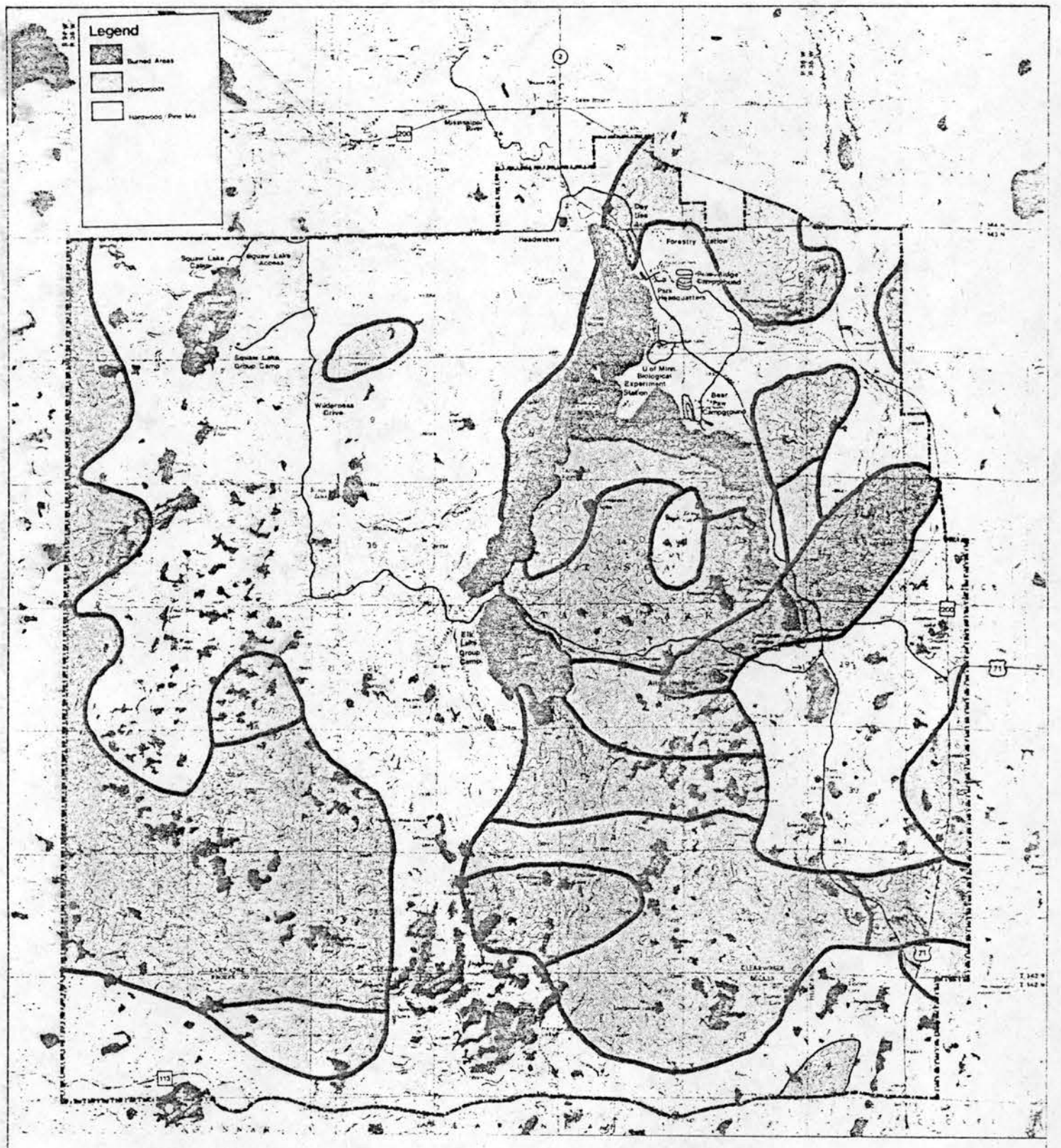
Section	Stand No.	Stand Size in Acres	Stand Age
1	26	7	71
2	14	3	66
4	11	29	?
9	12	43	?
10	5	8	63
12	12	16	75
18	1	15	63
18	2	4	76
22	2	28	90?
		153	

Township 143N, Range 35W

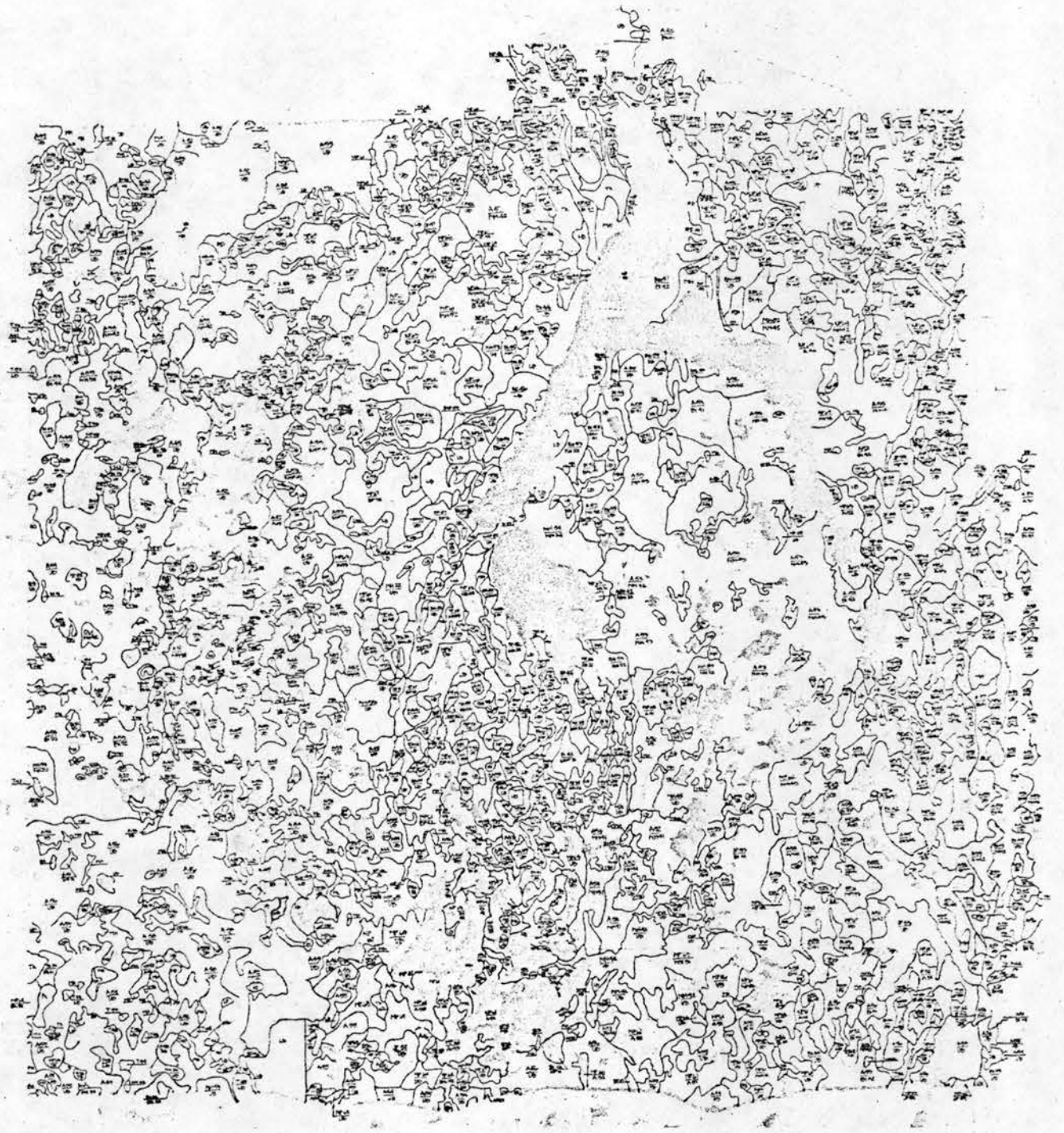
6	1	14	85
6	2	14	78
6	3	4	72
6	7	3	75
6	16	25	76
7	2	5	75
18	11	8	71
		73	

Total codimenent or subdominent Jackpine 270


Mississippi River
Organic soils over SSWL
Headquarters
Forestry Station
Non-acid organic soils
Douglas Ridge Campground
LLWL
Park Headquarters
Sandy over sandy, well drained, light colored soils
SLWL
South Lake Itasca Camp
South Lake Itasca Access
Wilderness Drive
SSWL
U of Minn. Biological Experiment Station
Bear Paw Campground
Deep silty or loamy, well drained, light colored soils
LLWL
LLWL
SSWL
Douglas Lodge Complex
Elk Lake Group Camp
Aiton Heights Lookout Tower
LLWL
SSWL
Sandy over sandy, well drained light colored soils
SSWL
Deep silty or loamy, well drained, light colored soils
LLWL
LLWL
Miles 0 1/4 1/2 1 2 mi
Kilometers 0 500m 1km 2km
N
Itasca State Park
Soils



Itasca State Park | Pre-Settlement Vegetation



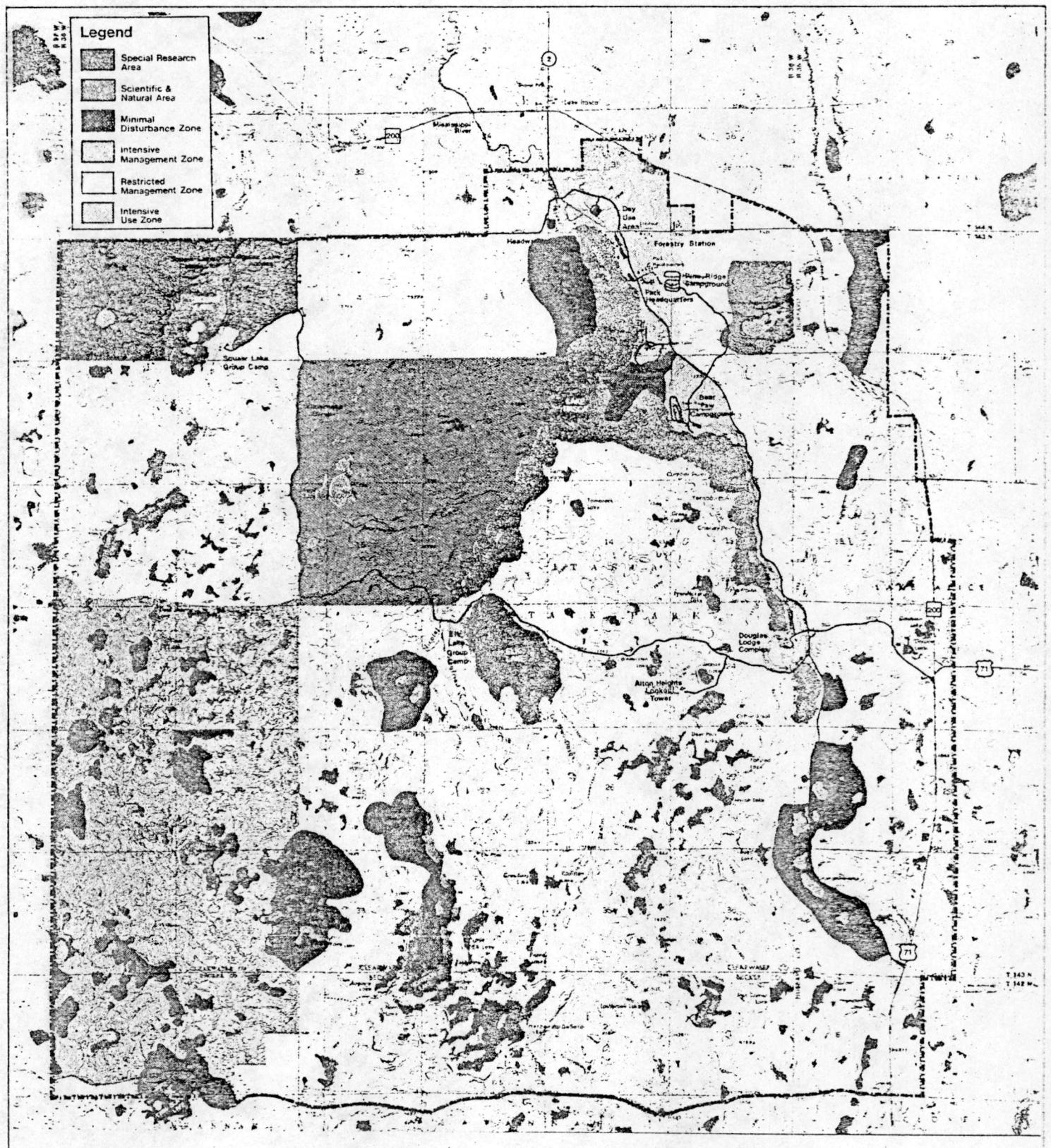
A generalized & toned version of this map will be used in the public copy

N

Miles 0 1/4 1/2 1 2mi

Kilometers 0 500m 1km 2km

Itasca State Park | **Existing Vegetation**



Itasca State Park | Vegetation Management

1208

VEGETATION

Inventory

Pre-European Settlement Vegetation

The records of early travelers provide some idea of the character of the vegetation before pioneer settlement. When O. E. Garrison visited the area in 1881, he reported extensive forest areas in various stages of regeneration following apparent devastation by fire. The fires were said to have been set and spread by Indians to improve feeding grounds for wild game. In a general conclusion regarding historical literature, S. S. Frissell, in his PhD Thesis, points our that the park area's presettlement forests were typically of diverse species composition and age structure, rather than vast homogenous stands of undisturbed pine forest.

The map on p. 38 shows the forest cover types found in the park prior to logging. This map was developed using the general vegetation descriptions from the field notes of the first survey done by the General Land Office in 1875-79.

There was significantly more pine in the park prior to European settlement than there is now. Much of this loss was due to logging during the early 1900's.

Existing Vegetation

Itasca State Park is located in a transition area between three distinctly different vegetation associations. There are prairies to the west, boreal forests north and east, and southern hardwoods to the south. The park has a diverse vegetation pattern. Because it is located in a transition area, it has a varied and rugged terrain. The logging done in the park had a major impact on the vegetation diversity that now exists, because many areas were clearcut and others left untouched. (See Existing Vegetation chart, p. 41)

Aspen is the dominant species in the park. It is found in almost all of the vegetation communities.

Approximately a fifth of the park's acreage is mapped as pine. This is far less than existed in pre-settlement times. Logging operations and frequent and intense fires during the settlement and logging periods greatly reduced the number of pine in the park. Fire suppression, the build up of excessive populations of porcupine and deer as a result of predator control and prohibition of deer hunting, further reduced the number of pine and minimized pine reproduction. The introduction of white pine blister rust also affected the amount of white pine. Of the surviving pine stands one-half of the Norway pine and more than eighty-five percent of the white pine are over 200 years old and subject to heavy mortality. The once common jack pine, ecologically fire-dependent, is now reduced to only a few small stands. Because of the short life expectancy of jack pine, the remaining stands are now literally falling apart. Overmature trees are more subject to insect attack, disease, and wind damage. Research has demonstrated that the death rate of the old growth pine is accelerating.

The management of the pine is directed by law; ...preserve intact the primeval pine forest now growing in Itasca State Park, and shall cut no part thereof except weak, diseased, or insect infested trees, or dead and down timber ...

The other vegetation types are generally found in small localized areas.

EXISTING VEGETATION

Map Symbol	Cover Type	Acres
ASP	Aspen	13,497
NP	Norway Pine	3,946
BIR	Birch	1,832
NH	Northern Hardwoods	1,820
MH	Marsh	1,351
JP	Jack Pine	,1203
WP	White Pine	1,011
LB	Lowland Birch	781
SF	Spruce Fir	753
UB	Upland Brush	569
LH	Lowland Hardwoods	355
O	Oak	273
BsL	Black Spruce; Lowland	229
RD	Roads	222
T	Tamarack	198
Ea	Ash	183
Rec	Recreation Development	180
Tx	Stagnant Tamarack	136
UG	Upland Grass	118
MS	Muskeg	79
WSp	White Spruce	68
LG	Lowland Grass	40
IDev	Industrial Development	33
C	White Cedar	24
Bg	Balm of Gilead	2
	Total	28,903* acres

*Does not include water

~~1966~~

A survey conducted in 1952 by the School of Forestry in cooperation with the State Conservation Department furnishes the data for the general summary in Table X of acreages present in the different forest types.

Table X

Type Acreages in Itasca State Park

Forest Type	Total Acreage
Aspen	13,268
Norway Pine	5,738
Jack pine	1,898
Spruce-balsam	1,637
Marsh and bog	1,563
Northern hardwoods	1,513
White pine	847
Lowland brush	579
Lowland hardwoods	374
Upland brush	370
Tamarack	306
Spruce	201
Lakes	3,114
Fields and roads	205
Total	31,586

From this table it appears that the total area of Norway and white pine, the forest types of critical importance as a basic attraction in the Park, is approximately 6,586 acres or less than 20 per cent of the total area. It is also pertinent to note the condition of these acres devoted to the Norway and white pine types as shown in Table XI.

Table XI

Area in Acres by Condition Classes

Forest Type	Overmature[1/]	Mature[2/]	Young[3/]	Total
Norway pine	2537	2908	293	5738
White pine	739	108	---	847

1/ Trees over 200 years old with an average life expectancy of 25 years.
2/ Trees mostly 90 to 150 years old.
3/ Trees mostly 50 to 75 years old.

These data indicate a serious absence of the younger age classes in the forest and a disturbing concentration of overmature trees, many of which cannot be expected to last more than about 25 years. As these acres revert to other less desirable forest types such as mixed hardwoods, brush, and balsam, the value of Itasca Park as a tourist attraction will suffer greatly unless there is a sufficient acreage of young pine growth to replace it.

However, all future management actions will follow the established objectives, and the guidelines stated for each vegetation management zone. The detailed recommendations that have been identified and can be implemented at this time are as follows:

Scientific and Natural Area

Action #1. Burn areas in early spring.

The area should be burned while there are still scattered patches of snow on the ground. This should insure a cool and easily controlled fire.

There are no fire roads in this area and because of an existing statute none can be constructed. If a fire starts in this area during late summer or fall, it will be very difficult to stop. Through the years of preservation management, tinder and fire supporting dead and down timber have increased to a point where a major fire in the near future is probable.

Several successive cool ground fires will reduce the tinder available, and allow future duff consuming summer fires for pine management.

Minimal Disturbance Areas

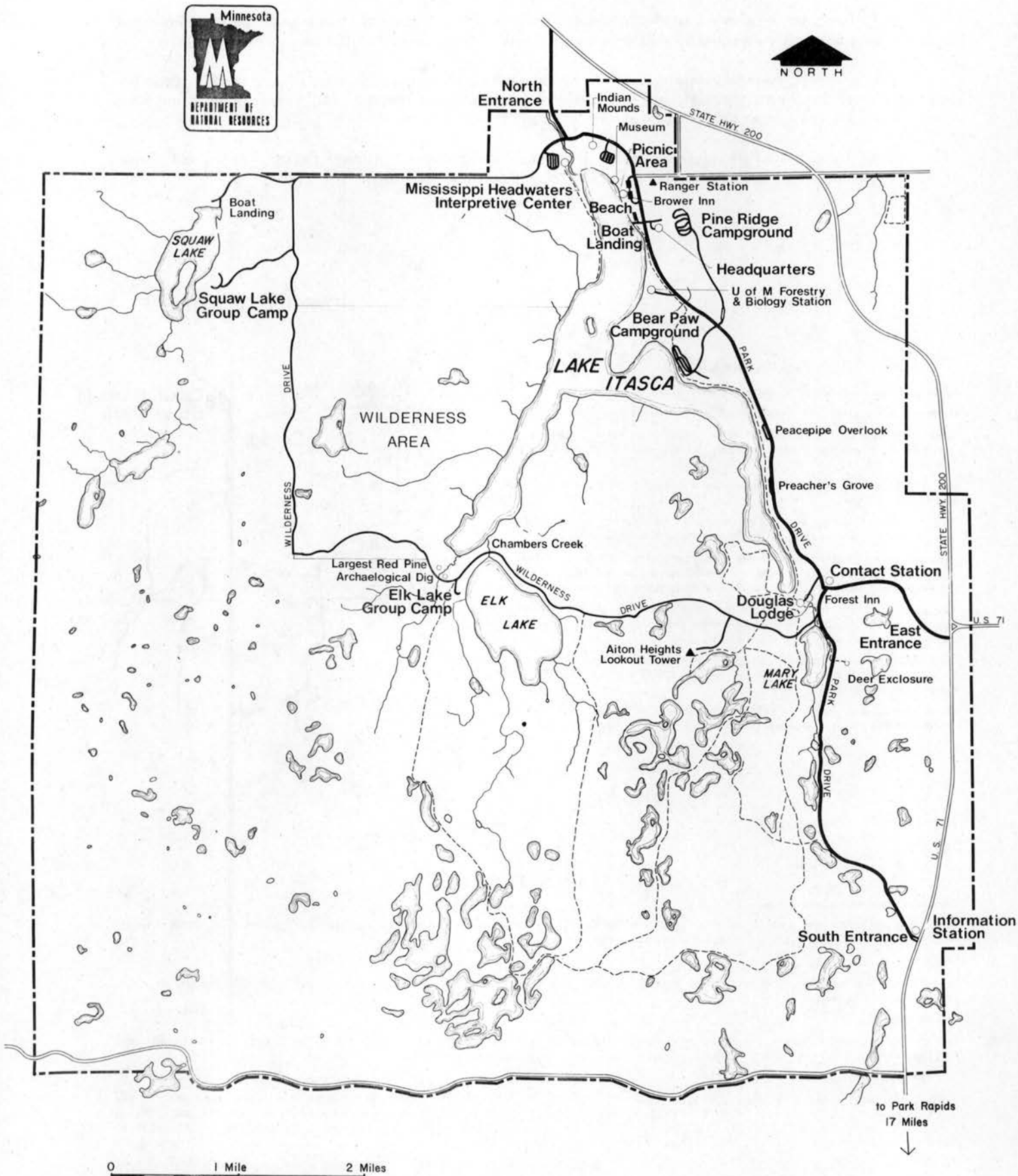
No specific management actions are currently proposed for these areas.

Restricted Management Area

Action #2. Harvest over mature Jack pine.

Small openings (3-10 acres) will be clear cut near the southern edge of these jack pine stands. Norway pine in the stands will be left standing. Slash will be piled and the opening burned. This is the most economical way of providing a good seed bed for Norway and jack pine regeneration.

Itasca State Park



WELCOME TO
ITASCA STATE PARK

Besides being the headwaters of the Mississippi River, and the largest and most popular park in Minnesota, Itasca has a special quality accented by magnificent towering pines and a myriad of 100 lakes.

Within the park boundary you can camp, canoe, or hike more than 20 miles of foot trails. Itasca has two experienced naturalists that can help you discover rare orchids in blossom, 146 species of birds including the endangered Bald Eagle, or the footsteps of fur traders and explorers.

And so, Itasca State Park, preserved by the devoted efforts of Jacob V. Brower and other far-sighted people, is today awakening a new understanding of man's relationship to his environment.

PARK MANNERS

Read and heed all posted rules and park signs.

Help protect your park. Preservation is everyone's business.

Take pictures and memories; leave only footprints. Don't dig trenches, pick plants, molest animals, or scavenge dead wood – it's needed for the soil environment.

Be considerate of others. Maintaining a clean, quiet park is best for everybody.

The use of firearms, explosives, air guns, slingshots, traps, seines, nets, bows and arrows and all other weapons is prohibited.

Pets are prohibited from all park areas except when restrained on a leash measuring six feet or less. Pets may not enter buildings. Horses are permitted only on trails specifically designated for such use.

The park is closed from 10:00 p.m. until 8:00 a.m. of the following day, except in campgrounds or in cabin areas. Loud noises or other disturbances are prohibited after 10:00 p.m.

Park permits are required for every vehicle and can be purchased at park headquarters. Permit prices are $3.00 per car for Annual Permit; $1.00 for Daily Permit.

Motor bikes and other licensed vehicles are allowed only on the motor vehicle roads – not on the trails.

HOW TO GET THERE

Vehicle Permits Required.
For Sale at Headquarters.

FACILITIES

Camping, Picnicking and Hiking

Campsites are provided with water and toilet facilities. Tables and parking areas are available for picnicking. Trails provide diverse opportunities to experience the park and participate in nature.

Water Sports

Where appropriate, boat launching and swimming facilities have been developed. Activities should be confined to designated areas. Fishing subject to state law.

Winter Sports

Ski touring and showshoeing are encouraged in all state parks; snowmobiling is permitted in some parks only in designated areas and posted trails under conditions considered adequate for park protection by the park ranger or manager.

Environmental Education

Today, not only is our quality of life reduced but life itself is jeopardized. A new life style is called for, based upon enlightened ways of living in harmony with nature, with each other and our world. One way to begin a new way of thinking and of living is through environmental education. Schools and other groups are encouraged to use state parks for environmental education acitivities; park visitors can acquaint themselves with the natural uniqueness of the park by participating in the park naturalist's programs.

ADMIN 1000 (Rev. 1/78)

STATE OF MINNESOTA 3460-1-1-2

DEPARTMENT Natural Resources/Forestry

Office Memorandum

TO : Bill Berndt

DATE: Feb. 14, 1980

FROM : George Miller

PHONE: 755-2891

SUBJECT: Hubbard County Auction Sale - Sealed Bid
Five Tracts - Itasca State Park

Enclosed are summary sheet, Notice of Sale and Terms of Sale, face sheets and appraisals, copy of letters and ads to newspapers, bid forms, copy of letter to EQC, and environmental impact statement.

Milt Krona has told Henry Hanson that it will be all right to sell this budworm infected timber.

Send ten copies of bid forms to Bemidji, Itasca, Park Rapids, and Bagley.

GM:my

cc: Duane Moran
Ken Baumgartner

Summary

Hubbard County Sale
March 25, 1980

Pulp & Bolts

Jack Pine	943 Cords

Fuelwood

Jack Pine	85 Cords
Birch	13 Cords

Total Sale Converted to Cords	1,041 Cords
Total Value of Sale Offered	$14,646.35
Type Acres	37 Acres
Number of Tracts	5 Tracts

Form F-121 (Rev. 5/75) Itasca Park Pine Restoration

Parks

Minnesota Department of Natural Resources

TIMBER APPRAISAL REPORT

Permit No. B8362

Permittee ART Tieden

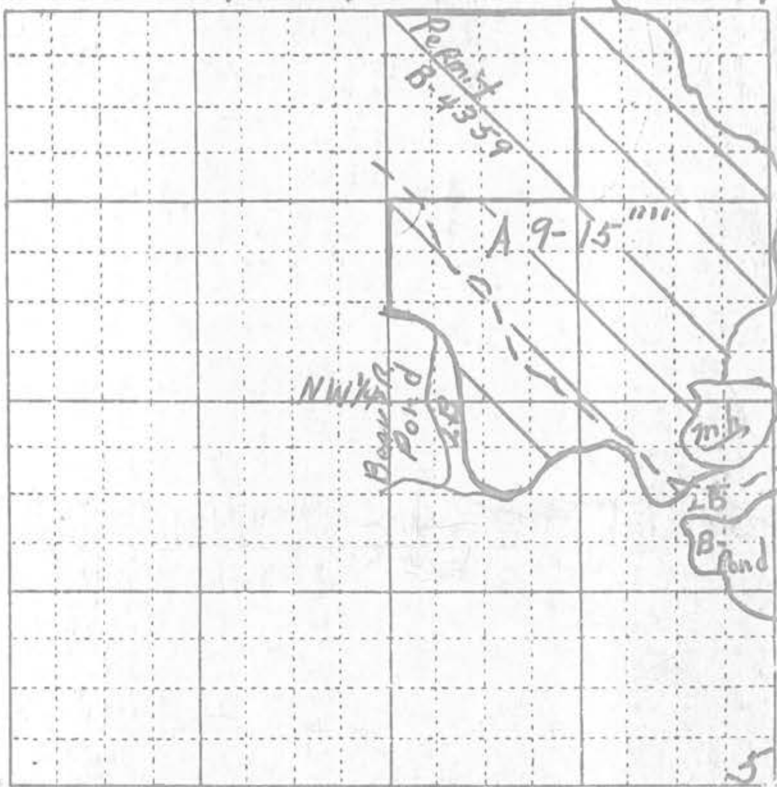
County 3 Becker

Cutting Regulations:

State Forest No. 00 Sec. 5 Twp. 142 Rge. 36W Region, Area & Dist. No. 114

Clear Cut Area of Aspen & Birch. Species Reserved within This Type, All Northern Hardwood other than Aspen & Birch and The Norway and White Pine. Utilize Timber To A 4 inch Top Diameter.

Forty or Lot	% of Total Value
~~NENW~~	~~85~~
SENW	15
LOT 3	85
xxx	100



Scale 4" or (8") to Mile. (Circle One)

Slash Disposal Regulations: Lop & Scatter With No Tops Left hanging in Standing Timber.

All landings of cut products must be marked with name of permit holder and permit number.

No more than 2 scales allowed.

At least 3 working days' notice required to scale

Cut within planned cutting area? Yes X No ____

Acres Sold by Type (Drain) A-28

Acres Used for P.G.F. 78

Species	Products	M Feet	Cords	Pieces	Bundles of 10	Weight M LBS.		Unit Price	Value
Aspen	Pulp + Bolts		860					1.55	1333.00
Birch	Pulpwood		20	Sold as appraised				1.00	20.00

Pole Sizes	10'	12'	14'	16'	20'	25'	30'	35'	40'	45'	50'			Total Value
Pole Prices														$1353.00

Remarks: Long Range Plans are in The making For Pine Restoration within The Itasca Park Lands.
Aspen = 25% Bolts
P.G.F. = 130% - 50% = 80%

Price Guide Factors: 55 + .25 + .15 + .15 + .10 + .10 = 1.30%. Minus Factors = -10% Slash Disposal; Landing Restrictions - 5%; Time of Year - 10%; Disposal of Non-merchantable The 10% Road Restrictions - 10%; Any Park Restrictions 5%

Eugene H. Shroe — State Appraiser — 1/24/77 — Date

George J. Miller — Area Forest Supervisor — 7-27-77 — Date

Form F-121
(Rev. 5/75)

ITASCA PARK

Minnesota Department of Natural Resources

TIMBER APPRAISAL REPORT

Permit No. ____________

Permittee ____________

County 29 HUBBARD

Cutting Regulations:

State Forest No. 00 Sec. 17 Twp. 143 Rge. 35W Region, Area & Dist. No. 1 1 4

CLEAR CUT AREA OF JACK PINE and Birch.

1. All Norway Pine are reserved.
2. Seed cone recovery is important, slash can be lopped in cut area [redacted]
3. Stumps are to be cut low to the ground, maximum height 6 inches.
4. All stems green or dead, Jack pine species, are to be cut down.
5. Utilize timber to a 3 inch top diameter or smaller if markets permits

Slash Disposal Regulations: Lop and scatter [redacted]

All landings of cut products must be marked with name of permit holder and permit number.

No more than XX scales allowed.

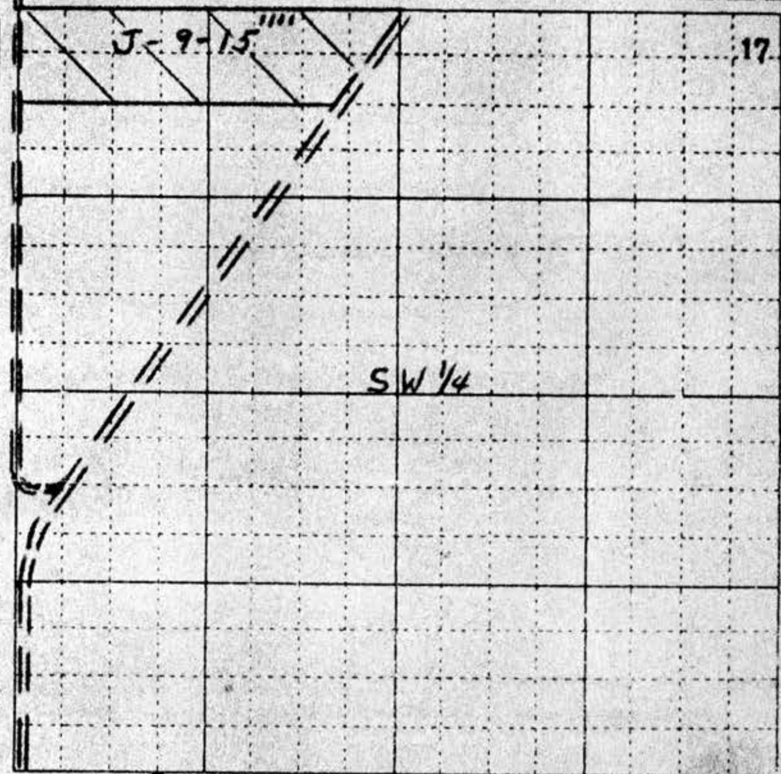
At least 3 working days' notice required to scale

Cut within planned cutting area? Yes X No ____

Acres Sold by Type (Drain) J.P. type 2, 9 A

Acres Used for P.G.F. XX. 9 acres.

Forty or Lot	% of Total Value
NWSW	100
xxx	100



Scale 4" or (8") to Mile. (Circle One)

Species	Products	M Feet	Cords	Pieces	Bundles of 10	Weight M LBS.		Unit Price	Value
JACK PINE	PULP & BOLTS		200					$ 15.35	$3070.00
Jack Pine	FUELWOOD		25	SOLD AS APPRAISED.				1.75	43.75
BIRCH	FUELWOOD		8	SOLD AS APPRAISED.				1.75	14.00

Pole Sizes	10'	12'	14'	16'	20'	25'	30'	35'	40'	45'	50'				Total Value
Pole Prices															$3127.75

Remarks: Seed cones will be picked, extracted at the State Nursery, marked, and returned to the Itasca Ranger Station for Jack Pine regeneration in XXX Itasca Station Park.
JACK PINE = 50% bolts.

Price Guide Factors: .50 +.20 +.25 +.25 +.20 +.15 = 1.55%.

STATE OF MINNESOTA

DEPARTMENT Natural Resources - Forestry

Office Memorandum

File No. 6300-4

DATE: 2/1/80

TO : Frank Knoke
Division of Parks and Recreation

FROM : Alan C. Jones ag
Forest Pest Specialist

E. I. S.

SUBJECT: Decadent Jack Pine in Itasca Park

Paul Rundell asked me to look at a 30-acre jack pine stand in the NWSW forty of Section 17, Township 143 North, Range 35 West in Hubbard County and located on State land within the boundaries of Itasca State Park.

On January 31, 1980, I looked at this particular stand with the District Forester, Gene Wroe, and his assistant, Ron Kuschel. During the inspection, I found evidences of jack pine budworm damage from 1979 and evidences of an active and growing bark beetle population. The presence of these two major insect pests combined with the advanced age of the jack pine making up the stand cause me concern for the health and safety of not only this stand, but also the surrounding jack pine and the red pine stands.

It is quite obvious that the stand of jack pine is beginning to break up. One of the major causes is old age. The trees are no longer able to withstand any kind of stress, and dead trees and trees with dead tops are commonly seen. The drought of 1976-77 hastened this inevitable break up. Trees were killed during that period and these dead trees contributed to a buildup in the bark beetle population. Since that time more trees have died from bark beetle attacks, from a budworm infestation, and from other minor insects feeding on the trees. These additional dead trees have allowed the bark beetle population to continue to build up. Tree mortality is accelerating and will continue to do so as long as dead and dying trees are left in the stand.

The jack pine budworm has also hastened the decline of the stand. Although the infestation has not been heavy enough to cause widespread mortality, it was evident that some trees were killed and other trees were characterized by tops with sparse foliage. The presence of the budworm will serve as another stress-inducing factor which will contribute to an increase in the numbers of trees being successfully invaded and killed by bark beetles.

My concern is two-fold. First, the stand of jack pine is being lost. The trees are loaded with cones but those cones need to be on the ground before they can release their seeds. By allowing

the stand to break up naturally, the wood products will be lost. More important, however, a new stand of jack pine will not be regenerated, and a stand will be lost which has helped to contribute to the attractiveness of the Park. Secondly, bark beetles do not stop on section lines or regard State Park property as sacred. What is being created by leaving the jack pine standing is a sanctuary for bark beetles which, if conditions are right, such as a period of low moisture, those bark beetles will begin to successfully invade surrounding pine stands of all species.

It is my judgement, therefore, that this 30-acre stand of jack pine be clearcut by the 15th of June and slash disposed of by burning by the same date. Also, I would strongly recommend that a crew be assigned to pick the cones and after seed extraction is carried out at the nursery, enough seed be brought back to the area to adequately reseed it.

Immediate attention should also be given to the mixed jack and red pine stand adjacent to the pure jack pine stand in Section 17. The jack pine in the stand is similar in condition to the jack pine in Section 17. After the Section 17 jack pine is cut, the jack pine in the mixed stand will continue to be a hazard to the red pine in the stand. Consultation with the District Forester for harvesting recommendations in this stand is strongly recommended.

AJ:vb
cc: Paul Rundell
Gene Wroe
Duane Moran
John Rodewald

I t a s c a   P a r k

Form F 121
(Rev. 5/75)

Minnesota Department of Natural Resources

TIMBER APPRAISAL REPORT

Permit No. ______

Permittee ______

County 29 HUBBARD

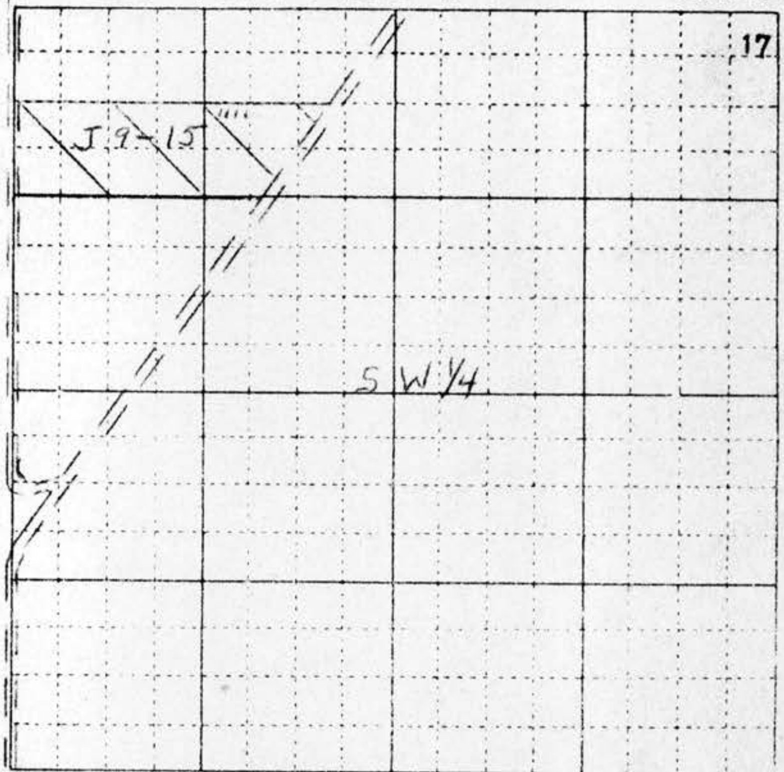
Cutting Regulations:

State Forest No. 00 Sec. 17 Twp. 143 Rge. 35W Region, Area & Dist. No. 1 1 4

CLEAR CUT AREA OF JACK PINE & BIRCH.

1. All Norway pine are reserved.
2. Seed cone recovery is important: slash can be lopped in cut area [redacted]
3. Stumps are to be cut low to the ground, maximum height 6 inches.
4. All Jack Pine stems, green or dead, are to be cut down.
5. Utilize timber to a 3 inch top diameter or smaller if markets permit

Forty or Lot	% of Total Value
NWSW	100
XXX	100



Scale 4" or (8)" to Mile. (Circle One)

Slash Disposal Regulations: Lap off in cutting area [redacted]

All landings of cut products must be marked with name of permit holder and permit number.

No more than XX scales allowed.

At least 3 working days' notice required to scale

Cut within planned cutting area? Yes X No ___

Acres Sold by Type (Drain) J.P. type #2 - 8 A.

Acres Used for P.G.F. 8

Species	Products	M Feet	Cords	Pieces	Bundles of 10	Weight M LBS.		Unit Price	Value
Jack Pine	Pulp & Bolts		232					$15.35	$3561.20
Jack Pine	Fuelwood		25	Sold as appraised				1.75	43.75
Birch	Fuelwood		2	Sold as appraised				1.75	3.50

Pole Sizes	10'	12'	14'	16'	20'	25'	30'	35'	40'	45'	50'			Total Value	$3608.45
Pole Prices															

Remarks: Jack Pine = 50% bolts

Seed cones will be picked, sent to the state nursery for extraction, and returned to the Itasca Ranger station for the regeneration of jack pine in Itasca Park.

Price Guide Factors: .50 + .20 + .25 + .25 + .20 + .15 = 1.55%

Eugene W. Hove — State Appraiser — 2/7/80 (Date)

Dale A. Moran — Area Forest Supervisor — 2-11-80 (Date)

STATE OF MINNESOTA

DEPARTMENT Natural Resources - Forestry

Office Memorandum

File No. 6300-4

DATE: 2/1/80

TO : Frank Knoke
Division of Parks and Recreation

FROM : Alan C. Jones ag
Forest Pest Specialist

E. I. S.

SUBJECT: Decadent Jack Pine in Itasca Park

Paul Rundell asked me to look at a 30-acre jack pine stand in the NWSW forty of Section 17, Township 143 North, Range 35 West in Hubbard County and located on State land within the boundaries of Itasca State Park.

On January 31, 1980, I looked at this particular stand with the District Forester, Gene Wroe, and his assistant, Ron Kuschel. During the inspection, I found evidences of jack pine budworm damage from 1979 and evidences of an active and growing bark beetle population. The presence of these two major insect pests combined with the advanced age of the jack pine making up the stand cause me concern for the health and safety of not only this stand, but also the surrounding jack pine and the red pine stands.

It is quite obvious that the stand of jack pine is beginning to break up. One of the major causes is old age. The trees are no longer able to withstand any kind of stress, and dead trees and trees with dead tops are commonly seen. The drought of 1976-77 hastened this inevitable break up. Trees were killed during that period and these dead trees contributed to a buildup in the bark beetle population. Since that time more trees have died from bark beetle attacks, from a budworm infestation, and from other minor insects feeding on the trees. These additional dead trees have allowed the bark beetle population to continue to build up. Tree mortality is accelerating and will continue to do so as long as dead and dying trees are left in the stand.

The jack pine budworm has also hastened the decline of the stand. Although the infestation has not been heavy enough to cause widespread mortality, it was evident that some trees were killed and other trees were characterized by tops with sparse foliage. The presence of the budworm will serve as another stress-inducing factor which will contribute to an increase in the numbers of trees being successfully invaded and killed by bark beetles.

My concern is two-fold. First, the stand of jack pine is being lost. The trees are loaded with cones but those cones need to be on the ground before they can release their seeds. By allowing

the stand to break up naturally, the wood products will be lost. More important, however, a new stand of jack pine will not be regenerated, and a stand will be lost which has helped to contribute to the attractiveness of the Park. Secondly, bark beetles do not stop on section lines or regard State Park property as sacred. What is being created by leaving the jack pine standing is a sanctuary for bark beetles which, if conditions are right, such as a period of low moisture, those bark beetles will begin to successfully invade surrounding pine stands of all species.

It is my judgement, therefore, that this 30-acre stand of jack pine be clearcut by the 15th of June and slash disposed of by burning by the same date. Also, I would strongly recommend that a crew be assigned to pick the cones and after seed extraction is carried out at the nursery, enough seed be brought back to the area to adequately reseed it.

Immediate attention should also be given to the mixed jack and red pine stand adjacent to the pure jack pine stand in Section 17. The jack pine in the stand is similar in condition to the jack pine in Section 17. After the Section 17 jack pine is cut, the jack pine in the mixed stand will continue to be a hazard to the red pine in the stand. Consultation with the District Forester for harvesting recommendations in this stand is strongly recommended.

AJ:vb
cc: Paul Rundell
Gene Wroe
Duane Moran
John Rodewald

Form F-121
(Rev. 5/75)

Minnesota Department of Natural Resources
TIMBER APPRAISAL REPORT

Permit No. ______

Permittee ______

County 29 HUBBARD

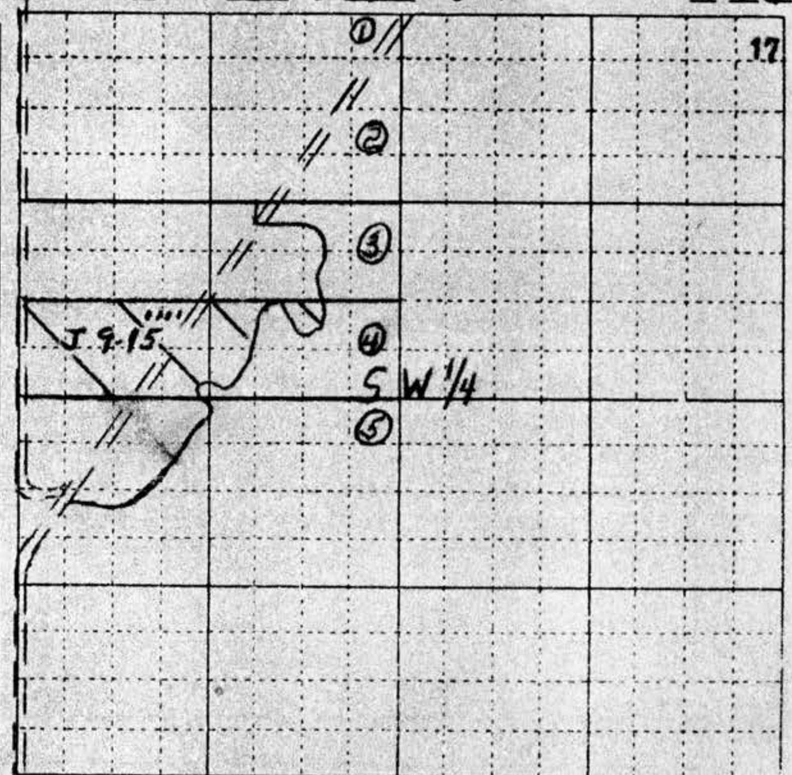
Cutting Regulations:

State Forest No. 00 Sec. 17 Twp. 143 Rge. 35W Region, Area & Dist. No. 1 1 4

CLEAR CUT AREA OF JACK PINE AND BIRCH.

1. All Norway and White pine are reserved.
2. Seed cone recovery is important, slash can be lopped in cut area [redacted]
3. Stumps are to be cut low with a maximum height of 6 inches.
4. All Jack Pine, green or dead, are to be cut down.
5. Utilize timber to a 3 inch top diameter.

Forty or Lot	% of Total Value
NWSW	100
xxx	100



Scale 4" or (8") to Mile. (Circle One)

Slash Disposal Regulations: Lop and scatter [redacted]

All landings of cut products must be marked with name of permit holder and permit number.

No more than XX scales allowed.

At least 3 working days' notice required to scale

Cut within planned cutting area? Yes X No ___

Acres Sold by Type (Drain) J.P. type 2 - 6 A.

Acres Used for P.G.F. 6

Species	Products	M Feet	Cords	Pieces	Bundles of 10	Weight M LBS.		Unit Price	Value
BIRCH	FUELWOOD		1	Sold	as Appraised.			$ 1.75	$ 1.75
JACK PINE	PULP & BOLTS		185					15.35	2839.75

Pole Sizes	10'	12'	14'	16'	20'	25'	30'	35'	40'	45'	50'			Total Value
Pole Prices														$2841.50

Remarks: JACK PINE = 50% bolts.
Seed cones will be picked, sent to the State Nursery for extraction, and returned to the Itasca Ranger Station for the regeneration of Jack pine in Itasca Park.

Price Guide Factors: .50 +.20 +.25 +.25 +.20 +.15 = 1.55%.

[illegible] 2/7/80
State Appraiser Date

[illegible] 2-11-80
Area Forest Supervisor Date

Form F-121
(Rev. 5/75)

ITASCA PARK
Minnesota Department of Natural Resources
TIMBER APPRAISAL REPORT

Permit No. ______

Permittee ______

County 29 HUBBARD

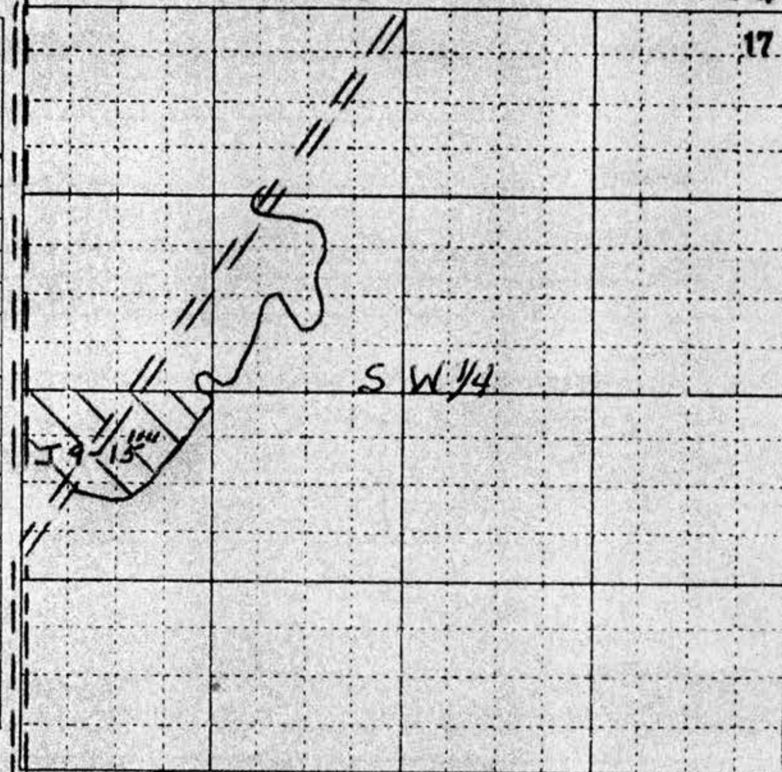
Cutting Regulations:

State Forest No. 00 Sec. 17 Twp. 143 Rge 35W Region, Area & Dist. No. 1 2 4

CLEAR CUT AREA OF JACK PINE & BIRCH.

~~1. All Norway and White pine are reserved.~~
~~2. Seed cone recovery is important, slash can be lopped in the cutover area~~ [redacted]
~~3. Stumps are to be cut low with a maximum height of 6 inches.~~
~~4. All Jack pine, green or dead, are to be cut down.~~

Forty or Lot	% of Total Value
SWSW	100
xxx	100



Scale 4" or (8") to Mile. (Circle One)

Slash Disposal Regulations: Lop and scatter in cut area [redacted]

All landings of cut products must be marked with name of permit holder and permit number.
No more than XX scales allowed.
At least 3 working days' notice required to scale
Cut within planned cutting area? Yes X No ____
Acres Sold by Type (Drain) J.P. type 2 - 4 A.
Acres Used for P.G.F. 4.

Species	Products	M Feet	Cords	Pieces	Bundles of 10	Weight M LBS.		Unit Price	Value
JACK PINE	PULP & BOLTS		122					$15.35	$ 1872.70
JACK PINE	FUELWOOD		10	SOLD AS APPRAISED.				1.75	17.50

Pole Sizes	10'	12'	14'	16'	20'	25'	30'	35'	40'	45'	50'				Total Value
Pole Prices															$ 1890.20

Remarks: JACK PINE = 50% bolts.
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Price Guide Factors: .50 +.20 +.25 +.25 +.20 +.15 = 1.55%.

Eugene H. Thea — State Appraiser — 2/8/80 Date

Duane J. Moran — Area Forest Supervisor — 2-11-80 Date

STATE OF MINNESOTA

DEPARTMENT Natural Resources - Forestry

Office Memorandum

File No. 6300-4

DATE: 2/1/80

TO : Frank Knoke
Division of Parks and Recreation

FROM : Alan C. Jones
Forest Pest Specialist

E. I. S.

SUBJECT: Decadent Jack Pine in Itasca Park

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On January 31, 1980, I looked at this particular stand with the District Forester, Gene Wroe, and his assistant, Ron Kuschel. During the inspection, I found evidences of jack pine budworm damage from 1979 and evidences of an active and growing bark beetle population. The presence of these two major insect pests combined with the advanced age of the jack pine making up the stand cause me concern for the health and safety of not only this stand, but also the surrounding jack pine and the red pine stands.

It is quite obvious that the stand of jack pine is beginning to break up. One of the major causes is old age. The trees are no longer able to withstand any kind of stress, and dead trees and trees with dead tops are commonly seen. The drought of 1976-77 hastened this inevitable break up. Trees were killed during that period and these dead trees contributed to a buildup in the bark beetle population. Since that time more trees have died from bark beetle attacks, from a budworm infestation, and from other minor insects feeding on the trees. These additional dead trees have allowed the bark beetle population to continue to build up. Tree mortality is accelerating and will continue to do so as long as dead and dying trees are left in the stand.

The jack pine budworm has also hastened the decline of the stand. Although the infestation has not been heavy enough to cause widespread mortality, it was evident that some trees were killed and other trees were characterized by tops with sparse foliage. The presence of the budworm will serve as another stress-inducing factor which will contribute to an increase in the numbers of trees being successfully invaded and killed by bark beetles.

My concern is two-fold. First, the stand of jack pine is being lost. The trees are loaded with cones but those cones need to be on the ground before they can release their seeds. By allowing

the stand to break up naturally, the wood products will be lost. More important, however, a new stand of jack pine will not be regenerated, and a stand will be lost which has helped to contribute to the attractiveness of the Park. Secondly, bark beetles do not stop on section lines or regard State Park property as sacred. What is being created by leaving the jack pine standing is a sanctuary for bark beetles which, if conditions are right, such as a period of low moisture, those bark beetles will begin to successfully invade surrounding pine stands of all species.

It is my judgement, therefore, that this 30-acre stand of jack pine be clearcut by the 15th of June and slash disposed of by burning by the same date. Also, I would strongly recommend that a crew be assigned to pick the cones and after seed extraction is carried out at the nursery, enough seed be brought back to the area to adequately reseed it.

Immediate attention should also be given to the mixed jack and red pine stand adjacent to the pure jack pine stand in Section 17. The jack pine in the stand is similar in condition to the jack pine in Section 17. After the Section 17 jack pine is cut, the jack pine in the mixed stand will continue to be a hazard to the red pine in the stand. Consultation with the District Forester for harvesting recommendations in this stand is strongly recommended.

AJ:vb
cc: Paul Rundell
Gene Wroe
Duane Moran
John Rodewald

ITASCA PARK

Form F-121
(Rev. 5/75)

Minnesota Department of Natural Resources

TIMBER APPRAISAL REPORT

Permit No. ______

Permittee ______

County 29 HUBBARD

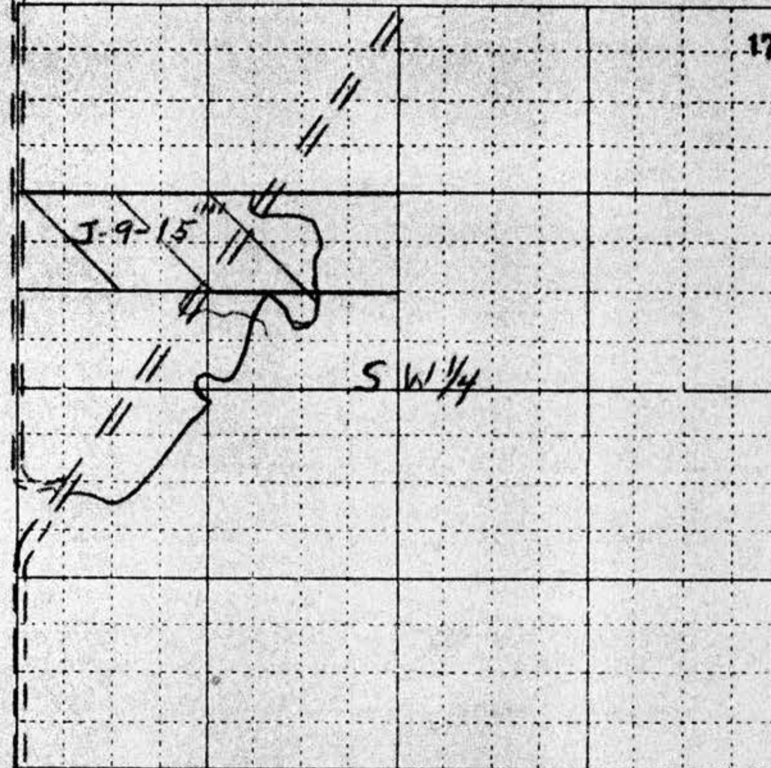
Cutting Regulations:

State Forest No. 00 Sec. 17 Twp. 143 Rge 35W Region, Area & Dist. No. 1 1 4

Clear cut area of JACK PINE, ASPEN, & BIRCH.

1. All Norway and White pine are reserved.
2. Seed cone recovery is important, slash can be lopped in cut area [redacted].
3. Stumps are to be cut low to the ground, maximum height 6 inches.
4. All Jack pine, green or dead, are to be cut down.
5. Utilize timber to a 3 inch top diameter.

Forty or Lot	% of Total Value
NWSW	100
xxx	100



Scale 4" or (8") to Mile. (Circle One)

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Cut within planned cutting area? Yes X No ____

Acres Sold by Type (Drain) J.P. type 2- 8 A.

Acres Used for P.G.F. 8.

Species	Products	M Feet	Cords	Pieces	Bundles of 10	Weight M LBS.		Unit Price	Value
ASPEN	PULPWOOD		4	SOLD AS APPRAISED.				$ 2.70	$ 10.80
BIRCH	FUELWOOD		2	SOLD AS APPRAISED.				1.75	3.50
JACK PINE	PULP & BOLTS		204					15.35	3131.40
JACK PINE	FUELWOOD		25	SOLD AS APPRAISED.				1.75	43.75

Pole Sizes	10'	12'	14'	16'	20'	25'	30'	35'	40'	45'	50'			Total Value
Pole Prices														$ 3189.45

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Eugene H. [signature] State Appraiser 2-7-80 Date

Duane J. [signature] Area Forest Supervisor 2-11-80 Date

STATE OF MINNESOTA

DEPARTMENT Natural Resources - Forestry

Office Memorandum

File No. 6300-4

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FROM : Alan C. Jones
Forest Pest Specialist

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AJ:vb
cc: Paul Rundell
Gene Wroe
Duane Moran
John Rodewald

UNIVERSITY OF MINNESOTA
TWIN CITIES

College of Forestry
Department of Forest Resources
110 Green Hall
1530 North Cleveland Avenue
St. Paul, Minnesota 55108

WAYLAND
FRANK.
SOUTH

February 27, 1980

Mr. Milton Krona
Division of Parks and Recreation
Minn. Department of Natural Resources
330 Centennial Office Building
St. Paul, Minnesota 55155

Dear Milt:

This is in reference to our phone conversation regarding the proposal to salvage approximately 30 acres of jack pine on the east boundary of Itasca Park which was reported to have an active budworm population.

On February 18, I visited the area together with Gene Wroe, the District Ranger, and George Miller, Regional Silviculturist from the Bemidji office. I also had available Alan Jones' report to Frank Knoke on the nature and extent of the damage and a copy of the action proposal.

As I told you, I'm afraid the problem is serious and has ramifications beyond the immediate 30-acre tract. We discussed the details of the timber sale and follow-up proposal which have now been incorporated in the sale specifications. The logging slash is to be lopped and scattered to help provide a hot enough fire to prepare the area for subsequent seeding. Gene Wroe has agreed to have cones collected from the area to provide the seed of local origin. In addition, there may be a minor seeding in from nearby old growth Norway pine. The timing of this depends on how rapidly the slash dries. If it is burnable, this could be done next fall and seeding done in the spring of 1981. I would recommend that this be done early while there is still some snow on the ground. This burning and seeding would simulate the natural regeneration as nearly as possible. If it does not work, we have no recourse but to plant the spring of 1982.

As we discussed, it would be important to meet for a field trip in the park next summer to take a look at the larger problem. Jack pine is not a big type in the park -- approximately 1500 acres. However, it should be perpetuated as part of the original forest system. Most of these stands are a product of fires in the late 1800's and as such are very old, decadent, and ripe for insect and disease attacks. Unfortunately, the Norway and white pine stands are in intimate contact and also under age stress. There is a serious threat that bark beetles will invade these trees also. The jack pine stands are also largely in areas highly visible to the public such as the

Indian Mounds, the picnic areas, and the main drive to the information center. It will be very important what is done and how it is handled. It was apparent on my trip that the budworm is already in these areas.

I will be glad to participate in a field review of the situation next summer and would suggest sometime in late June or July when the extent of the current insect problem should be most evident.

Sincerely,

Henry Hansen

Henry Hansen
Professor

HH/kp

cc: George Miller
Gene Wroe
John Herhusky
Paul Rundell
Frank Knoke

UNIVERSITY OF MINNESOTA
TWIN CITIES

College of Forestry
Department of Forest Resources
110 Green Hall
1530 North Cleveland Avenue
St. Paul, Minnesota 55108

February 27, 1980

Mr. Milton Krona
Division of Parks and Recreation
Minn. Department of Natural Resources
330 Centennial Office Building
St. Paul, Minnesota 55155

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Sincerely,

Henry Hansen

Henry Hansen
Professor

HH/kp

cc: George Miller
Gene Wroe
John Herhusky
Paul Rundell
Frank Knoke✓

ADMIN 1000 (Rev. 1/78)
SF-00006-01

STATE OF MINNESOTA

DEPARTMENT Natural Resources-Parks & Recreation

Office Memorandum

TO : John Rodewald, Regional Forester

DATE: February 14, 1980

FROM : Don D. Davison
Director

PHONE: 296-2270

SUBJECT: Jackpine Sanitation Cut /Itasca

Based on the recommendations of Alan Jones, the park plan and staff, I feel that the immediate removal of this stand of jackpine is justified. Concern has been expressed over the slash burning and replanting. It is preferable that the slash be burned this spring and the area replanted. The details of the sale and replanting should be worked out with the Park Manager and Regional Resource Coordinator.

No Environmental Assessment Worksheet (EAW) will be filed with the Environmental Quality Board since this is an insect control cut. My staff and yours should plan a meeting this spring to discuss the details of the jackpine restoration called for in the park management plan. Once the details are worked out an Environmental Assessment Worksheet can be filed for the whole restoration project.

DDD/FHK/hab
cc: Paul Rundell, Regional Resource Coordinator
Russell Simmons, Regional Park Supervisor
Henry Hanson, University of Minnesota
John Herhusky, Park Manager Itasca
Wayland Porter, Recreation Planner
Frank H. Knoke, Environmental Specialist ✓

ADMIN 1000 (Rev. 1/78)
SF-00006-01

STATE OF MINNESOTA

DEPARTMENT Natural Resources

Office Memorandum

TO : Frank H. Knoke
Environmental Specialist

DATE: February 19, 1980

FROM : Paul Rundell PR
Vegetation Management Coordinator

PHONE:

SUBJECT: Itasca State Park Timber Sales

I have reviewed the cutting and regeneration plan and feel that this is a good way to proceed. The aspen will be left standing, but will be girdled to prevent suckering. Pine cones will be collected and the seed will be spread over the area after the prescribed burn. John Rodewald suggested spreading some norway and white pine seed at the same time to give us a better stand mix and this will be done. We will use local seed that is now available.

9% to 8% now less 5%

The general cutting plan, with this restriction, will be followed.

Slash free alleys will be maintained for better control of the planned burn. Fire breaks will be constructed where needed.

I will work with the forester to develop a comprehensive jack pine management plan for the park. At the same time, we will try to identify the insect and disease problems where possible.

The last time I was in the park I noticed a problem with the old spruce around the headquarters. We have a severe tip injury problem as many have dead tips. We did not see any egg cases, but many of the tips have insect burrows in them. Alan Jones, the forest specialist, will check on this periodically.

PR/mc

copy: Henry Hanson, University of Minnesota
John Rodewald, Regional Forester
Duane Moran, Area Forestry Supervisor
John Herhusky, Itasca State Park Manager
George Miller, Forest Management Specialist

Reg. For
Park Mgr.
Reg. Park Mgr.
Reg. Res. Coord.

Minnesota
Environmental Quality Board
100 Capitol Square Building
550 Cedar Street
St. Paul, Minnesota 55101
Phone 296-9031

February 19, 1980

Frank Knoke
Department of Natural Resources
Office of Planning
Box 10 C - Centennial Building
St. Paul, MN 55155

RE: Itasca Pine Restoration

Dear Mr. Knoke:

The 30-day review period for the environmental assessment worksheet (EAW) on the above project ended on February 13, 1980. No objections to the EAW's determination that no environmental impact statement (EIS) is needed on the project were received. Therefore, the decision stands.

Final actions to approve or commence the project can now be undertaken.

Sincerely,

Jason Jentzsch, Staff
Environmental Quality Board

JJ/jc

cc: Department of Natural Resources - Division of
Parks - Bemidji

ADMIN. 1000
3

STATE OF MINNESOTA

DEPARTMENT Natural Resources - Forestry

Office Memorandum

File No. 6300-4

DATE: 2/1/80

TO : Frank Knoke
Division of Parks and Recreation

FROM : Alan C. Jones
Forest Pest Specialist

SUBJECT: Decadent Jack Pine in Itasca Park

Paul Rundell asked me to look at a 30-acre jack pine stand in the NWSW forty of Section 17, Township 143 North, Range 35 West in Hubbard County and located on State land within the boundaries of Itasca State Park.

On January 31, 1980, I looked at this particular stand with the District Forester, Gene Wroe, and his assistant, Ron Kuschel. During the inspection, I found evidences of jack pine budworm damage from 1979 and evidences of an active and growing bark beetle population. The presence of these two major insect pests combined with the advanced age of the jack pine making up the stand cause me concern for the health and safety of not only this stand, but also the surrounding jack pine and the red pine stands.

It is quite obvious that the stand of jack pine is beginning to break up. One of the major causes is old age. The trees are no longer able to withstand any kind of stress, and dead trees and trees with dead tops are commonly seen. The drought of 1976-77 hastened this inevitable break up. Trees were killed during that period and these dead trees contributed to a buildup in the bark beetle population. Since that time more trees have died from bark beetle attacks, from a budworm infestation, and from other minor insects feeding on the trees. These additional dead trees have allowed the bark beetle population to continue to build up. Tree mortality is accelerating and will continue to do so as long as dead and dying trees are left in the stand.

The jack pine budworm has also hastened the decline of the stand. Although the infestation has not been heavy enough to cause widespread mortality, it was evident that some trees were killed and other trees were characterized by tops with sparse foliage. The presence of the budworm will serve as another stress-inducing factor which will contribute to an increase in the numbers of trees being successfully invaded and killed by bark beetles.

My concern is two-fold. First, the stand of jack pine is being lost. The trees are loaded with cones but those cones need to be on the ground before they can release their seeds. By allowing

the stand to break up naturally, the wood products will be lost. More important, however, a new stand of jack pine will not be regenerated, and a stand will be lost which has helped to contribute to the attractiveness of the Park. Secondly, bark beetles do not stop on section lines or regard State Park property as sacred. What is being created by leaving the jack pine standing is a sanctuary for bark beetles which, if conditions are right, such as a period of low moisture, those bark beetles will begin to successfully invade surrounding pine stands of all species.

It is my judgement, therefore, that this 30-acre stand of jack pine be clearcut by the 15th of June and slash disposed of by burning by the same date. Also, I would strongly recommend that a crew be assigned to pick the cones and after seed extraction is carried out at the nursery, enough seed be brought back to the area to adequately reseed it.

Immediate attention should also be given to the mixed jack and red pine stand adjacent to the pure jack pine stand in Section 17. The jack pine in the stand is similar in condition to the jack pine in Section 17. After the Section 17 jack pine is cut, the jack pine in the mixed stand will continue to be a hazard to the red pine in the stand. Consultation with the District Forester for harvesting recommendations in this stand is strongly recommended.

AJ:vb
cc: Paul Rundell
Gene Wroe
Duane Moran
John Rodewald

ADMIN 1000 (REV. 4/77)

STATE OF MINNESOTA 3460

DEPARTMENT Natural Resources - Forestry

Office Memorandum

TO : Duane Moran

DATE: 2/4/80

FROM : George Miller

PHONE:

SUBJECT: Itasca Park Timber Sales

Due to the large volumes and values of timber being sold in Itasca Park, all future sales will be auction. This includes the diseased jack pine which will be appraised this week. When you submit the appraisals, indicate if you want oral or sealed bid auction.

This jack pine might have a good cone crop due to the distressed nature of the stand. Plans should be made to salvage these cones prior to slash burning.

GM:ds

cc: Region I Parks
Frank Kanoke ✓
Henry Hanson

Write memo to alert on special management specs for logging contracts
2/12/80

MINNESOTA HISTORICAL SOCIETY

690 Cedar Street, St. Paul, Minnesota 55101 • 612-296-2747

January 14, 1980

Mr. Frank Knoke
Division of Parks
Box 10 C
Centennial Building
St. Paul, Minnesota 55155

Dear Mr. Knoke:

RE: Review of the E.A.W. for the Itasca State Park Pine Restoration Projects, Clearwater and Becker Counties.

MHS Referral File Number: J 898

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to responsibilities given the State Historic Preservation Officer by the National Historic Preservation Act of 1966 and the Procedures of the National Advisory Council on Historic Preservation (36CFR800).

As you are aware, Itasca State Park is well known for its concentration of prehistoric archaeological resources. Although there are no recorded sites within the restoration area, this lack of archaeological information may be due to the absence of survey work in the area rather than the actual absence of sites. Consequently, we feel that an archaeological survey should be conducted of the areas that will be disturbed by logging activity. If, however, logging is to be done in such a manner (i.e., during the winter) that the ground will not be disturbed, a survey will not be necessary. Such a survey would determine the existence of any sites, their eligibility to the National Register, and the specific effects on them from the proposed activity. I have enclosed for your reference a list of archaeological consultants who have indicated an interest in performing such surveys. The archaeologist hired will need a map of the project area and an explanation of the kind of development proposed. Upon the completion of the survey and before work on the project begins, a copy of the survey results should be submitted to this office for final review.

If you have further questions or comments, please do not hesitate to contact Ms. Susan Hedin, Environmental Assessment Officer, State Historic Preservation Office, James J. Hill House, 240 Summit Avenue, St. Paul, Minnesota 55102, (612) 296-0103.

Thank you for your attention to cultural resources in your planning process.

Respectfully,

Russell W. Fridley
State Historic Preservation Officer

RWF:bh
ENCL

MINNESOTA CONTRACT ARCHAEOLOGISTS

Alan Brew
Department of Anthropology
Bemidji State College
Bemidji, Minnesota 56001
(218) 755-2801 or
(218) 551-8723

Commonwealth Associates
209 E. Washington Street
Jackson, Michigan 49201
(519) 788-3551 or
(519) 788-3561

James P. Gallagher, Archaeologist
Department of Sociology & Archaeology
University of Wisonsin - La Crosse
La Crosse, Wisconsin 54601
(608) 784-8042 home
(608) 785-8457 work
(608) 785-8463 work

Guy Gibbon
Department of Anthropology
University of Minnesota
Minneapolis, Minnesota 55455
(612) 376-3256

Christina Harrison
503 East 4th Street
Northfield, Minnesota 55057
(507) 645-9017

Vernon Helmen
Professor of Anthropology
Normandale Community College
9700 France Avenue South
Minneapolis, Minnesota 55431
(612) 935-1357 or
(612) 831-5001 ext. 245

G. Joseph Hudak
Archaeological Field Services, Inc.
421 South Main Street - Suite 421E
Stillwater, Minnesota 55082
(612) 439-6782 or 277-2737 work
(612) 436-7444 home

Richard Lane
Department of Anthropology
St. Cloud State College
St. Cloud, Minnesota 56301
(612) 255-3010
or
P.O. Box 687
St. Joseph, Minnesota 56374
(612) 363-8411

Richard Strachan & Kathleen Roetzel
Impact Services, Inc.
P.O. Box 3224
Mankato State College
Mankato, Minnesota 56701
(507) 388-4543

Mike Michlovic
Department of Anthropology
Moorhead State
Moorhead, Minnesota 56560
(218) 236-2632

Clifford W. Watson
Terra Archaeological Services
562 Holly, Apt. 202
St. Paul, Minnesota 55102
(612) 226-7660

Alan Woolworth
3719 Sun Terrace
White Bear, Minnesota 55110
(612) 429-4091

Michael L. Gregg
Research Director
University of North Dakota Archaeological Research
Anthropology - Archaeology
Box 8242, University Station
Grand Forks, North Dakota 58202
(701) 777-3009

STATE OF MINNESOTA

ENVIRONMENTAL QUALITY COUNCIL
CAPITOL SQUARE BUILDING
550 CEDAR STREET
ST. PAUL, 55101

October 20, 1977

Frank Knoke
Environmental Review Specialist
MN Department of Natural Resources
196 Centennial Office Building
658 Cedar Street
St. Paul, MN 55101

RE: Itasca State Park Pine Restoration

Dear Mr. Knoke:

The 30-day review period for the environmental assessment worksheet (EAW) on the above project ended on October 19, 1977. No objections to the EAW's determination that no environmental impact statement (EIS) is needed on the project were received. Therefore, the decision stands.

Final actions to approve or commence the project can now be undertaken.

Sincerely,

Charles R. Kenow

Charles R. Kenow, Coordinator
Environmental Review Program

CRK/dh

STATE OF MINNESOTA

ENVIRONMENTAL QUALITY COUNCIL
CAPITOL SQUARE BUILDING
550 CEDAR STREET
ST. PAUL, 55101

October 20, 1977

Frank Knoke
Environmental Review Specialist
MN Department of Natural Resources
196 Centennial Office Building
658 Cedar Street
St. Paul, MN 55101

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Sincerely,

Charles R. Kenow

Charles R. Kenow, Coordinator
Environmental Review Program

CRK/dh

minnesota department of health
717 s.e. delaware st. minneapolis 55440

October 4, 1977

Minnesota Department of Natural Resources
Parks and Recreation
c/o Frank Knoke
196 Centennial Office Building
St. Paul, Minnesota 55155

Gentlemen:

Enclosed is a copy of our report covering an examination of the Environmental Assessment Worksheet - Negative Declaration determining, within the area of the Department of Health's responsibility, the need to require an Environmental Impact Statement for Itasca State Park Pine Restoration, Clearwater and Becker Counties.

We do not intend to file objections to the Negative Declaration at this time. If you have any questions in regard to the information contained in this report, please write us.

Yours very truly,

Robert S. Banks, P.E., Supervisor
Environmental Health Impact
Analysis Unit

Enclosure

MINNESOTA DEPARTMENT OF HEALTH
Division of Environmental Health

Report on Environmental Assessment Worksheet (EAW) -
Negative Declarations

Project name Itasca State Park Pine Restoration, Clearwater & Becker Counties

Project proposer(s) Department of Natural Resources, Parks & Recreation

Address 196 Centennial Office Building, St. Paul, MN 55155

Responsible Agency or Person Department of Natural Resources, Parks & Recreation

Address 196 Centennial Office Building, St. Paul, MN 55155

Person in Responsible Agency (Person) to contact Frank Knoke

Date of Negative Declaration Notice in EQB Monitor 9/19/77

Deadline for filing objection 10/19/77

Date received 9/13/77

Date reviewed 9/29/77

Reviewed and submitted by C. M. Kanniainen, Public Health Sanitarian

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Scope - The examination of this EAW is limited to an evaluation of this project within the area of the Department of Health's responsibility to determine only the need to require an Environmental Impact Statement (EIS) pursuant to 6 MCAR §3.025 and does not cover any other rules nor limit later permit requirements and does not limit statutory authority vested in the Department of Health.

Conclusion - The Department of Health finds the action, as described in this EAW, to be in accord with the Negative Declaration Notice filed by the Responsible Agency or Responsible Person and does not intend to file objections at this time pursuant to 6 MCAR §3.028 B.1.

Comments -

Approved:

Robert S. Banks, P.E., Supervisor
Environmental Health Impact Analysis Unit

STATE OF MINNESOTA 3500

DEPARTMENT Natural Resources-Parks & Recreation **Office Memorandum**

TO : Jim Brooks, Acting Director
Division of Forestry

DATE: July 12, 1977

FROM : Don D. Davison, Director
Division of Parks and Recreation

PHONE: 6-2270

SUBJECT: Itasca State Park Vegetation Management Projects

We were informed by Gene Rowe, District Forester, that the field people are ready to schedule summer burns on some of the vegetation management projects in Itasca State Park. This memo is to authorize you to proceed with these burns whenever feasible during the summer. The burns we are to do are as follows:

(1) The Squaw Lake Project - This is the 200 acre research area under Dr. Henry Hanson that was logged about three years ago and needs to be burned again. It has been burned about two times.

(2) The Lagoon Area - This area was an experimental burn project by Gene Rowe within an old growth pine stand. The first burn was a ground fire that went through the old growth area successfully doing minimal damage to old growth pine trees. Gene informed us that there is a good crop of pine cones this year. The second burn would be interesting because of the seed crop and the two ground fires effect on these old growth pines.

All these projects are very important for us as we proceed into this biennium looking at the whole park for its vegetation management plan that we will be completing as instructed in the ORA of 1975. As you know, we have completed the project description for the pine restoration project on the southwestern portion of Itasca State Park. This project will be part of this total plan for the park. In the project we have two units that will be treated during this year. The first unit will need prescribed burning next summer and there is a possibility that the second unit will if tree removal is completed.

Please inform us as to if and when these requested burns for this summer will take place.

Thank you.

DDD:GLJ:sm
cc: G. L. Jensen
Milt Krona
Frank Knoke ✓
Regional Administrators
Don Carlson
Tex Hawkins

ADMIN 1000

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT Natural Resources - Forestry

TO : Art Keenan
Regional Forest Supervisor

DATE: 7-6-77

FROM : Jim Brooks, Acting Director

PHONE: 61486

BY: Robert Hance, Jr.

SUBJECT: Timber Sales in Itasca State Park

In order to keep the general public informed of the pine restoration project in Itasca State Park, the Division of Parks and Recreation has requested that we notice the timber sales involved in the EQC Monitor.

This can be accomplished simply by flagging the timber appraisal report which is submitted to the St. Paul office. The wording in red or other appropriate color should read, "Itasca State Park Sale - Notice in Monitor".

The Environmental Studies Forester will then complete the appropriate form to have the notice published in the EQC Monitor. The information will be published under the general interest category (MEQC 35 B) therefore the 30 day restriction does not apply.

Due to a change in the publishing of the EQC Monitor by the State Planning Agency there will be no charge to DNR.

JB:RH:bs

cc: Merlyn Wesloh
Don Davison
Frank Knoke
Willard West
Duane Moran
Eugene Wroe

ADMIN 1000

STATE OF MINNESOTA

DEPARTMENT State Planning Agency

Office Memorandum

TO : Frank Knoke
Environmental Specialist
DNR/Division of Parks

DATE: 24 August 1977

FROM : Charles R. Kenow, Coordinator
Environmental Review Program

PHONE: 8254

SUBJECT: Forest and Park Management Plans for Itasca

Recent discussion with the Environmental Review Program and our Outdoor Recreation staff, as well as the Park Division, have indicated the need to discuss the content requirements of park management plans. We would like to expand the previous discussions to include forest management activities in parks or general forest management plans which may be filed with the Board. Hopefully, we can meet within the next two weeks to discuss these items. In the meantime, in order to solve the immediate situation with the Itasca cutting plan for units 1 and 2, the following information deficiencies in the report are provided as you requested on the Pine Restoration project. This information should be provided to the Board before the August 30 Special Meeting.

1. Since review at this time will be primarily concerned with units 1 and 2, a more detailed description of these areas should be provided. This description should include existing vegetation, acreage, soil types, slopes, and water bodies present and known or expected wildlife.

2. The description should comment on which if any rare or endangered plant or animal species exist and describe the measures to be taken in preventing disturbance of the areas identified as "sensitive."

3. The plan should provide a concise statement of the purpose of the management program proposed and its relationship to the total park master plan. References to supporting studies should be by title, page, and paragraph not by volume.

4. Water Quality - figure 3 indicates numerous ponds and marshes in unit 2 and adjacent to unit 1. The plan only mentions felling away from swamps and on page 9, para. 2 indicates that "birch stands on lake side slopes may be cut or burned..." or might in other cases be reserved for aesthetic purposes.

   What control measures will occur on units 1 and 2? Who will make these decisions? What type of buffer zone if any will be provided on slopes draining to ponds and streams? What type of controls will be employed if herbicides are used? What aquatic animals

are present in these ponds? The report leaves all these questions to the reader's imagination.

5. Mitigation Measures - it is especially discomforting not to know who is actually responsible for assuring mitigative measures are enforced. Page 8, para. 3, states "An overseer should be employed to aid the district forester in the enforcement of regulations during cutting, burning, and planting operations. Other duties of the overseer might be: 1) marking treatment unit boundaries, buffer zones, control areas and sensitive areas."

   A management plan should affirmatively identify what state agency personnel will be responsible for assuring that mitigative measures are enforced. The plan not only leaves these measures vague, it also does not assign this responsibility.

6. Alternative Management Treatments - page 9, describes five site preparation alternatives in terms of cost only. Each alternative has a different environmental impact in terms of soil disturbance, nutrient loss, energy consumption, wildlife disruption, erosion potential, hydrologic changes and air quality.

   The plan should first describe these techniques so the public can understand what is being proposed and why. Secondly, it should discuss which are likely to be used on units 1 and 2 and why. Finally, it should discuss the impacts of these alternative management techniques and the control measures which will be employed to reduce these impacts on the natural environment and the park user. If herbicides may be used, the plan should say so. It should then discuss the need for its use and the control measures employed. ie. buffer drift zones, temperature and wind restrictions, rates of application, and effect on wildlife populations.

7. The plan does not address any traffic impacts relative to the location of haul roads, hours of operations, frequency, etc.

8. Air Quality - if controlled burning is utilized, how does this relate to state air quality standards in this area? When will burning occur? What controls will be employed and how large of areas will be burned? What impact will this have on park users?

9. The plan does not describe what regeneration methods will be used to restore the area to pine after logging.

10. If deer herds have in the past affected pine regeneration and are likely to be increased with the proposed cutting methods, then population controls are necessary. The plan should discuss the implications of increased hunting and the long term impact on the park. If this is a necessary management tool to accomplish the goals of vegetation restoration, it should be discussed and justified.

Overall, the plan like an EAW is a public disclosure document and a planning tool. It should be written in a layman's terms. In most cases, the opposition to forest management activities has been the lack of proper communication as to the benefits of alternative management techniques. In a state park where more than "one million visitor use days" occur annually, these points must be explained well.

If you have any questions on these comments, please contact me.

cc: Peter Vanderpoel
Joe Sizer
Tom Rulland
Roger Williams
Barbara Clark
Donald Davison
Vonny Hagen

ADMIN 1000

STATE OF MINNESOTA

DEPARTMENT Environmental Quality Board

Office Memorandum

TO : Dave Davison, Director
Division of Parks and Recreation, DNR

DATE: 25 July 1977

FROM : Charles Kenow CK
Environmental Review Program

PHONE: 8254

SUBJECT: Environmental Quality Board's Review of Timber Management Plans for State Parks

It has come to our attention that each of the management plans DNR is preparing for state parks includes a section on vegetation management. It is my understanding that some of the management plans propose timber harvesting for various purposes. I would like to remind you that the Environmental Quality Board (EQB) Rules require an environmental assessment worksheet (EAW) for any harvest of timber within a state park - unless the proposed harvest is included in "an annual timber management plan filed with the Council." (6 MCAR § 3.024.B.z)

Consequently, before any "action" is taken in a state park, (ie. timber harvest), the DNR must either file a timber management plan with the EQB or complete an EAW. If an EAW is completed, a decision on the need for an environmental impact statement (EIS) is made by the DNR. There is a 30 day waiting period from the date of publishing your finding in the EQB Monitor. No final decision to commence the action can occur until this time limit expires or an EIS is completed if one is required.

Copies of the EAW or management plan must be submitted to all EQB members and others on the official distribution list.

If you have any questions on this procedure, please contact Vonny Hagen of your department or me at the above number.

cc: Joe Sizer
Roger Williams
Tom Rulland
Vonny Hagen

ADMIN 1000 (REV. 4/77)

STATE OF MINNESOTA

DEPARTMENT Natural Resources-Parks & Recreation **Office Memorandum**

TO : Don D. Davison, Director

DATE: July 27, 1977

FROM : Frank H. Knoke
Environmental Review Specialist

PHONE: 4781

SUBJECT: Environmental Quality Board's Reivew of Timber Management Plans for State Parks

The memo from Chuck Kenow suggests that we may have to clear our plans with the Environmental Quality Council. I am not going to argue whether or not this is true. I feel we should file the completed plans with the EQC and notice all meetings in the "EQC Monitor."

This process will require about 25 extra plans. The advantages are that all State Agencies will look at the plans and if they have no problems, it may pressure State Planning into getting off our back.

Also by using the EQC process we will be noticing our plans through the official environmental review process.

I plan to meet with Chuck Kenow in the near future to see what he specifically needs.

FHK:hf

F.15 5800

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT: Division of Air Quality, MPCA.

TO : Don Carlson, Chief,
Section of Forest Environment Protection,
Minnesota Department of Natural Resources.

DATE: May 13, 1974.

FROM : Thomas M. Wilde, Pollution Control Specialist II,
Engineering & Enforcement Section, D.A.Q.,
Minnesota Pollution Control Agency.

TMW

SUBJECT: MINNESOTA AIR POLLUTION CONTROL REGULATION APC-8: Open Burning Restrictions.

Since some confusion still exists amoung many DNR commissioned town fire wardens, this Agency is submitting the following information. The confusion may be a result of conflicting or unclear statements issued by various governmental agencies dealing with the burning ban in one form or another. We hope this memo will eliminate some of the confusion.

OPEN BURNING PERMITS MAY NOT BE ISSUED FOR THE FOLLOWING:

1. Garbage.
2. Rubber Tires or Plastic Materials.
3. Dump-ground Burning.
4. Refuse generated by Commercial Firms, Businesses, Public or Private Corporations.
5. Automobile Bodies or any form of salvaging such as wire, electric motors, etc.
6. Railroad Ties.
7. Animal Wastes.
8. Buildings or any other structures unless the building or structure presents an immediate and serious fire hazard in forest protection areas.
9. Construction Debris such as palates, scrap-lumber, cardboard, shingles, tar paper insulfation, packaging material or any similar material.
10. Animal Carcasses unless recommended as a sanitation or disease-control method by the Livestock Sanitary Board.

OPEN BURNING PERMITS MAY BE ISSUED FOR:

1. Trees.
2. Brush.
3. Slash.
4. Grass, weeds and similar vegetation.
5. Crop Redidue.
6. Paper, cardboard and similar dry material generated from homes within the township only.
7. Recreational fires such as cooking fires, camp fires and ceremonial fires.
8. Forest and game management activities recommended by DNR, Department of Agriculture of U.S. Forest Service.
9. Eliminating fire hazards occurring in forest protection areas.

- -

The following definitions are offered in order to assist DNR personnel in interpreting the meaning of certain words contained in this memorandum:

GARBAGE: Garbage includes items such as meat packaging, food scraps, moist & wet paper resulting from the wrapping, serving, draining and disposal of food and food scraps. The intent of the legal definition of garbage is to include high-moisture content organic material. Garbage would not necessarily include cardboard or paper products such as cereal boxes unless such materials become soaked with drainings from food or food-scraps.

ANIMAL WASTE: Animal Waste is animal manure.

REFUSE: Refuse is discarded solid material including leaves, rubbish and paper. In parts of Ramsey, Forest Lake and Ham Lake townships in the Metro area, and Alexandria township in Douglas County, the MPCA burning ban applies to leaves, rubbish and paper. Therefore, no permit can be issued for burning these items in those parts of the townships.

DUMP: A dump is a disposal site where refuse, garbage and other wastes are indiscriminantly dumped with no thought given to possible ground-water pollution, fire protection, insect and rodent control.

SANITARY LANDFILL: A disposal site using engineering principles to minimize hazards of water pollution,insect and rodent breeding. Waste is compacted and buried daily in thin layers. Dumps are being phased-out in favor of the more esthetically pleasing sanitary landfill concept.

In general, DNR issues permits to assist in fire prevention and denies permits during high fire danger periods as a control measure. The MPCA issues permits to insure that "necessary" burning be done under conditions that would minimize nuisance smoke, safety and fire hazards. While both types of permits are issued for entirely different reasons, both can be issued with the same set of restricting guidelines attached. To this extent, the DNR and the MPCA are presently studying the concept of a combined permit to encompass both sets of restrictions.

TMW/rmg
copies: T. Kosa -&- R. Starn, Engr. & Enf., DAQ, MPCA.
Edward M. Wiik, P.E., Dir., DAQ, MPCA.

Rich Sandberg — attached is executed copy of Memorandum EG 4/16/75

April 16, 1975.

Mr. Robert L. Herbst,
Commissioner,
Minnesota Department of Natural Resources,
Centennial Office Building,
St. Paul, Minnesota. 55101.

Dear Mr. Herbst:

Enclosed herewith is the original copy of the Memorandum of Understanding regarding Issuance of Open Burning Permits signed by Grant J. Merritt, Executive Director of the Minnesota Pollution Control Agency on April 15, 1975 and by you as Commissioner of the Department of Natural Resources on March 15, 1975.

We will keep the executed copy in our file of this Memorandum.

Very truly yours,

EDWARD M. WIIK, P.E.
Director
Division of Air Quality

EMW/xxg
copies: Ray Hitchcock, DNR.
Grant J. Merritt, Exec. Dir., MPCA.
L. M. Richie, Deputy Dir., MPCA.
[illegible], MPCA.
Tibor Kosa, P.E., Engr. & Enf., DAQ, MPCA.
[illegible], Engr. & Enf., DAQ, MPCA.
[illegible] Regional PCA Office.
J. [illegible], [illegible] Regional PCA Office.
R. Hammesa, Fergus Falls Regional PCA Office.
L. Shaw, Brainerd Regional PCA Office.
L. Johnson, Marshall Regional PCA Office.
R. Hamilton, Metro PCA, Roseville.

Enclosure - 1.

MINNESOTA POLLUTION CONTROL AGENCY

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

MEMORANDUM OF UNDERSTANDING

ISSUANCE OF OPEN BURNING PERMITS

Agreement between the Minnesota Pollution Control Agency, hereinafter referred to as the MPCA, and the Minnesota Department of Natural Resources, hereinafter referred to as the DNR.

WHEREAS the DNR pursuant to Minnesota Statutes Section 88.02 through 88.22 is responsible for the prevention and control of forest fires, and

WHEREAS the MPCA under Minnesota Statutes, Chapter 116, and Minnesota Air Pollution Control regulation APC-8, entitled "Open Burning Restrictions" is responsible for the control of air pollution and has banned open burning in populated areas of the State, and

WHEREAS the MPCA and the DNR presently issued separate open burning permits, and

WHEREAS a joint permitting program would facilitate closer cooperation and coordination of permit issuance activities, promote better enforcement of State statutes and regulations, and provide the public with better service and a clearer understanding of the necessity of obtaining open burning permits,

THEREFORE, it is agreed that:

1. A standard open burning form shall be used by the MPCA and the DNR;

2. A list of persons authorized to issue open burning permits shall be compiled and exchanged by the DNR and the MPCA annually on March 1st. If changes of issuing personnel are made by either agency, the other agency shall be advised expeditiously;

3. Persons authorized to issue open burning permits by the DNR and the MPCA will issue the permits in accordance with the regulations of both agencies;

4. In designated fire protection districts persons authorized by MPCA to issue permits must also have been approved as township fire wardens by the DNR.

5. The DNR shall notify the MPCA and its authorized permit issuing authorities of time periods during which open burning is restricted;

6. The MPCA and the DNR shall conduct an educational program to inform persons involved in the issuance of open burning permits, of all applicable rules, regulations and procedures.

7. The Agreement herein executed between the DNR and the MPCA may be terminated immediately upon written notice by either party.

MINNESOTA POLLUTION CONTROL AGENCY

By _____
Director, Pollution Control Agency

Dated this 15 day of April 1975

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

By _____
Commissioner of Natural Resources

Dated this 25 day of March 1975

ENVIRONMENTAL IMPACTS

The goal of the Pine Restoration Project is to restore to the project area, as nearly as possible, the plant communities that occupied these sites in presettlement times. To achieve this goal the present canope on selected sites must be removed. The pine species that formerly occupied the sites will be land planted in a semi-random fashion. The competing vegetation that has invaded and dominated these sites in postsettlement times must be held in check for pine establishment to be successful. This goal is in agreement with the management goal stated at the park's inception and is consistent with the present management goal to preserve and protect the plant communities so appreciated by the park's founders.

The pursuit of the project goal will by design have certain impacts on the present vegetation. Where logging and other postsettlement activities have seriously altered the vegetation presettlement communities cannot be restored without traumatic manipulation of the vegetation comparable to the powerful natural forces that shaped the prewhite man communities. The original pine types were maintained and renewed by intense fires that swept over the area.

The treatments are designed to impact and suppress the transient hardwood and brush that have invaded former pine sites. Undesirable impacts on plants and animals will be minimized through careful adherence to standard constraints and restrictions of treatment operations and the enforcement of additional restrictions outlined in this report.

SOILS

The soils of the Itasca moraine are varied. They include the Marquette, Menahga, Nikish, Beltrami and Rockwood series. The vegetation on any given site generally reflects the soils on the site if we exclude man's interference. Generally, northern hardwoods are found on heavier, finer textured soils while pine and transient hardwoods (aspen) are found on sandy, coarser soils.

The Marquette soils are medium to coarse-textured soils with high proportions of sand and gravel. This outwash soil is a droughty media and is characterized by mixed pine and aspen birch associations.

The Menahga soils are also sandy, droughty, poorly developed soils that seldom support species other than the drought-enduring jack pine.

The Nikish and Beltrami and Rockwood series are heavier, finer soils that generally suppor northern hardwoods.

Generally sandy loams to loamy sands dominate the project area. These soils are not easily compacted or eroded. The heavier soils and organic soils will generally be reserve areas and therefore untreated.

Roads shall be constructed to minimize impact to soils. Old roads will be used where feasible and environmentally sound. Steep grades will be avoided.

Generally stopes are less than 25 percent, but there they are greater heavy machinery will be excluded.

Vigorous sprouting of shrubs and aspen serves to protect these soils from past harvest erosion. Brush is almost invariably found around water bodies and prevents overland inwash.

ENDANGERED SPECIES

Pretreatment animal and plant census studies (1970) have been conducted by University of Minnesota station biologist David Bosanka and other University and Division of Parks personnel under the direction of Tex Hawkins, regional parks naturalist, and Jerry Jensen, head of parks natural programs.

No endangered or rare animals species have been found in the area. However, a large "reserve" zone has been established to protect the heron rooking at Kirk Lake (see map).

Some unusual orchids have been found in several bogs. Consequently these areas have been declared "sensitive areas" and 50 to 200 feet buffer strips have been created to protect these plant communities.

The Project overseer and station biologist will conduct ongoing research and surveilance in this area of environmental concern.

WATER QUALITY

Twenty-five years of intensive forestry and biological research at Itasca not exposed a perceptable impact to water quality following treatments such as have been described in this report.

Of special note is William Patterson's unpublished (College of Forestry) study of water quality following a 200 acre cut and harn. The operations on this Squaw Lake site resulted in no detectable impact on the quality of water coming off this watershed.

In the project area for smaller operational units will be treated. Machinery will be kep off erodable slopes and buffer zones will be created for herbicide treatments as discussed in separate sections of this report.

The grounds and marshes of the treatment area do not support fish populations. Many of these bodies went dry in the drought of 1970 and most went by during the 1930's drought.

Station biologist, David Bosanka has monitored beaver activity in the area in 1975, 1976 and 1977. He expects restoration treatments to improve beaver habitat.

Wetlands shall not be used for winter haul roads. Any trees filled on wetland shorelines will be filled away from the water and operators will be prohibited from depositing materials lowlands.

Often steep shorelines formerly supported dense pine stands and such sites offer an excellent opportunity to reintroduce pine. Thus trees may be filled

on such sites but would have to be filled by hand and winched off the site with cables.

Some birch on former pine sites along lakes will be reserved where aesthetically desirable. The overseer will have to make on the spot decisions as to which sites would be preserved and which treated. These decisions will be finalized in consultation with the regional parks naturalist and the district forester. Natural brush buffer zones, beaver halos, exist around most water bodies in the project area and will prevent infiltrates from entering the water. In all cases, the above mentioned man designed buffer zones will be required.

HERBICIDE APPLICATION

Herbicide applicators will be required to operate within the restrictions and constraints set by the Minnesota Department of Natural Resources and the Bureau of Environmental Planning and Protection.

1. No herbicide shall be applied within 50 feet of open water and no herbicide shall be spray-applied within 100 feet of water. On slopes exceeding 30 percent the width of the no treatment zone will be doubled (100 and 200 feet respectively).

The more selective land application of herbicides (stamp drench, individual tree injection basal spray and field application) will be excluded from a 50 foot buffer strip around open water.

An unsprayed buffer zone of 100 feet will be left where treatment areas border private property. The buffer zones shall apply to all "sensitive" and "reserve" areas.

2. The maximum allowable air temperature for treatment will be 80° farenheit. High volatile esters will not be used.

3. Spray treatments will not be allowed when wind velocities reach or exceed 5 miles per hour.

4. Treatment areas shall not exceed 40 acres for any single treatment.

5. Areas to be treated shall be posted well in advance.

6. Applicators shall practice standard safety precuations. Applicators shall be briefed on safety practices and shall be monitored.

7. E. P. A. and Minnesota state recommendations for pesticides handling and disposed shall be adhered to.

The purpose of herbicide applicatns would be to suppress the vigorous sprouting of aspen. (Populus trumuloides and Pigradidentata) and shrubs (principly Corlus cornuta) which shade out pine reproduction. Also these treatments would provide fuel for subsequent barns if control burning is necessary.

It is not necessary to use concentration of herbicides that would complete elimination competition to effect release of the pine reproduction (Rudolf and Watt 1956).

would most certainly slam the progress of returning the forest land to its original state. Regeneration successes would be spotty and man's areas would have to be reprepared and planted several times.

2) Hand release with severed axe or power equipment is another alternative to provide low release for conifers. The great number of stems per acre in the project area would inflate the cost of such operations five to fifteen times the cost of herbicide or five release. Hand cut shrubs and aspen vesprant quickly and would overtop conifer plantings in one year. Thus repeated cutting would be required.

Cutting of individual stems using land labor increases the opportunity for personal injury through the misuse of axes and chainsaws.

High costs, poor control of sprouting and personal safety makes hand release a less desirable alternative to herbicide use.

3) Site preparation with heavy equipment has a greater impact on soils and aesthetic values. It is more expensive than herbicides as a site preparation tool and cannot be used at all for conifer release.

4) Burning is an inexpensive site preparation tool that has little impact on soils and water and though wood is a relatively clean-burning fuel it does add large volumes of particular matter to the air. Fire cannot be used to release conifers.

Table 2 presents an overview of release methods.

ALTERNATIVES TO HERBICIDE USE

1) Nouse - Past experimentation at Itasca demonstrates that the establishment of pine is almost impossible without herbicide application (?). Nonuse of herbicides

TRAFFIC IMPACTS

The ecological impact of treatment related traffic will be minimized by:

1) The road construction restrictions called for in the plan.

2) Landing locations shall be prescribed.

3) Hand road locations shall be prescribed and have already been designated for areas one and two.

4) Traffic will be excluded during the spring break up period.

BURNING

Prescribed burns here to for converted in the park have been well received by visitors and the local community. Care has always been taken to educate the public in the role of fires. Similar efforts will continue in the future.

Visitor use of the project area is almost entirely absent. Because of limited road access to the area, visitors can easily be excluded from the area during burning.

Individual burns shall be limited to 40 acre tracts.

Burning shall be scheduled during burnable conditions. Slack conditions usually occur in spring and fall.

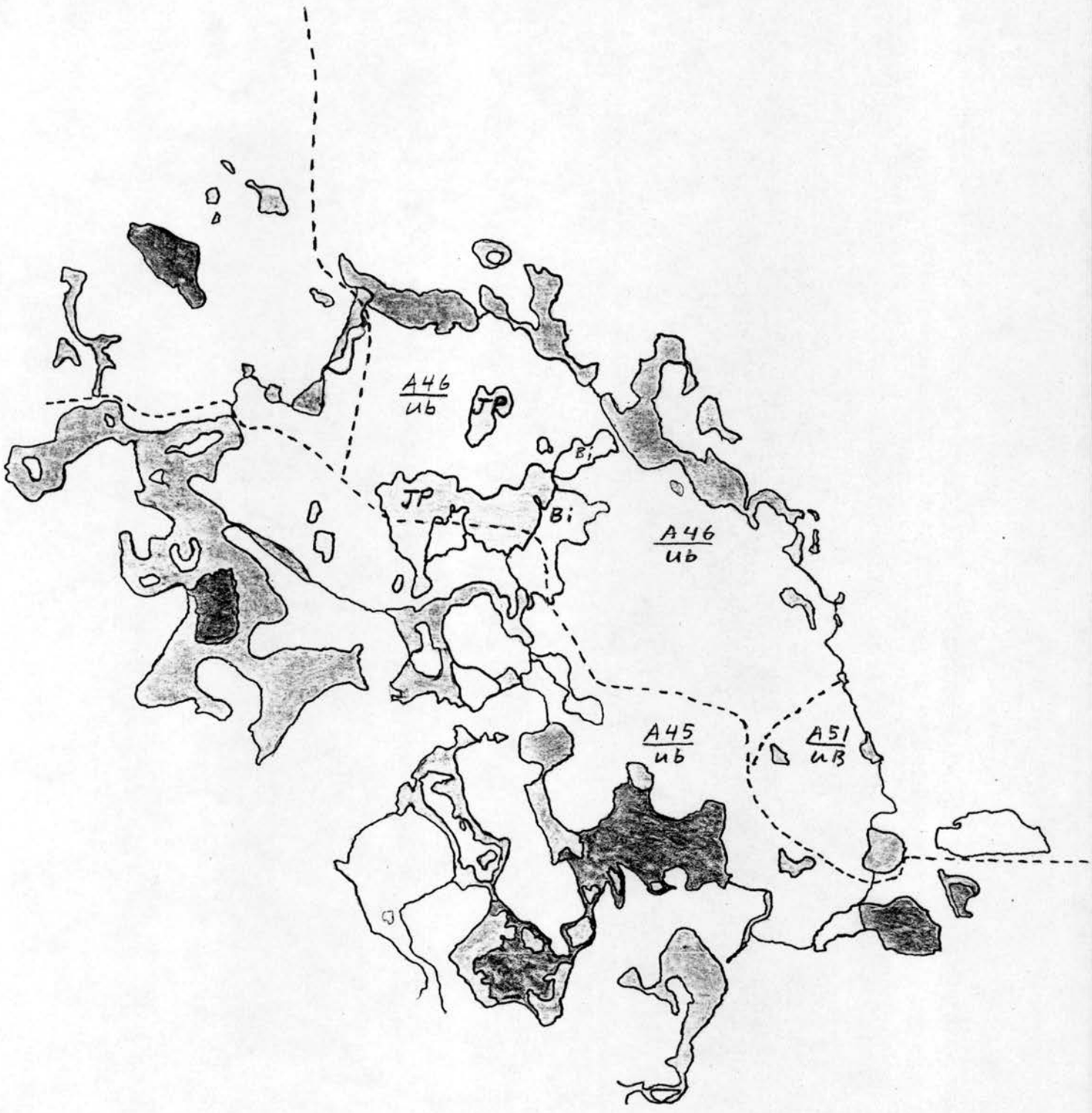
Burn boundaries will in most cases follow natural low and wetlands.

Where natural boundaries will not effectively limited fires, temporary fire LINES will be constructed to provide access.

DEER CONTROL

Cutting areas will undoubtedly be preferred hunting areas and it is hoped that this will reduce deer damage to young conifers.

Battery operated, single wire electric fences also offer a safe reliable method of deer exclusion.

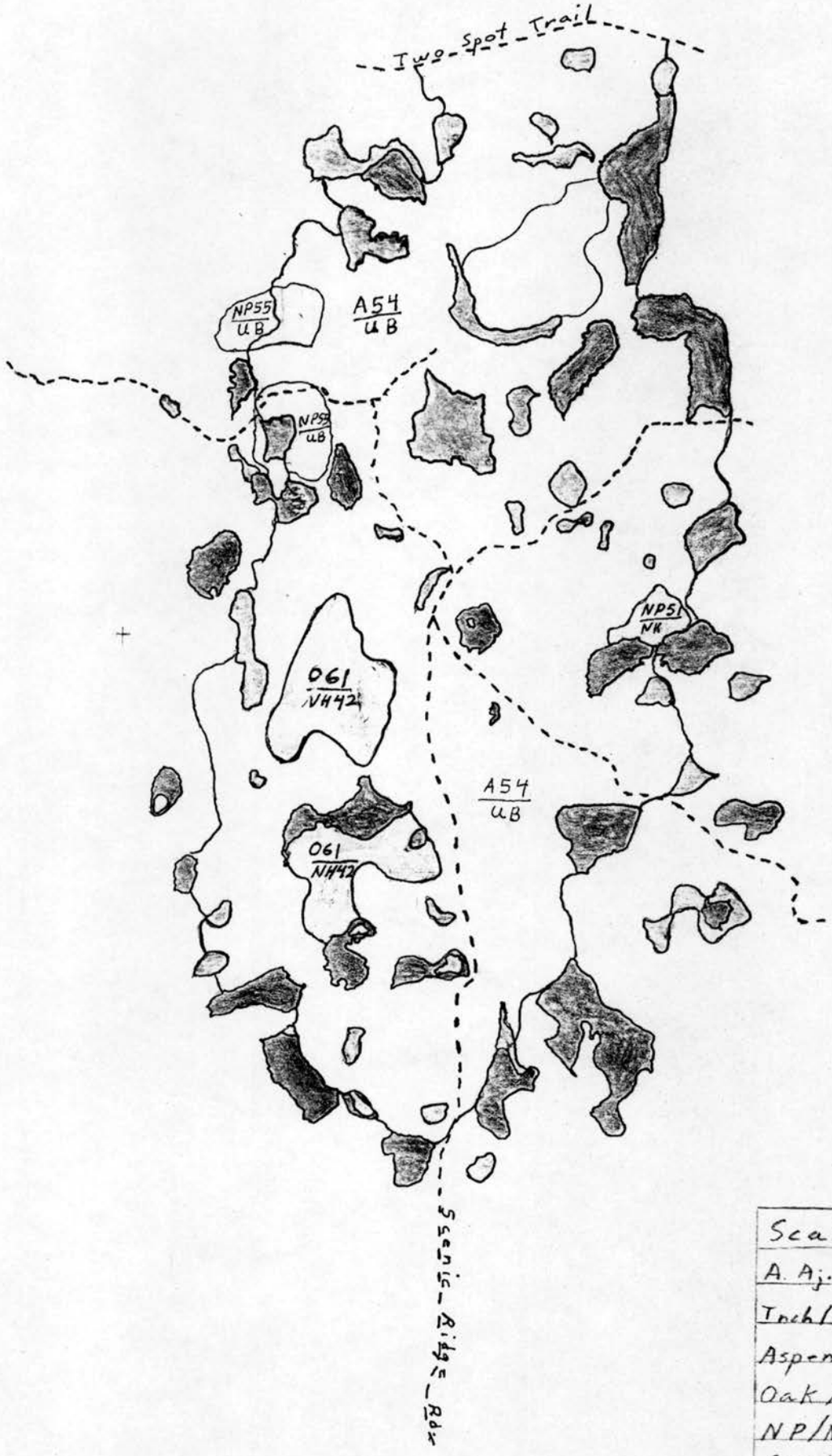


Scale 1:12000

Tot. ac: 191.01 a

Reserved: 22.04a

Treated: 168.97 ac



Scale:	1:12000
A. Aj. F:	0.529
Inch/mi.:	5.5
Aspen ac:	263.38 - rds
Oak/NH:	21.69
NP/NH:	2.12
Section:	19

ITASCA STATE PARK

PINE RESTORATION PROJECT

Short Project Description

Prepared for the Department of Natural Resources

Division of Parks and Recreation

by

Raymond F. Moritz

1976

ITASCA STATE PARK

PINE RESTORATION PROJECT

Short Project Description

The Pine Restoration Project for Itasca State Park arose out of long concern over the deterioration of the very amenities the establishment of the park was meant to preserve. Concern about attrition to the seral pine communities and the scarcity of young pine stands was voiced almost from the park's inception in 1891. In earlier years some planting was attempted with only partial success.

Today less than a fifth of the park's acreage is mapped as pine. This is far less than existed in pre-settlement times (Figures 1a and 1b). Logging, frequent and intense fires of the settlement and logging periods, subsequent fire suppression, the buildup of excessive populations of porcupine and deer as a result of predator control and prohibition of deer hunting, and introduction of white pine blister rust have all discriminated against the pine types and their reproduction in the park. Of the surviving pine stands one-half of the red pine (Pinus resinosa) and more than eighty-five per cent of the white pine (Pinus strobus) are over 200 years old and subject to heavy mortality. The once common jack pine (Pinus banksiana) type, ecologically fire-dependent, is now reduced to only a few small stands. Because of the short life expectancy of jack pine, the remaining stands are now literally falling apart. Overmature trees are more subject to insect attack, disease, and windthrow. Research has demonstrated that attrition of the old growth pine is accelerating.[1]

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[1]For a more detailed discussion of the ecological trends of Itasca vegetation the reader is referred to "The Ecology of Upland Forest Communities and Implications for Management in Itasca State Park, Minnesota," Univ. of Mn. Ag. Exp. Sta. Bull. 298, 1974.

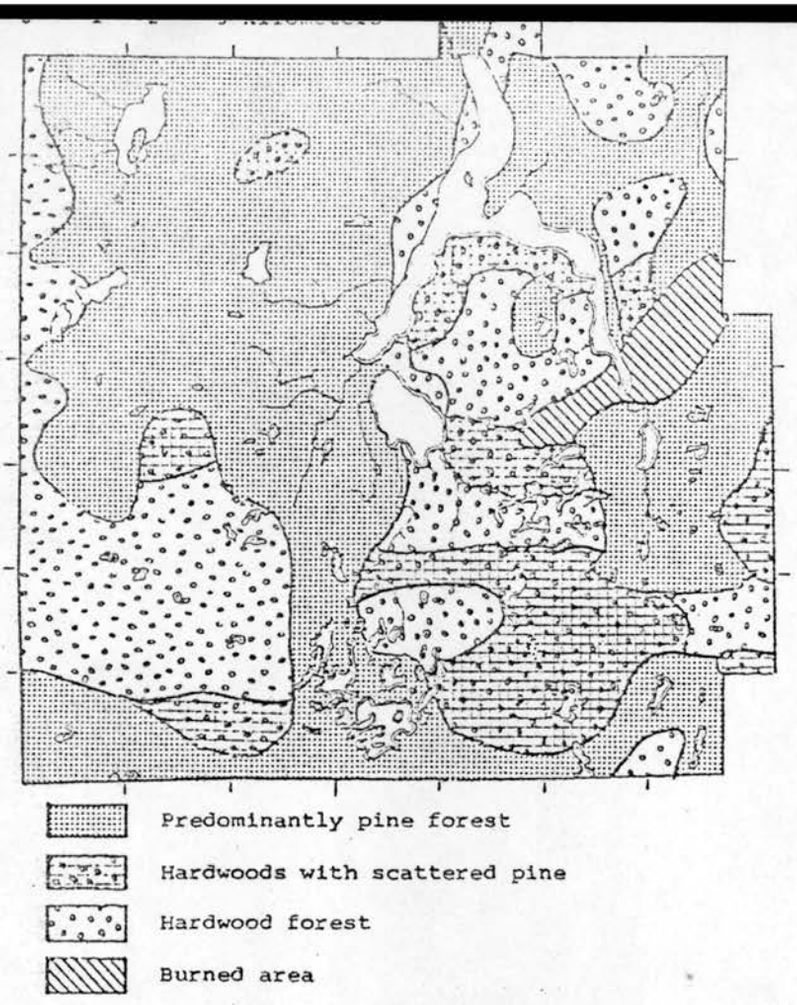

Figure 1a. This is the forest cover of Itasca State Park as reconstructed from the general vegetation descriptions in the field notes of the land survey, 1875-1879 (after Frissell, 1971).

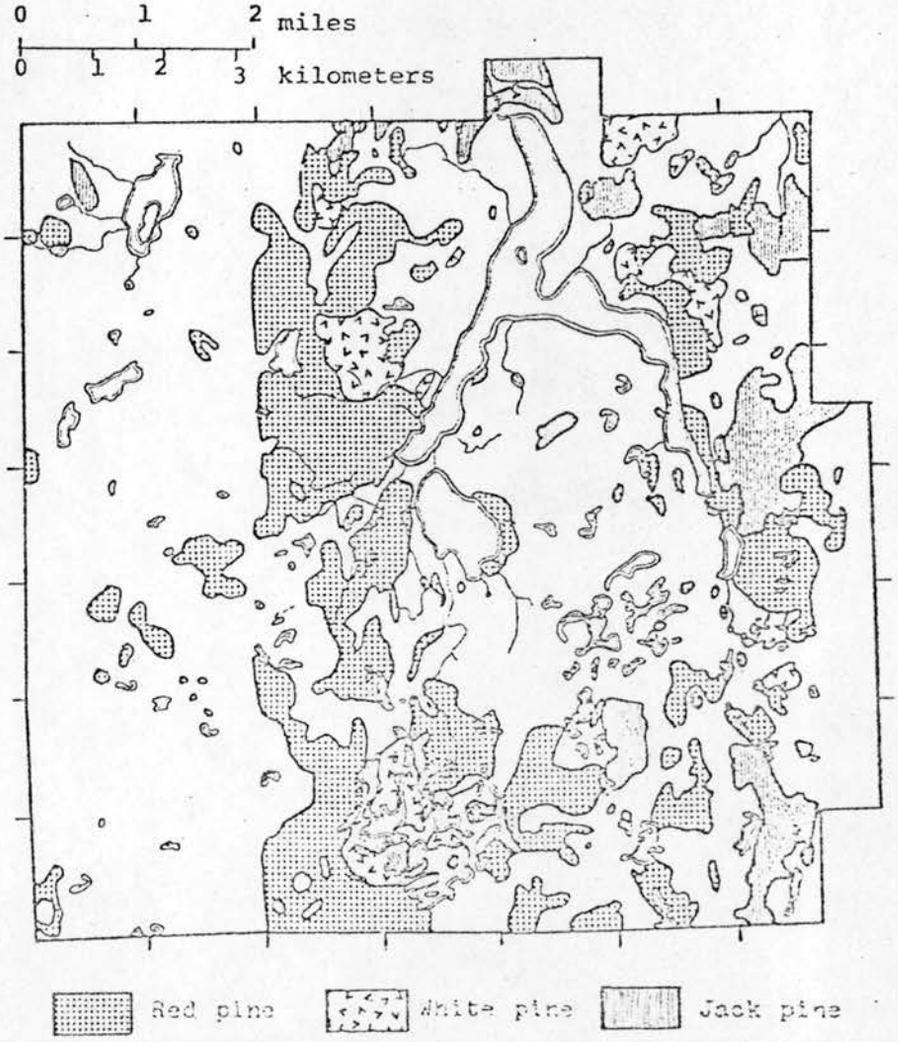

Figure 1b. Here is the distribution of pine forest in Itasca State Park in 1966 (after Meyer, 1966 and Frissell, 1971).

A long history of research and cooperative monitoring of the park's vegetational status led to a joint proposal by the University of Minnesota College of Forestry and the Minnesota Department of Natural Resources to restore pine forest to certain areas within the park. In 1964 a major research project was initiated:

1. To investigate the history of the park's vegetation;
2. To examine present forest stands to determine species and types, their ages, conditions, regeneration patterns, and other characteristics;
3. To determine future changes resulting from ecological succession under present protection management;
4. To evaluate park users' preferences and reactions to various management activities such as burning, logging, use of herbicides and planting, and the resultant administrative problems created;
5. To investigate the possibilities of recreating the pre-white man forest. (Hansen, 1974)

Most aspects of this project have now been completed. S. S. Frissell did an exhaustive work on the fire history of the park in 1968. Norman Aaseng documented the logging history for the area within the present park boundaries. M. P. Meyer prepared a cover type map for the park from 1966 aerial photographs. Visitor preferences and reaction to active vegetation manipulation were surveyed by Klukas, Duncan and McCool. H. L. Hansen and others have established fourteen experimental areas testing various management techniques for the restoration of pine.

In recognition of the different management objectives appropriate to different areas of the park, a plan for dividing the park into six management zones, with different management goals for each zone, has been developed (Figure 2). The Pine Restoration Project described here is located in Zone 5, the Developmental Management Zone. In 1976 the Department of Natural Resources researchers made an intensive study of this area with the following objectives:

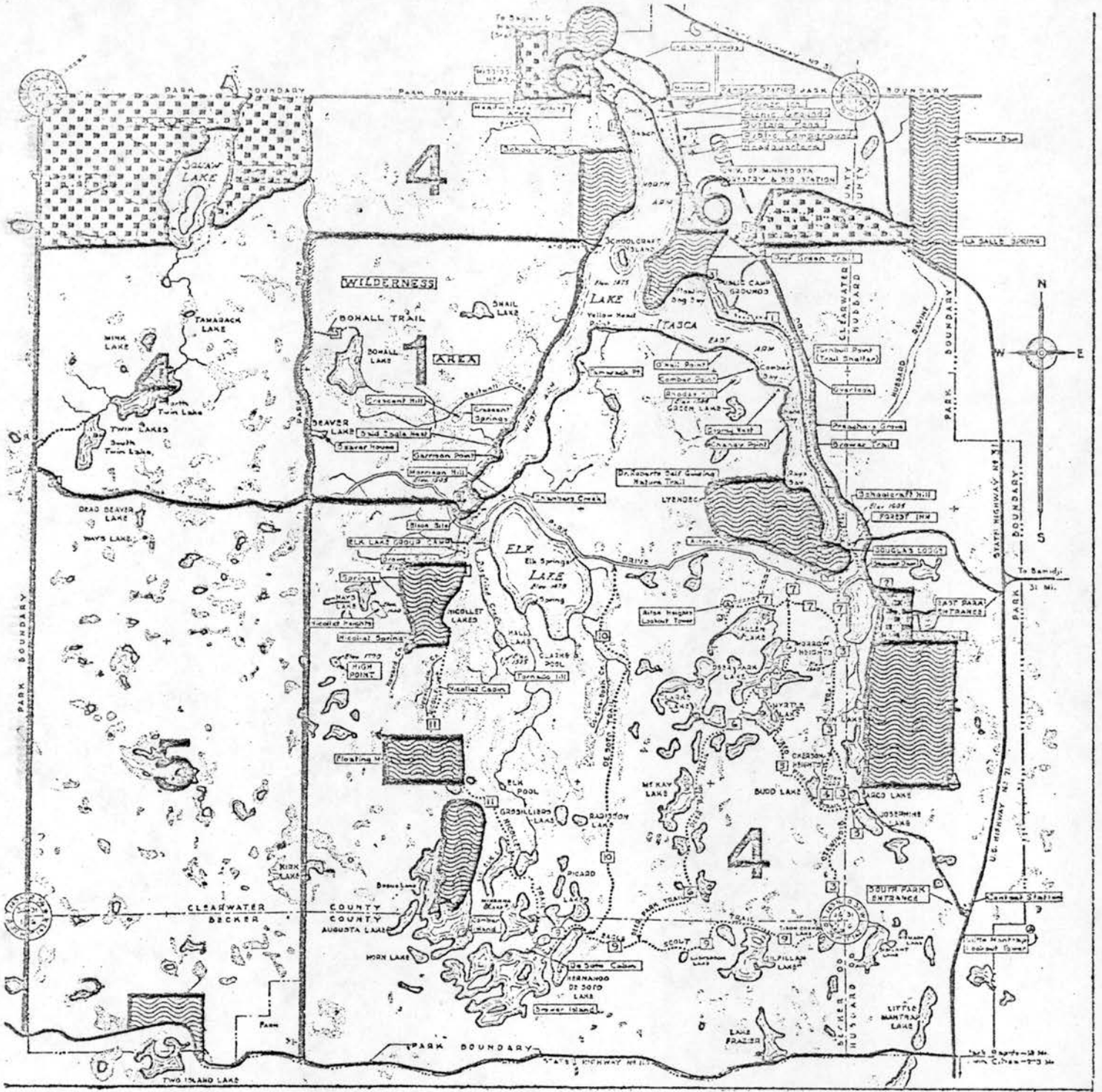

Figure 2.

Itasca State Park Management Zones,

Provisionally recommended June 26, 1970

1. Mapping of the old growth pine forest by examining cut stump patterns and densities;
2. Identifying sensitive areas where vegetation or wildlife values might be irrevocably altered by active treatment;
3. Delineation of northern hardwood areas;
4. Mapping of old logging roads, lumber camps, cabins, and other historic areas;
5. Vegetation analysis;
6. Location of natural fire barriers;
7. Delineation of fifteen treatment units.

The Developmental Management Zone has been identified as having had the greatest disturbance. It was annexed to the park after being almost completely cut over and repeatedly burned. Consequently, the original pine areas in the zone converted to aspen, birch, brush, and other transient types. It is hoped that the application of ecological knowledge and management techniques tested over the past 25 years will restore this zone to its pre-settlement condition as faithfully as possible.

Treatment Units

There are fifteen treatment units, one for each of the 15 years of the management plan. (Figure 3) Unit number 9 is divided into two sub-units 9A and 9B. It was originally thought that each of these sub-units would have unit status but the small treatable acreage in this area suggested the fusion of the two.

The unit boundries were designed to follow natural fire breaks: slopes, ridges, lakes and swamps. The units were, as near as possible, made equal in size (in terms of treatable acreage).

Prior to the establishment of the unit boundries several areas were excluded from treatment either to leave the existing community structure as it has developed or to protect sensitive plants or wildlife areas. These areas are indicated with a slant hatching in Figure . Exclusion from treatment does not mean that fire should be forever excluded from such areas. The exclusion zone on the east border of the Project area, in section 32, was established as a buffer zone for a heron rookery at Kirk Lake. The red tinted areas in figure one are sensitive areas from which treatment is to be excluded. These areas were located and delineated by the 1976 research team with the help of the Department of Natural Resources Division of Forestry cruisers. The criteria for the establishment of an exclusion areas were:

1. areas with rare or sensitive plants or plant communities
2. areas where wildlife would be irrecoverably disturbed by treatment operations.
3. areas that have succeeded to and are currently dominated by "climax" hardwoods.
4. areas where coniferous communities sensitive to treatment should be maintained.

5. areas left to develop as they are to promote the vegetational variety that existed in pre-settlement times.

The sequence of units to be treated was determined on the basis of several factors.

1. The age, health and vigor of the pioneer hardwoods now dominating the area. To reduce treatment costs and achieve the most desirable conditions for restoration it is expedient to treat the oldest, most decadent units first.
2. We have attempted to avoid treating contiguous units in successive years to create variety and avoid large blocks of treated land for aesthetic purposes.
3. Treatments have been timed to coincide with concomitant wildlife, ecological, and palynological studies.
4. Accessibility to treatment units has also been considered in the ordination.
5. Current harvesting operations in the White Earth State Forest to the west of the project area have called for some postponement in the treatment of bordering units.

The unit boundaries, sizes, ordination, and exclusion zones are not unalterable. The experience acquired during the early years of the project may suggest changes in the initial plan. Buffer zones or exclusion zones may be established or old zones altered to break up the treatment units into sub-units or to preserve newly found sensitive areas. Ecological and climatological phenomena now unforeseen may render decisions made today obsolete. Consequently, planning should not be cast in bronze, but maximum flexibility should be maintained within the basic framework.

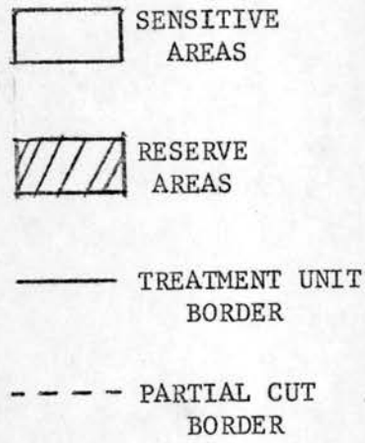

Figure 3. Treatment Units of the Development Management Zone

Treatment Restrictions

Small clearcuts of transient types will be required on sites to be reconverted to pine types. Such treatments are necessary to open the canopy for the shade-intolerant pine, for the suppression of competing vegetation, and for the reduction of fuel loads for subsequently prescribed burns. These small clearcuts and partial cuts will be conducted on approximately three-fourths of the project area (Table 1).

Cutting regulations and restrictions are designed and shall be imposed in part or entirely to best achieve the project goal and protect amenities. Compliance with restrictions and requested operations will amount to additional harvest costs for the timber operator and therefore should be discounted from stumpage fees. Discounts will be set by the appraiser and listed in the timber appraisal report.

Regulations and Restrictions:

1. Clear-cut all merchantable timber as indicated in the appraisal report;
2. Fell trees away from swamps;
3. Utilize aspen and birch to 4" top diameter or less;
4. Certain areas shall be reserved from treatment and so indicated in the appraisal report;
5. Some stumpage may be excluded after harvest operations have begun;
6. Non-merchantable trees of non-reserve species shall be cut or pushed down and flattened to facilitate burning;
7. Cutting of non-commercial stands may be required;
8. Limbing can be done where the tree is felled, but topping must be done at a convenient site and the tops pushed into piles for burning;
9. Slash shall be flattened with a skidder or the like and kept out of swamps;
10. Slash shall be removed from reserve pine stands and kept away from pine tree bases;

11. Stumps shall not be higher than six inches from the ground, or stump heights shall be regulated for given conditions;
12. Roads: all shall be to minimum specifications:
    a) Main haul roads will be set up by the Divisions of Forestry and Parks. No deviations will be allowed without permission;
    b) Road construction debris shall be shoved well off the road and flattened. None shall be shoved into swamps or drainage ways;
    c) Roads shall be constructed so as not to impede drainage;
    d) Truck turnouts for passing will be marked out along access roads;
    e) Minor maintenance and snow removal will be the responsibility of the timber operator;
13. Timber landings will be located a minimum of 200 feet off the main haul road, according to the Forester's directions and to the minimum Division of Forestry specifications;
14. Decible maximums for equipment may be imposed;
15. Any solid waste or equipment residue must be kept picked up and a garbage can provided for this purpose;
16. Oil from equipment oil changes must be drained into a receptacle for removal from the park;
17. All buildings and equipment must be removed from the permit area within the specified 90-day period;
18. Time of day or day of week or season for cutting may be restricted;
19. If there is some doubt or question about some environmental problem, the operator is requested to contact the District Forester at the Itasca Ranger Station.

Silvicultural Treatments

The purpose of silvicultural treatments is to secure the best possible conditions for restoring the area to pre-settlement community types. These types include:

1. small, even-aged stands of red pine and jack pine;
2. stands of mixed red pine, white pine, and jack pine;
3. stands of jack pine and red pine mixed with seral hardwood species;
4. pure stands of seral hardwood species;
5. scattered white pine mixed into red pine groves;
6. white pine mixed with other seral species;
7. some limited stands of pure even-aged white pine;
8. stands of white pine scattered among mesic northern hardwoods;
9. pure northern hardwood groves;
10. upland brush;
11. lowland brush;
12. lowland conifers, etc.

It must be kept in mind that the primary purpose of treatments is neither the collection of stumpage fees nor the fulfilling of local industrial needs. Depending on the assessed value of the timber and the restrictions placed on cutting, it may be necessary to discount stumpage even to zero to obtain the desired site preparation and to protect fragile plant associations.

An overseer should be employed to aid the district forester in the enforcement of regulations during cutting, burning, and planting operations. Other duties of the overseer might be:

1. Marking treatment unit boundaries, buffer zones, control areas and sensitive areas;
2. Brushing out fire breaks;

3. Cruising and marking the next year's treatment unit;
4. Coordinating wildlife studies with treatment operations;
5. Aiding the district forester in the supervision of cutting, prescribed burns, and other treatment activities;
6. Conducting silvicultural experiments.

Pine and mesic hardwood stands may be thinned and ground fired to facilitate natural or artificial regeneration.

Birch stands on lake-side slopes may be cut or burned even if not merchantable because such sites offer good opportunities for pine regeneration. Such areas might in other cases be reserved for aesthetic purposes.

It might be advantageous to brush out some swamp and lake-side brush areas where it would be difficult to use prescribed burning.

Prescribed burning as a site preparation tool is not always successful in the Itasca area. Often conditions are too hazardous to chance a prescribed burn. At other times conditions would cause the burn to be too cool to be effective. The aspen root web in Itasca has built up to the point where it offers fatal competition with red pine and jack pine. White pine, spruce, and balsam do better in competition with aspen suckers. Thus, back-up systems of competition suppression and site preparation must be considered.

Estimated costs for the various alternatives in site preparation in 1976 dollars are:

Type of Treatment:	Cost/Acre:
Mechanical (hand tools)	$50-$75
Chopping or brush hooks	$60-$70
Clearing (D8 Caterpillar)	$40-$200
Raking	$8-$12
Burning (per burn)	$2-$4

Type of Treatment (con'd):	Cost/Acre (con'd):
Herbicide	
Aerial spray	$10-$20
Ground spray	$30-$70
Basal spray	$50-$75
Hand injection	$30-$50

Recent public concern about aerial- and ground spray-applied herbicides might make stump drench methods or individual tree injection desirable alternatives (see Addendum).

Stump treatment is used to prevent root suckering and sprouting from stumps, stubble of trees, and brush that have been recently cut. The equipment and herbicides employed are the same as those used for basal spraying (oil carriers and a brush and pail or spray unit). The radial surface and remaining bark should be saturated for best results.

Mcaffery et al. (1974) found that selective stump spraying with 2,4-DP cost $19-$22 per acre. Tordon is more expensive, but no exact per acre figures are now available.

Individual tree injection is the most effective way of eliminating undesirable hardwoods of any size. This herbicide application is ideal for use along trails and in recreation areas and gives good control of most species but is not economical for small diameter stems (J. S. Barnhart et al., 1976).

Hypo-Hatchet injections with Tordon 101 achieve 97% suppression on the average. Better success is gained on sandy soils. Costs run $30-$50 per acre or more, depending on dilution and number of stems treated per acre.

Burning costs $2-$4 per acre, but may cost as little as $0.60 per acre with student volunteers. Repeated burnings have not been given ample trial at Itasca to give a good picture of potential results. Buckman (1959) found that summer burns were better for hazel suppression. However, it is rare that summer vegetation will carry a burn. Mineral soil exposure is one benefit of site preparation by fire.

Combinations of aspen and brush suppression systems might give the best results and should be experimented with in the early years of the project.

Frequent occurrences of ten- to thirty-day summer droughts in Itasca make seeding a very chancey method of reproduction. Planting at random but in accordance with old cut stump densities will give the best results and in the long run be cheaper. With student volunteer help, costs could almost be cut in half.

Other silvicultural prescriptions will undoubtedly have to be evaluated in the near future to achieve the best possible results at the lowest possible cost.

Impact

The impacts of the described treatments on water quality and animal populations are fairly predictable. Research already conducted in Itasca State Park provides basic information. Initially, deer, grouse, and beaver populations can be expected to increase in the project area due to increases in food supply, appropriate habitat, and in the case of beaver, hutch building materials. The increased browsing impact on pine reproduction may call for increased hunting to moderate this situation. Openings and vistas created by treatment operations will make wildlife and lakes more visible to visitors.

No significant impact on water quality is expected. In a 1973 experimental clearcut of a 200-acre watershed west of Squaw Lake in Itasca State Park, no significant effects on stream flow or water quality were documented following treatment. Further, the size of the cutting areas in the 15-year plan are considerably smaller and operations considerably more restricted than in the 1973 experiment.

STATE OF MINNESOTA

ENVIRONMENTAL QUALITY COUNCIL
CAPITOL SQUARE BUILDING
550 CEDAR STREET
ST. PAUL, 55101

September 14, 1977

Frank Knoke
Environmental Review Specialist
MN Department of Natural Resources
196 Centennial Office Building
658 Cedar Street
St. Paul, MN 55101

RE: Itasca State Park Pine Restoration

Dear Mr. Knoke:

This letter acknowledges receipt of the Environmental Assessment Worksheet (EAW) on the above project. Notice of the EAW's conclusions on the need for an Environmental Impact Statement (EIS) on the project will be published in the EQB Monitor on September 19, 1977.

Publication in the EQB Monitor commences the 30 day review period for the decision. You will be notified if any challenges to the decision are filed and EQB action is necessary. You will also be notified if no objections are filed during the review period.

Please note that no final actions to approve or commence the project should be taken until 30 days after publication of a Negative Declaration (a decision that no EIS is needed) or, if an EIS Completion Notice (a decision that an EIS is needed) is published, until after the EIS is completed. This is in accord with the Minnesota Environmental Policy Act (MEPA) (Minn. Stat. § 116D) and the Environmental Review Program Rules (Minn. Reg. MEQC 31).

Sincerely,

Nancy I. Onkka

Nancy I. Onkka
Environmental Planner

NIO/dh

ADMIN 1000

Frank

STATE OF MINNESOTA

DEPARTMENT Environmental Quality Board

Office Memorandum

TO : Dave Davison, Director
Division of Parks and Recreation, DNR

DATE: 25 July 1977

FROM : Charles Kenow CK
Environmental Review Program

PHONE: 8254

SUBJECT: Environmental Quality Board's Review of Timber Management Plans for State Parks

It has come to our attention that each of the management plans DNR is preparing for state parks includes a section on vegetation management. It is my understanding that some of the management plans propose timber harvesting for various purposes. I would like to remind you that the Environmental Quality Board (EQB) Rules require an environmental assessment worksheet (EAW) for any harvest of timber within a state park - unless the proposed harvest is included in "an annual timber management plan filed with the Council." (6 MCAR § 3.024.B.z)

Consequently, before any "action" is taken in a state park, (ie. timber harvest), the DNR must either file a timber management plan with the EQB or complete an EAW. If an EAW is completed, a decision on the need for an environmental impact statement (EIS) is made by the DNR. There is a 30 day waiting period from the date of publishing your finding in the EQB Monitor. No final decision to commence the action can occur until this time limit expires or an EIS is completed if one is required.

Copies of the EAW or management plan must be submitted to all EQB members and others on the official distribution list.

If you have any questions on this procedure, please contact Vonny Hagen of your department or me at the above number.

cc: Joe Sizer
Roger Williams
Tom Rulland
Vonny Hagen

ADDENDUM
ITASCA CUTTING PLAN.

Wild life impacts —

erosion control - ie logging roads.
marsh edge

herbicides — when, control
alternatives

monitor — fona

burning —

PLAN to KENOW
AUG. 2

~~40~~	40.8	11,577.02
55.0	53	15,501.84
95	57.8	17,069.38
50	95.5	22,655.36
miles		
	247.1	66,813.60

St. Croix
miles & acreages

STATE OF
MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

500 LAFAYETTE ROAD • ST. PAUL, MINNESOTA • 55155-40_____

DNR INFORMATION
(612) 296-6157

DATE: October 14, 1988

TO: Interested Parties

FROM: Thomas W. Balcom, Supervisor T.B.
NR Planning and Review Services Section

SUBJECT: Lake Itasca Boat House and Harbor Project
Record of Decision

The Department of Natural Resources (DNR) has issued a Record of Decision (attached) on the need for an environmental impact statement (EIS) for the Lake Itasca Boat House and Harbor project in Clearwater County. We have concluded that an EIS is not required for this project. The Record of Decision summarizes the comments received and explains the justification for our decision.

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

RECORD OF DECISION

In the Matter of the
Determination of Need for an
Environmental Impact
Statement for the
Lake Itasca Boat House and Harbor
Clearwater County, Minnesota

FINDINGS OF FACT

1. The Department of Natural Resources (DNR) pursuant to Minnesota Environmental Quality Board Rule Part 4410.4300 Subpart 12A, has prepared an Environmental Assessment Worksheet (EAW) for the Lake Itasca Boat House and Harbor in Itasca State Park in Clearwater County, Minnesota.

2. The EAW was filed with the Environmental Quality Board (EQB), and a notice of its availability for review was published in the EQB Monitor on September 6, 1988.

3. The Lake Itasca Boat House and Harbor Project consists of the construction of a boat house and the dredging of a small harbor to replace an existing boat house and docks at the University of Minnesota Itasca Forestry and Biological Station in Itasca State Park.

4. The EAW describes the project and its impacts on the management plan for Itasca State Park, shoreland vegetation, fish and wildlife habitat, noise, and air quality.

5. The DNR received comments on the EAW from the Minnesota Department of Transportation indicating that the proposed project will cause little adverse impact to their transporation facilities.

6. There are no phased or related actions associated with the construction of the Lake Itasca Boat House and Harbor.

CONCLUSIONS

1. The potential adverse impacts are determined to be minor in type and extent.

2. Based on the above findings of fact and conclusion, a negative declaration is made, and no environmental impact statement will be prepared.

Dated this 13th day of Oct., 1988

Steven G. Thorne

STEVEN G. THORNE
DEPUTY COMMISSIONER


OCT 1988
RECEIVED
PARKS & REC