Minnesota Natural Resources Department: Environmental Assessment Files Regarding State Parks

SF-00006-02

STATE OF MINNESOTA
Office Memorandum

DEPARTMENT Natural Resources

TO : Frank Knoke

DATE: April 4, 1985

FROM : Paul Rundell Paul

PHONE:

SUBJECT: Noxious Weed Control in Maplewood State Park

This proposal is for commercial spraying of plumeless thistles in the park. If we get as good results as we did in 1982, this should be the last time for a number of years.

I prepared the A-41 just to be on the safe side as the total job is over the 40 acre limit, but no single site would be near that size.

Please sibmit it through Davison for the Commissioner's signature.

PR/mec

Don,

Please sign and forward to Commissioner office. I checked this out with Paul and it looks OK

Frank

4/12/85

A - 41
Rev. 1/71

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

REQUEST FOR APPROVAL OF USE OF PESTICIDES ON LARGE AREAS

This request form is to be completed by personnel of the Department of Natural Resources who plan to use a pesticide (herbicide, insecticide, fungicide, etc.) on any area larger than 40 acres and is to be submitted in duplicate to the Commissioner's Office for approval prior to application.

1. Location (county and legal description) of area to be treated: Within Maplewood State Park in Ottertail County T.135N, R.42W and T.136N, R.42W (see attached map)

2. Size of area in acres: 50 acres in several parcels

3. Proximity of area to lakes or streams: No spraying will be done within 300 feet of any lake or stream

4. Reasons for proposed application: Noxious weed control without loss of heavy sod cover

5. Chemical, concentrations and application methods to be used: Ground spray using emulsifiable 2,4-Dichlorophenoxyacetic acid butoxyethyl ester (Weedone LV6 or equivalent) at 3 pints per acre.

6. Approximate date of application: June 20, 1985

7. Possible alternative methods or chemicals: 2,4-DP but harms desirable woody plants Mechanic (Mowing does not kill plants, but may prevent seeding)

Requested by: Paul Rundell

Title: Regional Resource Coordinator

Address: 2115 Birchmont Beach RD NE
Bemidji, MN 56601

Date: April 4, 1985

Approved by:

[signature]
Division Director

[signature]
Commissioner of Natural Resources

Date: 22 Apr 85

MAPLEWOOD STATE PARK

SUMMER TRAILS

Minnesota Department of Natural Resources

MAPLEWOOD State Park is located seven miles east of Pelican Rapids, Minnesota, on state Trunk Highway 108 in Ottertail County. Highway Map index: 11-C

GENERAL DESCRIPTION

On a series of high hills, Maplewood State Park provides a respite from the intensively farmed lands that surround it. The tree covered hills provide striking vistas of small, clear lakes nestled in deep valleys.

The park, established in 1963 by legislative action, provides a public recreational area of about 9,000 acres. Its many attractions offer people a variety of recreational opportunities throughout the year.

WILDLIFE

Maplewood is located in the transition area between the state's eastern forests and western prairies. It contains plants and animals found in both. Thirteen plant communities support nearly 150 species of breeding birds, 40 kinds of mammals, and 25 kinds of reptiles and amphibians. The park is known for its large hardwood trees and includes the largest ironwood tree in the state.

Other hardwoods include sugar maple, basswood, American elm, and aspen. Few softwoods are found in this part of the state, but occasionally red cedar and tamarack may be found in the park.

Upland flowers are common, with representatives from both prairie and forest. The forest floor has many striking spring flowers; trillium, bloodroot, and liverwort being common. Prairie species include wild onion, showy milkweed, beardtongue, and prairie rose. Many flower in late summer and fall.

White-tailed deer may be seen throughout the park. Many browse along the park drive. Beaver are active in some lakes; their cuttings and lodges may be seen in several locations. Raccoon, squirrels, rabbits, and chipmunks are also present and often seen.

Herons and other large wading birds are found in summer seeking food in the shallows. Birds of prey can be seen hunting. Their nests are sometimes found in heavily wooded areas.

GEOLOGY

Maplewood lies on a series of hills in the Park Landscape Region near the eastern edge of the level Red River Valley. These hills, part of the Alexandria Moraine, were deposited during the last ice age. Relief is abrupt, with changes of about 300 feet in less than a mile. The highest hills in the park approach 1,600 feet. Lake Lida Basin was probably formed when the last glacier retreated 20,000 years ago and left ice stranded in a valley. The ice melted, exposing the basin and allowed the present lake to form.

HISTORY

Evidence of people in Maplewood dates back about 1,300 years but man was certainly there earlier. An archaeological site just north of Pelican Rapids shows that man lived in the area at least 6,000 years ago.

Starting in 1967, University of Minnesota archaeologists examined the park and identified several study sites. One site exhibited characteristics typical of both prairie and woodland cultures. A few Late Woodland artifacts were also found showing that the site may have been used periodically until it was settled by modern man.

Most artifacts indicated that the site was occupied during the Middle Woodland Period (1,200 to 900 years ago). Fire hearths, food pits, and post holes were found, along with numerous pieces of pottery and many animal bones. Evidence showed that the residents were primarily hunters during this period.

Other sites were identified at the same time. One was a temporary campsite with little archaeological evidence. The other had a fire ring constructed from large boulders. This area was not excavated.

Records of modern man in the area began in mid-1880s when the original land surveys occurred. Township lines were surveyed in the 1850s, followed by section surveys in 1870. Original land plats and a county map made in 1874 did not show any dwellings or improvements.

Settlement started shortly after, with Lida and Maplewood townships organized in 1879 and 1880 respectively. In 1890, the two townships had a population of 757 persons. This grew to 1167 by 1900 and then declined slightly after that.

INTERPRETIVE PROGRAM

Self-guided trails allow visitors to explore and learn about many interesting features in the park. Large displays at points of interest introduce visitors to scenes sometimes missed by the casual observer. A demonstration forest exhibits several types of forest management. Brochures are available for persons desiring more information.

Under development are several other interpretive trails, each highlighting a different biological community. One feature of great interest is the "Sugar Bush" operation where maple trees are tapped each year to collect sap and then boiled to make maple syrup.

POINTS OF INTEREST

Maplewood State Park offers visitors a variety of interesting things to see and do:

- Campgrounds. Sixty-six family campsites are provided in three locations around Grass Lake. Thirty-six are at the Shores Campground where showers and flush toilets are available. The others are rustic sites with pit toilets.
- Swimming Beach. Located on Lake Lida, the area provides a changing house and sanitation building. A nearby picnic area makes this an ideal location for family recreation. No motor boats are allowed in the swimming area.
- Boat Launching Ramps. Two ramps are provided in the park, one on South Lake Lida and one on Beers Lake. Both lakes offer good fishing for walleye, northern, and panfish.
- Lake Lida Group Picnic Area. An excellent view is afforded from this rustic picnic location. Water, pit toilets, and a large parking area.
- Forest Demonstration Area. A self-guiding trail leads visitors through the area where they can compare forest management methods.
- Park Drive. Two way traffic with sharp curves. Drive slowly and watch for parked cars. Many glimpses of wildlife can be expected.
- Overlooks. High hills provide dramatic vistas. Interpretive signs at major points of interest.
- Trails. Multiple-use trails are available throughout the year. Summer trails include 16 KM of hiking trails and 15 miles for horseback riding. For persons returning in the winter, there are 20 KM of ski trails and 12 miles of snowmobile trails. The winter trails are groomed weekly.
- Maplewood Church and Cemetery. These are still active. Watch for service notices.
- Maplewood Town Hall. Still standing, but no access is presently available.
- Old Schools. There were four schools here at one time but none is active. Two still stand and one can be seen from the park drive.
- Firewood. Purchase at the contact station.
- Laundry, Groceries, Gas. Obtain locally outside the park.

SO EVERYONE CAN ENJOY THE PARK

- Hunting in the park is prohibited.
- No intoxicating liquors may be consumed in the park.
- Pets must be kept on a controlled leash not longer than six feet.
- Motorized vehicles may not use park trails. However, snowmobiles may use designated trails during winter.
- Leave plants, rocks, or artifacts where they are. Let others enjoy them.
- Air mattresses and other floats are prohibited in the swimming area.
- Build fires only in fire rings or in fireplaces provided for that purpose. Do not scavenge dead wood from forest floor.
- The park is closed from 10 p.m. to 8 a.m., except in the cabin or campground area.
- Loud noises or other disturbances are prohibited after 10 p.m.
- All vehicles require park permits. Purchase them at headquarters or at entrance stations when open.
- No camping in undesignated areas. Backpack camping by permit only.

NEED MORE INFORMATION? CONTACT:

- **Park Manager, Maplewood State Park, Route #3, Box 281, Pelican Rapids, MN 56572. (218) 863-8383**
- **Regional Park Supervisor, Department of Natural Resources, Route #5, Box 41A, Bemidji, MN 56601. (218) 755-3976**
- **DNR Division of Parks and Recreation, Third floor, Space Center, 444 LaFayette Road, St. Paul, MN 55101. (612) 296-4776**

LEGEND
TRAILS
Hiking
Interpretive
Horseback
FACILITIES
Information
Trail Center
Picnic Area
Beach
Boat Landing
Campground
Primitive Group Camp
Interpretive Trail
SCALE
MILES
0 .1 .2 .3 .4 .5
0 .1 .2 .3 .4 .5 .6 .7 .8
KILOMETERS
Maplewood State Park
Areas to Be spot sprayed
Lake Lida
108
PELICAN RAPIDS – 7 miles
PARK ENTRANCE
WADENA 45 miles
Slim Lake
Deadwood Lake
South Arm
Lake Lida
Venstrom Lake
Beaver Lake
Beaver Dam
Cataract L.
Forest Demonstration Area
Grass Lake
Beers Lake
Bass Lake
Scott Lake
Cow Lake
Fladmark Lake
Twenty-one Lake
Wilson Lake
Bon Lake
Railroad Lake
Eddy Lake
23
3
1400
1500

STATE OF MINNESOTA
DEPARTMENT OF CONSERVATION

COMMISSIONER'S ORDER NO. 1495.

REGULATIONS RELATING TO PERMITS FOR TAKING WILD ANIMALS ON STATE GAME REFUGES AND PUBLIC HUNTING GROUNDS, TAKING MUSKRATS IN SHALLOW MARSHES OR SLOUGHS, AND FOR FIELD DOG TRIALS, RESCINDING AND SUPERSEDING COMMISSIONER'S ORDER NO. 1279.

Pursuant to authority vested in me by law, I, George A. Selke, Commissioner of Conservation, do hereby order the following regulations relating to permits for taking wild animals on state game refuges and public hunting grounds, taking muskrats in shallow marshes or sloughs and for field dog trials, which regulations shall supersede and rescind Commissioner's Order No. 1279:

Section 1. Subdivision 1. Permits to take wild animals, other than beaver, on state game refuges and public hunting grounds and to take muskrats from shallow marshes or sloughs may be issued, without fee, to any resident by the director of the Division of Game and Fish or his agent in charge of the area for which the permit is issued, hereinafter called the agent, provided that permits to take protected wild animals may be issued only when, in the opinion of the director or agent, they are doing damage to private or public property or, in the case of muskrats, they are in danger of freezing out or starving during the winter.

Subd. 2. Permits shall be issued in triplicate and the original shall be given to the permittee, one copy shall be mailed to the director of the Division of Game and Fish for filing, and one copy shall be retained by the agent issuing the permit.

Subd. 3. No permit issued for the taking of wild animals in any state park shall be valid unless it is counter-signed by the director or assistant director of the Division of State Parks.

Subd. 4. Permits for the taking of wild animals on privately owned property shall be issued only to the owner or occupant of the land on which the animals may be taken thereunder or to residents of the state who have written permission from the owner or occupant to take such wild animals on such land.

Subd. 5. Each permit shall state the specific species of animals that may be taken thereunder, the method of taking authorized and the period of time during which taking is authorized, and shall describe the land on which the taking is authorized.

Subd. 6. All permits may be revoked by the agent upon violation of any of the terms thereof and may be revoked without cause at any time by the director of the Division of Game and Fish.

Subd. 7. Permits may provide for the taking of furbearing animals on stateowned game refuges and public hunting grounds on a sharecrop basis upon such terms as the supervisor of the Bureau of Game may authorize.

MINNOWS & LEACHES ARE
PROTECTED WILD ANIMALS

Subd. 8. All pelts to which a permittee is entitled pursuant to a sharecrop permit shall be tagged, without charge, by the agent and shall thereupon become the property of the permittee.

All pelts to which the state is entitled pursuant to a sharecrop permit shall be forwarded by the agent to the Director of the Division of Game and Fish.

Subd. 9. All pelts taken pursuant to any permit, other than a sharecrop permit, shall either be tagged by the agent at a charge to the permittee of ten cents (10¢) per tag, or shall be surrendered to the agent and forwarded to the Director of the Division of Game and Fish. Any pelts so tagged shall thereupon become the property of the permittee.

Subd. 10. Each permittee shall bring all pelts and a report, stating the number and kind of animals taken under the permit, to the agent on or before the tenth day of each month following issuance of the permit and on the day following the expiration of the permit.

Subd. 11. Pelts tagged pursuant to this order may be bought or sold at any time while the tag and seal remain attached to the pelt, and any pelt not tagged or from which the tag is removed shall be contraband and subject to seizure and confiscation.

Subd. 12. The pelts of furbearing animals and all other protected wild animals which are not covered by the permit and which are accidentally taken, and any deer taken pursuant to a permit, shall be surrendered to the agent immediately after the taking and shall be forwarded to the director of the Division of Game and Fish, except that the director may authorize the agent to sell locally any perishable animals received.

Section 2. The director of the Division of Game and Fish may issue special permits, without fee, for field dog trials and for training retrieving dogs by use of firearms and live ammunition on domestic birds or banded game birds which have been legally purchased from licensed game farms, to any responsible association organized for that purpose.

Section 3. Commissioner's Order No. 1279 is hereby rescinded and superseded.

Dated at St. Paul, Minnesota, this 9th day of January, 1958.

/s/ George A. Selke
Commissioner of Conservation

APPROVED AS TO FORM AND EXECUTION

MILES LORD
Attorney General

/s/ Wayne H. Olson
Deputy Attorney General

INCREASING USE AT MAPLEWOOD STATE PARK

This park has relatively low use when compared to the other parks. It has attributes similar to Sibley and Lake Carlos but on a greater scale. There are few parks in the system which can match its recreation potential or resources.

The greatest potential for increased use is camping. Since the park offers little that is not available in the area for day use.

The park is relatively new and a four hour drive from the metro area. Both can explain part of the problem. The location of the campground may explain why this is a weekend park. A 4-mile drive to the beach is not conducive for families on a long stay.

To increase summer use, the following improvements are needed:

CAMPING

Site A: 15-20 rustic sites.
The proximity to the beach will make this the most desirable area for longer stays. Water is available at the beach sanitation building and it could be extended to this area. Thus no well would be needed. Pit or vault toilets will be needed. Tree plantings also would be needed.

Site B: 15-20 rustic sites
This little used picnic area already has toilets and a well. A short trail to the beach along the lake is needed. Also, stairs down to the lake will be needed since the boat owners will be leaving their boats in the water. This site, like Site A, will also promote longer stays.

Site C: 15-20 sites
This area is adjacent to the public access and would primarily serve fishermen. It would need a well and pit toilets. It also may encourage longer stays but it is too far from the beach for walking.

All these new sites, as well as the existing camping areas, need fish cleaning houses. The Grass Lake site should have a large one with water since it would serve 60+ sites. The new sites could get by with small (4' x 6') structures, with the people expected to bring their own water. The one at Site C should be sited to serve the access as well.

RESERVATION SYSTEM

This would serve two purposes, added advertisement and attract more people from the metro area. It is not likely that many people will drive for 4 hours on a Friday night after work with no guarantee of a place to camp.

FISHING DOCK

These would serve the kids and people with no boats. They should be located near the campgrounds on Grass and Lida Lakes as well as on the west shore of Beers Lake.

SIGNING

The major travel routes from the metro area are I 94 and U.S. 10, but the park is not signed on either highway probably due to distance.

PARK SPECIFIC ADVERTISEMENT

Once the above improvements are in place, a feature article in the metro papers could do the trick

To increase winter use, we should work with local resorts and motels to attract organized groups of skiers. This would expose a lot of people to the area and return visits could be expected.

OTHER NEEDS

The public accesses both need to be improved and organized.

A parking lot on the county road west of Lake Twenty-one and a portage trail to the lake.

Backpack camping sites would add another dimension to the park, one which it is well suited for.

I feel that with these improvements or changes, Maplewood State Park could become one of our heavier used parks year round.

MAPLEWOOD STATE PARK

FOREST DEMONTRATION MANAGEMENT PLAN

DISCUSSION DRAFT

November 25, 1980

****

Paul Rundell

The attached is a Revision of the Maplewood Demonstration woodland proposal (, 1968) following review of the project in 1978, 1979, and 1980. After considerable discussion we decided to merge some of the management areas in order to simplify activities making them more understandable and useful to the public. This will continue to be a cooperative project between Parks and Forestry division and the U of M School of Forestry.

As before, the stand next to the road will continue to be the control area. The only change here will include rerouting the access trail from the parking lot to the demonstration area through the woods near the top of the hill. This will prevent parking problems and will bring visitors through the control area instead of along its edge allowing better viewing.

Changes in the plan will include combining several of the plots simplifying the observable results. Also, due to some severe red oak mortality many will be removed to prevent further contamination to the surrounding area. Special interest trees will be favored because of form, foliage, branching and when in esthetic areas.

Den trees and existing bare snags will be marked and reserved for educational purposes.

The interior of the tract will be managed as a single unit. Improvement cuts will be made to remove inferior trees or species competing with desired trees. Openings in the canopy will be enlarged allowing more light to reach the forest floor encouraging suckering and natural seeding.

A deer exclosure will be maintained in the treatment area along with a similar sized control and data will be collected each year for comparison and educational purposes.

DEMONSTRATION AREA OBJECTIVES AND RESPOSIBILITIES

The major objective is to maintain a forest demonstration area showing methods of managing mixed hardwood. Emphasis will be placed on growth of usable forest products while addressing wildlife values, protection of the enviroment and esthetic concerns. The area will be used for land owners, school groups and park visitors. It will also be used for research purposes with all treatments documented and comparisons of each available for educational purposes.

This is meant to be an ongoing project committed to the long term management of the area. Management to follow the long term management plan recognizing the need for periodic management activities.

Each unit will be updated every five years and all management will be timely. New information may cause changes in the plan. Research results in other areas will be examined before major changes are made. Periodic reports will be issued to interested persons. Representatives from Parks, Forestry and the School of Forestry, U of M will review existing data before beginning each phase of the plan.

Attempts will be made to involve local schools, educational groups, civic organizations and others to assist on the maintenance of the area.

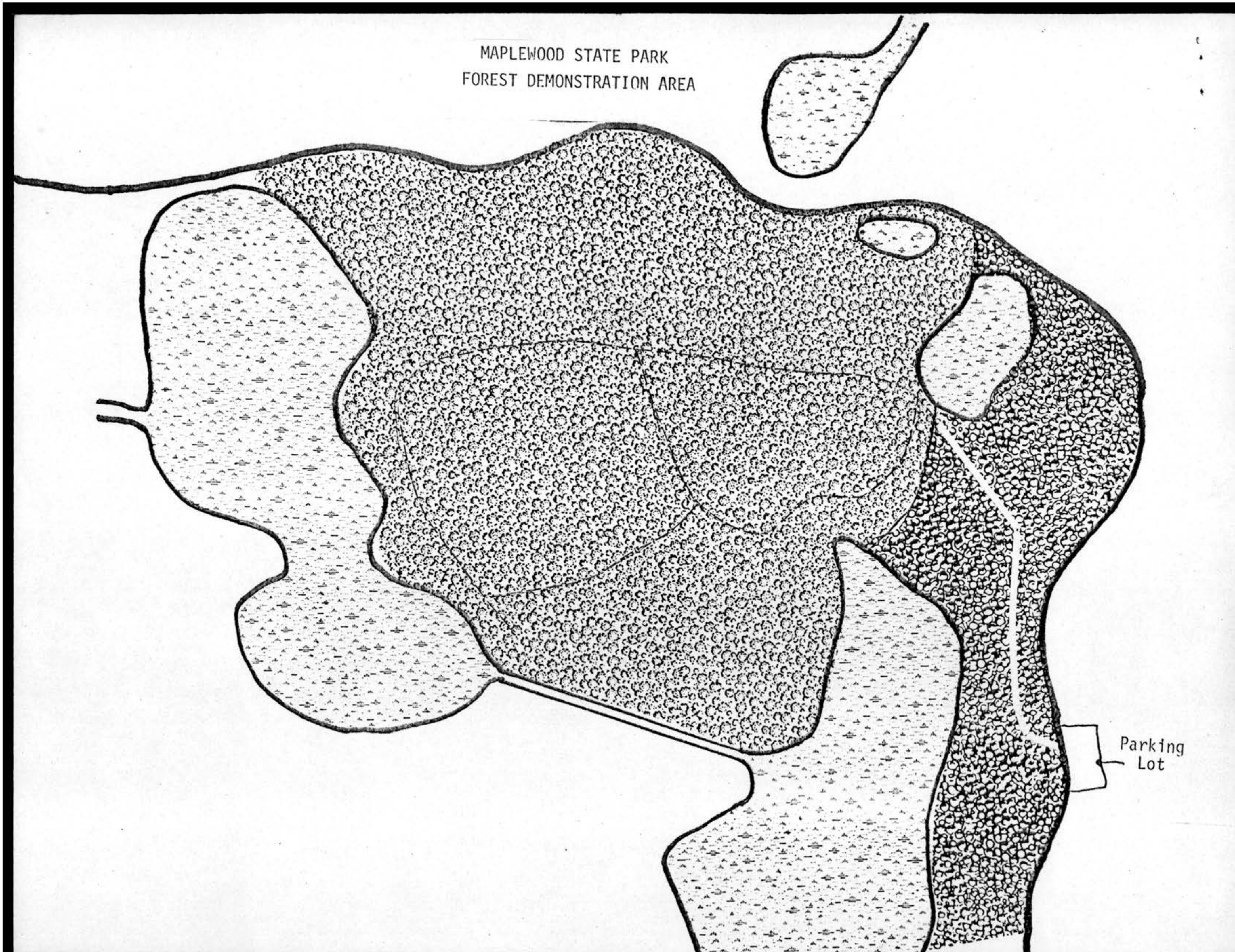
Management of the area will be a joint responsibility. Timber sales will be the responsibility of the Division of Forestry. Trails will be maintained by Parks. The Park Manager will approve the timing of all treatments to prevent interference of normal park operations. Interpretive signs and brochures will be the responsibility of the Regional Naturalist. The Resource management coordinator will insure close cooperation between all divisions and others involved in managing the area.

MANAGEMENT TECHNIQUES

We will manage the area using Coppice and standard methods. This will permit rapid growth and limits invasion by undesirable species. These mixed age and size stands are also more pleasing esthetically. The disadvantages are lessened because of fuel wood needs in the area. Updating every five years will allow us to select higher quality trees with better sawlog potential. Form and density will be major factors considered during each treatment period.

Stump and root suckers will be selectively cut each treatment period. Removal of ironwood for fuel wood will be considered as will clear-cutting in the small aspen stands. Some of the existing wildlife trees will be retained if they do not cause safety problems for the public or health problems for the stand.

MAPLEWOOD STATE PARK
MAPLEWOOD
Cataract Lake
Park Headquarters
Campground
Picnic Area
Grass Lake
Campground
Boat Ramp
Bass Lake
Picnic Area
Boat Ramp
Beers Lake
Boat Ramp
James Lake
Grass Lake
Picnic Area
Picnic Area
Boat Ramp
Gravel Pit
Cems


MAPLEWOOD STATE PARK
FOREST DEMONSTRATION AREA
Parking
Lot

United States Department of the Interior

NATIONAL PARK SERVICE

MIDWEST REGION
1709 JACKSON STREET
OMAHA, NEBRASKA 68102-2571

(WAYLAND

MS.

IN REPLY REFER TO:

27-00726(MWR-RGG)

JUN 18 1992

Mr. Robert E. Johnson
Federal Aid Coordinator
Department of Natural Resources
301 Centennial Building, Box 11
St. Paul, Minnesota 55155

Dear Mr. Johnson:

We have reviewed the documentation provided with your letter concerning possible Section 6(f)(3) and Section 4(f) conflicts at Maplewood State Park. We apologize for the delay in our response.

Based on the information provided, we do not concur with your recommendation that no Section 6(f)(3) or possible Section 4(f) conflicts are involved with the construction of a turn lane at the park entrance and the resultant conversion of 0.21 acres of parkland to transportation purposes. The loss of control and tenure through the granting of a permanent easement constitutes a Section 6(f)(3) conflict and a possible Section 4(f) conflict if Federal highway funds are involved. As you know, the possible Section 4(f) conflict must be resolved prior to consideration of the Section 6(f)(3).

As we discussed, the Department of Natural Resources may wish to avoid the Section 6(f)(3) conflict by entering into a long-term land use agreement for the 0.21 acres with the Minnesota Department of Transportation. Such an agreement or other similar instrument must indicate:

1. That the land is being developed for park road purposes.

2. That the duration is for a specific period of time, not to exceed 30 years.

3. Must contain a reversionary clause returning the land to the Department of Natural Resources if the road use is changed from park turn lane at a future date.

We have no objection to the granting of a temporary easement covering the 0.26 acre borrow area within the park as long as it is returned to a natural setting after completion of the construction.

Sincerely,

Robert J. Blais

Robert J. Blais
Acting Chief, Grants Division

Minnesota
Environmental Quality Board
100 Capitol Square Building
550 Cedar Street
St. Paul, Minnesota 55101
Phone (612) 296-8542

September 11, 1980

Paul L. Rundell, Office of Planning
Department of Natural Resources
Box 10, Centennial Building
St. Paul, Minnesota 55155

RE: Maplewood State Park Forest

Dear Mr. Rundell:

The 30-day review period for the environmental assessment worksheet (EAW) on the above project ended on September 10, 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,

Steve Brandt

Steve Brandt, Staff
Environmental Quality Board

SB/dh

cc: Tom Balcom, Department of Natural Resources
Department of Natural Resources, Bemidji

SF-00006-01

STATE OF MINNESOTA 6500-4

DEPARTMENT of Natural Resources - Forestry

Office Memorandum

TO : Frank Knoke
Division of Parks & Recreation

DATE: 9/18/80

FROM : Alan C. Jones *ag*

PHONE:

SUBJECT: Red Oak and Birch Dieback in Maplewood State Park

I was asked to look at the dead and dying red oak in Maplewood State Park, particularly in the forestry demonstration area.

There appears to be between 75 and 100 large, sawlog-size red oak dead or nearly so. Death is probably caused by moisture stress weakening the trees and then an invasion by the two-lined chestnut borer. The moisture deficiencies of 1976-77 allowed a population of borers to build up and the drought of 1980 then provided conditions suitable for an epidemic of borers to occur.

The two-lined chestnut borer is much like the bronze birch borer in that they both get started in the tops of stressed trees and work their way down the main stem girdling as they go. Symptoms often appear similar to oak wilt, but this disease has never been found as far north and west as Maplewood Park. D-shaped emergence holes indicating flat-headed wood borers were present which also indicates the presence of the two-lined chestnut borer. These holes can be found and will be more numerous next spring after adults emerge.

Lake Carlos

It is my recommendation that the dead and dying red oak be harvested this fall and winter. Adults will emerge in May of 1981 and fly to live oak to begin the process all over again. Harvesting with slash treatment (burning, bark removed, or complete removal) should be completed by May 1st, 1981 to prevent reinfestation.

The birch too have been very hard hit, not only in Maplewood, but all over northern Minnesota. The birch have suffered from an invasion by the bronze birch borer, and the same recommendation as that for red oak can be made for the birch.

Both red oak and birch are dying elswhere in the park, but the forestry demonstration area seems to be the heaviest hit area. Harvesting should be first started in the demonstration area, but harvesting should be done elsewhere in the park if sales could be set up and loggers found to do the cutting.

ACJ:ds
cc: Alan Olson
Ken Baumgartner
Paul Rundell
John Rodewald
Ray Hitchcock

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 Maplewood State Park Forest Demonstration Area Part 2

2. Project proposer(s) Department of Natural Resources - Parks & Recreation

Address Route 5, Box 41A Bemidji, MN 56601

Telephone Number and Area Code (218) 755-3976

3. Responsible Agency or Person Office of Planning

Address 658 Cedar Street Box 10 Centennial Bldg. St. Paul, Mn. 55155

Person in Responsible Agency (Person) to contact for further information on this EAW: Paul L. Rundell Telephone 218-755-3976

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

Telephone 218-755-3976 Hours 8-4:30

5. Reason for EAW Preparation

[X] Mandatory Category -cite MEQC Rule number(s) 6MCAR 3.024 B.1.Z [ ] Petition [ ] Other

C. ACTIVITY DESCRIPTION SUMMARY

1. Project location

County Ottertail City/Township name Maplewood

Township number 135 (North), Range Number 42 East or West (circle one),

Section number(s) 2 Street address (if in city) or legal description:

2. Type and scope of proposed project: Partial removal of 38 acres of existing timber over a one (1) year period allowing better growth of existing hardwood stands

3. Estimated starting date (month/year) September 1980

4. Estimated completion date (month/year) May 1981

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
Minn DNR	Informal Timber Sale Permit	To be applied for as needed
Minn 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 Maplewood State Park

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

a. Urban developed NA acres	f. Wetlands (Type III, IV, V) ___ acres
b. Urban vacant NA acres	g. Shoreland NA acres
c. Rural developed NA acres	h. Floodplain NA acres
d. Rural vacant NA acres	i. Cropland/Pasture land NA acres
e. Designated Recreation/Open Space 58 acres	j. Forested 38 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. Grass Lake 79 acres
Beers Lake 255 acres
Cataract Lake 21 acres

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). The small wood lot demonstration area has been operated for eleven years. The area is used in the park interpretive program to demonstrate four small wood lot management technicians for maximum production of wood products.

The harvesting is done through commerical means to reduce state costs and demonstrate the profitability of such management. Hand, mechanical and chemical means may be used to control regeneration of unwanted species.

2. Fill in the following where applicable:

a. Total project area 58 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 6 ADT

i. Number of employees 3

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.

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?

B. VEGETATION

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

Woodland	91 %	Cropland/ Pasture	_____ %
Brush or shrubs	_____ %	Marsh	9 %
Grass or herbaceous	_____ %	Other (Specify)	_____ %

2. How many acres of forest or woodland will be cleared, if any? -0- 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.) X NO _____ YES
   If yes, list the species or area and indicate any measures to be used to reduce potential adverse impact.

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? X NO ___ 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.) X NO ___ 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.

   Addendum I

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.)?

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.
NA

F. AIR QUALITY AND NOISE

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. The burn will be of small size and will not have any significant effect on air quality. Gases and particulates will be released during controlled burns. There will be emission of exhaust gases from chain saws and logging equipment. The amount of exhaust gas will not require special control.

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, logging equipment and trucks during daylight hours, Monday-Friday. Work to occur after the major park use season 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. There is an interpretive trail through the area that is used during the summer months and on weekends. A park road is adjacent to the area.

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 wood production, but it is a state park, by state law and timber production is not a primary goal.

2. Are there any known mineral or peat deposits on the site? __X__NO ____YES
If yes, specify the type of deposit and the acreage.

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)		Anticipated Supplier	Firm Contract or Interruptible Basis?
		Summer	Winter		

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.

Maplewood State Park - The project will enhance the aesthetics of the park for future users. The project will provide information needed for management of forest resources in major use areas. 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).

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?
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.

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.

III. 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

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: There is no change in land use or vegetative cover type. The project involves less than one percent of the park land.

2. The project does (___) does not (X) have the potential for significant environmental effects.
State reasons:

Although there will be some immediate adverse impacts, they are expected to be minor. Prior cutting in the demonstration area showed no significant adverse effects. This cutting is required to reach the desired goal.

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)):

____

[signature] Signature

Director Title

7/28/80 Date

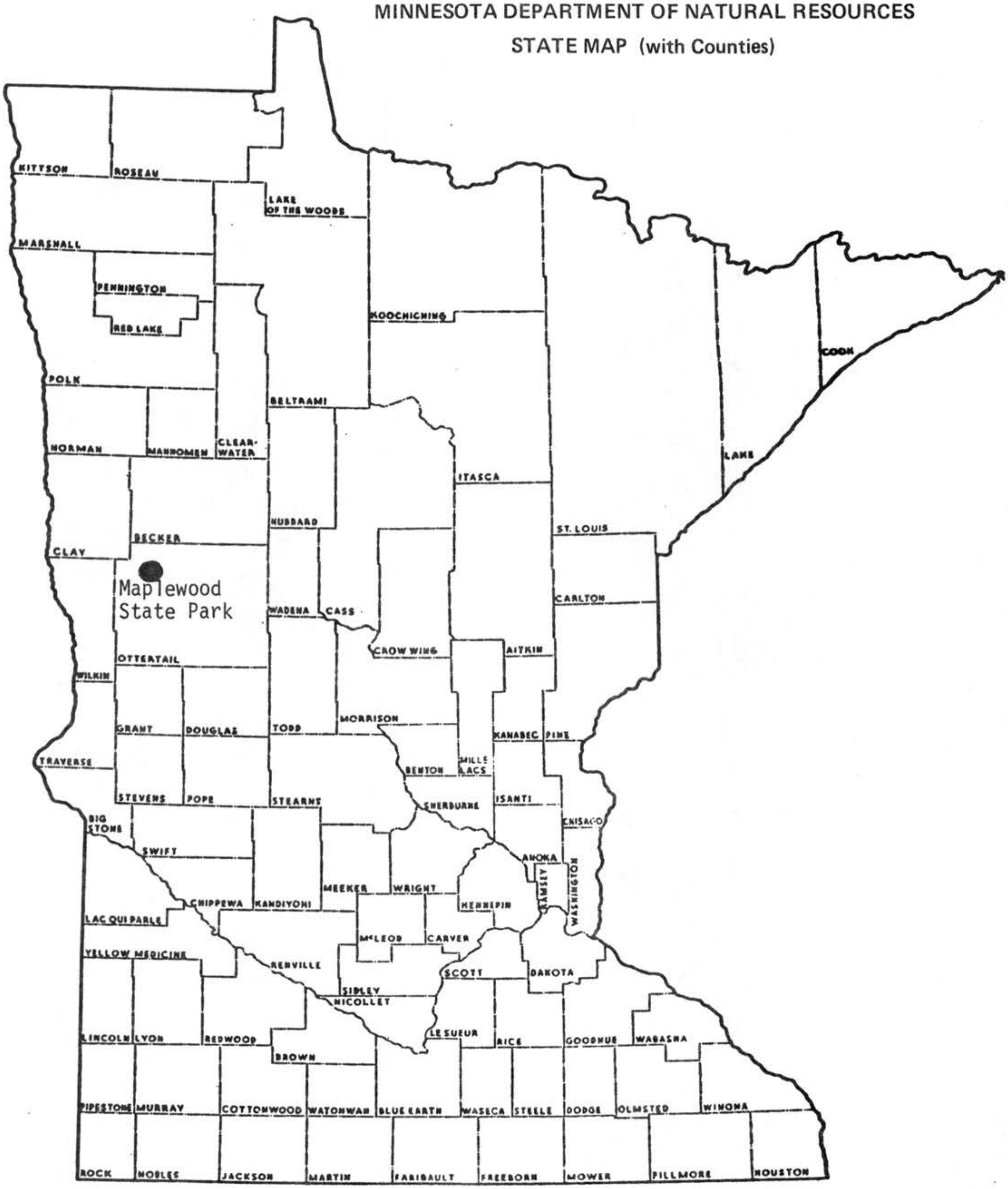
B. Attach an affidavit certifying the date that copies of this EAW were mailed to all points on the official EQC distribution list, to the city and county directly impacted, and to adjacent counties or municipalities likely to be directly impacted by the proposed action (refer to question III.J.4 on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

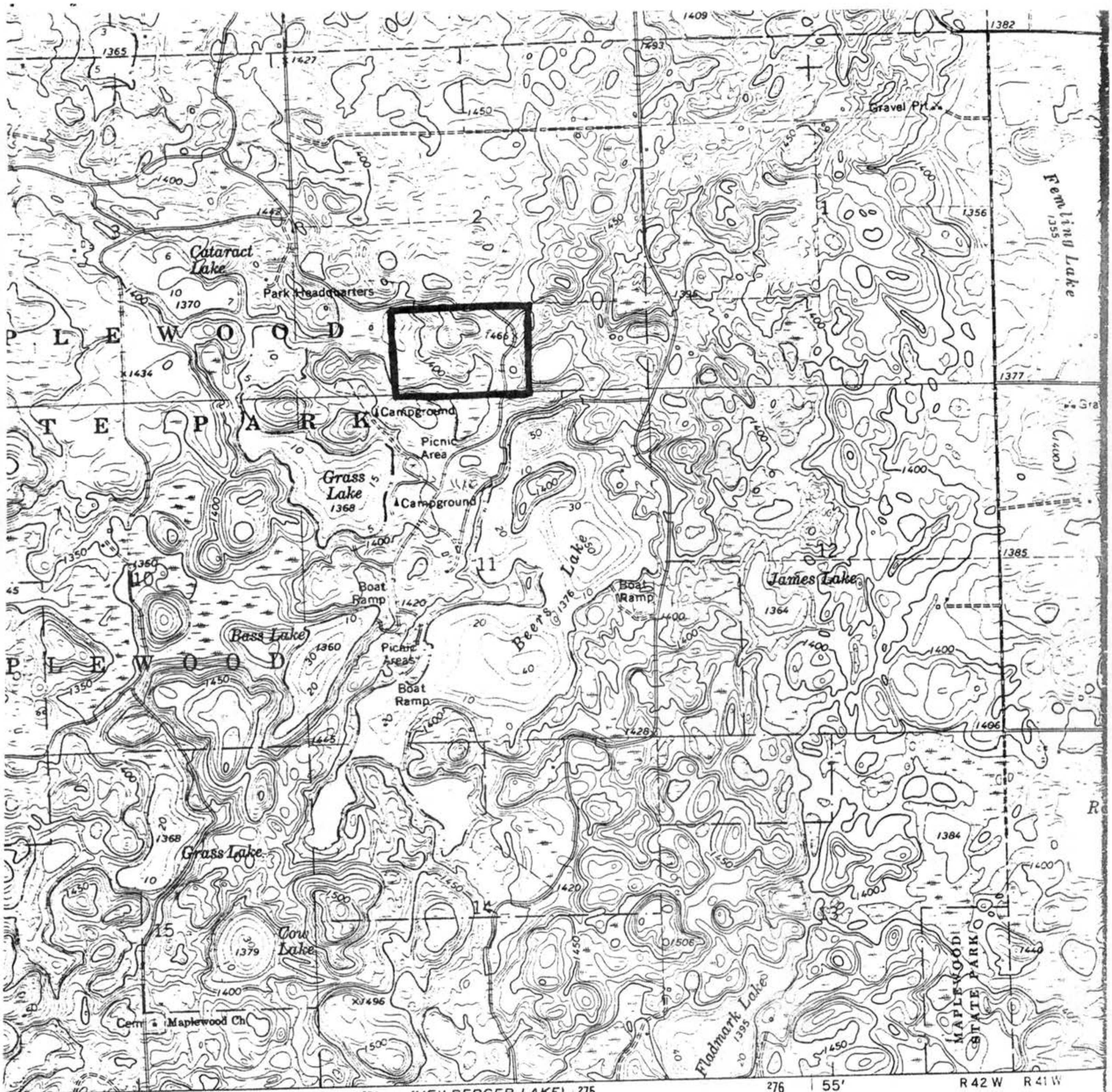
C. Billing procedures for EQC Monitor Publication

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.

NA-00147-01
(A-21) 12-77

MINNESOTA DEPARTMENT OF NATURAL RESOURCES
STATE MAP (with Counties)





57'30" 274 (HEILBERGER LAKE) 275 276 55' R 42 W R 41 W

6876 IV NW

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETRE

MN

7½°
133 MILS

73 MAGNETIC NORTH
CENTER OF SHEET

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

LAKE LIDA, MINN.

SW/4 VERGAS 15' QUADRANGLE
N4630—W9552.5/7.5

1973

AMS 6877 III SW—SERIES V872

MINN.

QUADRANGLE LOCATION

THIS MAP COMP CY STANDARDS
FOR SALE BY U. VIRGINIA 22092
A FOLDER DESCRIBING T(AVAILABLE ON REQUEST

ADDENDUM

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

3. The project will be beneficial to wildlife. Some mature trees will be removed allowing increased vegetative diversity to occur thus increasing the number of species in the area. Known nest and den trees will be saved. Three to four snags per acre will be retained.

III. J. 7. The herbicide to be used is 2-4-D. It will be applied according to labeled instructions. The size of the treatment area will be limited to twenty (20) acres.

<u>Ground Spray</u>

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), treatment required is variable, or height of vegetation to be controlled is low.

<u>Guidelines</u>

Weather Conditions

- Wind less than 6 MPH
- Relative humidity more than 50%
- Temperature less than 80 F
- No spraying during rainy or foggy weather
- No spraying when air turbulance is great enough to affect normal spray pattern

Other

- 100 foot buffer strip along roads
- 200 foot buffer strip along water (lake, river, or stream)
- 100 foot buffer along wetlands
- 100 foot buffer along sensitive or reserve areas

<u>Basal Spray</u>

Application of herbicide to stems of woody plants at or just above groundline. Hand method.

<u>Hand Injection</u>

Application of herbicide to tree by means of cuts, frills, holes, or notches. Herbicide is applied after the cut or frill is made or in one operation using the Hypo-Hatchet injection tool.

IV. Other Mitigation Mea

Logging contract regulations and restrictions.

1. Fell trees away from wetlands.
2. Utilize all trees to 4" top diameter or less
3. Certain areas shall be reserved from treatment and so indicated in the appraisal report.
4. Cutting of non-commercial timber may be required.

5. Lumbering can be done where the tree is felled, all brush to be piled.

6. Stumps shall not be higher than six inches from the ground.

7. Roads: all shall be to minimum specifications
   a. haul roads to be designated by the Division of Parks, no deviation will be allowed without permission.
   b. road construction debris shall be flattened out. No debris shall be shoved into wetlands or drainageways.

8. Timber landings will be located as directed by the Park Manager and Forester's direction to the minimum forestry specifications.

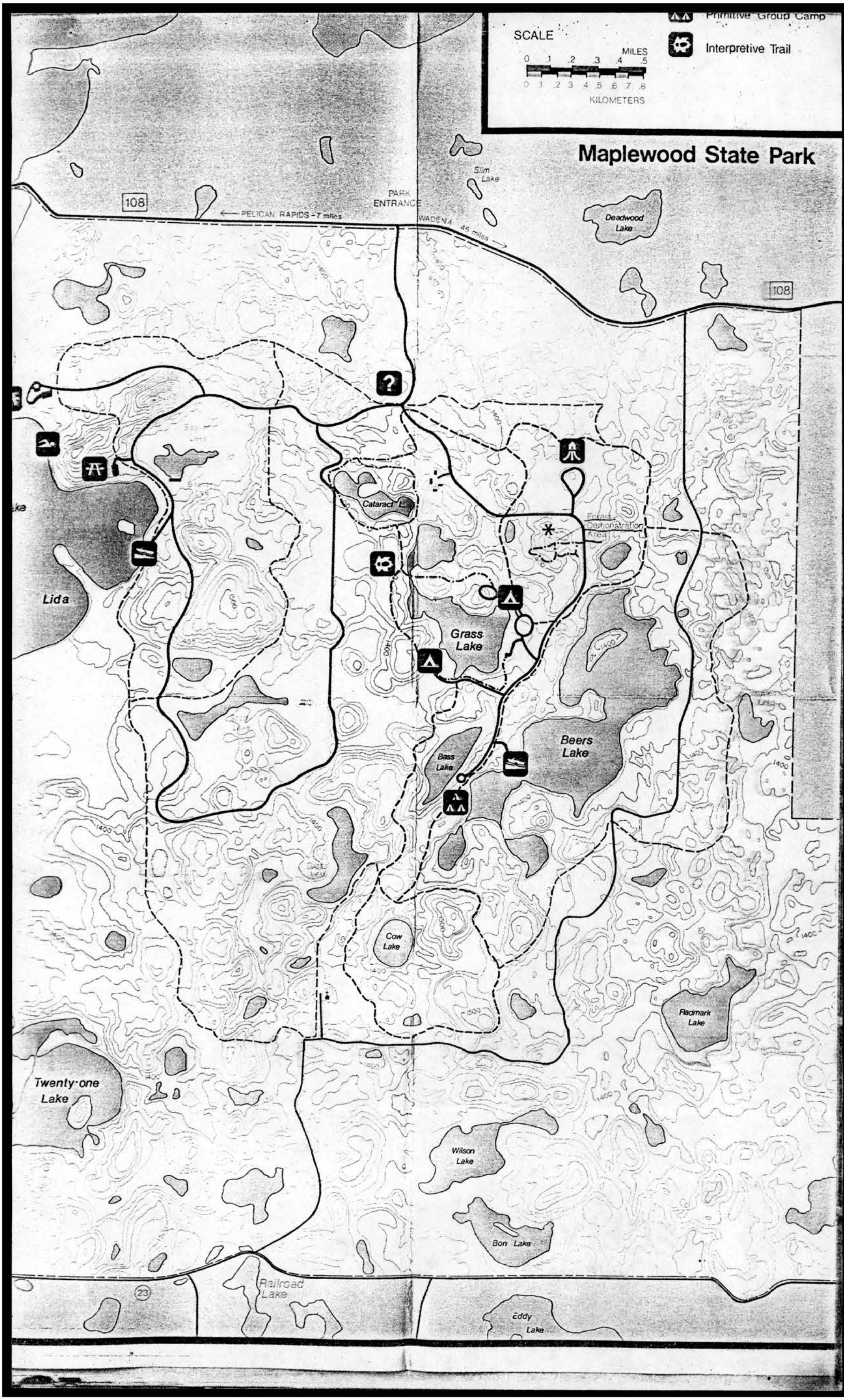
9. All solid waste and equipment residue must be picked up and a garbage can must be provided for this purpose.

10. Oil from equipment oil changes must be drained into a receptacle for removal from the park.

11. All equipment must be removed from the permit area within the specified 90 day period.

12. Time of day or day of week or season for cutting may be restricted.

13. If there is some doubt or question on any environmental problem, the operator is to contact the Park Manager.



Primitive Group Camp
Interpretive Trail
SCALE
MILES
0 .1 .2 .3 .4 .5
0 .1 .2 .3 .4 .5 .6 .7 .8
KILOMETERS
Maplewood State Park
108
PELICAN RAPIDS - 7 miles
PARK ENTRANCE
WADENA 45 miles
Slim Lake
Deadwood Lake
108
Cataract Lake
Forest Demonstration Area
Lida
Grass Lake
Beers Lake
Bass Lake
Cow Lake
Twenty-one Lake
Fladmark Lake
Wilson Lake
Bon Lake
Railroad Lake
Eddy Lake
23
1400
1500

ADMIN 1000 (Rev. 1/78)

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT Natural Resources

TO : Ken Baumgartner, Area Forestry Supervisor
Park Rapids

DATE: May 20, 1980

FROM : Paul Rundell, Vegetation Management Coordinator
Paul

PHONE:

SUBJECT: Woodland demonstration area, Maplewood State Park

I've finally had a chance to get a look at Alan's proposal; as he said, the demonstration area needs to be updated as nothing has been done for nearly ten years.

Crop tree selection appears to be a good method to use, however, I think we need to put more emphasis on snag management for wildlife use. This can only be done when we have a chance to get together in the field. The aspen clear cutting is a good idea.

I am wondering if we can look at possibly managing a small area in association with the crop tree area to demonstrate the development of iron wood fuel wood enhancement. I don't know how feasible this is but we can talk about it next time we get together.

The self-guided trail does need upgrading and will be as soon as the just cuts are made. Because of the demonstration area being on the main park drive, we will have to wait until this fall to sell the timber. I agree that commercial cutting is the best method here but am wondering if sealed bid is the best method as the volume will be rather small.

TSI following the cutting will be done either with YACC or park worker. We will schedule it for the spring of 1981. Any follow up will be scheduled as needed and can come anytime over the next 10 years.

To facilitate this I think that we need to put together a plan with timing of each change spelled out.

Thanks to both you and Alan for all the work you have put in on this project. Will get together with you the first part of June if not before.

cc Bob Hanson
Frank Knoke ✓
Dr. Henry Hanson

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT D.N.R. Forestry

TO : Ken Baumgartner

DATE: April 11, 1980

RECEIVED MAY 06 1980

FROM : Alan Olson

SUBJECT: Proposal for management of the woodland demonstration area in Maple Wood St. Park

The purpose of the woodland demonstration area in Maple Wood State Park is to show the public forest management of the Northern Hardwood stands. Harvesting work was particially completed on some of the acreage in 1969 to 1971. Since that time, little has been done to complete the project. In the original plan, the demonstration woodland was artificially divided into six areas; namely, two control areas and four areas for demonstration of four different types of hardwood management. The areas are each two to three acres in size. The timber stand is virtually the same throughout the forty acres. Therefore, the different management techniques are not apparent to the untrained eye of a visitor.

I propose that we selectively harvest areas number one through four to remove the mature and over mature trees. This harvesting will demonstrate select cutting in Northern Hardwood for the purpose of timber production, wildlife habitat, and water shed improvement. Basically, we would be interested in crop tree selection and to improve regeneration in the under story by stump sprouting and release of seedlings. In area number two, we should clear cut two of the one to two acre Aspen stand to demonstrate clear cutting techniques as being benificial to Aspen Management. Area five and six should be left as control areas to demonstrate the difference in unmanaged versus managed stands. The demonstration area should be set up to be utilized as a walking tour area with handouts for the visitors at the entrance to explain the harvesting done on the woodlot.

After the harvesting has taken place areas #1-#4 should have some T.S.I. done to them to remove ironwood, diseased and damaged trees and reduce clumps of trees particularly basswood.

The harvesting should be done by a professional logger selected through a sealed bid invitation process. The T.S.I. work could be accomplished by some contracted private vendors or an interested civic group. The harvesting and T.S.I. work should begin as soon as possible and completed over the entire area within two or three years.

It is important that this work be finished in the part of Maplewood Park because it is difficult for the untrained observer to see any results from the cutting that has taken place. The area should have signs posted along the trail route pointing out reproduction, wildlife habitat improvement and improved growing potential on crop trees. This park area has great potential for showing off forest management benefits to park visitors particular residents of Otter Tail county. There is a need to demonstrate forestry to private woodland owners in order to encourage them to practice forest management. This work can be compatable with management in Maplewood State Park. We are trying to preserve good growing timber stands in the park and use the park as a public place of information and education.

MAPLEWOOD DEMONSTRATION WOODLAND

A demonstration woodland was established in 1969 in the Maplewood State Park (Ottertail County). This 40 acre "outdoor laboratory" provides private forest owners, students and others an opportunity to examine and study the various forestry practices carried out at six different stations.

The visitor will learn through observation how growth is increased on certain crop trees, while at the same time young trees are established for the future.

The small forest produces raw material needed by local wood-using industries. It also provides wildlife habitat, natural beauty, recreation and water protection.

STATIONS

AREA 1 - This stand is immediately adjacent to the road. Management is directed toward beautification. Overmature and defective trees will be removed. Trees beneficial to wildlife will remain and will be identified. Some thinning is planned to accelerate the regeneration of a new stand.

AREA 2 - This area was selected for crop tree(best tree) management at minimum cost. The purpose is to release and favor the better quality trees. Undesirable timber competing with the crop trees have been deadened by applying herbicide to individual trees. Mature trees will be harvested at 15 year intervals.

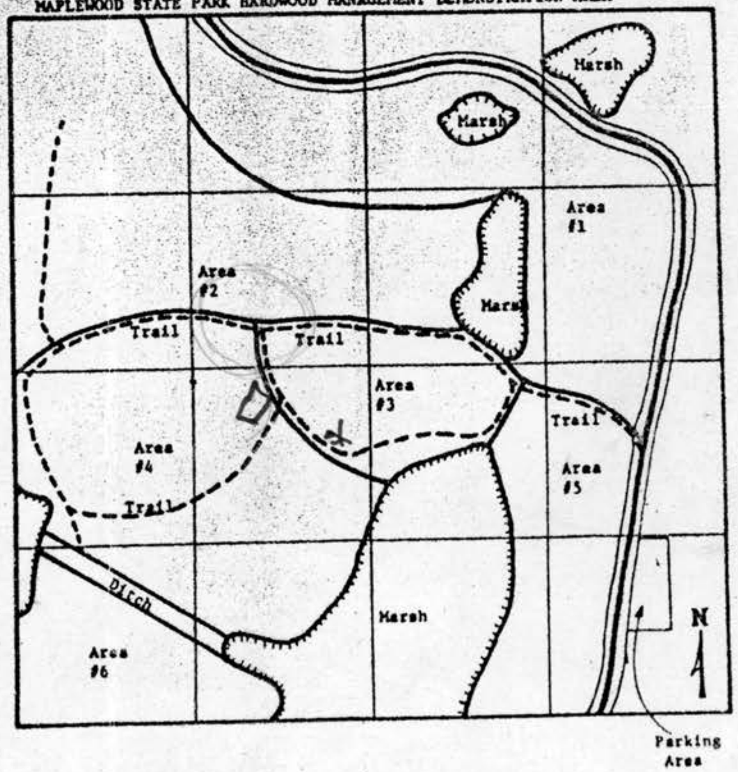
AREA 3 - This stand was harvested under the Shelterwood System (Two Heavy Cuts). About 35 percent of the volume was removed in the first cut. In 15 years, after an under-story of young trees has developed, the remaining mature trees will be harvested.

AREA 4 - This area will be completely released and thinned. All undesirable trees will be removed. Spacing will be adjusted for the development of tree crowns.

AREA 5 - This stand, which also adjoins the road, is a "control area" reserved to provide a comparison of the managed vs the unmanaged areas.

AREA 6 - This area is reserved for future treatment. Information derived from the various practices (Areas 1 through 4) will determine the type of treatment.

MAPLEWOOD STATE PARK HARDWOOD MANAGEMENT DEMONSTRATION AREA



1/2/80

ADDENDUM

MAPLEWOOD STATE PARK

Environmental Assessment

I. Description of the Proposed Action

The Minnesota Department of Natural Resources intends to increase the quality of outdoor recreational opportunities at Maplewood State Park by developing new facilities.

The Heritage Conservation Recreation Service proposes to participate with the State of Minnesota in the proposed projects.

The proposed projects include:

1.	Roads	380,000
2.	Picnic Area Well	10,000
3.	Campground*	5,000
4.	Trails*	15,000
5.	Water Resources Management	1,000
6.	Erosion Control*	1,000
7.	Vegetative Management*	10,000

The total cost of the proposed projects is $422,000. State funds are available for the completion of the projects, scheduled to be concluded by the end of the 1981 construction season.

*Projects described in 1977 addendum.

II. Description of the Environment

Provided previously in the environmental assessment for Maplewood LAWCON Project submitted June 10, 1976.

III. Environmental Impact of the Proposed Action

The road realignment and paving from Minnesota Highway 100 to the beach and campground may cause traffic delays for park users. The project will also result in some vegetation loss. The public use of the park will benefit through the existence of an all-weather road.

The picnic area well will provide a safe source of water for the public's use.

The water resource management project will result in the re-establishment of wetlands by blocking of artificial drains. The parks aquatic flora and fauna will benefit from additional habitat. The wetlands may also help replenish the park's ground water resources.

ADDENDUM

MAPLEWOOD STATE PARK

Environmental Assessment Submitted June 10, 1976.

I. Description of the Proposed Action

The Minnesota Department of Natural Resources intends to increase the quality of outdoor recreational opportunities at Maplewood State Park by developing new facilities.

The Bureau of Outdoor Recreation, as federal administering agency of the Land and Water Conservation Fund (LAWCON), proposes to participate with the State of Minnesota in the proposed projects.

The proposed projects include:

1)	Soil and Vegetation Management	$23,000
2)	Cultural Resource Surveys	$10,000
3)	Road Improvement	$ 3,500
4)	Interpretive Displays	$ 4,500
5)	Campground Development	$42,000
6)	Trail Development	$10,000
7)	Campground Amphitheatre	$ 5,000
8)	Beach Sanitation/Shelter Building	$63,000

The total cost of the proposed projects is $161,000. State funds are available for the completion of the projects, scheduled to be concluded by the end of the 1979 construction season.

II. Description of the Environment

Provided previously in the environmental assessment for Maplewood LAWCON Project submitted June 10, 1976.

III. Environmental Impact of the Proposed Action

Under the Minnesota Outdoor Recreation Act of 1975, a comprehensive management plan has been developed for Maplewood State Park. Development funds will be released upon final approval of the master plan, which sets forth the development proposals listed in this assessment. Proposals followed a two-year multidisciplinary study of park needs and possible impacts of management alternatives.

Proposed actions fall into three general categories: research, resource management and development. A cultural resource site survey will be conducted on all locations prior to project implementation (map attached). A soils inventory will be undertaken in association with soils and vegetation management projects. Neither of these actions will significantly affect the environment, although findings of these investigations could eventually lead to enhancement of the park and the surrounding area.

Resource management actions will include erosion control in problem areas on steep trails and prescribed burning to stimulate prairie remnants and maintain old field openings. Vegetation management areas and proposed techniques are appended. Although prescribed burning may cause shifts in species composition and density favoring non-woody native varieties, no appreciable adverse impacts on physical, biotic or other park resources are anticipated.

Development projects include a road realignment, interpretive displays, campground, trail and beach sanitation building construction. Development sites are identified on the attached map. Some local disruption of flora and fauna will occur in and adjacent to development sites. Since no historical or archaeological sites are known in proposed development areas, no adverse impacts to these resources are anticipated. However, a site survey will be conducted on each development project location prior to implementation.

IV. Mitigating Measures Included in the Proposed Action

The development of new facilities at this new and increasingly popular park will direct patterns of use consistent with goals put forth in the recently completed master plan. This will mitigate against the long term adverse impacts of uncoordinated development and misuse of park resources. Road realignment will improve safety for drivers on the park road. Improved sanitation facilities will contribute to the health and comfort of visitors. Trail development and interpretive media will facilitate public access to an understanding of the park.

V. Unavoidable Adverse Environmental Impacts

There will be direct loss of plant and animal life in the immediate vicinity of development sites. Development of certain facilities, particularly trails, will subject new areas to recreational pressures and possibilities of increased littering, vandalism, wildfire and displacement of certain wildlife species.

VI Relationships of Short-term Uses and Long-term Productivity

Because increasing recreational use of Maplewood is creating a need to provide additional facilities and management, short-term losses will be outweighed by long-range productivity.

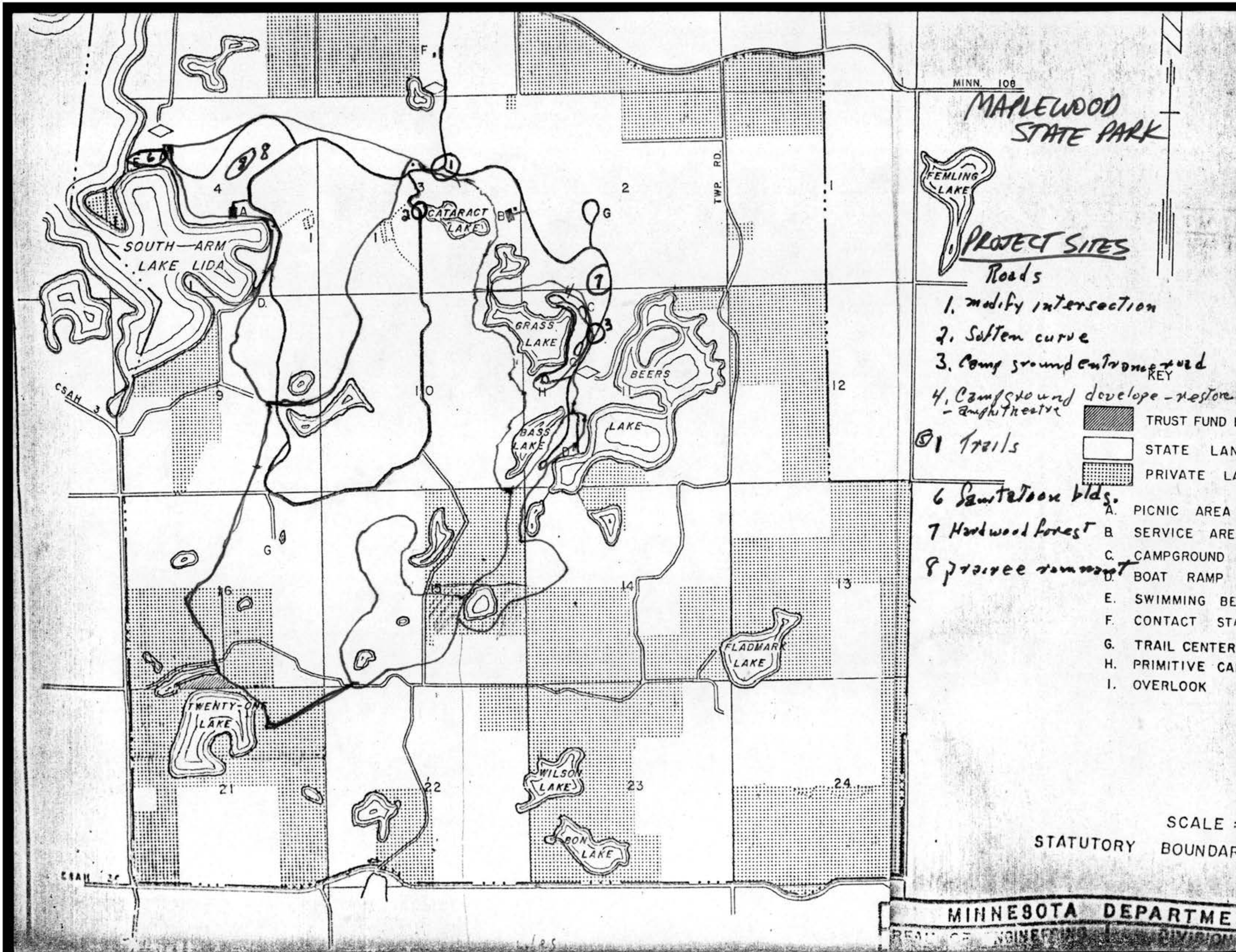
GAINS	LOSSES
1. Improved soils information	1. Expenditure of $161,000 of public funds.
2. Improved soil/vegetation management	2. Loss of local flora and fauna in project areas.
3. Safer park drive	
4. Improved camping/trail facilities	
5. Improved beach sanitation	
6. Improved interpretation	
7. Improved cultural information	

VII. Irreversable or Irretrievable Commitment of Resources

Project implementation will result in increased attractiveness of the area to recreationists and enhanced value of nearby recreational lands. The manpower, materials and funds necessary to carry out the project will also be irretrievably committed.

VIII. Alternatives to the Proposed Action

Major alternatives considered are : 1) no action and 2) a project of larger scope. In 1), failure to develop necessary facilities could result in degradation of resources. The park master planning process has demonstrated the need for facilities and improvements included in this project. In 2), more extensive work is not judged necessary at this time, under project phasing outlined in the plan.



MAPLEWOOD STATE PARK
MINN. 108
FEMLING LAKE
PROJECT SITES
Roads
1. modify intersection
2. Soften curve
3. Camp ground entrance road
4. Campground develope - restore - amphitheatre
5 1 Trails
6 Sanitation bldg.
7 Hardwood forest
8 prairee remnant
KEY
TRUST FUND L
STATE LAN
PRIVATE LA
A. PICNIC AREA
B. SERVICE AREA
C. CAMPGROUND
D. BOAT RAMP
E. SWIMMING BE
F. CONTACT STA
G. TRAIL CENTER
H. PRIMITIVE CAM
I. OVERLOOK
SOUTH ARM LAKE LIDA
CATARACT LAKE
GRASS LAKE
BEERS LAKE
BASS LAKE
TWENTY-ONE LAKE
WILSON LAKE
BON LAKE
FLADMARK LAKE
CSAH 3
TWP. RD.
SCALE :
STATUTORY BOUNDAR
MINNESOTA DEPARTME

ADDENDUM

MAPLEWOOD STATE PARK

~~Addendum~~ to Environmental Assessment ~~Submitted with LAWCON Project~~
~~LW-27-00~~ SUBMITTED JUNE 10 1976

I. Description of the Proposed Action - ~~Maplewood State Park was created by an act of the Minnesota State Legislature in 1963.~~

The Minnesota Department of Natural Resources intends to increase the quality of outdoor recreational opportunities at Maplewood State Park by developing new facilities.

The Bureau of Outood Recreation, as federal administering agency of the Land and Water Conservation Fund (LAWCON), proposes to participate with the State of Minnesota in the proposed projects.

The proposed projects include:

1)	Soil and Vegetation Management	$23,000
2)	Cultural Resource Surveys	$10,000
3)	Road Improvement	$3,500
4)	Interpretive Displays	$4,500
5)	Campground Development	$42,000
6)	Trail Development	$10,000
7)	Campground Amphitheatre	$5,000
8)	Beach Sanitation/Shelter Building	$63,000

The total cost of the proposed projects is $161,000. State funds are available for the completion of the projects, scheduled to be concluded by the end of the 1979 construction season.

II. Description of the Environment - Provided previously in the environmental assessment for Maplewood LAWCON Project ~~LW-27-00~~. SUBMITTED JUNE 10, 1976,

III. Environmental Impact of the Proposed Action - Under the Minnesota Outdoor Recreation Act of 1975, a comprehensive management plan has been developed for Maplewood State Park. Development funds will be released upon final approval of the master plan, which sets forth the development proposals listed in this assessment. Proposals followed a two-year multi-disciplinary study of park needs and possible impacts of management alternatives.

Proposed actions fall into three general categories: research, resource management and development. A cultural resource site survey will be conducted on all locations prior to project implementation (map attached). A soils inventory will be undertaken in association with soils and vegetation management projects. Neither of these actions will significantly affect the environment, although findings of these investigations could eventually lead to enhancement of the park and the surrounding area.

Resource management actions will include erosion control in problem areas on steep trails and prescribed burning to stimulate prairie remnants and maintain old field openings. Vegetation management areas and proposed techniques are appended. Although prescribed burning may cause shifts in species composition and density favoring favoring non-woody native varieties, no appreciable adverse impacts on physical, biotic or other park resources are anticipated.

Development projects include a road realignment, interpretive displays, campground, trail and beach sanitation building construction.

Development sites are identified on the attached map. Some local disruption of flora and fauna will occur in and adjacent to development sites. Since no historical or archaeological sites are known in proposed development areas, no adverse impacts to these resources are anticipated. However, a site survey will be conducted on each development project location prior to implementation.

IV. MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

The development of new facilities at this new and increasingly popular park will direct patterns of use consistent with goals put forth in the recently completed master plan. This will mitigate against the long term adverse impacts of uncoordinated development and misuse of park resources. Road realignment will improve safety for drivers on the park road. Improved sanitation facilities will contribute to the health and comfort of visitors. Trail development and interpretive media will facilitate public access to and understanding of the park.

V. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

There will be direct loss of plant and animal life in the immediate vicinity of development sites. Development of certain facilities, particularly trails, will subject new areas to recreational pressures and possibilities of increased littering, vandalism, wildfire and displacement of certain wildlife species.

VI. RELATIONSHIPS OF SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

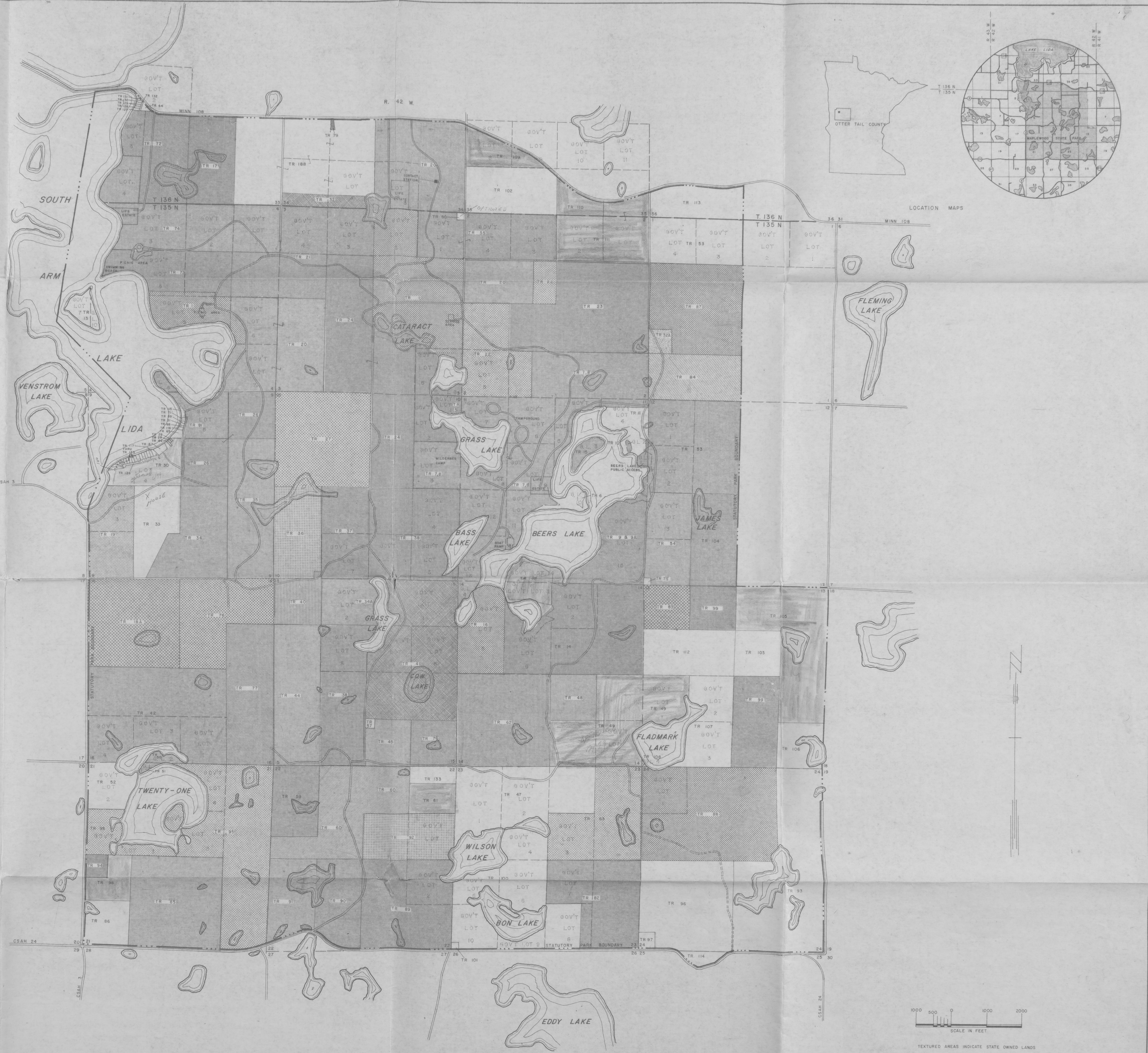
Because increasing recreational use of Maplewood is creating a need to provide additional facilities and management, short-term losses will be outweighed by long-range productivity.

GAINS	LOSSES
1. Improved soils information	1. Expenditure of 161,000 of public funds.
2. Improved soil/vegetation management	2. Loss of local flora and fauna in project areas.
3. Safer park drive	
4. Improved camping/trail facilities	
5. Improved beach sanitation	
6. Improved interpretation	
7. Improved cultural information	

VII. Irreversable or Irretrievable Commitment of Resources - Project implementation will result in increased attractiveness of the area to recreationists and enhanced value of nearby recreational lands. The manpower, materials and funds necessary to carry out the project will also be irretrievably committed.

VIII. Alternatives to the Proposed Action - Major alternatives considered are 1) no action and 2) a project of larger scope. In 1), failure to develop necessary facilities could result in degradation of resources. The park master planning process has demonstrated the need for facilities and improvements included in this project. In 2), more extensive work is not judged necessary at this time, under project phasing outlined in the plan.

TR. NO.	NAME	ACREAGE	OPT.	EP.	ACQ.	REMARKS
1	Carl Fogelberg	242.00	x	x	x	
~~2~~	~~Replaced by 72~~					
~~3~~	~~Replaced by 74~~					
	~~Replaced by 72~~					
5	A.C. Meland	8.25	x	x	x	
6	W. Roger Cammack	2.15				
7	Melvin Drayton	86.90	x	x	x	Life Estate
8	Melvin Drayton	277.35	x	x	x	
9	Lloyd Cromwell	40.00	x	x	x	
9A	Lloyd Cromwell	15.60	x	x	x	
10	Robert Klaboe	2.80				
11	Alfred Schultz	17.25				
12	E.J. Tansem	22.00			x	
13	Dale Lestina	14.75				
14	Jake L. Hurni	200.25	x	x	x	
15	Edith V. Moore	6.75	x	x	x	
16	Warren Ohman	50.50	x	x	x	
17	Francis Jacobson, et al	80.00	x	x	x	
18A	Emil Drayton	160.00	x	x	x	
18B	Emil Drayton	214.60				
19	Alma Johnson	72.25	x	x	x	
20	Vivian Fritz	381.70	x	x	x	Life Estate
21	Sevander Johnson	156.76	x	x	x	
22	August Springer	118.50	x	x	x	
23	Elwin Roed	200.00	x	x	x	
24	Alvar Jacobson	273.00	x	x	x	
24A	Alvar Jacobson		x	x	x	Life Estate
~~25~~	~~Replaced by 81~~					
26	Harry W. Berg	80.00	x	x	x	LEASE PART EXP '80
27	Ellis R. Wagstrom	160.00	x	x	x	
28	Bernice Bakken	0.11				
29	Mary Bakken	0.12				
30	Edward R. Brekke	42.24			x	
31	Homer Halbakken	0.22				
32	Vivian Fritz	20.5	x	x	x	
32A	Vivian Fritz	10.00	x	x	x	
33	Oscar Benston	60.00				
34	Melvin R. Berg	142.00	x	x	x	
34A	A. C. Meland		x	x	x	
35	Robert Kiser	120.00	x	x	x	
36	Zane Heifner	78.95	x	x	x	
37	Walter Kalling	79.90	x	x	x	
38	Maplewood Park Assn.	265.15	x	x	x	
~~39~~	~~Replaced by 76~~					
40	Edgar A. Heifner	41.05	x	x	x	
41	Melwyn Townsend	200.65	x	x	x	NO SNOWMOBILES, ATV's, ETC DURING LIFE OF GRANTORS
42	Elroy Backstrom	211.00	x	x	x	
~~43~~	~~Replaced by 77~~					
44	Campfire Girls	120.00	x	x	x	
45	L. Hegland	38.00				
~~46~~	~~Replaced by 78~~					
47	Jack Newberry	144.00				
48	Kenneth Beckman	40.00	x	x	x	
49	Hector Zeller	159.90			x	
50	State of Minnesota	6.00			x	Trust Fund
51	Alan and John Snowberg	1.00	x	x	x	
52	Harry Martinson	32.25				
53	Olga B. Nelson	234.09	x	x	x	
54	Leona Krebs	77.75	x	x	x	
55	Norman E. Pierce	117.60	x	x	x	
~~56~~	~~Replaced by 95~~					
57	Maplewood Lutheran Church	2.00				
~~58~~	~~Replaced by 79~~					
59	Bruce Pederson	60.00	x	x	x	
60	Henry Tollefson	140.00	x	x	x	
61	Robert Danicourt	22.00			x	
62	Clifford Saunders	160.00	x	x	x	
63	Sanford Emery, et al	118.00	x	x	x	
64	Helmer Ohman	1.30				
65	Clifford Green	1.60				
66	Blanche Grey	0.23				
67	Laurabel M. Tavis	2.00				
68	Cecil Johnson	0.17				
69	E. C. Stinar	0.15				
~~70~~	~~Replaced by 71~~					
71	Hallet Bruestle	0.30				
72	Horace Hallaway	94.00	x	x	x	
73	William Hallaway	80.00	x	x	x	
74	Hallaway, et al	163.66	x	x	x	Life Estate
75	School	1.00				
76	Clyde L. Thorstenson	120.00	x	x	x	
77	Maplewood Park Assn.	120.00	x	x	x	
78	Fergus Falls Area SA.W.C.	40.00	x	x	x	
79	Sunday School Assn.	0.50	x	x	x	
80	Norman E. Pierce	1.00				
81	Viking Developers	45.99	x	x	x	
82	Leonard Saurer	136.25	x	x	x	
83	Stanford Miles	40.00	x	x	x	
84	Wilbur Shipley	80.00	x	x	x	
85	Floyd Neubauer	160.00	x	x	x	
86	Gulleck Gulleckson	40.00				
87	Elwin Roed	150.00	x	x	x	
88	Nafzeger & Popen	236.65	x	x	x	
89	David Anderson	155.00	x	x	x	
90	Vernon Sylvester, et al	75.00	x	x	x	
91	Carl Norgren	60.00	x	x	x	
92	Neil Hunter	78.50	x	x	x	
93	Alfred Schleske	240.00				
94	Dell Kenyon	10.00	x	x	x	
95	Allen A. Metcalf	257.80	x	x	x	Life Estate - G.L. 3
96	Martin Nodsle	155.00				
97	John Nodsle	5.00				
98	Mark Kenyon	30.00	x		x	
99	Otter Tail County	120.00	x	x	x	Tax Forfeited
100	Clifford Knutson	126.75				
101	Russel Schleski	1.00				
102	Lula Brown	78.2				
103	Lester Kahl	40.00				
104	Steve Johnson	80.00	x	x	x	
105	Albert Wischwacht	160.00			x	
106	L. C. Adams	40.00				
107	Leonard Willhite	55.15				
108	Fergus Falls F & G Club	0.25	x	x	x	
109	Carl H. Carlson	38.10			x	
110	Maple Acres	21.70			x	
111	Willard Drayton	95.00			x	
112	Evar B. Fladmark	80.00				
113	Orrin Monson	57.10				
114	Lawrence A. Nelson	18.40				
115	Ray F. Miller	0.84				
116	Les W. Klein	0.30				
117	Dale Western	0.35				
118	Joy Carlson	0.35				
119	Ken J. Anderson	0.35				
120	Duane H. Eidsvold	0.35				
121	George & Marie Fismen	0.35				
122	Paul Wegner	0.35				
123	Richard A. Tryhus	0.35				
124	Alvin & Dorothy Hanson	0.35				
125	Gustane H. Carlson	0.70				
126	Dedicated Roadway	2.80			—	
127	Fredrick & Mary Apite	0.30				
128	Harold Lee	0.23				
129	Philip Elgenmann	0.40				
130	Arthur M. Harden	0.20				
131	Fred W. Clemens	0.45				
132	Roadway	0.50			—	
133	Richard Danicourt	18.00				
243A	Melvin W. Drayton	3.45	x	x	x	Public Access



FEB 2 1978

No.	Date	Revision	By	Chkd.	Appr.
1	8-19-77	LOCATION MINN 108	LDS	RES	

Reference Drawings

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

BUREAU OF ENGINEERING — DIVISION OF PARKS AND RECREATION

OWNERSHIP MAP

Designed | Drawn 12-17-71 L.D. SWENSON
Survey | Checked 11-30-72 D.A. DUFFY
Datum | Revised (OWNERSHIP) SVF 12-15-77

MAPLEWOOD STATE PARK

OTTER TAIL COUNTY - NEAR PELICAN RAPIDS

Date 10-17-73 ACTING Administrator

Sec.	T. 135 & 136 N.	R. 42 W.	
Dept. Code REG 502	Req. 72-1	Sheet 10	File P.093.00.01

44x34

ADMIN 1000 (REV. 4/77)

DEPARTMENT Natural Resources

STATE OF MINNESOTA

Office Memorandum

TO : Frank Knoke
Environmental Specialist

DATE: March 9, 1982

RECEIVED

MAR 11 1982

Dept. of Natural Resources
Div. of Parks & Recreation

FROM : Paul L. Rundell PLR
Resource Management Coord.

PHONE:

SUBJECT: Hardwood Cutting in Maplewood State Park

Last summer Curt Cogan, the District Forester, Bob Hanson, and myself flew over the park attempting to identify tree disease and mortality problem areas. The enclosed map shows the location of these sites.

Tamarack mortality (Marsh Symbol) occurs in only one spot and could possibly be related to past herbicide usage outside the park. Two identified areas are elm mortality sites, one is in Basswood and the rest are all Red Oak problem areas. A total of 28 sites were identified.

Several options are available in these areas. We can leave them as they are, but they will probably spread rapidly to infect more of the area or we can remove infected trees hoping to stop the spread before it becomes worse. Some of the areas can be left as they are as they are isolated from other oak stands that could be directly affected. The two elm sites have a number of newly dead trees, some of which may be infected with Dutch Elm Disease; some do have Elm Bark Beetles suggesting that this may be a problem.

The Basswood site may be dying from old age. Many seedlings and root suckers are present, thus assuring that the stand will be perpetuated and the dead trees will provide valuable wildlife habitat. This stand will be watched in the future to see if it is expanding or spreading into other areas.

The large oak problem area is next to a healthy private stand and across the road from another and could infect either of them in the future.

We do have the option of removing Red Oak trees without greatly disturbing the rest of the forest they are included within. The oaks are scattered throughout the forest and make up about 20% of the total number of trees in the infected area. Some of the infected trees still have some live parts and can be expected to resprout if cut now. The gaps left from removal of the older trees will also allow some seedlings to develop.

Reasons for cutting now can be summarized easily. These are:

1. Limit the spread of the two lines chestnut borers
2. Salvage a valuable resource
3. Supply another habitat in the park
4. Change the age structure in the park's forest
5. We still have a chance for some suckering to occur

Reasons for leaving them are listed below:

1. May have a problem with public acceptance of cutting in the park
2. It will leave a short term scar
3. We will lose a part of the old growth oaks in the park
4. We will be removing some potential future snags
5. We will change the successional pattern on these stands

Limiting the spread of insects and diseases from the park to the surrounding area must be a major consideration, but does not assure continual health for these stands as other infection centers can be found outside the park. The best reasons are that we still have a good chance to regenerate the infected stands if we cut them now. Changing the age structure in the park will reduce the chance for biological disasters in the future. And last, salvaging a valuable resource should be considered.

Public acceptance may not be a problem if the public knows what we are doing and why we are doing it. The logging scar is transitory and should not be evident to the casual observer soon after cutting. Losing a part of the old growth oaks in this area will not really affect the total number of old oaks in the park and may, in fact, mean that some of the others will have a better chance of surviving.

For these reasons, I think that we should proceed with the planned removal of these trees.