



Minnesota Natural Resources
Department: Environmental
Assessment Files Regarding State
Parks

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SCHOOLCRAFT STATE RECREATION AREA - 27-00569

ENVIRONMENTAL ASSESSMENT

The parcel of land included in this proposal is typical of the timber and grassland located within the recreation area. The general assessment fully pertains to this parcel.

1. Description of the Proposed Action- Lands to be acquired or developed are within the statutory boundaries of Schoolcraft State Recreation Area, located in Cass and Itasca Counties, in North Central Minnesota, five miles southwest of Cohasset, Minnesota.

Schoolcraft State Recreation Area was established by the Minnesota State Legislature in 1959, with an original acreage of 192 acres to provide public recreational accommodations on a portion of the Mississippi River to commemorate Henry Schoolcraft who determined the true source of the Mississippi River at Lake Itasca in his explorations of 1832. Subsequent legislative action has expanded the statutory acreage to the present 295 acres.

The park was established to provide recreational facilities and preserve the virgin red pine timber which is abundant within the park. The Vermillion and Mississippi Rivers also flow through the boundaries bisecting the park in three parts. Recreational activities provided are camping, picnicking, fishing, boat launching and hiking.

The main management goal for Schoolcraft State Recreation Area is to provide a recreational and environmental learning area for present and future generations; to preserve and manage the abundant virgin pine; and to protect the Vermillion and Mississippi Rivers from development.

2. Description of the Environment- Schoolcraft State Recreation Area is located on the high banks of the Mississippi River and most of the land area is covered by virgin red pine timber which escaped the extensive logging in the area. Nesting waterfowl are found in abundance in the high grasses and wild rice found along the shores of the river. Miscellaneous articles of archaeological importance, from two periods of time, have been discovered on land within the recreation area which was originally known as Dobson's Point. Articles attributed to the Sioux Indians about 150 years ago and articles from the lumberjack days have been found only several yards apart on this point.
3. The Environmental Impact of the Proposed Action- Enhancement of the environment will result through improved management practices such as timber stand improvement, controlled burning, tree planting, sodding, seeding, erosion control and burial of obtrusive overhead power and telephone lines.

Current management policies on acquisition and development of State parks provides for an area, approximately one-fifth which is developed for intensive recreational use, with the remaining four-fifth providing a natural environmental area and buffer zone designed for limited use such as hiking trails.

The original 192 acres, when the park was established was part of a land transfer with part of the land being tax-forfeited and other parts being Indian lands of the counties. An additional 20.33 acres were transferred during 1963 bringing the total state ownership at present to 212.33 acres. To date no private lands have been acquired within the boundaries and therefore no tax loss has been experienced by the counties.

Separate police protection is provided by the park staff, resulting in reducing the local sheriff and police authorities responsibility.

4. Mitigating Measures Included in the Proposed Action- All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state, conforming with the surrounding environment.

Any agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Parks and Recreation acquires farm land, it becomes advantageous to allow a lease arrangement with the farm owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weed-icides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocated his home for the few remaining years of his life. As an inducement to sell, the Division of Parks and Recreation offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only, and avoids court proceedings for probating estates.

5. Any Adverse Environment Effects Which Cannot Be Avoided Should the Proposals be Implemented - The true effect of withdrawing land to be acquired in Schoolcraft State Recreation Area, cannot be determined. The remaining acreage to be acquired is small and does not interfere with the intensive use areas of the park. The acquisition of these parcels are not of high priority and will be made at the convenience of landowners.

As public visitation of the area increases, job opportunities will become available at the park. Additional jobs are provided by our development program in parks for NYC, Green Thumb and other such Federal programs. Economic benefits and job opportunities are expected for drive-ins, gas stations, restaurants, bait shops, etc., which cater to tourist and park visitors.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Before establishment of this area as a park, 212.33 acres were tax forfeited or county ownership and little or no productive use was being made of it. By establishing this area as a park, the entire public benefits from the use of its recreation resource. Economic benefits are enjoyed by the surrounding area and future generations are assured that the area will be preserved for their use.

7. Any Irreversible or Irretrievable Commitment of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated earlier, Schoolcraft State Recreation Area was established by the Minnesota State Legislature in 1959. Establishment of a Minnesota Park is a commitment to provide recreation facilities and open space for present and future generations. Remaining land to be acquired within the boundaries are of low priority and may be several years before they are acquired.

Once the land becomes state property inside park boundaries, only by act of the Minnesota Legislature can reverse the commitment of providing public recreation.

8. Alternative to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of preserving this area and its recreation resource, and providing for the projected future needs of open space cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique virgin natural area eventually resulting in its use for private purposes that would add little or nothing to the general public good.

Since Schoolcraft State Recreation Area has already been established for public use, the only remaining alternative is to acquire and develop the land within the boundaries according to the policies developed by the Division of Parks and Recreation for providing public recreational facilities.

ENVIRONMENTAL ASSESSMENT

Moose Lake State Recreation Area

1. Description of the Proposed Action -

Lands to be acquired or developed are located within the statutory boundaries of Moose Lake State Recreation Area. The Recreation Area is located in Carlton County in east central Minnesota. Thirty-four miles southwest of the City of Duluth.

The 1000 acre Moose Lake State Recreation Area is comprised of state lands previously under the jurisdiction of the Minnesota Department of Welfare as part of the Moose Lake State Hospital Complex. The lands were transferred by the Legislature in 1971 to the Department of Natural Resources' jurisdiction to be used for the establishment of a "demonstration area" to determine how such lands could be managed to provide recreational opportunities to those persons owning all terrain vehicles, snowmobiles, trail bikes, mini-bikes, dune buggies and other multiwheeled vehicles.

2. Description of the Environment -

The 1000 acre Moose Lake State Recreation Area is comprised of state land previously under the jurisdiction of the Minnesota Department of Welfare as part of the Moose Lake State Hospital Complex. These lands were determined to be surplus to the operation of that institution. Most of this acreage was formally under cultivation. This land fronts on about one-half mile of the shore of Moosehead Lake. The lake frontage is generally steep, with red and white pine covering much of the shore. The area also fronts all of the north shore and part of the east shore of Pickeral Lake. The land undulates, varying in elevations by approximately eighty feet. There are limited natural values inherent to this area, more specifically, the stand of Norway Pine on Moosehead Lake, some mixed hardwood stands and coniferous seeding plantings in the vicinity of Pickeral Lake, and a mixture of coniferous and deciduous cover along the creek which meanders on the north side of the area. This area is bisected by Interstate Highway 35E in that stretch between the Twin Cities and Duluth. Existing, is a half diamond interchange which is being proposed to be expanded to a full diamond in the future. Expansion of the diamond interchange to a full diamond would allow for a trail bridge to access trail users to the western portion of the area.

3. Environmental Impact of the Proposed Action -

This state recreation area is unique in that it is to be primarily for trail users where the natural scene and other recreation facilities will be of secondary importance. Of the 1,000 total acreage, only 340 acres are open to the use of ATV's under the management plan, and on a portion of the "open" area, ATV's are confined to established designated trails.

The varying degrees of restrictions of trail use is for the purpose of making comparisons in determining damage, if any, in the volume and type of traffic. The management plan will be revised to consider any conclusive results of damage.

ATV use, including snowmobiles is presently confined to the area east of U. S. Highway 35 E (see trail map). Because of the ruralness of the area, noise is a minor problem. The closest trail is approximately 3,500 feet from the hospital facilities and presents no intrusion. No designated snowmobile or riding trails west of I-35 will be built until a trail bridge is constructed to cross U. S. 35 E. In the meantime tree plantations which will serve as buffers will be planted along the boundary adjacent to the hospital and along the right-of-way of U. S. 35 E.

Actual damage to the physical environment from trail use of ATV's is yet to be determined. Reports of snowmobile damage is yet to be conclusive. Logically all types of use, from hiking to picnicking to camping, all leave their mark on the natural scene in varying degrees. Our obligation to preserve and protect the natural features is relatively simple where there is no use. But when the environment is used there will naturally be some impact. This impact however is not permanent. Areas which are overused can become restricted from use.

Facility development, as well as use areas, is reversible if the development is more damaging than the benefit of its uses.

4. Mitigating Measures Included in the Proposed Action -

Since a potential exists for considerable noise pollution once the area becomes heavily used, coniferous buffers will be planted to absorb disperse noise. This will relieve most noise problems to adjacent landowners. Trails will be posted with signs to prevent users leaving designated trails. Cyclone fencing has been established next to the highway right-of-way to prevent users from entering on or across U. S. 35 E. Farm fencing is also provided on the boundaries of the area preventing users from entering upon lands which are not part of the recreation area.

Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Park development will be minimized to preserve the natural resources. An effort will be made to control and limit the visitor use capacity and to conserve natural values. Development of structures will be carried out so that it is harmonious with the surrounding environment.

Farm lands that have been acquired were seeded with grass to prevent erosion. The local taxing district lost no revenue because the area was in public ownership. It is expected that the surrounding area will become more developed than it is at present. This would raise the local property tax base. Further development of the area as a park will allow more visitations, resulting in additional tourist dollars brought into the area. The land area acquired for the park has become the responsibility of the resident manager and his park staff. Local governmental police and fire protection have been reduced.

All existing overhead transmission lines on the property are buried. New lines will be buried whenever possible.

5. Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented -

Initially during the period of experimentation of ATV use, damage might result. Since ATV use is relatively unstudied, its full impact is not yet known. Damage no matter how severe, is not irreversible to the environment. The particular use causing damage will be restricted and stopped if need be.

Noise generated by the users will be most detrimental at first because of the lack of vegetative cover and the engines presently being manufactured. This however will deteriorate as coniferous cover grows and decibel limit restrictions become more widespread. At the present time there are several machines which offer a machine with a low noise emittance. It will be short time before users and manufacturers realize the benefits from a noiseless machine.

6. Relationship Between Local Short Term Uses of Man's Environment and the Maintenance and Enhancement of Long Term Productivity -

The natural character and scope of the project will play an important part in serving local, county, regional and State needs for outdoor recreational trail opportunities. Initially it will test the impacts of trail uses, to determine if unrestricted facilities can be provided in other areas of the State.

Farming, one of the earlier uses of the area, is economically not feasible. A number of abandoned farms exist within the area. Pine County, an adjacent county, presently has over three hundred abandoned farm sites.

Long term enhancement will result through tree planting, sodding, seeding, and erosion control. The character of the previous farmland can be changed by planting seedlings. Over a long term, this will be a considerable improvement to the openness and flatness of the area.

7. Irreversible and Irretrievable Commitments of Resources -

Transfer of the land by the State Legislature from the Department of Welfare to the Department of Natural Resources was a commitment to providing recreational use to the public. This commitment is irreversible.

Use and facilities of the area are determined by policies of the Department of Natural Resources as outlined by the management plan of the area. These are reversible if damage far outweighs the benefits of use. Restrictions of use and resource management can retrieve the natural environment.

Development of the land area with assistance from the Land and Water Conservation Fund commits it to recreation and open space. Section 5 (f) of the Land and Water Conservation Fund Act states that approval of the Secretary of the Interior must be granted before a change in use can be made.

8. Alternatives to the Proposed Action-

Designation of this area as a "recreation area" places more emphases on providing recreational activities then preservation of the area with limited recreation facilities. The area was previously farmed which proved to be uneconomical. There are no significant natural features which cannot be found elsewhere in the State or which cannot be duplicated in the recreational area. There are no significant archaeological, geological, historical or physical features of the area. Since the Division of Parks and Recreation did not provide an area for snowmobile and ATV use at the time of its establishment, it was felt that the Moose Lake State Recreation Area would be ideally suited for motorized use with a minimum of impact. The possibilities of experimentation are limitless in the area. The environment can be considerably improved by planting trees and seedlings which will enhance this and the surrounding area. Any designated use which is harmful to the environment can be restricted or eliminated. Designation of this area, as a recreation area open to all motorized uses, is on an experimental basis. Any detrimental environmental impacts resulting from use can be reversed.

ENVIRONMENTAL ASSESSMENT

FORESTVILLE STATE PARK

1. Description of the Proposed Action -

Lands to be acquired or developed are located in Forestville State Park in extreme southeastern Minnesota. The park is thirty miles from the city of Rochester and thirty-five miles from Austin.

Forestville State Park was established in 1963 with an authorized land area of 2,496 acres. The park includes the territorial ghost town of Forestville with its surrounding forest and steep limestone valley walls. Originally the area was recommended for state park establishment in 1939.

The park was established to preserve one of the early settlement sites of Minnesota located in the valley of the South Branch of the Root River. The site includes the Meighen trading post which was closed in May of 1910 with all of its merchandise still in place and dating back to the Civil War. The area also includes recreational opportunities for camping, picnicking, hiking, horseback riding, snowmobiling, trout fishing, nature study and bird watching.

2. Description of the Environment -

The park area embraces an early settlement site located in the Root River Valley surrounded by hardwood forests, meadows, cold spring water streams and steep limestone valley walls. Before the turn of the Twentieth century the town was a stopping place for the stage coach and a commercial center for the area. The town eventually died when the railroad bypassed it and the country side has changed little since then.

There is a large consolidated tract of virgin forest, comprising about 800 acres adjacent to the townsite of Forestville. The area has a rugged terrain because glacial action did not reach this portion of Minnesota. There are many clear spring water streams and the park contains one of the finer trout streams in Southern Minnesota. Most of the hillsides are covered by mature hardwood timber. The park is within the confines of the Minnesota Memorial Hardwood Forest.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through carefully implemented resource management practices. These will include timber stand improvement; watershed, stream and bank protection; planting; seeding and erosion control.

Park development will be minimized to preserve and protect the natural, biological, geological and historic features of the area. Selection of actual development sites will be made only after thorough considerations for the natural amenities. An effort will be made to control and limit visitor use capacity and to conserve natural values. Development of structures will be carried out so that they are harmonious with the surrounding environment.

4. Mitigating Measures Included in the Proposed Action-

All existing overhead power and telephone lines, which serve no demonstrated

need, will be removed. Overhead lines which can be used for development of park facilities will be buried or screened with vegetative cover to lessen the intrusion on the park atmosphere. New lines will be buried when feasible.

Buildings acquired which cannot be converted to park use, will be moved, sold or dismantled. These building sites are returned to natural conditions by filling basement depressions, seeding and tree planting.

Any productive agricultural lands will be seeded to a grass crop and planted with trees. This is done to eliminate any visible evidence of the land being farmed. Because farming sometimes takes place before the state acquires land, it becomes advantageous to allow a lease arrangement with the farm owner for one or two years following purchases. This allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any herbicides in the year immediately following harvest of the crop. The land must be thoroughly disced, dragged and seeded with June grass, perennial rye and fescues. The following year, the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and converts croplands to grasslands efficiently and quickly. The lessee, although he benefits economically, is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grasslands.

In limited cases, retired landowners refuse to sell their property because an unreasonable hardship would be created by having to sell and relocate their home. The state, will, however, offer the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This procedure is in lieu of relocation. This privilege is extended to the owner and his wife only and avoids court proceedings for probating estates.

All families who are required to relocate because of action by the State will be afforded the benefits of relocation assistance, moving costs and compensation.

5. Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented -

The natural environment will not suffer adverse environmental effects from acquisition since the purpose of state parks is to preserve historical, scenic, natural and archaeological areas. Initially, there will be adverse effects from a social and economic standpoint caused when families are required to relocate. This relocation is unavoidable. Relocation assistance will provide persons being relocated with similar housing or farms elsewhere. Tax loss experienced by local communities and governments will be compensated by bringing additional tourist dollars to the area and by providing new facilities for these tourists (gas stations, farm markets, drive-ins, etc.)

6. Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity -

The natural character, scope and locations of the project will play an important role in serving local county and regional area needs for outdoor recreational opportunities. The project will: (1). Preserve the geological features of the South Branch of the Root River. (2). Preserve the historical character of the area. (3). Maintain the undeveloped character of the area. (4). Provide recreational opportunities and open space and lessen regional needs. (5). Interpret the historical aspects of the park heritage.

If acquisition and development is not completed, the area will continue to provide temporary uses such as farming.

7. Irreversible and Irretrievable Commitments of Resources -

Acquisition and development of lands within park boundaries will result in the permanent conversion of land from present limited use to recreational use. Acquisition and development of land with assistance from the Land and Water Conservation Fund commits it to recreation and open space. Section 5 (f) of the Land and Water Conservation Fund Act states that approval of the Secretary of the Interior must be granted before a change in use of any fund associated land can be made. No other land use will be permitted in the project area unless the change is authorized.

8. Alternatives to the Proposed Action - There remain two alternatives to consider once the State Legislature has established statutory boundaries in a state park: (1). Take no action. (2). Acquire land at the earliest convenience.

No action will provide the continued use of the land until a more desirable and economic use is recognized. Occasionally the economic aspect of the use is overlooked and residential building sites become desirable. The unspoiled character of this park, and the Root River would be harmed if residential sites were allowed to be developed. The goal of preserving the history and environment will be forgone if the park area is not acquired or developed.

By acquiring the land at the earliest convenience means that the land would be in private hands until the owner decides to sell his property. Since the Division of Parks and Recreation does not have the broad authority of Eminent Domain, the owner is not forced to sell his property to the State. However, eventually acquisition of the parks lands will provide valuable open space for future generations.

The parcels of land included in this proposal are typical of the agricultural land located within the park. The General Assessment fully pertains to this land.

ENVIRONMENTAL ASSESSMENT

1. Description of the Proposed Action. - Lands to be acquired or developed are within the statutory boundaries of Maplewood State Park, located in Otter Tail County in West Central Minnesota, five miles east of Pelican Rapids.

Maplewood State Park was established by the Minnesota State Legislature in 1963 with a statutory acreage of 6,660 acres. In 1971, the Legislature expanded the statutory acreage to 9,176 acres, of which, state ownership presently is 3,878 acres.

The park is the fifth largest in the State Park System and is exceeded only in statutory acreage by Itasca, St. Croix, Jay Cooke and Savanna Portage State Parks. It was established to provide a recreational opportunity in a region devoid of park and public recreational facilities and to protect and preserve the archaeological, biological, and natural resources of the area, which is located in the transition zone between natural western prairie and northern deciduous forest and results in a wide range of natural plant species and wildlife habitat. The area has a unique combination of rolling hardwood forest, meadows, sloughs and deep clear water lakes.

The main management goal, for Maplewood State Park, is to provide a recreational and an environmental learning area for present and future generations, while maintaining and improving the natural environment against changing ecological and social conditions.

2. Description of the Environment - Maplewood State Park is located on the Big Stone Moraine, a geographical feature which was deposited in late pleistocene times by the Des Moines sublobe of the Laurentine Ice Sheet. This moraine is characterized by fairly large rolling hills and many lakes. Several lakes within the moraine, such as Lake Lida which borders on the park, are fairly large and are drained by creeks or small rivers. Lake Lida has a fine developed beach, approximately one mile length with a gentle slope to the water's edge. Before establishment as a park, this beach had been a semi-public recreation spot for many generations. Most of the lakes in the area are, however, rather small run off bodies without outlets. Some of these potholes are only an acre in extent, yet there are multitudes of them in the area which add distinctly to the park.

It was estimated in 1960 that fifty percent of the land surface in the park was forested. Native woodlands are the prime feature of the southeastern portion of the park. Beers Lake is entirely within this area and provides a pleasant setting for the woodland vista. The trees represented in the woodland are basswood, maple, elm, aspen, birch, oak and others. It is typical of the "breakover edge" from prairie to forest as it appears in Minnesota.

Some of the land had been farmed where the terrain made farming possible, however, at the time Maplewood was established as a park many of the farmers were retired, or about to retire and a few farms were in the hands of estates.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding, erosion control and burial of overhead wires. Existing township roads are being abandoned and returned to a natural state as acquisition of acreage on both sides of the roads are acquired. Before abandonment, however, careful consideration is given for accessibility, of remaining landowners, to their property.

Park development will be minimized to preserve the natural, biological, geological, and archaeological resources of the park.

Current management policies on acquisition and development of State Park provides for an area, approximately one-fifth which is developed for intensive recreational use with the remaining four-fifths providing a natural environmental area and buffer zone designed for limited use such as hiking trails.

Before establishment of the park the land that was considered for inclusion in Lida Township, according to the County Auditor, had an assessed valuation of \$2,640.00 and the township tax revenue on that property in 1960 was \$106.00. The portion in Maplewood Township had an assessed valuation of \$4,323.00 and the township's share of the tax was \$572.00 in 1960.

As was expected the surrounding area has become developed with summer homes and residential development. Experience shows that preservation of open space not only preserves but generally enhances property values. This increases the property tax yield, which is the major source of revenue for local governments.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

The agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Park's acquires farm land, it becomes advantageous to allow a lease arrangement with the farmer owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is

acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in reestablishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocate his home for the few remaining years of his life. As an inducement to sell, the Division of Parks and Recreation offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only.

5. Any Adverse Environmental Effects which cannot be Avoided Should the Proposal be Implemented - The true effect of withdrawing land to be included in Maplewood State Park from the tax rolls is impossible to determine since land acquisition within a park is slowly accomplished over a period of years. However, recent studies of the value of lands surrounding metropolitan area parks indicate that land values increase disproportionately to the general rise in real estate values. In this case, the land which encompasses Lake Lida, a portion of which is included in Maplewood State Park, is considered prime for high quality, costly lakeshore development because of the proximity to the park and its open space.

Establishment of a park of this size can be expected to eventually attract at least 500,000 visitor days annually. This expands the market for farm products grown in the area close to the park, and provides a market for fresh eggs, dairy products, meat, homemade bread, jelly, jam, fresh dressed poultry, and all the other food stuffs that park visitors purchase. When a park is established, there is also an expected increase in job opportunities within the park and for drive-in, gas stations, restaurant etc., which are usually built close to the park to cater to the increased tourist trade.

6. The Relationship Between Local Short-time Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - When Maplewood State Park was established in 1963, approximately fifty percent of the area was forest because of the rolling hills, sloughs and potholes. The remaining land was used for agricultural purposes with the exception of the undeveloped lakeshore property along the south arm of Lake Lida.

The extensive hardwood forests located within the park can be carefully harvested on a long term basis according to a timber management plan which will not jeopardize recreational activities. Before establishment of the park there was a possibility of clearing the timber resources to produce agriculture crops, however this would have been a costly adventure which individuals were not too anxious to undertake. The agriculture land being taken out of production within the park boundaries will be offset by the increased production on agriculture lands outside of the park boundaries because of the additional demand for agriculture products by park visitors and tourists.

Local realtors who would be able to do business buying, selling and subdividing lakeshore in the park area have lost the opportunity to profit. However the reduction in availability of lake shore property surrounding Lake Lida has increased the value of private lakeshore holdings and preserves an area for all the public to recreate at the same time.

7. Any Irreversible and Irretreivable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented. As stated earlier, Maplewood State Park was established in 1963 by the Minnesota Legislature. Establishment of a Minnesota State Park is a commitment to provide recreation facilities and open space for present and future generations. Acquisition within statutory boundaries is a slow process which sometime requires many years and because the Division of Parks and Recreation does not have the authority of Eminent Domain the acquisition may never be fully accomplished. Once the land becomes State property inside park boundaries only an act of the Minnesota State Legislature could reverse the commitment to provide a park and open space.
8. Alternatives to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of preserving this area, and providing for the projected needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural area eventually resulting in its use for private purpose that would add little or nothing to the general public good.

Since the park has been established for public use under State Law the only remaining alternative is to acquire and develop the land within the boundaries. According to the policies developed by the Division of Parks and Recreation, for providing public Recreational facilities.

ENVIRONMENTAL ASSESSMENT

Blue Mounds State Park

This parcel of land included in this proposal is typical of the land within the park. The general assessment fully pertains to this parcel.

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Blue Mounds State Park, located in Rock County, in the extreme southwest portion of Minnesota, four miles north of Luverne, Minnesota.

Blue Mounds State Park was established by the Minnesota Legislature in 1937 with an original statutory acreage of 195 acres surrounding two small water impoundments in Mound Creek. Two dams were constructed under the WPA Program in the late 1930's. The 1961 State Legislature authorized the acquisition of 122 acres of scenic Sioux Quartzite bluff and prairie land separated from the original park area. In 1963 the State Legislature authorized acquisition of 342 acres lying between the two previous purchases which included portions of the bluff and virgin prairie lands. Subsequent action by the Minnesota State Legislature has expanded the statutory boundaries to 1995 acres to include the remaining bluff and virgin prairie.

The park has been established to protect and preserve the unique geological feature of the Sioux Quartzite Cliff and virgin prairie and to provide and improve upon recreational facilities started by the WPA Program in the late 1930's.

Historically, the rugged cliffs provided shelter from the winter winds and food (by herding the buffalo over the cliffs to their death) for the Sioux Indians traveling in this area.

The main management goal, for Blue Mounds State Park is to provide facilities for recreation, to protect and preserve the unique natural features of natural prairie and cliff and to interpret the geological and historical significance to the park visitors.

- II. Description of the Environment - Blue Mounds State Park is within an area of virgin prairie which in centuries gone by provides excellent grazing for large herds of American bison which roamed this vast area. Vegetation in the park includes, woods of oak, ash, cottonwood and wild plum along the rock strewn mound creek, patches of Brittle Optunia, Western Prickly Pear, Buffalo Grass, and many wild prairie flowers. Glaciers, twice passed over this spot, leaving scratches in the flat, wind polished rock and boulders. Red, lichen covered boulders litter the park and an outcropping of rock, called Morton Gneiss, forms an eastward facing cliff about a mile long and up to 100 feet in vertical height. These ancient mountain stubs, which are among the oldest rock in the United States (3.5 billion years) not only saved the virgin prairie from agriculture crops but provided the park with an exciting past.

Recreational facilities provided by the park are swimming, fishing, camping, hiking and picnicking.

III. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved prairie management practice such as sodding, seeding, erosion control, controlled burning and grazing by buffalo.

Park development will be minimized to preserve the natural, geological and archaeological resources of the park. Preliminary geological and archaeological research has been conducted in and surrounding the park. Findings indicate that the Sioux Quartzite is approximately 3.5 billion years old and that the rock cliff may have been used by the Sioux Indians as a buffalo kill site. These findings and any subsequent findings are part of the interpretation program of the park.

Current policies on acquisition and development of State Parks provide for an area, approximately one-fifth which is developed for intensive recreational use, with the remaining four-fifths providing a natural environment area and buffer zone designed for limited use such as hiking trails and interpretive programs.

The park provides separate police protection for the land area within the park, thereby reducing the local sheriff and police authorities responsibilities

During 1972, 98,867 visitors were recorded at Blue Mounds State Park, which represents an increase of thirty-three percent in visitations over the previous year. Visitations to the park provide an economic boost to the surrounding communities. The Minnesota Department of Economic Development estimated in 1966-67 that the average overnight visitor spends about \$9.00 per day. Applying the \$9.00 rate to the number of overnight visitors (13,982) to the park, approximately \$125,838 was spent in the area on gasoline, food and overnight facilities.

IV. Mitgating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried, and when burial is not physically possible or feasible economically, vegetative cover will be used to screen lines. Blue Mounds State Park has experienced impossibilities trying to bury overhead lines because of the extremely hard rock surface, and difficulties arise when trying to screen lines with unnatural vegetation on prairie land. Efforts have been made to keep overhead lines out of the view of park visitors but use areas do require electrical power. Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

Any agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Park's acquires farm land, it becomes advantageous to allow a lease arrangement with the farm owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in reestablishing the grasslands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocate his home for the few remaining years of his life. As an inducement to sell, the Division of Parks and Recreation offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only, and avoids court proceedings for probating estates.

- V. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - The true effect of withdrawing private land, to be included in Blue Mounds State Park, from the tax rolls is impossible to determine since land acquisition is slowly accomplished over a period of years. The majority of the land area within the park is non-farmable because of the rock formations and geological features of the terrain and is the reason why the natural virgin prairie has survived until modern times. Some farm land does exist below the cliff within the statutory boundaries and will be more than compensated for by park visitors spending money in the surrounding communities.

When a park is established, there is also an increase in job opportunities within the park and in the surrounding communities at drive-ins, gas stations, grocery stores, restaurants, etc., which cater to the tourist trade.

- VI. The Relationship Between Local Short-Term uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Because of the geological features of the park, no economical use has been found for the land for over a century. Farming is impossible. Sioux Quartzite is sometimes used for building stone, however the best Quartzite is extremely dense and hard, and mining of the stone became uneconomical.

By establishing the area as a park, the public benefits from the use of the recreation resource. The historical and geological resources when interpreted to the visitor add to his knowledge and experience. The land and water resources are protected by those skilled in conservation practices for the enjoyment of present and future generations who come to recreate.

- VII. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated earlier, Blue Mounds State Park is a commitment to provide recreation facilities and open space for present and future generations

Private land within the park, once acquired by the State of Minnesota, will become part of the commitment to provide recreation facilities. Only by action of the Minnesota State Legislature can that commitment be reversed.

- VIII. Alternatives to the Proposed Action - If no action is taken to acquire and develop the land within Blue Mounds State Park, the goal of preserving this area, and providing public land for recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural and geological area, eventually resulting in its use for private purposes that would add little or nothing to the general public good. Land not suitable for private purposes and not utilized for public recreation would become an economic burden to the unit of government holding title.

Since Blue Mounds State Park has already been established for public use, the only remaining alternative is to acquire and develop the lands within the boundaries according to the policies developed by the Division of Parks and Recreation, for providing public recreational facilities.

ENVIRONMENTAL ASSESSMENT
SAKATAH SINGING HILLS TRAIL

1. Description of the Proposed Action - The land to be acquired and eventually developed for trail use is an abandoned Chicago North Western Railroad right-of-way. The State Legislature has established the Sakatah Singing Hills Trail as a 46 mile long trail. Acquisition of the abandoned railroad right-of-way will provide approximately 27 miles of trail between the cities of Faribault and Mankato. The right-of-way is 100 feet wide and is approximately 338 acres in size.

The right-of-way will be utilized as a multi-purpose trail. These uses include, but are not limited to, hiking, horse riders, bikers, cross country skiers, snowshoers and snowmobiles. With the exception of snowmobiles, motorized use will be prohibited. Users will be able to gain access at several designated points.

The main goal of the corridor trail is to provide an unique recreational experience. It will allow the user to travel several miles of interesting terrain and pass by numerous lakes. The trail will link cities, city, county and state parks, and other trail systems. Eventually it will be linked with the statewide trail system.

This right-of-way presently comes within a few miles of Sakatah Lake State Park. Facilities at the park includes a campground, boat landing, swimming and picnic area, a stable area, and wilderness campground. Further acquisition will allow direct access to the park from the east and west boundary.

2. Description of the Environment - Most adjacent land is agricultural. Many farm wood lots of mature deciduous trees can be seen in the distance. The immediate right-of-way has grown up into shrubbery and grasses. In many areas, this is the only natural vegetation to be found. The right-of-way ranges from grasses and herbs to lowland marsh and upland trees and brush.

The soil is part of a prime agriculture belt and would be ideal for farming once the gravel overburden is removed. The LeSueur-Lester-Cordova Association is most common.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through three planting, seeding and other methods of forestry and game management. The shrub and tree cover will provide excellent habitat for pheasants, rabbits and other small game animals. In many areas, this will be the only area in which permanent cover for game is allowed to grow.

The 100 feet of right-of-way will provide a 45 foot buffer on each side of the trail since the trail will be approximately centered. The buffer will reduce snowmobile noise considerably. There will be no tax loss since the railroads paid a gross income tax instead of a property tax.

The primary responsibility for maintenance and policies will be with personnel of the Department of Natural Resources. Additional assistance will be provided from county sheriff and the State Highway Patrol when necessary.

4. Mitigating Measures Included in the Proposed Action - In most cases natural regeneration of vegetation will reduce the need for planting. If the area is overly devoid of vegetation, trees and shrubs will be planted to help in regeneration.

Proper signing of the trail will insure safe operation. A trail boundary sign will be used to indicate common boundaries between landowners and the State. A "stop" sign will be placed at all road and highway crossings. Users will be notified of the impending "stop sign" 300 feet before the stop is required. "Danger" signs will indicate an area where caution is necessary such as narrow bridges, cliffs, sharp corners and road crossings.

Fencing will be provided under the following circumstances:

- (a) To protect private property including livestock.
- (b) To prevent encroachment by private interests upon state land.
- (c) To protect trail users.

In order to provide fencing, the landowner will be required to submit a written request. The cost, construction and maintenance of the common boundary will be shared by the state and landowner in a manner agreeable to both parties.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - During construction of the trail the railroad bed will be leveled. In some cases this will destroy about five feet of the adjacent brush cover. It will be several years before this cover has regenerated. Noise from users, especially snowmobiles, could be detrimental during the first few years of use. Full regeneration of brush will lessen noise and pollution.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Since for the most part agricultural land adjoining the right-of-way the only logical use, other than recreation, would be for agriculture. Whether this is an economical undertaking, would be for the adjacent landowners to determine. The gravel overburden would first have to be removed before crops could be planted. Long term use would be to provide recreational use for people in the surrounding area. It would also provide wildlife habitat in an area which is devoid of good wildlife cover.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - The acquisition and development of the project would result in the permanent conversion of railroad right-of-way into a recreational linear trail. Acquisition of project lands with Land and Water Conservation Funds will dedicate the land to recreation and open space.

Section 5(f), of the Land and Water Conservation Fund Act states that approval of Secretary of the Interior must be granted before a change in use of any fund-associated lands can be made. No other land uses will be permitted in the project area unless a change is authorized.

8. Alternatives to the Proposed Action - If no action is taken to acquire and maintain these lands, the goal of preserving this area and providing for recreational trails needs cannot be accomplished. Failure to utilize this right-of-way for public trail purposes will perhaps prevent the establishment of any linear trail. The railroad right-of-way allows acquisition of a linear trail which is not in individual ownership. Similar acquisition of individual parcels would require the use of eminent domain.

The right-of-way could be used for agriculture purposes once the gravel overburden has been removed. Only a few landowners have expressed an interest in acquiring the right-of-way adjoining their property.

OCT 9 1973

ENVIRONMENTAL ASSESSMENT
SAND DUNES STATE FOREST ACQUISITION

1. DESCRIPTION OF THE PROPOSED ACTION

Lands to be acquired are within the Sand Dunes State Forest located in the East central part of Minnesota. The uses of this forest are many fold, but the original purpose of the forest was to alleviate the dust storms created by the blowing of very light sand soils typical of the area. Soil stabilization was obtained through an extensive tree planting program. The uses of the forest has increased many times since its establishment in 1943. Due to its proximity to the Minneapolis - St. Paul metro area (approximately 40 miles) it has become a major recreational area. In fact its prime value lies in its recreational potential. It now contains Ann Lake Campground with 24 units, a picnic area, beach and trails. There are several large campgrounds within a 10 mile radius of the State Forest. Hunting, camping, picnicking, hiking, snowmobiling, fishing and water sports are the chief recreational pursuits of visitors.

The Sherburne National Wildlife Refuge bounds the State Forest on the north and has much to offer the recreation seeker. The refuge also attracts people to the State Forest.

The 2,000 plus acres which have been planted to pines and wildlife shrubs will become increasing important for timber production and wildlife cover.

2. DESCRIPTION OF THE ENVIRONMENT

The areas to be acquired vary somewhat in characteristics but the land is generally flat and the soils tend to be sandy in nature. Due to the ownership pattern in the forest there are tracts of private land intermingled with public ownership.

With increasing useage and improved road facilities to the Twin Cities private land areas are being sought for development. In fact some of the

private land has now been platted for development. Land values are continuing to increase and unless acquisition of private lands are began immediately future values and developments will preclude acquisition.

3. THE ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

Enhancement of the environment will result from the acquisition of the proposed lands. If private development continues much of the recreational value of the area will be lost. There is a major need for recreational facilities, close to the metro area, and the forest can do much to provide some of the needs. The problems encountered when residential areas and public recreational facilities such as hiking, snowmobiling, aesthetic enjoyment, hunting, etc. are mixed will, most likely, preclude the basic purposes for which this State Forest has been established.

With the acquisition of these lands steps will be undertaken to improve the environmental aspects. Tree and wildlife shrub species will be planted and uses will be established which will maintain and improve environmental characteristics.

4. MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

Covered in the above discussion.

5. ANY ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED SHOULD THE PROPOSAL BE IMPLEMENTED

Human useage of an area will have certain environmental effects which are not always desirable. Due to the location of this State Forest these uses are eminent. If the proposed private lands are not acquired there will be little control over these uses and values of the land in public ownership will be impaired for their intended use. It is felt that in public ownership these lands will be able to serve the public their environmental qualities enhanced, and the total forest will be benefited.

6. THE RELATIONSHIP BETWEEN LOCAL SHORT - TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG - TERM PRODUCTIVITY

If privately owned lands in the Sand Dunes State Forest are not acquired by the State the lands will be developed for residential or commercial use, thereby depriving the general public of use of the area.

7. ANY IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

State ownership of this area will enhance the range of recreational uses. Recreational activities such as camping, hiking, hunting, fishing, berry picking, etc. may be enjoyed freely by the public. High quality timber and better hunting will be available through forest and game management work.

8. ALTERNATIVES TO THE PROPOSED ACTION

If no action is taken to acquire these lands, the goal of improving the scenic beauty of the forest and setting it aside for use by the public, cannot be accomplished. Much of the land will be developed for commercial and residential purposes. The entire character of the State Forest will be irrevocably changed.

10/09/73

ENVIRONMENTAL ASSESSMENT

BEAR HEAD LAKE STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the boundaries of Bear Head Lake State Park. The park is located in the extreme northeast part of the state in St. Louis County, eight miles from Ely and twelve miles southeast of Tower. Bear Head Lake State Park was established under an Act of the 1961 Legislature which provided for a statutory boundary encompassing 4,418.92 acres.

The park was established to make the area available to the public for outdoor recreation. The surrounding area is economically depressed and the park has contributed to building the tourist industry. When the park was established the closest state park was over fifty miles away and the nearest U. S. Forest Service campground with a beach was over forty miles distance. Since that time a new state park has been developed ten miles west, at Tower, Minnesota emphasizing underground iron ore mining of the area along with recreational facilities.

The management goals, for Bear Head State Park, are to provide recreational opportunities for present and future generations; to attract recreators and tourists to the area; to provide an economic lift for a depressed area; and to protect the natural features of the park.

2. Description of the Environment - The park is located in the Superior National Forest eight miles from Ely, Minnesota a popular access point to Minnesota's Boundary Water Canoe Area.

In 1960, prior to the establishment of the park, the Division of Forestry built two miles of truck trail from the north boundary to the east shore of Bear Head Lake for fire fighting purposes. Before this, access to the area was nonexistent. Of the 4,418.92 acres, 3,386.73 acres were public lands when the park was established. There is an additional 1,075 acres of surface water area which were opened to the public by the establishment of the park. The two larger lakes in the park contain 15 islands, recently transferred to the state as federal surplus property for recreational purposes. Nine of these islands are in Bear Head Lake and six are in Eagles Nest Lake No. 3. These lakes provide excellent fishing for walleye, northern pike, bass, crappies, etc. Complementing these fishing opportunities is a creek and two small lakes which provide some of the best trout fishing in the area.

The land surface is extremely attractive. The terrain is heavily rolling with rock outcroppings. The dense forest cover is primarily second growth birch, poplar and pine with a scattering of virgin norway and white pine. There are two good sand beaches which are excellent for swimming activities. The area provides habitat for the white-tailed deer, black bear and other common forest creatures. Moose and the eastern timber wolf are occasionally sighted driving in the area. One hundred forty acres have been offered as a donation from the Nature Conservancy, to be included in the park boundaries. This land would be set aside and designated as a timber wolf habitat. The park has many bays and islands and several smaller lakes hidden deep in the woods. The wilderness atmosphere attracts the common loon and bald eagles.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Park development will be minimized to preserve the natural biological and geological resources. Much of the park area is only assessable by trails. An effort will be made to control and limit visitor use capacity and to conserve natural values.

The inaccessibility of the surrounding area does not lend itself to development. Since the area is about 230 miles from the Twin Cities, the park is a destination point and stays last as long as two weeks.

Parcel #5 - approximately 33.3 acres of land.

This parcel has approximately 2,400' of shoreline on Eagles Nest Lake.

Topography: 16 acres of this tract is flat, and 17.3 is rolling. The land slopes toward the lake.

Ten acres of this tract is cutover, 3.3 acres are in pasture, and twenty acres are in forest land, containing birch, popple and pine.

The land adjacent to this tract is similar to that contained in subject parcel.

There is a 20' x 20' log cabin containing 400 sq. ft on subject parcel. If this cabin cannot be utilized for park purposes it will be dismantled or disposed of after acquisition.

This parcel is located eight miles from Ely and twelve miles southeast of Tower. It is accessible via Highway 169 (U.S.) and by gravel road.

This parcel will be developed in the area to support activities from the group camp when it is developed.

Given below is the Tax Breakdown:

School District #708	County	Township	Total
\$24.08	\$27.58	\$6.90	\$58.56

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone wires will be buried and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development plans include provision for burial of all overhead lines when burial is possible. Telephone lines which serve no demonstrated needs will be removed.

Any buildings which are acquired through acquisition will be removed if they cannot be converted to park use. When buildings are removed on park premise the area is returned to a natural condition.

5. Any Adverse Environmental Effect Which Cannot be Avoided Should the Proposal be Implemented - There will be an adverse effect by withdrawing private land from the tax revenue of the local taxing districts. This will be minor however. Acreage remaining to be acquired within the boundaries is approximately 180 acres. Since most of the land area within the park was in public ownership before the park was established very little tax loss has been experienced. The surrounding communities have benefited by the utilization of an area in public ownership which was inaccessible to the general public prior to development as a park.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long Term Productivity - Although the area was inaccessible, eventually the two large lakes would have become developed with lakeshore cottages by area residents. It is also possible that a few summer homes would also have been built by individuals who have the opportunity to spend three months in the wilderness retreat. Timber resources would have been harvested if left in the present state.

By establishing the area as a park, many people can use its resources continually and during all seasons of the year. The many resources, water, land, timber, wildlife will be protected from development.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - State ownership and development of this area, as park and open space, will enhance the range of resource uses. Acquisition and development of land with assistance of the Land and Water Conservation Fund will preclude any uses other than for park and recreation.
8. Alternatives to the Proposed Action - Once the park has been established by the legislature there are no alternatives but to acquire the land within the boundaries. Acquisition, however, covers a period of many years since the Division of Parks and Recreation does not have the power of Eminent Domain. Land acquisition is at the convenience of the individual owners. This does not interfere with its present use.

ENVIRONMENTAL ASSESSMENT

Frontenac State Park - 27-00577

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Frontenac State Park located in Goodhue County sixty miles to the southeast of the Twin Cities. The park borders scenic Lake Pepin on the Mississippi River and is accessible from U. S. Highway No. 61, commonly known as the Great River Road.

The park was established by the Minnesota State Legislature in 1957 with an acreage of 950 acres. The legislature increased the acreage to 1,074.9 acres in 1965. The park area was subsequently expanded to the present acreage of 2,689 acres.

Some of the factors which led to the establishment of Frontenac as a State Park in 1957 were: (1) the natural scenic qualities at the head of Lake Pepin (2) the absence of the railroad and commercial development along the lake front (3) the unusual natural habitat for both shore birds and upland birds (4) the site of historical Fort Beauharnois, constructed in 1727 and occupied as the first French outpost for exploration and fur trading on Minnesota soil (5) site of the first Christian Mission Chapel in Minnesota erected by Jesuit priests (6) the old town of Frontenac now surrounded but not included in the park. Present recreational facilities provided for the general public include a modern campground with 39 sites, primitive campground with 20 sites, picnic area with modern facilities, and an overlook with seven miles of hiking trails and eleven miles of snowmobile trails. Possible future facilities may include a boating marina and beach and swimming facilities. Hiking and bird watching are popular activities in the park.

The main management goal, for Frontenac State Park, is to provide a recreational and an environmental learning area for present and future generations.

2. Description of the Environment - The natural conditions of topography, water, and vegetation on and immediately adjacent to Frontenac State Park complement the total environment in creating an ecological pattern that is characteristic of southeastern Minnesota.

The topography consists of about equal portions of gently rolling land with low areas punctuated by some major changes amounting to better than 300 vertical feet of elevation change. Limestone outcroppings are to be found in certain portions of the park but exist to a greater degree off the site.

Water in the immediate vicinity assumes two forms: (1) a flowing rapid motion found in Lake Pepin and a more placid mood of water found in the smaller impoundment immediately adjacent to U. S. Highway 61. Marsh and swamp bog areas are restricted to one location in the lowland area below Villa Maria Academy, adjacent to Lake Pepin and U. S. Highway 61.

Wildlife abounds in the park. Deer, skunks, raccoons, grey and red fox squirrel, muskrat, beaver are some of the common ones. Numerous species of birds frequent this location as the Mississippi River is a major flyway. Fish is popular in Lake Pepin and all species common to Minnesota are found in the river. These include walleye, northern pike, large and smallmouth bass, suckers, carp, redhorse, white and black crappie, and sunfish. Soils vary from almost total sand outcroppings to sandy clay. Some limestone outcroppings to areas of very tight soil adjacent to small water impoundment and in areas of forest cover a high humus content at the surface of the soil.

Except for the steep bluffs much of the land was stripped by loggers in the mid 1800's. Once the land was bared, farmers cut the level ground into fields and quarreymen cut some of the limestone into building blocks. Second growth timber covers some of the park land and meadows again dotted the landscape.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding, and erosion control. Land acquired and developed within the park will provide habitat for wildlife and recreation facilities for humans. Some of the areas within the park will be managed for the purpose of returning natural prairie lands to the area.

Park development of recreational facilities will be minimized to preserve the natural, biological, geological and archaeological resources of the park. The historical aspects of the park will be presented to enhance visitor enjoyment.

Agriculture uses of private lands will be curtailed when it is acquired by the State and all existing improvements on properties will be removed or, if they do not conflict with the overall management of the park, will be used for park purposes.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies of the Division of Parks and Recreation includes provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

The agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Parks and Recreation acquire farm land, it becomes advantageous to allow a lease arrangement with the farmer owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in reestablishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocated his home for the few remaining years of his life. As an inducement to sell, the Division of Parks and Recreation offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only.

5. Any Adverse Environmental Effects which cannot be Avoided Should the Proposal be Implemented - The true effect of withdrawing land to be included in Frontenac State Park from the tax rolls is impossible to determine since land acquisition within a park is slowly accomplished over a period of years. However, recent studies of the value of lands surrounding parks indicate that land values increase disproportionately to the general rise in real estate values. In this case, the land which encompasses Lake Pepin, is considered prime for high quality, costly lakeshore development because of the proximity to the park and its open space. Land which is included in the park will not provide this opportunity for development. It will, however, provide an opportunity of enjoyment and recreation for everyone.
6. The Relationship Between Local Short-Time Uses of Man's Environment and the Maintenance and Enhancement of Long Term Productivity - Short term uses of the park environment would be limited to agriculture on the flat land and private residential recreational sites on the bluffs overlooking Lake Pepin. Other private developments could also include resorts, hotels, and private marinas.

The natural character and location of the park will play an important role in serving local, county, regional and eventually metropolitan area needs for outdoor recreation. Establishment of the park assures its use for future generations. Its use by future generations however cannot be accomplished without acquisition and limited development in this point of time.

7. Irreversible and Irretrievable Commitments of Resources - The acquisition and development of the area would result in the permanent land use change from present use to recreational use. This conversion would certainly enhance the land and water resources of the Mississippi River.

Acquisition of project lands with Land and Water Conservation funds will commit the land to recreation and open space. Section 5(f), of the Land and Water Conservation Fund Act, states that approval of the Secretary of the Interior must be granted before a change in use of any fund associated lands can be made. No other land uses will be permitted in the project area unless a change is authorized.

8. Alternatives to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of preserving this area, and providing for the project needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural area eventually resulting in its use for private purposes that would have little value to the general public. Fragments of historical significance would become more difficult to piece together and might be lost.

August 29, 1973

Mr. John D. Cherry
Regional Director
United States Department of the Interior
Bureau of Outdoor Recreation
Lake Central Region
3853 Research Park Drive
Ann Arbor, Michigan 48104

Dear Mr. Cherry:

We are submitting under separate cover a Draft Environmental Impact Statement for the Minnesota River Valley Trail System. We trust that this will fulfill the need for this assessment of the environmental impact as requested in your letter of May 15, 1973.

If there should be any questions or need for further information we would be most pleased to furnish it.

Sincerely yours,

Jerome H. Kuehn
Planning Administrator

JHK:rd

Enclosures

Negatives Used in Environmental Impact Statement
1 Copy of the Supplement to Part III-27-00574

September 21, 1973

Mr. Robert S. Chandler, Assistant
Regional Director
U. W. National Park Service
2510 Dempster Street
Room 214
Des Plaines, Illinois 60016

Dear Mr. Chandler:

It is our understanding that both the National Park Service and the Bureau of Outdoor Recreation will be required to prepare an Environmental Impact Statement for the Upper St. Croix Scenic Riverway. This is true because the State of Minnesota is going to seek Land and Water Conservation Fund assistance in the implementation of its Upper St. Croix Resource Management Plan.

It would be advantageous to all concerned if your Environmental Impact Statement is comprehensive enough to cover the management plans of both Minnesota and Wisconsin. Obviously, this would eliminate a great duplication of effort. We would be glad to cooperate in any way possible to produce such a document.

Thank you for your consideration.

Sincerely,

Archie D. Chelseth
Assistant Commissioner

cc: Robert L. Herbst
Jerome H. Kuehn

ENVIRONMENTAL ASSESSMENT

AFTON STATE PARK

- I. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Afton State Park in East Central Minnesota within the Twin Cities 7 County Metropolitan Area. Funds were provided for the initial acquisition of lands within these boundaries through the Department of Housing and Urban Development Grant OSA-85, Afton State Park.

The park has been established to provide open space in an area which is rapidly being developed by commercial and private interests and to preserve a part of the scenic and recreational values of the St. Croix River Valley for enjoyment by future generations.

The Open Space Advisory Committee of the Metropolitan Council in its "Proposals for Preserving a Metropolitan Open Space System," published in January 1969, recommended the acquisition of 20,000 acres of land by 1985 to serve the needs of Washington County and the metropolitan area for open space. Although the assets of a large park in this area will be of particular advantage to the citizens of Washington County, Afton has been judiciously incorporated into a coordinated system of local, county, and state parks which will serve regional and metropolitan needs and attract outstate residents and non residents. Afton State Park will be most enjoyed by hikers since the park will have only one main parking lot in the picnic area. The public desiring to use such facilities as the beach, campgrounds, trails and natural areas will be required to hike to their destination, leaving their automobiles behind.

The main management goals for Afton State Park are to provide a recreational and an environmental learning area for present and future generations while maintaining and improving the natural environment against changing economical and social pressures and to protect and manage the area's renewable resources such as timber, vegetation, wildlife and water. The Afton area along the St. Croix River has traditionally taken high honors for the highest number of bird species counted during the annual Audubon Society's Christmas Bird Count held in late December.

- II. Description of the Environment - Afton State Park contains considerable amounts of river frontage, areas of extensive stream dissection, wooded lowlands, and gently rolling uplands adjacent to the St. Croix River. Local relief of more than 200 feet is found in several areas, with maximum relief being approximately 300 feet.

The present vegetation is quite varied and of several types. The valleys are heavily wooded with red oak, bur oak, birch, and ironwood with some white oak, white pine, basswood and other woody plants. The area is of special interest botanically because the most northern range of several southern plants of the Carolinian Flora Types ends here. Much of the land

has been farmed. The soils are light and often sandy not ideally suitable for good farming practices. The dispersion of plant types in this area, because of its varied topography, make it an excellent area for observing song birds. As a part of the St. Croix River Valley it is in a natural migration route for birds. There are many plant types that favor wildlife. The area also contains a variety of lichens and mosses, which are now scarce in the Twin Cities area because of air pollution. With some encouragement the area should provide excellent sites for fields of prairie wild flowers such as puccoon, prairie phlox, spiderwort, wild foxglove and blazing star. These plants once common in Southern Minnesota are becoming scarce.

The surrounding area is rapidly changing from an agriculture rural community to a suburban community whose needs will require recreation and open space land.

- III. The Environmental Impact of the Proposed Action- Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Park development will be minimized to preserve the natural biological, geological and archaeological resources. An effort will be made to control and limit the visitor use capacity and to conserve natural values by keeping at least 80% of the acreage in a natural state and allowing no motorized traffic in any of the public use areas other than the principal picnic area.

It is expected that the surrounding area will become developed with residential dwellings because of its proximity to open space. Experience shows that preservation of open space not only preserves but generally enhances residential values. This increases the property tax yield, which is the major source of revenue for local governments. It can be observed in metropolitan areas, that residential development adjacent to open space is always well maintained which also increases property valuation. Within a very few years the existence of this park will have such beneficial effects on the Denmark and Afton township areas in terms of higher quality residential development requiring less costly public services. This will counter-balance any loss of tax revenue in the park area itself.

The park area will be better policed than it is now by the addition of a resident park manager who will have total responsibility for the park and public safety within the park. The police protection of surrounding landowners' property will continue to be the responsibility of the local authorities. By providing separate police protection for the 1285 acre park, the total responsibility of local sheriff and police authorities will be reduced rather than increased, as the case would be if the park were allowed to develop into a residential area.

- IV. Mitigating Measures Included in the Proposed Action- All existing overhead power and telephone wires will be buried. Where burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Buildings which cannot be converted to park use will be removed or dismantled and the immediate area returned to a natural state.

The marginal agriculture lands will be seeded to grass crops. Eventually trees will be planted which conform to the surrounding environment to eliminate any visible evidence of the lands being farmed.

- V. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - In 1969 a consultant was hired to determine the tax revenue which would be lost if all the acreage within Afton State Park were acquired that year. The tax loss figures are based on tax levies and assessed values in effect by those governments during 1969. The findings were:

	<u>Tax Lost</u>	<u>Total Tax Levy for 1969</u>	<u>Percent Lost</u>
County of Washington	\$ 5,324.56	\$3,645,052.51	.15%
School District No. 834	5,029.64	3,797,238.85	.13%
School District No. 200	10,386.21	1,939,717.00	.54%
Town of Afton	550.99	36,339.45	1.52%
Town of Denmark	1,068.27	16,054.48	6.65%
	<u>\$22,359.67</u>	<u>\$9,434,402.29</u>	<u>.24% *</u>

*Approximately one-fourth of one percent.

The true effect of withdrawing land to be included in Afton State Park from the tax rolls is impossible to determine. However, recent studies of the value of lands surrounding metropolitan area parks indicate that these land values have increased disproportionately to the general rise in real estate values. The land which encompasses a park of this nature is considered prime for high quality residential development because of its proximity to open space.

It was found, by the Wildlife Management Institute, that parks enhance the value of privately owned lands. They reported, in the October 27, 1967 issue of Outdoor News Bulletin, "Between 1956 and 1966 land values increased 174 percent in 13 sections of the town of Ottawa in Waukesha County, where major land purchases were made for parks. Land values in the entire town of Ottawa increased 98 percent during the same period."

The escalation of value in former farmland within a short distance of the Milwaukee metropolitan area clearly demonstrates what happens to land values when parks are established to help retain open space.

- VI. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Metropolitan growth and rising property and tax values will bring about urbanization of the area in the relatively near future. Local realtors who might be able to do business buying, selling, and subdividing land in the park area will lose this opportunity to profit. On the other hand, local realtors have not overlooked the opportunity for the higher-quality development of the whole Afton-Denmark township area that can be expected from the establishment of the park and providing river access to all residents of the area. As the population of Washington County and the metropolitan area increases, the need for open space will become drastic near the Twin Cities metropolitan centers.

"Transportation of all kinds contributes 42% of air pollution," reports the National Wildlife Federation in their 1971 EQ Index. Travel restrictions, gas prices and the possibility of gas rationing may deter the average citizen of the future from traveling great distances to find recreation. A State Park, situated near a major population center may provide the only unconcentrated, recreation oriented natural area, economically reachable by the public in the future.

If privately owned lands are not acquired and developed in Afton State Park, private and commercial development will preclude park acquisition and the recreation use of this area and its valuable open space. Limited park development will prevent intensive development by private developers of an area acclaimed for its natural and remote beauty.

VII. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - State ownership and development of this area, as park and open space, will enhance the range of resource uses. The land acquired for Afton State Park is a commitment to provide open space and recreation for future generations, since the true effects of establishing a park will not be fully appreciated or enjoyed during this generation. Development will be used as a management technique to protect the natural environment from destructive uses but will allow users to enjoy the natural environment.

VIII. Alternatives to the Proposed Action- If no action is taken to acquire and develop these lands, the goal of preserving this area, and providing for the projected needs of open space and recreation, cannot be accomplished. This site, because of population pressures, could not remain in its present condition. In less than ten years, urbanization would cause the area to be developed with single family housing severely curtailing public use of the lower St. Croix River for recreational purposes. Failure to utilize this area for public park purposes would result in loss of a unique natural area eventually resulting in its use for private purposes that would add little or nothing to the general public good.

Numerous studies have been made of the Afton site to determine its feasibility for park purposes by local, county, metropolitan and federal government agencies. One of the more recent studies was made by the Department of the Interior in 1964 and 1965. This study which was made of the entire St. Croix river, determined that the Trout Brook delta (included in Afton State Park) was the only site on the Minnesota side of the Lower St. Croix River suitable for public access from the water. Other studies have been made of the area and placed the site as a future park. The Central Washington County Planning Advisory Commission, and the Washington County Planning Commission have included this area in their county park proposal since the late 1950's. The Metropolitan Planning Commission and more recently the Open Space Advisory Committee of the Metropolitan Council have recommended the site for a state or metropolitan park. Since costs for agencies sometimes become prohibitive, it was determined that the site should be developed as a state park. Any agency below the state level would have had to finance the acquisition and development of Afton State Park from revenue generated within the area's jurisdiction. It would be unfair for local residents to be totally responsible for financing a park serving regional and state needs.

Prior to establishing Afton State Park, Trout Brook was the best available privately owned access point left on the St. Croix River between Afton and Point Douglas. It contains a sizeable beach and harbor. Commercially, the area was suitable for a resort, boat launching, or marina facilities. These were not privately developed, probably because ownership remained in the hands of farmers whose primary business was farming not recreation.

Who would be served best by the alternatives for Afton State Park? Private residential development would be limited to those who could afford the cost of development and would require more costly services from the county and local governments. Farming is not feasible on most of the land within the park because of the extreme land relief. Private recreational development would serve a limited cliental and its use would cost considerably more than public facilities.

Since the establishment of this park by the Minnesota Legislature there are no legal alternatives to this land use.

The parcels contained in this project are typical of the land contained within the park. The Environmental Assessment covering the entire park will apply in its entirety to this project.

The final disposition of the improvements will be determined upon the completion of the Master Plan for this park.

There are utility lines on subject parcel. The utility lines serving the homesite run parallel to the road. These are partially screened by trees and shrubbery and are unobtrusive. Their mitigation also depends upon the final Master Plans for this park.

Subject tract is located in Washington County, $7\frac{1}{2}$ miles south of the village of Afton and approximately 11 miles north of the city of Hastings. Access is via a gravel road, being $2\frac{1}{2}$ miles from a county blacktop road and $12\frac{1}{2}$ miles south of U. S. Highway 12. This park is about 15 miles southeasterly of St. Paul. It is adjacent to Afton Alps ski area.

ENVIRONMENTAL ASSESSMENT

LAKE BRONSON STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within statutory boundaries of Lake Bronson State Park located in extreme Northwestern Minnesota. The park has been established to protect the scenic beauty, woodlands and natural resources of the ancient lake bed of glacial Lake Agassiz, while providing recreational facilities and activities for park visitors. Emphasis will be placed on interpreting the surrounding natural areas in the park to users and visitors.

The main management goal is to provide a recreation and an environmental learning area for future generations, while maintaining and improving the natural environment against changing ecological conditions. This park was established by the 1937 Minnesota Legislature.

2. Description of the Environment - Lake Bronson State Park lies within the flat, immense basin of glacial Lake Agassiz and is located adjacent to the south branch of Two Rivers which flows into the International waters of the Red River of the North.

Lake Bronson, with its highly irregular shore line, was created by the construction of a dam on the south branch of Two Rivers and the level of this lake is therefore artificially controlled by a dam spillway. The terrain of Lake Bronson State Park is generally rolling, but flat. Much of this land is wooded with small fields and pastures scattered throughout the area. Especially interesting are the stands of creeping juniper.

Lake Bronson State Park was created to take advantage of the reservoir for public water-oriented recreation and since natural lakes of this size are nonexistent in this region, it has become a unique and popular recreation facility. The lake still serves as a water supply for Hallock, Minnesota and surrounding towns are highly dependent upon the economic boost the park provides to the area.

3. The Environmental Impact of the Proposed Area - Enhancement of the environment will result by management of the natural resources with current management practices such as timber stand improvement, tree planting, and erosion control. Park development will be minimized to preserve the natural biological, geological and archaeological resources.
4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be converted to underground lines where physically possible and when economically feasible. If this is not possible, vegetative cover will be used as a screen.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Additional recreational facilities will be constructed, to serve park visitors' needs, but will be aesthetically designed to minimize the scenic and environmental effects upon the natural surroundings.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - If the remaining private lands in Lake Bronson State Park are not acquired by the State, much of the forests may be cleared of timber and used for grazing. Lake shore would be used for private development suitable for individual recreation only. The expanding population, pollution, pesticides and other ecological problem, without proper management could destroy the valuable assets characteristic of this park and the recreation it provides.
7. Any Irreversible and Irretrievable Commitment of Resources Which Would be Involved in the Proposed Action Should it be Implemented - State ownership and management of this area will enhance the range of resources uses. Recreational activities such as camping, boating, fishing, water skiing, picnicking, bird watching, snowmobiling, snowshoeing, and cross-country skiing may be freely enjoyed by the public. Lake Bronson State Park situated in the midst of agriculture (grazing lands) and forest lands will provide a natural environment preserved for enjoyment of generations to come.
8. Alternatives to the Proposed Action - If no action is taken to preserve and maintain these lands the scenic beauty of this ancient lake bed area, and setting it aside for recreational use by the public, cannot be accomplished. Much of the remaining land would be purchased by commercial timber companies for timber products and the land abutting the lake shore would be in high demand by private developers since few lakes exist in this region of the State. The park provides an economic source and the only recreation to the area, which would be difficult to replace if the land were in private ownership.

Lake Bronson State Park - 27-00566

The parcels of land included in this proposal are typical of the agricultural land located within the park. The General Assessment fully pertains to this land.

Environmental Assessment

Lake Bronson State Park

1. Description of the Proposed Action - Lands to be acquired or developed are within statutory boundaries of Lake Bronson State Park located in extreme Northwestern Minnesota. The park has been established to protect the scenic beauty, woodlands and natural resources of the ancient lake bed of glacial Lake Agassiz, while providing recreational facilities and activities for park visitors. Emphasis will be placed on interpreting the surrounding natural area in the park to users and visitors.

The main management goal is to provide a recreation and an environmental learning area for future generations, while maintaining and improving the natural environment against changing ecological conditions. This park was established by the 1937 Minnesota Legislature.

2. Description of the Environment - Lake Bronson State Park lies within the flat, immense basin of glacial Lake Agassiz and is located adjacent to the south branch of Two Rivers which flows into the International waters of the Red River of the North.

Lake Bronson, with its highly irregular shore line, was created by the construction of a dam on the south branch of Two Rivers and the level of this lake is therefore artificially controlled by a dam spillway. The terrain of Lake Bronson State Park is generally rolling, but flat. Much of this land is wooded with small fields and pastures scattered throughout the area. Especially interesting are the stands of creeping juniper.

Lake Bronson State Park was created to take advantage of the reservoir for public water-oriented recreation and since natural lakes of this size are nonexistent in this region, it has become a unique and popular recreation facility. The lake still serves as a water supply for Hallock, Minnesota and surrounding towns are highly dependent upon the economic boost the park provides to the area.

A description of the parcels to be acquired in this project is as follows:
Parcel No. 3.

This parcel contains approximately 20 acres of generally level land. The soil is mainly a loamy sand with some gravel. 12 acres is wooded, 5 acres is gravel and two acres is an abandoned gravel pit and one acre is road. It is located approximately one-half mile north of Lake Bronson which is an artificial lake created in the early 30's and is within the boundaries of Lake Bronson State Park. This area has an abundance of deer, moose, waterfowl and grouse.

This parcel was a dumping ground for the Village of Lake Bronson but has been closed because of new State Regulations. After acquisition this parcel will be rehabilitated. It is unimproved, has no environmental intrusions and there will be No Relocation costs.

Parcel No. 14

This parcel contains approximately 160 acres of land which is very level. The land is a sandy soil, suitable for growing potatoes when irrigated. 54 acres is wood, wet grassland.

The South Branch of Two Rivers cuts through this parcel sloping from east to west. The river is flanked by trees which are aspen, oak, hazel brush and willow. In addition a ravine cuts the property in the southwest corner running from northwest to southeast. A shallow gravel crossing for access to the land south of the river is located approximately in the center of the quarter. This parcel is within the statutory boundaries of Lake Bronson State Park. It is unimproved and there will be No Relocation Costs. There are no environmental intrusions on subject parcel. It is located four miles east of Lake Bronson.

3. The Environmental Impact of the Proposed Area - Enhancement of the environment will result by management of the natural resources with current management practices such as timber stand, improvement, tree planting, and erosion control. Park development will be minimized to preserve the natural biological, geological and archaeological resources.
4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be converted to underground lines where physically possible and when economically feasible. If this is not possible, vegetative cover will be used as a screen.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Additional recreational facilities will be constructed, to serve park visitors' needs, but will be aesthetically designed to minimize the scenic and environmental effects upon the natural surroundings.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - If the remaining private lands in Lake Bronson State Park are not acquired by the State, much of the forests may be cleared of timber and used for grazing. Lakeshore would be used for private development suitable for individual recreation only. The expanding population, pollution, pesticides and other ecological problems, without proper management could destroy the valuable assets characteristic of this park and the recreation it provides.
7. Any Irreversible and Irrecoverable Commitment of Resources Which Would be Involved in the Proposed Action Should it be Implemented - State ownership and management of this area will enhance the range of resources uses. Recreational activities such as camping, boating, fishing, water skiing, picnicking, bird watching, snowmobiling, showboating, and cross-country skiing may be freely enjoyed by the public. Lake Bronson State Park situated in the midst of agriculture (grazing lands) and forest lands will provide a natural environment preserved for enjoyment of generations to come.
8. Alternatives to the Proposed Action - If no action is taken to preserve and maintain these lands the scenic beauty of this ancient lake bed area, and setting it aside for recreational use by the public, cannot be accomplished. Much of the remaining land would be purchased by commercial timber companies for timber products and the land abutting the lake shore would be in high demand by private developers since few lakes exist in this region of the State. The park provides an economic source and the only recreation to the area, which would be difficult to replace if the land were in private ownership.

ENVIRONMENTAL ASSESSMENT

ZIPPEL BAY STATE RECREATION AREA

27-00570

The parcel of land included in this proposal is typical of the agricultural land located within the Recreation Area. The General Assessment fully pertains to this parcel.

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Zippel Bay State Recreation Area, located in Lake of the Woods County in extreme northern Minnesota, at the base of the Northwest Angle.

Zippel Bay State Recreation Area was established by the Minnesota State Legislature in 1959 with a statutory acreage of 2,766 acres. At that time, 2611 acres were tax forfeited, Volstead or Trust Fund land which is public land. The 1959 Legislature also authorized the Commissioner of Natural Resources to accept all tax forfeited land, including trust fund lands within the limits for this park. Subsequent action by the 1963 Minnesota Legislature expanded the statutory acreage to 2,946 acres, which absorbed 180 acres of marginal agricultural land.

The park was established to provide access and public recreational opportunities on the great border lake between Canada and Minnesota. Nearest state administered recreation facilities are Lake Bronson, 100 miles to the southwest. Long range development plans include recreational facilities such as beach development, harbor and marina for fishing and boating, public campgrounds and picnic area.

The main management goal, for Zippel Bay State Recreation Area, is to provide a recreational area for present and future generations; to preserve and protect the archaeological significance of the park; and to protect and manage the area's renewable resources such as timber, vegetation, wildlife, waterfowl and water.

2. Description of the Environment - Zippel Bay State Recreation Area is located in Lake of the Woods county, ten miles northeast of Williams, Minnesota. The park is situated on the south shore of Lake of the Woods comprising 950,400 acres of water. Of this total 407,460 acres of water and 106 miles of shoreline lie within the state. The lake itself possesses important historic interest of natural significance since it was used as a major water route of the early voyagers.

The park, located on the south shore of Lake of the Woods, comprises approximately 2,800 acres of Jack Pine, Aspen and a scattering of Norway Pine, included in the boundary three miles, of 300 yard deep, fine sand beach which is generally flat with a few high ridges. The soils were derived from lacustrine deposits, reworked glacial till, and beaches of glacial Lake Agassiz, under a forest vegetation. Zippel Creek watershed of which the park is part of, suffers from floodwater damage due largely to spring rains which are not siphoned off because of flatness of the land and the lack of drainage outlets.

Zippel Bay, of Lake of the Woods, is a combination waterfowl - fish area. There are ideal growth of preferred aquatic vegetation, loafing spots and nesting cover for waterfowl and the dense growth of vegetation provide excellent spawning beds for fish. The principle big game species are whitetail deer and frequently moose, and black bear, sharptail and ruffed grouse are the main upland bird species.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding, erosion control and burial of obtrusive overhead power and telephone lines.

Current management policies on acquisition and development of State Parks provides for an area, approximately one-fifth which is developed for intensive recreational use, with the remaining four-fifths providing a natural environmental area and buffer zone design for limited use such as hiking trails.

Eighty-eight percent of the land area within the park was either tax forfeited or Trust Fund land and has provided sufficient land area for development of all recreational facilities for the park. Remaining private land within the boundaries are low priority for acquisition and will be acquired at the convenience of the landowner. A negligible effect will be felt by the taxing governments in the county when compared with the economic boost to the county provided by the park visitors. Zippel Bay's 1972 attendance increased thirty-two percent over 1971, for a total of 32,583 and the 1973 attendance is expected to rise similarly as the park becomes more widely known.

Although the park area is only 2,946 acres, it provides public access to 950,400 additional acres for water recreation. By providing separate police protection for the park area, the public will be inclined to make extended trips on Lake of the Woods without fear of vandalism to their automobile. Local sheriff and police authorities responsibility will be comparatively reduced.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

Any agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Parks and Recreation acquires farm land, it becomes advantageous to allow a lease arrangement with the farm owner for two years after the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest

of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocate his home for the few remaining years of his life. As an inducement to sell, the Division of Parks and Recreation offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only, and avoids court proceedings for probating estates.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - The true effect of withdrawing land to be acquired in Zippel Bay State Recreation Area cannot be determined. The remaining acreage to be acquired is small and does not interfere with the intensive use areas of the park and therefore the acquisition of these parcels are not of high priority.

As public visitation of the area increases, job opportunities will become available at the park. Additional economic benefits and job opportunities will be expected for drive-ins, gas stations, restaurants, bait shops, etc., which cater to the tourist trade.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Before establishment of the park, eighty-eight percent of the land area was either tax forfeited or Trust Fund land and little or no productive use was being made of it. By establishing this area as a park, the entire public benefits from the use of the recreation resource. Economic benefits are enjoyed by the surrounding area and future generations are assured that the area will be preserved for their use.

7. Any Irreversible and Irretrievable Commitment of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated earlier, Zippel Bay State Recreation Area was established in 1959 by the Minnesota Legislature. Establishment of a Minnesota State Park is a commitment to provide recreation facilities and open space for present and future generations. Remaining acquisition within the statutory boundaries are low priority for acquisition and may be several years before they are finally acquired.

Once the land becomes State property inside park boundaries, only by action of the Minnesota Legislature can the commitment of providing park and open space be reversed.

8. Alternative to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of preserving this area, and providing for the projected future needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural area eventually resulting in its use for private purposes that would add little or nothing to the general public good.

Since Zippel Bay State Recreation Area has already been established for public use, the only remaining alternative is to acquire and develop the lands within the boundaries according to the policies developed by the Division of State Parks for providing public recreational facilities.

ENVIRONMENTAL ASSESSMENT
MILLE LACS KATHIO STATE PARK

27-00563

This parcel of land included in this proposal is typical of the wooded areas located within the park. The General Assessment fully pertains to this parcel.

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Mille Lacs Kathio State Park, located in Mille Lacs County in East Central Minnesota, on the southwest tip of Lake Mille Lacs and five miles northwest of Onamia, Minnesota.

Mille Lacs Kathio State Park was established under the Laws of the State of Minnesota in 1957, with a statutory acreage of 9,951 acres surrounding the outlets of Lake Mille lacs, Ogeche Lake and the Rum River to just beyond Shakopee Lake to the southwest. Present state ownership consists of 6,812 acres which includes one of the most important archaeological site locations in the history of Minnesota.

Preliminary findings by archeologists suggest inhabitation of the area by man as early as 4500 B. C., and apparently sporadically through the Sioux and Chippewa periods up to the present. The most intensive occupation of the park area in prehistoric times seems to have been during the period following 1000 A. D. At that time large villages of the ancestral Sioux were established and a series of specialized wild rice harvesting sites began to be used.

Long range development plans include recreational facilities for camping, picnicking, swimming, group camp activities, boating, snowmobiling, canoeing, horseback riding and hiking. Construction and maintenance operations are continuously under way to improve and enhance the recreation experience for the park visitor.

The main management goal, for Mille Lacs Kathio State Park, is to provide a recreational and an environmental learning area for present and future generations; to preserve and interpret the archaeological significance of the park; to maintain and improve the natural environment against changing ecological and social pressures; and to protect and manage the area's renewable resources such as timber, vegetation, wildlife and water.

2. Description of the Environment - Around the turn of the century woodsmen engaged in timber harvesting of the great pine forests which once covered this area. Only a few scattered wood lots of pine remain which were not harvested at that time, because of inaccessibility. Now a greater portion of the park area is covered with a second growth of aspen, elm and maple.

Some scattered clearings remain within the park boundaries resulting from unsuccessful agriculture developments which followed the removal of the original forests of pine. Unsuitable for agriculture purposes, commercial tree farming was attempted, but because of the character of the soil, these

operations failed also. During the depression of the 1930's, much of the land became tax delinquent and finally when the park was established in 1957 almost 6,600 acres within the boundaries had become tax forfeited.

The park embraces the Rum River from its source from Lake Mille Lacs to the outlet of Shakopee Lake. The Rum River is characterized as a broad shallow river with a sandy bottom but choked with aquatic vegetation. Ogeehie and Shakopee Lakes are within boundaries of the park. The lakes are wide sections of the Rum River, shallow and weed infested.

Wild rice grows profusely in each lake and were the sites of ricing villages of the Dakota Indians. The lakes are used extensively by waterfowl during spring and fall migrations.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control.

Park development will be minimized to preserve the natural and archaeological resources of the park. Extensive archaeological research has been conducted prior to any development of recreational facilities and has become part of the interpretation program for park visitors.

Current policies on acquisition and development of State Parks provide for an area, approximately one-fifth which is developed for intensive recreational use, with the remaining four-fifths providing a natural environmental area and buffer zone, designed for limited use such as hiking trails.

Before establishment of Mille Lacs Kathio State Park, approximately 1,200 acres of land were held by private parties within the park boundaries. According to records in the office of the County Treasurer, the county derived a tax revenue of \$326.97 of which the town and school district #16 were entitled to \$111.17. At this date only 6,812 acres are owned by the State of Minnesota, and of this 6,600 acres were tax forfeited with only 212 acres having been taken off the tax roles.

During 1972, 41,164 visitors were recorded at Mille Lacs Kathio State Park and the economic benefits to the surrounding area derived from visitors to the park more than offset the tax revenue loss.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies include provisions for burial of all overhead lines and the removal of lines which serve no demonstrated needs for the park.

Buildings which cannot be converted to park use are removed, dismantled or sold and the area is then returned to a natural state which conforms with the surrounding environment.

Former agriculture lands are seeded to a grass crop and eventually trees are planted which conform to the surrounding environment for the purpose of eliminating any visible evidence of the lands being farmed.

In view of the fact that agriculture practices sometimes take place inside park boundaries before the land is acquired by the Division of Parks and Recreation, it becomes advantageous to allow a lease arrangement with the former owner for two years after state acquisition. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked, and dragged, then seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocate his home for the few remaining years of his life. As an inducement to sell, the Division of Parks and Recreation offers the landowner a life tenure on three to ten acres of land, surrounding his buildings, for residential purposes. This privilege is extended to the owner and his wife only and allows them to remain on their land until they die eliminating the need for court proceedings to probate a will or estate before title is transferred.

5. Any Adverse Environmental Effects Which Cannot be Avoided should the Proposal be Implemented - The true effect of withdrawing land to be included in Mille Lacs Kathio State Park from the tax roles is impossible to determine since land acquisition is slowly accomplished over a period of years. Since only 212 acres of private lands have been acquired since the park was established and use areas were located on the bulk of tax forfeited lands only a negligible amount of tax revenue has been lost by the taxing districts concerned. The remaining private land and holdings within the park are of low priority and can be accomplished leisurely over a period of years to ease the burden of tax loss.

When a park is established, there is also an increase in job opportunities within the park and for drive-ins, gas stations, grocery stores, restaurants, baitshops, etc. which are usually built close to the park to cater to the increase tourist trade.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - It is no doubt that the lakeshore along Lake Mille Lacs, Shakopee Lake and Ogechie Lake would have become highly developed with summer homes since Lake Mille Lacs is a popular summer recreation area. Land along the Rum River would have been filled to provide summer homes along the river. Since the river is shallow and in stretches navigable only with a canoe, the people who would have built on the river might eventually have wanted the river dredged to provide boating access.

By establishing the area as a park, the public benefits from the use of the recreation resource not just a few who would be able to make the capitol improvements necessary to construct summer residences. The historical significance of the area will be preserved and interpreted for future generations rather than being destroyed by those not interested in preserving historical values.

The timber and water resources will be protected by those skilled in conservation practices for the enjoyment of the public who comes to recreate.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated earlier, Mille Lacs Kathio State Park was established in 1957. Establishment of a Minnesota State Park is a commitment to provide recreation facilities and open space for present and future generations. It is also a commitment to protect and preserve valuable nonrenewable resources such as minerals and renewable resources such as timber and water.

The most important aspect of Mille Lacs Kathio State Park which, if destroyed cannot be replaced, is the archaeology of the area. This area is believed to have been the village sites of Indian tribes of the Dakota Nation. More than 1,000 of the 10,000 Indian mounds known to exist 75 years ago in Minnesota were located around Lake Mille Lacs and it is regrettable that a great many of the mounds were thoughtlessly destroyed by the rapid modernization and development of shoreline around Lake Mille Lacs.

8. Alternatives to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of providing for the projected needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in the loss of a unique natural area rich in archaeological history, eventually resulting in its use for private purposes that would add little or nothing to the general public good.

Since Mille Lacs Kathio has already been established as a State Park, the only remaining alternative is to acquire and develop the lands within the park boundaries according to the policies of the Division of State Parks for providing public recreational facilities.

ENVIRONMENTAL ASSESSMENT

MINNEOPA STATE PARK

1. Description of the Proposed Action- Lands to be acquired or developed are within the statutory boundaries of Minneopa State Park, located in Blue Earth County, in South Central Minnesota, five miles West of Mankato, Minnesota.

Minneopa State Park was established by the Minnesota State Legislature in 1905 with an original statutory acreage of 116 acres. Legislative Action, State transfer of control and land donations have expanded the boundaries of Minneopa State Park to its present size of 1,145 acres.

The park was originally established to preserve and protect Minneopa Creek and its two waterfalls, one with a verticle drop of thirty feet. The original 116 acres has been used extensively as a picnic area by local residents. In 1931, the Minnesota Legislature accepted a donation from Albert Seppman, son of Louis Seppmen of an Old Stone Windmill and site for inclusion to Minneopa State Park. The Seppman windmill is one of the first old stone grist mills constructed in Minnesota.

The main management goal, for Minneopa State Park is to provide facilities for recreation, to protect and preserve a unique natural geological feature of the park and to interpret milling operation of early pioneers in the area.

The parcel included in this project is described as follows:

The terrain varies from nearly level on the south part to gently rolling on the northerly side and slightly hilly around the buildings. The acquisition does not include the portion of the parcel containing the buildings, only approximately 36 acres is to be acquired.

This parcel is pasture land being too rocky for cultivation. The adverse economic affects of this acquisition will be minimal and offset by the affect of the park on the general area.

2. Description of the Environment - Minneopa State Park is located over a series of flat-lying sedimentary rocks which were cut through by glacial drainage during the ice age. During this period erosion formed a vast valley cutting rock benches and depositing gravel terraces along the valley wall. As regional drainage adjusted to the glacial river, a tributary, Minneopa Creek eroded through the bedrock and formed a waterfall when the stream encountered resistant well cemented sandstone

The park embraces a segment of Minneopa Creek to where it empties into the Minnesota River. Two waterfalls within the park are located on the stream. The upper falls, about fifty yards down stream, falls about 30 feet vertically and is quite similar to the famous Minnehaha Falls. Unfortunately, Minneopa Creek has a relatively small drainage area extending westward about fifteen miles to its point of origin in Lake Crystal. The flow of the stream is very minor except during spring thaw when the

runoff is abundant. Below the falls, the stream meanders through a deep glen, with the sides of the valley rising about 100 feet and thickly covered with hardwood timber.

The area of the park includes the continuation of Minneopa Creek and valley to the Minnesota River and a large generally level, rocky plateau with open groves of deciduous trees. The area also includes a steep bank going down to the Minnesota River bottom. The northern boundary of the park being the meandering Minnesota River.

The deciduous trees found on the rocky plateau and hardwoods found in the valley of Minneopa Creek and the Minnesota valley enhance the unique character of Minneopa State Park.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding, erosion control and burial of obtrusive overhead power and telephone lines.

Current management policies on acquisition and development of State Parks provides for an area, approximately one-fifth which is developed for intensive recreational use, with the remaining four-fifths providing a natural environmental area and buffer zone designed for limited use such as hiking trails.

It is expected that future expansion of the city of Mankato will extend around and beyond the park boundaries because the land is more conducive to residential development than farming, since it is located within the Minnesota River Valley. Preserving the open space in Minneopa State Park will enhance residential values. This will increase the property tax yield, which is the major source of revenue for local governments.

By providing separate police protection for the park the total responsibility of local sheriff and police authorities will be reduced, rather than increased, as the case would be if the park were developed into a residential area. The protection of the surrounding landowner's property will, of course, continue to be the responsibility of the local police authorities.

4. Mitigating Measures Included in the Proposed Action- All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

Any agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Park's acquires farm land, it becomes advantageous to allow a lease arrangement with the farm owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former croplands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grasslands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocated his home for the few remaining years of his life. As an inducement to sell, the Division of Parks and Recreation offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only, and avoids court proceedings for probating estates.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - The true effect of withdrawing land to be included in Minneopa State Park from the tax rolls is impossible to determine. Expected population growth from 1970 to 1980 for Blue Earth County is 23 percent. Projected growth between 1980 - 1990 is expected to be 8.6 percent for the county, however, Blue Earth County is a highly agriculture county and trends indicate that the number of those directly engaged in agriculture is expected to decline by 1990. This indicates that Mankato, Minnesota, the only substantial city in the county will increase approximately 18.6 percent absorbing the decrease in farm population.

Recent studies of the values of lands surrounding metropolitan area parks indicate that land values increase disproportionately to the general rise in real estate values. In several cases, the land, which encompasses a park, is considered prime for high quality residential development.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity - Minneopa State Park is bisected by Minnesota Highway 68 and County State Aid Highway 69 (Old U. W. 169) which divides the land area of the park in two. The construction of U. S. Highway 169 has encouraged suburban growth west of the park and prior to boundary expansion there were commercial and industrial business located on Minnesota Highway 68. Establishment of the park and subsequent boundary expansion have deterred residential and commercial development within the boundaries but the area surrounding that park has become desirable by developers because of the proximity to open space.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated earlier, Minneopa State Park was established in 1905 by the Minnesota Legislature with boundary expansion following in later years to meet the needs of open space recreation and natural resource preservation. Establishment of a Minnesota State Park is a commitment to provide recreation facilities and open space for present and future generations. Acquisition with statutory boundaries is a slow process which sometimes requires many years to accomplish. Once the land is acquired and becomes State property inside park boundaries only by act of the Minnesota Legislature will the commitment to provide park and open space be reversed.
8. Alternatives to the Proposed Action - If no action is taken to acquire and develop private lands inside the boundaries of Minneopa State Park, the goal of preserving the area, and providing for the project needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural area eventually resulting in its use for private purposes that would add little or nothing to the general public's good.

Since the park has been established by State Law for public use the only remaining alternative is to acquire and develop the land within the boundaries according to the policies developed by the Division of Parks and Recreation for providing public recreational facilities.

ENVIRONMENTAL ASSESSMENT

MEMORIAL HARDWOOD STATE FOREST ACQUISITION

1. Description of the Proposed Action. Lands to be acquired are within the Minnesota Memorial Hardwood State Forest in southeastern Minnesota. The purpose of this forest is to preserve the scenic beauty of the bluffs and river valleys of southeastern Minnesota thereby providing a vast recreational area for the millions of people in the Twin Cities, southeastern Minnesota and the adjacent area, and to provide top quality hardwood timber for veneer, sawlogs, pulpwood, fence posts and other products. These goals alone will ultimately provide for a tremendous economic expansion in this area. Measures will be taken to control the erosion that is a serious problem in the area. Erosion control efforts to date are already responsible for improvement of some of the fine trout streams in the area. Ultimately the Department of Natural Resources hopes that this area will serve as a demonstration for private forest land owners in the area to show what can be done in forest management and what benefits can be derived from carrying out sound management programs. Forest management practices will be accomplished in cooperation with game and fish personnel and other resource managers so that benefits from these natural resources may be maximized to the greatest possible extent.
2. Description of the Environment. The area to be acquired is generally steep timbered or grass slopes with occasional fields on the level areas. Acquisition of this land will preclude poor logging practices often found on privately owned land with resultant erosion problems. Where erosion has occurred, steps will be taken to prevent further erosion and to revegetate the area.

Many of the farms are only subsistence operations. Acquisition of these areas will enable such land owners to move to areas more suitable to agriculture thereby improving the economy of the locality.
3. The Environmental Impact of the Proposed Action. Enhancement of the environment will result through improved forest management practices and timber stand improvement operations, tree planting, and erosion control. Surface run-off from steep slopes will thereby be curtailed improving the quality of trout streams below.
4. Mitigating Measures Included in the Proposed Action. Covered in above discussion.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented. The final harvest cut of any tree or a particular stand in the forest is often construed by many people as having an adverse effect on the environment and is viewed with displeasure. Recognizing that such is the case, all operations will be designed and carried out in such a manner that the impact of the harvest and removal of the trees will be accomplished with the minimal disturbance of the site and aesthetics. Harvested areas will be kept relatively small in size and the regeneration of new stands will be carried out through planting, or manipulation of the existing stand to assure natural regeneration.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity. If privately owned lands in the Memorial Hardwood State Forest are not acquired by the State, many of such lands may be denuded of forest cover with soil erosion following. Other private lands will be developed for residential or commercial use, thereby depriving the general public of use of the area.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented. State ownership of this area will enhance the range of resource uses. Recreational activities such as camping, hiking, hunting, fishing, berry picking, bird watching and others may be enjoyed freely by the public. High quality timber products will be produced through better forest management practices. Better hunting and fishing will be available through game management and stream improvement work.
- ② 8. Alternatives to the Proposed Action. If no action is taken to acquire these lands, the goal of preserving the scenic beauty of this forest and setting it aside for use by the public, cannot be accomplished. Much of the available lands will be purchased by land developers or individuals and developed for commercial and private purposes. Those lands not suitable for development will be abandoned, scarring the landscape, silting the lakes and streams, and generally producing an unhealthy economic condition for the area.

WEW:hcf

FOX RIVER BOND

ENVIRONMENTAL ASSESSMENT

CAMDEN STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the boundaries of Camden State Park in Southwestern Minnesota. The park has been established to protect and preserve the scenic beauty and historical aspects of the Redwood River and its valley and bluffs while providing recreational facilities and activities for park visitors. Abundance of Wildlife and waterfowl and its natural prairie are unique features of the park and will provide a study area, in environmental education, for Southwest Minnesota State College.

The main management goal is to provide a recreation and an environmental learning area for future generations while maintaining and improving the natural environment against changing ecological conditions. This park was established by the 1935 Minnesota Legislature.

2. Description of the Environment - The Redwood River and its valley constitute the most prominent physical feature of the park with a well defined valley of approximately 150 feet depth contained within a horizontal width of 2,000 - 3,000 feet from brow to brow. The river falls through the park from southwest to northeast as it drains from the high glacial moraine forming the southwest corner of Lyon County to the low land forming the northeast corner of the county.

Numerous sand and gravel deposits are found on private holdings within park boundaries. A problem of erosion control and wash-outs have resulted from gravel excavations during periods of heavy rain, and threaten the existence of trout in the Redwood River. The Redwood River is a designated trout stream, which is rare in Southwestern Minnesota. On the moraine upland west of the wooded ravines is roughly 70 acres of unbroken grasslands. It is dominately a bluestem prairie that was moderately grazed in the past. Only 250-300 acres of prairie exist elsewhere in the county.

Brawner Lake is an artificial lake constructed in 1951 and is presently owned and managed by the Division of Game and Fish for fish and game proproagation. The project consists of a water-level-control structure with outlet culvert and dikes. The Burlington Northern Railroad runs from north to south through the park, however, the property is not included in the statutory boundaries. During the period of heavy park visitations, the railroad remains well screened under a tree cover declduous trees.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved resource management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Sand and gravel excavations will be restored to a natural state to prevent surface run-off and erosion. Park development will be minimized to preserve the natural biological, geological, and archaeological resources.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone wires will be buried and when burial is not possible, floral cover will be used to screen lines.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Additional recreational facilities will be constructed for park visitors, but will be aesthetically designed to minimize the effect upon the natural environment.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - If privately owned lands in Camden State Park are not acquired by the State, sand and gravel excavation will continue until the extensive supplies are depleted, subjecting the valley to erosion and extensive flooding. Other private lands will be developed for residential use, and thereby obstructing the natural view from the valley floor by the general public. The expanding population, pollution, pesticides, urban sprawl, and other ecological problems could destroy the valuable assets characteristic of this park.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - State ownership and management of this area will enhance the range of resource uses. Recreational activities such as camping, hiking, horseback riding, fishing, picnicking and environmental study may be freely enjoyed by the public. Camden State Park's situated in the midst of agriculture land will provide a natural environment preserved for enjoyment of generations to come.
8. Alternatives to the Proposed Action - If no action is taken to preserve these lands, the scenic beauty of this valley and setting it aside for use by the public, cannot be accomplished. Much of the remaining land will be purchased by land developers or individuals to be developed for commercial or private development following on the suitable lands remaining.

ENVIRONMENTAL ASSESSMENT
For Entire Minnesota Valley Trail System

1. Description of the Proposed Action:

1. The State of Minnesota will acquire and develop approximately one hundred and twenty-six miles of multipurpose trail extending from Fort Snelling State Park to LeSueur, Minnesota. This system is designed to develop a portion of the valley for recreational use in harmony with industrial, commercial and municipal development. This trail park system will be mainly located in the flood plain and will contain approximately 8000 acres of land.

The trail will be a multipurpose trail to be used for hiking, horseback riding, bicycling, snowmobiling, skiing and snowshoeing. It will be developed in part as two separate trails as the anticipated uses aren't entirely compatible. The system will include several wayside parks.

This system will begin in the heart of the Twin Cities Metropolitan Area and travel uninterrupted up the Minnesota River Valley for approximately 65 miles.

2. Description of the Environment:

The confines of the MVT are the tops of the bluffs on the north and south sides of the river. In some cases these include portions of stream ravines entering the valley. The trail abutts the river wherever possible most of it being in the flood plain.

The river contains shallow spots, sand bars and occasional rock outcrops. Many trees have fallen into the river during periods of high water when the bank has been under-cut. The banks are generally heavily vegetated containing an abundance of wildlife.

Most of the agriculture land is cultivated with row crops, hay and small grain. Pasture land represents only a small portion of present use. Small wooded tracts are scattered throughout the area.

Some areas are being used for gravel excavation. Industry is dispersed throughout the valley being concentrated particularly in Dakota and Scott counties near the metropolitan area. Barge traffic is increasing on the river with frontage being acquired for use as terminals. There are plans to extend navigation further upstream by dredging.

At least 40 historical sites and 25 (private, municipal and state) recreational facilities exist along the proposed trail routes. Adjacent municipalities outside the metropolitan area include : Shakopee, Chaska, Jordan, Belle Plaine, Blakely, Henderson and LeSueur.

3. The Environmental Impact of the Proposed Action:

By retaining the land in a near natural state and following accepted erosion control practices state ownership of these lands should result in minimizing the periodic damage due to flooding. The trail system can be flooded during high water allowing the plain to perform its necessary function

Some agricultural land will be taken out of production. Gravel excavation will be halted on land acquired for the trail system. The development of the trail system and increased use of recreation facilities will generate revenue to surrounding areas as well as to recreation oriented enterprises. This will offset the loss of commercial gravel production and agricultural income.

The bottomlands are largely uninhabited. In instances where trail users would be objectional to landowners in the form of noise pollution or potential vandalism the State's takings have been enlarged to provide buffer zones. Portions of the trail will utilize the existing secondary road system. This usage shouldn't add to the noise already generated by these facilities.

The noise made by snowmobiles and other users shouldn't have any effect on the industrial or commercial development. The trail is located in the sparsely developed parts of the municipalities it crosses and should not create a noise problem in the municipalities.

4. Mitigating Measures included in the Proposed Action:

Actual trails will be natural, void of asphalt and where possible gravel. Erosion control including reforestation, planting and seeding will be used to retard but not impair flood run-off.

5. Any Adverse Environmental Effects which cannot be Avoided should the Proposal be Implemented:

As stated previously no adverse effect should be encountered. With sound forestry practices flood damages will be lessened. The welfare of wildlife will be a paramount consideration in the development of this project.

6. The Relationship between Local Short-Term uses of man's Environment and the Maintenance and Enhancement of Long-Term Productivity:

If these lands aren't acquired by the State, they will be developed for commercial, industrial or residential use. This will result in the development of structures to contain the river thereby removing portions of the flood plain to the jeopardy of areas downstream. It will also result in the loss of this area for public use and enjoyment.

7. Any Irreversible and Irretrievable Commitments of Resources which would be Involved in the Proposed Action should it be Implemented:

State ownership will enhance the value of these lands through better land and forest management practices. This will also have a beneficial effect on the entire basin.

8. Alternatives to the Proposed Action:

No action alternative will result in commercial and industrial development especially near the metropolitan areas. Future growth rates of these areas are expected to push development out and up the MVT corridor. This will result in the termination of the unspoiled character of the area and result in the loss of much of the flood plain.

There are no alternate locations for a linear trail with a terminus in the metropolitan area that contains the unspoiled natural features of the MVT.

ENVIRONMENTAL ASSESSMENT
LAC QUI PARLE RECREATION AREA

1. Description of the Proposed Action - Lands to be acquired or developed are within the Lac Qui Parle Recreation Area in Western Minnesota. The purpose of this recreation area, is to preserve the scenic, natural and historical resources while providing recreational facilities and activities for park visitors. Ultimately, the rich history of this area will be interpreted to the visitors for their enjoyment.

The main management goal is to provide a recreational and an environmental learning area for present and future generations while maintaining and improving the natural environment against changing ecological and social pressures.

2. Description of the Environment - This area was acquired under the SERA Program in the late 1930's and developed as part of the Lac Qui Parle dam and reservoir project under WPA. The area is located adjacent to agriculture lands in Western Minnesota where the Lac Qui Parle and Minnesota River join. The main characteristic of the recreation area is heavily wooded hard wood timber, which also forms a corridor along each river. In the fall, massive concentrations of waterfowl use the reservoir on their migration south and this area is one of the few locations in the State where Golden Eagles can be observed with any regularity.
3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved resource management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Park development will be minimized to preserve the natural biological, geological, and archaeological resources.
4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone wires will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Additional recreational facilities will be constructed, to serve park visitors' needs, but will be aesthetically designed to minimize the effect upon the natural environment.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity - Lac Qui Parle Recreation Area is almost entirely State owned and managed by the Department of Natural Resources, the only exceptions are 6.81 acres private ownership and approximately fifty acres owned by the county of Lac Qui Parle. Present management is entirely harmonious with recreation and as technology advances, management practices will evolve to maintain, preserve and improve the natural habitat for a quality recreation experience.

7. Any Irreversible and Irretrievable Commitment of Resources Which would be Involved in the Proposed Action Should it be Implemented - State ownership and management of this area will enhance the range of resource uses. Recreational activities such as camping, picnicking, boating, fishing, swimming, horseback riding, and hiking will be freely enjoyed by the public.

Alternatives to the Proposed Action - If no action is taken to preserve and maintain these lands the public would be deprived of a valuable resource for recreation. The remaining private land inside the boundaries abutts a beautiful beach, which, if not acquired by the State, would be purchased by developers, for lakeshore development.

ENVIRONMENTAL ASSESSMENT

CAMDEN STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the boundaries of Camden State Park in Southwestern Minnesota. The park has been established to protect and preserve the scenic beauty and historical aspects of the Redwood River and its valley and bluffs while providing recreational facilities and activities for park visitors. Abundance of wildlife and waterfowl and its natural prairie are unique features of the park and will provide a study area, in environmental education, for Southwest Minnesota State College.

The main management goal is to provide a recreation and an environmental learning area for future generations while maintaining and improving the natural environment against changing ecological conditions.

This park was established by the 1935 Minn. Legis.

2. Description of the Environment - The Redwood River and its valley constitute the most prominent physical feature of the park with a well defined valley of approximately 150 feet depth contained within a horizontal width of 2,000 - 3,000 feet from brow to brow. The river falls through the park from southwest to northeast as it drains from the high glacial moraine forming the southwest corner of Lyon County to the low land forming the northeast corner of the county.

Numerous sand and gravel deposits are found on private holdings within park boundaries. A problem of erosion control and wash-outs have resulted from gravel excavations during periods of heavy rain, and threaten the existence of trout in the Redwood River. The Redwood River is a designated

trout stream, which is rare to Southwestern Minnesota. On the moraine upland west of the wooded ravines is roughly 70 acres of unbroken grasslands. It is dominately a bluestem prairie that was moderately grazed in the past. Only 250-300 acres of prairie exist elsewhere in the county.

Browner Lake is an artificial lake constructed in 1951 and is presently owned and managed by the Division of Game and Fish for fish and game propagation. The project consists of a water-level-control structure with outlet culvert and dikes. The Burlington Northern Railroad runs from north to south through the park, however, the property is not included in the statutory boundaries. During the period of heavy park visitations, the railroad remains well screened under a tree cover deciduous trees.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved resource management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Sand and gravel excavations will be restored to a natural state to prevent surface run-off and erosion. Park development will be minimized to preserve the natural biological, geological, and archaeological resources.
4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone wires will be buried and when burial is not possible, floral cover will be used to screen lines.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Additional recreational facilities will be constructed for park visitors, but will be aesthetically designed to minimize the effect upon the natural environment.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - If privately owned lands in Camden State Park are not acquired by the State, sand and gravel excavation will continue until the extensive supplies are depleted, subjecting the valley to erosion and extensive flooding. Other private lands will be developed for residential use, and thereby obstructing the natural view from the valley floor by the general public. The expanding population, pollution, pesticides, urban sprawl, and other ecological problems could destroy the valuable assets characteristic of this park.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - State ownership and management of this area will enhance the range of resource uses. Recreational activities such as camping, hiking, horseback riding, fishing, picnicing and environmental study may be freely enjoyed by the public. Camden State Park's situated in the midst of agriculture land will provide a natural environment preserved for enjoyment of generations to come.
8. Alternatives to the Proposed Action - If no action is taken to preserve these lands, the scenic beauty of this valley and setting it aside for use by the public, cannot be accomplished. Much of the remaining land will be purchased by land developers or individuals to be developed for commercial or private interests. Sand and gravel deposits will be depleted initially with private development following on the suitable lands remaining.

ENVIRONMENTAL ASSESSMENT

BIRCH LAKES STATE FOREST ACQUISITION

1. Description of the Proposed Action. The land to be acquired is within the Birch Lakes State Forest which lies about 5 miles north of Melrose, Minnesota, or about 100 miles northwest of the Twin Cities. The purpose of this forest is primarily for outdoor recreation, serving the surrounding area as well as the Twin City Metropolitan Area. This forest also serves as a demonstration area where private land owners can learn how to better manage their wood-lots and forest land for increased production. Timber production in this forest is limited mostly to salvage and sanitation cuts designed to increase recreational and esthetic values of the forest.
2. Description of the Environment. The area to be acquired is generally level land with mixed hardwood and conifer timber. It is immediately adjacent to the Birch Lake State Forest Campground so will provide for expansion of the campground, recreational trails, and a nature study area.
3. The Environmental Impact of the Proposed Action. Enhancement of the environment will result through improved forest management practices and timber stand improvement operations. These benefits will be extended to the surrounding area through land owners applying forest management information gained from the forest management demonstration schools.
4. Mitigating Measures Included in the Proposed Action. Because this land will be used primarily for camping and other recreational activities, particular attention will be given to precluding the deterioration of the site resulting from such use. If deterioration becomes evident, steps will be taken to limit useage by the public while the area is recovering from over-use.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented. See item 4 above.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity. This acquisition will provide additional land for expansion of the Birch Lake Campground. More area will, therefore, be provided for the camping public which will lessen crowding and overuse of the present campground.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented. State ownership of this area will enhance the range of resource uses. Recreational activities such as camping, hiking, hunting, fishing, berry picking, bird watching and others may be enjoyed freely by the public.
8. Alternatives to the Proposed Action. If no action is taken to acquire this land, continued crowding will result in the present campground with the usual deleterious effects of overuse. Campers have been trespassing on the private land proposed for acquisition which has created ill-will with the land owner. Acquisition will, therefore, eliminate this problem. Also, if no action is taken, the public will be deprived of expanded recreational activities as described in item 7 above.



STATE OF MINNESOTA

DEPARTMENT NATURAL RESOURCES**Office Memorandum**

TO : Bob Johnson, Recreation Planner
Bureau of Planning

DATE: January 19, 1973

FROM : Willard E. West, Staff Forester
Division of Lands and Forestry

*Willard E. West
hf*

SUBJECT: Environmental Assessment
Birch Lakes State Forest Acquisition

Attached is the environmental assessment for the Birch Lakes State Forest acquisition which you requested.

WEW:hf

Attachment

ENVIRONMENTAL ASSESSMENT

BIRCH LAKES STATE FOREST ACQUISITION

1. Description of the Proposed Action. The land to be acquired is within the Birch Lakes State Forest which lies about 5 miles north of Melrose, Minnesota, or about 100 miles northwest of the Twin Cities. The purpose of this forest is primarily for outdoor recreation, serving the surrounding area as well as the Twin City Metropolitan Area. This forest also serves as a demonstration area where private land owners can learn how to better manage their wood-lots and forest land for increased production. Timber production in this forest is limited mostly to salvage and sanitation cuts designed to increase recreational and esthetic values of the forest.
2. Description of the Environment. The area to be acquired is generally level land with mixed hardwood and conifer timber. It is immediately adjacent to the Birch Lake State Forest Campground so will provide for expansion of the campground, recreational trails, and a nature study area.
3. The Environmental Impact of the Proposed Action. Enhancement of the environment will result through improved forest management practices and timber stand improvement operations. These benefits will be extended to the surrounding area through land owners applying forest management information gained from the forest management demonstration schools.
4. Mitigating Measures Included in the Proposed Action. Because this land will be used primarily for camping and other recreational activities, particular attention will be given to precluding the deterioration of the site resulting from such use. If deterioration becomes evident, steps will be taken to limit useage by the public while the area is recovering from over-use.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented. See item 4 above.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity. This acquisition will provide additional land for expansion of the Birch Lake Campground. More area will, therefore, be provided for the camping public which will lessen crowding and overuse of the present campground.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented. State ownership of this area will enhance the range of resource uses. Recreational activities such as camping, hiking, hunting, fishing, berry picking, bird watching and others may be enjoyed freely by the public.
8. Alternatives to the Proposed Action. If no action is taken to acquire this land, continued crowding will result in the present campground with the usual deleterious effects of overuse. Campers have been trespassing on the private land proposed for acquisition which has created ill-will with the land owner. Acquisition will, therefore, eliminate this problem. Also, if no action is taken, the public will be deprived of expanded recreational activities as described in item 7 above.

Hardwood Forest
Crown Access
March, 1971

MINNESOTA MEMORIAL HARDWOOD FOREST

The MMHF includes 519,000 acres of forest land ranging from non-productive bluffs to highly productive coulees, coves, and bottomlands.

The main purposes for establishment were to provide the public with:

I. Recreation:

- a. Picnic facilities
 - b. Camping facilities
 - c. Canoe & boating
 - d. Skiing - Several facilities presently available
 - e. Horseback riding - many saddle clubs exist at present. One large private dude ranch type operation is proposed.
 - f. Hiking trails
 - g. Snowmobile trails
- } Division of Lands & Forestry present policy
is to provide primitive type areas.
Relieves pressure on state parks.

II. Protection:

- a. Fire control - bring effective control of wild grass, brush, and woods fires to area
 - (1) 1970 - 23 fires, 329 acres
 - (2) 165 township Fire Wardens (volunteer)
- b. Erosion control and watershed protection
 - (1) 37 major streams within the MMHF boundary
 - (2) 60-70% of woodlands are grazed presently - poor watershed practice
 - (3) Substantial number of poor farms and poor watershed practices used.

III. Wood Production:

- a. Provide continuous supply of raw materials for new woods-using industries.
- b. Safeguard and expand already established industries
 - (1) 6 major sawmills producing ties and lumber
 - (2) Wood chipping plant at Kellogg producing chips for Waldorf Paper Company
 - (3) Dry kiln (1) which provides custom drying facilities
 - (4) Possible development of Hardwood pulpwood industry
 - (5) Present drain equals 17,000,000 board feet - rough product Value = \$1,500,000

- c. Provide work for local people through planting, thinning, and pruning projects.

1. All counties passed resolutions favoring the Memorial Hardwood Forest.
2. SCS, Extension, Game & Fish, and other agencies support the MMHF.
3. Much support for the MMHF is evidenced by Sportsmens' Clubs, land donations, etc.
4. Lands proposed for acquisition are lands that are not usable for other purposes, therefore, little conflict with farmers and landowners.
5. Counties get 50% of all gross revenue in lieu of taxes.

Lands Acquired to Date:

Trust Fund	952 acres
Land Donations	453 acres
Tax-Forfeited	1,364 acres
Purchased	<u>19,660 acres</u>
MMHF Total Ownership	22,409 acres
Goal for MMHF:	200,000 acres

Accomplishments on Acquired Lands to Date:

1. Tree planting: 1,644,700 trees on 1,598 acres.
2. Kruger Picnicground: public access, 2 shelters, fire rings, tables, 3 latrines
3. Kruger Campground: 8 site campground, 2 latrines, pump.
4. Kruger Recreation Trails: 5½ miles riding and hiking trails.
5. Development plans written for Root and Zumbro River Canoe Routes.
6. Self-guided nature trail developed in Fillmore County - ½ mile.
7. Six (6) miles of hiking and riding trails have been made in the Hay Creek Recreation Area in Goodhue County. Parking lot and picnic area being constructed.
8. 38 erosion control structures have been constructed in the counties of Houston, Fillmore, Goodhue, Wabasha, and Winona.
9. High value black walnut and butternut have been thinned and pruned on 451 acres of Fillmore, Houston, Goodhue, and Wabasha Counties.
10. Black walnut experimental planting (2 acres) has been set up in Winona County in cooperation with the USFS.
11. Conservation Region Headquarters established at Rochester.
12. Area headquarters office of Lands & Forestry built in Lake City.
13. District headquarters office of Lands & Forestry built in Lewiston.

14. 165 township fire wardens have been commissioned and fire protection given to Fillmore, Houston, Winona, Wabasha, and Goodhue Counties.
15. Twenty three (23) agricultural leases are active on 454 acres. Value of this: \$3,999.50
16. Sustained yield timber management plans have been prepared on all state forest districts.
17. Sales of mature timber are routine with counties receiving 50% of return.
18. Free use permit to Houston Sportsmen's Club to build and maintain Root River Canoe Campground.
19. 2692 rods of line fence between state land and private land have been erected by 22 private landowners with 50% or \$5,771 total cost paid by the state.
20. Reno Recreation Area--18 miles of trail, parking area and picnicground. (Under Construction)
21. Four (4) Demonstration Woodlands are now being completed in Fillmore, Houston, Olmsted, Wabasha, and Winona counties.
22. Eight (8) miles of an abandoned railroad grade purchased for a multiple-use trail in Goodhue County.

December 21, 1972

Mr. Bernard Edmund, Director
Parks and Recreation
Ramsey County
Courthouse
St. Paul, Minnesota 55102

Dear Mr. Edmund:

Enclosed a copy of the Environmental Assessment for the
Minnesota Memorial Hardwood Forest for your information.

Sincerely,

Jerome H. Kuehn
Planning Administrator
Bureau of Planning

Enc. 1

REJ:i



STATE OF MINNESOTA

141-0

163-0

85

DEPARTMENT NATURAL RESOURCES

Office Memorandum

TO : Jerry Kuehn, Administrator
Bureau of Planning

DATE: December 6, 1972

RECEIVED

DEC 8 1972

FROM : Wm. Aultfather, Director
Division of Lands and Forestry

BUREAU OF
PLANNING
[Signature]

SUBJECT: Environmental Assessment - Memorial Hardwood State Forest Acquisition

Attached is the environmental assessment for LAWCON projects in the
Memorial Hardwood State Forest which you requested in your memo of
November 28, 1972.

WA:WEW:hf

June 7, 1973

Mr. Eldon Johnson
State Archaeologist
200 Ford Hall
University of Minnesota
Minneapolis, Minnesota 55455

Dear Mr. Johnson:

The Department of Natural Resources is preparing Environmental Assessments for the land acquisition of the Minnesota Memorial Hardwood Forest and the Minnesota Valley Trail. Any contributions from you in the form of pertinent material for these assessments will be appreciated. If you have any questions contact Robert Johnson, Department of Natural Resources, Bureau of Planning, Centennial Office Building, St. Paul, Minnesota, telephone number 296-4790.

Thank you for your cooperation.

Sincerely,

R. E. Johnson
Recreational Planner
Bureau of Planning

REJ/i

Natural Resources
Bureau of Planning

Ken Anderson
Regional Forest Supervisor
2300 Silver Creek Road N.E.
Rochester, Minnesota 55901

June 12, 1973

R. E. Johnson

Environmental Impact Statements

Enclosed is a copy of procedures for writing Environmental Impact Statements received from the Department of Natural Resources, State of Michigan for your information.

June 7, 1973

Mr. Russel Fridley, Director
Minnesota Historical Society
Main Historical Building
Cedar Street at Central
St. Paul, Minnesota

Dear Mr. Fridley:

The Department of Natural Resources is preparing Environmental Assessments for the land acquisition of the Minnesota Memorial Hardwood Forest and the Minnesota Valley Trail. Any contributions from you in the form of pertinent material for these assessments will be appreciated. If you have questions contact Robert Johnson, Department of Natural Resources, Bureau of Planning, Centennial Office Building, St. Paul, Minnesota, telephone number 296-4790.

Thank you for your cooperation.

Sincerely,

R. E. Johnson
Recreational Planner
Bureau of Planning

REJ/i

ENVIRONMENTAL ASSESSMENT

ZIPPLE BAY STATE RECREATION AREA

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Zippel Bay State Recreation Area, located in Lake of the Woods county in extreme northern Minnesota, at the base of the northwest angle.

Zippel Bay State Recreation Area was established by the Minnesota State Legislature in 1959 with a statutory acreage of 2,766 acres. At that time, 2,611 acres were tax forfeited, Volstead or Trust Fund land which is public land. The 1959 Legislature also authorized the Commissioner of Natural Resources to accept all tax forfeited land, including trust fund lands within the limits for this park. Subsequent action by the 1963 State Legislature expanded the statutory acreage to 2,946 acres, which absorbed 180 acres of marginal agricultural land.

The park was established to provide access and public recreational opportunities on the great border lake between Canada and Minnesota. Nearest state administered recreation facilities are Lake Bronson, 100 miles to the southwest. Long range development plans include recreational facilities such as beach development, harbor and marina for fishing and boating, public campgrounds and picnic area.

The main management goal, for Zippel Bay State Recreation Area, is to provide a recreational area for present and future generations; to preserve and protect the archeological significance of the park; and to protect and manage the areas renewable resources such as timber, vegetation, wildlife, waterfowl and water.

2. Description of the Environment - Zippel Bay State Recreation Area is located in Lake of the Woods county, ten miles northeast of Williams, Minnesota. The park is situated on the south shore of Lake of the Woods comprising 950,400 acres of water. Of this total 407,460 acres of water and 106 miles of shoreline lie within the state. The lake itself possesses important historic interest of natural significance since it was used as a major water route of the early voyagers.

The park, located on the south shore of Lake of the Woods, comprises approximately

2,800 acres of Jack Pine, Aspen and a scattering of Norway Pine, included in the boundary three miles, of 300 yard deep, fine sand beach which is considered to be the finest sand beach in the entire state. The wilderness terrain is generally flat with a few high ridges. The soils were derived from lacustrine deposits, re-worked glacial till, and beaches of glacial lake Agassiz, under a forest vegetation. Zipple Creek watershed, of which the park is part of, ~~because of the flatness of the land of drainage outlets~~ suffers from floodwater damage due largely to spring rains which are not siphoned off ~~because of flatness of the land and the lack of drainage outlets~~

Zipple Bay, of Lake of the Woods, is a combination waterfowl - fish area. There are ideal growths of preferred aquatic vegetation, loafing spots and nesting cover for waterfowl and the dense growth of vegetation provide excellent spawning beds for fish. The principle big game species are white tail deer and frequently moose, and black bear, and ~~Sharp Tail~~ ^{Sharp Tail} and ruffed grouse are the main upland bird species.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding, erosion control and burial of obtrusive overhead power and telephone lines.

Current management policies on acquisition and development of State Parks provides for an area, approximately one-fifth which is developed for intensive recreational use, with the remaining four-fifths providing a natural environmental area and buffer zone design for limited use such as hiking trails.

Eighty-eight percent of the land area within the park ~~was~~ ^{WAS} either tax forfeited or Trust Fund land and has provided sufficient land area for development of all recreational facilities for the park. Remaining private land within the boundaries are low priority for acquisition and will be acquired at the convenience of the landowner. A negligible effect will be felt by the ~~taxing~~ ^{taxing} governments in the county when compared with the economic boost to the county provided by the park visitors. Zipple Bay's 1972 attendance increased thirty-two percent over 1971, for a total of 32,583 and the 1973 attendance is expected to rise similarly as the park becomes more widely known.

Although the park area is only 2,946 acres, it provides public access to 950,400 additional acres for water recreation. By providing separate police protection for the park area, the public will be inclined to make extended trips on Lake of the Woods without fear of vandalism to their automobile. Local sheriff and police authorities responsibility will be comparatively reduced.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen

↓ ~~lines~~ ↓ ↓ (scribble)
lines. Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

Any agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Park's acquires farm land, it becomes advantages to allow a lease arrangement with the farm owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocated his home for the few remaining years of his life. As an inducement to sell, the Division of Parks offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only, and avoids court proceedings for probating estates.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - The true effect of withdrawing land to be acquired in Zippel Bay State Recreation Area cannot be determined. The remaining acreage to be acquired is small and does not interfere with the intensive use areas of the park and therefore the acquisition of these parcels are not of high priority.

As public visitation of the area increases, job opportunities will become available at the park. Additional economic benefits and job opportunities will be expected for drive-ins, gas stations, restaurants, bait shops, etc., which cater to the tourist trade.

6. The Relationship Between Local Short-Time Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Before establishment of the park, eighty-eight percent of the land area was either tax forfeited or Trust Fund land and little or no productive use^{was} being made of it. By establishing this area as a park, the entire public benefits from the use of the recreation resource. Economic benefits are enjoyed by the surrounding area and future generations are assured that the area will be preserved for their use.

7. Any Irreversible and Irretrievable Commitment of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated earlier, Zippel Bay State Recreation Area was established in 1959 by the Minnesota Legislature. Establishment of a Minnesota State Park is a commitment to provide recreation facilities and open space for present and future generations. Remaining acquisition within the statutory boundaries are low priority for acquisition and may be several years before they are finally acquired.

Once the land becomes State property inside park boundaries, only ^{by} ~~the~~ action ^{of} the Minnesota Legislature can ~~reverse~~ the commitment of providing park and open space. *be reversed*

8. Alternative to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of preserving this area, and providing for the projected future needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural area eventually resulting in its use for private purposes that would add little or nothing to the general public good.

SINCE ZIPPEL BAY STATE RECREATION AREA HAS ALREADY BEEN ESTABLISHED FOR PUBLIC USE, THE ONLY REMAINING ALTERNATIVE IS TO ACQUIRE AND DEVELOP THE LANDS WITHIN THE BOUNDARIES ACCORDING TO THE POLICIES DEVELOPED BY THE DIVISION OF STATE PARKS FOR PROVIDING PUBLIC RECREATIONAL FACILITIES.

ENVIRONMENTAL ASSESSMENT
MILLE LACS KATHIO STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Mille Lacs Kathio State Park, located in Mille Lacs county, in East Central Minnesota, on the Southwest tip of ^{LAKE} Mille Lacs ~~Lake~~ and five miles Northwest of Onamia, Minnesota.

Mille Lacs Kathio State Park was established under the Laws of the State of Minnesota in 1957, with a statutory acreage of 9,951 acres surrounding the outlets of ^{LAKE} Mille Lacs ~~Lake~~, Ogeche Lake and the Rum River to just beyond Shakopee Lake to the Southeast. Present state ownership consists of 6,812 acres which includes one of the most important archeological site locations in the history of Minnesota.

Preliminary findings by archeologists suggest inhabitation of the area by man as early as 4500 years B.C., and apparently sporadically through the Souix and Chippewa periods ^{up} to the present. The most intensive occupation of the park area in prehistoric times seems to have been during the period following 1000 A.D. At that time large villages of the ancestral Sioux were established and a series of specialized wild rice harvesting sites began to be used.

Long range development plans include recreational facilities for camping, picnicking, swimming, group camp activities, boating, snowmobiling, canoeing, horse back riding and hiking. Construction and maintenance operations are continuously under way to improve and enhance the recreation experience for the park visitor.

The main management goal, for Mille Lacs Kathio State Park, is to provide a recreational and an environmental learning area for present and future generations; to preserve and interpret the archeological significance of the park; to maintain and improve the natural environment against changing ecological and social pressures; and to protect and manage the area's renewable resources such as timber, vegetation, wildlife and water.

2. Description of the Environment - Around the turn of the century woodsmen engaged in timber harvesting of the great pine forests which once covered this area. Only a few scattered wood lots of pine remain which were not harvested *AT THAT TIME,*

because of inaccessibility. Now a greater portion of the park area is covered with a second growth of aspen, elm and maple.

Some scattered clearings remain within the park boundaries ~~which~~ ¹⁰⁷⁹ resulted from unsuccessful agriculture developments which followed the removal of the original forests of pine. Unsited for agriculture purposes, commercial tree farming was attempted, but because of the character of the soil, these operations failed also. During the depression of the 1930's, much of the land became tax delinquent and finally when the park was established in 1957 almost 6600 acres within the boundaries had become tax forfeited.

The park embraces the Rum River from its source from Lake Mille Lacs to the outlet of Shakopee Lake. The Rum River is characterized as a broad shallow river with a sandy bottom but choked with aquatic vegetation. Ogechie and Shakopee Lakes are within boundaries of the park. The lakes are wide sections of the Rum River, shallow and weed infested.

Wild rice grows profusely in each lake and ^{were} ~~was~~ the sites of riceing villages of the Dakota Indians. The lakes are used extensively by waterfowl during spring and fall migrations.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control.

Park development will be minimized to preserve the natural and archaeological resources of the park. Extensive archaeological research has been conducted prior to any development of recreational facilities and has become part of the interpretation program for park visitors.

Current policies on acquisition and development of State Parks provide for an area, approximately one-fifth which is developed for intensive recreational use, with the remaining four-fifths providing a natural environmental area and buffer zone, designed for limited use such as hiking trails.

Before establishment of Mille Lacs Kathio State Park, ~~1,200~~ ^{approximately 1,200 ACRES} ~~OF LAND WERE~~ held by private parties within the park boundaries, according to records in the office of the County Treasurer, ^{The County} derived a tax revenue of \$326.97 of which the town and school district 16 were entitled to \$11.17. At this date only 6,812 acres are owned by the State of Minnesota, ^{and of this} ~~with~~ 6,600 acres ^{were} tax forfeited

-3-
having

with only 212 acres ~~have~~ been taken off the tax roles.

During 1972, 41,164 visitors were recorded at Mille Lacs Kathio State Park and the economic benefits to the surrounding area derived from visitors to the park more than offset the tax revenue loss.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies include ^{provisions} for burial of all overhead lines and the removal of lines which serve no demonstrated needs for the park.

Buildings which cannot be converted to park use are removed, dismantled or sold and the area is then returned to a natural state which conforms with the surrounding environment.

Former agriculture lands are seeded to a grass crop and eventually trees are planted which conform to the surrounding environment for the purpose of eliminating any visible evidence of the lands being farmed.

In view of the fact that ~~sometimes~~ ^{sometimes} agriculture practices take place inside park boundaries before the land is acquired by the Division of Parks and Recreation, it becomes advantageous to allow a lease arrangement with the former owner for two years after state acquisition. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked, and dragged, then seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocate his home for the few remaining years of his life. As an inducement to sell, the Division of Parks offers the landowner a life tenure on three to ten acres of land, surrounding his buildings, for residential purposes. This privilege is extended to the owner and his wife only ^{and} allows them to remain on their land until they die *mc*

-4-

~~and eliminates~~ ^{eliminating} the need ^{for} court proceedings to probate a will or estate before title is transferred.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - The true effect of withdrawing land to be included in Mille Lacs Kathio State Park from the tax roles is impossible to determine since land acquisition is slowly accomplished over a period of years. Since only 212 acres of private lands have been acquired since the park was established and use areas were located on the bulk of tax forfeited lands only a ^{negligible} ~~negligible~~ amount of tax revenue has been lost by the taxing districts concerned. The remaining private land holdings within the park are of low priority and can be accomplished leisurely over a period of years to ease the burden of tax loss.

When a park is established, there is also an increase in job opportunities within the park and for drive-in, gas stations, grocery stores, restaurants, ^{bait shops} etc., which are usually built close to the park to cater to the increase tourist trade.

6. The Relationship Between Local Short-Time Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - It is no doubt that the lakeshore along Lake Mille Lacs, Shakopee Lake and Ogechie Lake would have become highly developed with summer homes since Lake Mille Lacs is a popular summer recreation area. Land along the Rum River would have been filled to provide summer homes along the river. Since the river is shallow and in stretches navigatable only with a canoe, the people who would have built on the river might eventually have wanted the river dredged to provide boating access.

By establishing the area as a park, the public benefits from the use of the recreation resource not just a few who would be able to make the capitol improvements necessary to construct summer residences. The historical significance of the area will be preserved and interpreted for future generations rather than being destroyed by those not interested in preserving historical values.

The timber and water resources will be protected by those skilled in conservation practices for the enjoyment of the public who comes to recreate.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated earlier, Mille Lacs Kathio State Park was established in 1957. Establishment of a Minnesota State Park is a commitment to provide recreation facilities and open space for present and future generations. It is also a commitment to protect and

preserve valuable non-renewable resources such as minerals and renewable resources such as timber and water.

The most important aspect of Mille Lacs Kathio State Park which, if destroyed cannot be replaced, is the archeology of the area. This area is believed to have been the village sites of Indian tribes of the Dakota Nation. More than 1,000 of the 10,000 Indian mounds known to exist 75 years ago in Minnesota were located around Lake Mille Lacs and it is regrettable that a great many of the mounds were ~~thoughtlessly~~ ^{thoughtlessly} destroyed by the rapid modernization and development of shoreline around Lake Mille Lacs.

8. Alternatives to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of providing for the projected needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in the loss of a unique natural area rich in archeological history, eventually resulting in its use for private purposes that would add little or nothing to the general public good.

Since Mille Lacs Kathio has already been established as a State Park, the only remaining alternative is to acquire and develop the lands within the park boundaries according to the policies of the Division of State Parks for providing public recreational facilities.

ENVIRONMENTAL ASSESSMENT
LAC QUI PARLE RECREATION AREA

1. Description of the Proposed Action - Lands to be acquired or developed are within the Lac Qui Parle Recreation Area in Western Minnesota. The purpose of this recreation area, is to preserve the scenic, natural and historical resources while providing recreational facilities and activities for park visitors. Ultimately, the rich history of this area will be interpreted to the visitors for their enjoyment.

The main management goal is to provide a recreational and an environmental learning area for present and future generations while maintaining and improving the natural environment against changing ecological and social pressures.

2. Description of the Environment - This area was acquired under the SERA Program in the late 1930's and developed as part of the Lac Qui Parle dam and reservoir project under WPA. The area is located adjacent to agriculture lands in Western Minnesota where the Lac Qui Parle and Minnesota River join. The main characteristic of the recreation area is heavily wooded hard wood timber, which also forms a corridor along each river. In the fall, massive concentrations of waterfowl use the reservoir on their migration south and this area is one of the few locations in the State where Golden Eagles can be observed with any regularity.
3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved resource management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Park development will be minimized to preserve the natural biological, geological, and archaeological resources.
4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone wires will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Additional recreational facilities will be constructed, to serve park visitors' needs, but will be aesthetically designed to minimize the effect upon the natural environment.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity - Lac Qui Parle Recreation Area is almost entirely State owned and managed by the Department of Natural Resources, the only exceptions are 6.81 acres private ownership and approximately fifty acres owned by the county of Lac Qui Parle. Present management is entirely harmonious with recreation and as technology advances, management practices will evolve to maintain, preserve and improve the natural habitat for a quality recreation experience.

7. Any Irreversible and Irretrievable Commitment of Resources Which would be Involved in the Proposed Action Should it be Implemented - State ownership and management of this area will enhance the range of resource uses. Recreational activities such as camping, picnicking, boating, fishing, swimming, horseback riding, and hiking will be freely enjoyed by the public.

Alternatives to the Proposed Action - If no action is taken to preserve and maintain these lands the public would be deprived of a valuable resource for recreation. The remaining private land inside the boundaries abutts a beautiful beach, which, if not acquired by the State, would be purchased by developers, for lakeshore development.

ENVIRONMENTAL ASSESSMENT
LAC QUI PARLE RECREATION AREA

B.O.P.
RECEIVED
JAN 16 1973
BUREAU OF
PLANNING

1. Description of the Proposed Action - Lands to be acquired or developed within the Lac Qui Parle Recreation Area in Western Minnesota. The purpose of this recreation area, is to preserve the scenic, natural and historical resources while providing recreational facilities and activities for park visitors. Ultimately, the rich history of this area will be interpreted to the visitors for their enjoyment.

The main management goal is to provide a recreational and an environmental learning area for present and future generations while maintaining and improving the natural environment against changing ecological and social pressures.

2. Description of the Environment - This area was acquired under the SERA Program in the late 1930's and developed as part of the Lac Qui Parle dam and reservoir project under WPA. The area is located adjacent to agriculture lands in Western Minnesota where the Lac Qui Parle and Minnesota River join. The main characteristic of the recreation area is heavily wooded hard wood timber, which also forms a corridor along each river. In the fall, massive concentrations of waterfowl use the reservoir on their migration south and this area is one of the few locations in the State where Golden Eagles can be observed with any regularity.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved resource management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Park development will be minimized to preserve the natural biological, geological, and archaeological resources.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone wires will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Additional recreational facilities will be constructed, to serve park visitors' needs, but will be aesthetically designed to minimize the effect upon the natural environment.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Lac Qui Parle Recreation Area is almost entirely State owned and managed by the Department of Natural resources, the only exceptions are 6.81 acres private ownership and approximately fifty acres owned by the county of Lac Qui Parle. Present management is entirely harmonious with recreation and as technology advances, management practices will evolve to maintain, preserve and improve the natural habitat for a quality recreation experience.
7. Any Irreversible and Irretrievable Commitment of Resources Which Would be Involved in the Proposed Action Should it be Implemented - State ownership and management of this area will enhance the range of resource uses. Recreational activities such as camping, picnicing, boating, fishing, swimming, horse-back riding, and hiking will be freely enjoyed by the public.

Alternatives to the Proposed Action - If no action is taken to preserve and maintain these lands the public would be deprived of a valuable resource for recreation. The remaining private land inside the boundaries abutts a beautiful beach, which, if not acquired by the State, would be purchased by developers, for lakeshore development.

ENVIRONMENTAL ASSESSMENT

CAMDEN STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the boundaries of Camden State Park in Southwestern Minnesota. The park has been established to protect and preserve the scenic beauty and historical aspects of the Redwood River and its valley and bluffs while providing recreational facilities and activities for park visitors. Abundance of Wildlife and waterfowl and its natural prairie are unique features of the park and will provide a study area, in environmental education, for Southwest Minnesota State College.

The main management goal is to provide a recreation and an environmental learning area for future generations while maintaining and improving the natural environment against changing ecological conditions. This park was established by the 1935 Minnesota Legislature.

2. Description of the Environment - The Redwood River and its valley constitute the most prominent physical feature of the park with a well defined valley of approximately 150 feet depth contained within a horizontal width of 2,000 - 3,000 feet from brow to brow. The river falls through the park from southwest to northeast as it drains from the high glacial moraine forming the southwest corner of Lyon County to the low land forming the northeast corner of the county.

Numerous sand and gravel deposits are found on private holdings within park boundaries. A problem of erosion control and wash-outs have resulted from gravel excavations during periods of heavy rain, and threaten the existence of trout in the Redwood River. The Redwood River is a designated trout stream, which is rare in Southwestern Minnesota. On the moraine upland west of the wooded ravines is roughly 70 acres of unbroken grasslands. It is dominately a bluestem prairie that was moderately grazed in the past. Only 250-300 acres of prairie exist elsewhere in the county.

Browner Lake is an artificial lake constructed in 1951 and is presently owned and managed by the Division of Game and Fish for fish and game propagation. The project consists of a water-level-control structure with outlet culvert and dikes. The Burlington Northern Railroad runs from north to south through the park, however, the property is not included in the statutory boundaries. During the period of heavy park visitations, the railroad remains well screened under a tree cover deciduous trees.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved resource management practices such as timber stand improvement, tree planting, sodding, seeding and erosion control. Sand and gravel excavations will be restored to a natural state to prevent surface run-off and erosion. Park development will be minimized to preserve the natural biological, geological, and archaeological resources.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone wires will be buried and when burial is not possible, floral cover will be used to screen lines.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Additional recreational facilities will be constructed for park visitors, but will be aesthetically designed to minimize the effect upon the natural environment.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - If privately owned lands in Camden State Park are not acquired by the State, sand and gravel excavation will continue until the extensive supplies are depleted, subjecting the valley to erosion and extensive flooding. Other private lands will be developed for residential use, and thereby obstructing the natural view from the valley floor by the general public. The expanding population, pollution, pesticides, urban sprawl, and other ecological problems could destroy the valuable assets characteristic of this park.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - State ownership and management of this area will enhance the range of resource uses. Recreational activities such as camping, hiking, horseback riding, fishing, picnicking and environmental study may be freely enjoyed by the public. Camden State Park's situated in the midst of agricultural land will provide a natural environment preserved for enjoyment of generations to come.
8. Alternatives to the Proposed Action - If no action is taken to preserve these lands, the scenic beauty of this valley and setting it aside for use by the public, cannot be accomplished. Much of the remaining land will be purchased by land developers or individuals to be developed for commercial or private development following on the suitable lands remaining.

ENVIRONMENTAL ASSESSMENT
BLUE MOUNDS STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Blue Mounds State Park, located in Rock County, in the extreme southwest portion of Minnesota, four miles north of Luverne, Minnesota.

Blue Mounds State Park was established by the Minnesota Legislature in 1937 with an original statutory acreage of 195 acres surrounding two small water impoundments in Mounds Creek. Two dams were constructed under the WPA Program in the late 1930's. The 1961 State Legislature authorized the acquisition of 122 acres of scenic Sioux Quartzite bluff and prairie land separated from the original park area. In 1963 the State Legislature authorized acquisition of 342 acres lying between the two previous purchases which included portions of ~~a~~^{the} bluff and virgin prairie lands. Subsequent action by the Minnesota State Legislature has expanded ~~to~~^{the} statutory boundaries to 1995 acres to include the remaining bluff and virgin prairie.

The park has been established to protect and preserve the unique geological feature of the Sioux Quartzite Cliff and virgin prairie and to provide and improve upon recreational facilities started by the WPA program in the late 1930's.

Historically, the rugged cliffs provided shelter from the winter winds and food (by herding the buffalo over the cliffs to their death) for the Sioux Indians traveling in this area.

The main management goal, for Blue Mounds State Park is to provide facilities for recreation, to protect and preserve the unique natural features of natural prairie and cliff and to interpret the geological and historical significance to the park visitors.

2. Description of the Environment - Blue Mounds State Park is within an area of virgin prairie which ~~in~~ⁱⁿ centuries gone by ~~providing~~^{PROVIDED} excellent grazing for large herds of American bison which roamed this vast area. Vegetation in the park includes, woods of oak, ash, cottonwood and wild plum along the rock strewn mound creed, patches of Brittle Optunia, Western Prickly Pear, Buffalo Grass, and many wild prairie flowers.

Glaciers, twice passed over this spot, leaving scratches in the flat, wind polished rock and boulders. Red, lichen covered boulders litter the park and an outcropping of rock, called Morton Gneiss, forms an eastward facing cliff about a mile long and up to 100 feet in vertical height. These ancient mountain stubs, which are among the oldest rock in the United States (3.5 billion years) not only saved the virgin prairie from agriculture crops but provided the park with an exciting past.

Recreational facilities provided by the park are swimming, fishing, camping, hiking, and picnicing.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved prairie management practice such as sodding, seeding, erosion control, controlled burning and grazing by buffalo.

Park development will be minimized to preserve the natural, geological and archaeological resources of the park. Preliminary geological and archaeological research has been conducted in and surrounding the park. Findings indicate that the Sioux Quartzite is approximately 3.5 billion years old and that the rock cliff may have been used by the Sioux Indians-as a buffalo kill site. These findings and any subsequent findings are part of the interpretation program of the park.

Current policies on acquisition and development of State Parks provide for an area, approximately one-fifth, which is developed for intensive recreational use, with the remaining four-fifths providing a natural environmental area and buffer zone designed for limited use such as hiking trails, and *interpretive programs.*

The park provides separate police protection for the land area within the park, thereby reducing the local sheriff and police authorities responsibilities.

During 1972, 98,867 visitors were recorded at Blue Mounds State Park, which represents an increase of thirty-three percent in visitations over the previous year. Visitations to the park provide an economic boost to the surrounding communities. The Minnesota Department of Economic Development estimated in 1966-67 that the average overnight visitor spends about \$9.00 per day. Applying the \$9.00 rate to the number of overnight visitors (13,982) to the park, approximately \$125,838 was spent in the area on gasoline, food and overnight facilities.

4. MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION- *ALL EXISTING OVERHEAD ... (next page)*

power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen

lines. *Blue Mounds State Park has experienced impossibilities in trying to bury overhead lines because of the extremely hard rock surface and difficulties arise when trying to screen lines with unnatural vegetation on prairie land. Efforts have been made to keep*

OVERHEAD
LINES
OUT OF
THE VIEW
OF PARK
VISITORS
but use
Areas do
require
electrical
power.

Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

Any agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Park's acquires farm land, it becomes advantages to allow a lease arrangement with the farm owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocated his home for the few remaining years of his life. As an inducement to sell, the Division of Parks offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only, and avoids court proceedings for probating estates.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - The true effect of withdrawing private land, to be included in Blue Mounds State Park, from the tax roles is impossible to determine since land acquisition is slowly accomplished over a period of years. The majority of the land area within the park is non-farmable because of the rock formations and geological features of the terrain and is the reason ^{why} ~~that~~ the natural virgin prairie has survived until modern times. Some farm land does exist below the cliff within the statutory boundaries and will be acquired at the convenience of the owners. Loss of revenue on the tax roles will be more than compensated for ^{by} ~~the~~ park visitors spending money in the surrounding communities.

When a park is established, there is also an increase in job opportunities within the park and in the surrounding communities at drive-ins, gas stations, grocery stores, restaurants, etc., which cater to the tourist trade.

6. The Relationship Between Local Short-Time Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Because of the geological features of the park, no economical use has been found for the land for over a century. Farming is impossible. Souix Quartzite is sometimes used for building stone, however the best Quartzite is extremely dense and hard, and mining of the stone become uneconomical.

By establishing the area as a park, the public benefits from the use of the recreation resource. The historical and geological resources when interpreted to the visitor add to his knowledge and experience. The land and water resources are protected by those skilled in conservation practices for the enjoyment of present and future generations who come to recreate.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated earlier, Blue mounds State Park was established in 1937 by the Minnesota Legislature. Establishment of a Minnesota State Park is a commitment to provide recreation facilities and open space for present and future generations.

Private land within the park, once acquired by the State of Minnesota, will become part of the commitment to provide recreation facilities. Only by action of the Minnesota State Legislature can that commitment be reversed.

8. Alternatives to the Proposed Action - If no action is taken to acquire and develop the land within Blue Mounds State Park, the goal of preserving this area, and providing public land for recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural and geological area, eventually resulting in its use for private purposes that would add little or nothing to the general public good. Land not suitable for private purposes and not utilized for public recreation would become an economic burden to the unit of government holding title.

SINCE BLUE MOUNDS STATE PARK HAS ALREADY BEEN ESTABLISHED FOR PUBLIC USE, THE ONLY REMAINING ALTERNATIVE IS TO ACQUIRE AND DEVELOP THE LANDS WITHIN THE BOUNDARIES ACCORDING TO THE POLICIES DEVELOPED BY THE DIVISION OF PARKS AND RECREATION, FOR PROVIDING PUBLIC RECREATIONAL FACILITIES,

ENVIRONMENTAL ASSESSMENT

LAKE CARLOS STATE PARK

- I. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Lake Carlos State Park, located in Douglas County in West Central Minnesota, ten miles north of Alexandria. 404 acres of land for Lake Carlos State Park was acquired in 1936 by the State Emergency Relief Administration and was designated that year for State Park purposes, by resolution of the Executive Council. A WPA project was approved by the President of the United States of America on November 12, 1937 and work began soon thereafter. Original statutory acreage, acquired under the WPA, was 403.56 acres located on the north end of Lake Carlos. Boundary expansions in 1961 and 1963 have increased the statutory acreage of Lake Carlos State Park to 1,181 acres.

The Federal and State Work Relief Programs, which were designed to relieve distress and to rebuild the economy following the great depression, was focused to a large extent on Conservation Projects including State Parks. There was a need for a State Park in the Lakes Region around Alexandria, Minnesota and therefore in 1936 the Lake Carlos site was selected because of its scenic attributes and its potential for water and recreational opportunities on one of the larger lakes in the region. Lake Carlos also has the distinction of being the head waters of the Long Prairie River.

The main management goal, for Lake Carlos State Park, is to provide a recreational area for present and future generations; to improve the natural environment against changing ecological conditions; and to protect and manage the area's renewable resources such as timber, vegetation, wildlife and water.

- II. Description of the Environment - The Long Prairie River Watershed is located in Central Minnesota and extends from the prairies in the headwaters region of Douglas County to the coniferous forest in its lower reaches of northeastern Todd County. The glacial periods played an important role in determining the topography of the watershed forming two major moraine systems. Most of the lakes in the watershed are located in these two distinct geographic areas, an eastern and western lake district. Douglas County, Lake Carlos, and Lake Carlos State Park are located in the western lake district with Lake Carlos being the source of the Long Prairie River.

The cover types are mixed hardwood, softwood forests, grasslands, and agricultural crops. The forested areas are located mainly in the northeastern and eastern parts of the watershed. The forest species are jack pine, norway pine, white pine, hard maple, aspen, willow, red oak, white oak, American elm, box elder, tamarack, elder, white birch, ash and basswood. Sedge and willow are the dominant cover types.

Shoreline development is intensive on fish lakes located near municipalities. In 1960, an average of 24.5 percent of the shoreline in Douglas County was developed with homes, cottages, and resorts. Lakes near Alexandria, Minnesota, had more development. The shoreline development is above average on Lakes Darling, Le Homme Dieu, Carlos, Henry, Cowdry, Miltons, Brophy, Jessie, and Lotoka.

Lake Carlos has a planimetered area of 2,520 acres and a meandered area of 3,017 acres with 12.5 miles of shoreline. In 1966, approximately eight percent of the lake's shoreline was developed with 212 permanent homes, 55 summer cottages and 10 resorts. Maximum depth of Lake Carlos is 163 feet.

Lake Carlos State Park's rolling topography is covered with sugar maples and other deciduous trees on high land, and on the lower land, dense swamps of tamarack provide excellent habitat for deer and other wildlife. Lake Carlos and the surrounding lakes play an important role in fall migrations of waterfowl.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved conservation management practices such as sodding, seeding, tree planting, erosion control, and control burning. Current management policies on acquisition and development of State Parks provides for an area, approximately one-fifth which is developed for intensive recreational use with the remaining four-fifths providing a natural environmental area and a buffer zone designed for limited use such as hiking trails. Park development will be minimized to preserve the natural, biological, and geological resources of the park.

The 1966 Long Prairie River Watershed report indicates that in Douglas County 3,078 acres were in state ownership and 578 acres were in Federal ownership. This amounted to only 1.1 percent of the total land area in the county being in public ownership.

Agriculture and the operation of recreational facilities are primary sources of income in the surrounding area. The agricultural practices consist of raising beef and dairy cattle and cash crops, such as small grain, soybeans, and corn. The operation of campsites, golf courses, resorts, and other recreational facilities contribute to the economy.

Remaining land to be acquired within the statutory boundaries of Lake Carlos State Park is 49.65 acres and presently does not conflict with public use areas of the park. This land can be acquired at the convenience of the landowners.

During 1972, 117,028 visitors were recorded at Lake Carlos State Park. Since the area is a popular vacation spot, law enforcement authorities experience a heavy work load during the summer vacation months. By providing separate police protection for the park, the total responsibility of the local sheriff and police authorities is reduced, rather than increased, as the case would be if the park were developed into homes, cabins and resorts.

4. Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

Any agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose

of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Park's acquires farm land, it becomes advantageous to allow a lease arrangement with the farm owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay monetary consideration in lieu of his services rendered in re-establishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocate his home for the few remaining years of his life. As an inducement to sell, the Division of Parks and Recreation offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner and his wife only, and avoids court proceedings for probating estates.

5. Any Adverse Environmental Effect Which Can Not be Avoided Should the Proposal be Implemented - The true effect of withdrawing the remaining land to be acquired in Lake Carlos State Park cannot be determined because of constantly changing and increasing property tax rates. However, the remaining acreage to be acquired is small and does not interfere with the intensive use areas of the park and therefore the acquisition of these lands are not of high priority and will result in a negligible loss to taxing districts.

Any development, to serve public needs, will be designed to be compatible with the natural resources. Protection of the natural resources will be the main concern before development is contemplated.

As public visitation of the area increases, additional job opportunities will be available at the park. Supplementary economic benefits and job opportunities will be expected for drive-ins, gas stations, restaurants, bait shops, etc. which cater to the tourist.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - By establishing and developing this area as a park, the general public benefits from the recreational use and open space. Future generations are assured that the resources will be protected and maintained for their use. Wildlife and bird habitat is protected and preserved.

Short-term use of the area would result in medium density housing, summer cottages and resorts. The natural area would be devastated by individuals exploiting the resources for the economic benefits of providing private recreational facilities. Private houses and summer cottages would provide recreational opportunities to a very select few.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated previously, Lake Carlos State Park was established as a park in 1937. Establishment of a State Park, is a commitment to provide recreational facilities and open space for present and future generations. Once the land becomes state property inside park boundaries, only an act of the Minnesota State Legislature can reverse the commitment of State Park status.
8. Alternatives to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of preserving this area, and providing for the projected needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural area, resulting in its use for private purposes that would add little or nothing to the general public good.

Since the park has been established for the public, under State law, the only remaining alternative is to acquire and develop the land within the boundaries, according to the policies developed by the Division of Parks and Recreation, for providing public recreational facilities.

ADDENDUM
ENVIRONMENTAL ASSESSMENT
LAKE CARLOS STATE PARK

27-00573

1. Description of the Proposed Action - The State of Minnesota, Division of Parks and Recreation, through the Douglas County Engineer's Office will construct an entrance road within the boundaries of Lake Carlos State Park. The road will be approximately 6,600 feet in length and will allow for the abandonment of county and township roads which have served as entrance roads since the park was established, 1937. The present township and county roads will be abandoned to allow for better control and administration of the use areas of the park, with the road along the shoreline being renovated for a bicycle trail. By obliterating the abandoned roads, two areas of the park previously detached will be joined. The new entrance road will provide a more pleasing and aesthetic approach to the public use area of Lake Carlos State Park.
2. Description of the Environment - The topography of Lake Carlos State Park is flat to gently rolling hills, covered with sugar maples and other deciduous trees. Small open fields exist which are evidence of past farming operations. There are dense swamps of tamarack which provide excellent habitat for deer and other wildlife.
3. The Environmental Impact of the Proposed Action - The park will be enhanced with the construction of a single entrance road and abandonment of present entrances which utilize existing township and county roads. Land contours will be followed for an aesthetic approach and by skirting edges of abandoned fields, where possible destruction of existing plant and tree growth will be minimized. The county and township roads which have served as entrances to the park since 1937 will be abandoned. A portion of CSAH 38 along the lake, will be used as a bike trail by removing all but a narrow strip of asphalt surface. Sodding, seeding and tree planting will return the remaining road surfaces into a natural area. The Douglas County Highway Department will be relieved of maintenance on the roads that are abandoned. Private landowners within the park will not be affected by the abandonment of the roads.
4. Mitigating Measures Included in the Proposed Action - The proposed abandonment of the township and county roads had been delayed until property contiguous to the roads was acquired by the State of Minnesota so that remaining private landowners within the park boundaries would not be inconvenienced.

The new entrance road was located away from the lake to protect the natural lake shore and in consideration for the safety of the bikers.
5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - None.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long Term Productivity - Over the long term by relocating the entrance road away from the shore of Lake Carlos, Wildlife will be encouraged to use the shore of the lake; automobile noise and air pollution will be buffered between the lake and new road by vegetation; and bike riders can enjoy the scenery in relative safety without the hazard of automobile traffic. The relocation of the road is a relative trade-off which will leave the shoreline of Lake Carlos less disturbed.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - The resources affected by the proposed action can be retrieved over a relative short period of time.
8. Alternatives to the Proposed Action - If no action is taken to relocate the entrance road to Lake Carlos State Park, there is a possibility that damage to the shoreline might result; the county would be required to continue maintenance of the existing roads; and park administration and control of the entrance to public use areas would be hampered and more difficult.

A shorter entrance road could be constructed from the northern boundary of the park off County State Aid Highway 120, however at this time, part of the land in the northeast corner is in private ownership. Construction of an entrance road from this direction would require acquisition and relocation of the owner. Presently, this ownership does not conflict with park administration and when the land is eventually acquired, the township road, off CSAH 120, will be abandoned.

ENVIRONMENTAL ASSESSMENT

LAKE CARLOS STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Lake Carlos State Park, located in Douglas County in West Central Minnesota, ten miles north of Alexandria. 404 acres of land for Lake Carlos State Park was acquired in 1936 by the State Emergency Relief Administration and was designated that year for State Park purposes, by resolution of the Executive Council. A WPA project was approved by the President ^{of the U.S.A.} on November 12, 1937 and work began soon thereafter. Original statutory acreage, acquired under the WPA, was 403.56 acres located on the north end of Lake Carlos. Boundary expansions in 1961 and 1963 have increased the statutory acreage of Lake Carlos State Park to 1,181 acres.

The Federal and State Work Relief Programs, which were designed to relieve distress and to rebuild the economy following the great depression, was focused to a large extent on Conservation Projects including State Parks. There was a need for a State Park in the Lakes region around Alexandria, Minnesota and therefore in 1936 the Lake Carlos site was selected because of its scenic attributes and its potential for water and recreational opportunities on one of the larger lakes in the region. Lake Carlos also has the distinction of being the head waters of the Long Prairie River.

The main management goal, for Lake Carlos State Park, is to provide a recreational area for present and future generations; to improve the natural environment against changing ecological conditions; and to protect and manage the area's renewable resources such as timber, vegetation, wildlife and water.

2. Description of the Environment - The Long Prairie River Watershed is located in Central Minnesota and extends from the prairies in the headwaters region of Douglas County to the coniferous forest in its lower reaches of northeastern

Todd County. The glacial periods played an important role in determining the topography of the watershed forming two major moraine systems. Most of the lakes in the watershed are located in these two distinct geographic areas, an eastern and western lake district. Douglas County, Lake Carlos, and Lake Carlos State Park are located in the western lake district with Lake Carlos being the source of the Long Prairie River.

The cover types are mixed hardwood, softwood forests, grasslands, and agricultural crops. The forested areas are located mainly in the northeastern and eastern parts of the watershed. The forest species are jack pine, norway pine, white pine, hard maple, aspen, willow, red oak, white oak, American elm, box elder, tamarack, elder, white birch, ash and basswood. Sedge and willow are the dominant cover types.

Shoreline development is intensive on fish lakes located near municipalities. In 1960, an average of 24.5 percent of the shoreline in Douglas County was developed with homes, cottages, and resorts. Lakes near Alexandria, Minnesota, had more development. The shoreline development is above average on Lakes Darling, Le Homme Dieu, Carlos, Henry, Cowdry, Miliona, Brophy, Jessie, and Lotoka.

Lake Carlos has a planimetered area of 2,520 acres and a meandered area of 3,017 acres with 12.5 miles of shoreline. In 1966, approximately eight percent of the lake's shoreline was developed with 212 permanent homes, 55 summer cottages and 10 resorts. Maximum depth of Lake Carlos is 163 feet.

Lake Carlos State Park's rolling topography is covered with sugar maples and other deciduous trees on high land, and on the lower land, dense swamps of tamarack provide excellent habitat for deer and other wildlife. Lake Carlos and the surrounding lakes play an important role in fall migrations of waterfowl.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment

will result through improved conservation management practices such as sodding, seeding, tree planting, erosion control, and control burning. Current management policies on acquisition and development of State Parks provides for an area, approximately one-fifth which is developed for intensive recreational use with the remaining four-fifths providing a natural environmental area and buffer zone designed for limited use such as hiking trails. Park development will be minimized to preserve the natural, biological, and geological resources of the park.

Indicates that in Douglas County
~~The~~ The 1966 Long Prairie River Watershed report, 3,078 acres were in state ownership and 578 acres were in Federal ownership, ~~in Douglas County~~. This amounted to only 1.1 percent of the total land area in the county being in public ownership.

Agriculture and the operation of recreational facilities are primary sources of income in the surrounding area. The agricultural practices consist of raising beef and dairy cattle and cash crops, such as small grain, soybeans, and corn. The operation of campsites, golf courses, resorts, and other recreational facilities contribute to the economy.

Remaining land to be acquired within the statutory boundaries of Lake Carlos State Park is 49.65 acres and presently does not conflict with public use areas of the park. This land can be acquired at the convenience of the landowners.

During 1972, 117,028 visitors were recorded at Lake Carlos State Park. Since the area is a popular vacation spot, law enforcement authorities experience ^a heavy work load during the summer vacation months. By providing separate police protection for the park, the total responsibility of the local sheriff and police authorities is reduced, rather than increased, as the case would be if the park were developed into homes, cabins and resorts.

4. Mitigating Measures Included in the Proposed Action - All existing overhead

4. power and telephone lines will be buried, and when burial is not physically possible or economically feasible, vegetative cover will be used to screen lines. Present development policies of the Division of Parks and Recreation include provisions for burial of all overhead power and telephone lines and removal of lines that serve no demonstrated needs.

Buildings which cannot be converted for park use are removed, dismantled or sold and the immediate area is then returned to a natural state which conforms with the surrounding environment.

Any agriculture lands will be seeded to a grass crop and eventually trees, conforming to the surrounding environment, will be planted for the purpose of eliminating any visible evidence of the lands being farmed. In view of the fact that agriculture practices sometimes take place inside park boundaries before the Division of Park's acquires farm land, it becomes advantageous to allow a lease arrangement with the farm owner for two years after the land is purchased. The lease arrangement allows the lessee to plant the same crop that was planted the year in which the land is acquired, but he must dispense with the use of any chemical weedicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass, perennial rye and fescues. The following year the lessee has the right to harvest a hay crop. This arrangement avoids the furrowed texture of the land surface often left from corn crops and returns former crop lands to grass lands efficiently and quickly. The lessee is not required to pay any monetary consideration in lieu of his services rendered in re-establishing the grass lands.

In limited cases, a retired landowner inside the park boundaries refuses to sell because a hardship would be created by having to sell and relocated his home for the few remaining years of his life. As an inducement to sell, the Division of Parks offers the landowner a life tenure on three to ten acres of land surrounding his buildings for residential purposes. This privilege is extended to the owner

and his wife only, and avoids court proceedings for probating estates.

5. Any Adverse Environmental Effect Which Can Not be Avoided Should the Proposal be Implemented - The true effect of withdrawing the remaining land to be acquired in Lake Carlos State Park cannot be determined because of constantly changing ^{AND INCREASING} property tax rates. However, the remaining acreage to be acquired is small and does not interfere with the intensive use areas of the park and therefore the acquisition of these lands are not of high priority and will result in a negligible loss to taxing districts.

Any development, to serve public needs, will be designed to be compatible with the natural resources. Protection of the natural resource will be the main concern before development is contemplated.

As public visitation of the area increases, additional job opportunities will be available at the park. Supplementary economic benefits and job opportunities will be expected for drive-ins, gas stations, restaurants, bait shops, etc., which cater to the tourist.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - By establishing and developing this area as a park, the general public benefits from the recreational use and open space. Future generations are assured that the resources will be protected and maintained for their use. Wildlife and bird habitat is protected and preserved.

Short-term use of the area would result in medium density housing, summer cottages and resorts. The natural area would be devastated by ^{individuals} ~~units~~ exploiting the resource for the economic benefits of providing private recreational facilities. Private ^{select} houses and summer cottages would provide recreational opportunities to a very few.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - As stated previously, Lake Carlos State Park was established as a park in 1937. Establishment of a State Park, is a commitment to provide recreational facilities and open space for present and future generations. Once the land becomes state property inside park boundaries, only an act of the Minnesota State Legislature can reverse the commitment of State Park status.

Alternatives to the Proposed Action - If no action is taken to acquire and develop these lands, the goal of preserving this area, and providing for the projected needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of a unique natural area, resulting in its use for private purposes that would add little or nothing to the general public good.

Since the park has been established for the public, under State law, the only remaining alternative is to acquire and develop the land within the boundaries, according to the policies developed by the Division of Parks and Recreation, for providing public recreational facilities.

ADDENDUM
ENVIRONMENTAL ASSESSMENT
LAKE CARLOS STATE PARK

1. Description of the Proposed Action - The State of Minnesota, Division of Parks and Recreation, through the Douglas County Engineer's Office will construct an entrance road within the boundaries of Lake Carlos State Park. The road will be approximately 6,600 feet in length and will allow for the abandonment of county and township roads which have served as entrance roads since the park was established in 1937. The present township and county roads will be abandoned to allow for better control and administration of the use areas of the park, with the road along the shoreline being reinovated^{sp} for a bicycle trail. By obliterating the abandoned roads, two areas of the park previously detached will be joined. The new entrance road will provide a more pleasing and aesthetic approach to the public use area of Lake Carlos State Park.

2. Description of the Environment - The topography of Lake Carlos State Park is flat to gently rolling hills, covered with sugar maples and other deciduous trees. Small open fields exist which are evidence of past farming operations. There are dense swamps of tamarack which provide excellent habitat for deer and other wildlife.

3. The Environmental Impact of the Proposed Action - The park will be enhanced with the construction of an single entrance road and abandonment of present entrances which utilize existing township and county roads. Land contours will be followed for an aesthetic approach and by skirting edges of abandoned fields, where possible destruction of existing plant and tree growth will be minimized. The county and township roads which have served as entrances to the park since 1937 will be abandoned. A portion of CSAH 38 along the lake, will be used as a bike trail by removing all but a narrow strip of asphalt surface. Sodding, seeding and tree planting will return the remaining road surfaces into a natural area. The Douglas County Highway Department will be relieved of maintenance on the roads ^{that} ~~which~~ are ~~to~~ abandoned. ~~There are no~~ ^P private landowners ~~which~~ ^{within the Park,} will be affected by the abandonment of the roads. ^{not}

4. Mitigating Measures Included in the Proposed Action - The proposed abandonment of the township and county roads had been delayed until property contiguous to the roads was acquired by the State of Minnesota so that remaining private landowners within the park boundaries would not be inconvenienced.

The new entrance road was located away from the lake to protect the natural lake shore and in consideration for the safety of the bikers.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - None
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long Term Productivity - Over the long term by relocating the entrance road away from the shore of Lake Carlos, wildlife will be encouraged to use the shore of the lake; automobile noise and air pollution will be buffered between the lake and new road by vegetation; and bike riders can enjoy the scenery in relative safety without the hazard of automobile traffic. The relocation of the road is a relative trade-off which will leave the shoreline of Lake Carlos less disturbed.
7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - The resources affect by the proposed action can be retrieved over a relative short period of time.
8. Alternatives to the Proposed Action - If no action is taken to relocate the entrance road to Lake Carlos State Park, there is a possibility that damage to the shoreline might result; the county would be required to continue maintenance of the existing roads; and park administration and control of the entrance to public use areas would be hampered and more difficult.

A shorter entrance road could be constructed from the northern boundary of the park off county state aid highway 120, however at this time, part of the land in the northeast corner is in private ownership. Construction of an entrance road from this direction would require acquisition and relocation of the owner. Presently, this ownership does not conflict with park ^{administration} ~~polices~~ and when the land is eventually acquired, ~~then~~ the township road, off CSAH 120, will be abandoned.