



Minnesota Natural Resources  
Department: Environmental  
Assessment Files Regarding State  
Parks

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ENVIRONMENTAL ASSESSMENT

LAKE BEMIDJI STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are located in Lake Bemidji State Park. The park was established by the Minnesota Legislature in 1923 with a statutory acreage of 285 acres for the purpose of conserving the virgin red pine forest and to reserve right-of-way privileges for the public on one of Minnesota's finest lakes -- Lake Bemidji.

The park is located in north central Minnesota in Beltrami County, six miles northeast of the city of Bemidji and abuts a private eighteen hole golf course. One of the finest in northern Minnesota.

The park provides recreational facilities for picnicing, camping and hiking. For its size, the park has become very heavily used. In 1970 the total visitors were 146,531. In 1971 a total of 295,837 visitors and in 1972, 220,171 visitors.

2. Description of the Environment - Lake Bemidji State Park is located on the northern shore of Lake Bemidji. It is a large lake with a sandy bottom with a good to excellent water quality. The lake level is normally at 1,340 feet above sea level. The park topography varies considerably but only from ten to fifty feet above the level of the lake. The soils are light colored sandy soils with sand subsoils. The portion of the park west of CSAH 20 is covered with white, norway and jack pine; birch, popple and maple. The portion of the park east of CSAH 20 is lower and swampy. Birch, balsam, spruce and jack pine are more prevalent in this area. A plantation of norway pine exists in this area also.

The western portion is heavily developed for recreation use and offers the most spectacular scene of the lake. The recent addition of 160 acres east of CSAH 20 is primitive in nature and contains an abundance of wildlife, shore-birds and waterfowl. This area has been used for nature trails. This use will continue with no intensive use planned. Both sides of the park boundaries are heavily developed with summer and year-around residential homes.

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.

The west part of the park area will continue to provide the intensive uses for camping, picnicing, hiking, <sup>expansion</sup> Bird watching and nature trails will be provided in the recent ~~addition~~. The primitive character of the east part of the park will be maintained to provide a complete contrast. Most of the land area in the park was acquired prior to 1936 when the area was relatively undeveloped. The recent land acquisition to the east is located away from the lake and would not provide land for residential development or any economical use except timber harvesting.

Separate police protection is provided by a full time resident manager and additional park staff. This has reduced local sheriff and police fire authorities responsibilities.

6. Mitigating Measures Included in the Proposed Action - Because all of the land area has been acquired within the park boundaries further boundary expansion and acquisition is not anticipated.

Development will be modified to be consistent with the park environment. It will be minimized so it will not intrude on the park atmosphere. Visitor use will be controlled and areas which become overused will be closed to allow rehabilitation and recovery of the area.

5. Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - The natural environment will experience little if any adverse effects since the park is almost completely developed. Further development will consist of providing the necessary and required sanitary facilities for the park visitors. This may necessitate removal of a few trees, however, this will have no effect on the overall environment. Development of trails will be carefully planned so they will not intrude upon the wildlife. The purpose of providing nature trails is to allow the <sup>recreator</sup> ~~creator~~ the opportunity to observe wildlife in nature. To develop trails for hiking exclusively would defeat this purpose.
6. Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - It is perhaps absurd to discuss this point on a park area which has been acquired for the purpose of recreation ~~or for~~ present and future generations.

Private short-term uses of the park area would provide ideal lakeshore development lots for summer and annual residences. To some extent, the area could be logged of its virgin pine timber.



The park area, however, has been acquired and will not be used on a short-term basis. Long-term use will be the preservation and maintenance of recreation.

7. Irreversible and Irretrievable Commitments of Resources - Acquisition development of land within the park boundaries has committed the resource area to recreation.

Acquisition and development of lands with assistance from the Land and Water Conservation Fund further commits the land to recreation and open space. Section 5(f) of the Land and Water Conservation Fund Act stipulates that approval of the Secretary of the Interior must be granted before a change in land use can be made. No other land use, other than recreation is permitted in the park area unless the change is authorized.

8. Alternative to the Proposed Action - Further minor development of the area will be consistent with rules and regulations designed for the safety and health of the general public. Development will be carefully planned so as not to intrude upon the environment and resources which are present and have learned to exist with man.



ENVIRONMENTAL ASSESSMENT

STATEWIDE PROJECT LW27-00768

Statewide Tables, Toilets, Gates, and Signs Project.

- I. Description of the Proposed Action - The State of Minnesota proposes that the Federal Bureau of Outdoor Recreation, as administrator of the Land and Water Conservation (LAWCON) Fund, participate with the Department of Natural Resources in a state-wide development project.

Development in this action will consist of construction of picnic tables, pit toilets, gates, and signs in one or more specific locations and then be distributed to park and recreation areas within the State of Minnesota for outdoor recreation purposes.

Construction will most likely take place during the winter months as the park activity level is lower and park personnel can be utilized. The estimated cost of this project is \$110,000.00.

- II. Description of the Environment - Due to the nature of the items being constructed and the eventual distribution of these items over the entire state, the usual detailed description of the environment is not necessary.

- III. The Environmental Impact of the Proposed Action - The environmental impact of placing the constructed items in the state-wide park

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and recreation system will have some impacts, however insignificant. Wherever the picnic tables and pit toilets are placed there will probably be some soil compaction, however when one weighs the overall impacts with the current and escalating demand, the benefits outweigh the drawbacks. The gates and signs will direct user actions to protect park and recreation area resources.

- IV. Mitigating Measures Included in the proposed Action - In many respects the action itself will mitigate against extensive soil compaction and potential water quality deterioration.
- V. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - Some minor soil compaction will result.
- VI. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity
- Short term uses of our environment as they relate to the maintenance and enhancement of long-term productivity are not considered in terms of years. Trade-offs of environmental uses are necessary in order to gain certain benefits.

GAINS

1. Protection of the natural resource amenities of presently overused picnic grounds and campgrounds
2. Social benefits for the increased number of persons able to utilize the additional recreational opportunities afforded by the proposal.

LOSSES

1. A minimal loss of these natural resources amenities in proposed development areas.
2. Possible negative social impacts which may result from increases in littering, trespassing, and noise levels.

3. Increased benefits to the local economy resulting from the development and from increased use levels.

3. The expenditure of an estimated \$110,000.00 of public funds for development.

VII. Any Irreversible and Irretrievable Commitment of Resources

Which Would be Involved in the Proposed Action Should It Be

Implemented - The manpower, materials, and capital necessary

for implementation of the proposed action will be considered to be irretrievably committed.

VIII. Alternatives to the Proposed Action - The only alternative to this particular proposal is no action. This alternative is not realistic because of the present and anticipated demands for 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 Rivers 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

27-00709

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.

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 washouts 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.

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 propagation. The project consists of the acquisition of approximately 77.71 acres of land within the statutory boundaries of Camden State Park. The project cost is approximately \$49,000.00, of which \$5,000.00 is designated as relocation costs. The Burlington 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 of 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 runoff 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, 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 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 interests. Sand and gravel deposits will be depleted initially with private development following on the suitable lands remaining.



## ENVIRONMENTAL ASSESSMENT

### O. L. KIPP STATE PARK - LW 27-00704

#### 1. Description of the Proposed Action

This project proposes development of lands located within O. L. Kipp State Park. The park is located adjacent to the Mississippi River in Winona County near the town of Dresbach, Minnesota. Surrounding the park is the Minnesota Memorial Hardwood Forest which enhances the natural beauty and attractiveness of the area.

The park was established by the 1963 Legislature with a statutory acreage of 1,175 acres. Subsequent legislation has expanded the boundary to its present size of 2,835 acres. Total lands acquired to date is 1,160 acres.

This park is essentially a strip of land four miles long embracing the scenic bluffs along Highway #61 and the Mississippi River. The park was originally recommended in 1957 as a recreation area in connection with the Great River Road.

The project scope will entail the installation of a picnic area well with pressure tank system and a water fountain. The pressure tank system will be enclosed in a small building. This installation is designed to provide an adequate water supply for the comfort and convenience of the visiting public. In addition, an entrance road to include a picnic grounds parking area, pioneer camp road and parking area, campground entrance road and parking area will be constructed. The entrance and camp roads with their respective parking facilities are primarily improvements to existing facilities. A new roadway will have to be constructed to the pioneer camp.

This project is related to prior LAWCON projects (LW 27-00495 and LW 27-00599) in that it conforms to the main management goal of preserving, and restoring the natural beauty of the area for the benefit of the public.

#### 2. Description of the Environment

The park is characterized by the high bluffs and eroded valleys of southeastern Minnesota. Some bluffs rise as high as 500 feet above the Mississippi River and present a 180° view of the river. Most of the hills and ridges have been formed from a high plain that has been deeply dissected by stream erosion. This occurred from the tremendous volume of water flowing from Glacial Lake Agassiz.

The surrounding area is the most rugged unglaciated topography in Minnesota. This is the so-called Driftless Area because the area was not touched by any of the glaciers which covered Minnesota only by the subsequent drainage of Glacial Lake Agassiz.

The park area is characteristic of a deciduous forest. The hardwoods, maple, elm, oak and ash are the most common. Other species include hickory, black walnut, maple, red cedar and an occasional white cedar.

Wildlife abounds in the park. Deer, skunks, raccoons, grey and red fox squirrels. Numerous species of birds and waterfowl frequent this location as the Mississippi River is a major flyway. Fishing is popular along the Mississippi River and all species common to Minnesota are found. Some of these include walleye, northern pike, large and smallmouth bass, suckers, carp, redhorse, white and black crappie, sunfish and bullheads.

Without implementation of this proposed project, the main management plan of preserving the area for the benefit and enjoyment of the public would be hindered. At the present time, inadequate water and access facilities keep park operations below what they could achieve.

### 3. The Environmental Impact of the Proposed Action

This specific project will not have any adverse environmental impacts. That portion of the project which involves road and parking lot construction is primarily concerned with the improvement of existing roadways and parking lots. Consequently, the effects will be minimal in regard to the uprooting of the natural environment. A new road is to be constructed to the pioneer campground along with a parking area. This is needed to gain access to the area and the long term benefits of this roadway and parking area are greater than the benefits available in its present state.

The well will present no adverse environmental impact. The foundation and pressure tank system will be the only above-ground structures. The pressure tank system will be housed in a small esthetically pleasing building and the fountain will provide for the comfort of park visitors.

Park development will be minimized to preserve, protect and enhance the natural biological and geological features of the park and surrounding area. Selection of actual development sites are made only after thorough consideration 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 least intrusive with the surrounding environment.

### 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. 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. 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 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 O. L. Kipp 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 views the Mississippi River, is considered prime for high quality, residential 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.

The present project poses no other long term adverse environment effects.

6. The Relationship Between Local Short-Term 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 the river.

The natural character and location of the park will play an important role in serving local, county, and regional 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 at this point of time.

The project proposal will provide long-term benefits for those who take advantage of the parks facilities.

7. Irreversible and Irretrievable Commitments of Resources

The acquisition and development of the area will result in the permanent land use change from present use to recreational use. This conversion will 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 an unique natural area eventually resulting in its use for private purposes that would have little value to the general public.

The well, building, and water fountain installation along with roadway and parking lot improvement will enhance, improve, and make for a more efficient and enjoyable visit by the public. The alternative available is to maintain the status quo at a cost of a less efficient and enjoyable experience.

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ENVIRONMENTAL ASSESSMENT

LUCE LINE INGERSON CROSSING - LW 27-00702

1. Description of the Proposed Action

Authorization - In 1973, the Minnesota State Legislature amended Minnesota Statutes 1971, Section 85.151, Subdivision 1, establishing the Luce Line Trail. The Act authorized the Commissioner of Administration, for the Commissioner of Natural Resources to acquire by gift or purchase, the abandoned right-of-way of the Chicago North Western Railroad Company for development as a multi-use trail. The Act also authorized the Commissioner of Natural Resources to establish, develop, maintain and operate this trail in cooperation with local units of government and private individuals and groups.

The Minnesota Department of Natural Resources (DNR) through the Commissioner of Administration acquired by direct purchase approximately 104 miles of the abandoned Chicago and North Western Railroad Company right-of-way originating at Gleason Lake in the City of Plymouth, Hennepin County, and following the right-of-way west terminating at Gluek, Minnesota in Chippewa County.

The Minnesota Department of Natural Resources by this action proposes to construct a 10'x10'x76' long reinforced concrete culvert at Ingerson Road over Chicago and North Western right-of-way. The Ingerson Road will be constructed over the culvert as shown on preliminary sketch R.023.00.00.09, Sheet 1, to a width of 16' travelway. The crossing will be guarded by single beam guard rail and the traveled way will be graveled with a three inch (3 in.) thick layer of class 5 gravel.

Eventually the entire abandoned right-of-way will be developed as a multi-use trail for outdoor recreational activities. It will allow for snowmobile and nonmotorized uses. To provide a variety of trail uses, snowshoeing, skiing and snowmobiling will be allowed during the winter. In the summer bicycling, hiking and horseback riding will be allowed. The trail will be developed in three phases with some of the users excluded until other paths beside the original roadbed can be developed. In some areas, because of the terrain, width of the right-of-way, residential development, etc., certain types of uses will not be permitted. All motorized vehicles will be prohibited from the trail with the exception of snowmobiles. The trail will be developed to fill the needs of the greatest user demand consistent with sound environmental considerations.

2. Description of the Environment

Some homes abut the right-of-way, for the first four miles west of Plymouth, in addition to golf courses, pasture land, crop lands, marshes, lakes, open fields and municipal property. The heaviest concentration of homes exists in the City of Wayzata. Scattered homes exist in the cities of Orono, Independence and Minnetrista in Hennepin County.

In Hennepin County, there are no leases for grain elevators, oil storage tanks or other commercial developments. However, leases or easements for gardens and grade level farm crossings and other uses exist.

The portion of abandoned right-of-way west of the Hennepin County line runs through rural small towns and agricultural farm lands. The railroad has removed all salvageable rails and ties. Some bridges and culverts still remain in that section or right-of-way in Hennepin County. Many old ties which were not salvaged are strewn on the side slopes of the railroad bed. Weeds, shrubs and trees have started to engulf the right-of-way in many areas. In some cases this is the only natural vegetation in the area.

Encroachment exists in some places along the right-of-way. This does not include those landowners with current valid licenses, leases or contracts issued by the railroad or Northern States Power Company that permit special use of designated sections of the right-of-way. Some fences cross or do not follow currently the right-of-way boundary line and the grade level road or farm crossings have been erected without obtaining valid crossing permits.

Overhead power lines exist on eight miles of trail between Highway 101 in Plymouth and Stubbs Bay Road in Orono. These lines were not purchased by the State of Minnesota. They are not screened. Other power lines and telephone lines cross the trail at various points. These are also unscreened. Sewer, gas and buried cable are under the trail right-of-way but do not adversely effect the beauty or function of the trail.

### 3. The Environmental Impact of the Proposed Action

Enhancement of the environment will result because of the development of a bicycle treadway and horseback riding trail. The environment at present consists of weeds, ripped up railroad bed and discarded railroad ties. To enhance the environment the department proposes to remove the discarded railroad ties and use them for corduroy in developing the horseback trail. The railroad bed will be bladed, shaped, ditched, compacted and surfaced with limestone. Culverts will be installed to allow drainage.

The construction of the box culvert at Ingerson Road crossing is a replacement structure for an old wooden bridge that was determined to be beyond repair. The old wooden bridge has been removed and the basic preparation for the new cement culvert already exists by reason of the original wooden bridge constructed by the Chicago and Northwestern Railway many years ago. Consequently, there are no adverse environmental impacts.

The horseback trail will be brushed out removing some natural vegetation which has grown up since abandonment. Any excess vegetation removed during construction will be allowed to return by natural succession. Trees and shrubs will be planted along the right-of-way between the trails and adjacent private property where they do not exist.

A crushed limestone surface will be developed for bicycles on the old railroad bed. This surface will be approximately eight feet wide and four inches thick. Horses will be restricted from this pathway since hoofs damage the limestone surface, however, horses will be allowed on a separately



designed trail which will run parallel to the old railroad bed. The discarded ties along the trail will be used to corduroy low land sections of the trail where horses are permitted.

The enabling legislation for this trail provides that fencing will be provided by the state on portions of the trail according to need. Protection of homes and crops is the major consideration. Livestock fences presently exist in areas where they are needed to confine cattle. In addition to protecting private property fencing will be erected to prevent encroachment of private interests.

A landowner may erect any type of fence, he desires, which is consistent with local government ordinances.

Residential fencing will differ from agricultural fencing. Consideration is being given to four foot high, four strand barbed wire or plain steel post fence for agricultural areas. This type of fence is identical to the old railroad fence. In residential areas, four foot high wood post, woven wire freeway fence is being considered.

Fence materials will be provided and erected by the state but the abutting landowner will be required to maintain it. The fence will be erected on the state owned boundary line after consultation with the landowner. Eventually, the state will screen the fencing with natural vegetation.

Driveway, farm implement and livestock crossing easements granted to the landowner from the railroad or Northern States Power Company will be renewed by the state. To reduce the number of hazardous trail crossings, new crossing easements will be limited. Crossings presently being used but without written permission in the deed, will be renewed on an individual basis. Crossing easements for new underpasses or overhead bridges as a substitution for old grade level crossings will be reviewed, and if approved, granted on an individual basis. The landowner will be required to pay the construction costs.

The general policy for "garden" leases and other permits will be to gradually phase these types of uses out through terms of the contract.

In general, the state will maintain all the proposed facilities related to the trail that it installs. The only exception will be fences. Litter generated by the users will be removed by state employees. Noxious weeds growing on the trail bed will be controlled by spraying. Trails will be properly signed for safety of use.

Finally, it should be noted that this particular project is really just a continuation to, and in complete accord with LAWCON Project LW 27-00596 which was approved by the Department of the Interior on November 11, 1974.



4. Mitigating Measures Included in the Proposed Action.

Major concerns involve trail uses in the SMSA of Hennepin County. Snowmobiling will not be allowed on the trail between Vicksberg Lane in Plymouth and Stubbs Bay Road in Orono, a distance of seven miles.

Use will be restricted to horseback riding, hiking, biking, skiing, and snowshoeing in this area. All uses, including snowmobiling, and hunting with certain restrictions will be allowed on the balance of the Luce Line Trail to Gluek, Minnesota in Chippewa County. This portion of trail will be developed in phases as demand warrants.

In most cases natural regeneration of vegetation will reduce the need for planting, however, it is not considered the complete solution. Planting will be necessary to control and prevent erosion on side slopes. Planting will be used to screen fencing and keep the trail users on their designated trail. Trees and shrubbery will also help to eliminate noise from trail users. A benefit of planting vegetation is the habitat it will provide for small game birds and animals such as rabbits, fox, pheasant, mice and other small rodents. Planting will screen users from the surrounding landowners and screen the landowners activities from the user.

Proper signing of the trail will insure safe operation and a minimum of complaints from private owners of users straying from the trail. A "trail boundary" sign will be used to indicate common boundaries between landowners and the state. These are to be placed approximately thirty rods apart. A "stop" sign will be placed at all road and highway crossings. Users will be notified of impending "stop sign" 300 feet before the stop is required, "danger" signs will indicate where caution is necessary such as narrow bridges, steep grades and road crossings.

Litter will be removed by state maintenance workers or contracted refuse collectors on a normal basis. Litter cans will be placed at access points and waysides. The extent of this problem should be minimal because trail users are limited in the amount of litter they can carry.

Noxious weeds growing along the right-of-way will be controlled by park and recreation workers.

Enforcement of trail rules and regulations will be provided by the Department of Natural Resources Conservation Officers as authorized by the Commissioner of Natural Resources delegation order number 197. Violations of these rules and regulations is a misdemeanor carrying a fine of up to \$300 and/or ninety days in jail. In addition, all supervisors, guards, custodians, keepers and caretakers of state trails poses the authority and powers of peace officers and can warn, detain and report violators to the conservation officers. County sheriffs and highway patrol officers can also warn, detain and arrest violators. Violations will occur on state trails but by using preventive measures, informing the public and effective arrests by conservation officers, sheriffs and highway patrol officers, nuisances can be minimized.

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

During the construction of the trails the beds will be leveled which may destroy about five feet of adjacent shrub cover. However, shrubs will be allowed to regenerate along the individual trail corridors since it is desirable to screen users from adjacent landowners and lessens the noise from users. Shrubs along the corridor will regenerate in a few years.

Trespassing by trail users will be held to a minimum by providing and erecting fencing at the landowners request. Park facilities will be provided along the trail on public lands to prevent users from parking on township and county roads or private property. There still remains the possibility of users leaving the trail seeking adventure on their own. Although the landowner may call enforcement officers to make arrests, these adventurers are seldom caught.

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

Adjacent lands, for the most part, are used for agricultural purposes. Adjacent landowners; as a short-term use, after leveling the railroad bed and removing the gravel and rock overburden, could farm this land. Whether this is an economical undertaking, would be for the adjacent landowners to determine. Most land previously sold to landowners is in small towns and used as an extension of the homeowners backyard. Very few of these owners have removed the railroad bed.

The long-term use should be to provide recreational trail corridors for people in the surrounding areas. Restricting users to the trail would lessen the possibility of trespassing on private lands which exists now. This recreational use will exist now for future generations. The trail corridor will also provide wildlife habitat in agricultural areas which are relatively devoid of good wildlife cover.

7. Any Irreversible and Irretreivable Committments 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 conversion of an abandoned railroad right-of-way into a permanent recreational linear trail. Acquisition of project lands with Land and Water Conservation Funds will commit the land to recreation and open space. Section 6 (f) of the Land and Water Conservation Fund 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 (other than recreation) will be permitted in the project area unless this change is authorized.

8. Alternatives to the Proposed Action

Acquisition and development of an abandoned railroad right-of-way is an ideal method of establishing a linear trail for a considerable distance. The right-of-way provides one hundred feet which is sufficient to provide three adjacent trail beds for six types of uses. Negotiation of a right-of-way involving only two parties in contrast to establishing a trail through private land. Purchasing this abandoned right-of-way did not require the use of eminent domain as would establishing a trail over private land.

The State has been criss-crossed with railroad lines for over a century. These lines were established when railroads were the most efficient means of land travel. Since that time new means of travel have been established resulting in the abandonment of some railroad lines. As these lines are abandoned they provide an excellent means for establishing a linear trail with the least damaging impact to social and environmental factors.



## ENVIRONMENTAL ASSESSMENT

### WILLIAM O'BRIEN STATE PARK

27-00706

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of William O'Brien State Park. The park is located in east central Minnesota in northern Washington County on the St. Croix River, a short forty miles from the Metropolitan Twin Cities area.

The park was established with an original acreage of 307 acres in 1945. One of Minnesota's pioneer lumbermen, William O'Brien, owned 180 acres of this property which was donated by his daughter, Alice O'Brien. In 1959, the legislature increased the statutory limits by 193 acres and again in 1963 the limits were expanded by 80 acres. The 1973 legislature expanded the park to its present acreage of 1,330 acres.

Lands to be acquired are to be used to provide additional outdoor recreation facilities needed to complement those existing. Present facilities include a pioneer camp, campgrounds, picnic ground, ten miles of foot trails and a popular swimming beach.

The State of Minnesota will construct a beach toilet/refectory building within the beach area; within the statutory boundaries of William O'Brien State Park, to be used for outdoor recreation purposes. The project period will be from the date of approval through December 31, 1977.

2. Description of the Environment - William O'Brien State Park is situated on the Lower St. Croix River approximately seventeen miles south of Taylors Falls. The Lower St. Croix River, from the dam at Taylors Falls flows in a southerly direction for approximately fifty-two miles, entering the Mississippi River at Prescott, Wisconsin. The river as it passes through the park, flows through a heavily wooded, steep sided valley of pine and deciduous trees which have remained undeveloped. Sandstone and limestone bluffs are visible within the park.

In the immediate area around the park, farming is the dominant land use. Agricultural activity is orientated toward livestock, dairy, corn, small grain and speciality crops such as apples.

Immediately adjacent to the park boundary to the south is the little community of Marine-on-the-St. Croix.

The entire St. Croix River basin was covered with glacial drift which was cut by streams to form the present valley. The oldest rocks in the area are Precambrian in origin and are composed of metamorphic and volcanic materials. These are overlain by interbedded sedimentary and extrusive volcanic rocks which in turn are covered by cambrian dresbach, franconia sandstones, clays, silts, sedimentary rocks and gravels.



The early logging operation left few of the original white or red pine in the park. Several species of deciduous trees densely vegetate the park. Periodic flood of the lowland favors hydrophytic species. Timber stands are composed of mature second growth, dominated by a variety of hardwoods.

The river fishery is strongly influenced by the Mississippi River and its fish species. Game fish are the walleye, sauger, northern pike, bass and crappie and sunfish.

The mid-continental location and sheltering effect of the St. Croix Valley makes it an attractive habitat for a variety of wildlife. Particularly rich in bird life, many species of waterfowl and marsh shore birds, upland game birds, songbirds including unusual birds like the Great Blue Heron and American egret, nest or rest in the area. The valley is attractive to numerous small mammals, white tail deer, reptiles and amphibians.

If this project was not completed, the purpose of outdoor recreation facilities and management control would not be fulfilled. The park could also experience some unsanitary conditions without the completion of the project.

3. The Environmental Impact of the Proposed Action - Acquisition of lands within the park boundaries will protect the environment. It will contribute to the preservation of the scenic values of the St. Croix River which was recently included in the National Wild and Scenic Rivers program. The land acquired will remain undeveloped to insure the scenic and natural character of the river. Timber stand improvement, tree planting, sodding, seeding and erosion control will protect the natural landscape.

Farm lands that are acquired will be seeded with grass to prevent erosion. Farm buildings will be removed or sold. The local taxing district will lose some revenue from private lands which are acquired. It is expected that the surrounding area will become developed with urban residential housing raising the tax base. Experience shows that preservation of open space generally enhances residential values which also increases the property tax yield, a major source of revenue for local governments. Further development of the area as a park will allow more visitations, resulting in additional tourist dollars brought to the surrounding area.

The land area acquired for the park, will become the responsibility of the park staff. Local governmental police and fire protection will be reduced.

Land in the proposed acquisition area is generally hilly and wooded. Some dilapidated fences still bear mute testimony to the former use of this rough land for pasture, the present highest and best use. Disappearance of the once bountiful dairy herds has resulted in making this rough land unused. Approximately 200 acres of the high level land is still used for corn and hay production. The former is limited to fields which have been cleared of the stone outcroppings over the years.

Only one residential structure lies within the currently anticipated acquisition area. This property is located on land platted many years ago when the town of Copas appeared to becoming a future city. Of the fourteen lots platted some 100 years ago, only one has been developed and used as a residential site. It seems doubtful anymore would be sold as the access road terminates some 300 feet south. The Soo Line Railroad across the road is higher than the lot level, leading the appraiser to wonder why the location was ever considered for a residential site.

4. Mitigating Measures Included in the Proposed Action - All existing overhead transmission lines on property acquired in the park, 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 whenever possible.

Buildings acquired through acquisition which cannot be converted to park uses such as shelters, toilets, storage buildings, etc., will be moved, sold or dismantled. In the past, most buildings acquired in state parks have little or no resale value and have been destroyed. Some buildings have been used as residences for park personnel. The building sites are returned to a natural condition 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 chemical 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 reestablishing 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 by the relocation of families. 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.). The open space will attract new residential development which will broaden the tax base. This is especially true of open space projects such as this on the periphery of the metropolitan area.

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 location of the project will play an important role in serving local, county and metropolitan area needs for outdoor recreational opportunities. The project will: (1) Preserve the geological features of the St. Croix Valley. (2) Preserve the historic character of the area. (3) Maintain the undeveloped natural character of the valley. (4) Provide valuable open space for the rapidly growing metropolitan area and surrounding communities for generations to come. If the acquisition is not completed, the area will continue to provide lands for agriculture on tillable lands. Wooded hillsides might be logged off for hardwood. However, this is not being done at the present time. Finally, sites that provide a scenic view of the river will eventually be developed for residential purposes which will harm the St. Croix's aesthetic values.
7. Irreversible and Irretrievable Commitment of Resources - The acquisition of lands within park boundaries will result in the permanent conversion of land from its present use to recreation use. Acquisition 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 lands can be made. No other land use will be permitted in the project area unless a 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 a continued use of the land as it is presently being used such as farming. Occasionally, the economic aspect of the use is overlooked and residential building sites are selected. The unspoiled character of the St. Croix River will be harmed if more residential sites than presently exist were to be developed. If no action is taken timber harvesting will begin on mature hardwoods. The goal of preserving this area and providing for the projected recreational demand could not be accomplished.

By implementing the proposed action at the earliest convenience means that the land would be in private hands until the owner decided to sell his property to the state. Since the Division of Parks and Recreation does not have broad authority of Eminent Domain, the owner is not required to sell to the state. However, eventual acquisition of the park lands will provide valuable open space near a rapidly growing metropolitan area. It will preserve a portion of the St. Croix Valley's scenic and natural character.



## ENVIRONMENTAL ASSESSMENT

### ST. CROIX STATE PARK

27-00708

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of St. Croix State Park. The park is located in the east central part of the state, in Pine County, midway between Minneapolis - St. Paul and Duluth. The park is twenty miles east of Interstate #35 and the city of Hinckley, off State Highway #48. The St. Croix and Kettle Rivers border on the park. Established acreage is 34,037 acres, and it is the second largest park in the state park system.

The inception of the Civilian Conservation Program under the National Park Service resulted in a survey for an outlet for relief work which would benefit the state. The St. Croix area was selected because it was equal distance between the three largest metropolitan centers in Minnesota. The development work was undertaken in 1935 and the major portion of work was completed about 1941. In 1943 the St. Croix Recreation Demonstration Area became St. Croix State Park and was made a part of the Minnesota Park System.

The park's recreational facilities include campgrounds, a swimming beach and picnic area, a trail center area for horseback riding and snowmobiling, nature trails and over 174 miles of snowmobile trails, three large group camp facilities for under privileged and intercity children and four boat and canoe launches. Winter camping at the trail center has become popular since electrical outlets were provided for snowmobilers. The park has an active naturalist program and provides guided and self guided trails.

The main management goal of the park is to provide many recreational facilities for the entire state. The size of the park and many recreational opportunities available have made this park a destination area. Visitations are of one or two weeks duration. A secondary goal is to protect and preserve the resources of the area including those portions of the St. Croix and Kettle Rivers.

The State of Minnesota will construct a trail center shelter in the old Fleming Camp area with the statutory boundaries of St. Croix State Park to be used for outdoor recreation purposes. The project period will be the from date of approval through December 31, 1977.

2. Description of the Environment - The St. Croix park area was once part of a shallow sea. Earth movements succeeded in raising this portion of the state above sea level, then the great lava flows followed along the north shore. These followed down what is now the valley of the St. Croix River and outcropped near Interstate State Park near Taylors Falls. The glaciers scoured the St. Croix Valley and in the region of the park left a gravel plain of some extent with morainal ridges in the northeast part of the park. A tremendous amount of water flowed southward through the St. Croix Valley with the smaller tributaries of the Kettle, Sand and Bear creeks eroding channels through the plains and hills. In later geologic time, vegetation took over, so that in the beginnings of recent history this portion of the St. Croix Valley was covered with a magnificent white pine forest. The great lumbering industry ultimately removed the white pine forest. Today a beautiful second growth forest of pine, spruce, and hardwoods is interspersed with open meadows which form ideal conditions for the

many white-tailed deer and other wildlife.

The years following the logging operations found settlers coming in and attempting to farm the lands which were opened up in the timber harvest. By the early thirties it was determined that the soils were not sufficiently productive to warrant agricultural production.

Just as the streams are primitive in character so are the fish species. In the upper reaches, the rivers harbor one of the early remaining populations of Lake Sturgeon. Only in the St. Croix and Rainy River watersheds can many of these fish be found in Minnesota today. The other principle species are the smallmouth bass, muskellings, walleye, redhorse, northern pike and channel catfish.

If this project is not completed, the expanding state need for recreational facilities, as identified in the Upper St. Croix Resource Management Plan, would not be met.

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 of the area. An effort will be made to control and limit visitor use capacity and to conserve natural values.

Current management policies on acquisition and development of state parks provides for an area, approximately one-fifth which is developed for concentrated recreational use with the remaining four-fifths providing a natural environmental area and buffer zone designed for limited use such as trails. The natural area of St. Croix State Park perhaps is closer to ninety percent.

Public ownership of lands along the St. Croix River and Kettle Rivers will offer protection to those parts of the river. The animal and bird populations will be protected in the park since the park must be managed as a game preserve under state law.

Currently there is 1,700 acres of private ownership remaining to be acquired within the park boundaries. This is a small percentage compared to the present public ownership. Acquisition of the remaining private land will be at the convenience of the owner. These lands will be acquired if and when the owner wishes to sell to the State of Minnesota.

Tax loss experienced by the county will be insignificant. Most of the land has been in public ownership since the early forties. The acquisition remaining will be spread over a period of years.

Pine County has benefited from the establishment and development of the park. The county has, however, probably experienced the leveling off of these economic benefits. Park attendance is expected to increase to over one million by 1980 and this will increase the economic activity in the area but to a lesser degree than the increase in attendance.



There is expected to be only one or two relocations, if any, when the remaining land is acquired. Those persons relocated will be eligible for relocation assistance, compensation and moving expenses.

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, the lines will be screened. Present development policy include provisions for burial of all overhead lines when new development takes place. Lines which serve no demonstrated needs will be removed.

Any buildings which are acquired with the parcel will be removed, if they are not to be used for park purposes. When buildings are removed the area is returned to a natural condition.

To acquire the remaining private land within the park a land transfer transaction will be discussed before acquisition. This would allow the state to fill out the boundaries and the present owner to remain in the immediate area with a minimum of disturbance on a comparable plat of land. If a land transfer is not possible then an option will be taken for fee simple acquisition.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - There will be an adverse effect by withdrawing private land from the tax roles of the local taxing districts. This will be minor however. Acreage remaining to be acquired within the boundaries is approximately 1,700 acres or four percent of the total land area. Since most of the land area within the park was in public ownership before acquisition the CCC and WPA program, very little tax loss has been experienced. The local communities have benefited economically by the utilization of the area as a park.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - The immediate area of the St. Croix and Kettle Rivers would have eventually been developed with summer cabins and homes. Since the area is distant from any sizable city it is doubtful that the area would have provided for year around residential dwellings. The remaining area back from the rivers could have been timber harvested. Some of this land could also have been used for marginal agricultural production, however, this is also most doubtful. Most of the land in Pine County is a gravel plain. During the Great Depression much of the land became tax forfeited, which was the reason for the establishment of such a huge land area as a recreational demonstration area.

It is doubtful that much use could have been made of this area. The considered best use is for recreation. Secondary use, which would not necessarily be economical, would be for agriculture and timber harvesting.

By establishing the area as a recreational area, many persons can use the resources continually over a long period of time and during all seasons of the year. The many resources such as water, land, timber and wildlife, will be protected from development and exploration.

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 open space.
8. Alternatives to the Proposed Action - Once the park has been established by the legislature there remains two alternatives: (1) No action. (2) Acquisition of lands within the boundaries.

No Action - If no action is taken to acquire and fill out the boundaries of a park, then the goal of developing the area for recreation is denied the public. The goals of protection and preservation are lost.

Acquisition - Since the Division of Parks and Recreation does not have the general authority of eminent domain, acquisition must be accomplished over a period of years. This is done with the owner's consent by optioning a parcel of land or by land transfer. Eventually most land is acquired, development is accomplished and the area provides recreational opportunities for the public.



## ENVIRONMENTAL ASSESSMENT

### HELMER MYRE STATE PARK

1. Description of Proposed Action - Lands to be acquired or developed are located within the authorized land area of Helmer Myre State Park. The park is located five miles east of Albert Lea, and prior to 1947 the area was known as Big Island State Park.

Under the present project, the state will acquire an additional plot of land within the statutory boundaries of the park. This acquisition is in accordance to the management goal of acquiring all of the land within the statutory boundaries of the park.

The park, which is contained in Freeborn County was established in 1947 and consisted of Big Island (129 acres) in Albert Lea Lake. Due to heavy use the park was expanded to the mainland in 1963 to provide for concentrated use facilities, and to relieve the damaging impact on the island features. The island is connected to the mainland by a causeway and present facilities include campgrounds, a pioneer group camp, picnic sites, fishing spots, and foot, snowmobile and ski trails. The authorized land area was increased from the original 129 acres to 977 acres. To date 920 acres have been acquired.

The primary management goal for Helmer Myre State Park is to provide a recreational and environmental learning area for present and future generations.

2. Description of the Environment - Big Island in Albert Lea Lake is an unique natural feature in this region of Minnesota. It contains an excellent stand of virgin hardwood timber with a large variety of native plant species. Until 1963 this unique feature was in great danger of serious damage and loss of value through overuse due to the large volume of visitors attracted to this area. Trunk Highways #16 and #65 made the area readily accessible to tourists and sightseers. The Interstate freeway is also bringing an ever increasing volume of people into the park.

The wildflower season in this area of Minnesota, and specifically in Helmer Myre State Park, spans a period of from six to seven months. During this time some type of flowering plant may be found within its borders. Woodland types predominate and the showiest time is early spring when these are in bloom. These displays begin early in April and last through May. At this time many varieties of flowers carpet the ground along the trails in the wooded parts of Big Island.

In the future we hope to bring back prairie and marsh plants native to the area and gradually to restore to the park the flowers found here at the time Col. Albert Lea visited this section of the state.

To date, a total of 362 species have been discovered within the park and duly noted. What a wealth of beauty to behold! Many avail themselves of the opportunity to "come and see" and we feel sure that the natural beauty observed lends enrichment to the lives of the viewers.

The soil composition of the area is medium to fine textured prairie border soils of Central Minnesota. This probably accounts for the large variety of native plants in the park area. The bedrock formation consists largely of younger sediments and intrusive rocks (less than one billion years). The general landform is characterized by rough areas resulting from glacial deposition (terminal or lateral moraines).

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, game habitat improvement, tree planting, sodding, seeding, and erosion control. Land acquired for the park will continue to provide habitat for wildlife in addition to providing recreational facilities.

Park development of recreational facilities will be minimized to preserve the natural biological and geological resources. Agricultural uses of private lands will be curtailed when it is acquired by the state. 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 herbicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass a 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 Proposed Action be Implemented - The natural environment will not suffer adverse environmental effects from acquisition or development since the purpose of state parks is to preserve historical, scenic, natural and archaeological areas. Any development to serve the public needs will be designed and constructed to be compatible with the natural resources. Protection of the natural resources will be the primary concern before and during any developmental process. As public visitation to the area increases, additional job opportunities will be available at the park. This will improve service to the public who may visit the area and will also be an economic asset to the surrounding community.
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 location of the project will help to complete an important role in serving local county and regional area needs for outdoor recreational opportunities. The project will preserve the glacial moraine features of the area. It will also help to preserve the historical character of the area and maintain the undeveloped natural features. Future generations are assured that the resources will be protected and maintained for their use. Wildlife and bird habitat is protected and preserved in its most natural character.
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 - Concerning the project at hand, the only alternative action is no action. By taking no action, the efficiency, control and management of the park area might be significantly reduced.

In addition, one of the main management goals of acquisition of all land within the statutory boundaries of the park would not be met.



## ENVIRONMENTAL ASSESSMENT

LUCE LINE TRAIL - 27-00596

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### 1. Description of the Proposed Action

Authorization - In 1973, the Minnesota State Legislature amended Minnesota Statutes 1971, Section 85.151, subdivision 1, establishing (appendix A) the Luce Line Trail. The Act authorized the Commissioner of Administration, for the Commissioner of Natural Resources to acquire by gift or purchase, the abandoned right-of-way of the Chicago North Western Railroad Company for development as a multi-use trail. The Act also authorized the Commissioner of Natural Resources to establish, develop, maintain and operate this trail in cooperation with local units of government and private individuals and groups.

The Minnesota Department of Natural Resources (DNR) through the Commissioner of Administration acquired by direct purchase approximately 104 miles of the abandoned Chicago and North Western Railroad Company right-of-way originating at Gleason Lake in the City of Plymouth, Hennepin County, and following the right-of-way west terminating at Gluek, Minnesota in Chippewa County.

The Minnesota Department of Natural Resources by this action proposes to develop a six mile bicycle treadway and an adjacent trail for horseback riders, on the abandoned railroad right-of-way between state highway 101 in Plymouth and Stubbs Bay Road in the City of Orono in Hennepin County. Development will consist of the removal of unsalvaged railroad ties; installation of culverts, bridge decking and safety railings, blading, shaping, ditching, compacting and surfacing with limestone a six mile bicycle trail; brushing, blading shaping, ditching, corduroying, compacting, and rolling a six mile trail for horseback riders, installation of fence along the six miles and construction of two parking lots.

Eventually the entire abandoned right-of-way will be developed as a multi-use trail for outdoor recreational activities. It will allow for snowmobile and nonmotorized uses. To provide a variety of trail uses, snowshoeing, skiing and snowmobiling will be allowed during the winter. In the summer bicycling, hiking and horseback riding will be allowed. The trail will be developed in three phases with some of the users excluded until other paths beside the original roadbed can be developed. In some areas, because of the terrain, width of the right-of-way, residential development, etc., certain types of uses will not be permitted. All motorized vehicles will be prohibited from the trail with the exception of snowmobiles. The trail will be developed to fill the needs of the greatest user demand consistent with sound environmental considerations.

## 2. Description of the Environment

Some homes abut the right-of-way, for the first four miles west of Plymouth, in addition to golf courses, pasture land, crop lands, marshes, lakes, open fields and municipal property. The heaviest concentration of homes exists in the City of Wayzata. Scattered homes exist in the cities of Orono, Independence and Minnetrista in Hennepin County.

In Hennepin County, there are no leases for grain elevators, oil storage tanks or other commercial developments. However, leases or easements for gardens and grade level farm crossings and other uses exist.

The portion of abandoned right-of-way west of the Hennepin County line runs through rural small towns and agricultural farm lands. The railroad has removed all salvageable rails and ties. Some bridges and culverts still remain in that section or right-of-way in Hennepin County. Many old ties which were not salvaged are strewn on the side slopes of the railroad bed. Weeds, shrubs and trees have started to engulf the right-of-way in many areas. In some cases this is the only natural vegetation in the area.

Encroachment exists in some places along the right-of-way. This does not include those landowners with current valid licenses, leases or contracts issued by the railroad or Northern States Power Company that permit special use of designated sections of the right-of-way. Some fences cross or do not follow correctly the right-of-way boundary line and the grade level road or farm crossings have been erected without obtaining valid crossing permits.

Overhead power lines exist on the six miles of trail between Highway 101 in Plymouth and Stubbs Bay Road in Orono. These lines were not purchased by the State of Minnesota. They are not screened. Other power lines and telephone lines cross the trail at various points. These are also unscreened. Sewer, gas and buried cable are under the trail right-of-way but do not adversely effect the beauty or function of the trail.

## 3. The Environmental Impact of the Proposed Action

Enhancement of the environment will result because of the development of a bicycle treadway and horseback riding trail. The environment at present consists of weeds, ripped up railroad bed and discarded railroad ties. To enhance the environment the department proposes to remove the discarded railroad ties and use them for corduroy in developing the horseback trail. The railroad bed will be bladed, shaped, ditched, compacted and surfaced with limestone. Culverts will be installed to prevent erosion and allow drainage.

The horseback trail will be brushed out removing some natural vegetation which has grown up since abandonment. Any excess vegetation removed during construction will be allowed to return by natural secession. Trees and shrubs will be planted along the right-of-way between the trails and adjacent private property where they do not exist.



A crushed limestone surface will be developed for bicycles on the old railroad bed. This surface will be approximately eight feet wide and four inches thick. Horses will be restricted from this pathway since hoofs damage the limestone surface, however horses will be allowed on a separately designated trail which will run parallel to the old railroad bed. The discarded ties along the trail will be used to corduroy low land sections of the trail where horses are permitted.

The enabling legislation for this trail provides that fencing will be provided by the state on portions of the trail according to need. Protection of homes and crops is the major consideration. Livestock fences presently exist in areas where they are needed to confine cattle. In addition to protecting private property fencing will be erected to prevent encroachment of private interests.

A landowner may erect any type of fence, he desires, which is consistent with local government ordinances.

Residential fencing will differ from agricultural fencing. Consideration is being given to four foot high, four strand barbed wire or plain steel post fence for agricultural areas. This type of fence is identical to the old railroad fence. In residential areas, four foot high wood post, woven wire freeway fence is being considered.

Fence materials will be provided and erected by the state but the abutting landowner will be required to maintain it. The fence will be erected on the state owned boundary line after consultation with the landowner. Eventually, the state will screen the fencing with natural vegetation.

Driveway, farm implement and livestock crossing easements granted to the landowner from the railroad or Northern States Power Company will be renewed by the state. To reduce the number of hazardous trail crossings, new crossing easements will be limited. Crossings presently being used but without written permission in the deed, will be renewed on an individual basis. Crossing easements for new underpasses or overhead bridges as a substitution for old grade level crossings will be reviewed, and if approved, granted on an individual basis. The landowner will be required to pay the construction costs.

The general policy for "garden" leases and other permits will be to gradually phase these types of uses out through terms of the contract.

In general, the state will maintain all the proposed facilities related to the trail that it installs. The only exception will be fences. Litter generated by the users will be removed by state employees. Noxious weeds growing on the trail bed will be controlled by spraying. Trails will be properly signed for safety of use.



#### 4. Mitigating Measures Included in the Proposed Action

Major concerns involve trail uses in the SMSA of Hennepin County. Snowmobiling will not be allowed on the trail between Vicksberg Lane in Plymouth and Stubbs Bay Road in Orono, a distance of seven miles.

Use will be restricted to horseback riding, hiking, biking, skiing, and snowshoeing in this area. All uses, including snowmobiling, and hunting with certain restrictions will be allowed on the balance of the Luce Line Trail to Gluek, Minnesota in Chippewa County. This portion of trail will be developed in phases as demand warrants.

In most cases natural regeneration of vegetation will reduce the need for planting, however, it is not considered the complete solution. Planting will be necessary to control and prevent erosion on side slopes. Planting will be used to screen fencing and keep the trail users on their designated trail. Trees and shrubbery will also help to eliminate noise from trail users. A benefit of planting vegetation is the habitat it will provide for small game birds and animals such as rabbits, fox, pheasant, mice and other small rodents. Planting will screen users from the surrounding landowners and screen the landowners activities from the user.

Proper signing of the trail will insure safe operation and a minimum of complaints from private owners of users straying from the trail. A "trail boundary" sign will be used to indicate common boundaries between landowners and the State. These are to be placed approximately thirty rods apart. A "stop" sign will be placed at all road and highway crossings. Users will be notified of impending "stop sign" 300 feet before the stop is required, "danger" signs will indicate where caution is necessary such as narrow bridges, steep grades, and road crossings.

Litter will be removed by state maintenance workers or contracted refuse collectors on a normal basis. Litter cans will be placed at access points and waysides. The extent of this problem should be minimal because trail users are limited in the amount of litter they can carry.

Noxious weeds growing along the right-of-way will be controlled by park and recreation workers.

Enforcement of trail rules and regulations will be provided by the Department of Natural Resources Conservation Officers as authorized by the Commissioner of Natural Resources delegation order number 197. Violations of these rules and regulations is a misdemeanor carrying a fine of up to \$300 and/or ninety days in jail. In addition, all supervisors, guards, custodians, keepers and caretakers of state trails poses the authority and powers of peace officers and can warn, detain and report violators to the conservation officers. County sheriffs and highway patrol officers can also warn, detain and arrest violators. Violations will occur on state trails but by using preventive measures, informing the public and effective arrests by conservation officers, sheriffs and highway patrol officers, nuisances can be minimized.

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

During construction of the trails the beds will be leveled which may destroy about five feet of adjacent shrub cover. However, shrubs will be allowed to regenerate along the individual trail corridors since it is desirable to screen users from adjacent landowners and lessen the noise from users. Shrubs along the corridor will regenerate in a few years.

Traspassing by trail users will be held to a minimum by providing and erecting fencing at the landowners request. Park facilities will be provided along the trail on public lands to prevent users from parking on township and county roads or private property. There still remains the possibility of users leaving the trail seeking adventure on their own. Although the landowner may call enforcement officers to make arrests, these adventurers are seldom caught.

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

Adjacent lands, for the most part, are used for agricultural purposes. Adjacent landowners; as a short-term use, after leveling the railroad bed and removing the gravel and rock overburden, could farm this land. Whether this is an economical undertaking, would be for the adjacent landowners to determine. Most land previously sold to landowners is in small towns and used as an extension of the homeowners backyard. Very few of these owners have removed the railroad bed.

The long term use would be<sup>to</sup> provide recreational trail corridors for people in the surrounding areas. Restricting users to the trail would lessen the possibility of trespassing on private lands which exists now. This recreational use will exist now for future generations. The trail corridor will also provide wildlife habitat in agricultural areas which are relatively devoid of good wildlife cover.

7. Any Irreversible and Irretreivable Committments 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 conversion of an abandoned railroad right-of-way into a permanent recreational linear trail. Acquisition of project lands with Land and Water Conservation Funds will commit the land to recreation and open space. Section 6 (f) of the Land and Water Conservation Fund 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 (other than recreation) will be permitted in the project area unless this change is authorized.

#### 8. Alternatives to the Proposed Action

Acquisition and development of an abandoned railroad right-of-way is an ideal method of establishing a linear trail for a considerable distance. The right-of-way provides one hundred feet which is sufficient to provide three adjacent trail beds for six types of uses. Negotiation of a right-of-way involving only two parties in contrast to establishing a trail through private land. Purchasing this abandoned right-of-way did not require the use of eminent domain as would establishing a trail over private land.

The State has been criss-crossed with railroad lines for over a century. These lines were established when railroads were the most efficient means of land travel. Since that time new means of travel have been established resulting in the abandonment of some railroad lines. As these lines are abandoned they provide an excellent means for establishing a linear trail with the least damaging impact to social and environmental factors.



## Environmental Assessment

### Glacial Lakes State Park - 27-00703

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of Glacial Lakes State Park which is located approximately five miles south of Starbuck in Pope County. Glacial Lakes Park was established in 1963 with an established boundary of 1345 acres almost wholly virgin in character. The park embraces a unique segment of hills and valleys formed by the last glacier which receded about 11,000 years ago. There are several small lakes and ponds within the park area. The largest of these lakes is 56 acres and spring fed, lies in the northwest segment of the park, is nestled between spectacularly high hills and offers a rare panoramic view of the park.
2. Description of the Environment - The park area is an outstanding example of glacial moraine formation. In the northwest portion of the park is the larger of the several lakes lying within the statutory boundaries. The southwesterly segment constitutes of greatly rolling prairie land with shallow lakes and ponds which represent an outwash from the receding glacier as it melted and shrunk to the northeast. One of the larger hills rises to a height from which surrounding country sites can be observed for twenty miles in all directions. One side of the hill constitutes virgin prairie with prairie types of vegetation intact. The other side of the hill is wooded in virgin oak. At the foot of the hill lies a 56 acre spring fed lake which lies entirely within the park boundaries.
3. The Environmental Impact of the Proposed Action - Enhancement of the environment is being accomplished through carefully implemented resource management practices. These will include timber stand improvement; watershed, lake and pond 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 cannot be utilized will be removed. Existing overhead lines which can be used for maintenance and 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.

Buildings acquired that cannot be used or converted to park use, will be moved, sold or dismantled. These building sites will be returned to natural conditions by filling basement depressions, seeding and tree planting. Development of buildings on the park site will take place in such a way to minimize the change to the natural setting of the area.

5. Any Adverse Environmental Effects Which Cannot be avoided Should the Proposed be Implemented. The natural environment will not suffer adverse environmental effects from acquisition or development since the purpose of state parks is to preserve historical, scenic and natural and archaeological areas. Any development to serve the public needs will be designed and constructed to be compatible with the natural resources. Protection of the natural resources will be the primary concern before and during any developmental process. As public visitation to the area increases, additional job opportunities will be available at the park. This will improve service to the public who may visit the area and will also be an economic asset to the surrounding community.
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 location of the project will help to complete an important role in serving local county and regional area needs for outdoor recreational opportunities. The project will preserve the glacial moraine features of the area. It will also help to preserve the historical character of the area and maintain the undeveloped natural features. Future generations are assured that the resources will be protected and maintained for their use. Wildlife and bird habitat is protected and preserved in its most natural character.
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 - Concerning the project at hand, the only alternative action is no action. By taking no action, the efficiency, control and management of the park area might be significantly reduced.

## ENVIRONMENTAL ASSESSMENT

Sand Dunes State Forest - 27-00707

### 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 time since its establishment in 1943. Due to the 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 ten 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 increasingly important for timber production and wildlife cover.

The total proposed acreage is 443.67 acres.

The description of the proposed action for the acquisition of the parcels contained in this proposal is approximately 328.67 acres forest land, mostly Christmas trees and Norway pine plus a few Spruce. Approximately 88 acres of land is tillable but has not been cropped for the last few years.

All of the land is gently rolling with about 20 acres being rather flat. Ten acres is swampland and 2.36 acres is grassland.

There is approximately 1300 feet of lake shore on Lake Ann included in this project.

The land is mostly Zimmerman with some Hubbard sandy loam.

### 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 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.

## 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 camp-ground within a 10 mile radius of the State Forest. Hunting, camping, pic-nicking, 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

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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

WILLIAM O'BRIEN STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of William O'Brien State Park. The park is located in east central Minnesota in northern Washington County on the St. Croix River, a short forty miles from the Metropolitan Twin Cities area.

The park was established with an original acreage of 307 acres in 1945. 180 acres of the property was owned by one of Minnesota's pioneer lumbermen, William O'Brien, and donated by his daughter, Alice O'Brien. In 1959, the legislature increased the statutory limits by 193 acres and again in 1963 the limits were expanded by 80 acres. The 1973 legislature expanded the park to its present acreage of 1330 acres.

Lands to be acquired are to be used to provide additional outdoor recreation facilities needed to complement those existing. Present facilities include a pioneer camp, campgrounds, picnic ground, 10 miles of foot trails, and a popular swimming beach.

2. Description of the Environment - William O'Brien State Park is situated on the Lower St. Croix River approximately 17 miles south of Taylors Falls. The Lower St. Croix River, from the dam at Taylors Falls flows in a southerly direction for approximately 52 miles, entering the Mississippi River at Prescott, Wisconsin. The river as it passes through the park, flows through a heavily wooded, steep sided valley of pine and deciduous trees which have remained undeveloped. Sandstone and limestone bluffs are visible within the park.

In the immediate area around the park, farming is the dominant land use. Agricultural activity is orientated toward livestock, dairy, corn, small grain and speciality crops such as apples.

Immediately adjacent to the park boundary to the south is the little community of Marine-on-the-St. Croix.



The entire St. Croix River basin was covered with glacial drift which was cut by streams to form the present valley. The oldest rocks in the area are precambrian in origin and are composed of metamorphic and volcanic materials. These are overlain by interbedded sedimentary and extrusive volcanic rocks which in turn are covered by cambrian duesback, franconia sandstones, clays, silts, sedimentary rocks and gravels.

The early logging operation left few of the original white or red pine in the park. Several species of deciduous trees densely vegetate the park. Periodic flood of the lowland favors hydrophytic species. Timber stands are composed of mature second growth, dominated by a variety of hardwoods.

The river fishery is strongly influenced by the Mississippi River and its fish species. Game fish are the walleye, sauger, northern pike, bass and crappie and sunfish.

The mid-continental location and sheltering effect of the St. Croix Valley makes it an attractive habitat for a variety of wildlife. Particularly rich in birdlife, many species of waterfowl and marsh shore birds, upland game birds, songbirds including unusual birds like the Great Blue Heron and American egret, nest or rest in the area. The valley is attractive to numerous small mammals, white tail deer, reptiles and amphibians.

3. The Environmental Impact of the Proposed Action - Acquisition of lands within the park boundaries will protect the environment. It will contribute to the preservation of the scenic values of the St. Croix River which was recently included in the National Wild and Scenic Rivers program. The land acquired will remain undeveloped to insure the scenic and natural character of the river. Timber stand improvement, tree planting, sodding, seeding and erosion control will protect the natural landscape.

Farm lands that are acquired will be seeded with grass to prevent erosion. Farm buildings will be removed or sold. The local taxing district will lose some revenue

from private lands which are acquired. It is expected that the surrounding area will become developed with urban residential housing raising the tax base. Experience shows that preservation of open space generally enhances residential values which also increases the property tax yield, a major source of revenue for local governments. Further developemnt of the area as a park will allow more visitations, resulting in additional tourist dollars brought to the surrounding area.

The land area acquired for the park, will become the responsibility of the park staff. Local governmental police and fire protection will be reduced.

Land in the proposed acquisition area is generally hilly and wooded. Some dilapidated fences still bear mute testimony to the former use of this rough land for pasture, the present highest and best use. Disappearance of the once bountiful dairy heards has resulted in making this rough land unused. Approximately 200 acres of the high level land is still used for corn and hay production. The former is limited to fields which have been cleared of the stone outcroppings over the years.

Only one residential structure lies within the currently anticipated acquisition area. This property is located on land platted many years ago when the town of Copas appeared to becoming a future city. Of the 14 lots platted some 100 years ago, only one has been developed and used as a residential site. It seems doubtful anymore would be sold as the access road terminates some 300 feet south. The Soo Line Railroad across the road is higher than the lot level, leading the appraiser to wonder why the location was ever considered for a residential site.

4. Mitagating Measures Included in the Proposed Action - All existing overhead transmission lines on propoerty acquired in the park, 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 whenever possible.

Buildings acquired through acquisition which cannot be converted to park uses such as shelters, toilets, storage buildings, etc., will be moved, sold or dismantled. In the past, most buildings acquired in state parks have little or no resale value and have been destroyed. Some buildings have been used as residences for park personnel. The building sites are returned to a neutral condition 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 chemical 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 by the relocation of families. 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.). The open space will attract new residential development which will broaden the tax base. This is especially true of open space projects such as this on the periphery of the metropolitan area.
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 location of the project will play an important role in serving local, county and metropolitan area needs for outdoor recreation opportunities. The project will: (1). Preserve the geological features of the St. Croix Valley. (2). Preserve the historic character of the area. (3). Maintain the undeveloped natural character of the valley. (4). Provide valuable open space for the rapidly growing metropolitan area and surrounding communities for generations to come. If the acquisition is not completed, the area will continue to provide lands for agriculture on tillable lands. Wooded hillsides might be logged off for hardwood. However this is not being done at the present time. Finally, sites that provide a scenic view of the river will eventually be developed for residential purposes which will harm the St. Croix's aesthetic values.
7. Irreversible and Irretrievable Commitment of Resources - The acquisition of lands within park boundaries will result in the permanent conversion of land from its present use to recreation use. Acquisition of lands 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 lands can be made. No other land use will be permitted in the project area unless a 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 a continued use of the land as it is presently being used such as farming. Occasionally the economic aspect of the use is overlooked and residential building sites are selected. The unspoiled character of the St. Croix River will be harmed if more residential sites than presently exist were to be developed. If no action is taken timber harvesting will begin on mature hardwoods. The goal of preserving this area and providing for the projected recreation demand could not be accomplished.

By implementing the proposed action at the earliest convenience means that the land would be in private hands until the owner decided to sell his property to the State. Since the Division of Parks and Recreation does not have broad authority of Eminent Domain, the owner is not required to sell to the State. However, eventual acquisition of the park lands will provide valuable open space near a rapidly growing Metropolitan area. It will preserve a portion of the St. Croix Valley's scenic and natural character.

## ENVIRONMENTAL ASSESSMENT

## MINNEOPA STATE PARK

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 Seppman, 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.

In this project, the State of Minnesota will construct an extension of the waterline from the existing sanitation building to the picnic area, install a drinking fountain, and improve the road and parking area in the picnic area.

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

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 thirty 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.

The inconvenience of no water fountain in the picnic parking lot area and the eventual deterioration of roadways and parking lots, will occur without implementation of the proposed action.

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.

Since the project entails an improvement to existing facilities such as the roads and parking lots, detrimental environmental impacts are non-existent. In addition, construction of a 1,000 foot, 2" water supply pipe from the sanitation building to the picnic area with installation of a water fountain, will prove to be beneficial to the park visitors with minimal detrimental effects.

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 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 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.

In this project there are no necessary or proposed measures to mitigate adverse environmental impacts.

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 twenty-three 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.



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.S. #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. Establishment of the park and subsequent boundary expansion have deterred residential and commercial development within the boundaries but the area surrounding this park has become desirable by developers because of the proximity to open space.

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.

In the specific project at hand, there are no irreversible and irretrievable commitments of resources.

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 projected needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of an unique natural area eventually resulting in its use for private purposes that would add little or nothing to the general public's good.

## ENVIRONMENTAL ASSESSMENT

### HELMER MYRE STATE PARK - 27-00700

1. Description of Proposed Action - Lands to be acquired or developed are located within the authorized land area of Helmer Myre State Park. The park is located five miles east of Albert Lea, and prior to 1947 the area was known as Big Island State Park.

The park, which is contained in Freeborn County was established in 1947 and consisted of Big Island (129 acres) in Albert Lea Lake. Due to heavy use the park was expanded to the mainland in 1963 to provide for concentrated use facilities, and to relieve the damaging impact on the island features. The island is connected to the mainland by a causeway and present facilities include campgrounds, a pioneer group camp, picnic sites, fishing spots, and foot, snowmobile and ski trails. The authorized land area was increased from the original 129 acres to 977 acres. To date 920 acres have been acquired.

The primary management goal for Helmer Myre State Park is to provide a recreational and environmental learning area for present and future generations.

2. Description of the Environment - Big Island in Albert Lea Lake is an unique natural feature in this region of Minnesota. It contains an excellent stand of virgin hardwood timber with a large variety of native plant species. Until 1963 this unique feature was in great danger of serious damage and loss of value through overuse due to the large volume of visitors attracted to this area. Trunk highways No. 16 and 65 made the area readily accessible to tourist and sightseers. The Interstate freeway is also bringing an ever increasing volume of people into the park.

The wildflower season in this area of Minnesota, and specifically in Helmer Myre State Park, spans a period of from six to seven months. During this time some type of flowering plant may be found within its borders. Woodland types predominate and the showiest time is early spring when these are in bloom. These displays begin early in April and last through May. At this time many varieties of flowers carpet the ground along the trails in the wooded parts of Big Island.

In the future we hope to bring back prairie and Marsh plants native to the area and gradually to restore to the park the flowers found here at the time Col. Albert Lea visited this section of the state.

To date, a total of 362 species have been discovered within the park and duly noted. What a wealth of beauty to behold! Many avail themselves of the opportunity to "come and see" and we feel sure that the natural beauty observed lends enrichment to the lives of the viewers.

The soil composition of the area is medium to fine textured prairie border soils of Central Minnesota. This probably accounts for the large variety of native plants in the park area. The bedrock formation consists largely of younger sediments and intrusive rocks (less than one billion years). The general landform is characterized by rough areas resulting from glacial deposition (terminal or lateral moraines).

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through improved management practices such as timber stand improvement, game habitat improvement, tree planting, sodding, seeding, and erosion control. Land acquired for the park will continue to provide habitat for wildlife in addition to providing recreational facilities.

Park development of recreational facilities will be minimized to preserve the natural biological and geological resources. Agricultural uses of private lands will be curtailed when it is acquired by the state. 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 herbicides that year. Immediately following harvest of the crop in the fall, the land must be thoroughly disked and dragged and seeded with June grass a perennial 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 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 Proposed Action be Implemented - The natural environment will not suffer adverse environmental effects from acquisition or development since the purpose of state parks is to preserve historical, scenic, natural and archaeological areas. Any development to serve the public needs will be designed and constructed to be compatible with the natural resources. Protection of the natural resources will be the primary concern before and during any development process. As public visitation to the area increases, additional job opportunities will be available at the park. This will improve service to the public who may visit the area and will also be an economic asset to the surrounding community.
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 location of the project will help to complete an important role in serving local county and regional area needs for outdoor recreational opportunities. The project will preserve the glacial moraine features of the area. It will also help to preserve the historical character of the area and maintain the undeveloped natural features. Future generations are assured that the resources will be protected and maintained for their use. Wildlife and bird habitat is protected and preserved in its most natural character.
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 - Concerning the project at hand, the only alternative action is no action. By taking no action, the efficiency, control and management of the park area might be significantly reduced.

## ENVIRONMENTAL ASSESSMENT

O. L. KIPP STATE PARK - 27-00704  
27-00599

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1. Description of the Proposed Action - Lands to be acquired or developed are located within O. L. Kipp State Park. The park is located adjacent to the Mississippi River in Winona County near the town of Dresback, Minnesota. It is located within the Minnesota Memorial Hardwood Forest which provides additional recreational opportunities.

The park was established by the 1963 Legislature with a statutory acreage of 1,175 acres. Subsequent legislature have expanded the boundary to its present size of 2,835 acres. Total lands acquired to date is 1,160 acres.

This park is essentially a strip of land four miles long embracing the scenic bluffs along U. S. Highway 61 and the Mississippi River. The park was originally recommended in 1957 as a combination recreational use area in connection with the Great River Road.

2. Description of the Environment - The park is characterized by the high bluffs and eroded valleys of southeastern Minnesota. Some bluffs rise as high as 500 feet above the Mississippi River and present a 180° view of the river. Most of the hills and ridges have been formed from a high plain that has been deeply dissected by stream erosion. This occurred from the tremendous volume of water flowing from Glacial Lake Agassiz.

The surrounding area is the most rugged unglaciated topography in Minnesota. This is the so-called Driftless Area because the area was not touched by any of the glaciers which covered Minnesota only by the subsequent drainage of Glacial Lake Agassiz.

The park area is characteristic of a deciduous forest. The hardwoods, maple, elm, oak and ash are the most common. Other species include hickory, black walnut, maple, red cedar and an occasional white cedar.

Wildlife abounds in the park. Deer, skunks, raccoons, grey and red fox squirrels. Numerous species of birds and waterfowl frequent this location as the Mississippi River is a major flyway. Fishing is popular along the Mississippi River and all species common to Minnesota are found. Some of these include walleye, northern pike, large and smallmouth bass, suckers, carp, redhorse, white and black crappie, sunfish and bullheads.

3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through management practices such as timber stand improvement, game habitat improvement, tree planting, sodding, seeding, and erosion control. Land acquired for the park will continue to provide habitat for wildlife in addition to providing recreational facilities.

Park development of recreational facilities will be minimized to preserve the natural biological and geological resources. Agricultural uses of private lands will be curtailed when it is acquired by the State. 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. 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. 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 O. L. Kipp 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 views the Mississippi River, is considered prime for high quality, residential 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-Term 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 the river.

The natural character and location of the park will play an important role in serving local, county, and regional 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 at this point of time.

7. Irreversible and Irretrievable Commitments of Resources - The acquisition and development of the area will result in the permanent land use change from present use to recreational use. This conversion will 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 an unique natural area eventually resulting in its use for private purposes that would have little value to the general public.

P. 200 1/11

ENVIRONMENTAL ASSESSMENT

MINNEOPA STATE PARK - 27-00705

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 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 Seppman, 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 an unique natural geological feature of the park and to interpret milling operation of early pioneers in the area.

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 downstream, 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 bxnk 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.

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 of 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.

Mitigating Measures Included in the Proposed Action - All existing overhead power and telephone lines will be buried. 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. 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 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.

Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal 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 twenty-three 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.

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. S. 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. Establishment of the park and subsequent boundary expansion have deterred residential and commercial development within the boundaries but the area surrounding this park has become desirable to developers because of the proximity to open space.

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 within 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 an act of the Minnesota Legislature will will the commitment to provide park and open space be reversed.

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 projected needs of open space and recreation cannot be accomplished. Failure to utilize this area for public park purposes would result in loss of an unique natural area eventually resulting in its use for private purposes that would add little or nothing to the general public's good.

KETTLE RIVER  
ENVIRONMENTAL ASSESSMENT

December 4, 1974

1. Description of the Proposed Action - The State of Minnesota proposes to acquire in fee simple and by gift, land, of approximately 100 acres, along the Kettle River in Pine County. One parcel of 50 acres is to be donated by a private citizen.

The parcel to be donated is part of the NE $\frac{1}{4}$ , SE $\frac{1}{4}$ , Section 22, and part of the W $\frac{1}{2}$ , SW $\frac{1}{4}$ , Section 23, Township 41, lying East of the Kettle River, Range 20.

The location of the parcels to be purchased in fee simple cannot be specified at this time since the State received notice of the donation from the private citizen on November 8, 1974, and he wished to donate his parcel by December 31, 1974. The parcel to be acquired in fee simple will be selected from several candidate parcels which are presently being appraised. The parcel selected for fee simple acquisition will: (1) require a willing seller and (2) be of equal or near equal value to the 50 acre parcel to be donated. The parcel meeting these qualifications will be submitted with project documentation for final approval of a LWCF project.

Together, both parcels will provide, in the public interest, protection of the scenic vistas and natural aesthetic values along the Kettle River in addition to providing for public river orientated use.

Banning Park is located along the Kettle River in Pine County near the City of Sandstone, Minnesota. The park is part of Township 42 - 43 N, Range 20 W along the 4th prime meridian.

2. Description of the Environment - The Kettle River originates in the NE $\frac{1}{4}$  of the NE $\frac{1}{4}$ , Section 31, Township 49, Range 19 of Carlton County and flows in a south to southeasterly direction through Pine County where it meets the St. Croix River. Numerous streams and creeks flow into the Upper Kettle adding variety and scenic character. A few red and Jack pine plantations can be found along the Upper Kettle, however, along the river the vegetation is generally a mixture of hardwoods and pines.

There are significant stands of young red pine along the lower portion of the river. One of the primary attractions of the Upper Kettle is the Banning Rapids and Hell's Gate, which are within Banning State Park and is an extremely dangerous set of rapids.

#### Watershed and Geology

The Kettle River watershed, located in east-central Minnesota, comprises an area of 1,566 square miles; 1,056 square miles of this being the Kettle River drainage basin. The watershed includes approximately 80 lakes with a total area of 10,000 acres. The largest lake in the watershed is Sturgeon Lake.

The watershed also includes all or part of six state forests.



The primary timber species include aspen, birch and other hardwoods. The most important forest products of the watershed are saw logs, saw bolts, pulpwood and firewood.

The Kettle River provides the major drainage for the watershed. The primary tributaries of the Kettle River include the Moose, Pine, Willow and Grindstone Rivers, as shown on Figure #2, Page 13.

The Kettle River falls a total of 484 feet within its entire length of 79 miles. The steepest descent is in the rapids 9 miles above the mouth of the Kettle, where the rate of fall is 18 feet per mile over a three mile stretch. Five miles above the mouth, the river descends 15 feet per mile. Above Sandstone, the river falls 14.5 feet per mile.

The watershed consists of a series of interrupted clayey and sandy morainic hills along with scattered glacial till plains.

The Kettle River and some of its tributaries are marked by terraces of sand and gravel outwash. Bedrock in the southeastern portion of the watershed consists of a belt of pre-Cambrian lava flows 8-24 miles wide. The elevated sub-surface structure of lava flows was caused by movement along a fault zone extending northeastward across Pine County about five miles east of Hinckley and Askov. Pre-Cambrian sandstones and shales are found adjacent to the lava flow at the fault zone. Metamorphic rock intruded by diabase sills and dikes

form the bedrock found to outcrop along the Kettle River below Willow River.

In the northern portion of the watershed, the Kettle River flows through a narrow, shallow valley, about 8 feet deep, cut through glacial drift. From the vicinity of Willow River to Hinckley, the Kettle River is set within a gorge 75-100 feet deep of pre-Cambrian Sandstone. From the Hinckley area to the St. Croix River, the Kettle River crosses a fault line and flows in a 25-40 foot valley, cut through lava flows.

Where sand and gravel lenses exist in great enough depths, sufficient water supplies can be obtained. Where the drift in the northern and southeastern parts of the watershed is shallow, ground water supplies are inadequate; hence the bedrock aquifers must be utilized.

The fault that brings lava flows into contact with the Hinckley sandstone is responsible for dramatic differences in the supply of ground water. That is, wells drilled just west of the fault usually yield large water supplies from the sandstone, as compared with wells drilled east of the fault plane which yield very low water supplies from the fractured lava flows.

#### Soils

A generalized description of some of the major soil associations found along the Kettle River provides valuable clues

to the area's natural history and ecological characteristics. There are four broad categories of soils which may be found along the Kettle River.

1. The first major category is the alluvial soil. This is the kind of soil most directly associated with the river itself because it consists of sediments, varying texture, and having been deposited relatively recently by the river during periods of flooding. Texture of these soils range from loamy sand to silty clay loam with most areas being poorly drained. Alluvial soils are often subject to flooding and are generally suitable for only certain recreational uses. Alluvial soils are most prevalent along the Kettle River from west of Askov to the confluence with the St. Croix River.
2. Another major soil type adjacent to or near the river in several areas, is peat. A long, narrow strip of peatland lies near the west side of the river in Finlayson Township. The vegetation located on these peat soils varies. In southern portions of the river, original vegetation on these peat soils in many areas consisted of hardwoods such as ash, elm, and basswood. Further north, spruce and tamarack predominate. Only a small percentage of the peat soils have been cleared and put into cultivation.
3. Most of the individual soil types along the Kettle River can be broadly grouped into a category of soils with



noncalcareous substrata. These soils are generally red in color and contain no carbonate of lime within at least the first ten feet below the surface, all horizons being acidic. Texture of these soils varies, with the finer textured soils being fairly productive. Original vegetation on these soils consisted primarily of pines, but lumbering operations or fires have resulted in their replacement by aspen, paper birch, and gray birch.

4. The final category of soils along the Kettle River is the group including the Hibbing very fine sandy loam, Adolph silt loam, and other miscellaneous, minor soil types. The Hibbing very fine sandy loam is a soil with a calcareous substrata, having carbonate of lime at slight depths. This gray-brown soil is quite productive for agricultural purposes. Original vegetation consisted of mixed hardwoods and some white and red pine. The Adolph silt loam is dark gray in color and occupies lowland areas which are often submerged during wet weather. Some areas are covered with a thick layer of muck or peat while others have numerous stones on or near the surface.

#### Vegetation

The vegetation along the Lower Kettle from Sandstone to the St. Crois River is essentially that of wet-site hardwood species. The forest cover types within the floodplain include

maple, ash, elm, and spruce.

The ridges and bluffs above the floodplain support forest types which include aspen, birch, oak, and pine. Along the river, ridges of exposed and partially exposed bedrock support "pockets" of dense red pine and jack pine stands.

There has been some recent commercial timber harvesting on lands along this portion of the river. This timber harvesting was generally of maple and other productive lowland species.

The understory along this portion of the river includes alder, willow, nettles and other species typical of the region. The drier sites along the ridges and bluffs have an understory and cover species of ironwood, hazel and grasses and shrubs.

The dry sites, including slopes, are primarily a hardwood mixture of birch, aspen, oak, maple and elm. Balsam fir and black spruce occupy those wet-sites not covered by maple, aspen and elm. Pockets of natural and planted jack pine are found along the river. A few remnants of original red and white pine species are scattered throughout the river landscape.

#### Wildlife

One of the major assets of the Kettle River Watershed is the abundance of wildlife on the adjacent land. The varied natural environment in the watershed, including marshes, bogs,

woodlands, and wild grasslands, provides good habitat for white-tailed deer, ruffed grouse, woodcock, and beaver. Game species such as ruffed grouse occupy the edges and the interior of the aspen woodlands that are common along most of the Kettle River. Scattered populations of sharptailed grouse are found in some of the open fields where brush is present. Woodcock inhabit the alder and brush lowlands throughout the area.

Aspen woodlands abound with many species of songbirds and avian predators. Variations in songbird species can be noted along the river in relation to the ages of trees and the difference between the upland and lowland vegetation types.

The largest, most common, and therefore, most significant game species along the Kettle River is the white-tailed deer. Good numbers are present along the entire Kettle River Valley, especially in the younger aspen forests that are broken by fields and other types of natural or artificial openings in the forests. Large concentrations of deer are present in St. Croix State Park, primarily due to the sanctuary status of the park.

Black bear, bobcats, coyote, gray and red fox occur in this area. Other species common along the river include red and gray squirrels, woodchucks, porcupines, snowshoe hare, cottontail and the many small animals such as chipmunks, ground squirrels and a host of mice, moles and shrews.



The uplands bordering the floodplain along the Kettle River are used for nesting by mallards, teal, wood ducks, hooded mergansers and some Canada geese. With the protection of the Kettle River corridor under the Wild and Scenic Rivers Act, much of the prime waterfowl habitat will be saved, and continued waterfowl production insured for present and future generations' use and enjoyment.

Other wetland oriented birds include the great blue heron, black crowned night heron, bittern, blackbirds, marsh wrens and many other songbirds and shorebirds.

Mammals commonly associated with the aquatic environment include beaver, muskrat, otter, mink and the racoon, all of which are present along the stretches of the Kettle River.

#### Fisheries

The Kettle River is one of the better warm-water streams in Minnesota due to its wooded and wild shorelines, mixture of boulder, rubble and gravel bottoms, and a good interspersion of rapids and pools. Fisheries surveys have divided the river into convenient sectors which are described as follows:

- A. Sector I (5.2 miles) - Mouth (T. 39, R. 21, S. 8) to the Big Eddy pool (T. 40, R. 19, S. 19). This is good small-mouth bass water but a variety of other fish can be caught, such as channel catfish, walleye, crappie, and northern pike.

- B. Sector II (7.7 miles) - Big Eddy pool and upstream to Highway #48 bridge (T. 41, R. 20, S. 26). This is walleye-northern pike waters and good fishing can be had for walleye, northern pike, and channel catfish.
- C. Sector III (8 miles) - Highway #48 to the Sandstone Dam (T. 42, R. 20, S. 22). Fishery in this portion of the river is similar to Sector II.

All of the first three sectors provide an added bonus in lake sturgeon.

The Kettle River is unique in that few rivers in Minnesota contain sturgeon. Being a barrier, no sturgeon or catfish are found above the Sandstone Dam.

- D. Sector IV (3.1 miles) - Sandstone Dam to the foot of Banning Rapids (T. 43, R. 20, S. 35). This is walleye-crappie habitat. Northern pike are also present.
- E. Sector V (1.3 of Banning Rapids). Swift waters and steep gradient do not make this area very productive for fish, and anglers would be advised to pass up this sector except for the foot of the rapids.
- F. Sector VI (8 miles) - Upper end of Banning Rapids to the old U. S. Highway #61 bridge just above Rutledge (T. 44, R. 20, S. 27). This is walleye-northern pike waters. Rock bass are also present.

- G. Sector VII (7.8 miles) - Old U. S. Highway #61 bridge to the Moose River. This is good smallmouth bass water.
- H. Sector VIII (8.8 miles) - Moose River to Highway #27 bridge (T. 46, R. 20, S. 21). This is good smallmouth bass water.
- I. Sector IX (15.7 miles) - Highway #27 bridge to western boundary of Section 2 (T. 47, R. 20). This is smallmouth bass water but are likely to be of small size. All of the last three sectors also have some northern pike present.

#### History

The natural resources of the area were the primary attraction for the early white settlement along the river. Some of these valuable resources were pine forests and the lumber they provided, sandstone for building material, copper mining, and the water power potential provided by the river itself. Today, traces of these early industries can still be seen; reminding us of the heyday period of the late 19th century. During this period, these industries reached their climax and then later, faded in importance.

One of the first resources to attract entrepreneurs and workers to the Kettle River area were the vast coniferous forests. The principal species in these forests were white and red pine, balsam fir, tamarack and white cedar. White pine provided the most valuable wood for lumber. In the 1880's great quantities



of lumber were manufactured in the Kettle River Area. Much more of the timber, however, was floated down the Kettle and St. Croix Rivers to Stillwater and other nearby mill towns. The Kettle River itself had no logging dams up until at least 1885. Some logging dams were built later, however, and one of these is believed to have been located near the present Banning State Park.

On September 1, 1894, the great Hinckley fire, the worst forest fire in Minnesota history, swept over Pine County destroying towns and farmsteads in its path. More than four hundred people died in the disaster and property losses were enormous. Many people in the Sandstone area took refuge in the Kettle River. Without the protection of the river, loss of life in this area would have undoubtedly been greater.

The river area was also the scene of a few, scattered copper mining operations. Copper lodes were discovered on the Snake and Kettle Rivers in the early 1880's. The copper was contained in trappean rock outcroppings along the Kettle which represents a continuation of similar outcroppings found in northern Michigan and Wisconsin. The copper mining activity, however, was a short-lived one.

Quarrying of a pink sandstone (known as Hinckley or Kettle River sandstone) became a major industry along the river. The Town of Banning, now a ghost town, grew up around one of the major quarries two miles north of Sandstone. Banning was

platted in 1896 and shortly after the turn of the century, had a population of about 300. Over 20,000,000 tons of rock were shipped out of Banning during its boom period. The demand for sandstone as a building material decreased; and by 1905, all work had ceased at the quarries. Attempts to establish new industries, such as power development and milling failed, and Banning ceased to exist as a town by about 1918. Today, all that remains of the old town are a few roofless concrete walls in Banning State Park. Robinson Park, in the City of Sandstone, contains many historic remnants of these sandstone quarrying operations.

The Kettle River itself provided a valuable resource - water power. In 1885, a temporary dam was built at the sandstone quarries to run a stone sawmill. Another dam was built shortly afterward at the same location, and operated for about 20 years. This was later replaced by the present "new dam" which was built in 1908. It became operable for hydroelectric power in the summer of 1909. This dam provided power for the quarries with a capacity of 475,000 kilowatts. It was acquired by Minnesota Power and Light Company in 1923, and was operated by M.P. & L. until it was finally retired in October of 1963.

An old military road, from Point Douglas to Duluth, roughly parallels the Kettle River for some distance. This road was completed in 1857, under the supervision of General W. W. Wheeler. It supplemented the water transportation of the day

and was suitable for use by stagecoach, buggy, and pedestrians. It was built for the modest cost of \$20,000.

Remnants of the Old Banning Road still remain where it traversed what is now Banning State Park. The old site of the Deer Creek Stage Stop, midway between Sandstone and Hinckley, is also of interest.

#### Land Use

There are two major land uses which currently exist along the Kettle. One of these uses is forested, the other agricultural. There are, however, other scattered land uses which occur along the river. These include urban-residential and urban-nonresidential land uses.

The lower reach of the Kettle River is almost exclusively forested. This is primarily due to the fact that there is a significant amount of public ownership along this portion and that the low-lying character of the adjacent lands discourage the intrusion of any man-made developments.

Along the upper reach there is more agricultural use of the land. This agricultural use is primarily pasture rather than cultivated. The mixture of pasture and forested land uses along this upper reach provides an interesting diversity for user and resident alike.

Another land use which exists along the river is residential.



This land use is more evident above Sandstone than below. Below the Sandstone Dam to the St. Croix River, only a few houses are visible from the river.

Above Sandstone, however, many more structures can be seen from the river. This is due largely to two factors. First, the upper reaches are more favorable for agricultural and residential uses and have, therefore, been developed for such. Second, the topography is less limiting and allows a more extensive line of sight from the river (up to one mile in some cases). However, the overall character and flavor of the upper Kettle River is still one of outstanding, scenic value.

There has been little change in the land use along the lower portion of the Kettle River over the years. However, much pressure has been generated in recent years to develop the lower Kettle River. Topographic limitations, unwilling sellers and public ownership are the primary reasons why lands in this area are still essentially primitive in nature. However, previously inaccessible lands are gradually becoming available for development because of technological advancement. This factor, together with the increasing tax burden of undeveloped lands, have been primarily responsible for the change from forested to residential land uses.

As was mentioned earlier, the land along the upper portion of the Kettle River, between the Town of Kettle River and the City

of Sandstone, is still largely undeveloped. However, recently there has been a rapid change in land use along this portion of the river, as compared to the lower portion of the river. This fact is evidenced by the construction of new residences along the river in the vicinities of the Towns of Kettle River, Willow River and Rutledge.

#### Population

In 1970, approximately 400,000 people lived within one hour's drive of the Kettle River and approximately 3.1 million people lived within a two hour's drive. The river is approximately 80 miles from the Minneapolis-St. Paul Standard Metropolitan Statistical Area (SMSA) which in 1970 had a population of approximately 1,805,000. Approximately 58% of the population residing within a two hour's drive of the Kettle River, live in the Twin Cities Metropolitan area.

The Kettle River flows through two counties which are Pine and Carlton. In 1970, approximately 45,000 people lived in Pine and Carlton Counties (16,821 in Pine and 28,072 in Carlton). The population of Pine and Carlton Counties is expected to decline between 1970 and 1985. Using past population trends, Pine County is expected to decline in population from 16,821 to 14,470 people in 1985. Carlton County is expected to decline from 28,072 people to 25,160 people in 1985. However, the Twin Cities Metropolitan area is expected to increase in population from approximately 1.8 million people to approximately

2.5 million people in 1985. This projected increase in the Twin Cities' population will also reflect a large increase in the population that lives within a two hour's drive of the Kettle River. Small communities include the Towns of Kettle River, Willow River, Rutledge, and the City of Sandstone.

3. The Environmental Impact of the Proposed Action - The impact on the natural amenities of this proposal is negligible. The donated parcel will be retained in its natural condition to provide a buffer for river users.

The most important aspect of the land donation, is that it will prevent any future development by private individuals which would distract from the primitive and undeveloped character of the Kettle River. It is possible that once the candidate parcel for fee simple acquisition is determined, it might be an area within the park that is contemplated for park development. Any development within a park, however, is planned to minimize the impact on the environment.

A harmful impact will result to be local units of government where these lands are titled to the State of Minnesota since they will no longer generate tax revenue. The expected tax loss is impossible to quantify at this time.

4. Mitigating Measures Included in the Proposed Action - The primary recreational use along the Kettle River is for boating



and canoeing. It cannot be over emphasized that a concern is aroused when promoting recreational use of a natural environment. To minimize this concern and to maintain the natural pure character of the river for users, future development, if any, on the parcels to be acquired will be primitive in character and will be well screened from river view. All efforts will be geared to maintaining the naturalness of the river for the river user.

5. Any Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented - As mentioned previously, perhaps the only adverse affect of the proposal is the tax loss to be experienced by the taxing districts.
6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long Term Productivity - The acquisition of these parcels will result in a conversion of private uses to public orientated river use. Short term use of this land would be for timber harvesting which would have no long term environment effects from the standpoint that timber is a renewable resource. Agricultural use would also be a possibility again with a minimal effect upon the environment. A third possibility exists where high land could be utilized for development of residential home sites which is semi-permanent in nature and would have a visual impact from river users' viewpoint.

The long term effect would be to maintain the natural environment ensuring quietude and maintain the essential quality of

the river for future generations.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented - Acquisition of the proposed action would result in the permanent conversion of private land to public lands. 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 land can be made. No other land users will be permitted in the project areas unless a change is authorized.

8. Alternatives to the Proposed Action - If no action were taken to acquire these lands, the lands would remain in private ownership with the potential that incompatible land uses could result. That is that, private residences could be developed in the future which would detract from the primitive character of the river. River users would then experience less of a wilderness effect.

## ENVIRONMENTAL ASSESSMENT

### LUCE LINE TRAIL

#### 1. Description of the Proposed Action

Authorization - In 1973, the Minnesota State Legislature amended Minnesota Statutes 1971, Section 85.105, subdivision 1, establishing (appendix A) the Luce Line Trail. The Act authorized the Commissioner of Administration, for the Commissioner of Natural Resources to acquire by gift or purchase, the abandoned right-of-way of the Chicago North Western Railroad Company for development as a multi-use trail. The Act also authorized the Commissioner of Natural Resources to establish, develop, maintain and operate this trail in cooperation with local units of government and private individuals and groups.

Proposed Action - The Minnesota Department of Natural Resources, (DNR) by the Commissioner of Administration will acquire by gift or purchase approximately 104 miles of the abandoned Chicago and North Western Railroad Company right-of-way originating at Gleason Lake in the City of Plymouth, Hennepin County following the right-of-way west and terminating Gluek, Minnesota in Chippewa County. The abandoned right-of-way will be developed as a multi-use trail for outdoor recreational trail activities. It will allow for both motorized and nonmotorized uses. To provide a variety of trail uses, snowshoeing, skiing, and snowmobiling will be allowed during the winter. In the summer bicycling, hiking, and horseback riding will be allowed. The trail will be developed in three phases with some of the users excluded until other paths beside the original roadbed can be developed. In some areas, because of the terrain, width of the right-of-way, residential development, etc., certain types of uses will not be permitted. All motorized vehicles will be prohibited from the trail with the exception of snowmobiles. The trail will be developed to fill the needs of the greatest user demand consistent with sound environmental considerations.

#### 2. Description of the Environment

Ownership - Ownership of the right-of-way is concentrated by two parties, however, portions of the right-of-way passing through small towns have been sold to adjacent landowners. The United Power and Light Company, a wholly owned subsidiary of Northern States Power Company acquired all of the right-of-way in Hennepin County, a distance of fifteen miles, and three miles of right-of-way in Carver County. On this continuous segment of trail, a single and double power pole transmission line exists on a portion of the south side of the right-of-way. Northern States Power Company's short range plans do not call for upgrading the capacity of this transmission line.

Most of the remaining portion of the abandoned right-of-way has been retained by the Chicago and North Western Railroad Company. These exceptions exist: in Watertown, Winsted, Silver Lake, Hutchinson and Cosmos the Chicago North Western Railroad has sold portions or all of the right-of-way to either the town councils or adjacent landowners. The extent of these sales will not be known until negotiations with the Chicago North Western Railroad are completed.



Some homes abut the right-of-way, for the first four miles of the Northern States Power Company segment, in addition to golf courses, pasture land, crop lands, marshes, lakes, open fields and municipal property. The heaviest concentration of homes exist in the City of Wayzata. Scattered homes exist in the cities of Orono, Independence and Minnetrista in Hennepin County.

In Hennepin County, there are no leases for grain elevators, oil storage tanks or other commercial developments. However, leases or easements for gardens and grade level farm crossings and other uses exist.

The portion of abandoned right-of-way which the Chicago North Western Railroad still retains, runs through rural small towns and agricultural farm lands. The railroad has removed all salvageable rails and ties. Some bridges and culverts still remain in that section of right-of-way in Hennepin County. Many old ties which were not salvaged are stwn on the side slopes of the railroad bed. Weeds, shrubs and trees have started to engulf the right-of-way in many areas. In some cases this is the only natural vegetation in the area.

Encroachment exists in some places along the right-of-way, however, this does not include those landowners with current valid licenses, leases or contracts issued by the railroad of Northern States Power that permit special use of designated sections of the right-of-way. Agriculture crops have been illegally planted within the right-of-way. Some fences cross or do not follow correctly the right-of-way boundary line and the grade level road or farm crossings have been erected with obtaining valid crossing permits.

### 3. The Environmental Impact of the Proposed Action.

In cases where the right-of-way has been sold to adjacent landowners or town councils, land for the trail corridor will have to be purchased in fee simple. The initial attempt will be to rebuy the right-of-way from the title holder. At this time, some present owners have indicated a willingness on their part to sell. If this fails, before changing any trail alignment, a second attempt will be made to negotiate a trail easement. If this does not work the trail alignment will be changed to find favorable sellers, since the Division of Parks and Recreation does not have the power of eminent domain.

Tax loss experienced because of acquisition of the right-of-way will be minimal since most of the right-of-way is still owned by the Chicago North Western Railroad which pays a gross income tax. The remaining twenty-eight miles (eighteen miles of Northern States Power ownership) or approximately 330 acres will be a source of real estate tax loss. This owner is expected to be very small for each taxing district since the acquisition is not concentrated in one small area but spread in linear fashion over many miles.

Major concerns involve trail uses in the SMSA of Hennepin County. Snowmobiling and horseback riding will not be allowed on that portion of trail from Gleason Lake to Highway 12, in the cities of Plymouth, Wayzata and the northeast part of Orono, a distance of four miles. Use will be restricted to hiking, biking, skiing, and snowshoeing in this area. All uses, including snowmobiling and horseback riding, will be allowed on the

balance of the trail from Highway 12 to Gluek. The trail will be developed in three phases as the cross section user diagrams depict (see appendix). Picnic tables, litter cans, pit toilets and hand pump wells for water will be provided in wayside rest areas. Overnight camping will not be allowed at this designated waysides. Overnight camping facilities will not be provided initially by the State because additional land adjacent to the 100 ' right-of-way will be needed to accomodate this use. However, some camping facilities maintained by local units of go ernment presently exist near the trail.

A crushed limestone surface will be developed for bicycles on the old railroad bed. This surface will be approximately eight feet wide and four inches thick. The section of trail between the cities of Plymouth and Watertown, a distance of twenty miles, will probably be surfaced first because of the greatest demand for bicycle trails is expected from the metropolitan area. Horses will be restricted from this pathway since hoofs damage the limestone surface. Horses will be allowed on a separately designated trail, to be developed later, which will run parallel to the old railroad bed. The discarded ties along the trail will be used to coruoy marsh sections of the trails where horses are permitted.

Fencing will be provided by the State on portions of the trail according to need. Protection of homes and crops will receive the first consideration. Livestock fences presently exist in areas where they are needed to confine cattle. In addition to protecting private property, fencing will be erected to prevent encroachment of private interests and to limit access points. Any landowner may erect any type of fence, he desires, which is consistent with local government ordinances.

Residential fencing will differ from agricultural fencing. Considering is being given to four foot high, four strand barbed wire or plain wire steel post fence for agricultural areas. This type of fence is identical to the old railroad fence. In residential areas, four foot high wood post, woven wire freeway fence is being considered.

Fence materials will be provided and erected by the State but the abutting landowner will be required to maintain it. The fence will be erected on the State owned boundary line after consultation with the landowner. Eventually, the State will screen the fencing with natural vegetation.

Driveway, farm implement and livestock crossing easements granted to the landowner from the railroad or Northern States Power will be renewed by the State. To reduce the number of hazardous trail crossings, new crossing easements will be limited. Crossfngs presently being used but without written permission in the deed, will be renewed on an individual basis. Crossing easements for new underpasses or overhead bridges as a substitution for old grade level crossings will be reviewed, and if approved, granted on an individual basis, however, the landowner will be required to pay the construction costs.

The general polcy for "garden" leases and other permits will be to gradually phase these types of uses out. The termination period will be determined with each permitter on an individual basis according to their needs and the terms of the contract.

In general, the State will maintain all the proposed facilities related to the trail that it installs. The only exception will be fences. Litter generated by the users will be removed by state employees. Noxious weeds growing on the trail bed will be controlled by spraying. Trails will be properly signed for safety of use.

4. Mitigating Measure Included in the Proposed Action

In most cases natural regeneration of vegetation will reduce the need for planting, however, it is not considered the complete solution. Planting will be necessary to control and prevent erosion on side slopes. Planting will be used to screen fencing and keep the trail users on their designated trail. Trees and shrubbery will also help to eliminate noise from snowmobiles. A benefit of planting vegetation is the habitat it will provide for small game birds and animals such as rabbits, fox, pheasant, mice and other small rodents. Planting will screen users from the surrounding landowners and screen the landowners activities from the user.

Proper signing of the trail will insure safe operation and a minimum of complaints from private owners of users straying from the trail. A "trail boundary" sign will be used to indicate common boundaries between landowners and the State. These are to be placed approximately fifty rods apart. A "stop" sign will be placed at all road and highway crossings. Users will be notified of 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.

Litter will be removed by state maintenance workers or contracted refuse collectors on a normal basis. Litter cans will be placed at access points and waysides. The extent of this problem should be minimal since the users because of their short distance of travel are limited in the amount of litter they can generate.

Noxious weeds growing along the right-of-way will be controlled by park and recreation workers.

Enforcement of trail rules and regulations will be provided by the Department of Natural Resources Conservation Officers as authorized by the Commissioner of Natural Resources delegation order number 197. Violations of these rules and regulations is a misdemeanor carrying a fine of up to \$300 and/or ninety days in jail. In addition, all supervisors, guards, custodians, keepers and caretakers of state trail poses the authority and powers of peace officers and can warn, detain and report violators to the conservation officers. County sheriffs and highway patrol officers can also warn, detain and arrest violators. Violations will occur on state trails but by using preventive measures, informing the public and effective arrests by conservation officers, sheriffs and highway patrol officers, nuisances can be minimized.

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

Acquisition of land for the trail corridor will effect the real estate tax collected by the taxing districts. As stated earlier, this is expected to be minimal since a mile of 100' right-of-way is only about twelve acres.



During construction of the trail the railroad bed will be leveled which may destroy about five feet of adjacent brush cover. However brush will be allowed to regenerate along the trail corridor since it is desirable to screen users from adjacent landowners and lessen the noise from snowmobiles. Brush along the corridor will regenerate in a few years.

Trespassing by trail users can be held to a minimum by providing and erecting fencing at the landowners request. Parking facilities will be provided along the trail on public lands to prevent users parking on township and county roads or private property. There still remains the possibility of users leaving the trail seeking adventure on their own. Although the landowner may call enforcement officers to make arrests, these adventurers are seldom caught.

6. The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity - Adjacent lands, for the most part, are used for agricultural purposes. Adjacent landowners; as a short-term use, after leveling the railroad bed and removing the gravel and rock overburden, could farm this land. Whether this is an economical undertaking, would be for the adjacent landowners to determine. Most land sold to adjacent landowners is in the towns and used as an extension of the homeowners backyard. Very few of these owners have removed the railroad bed.

The long term use would be to provide recreational trail corridors for people in the surrounding areas. Restricting users to the trail would lessen the possibility of trespassing on private lands which exists now. This recreational use will exist now for future generations. The trail corridor will also provide wildlife habitat in agricultural areas which is relatively devoid of good wildlife cover.

7. Any Irreversible and Irretreivable 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 conversion of an abandoned railroad right-of-way into a permanent recreational linear trail. 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 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 (other than recreation) will be permitted in the project area unless this change is authorized.
8. Alternatives to the Proposed Action - If no action is taken to acquire and maintain these lands, the goal of providing a recreational trail for trail users and future generations cannot be accomplished.

It would be extremely diffucult for the Chicago North Western Railroad to dispose of the entire right-of-way to adjacent landowners. In some cases the adjacent landowner does not desire the additional fifty or one hundred feet. Land which was not disposable would benefit no one except wildlife. This situation exists now in the towns chich the Chicago North Western Railroad has offered the right-of-way for sale. Some parcels have been purchased but there is still portions of right-of-way which is owned by the Chicago North Western Railroad.

Acquisition of an abandoned railroad right of way is an ideal method of establishing a linear trail for a considerable distance. The right-of-way provides one hundred feet which is sufficient to provide three adjacent trail beds for six types of uses. Negotiation of a right-of-way involves only two parties in contrast to establishing a trail through private land. Purchasing an abandoned right-fo-way will not require the use of eminent domain as would establishing a trail over private land owners.

The State has been criss-crossed with railroad lines for almost two centuries. These lines were established when railroad lines were the only means of travel and the most efficient means. Since that time new means of travel have been established resulting in the abandonment of some railroad lines. As these lines are abandoned they provide an excellent means for establishing a linear trail and eventual long range goal of establishing a statewide trail system which would connect these lines within reach and desirable.

ENVIRONMENTAL ASSESSMENT  
SAKATAH SINGING HILLS TRAIL #2

1. Description of the Proposed Action - The land acquired and to be 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 42 mile long trail. Acquisition of the abandoned railroad right-of-way provided approximately 26 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. Development included in this project is for only eighteen miles of right-of-way.

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.

4. Invironmental Impact of the Proposed Action - Enhancement of the environment will result through tree 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 <sup>brush</sup> cover. It will be several years before this cover had 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 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 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 agricultural 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.

## ENVIRONMENTAL ASSESSMENT

### Whitewater State Park

1. Description of the Proposed Action - Lands to be acquired or developed are located in Whitewater State Park, in extreme southeastern Minnesota. The park is located twenty-five miles east of the City of Rochester in the Minnesota Memorial Hardwood Forest and adjacent to the Whitewater State Wildlife Area.

Whitewater State Park was established by the 1919 Minnesota State Legislature through the efforts of a group of local citizens. Over 482 acres of land was originally purchased by these local citizens, and in 1927 another 165 acres was donated by Mr. John A. Latsch. These citizens' foresight sought to protect many things: the Whitewater River, rugged limestone studded hills and spectacular scenery, which at that time was an area popular for hunting, fishing and camping. Present statutory acreage is 2,862 acres.

Present use facilities include camping, picnicking, swimming, golfing, group camping, hiking and fishing. Further development will seek to enhance the resources of the area and allow proper use of the area within its carrying capacity. Adjacent to the park is the Whitewater State Wildlife Area which provides areas for hunting, fishing and nature study. The Minnesota Memorial Hardwood Forest provides similar opportunities for hunting, fishing, hiking, driving for pleasure and nature study.

2. Description of the Environment - This park area embraces the Whitewater River Valley and the surrounding bluffs, hills, and caves. In the early 1850's pioneers cleared the land and established villages along the Whitewater River in the fertile valley. Wheat was the early crop, but eventually turned to dairying with its up-the-hill cultivation of corn and other row crops. This change in land use brought a disastrous change to the valley. Erosion began and increased as the vegetative cover on the slopes declined. The bed of the Whitewater River filled with sand and in one record year of 1938, there were twenty-eight floods. The depth of siltation in some areas was almost unbelievable, with one classic case leaving only the top two feet of a telephone pole above ground. The first of the abandoned farms was purchased by the State in 1931.

In 1934 a CCC camp was established in the park and improvements carried out under this program and a subsequent WPA program is still in use today. During World War II these facilities constructed under the work relief programs were relegated to use as a German prisoner of war camp.

Whitewater State Park also has exceptional qualities for natural science field studies. This is recognized by the increasing number of student groups who come to the park to observe natural conditions, wild animals and the variety of plant life. It also has fine examples of exposed rock strata in the scenic cliffs. The valley is gradually returning to its natural state. The raw hillsides have gradually healed, the gullies have ceased to grow deeper and general stability has returned to the area.



3. The Environmental Impact of the Proposed Action - Enhancement of the environment will result through carefully implemented resource management practices. Unwise land use has caused severe flooding and erosion of side slopes in past years and this park and adjacent wildlife management area are slowly correcting past mistakes. Resource management practices including timber stand improvement; watershed, stream and bank protection; planting; seeding and erosion control have had a stabilizing effect upon the area.

Park development will be minimized to preserve, protect and enhance the natural biological and geological features of the park and surrounding area. Selection of actual development sites are made only after thorough consideration 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 least intrusive 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 removed, 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 experience 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 Whitewater River. (2) Preserve the geological character of the area. (3) Maintain the undeveloped character of the area. (4) Provide recreational opportunities and open space and lessen regional needs. (5) Improve and correct the natural character of the area previously destroyed by unwise land use practices.

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 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 and develop facilities to control visitor use or overuse.

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 Whitewater River Valley would be harmed if residential sites were allowed to be developed. The goal of preserving the environment will be foregone 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.

As is the case with Whitewater State Park and Whitewater State Wildlife Management Area land use alternatives have previously been extensively explored. Wheat farming changed to dairy farming, with row crops and as erosion and siltation increased farmers turned to grazing cattle and goats. The once prosperous farms declined and one by one were abandoned. Local residents recognized the destruction of the valley because of previous land use practices and promoted establishment of the State Park; coupled with the development of impoundments for waterfowl, scattered cornfields sharecropped for deer, and the gradual natural return of native vegetation.

The valley has changed its character with the changed use of the land, and today recreation is the major industry. Farming, however, now adopted to the character of the terrain, still plays a considerable part in the valley's life.



## ENVIRONMENTAL ASSESSMENT

### CROW WING STATE PARK

- I. Description of the Proposed Action - Lands to be acquired or developed are located within Crow Wing State Park.

Crow Wing State park was established by the Minnesota Legislature in 1959 with a statutory acreage of 1,476 acres. The park is located in Crow, Wing, Cass and Morrison counties approximately eight miles southwest of Brainerd, Minnesota. The park embraces both sides of the Mississippi River and includes a section of the Crow Wing River. Subsequent legislative action has expanded the boundaries to its present 2,198 acres.

The park was established to preserve the site of the pioneer town of Crow Wing which flourished during the period when waterways were the prime means of commercial travel. In addition to preserving the townsite, it is intended that this area provide for the broad types of recreation which are consistent with its natural characteristics.

2. Description of the Environment - Both the Mississippi River and Crow Wing River in the area of the park have developed their channels through a broad floodplain which lies about twenty to sixty feet above the present water level. The immediate area surrounding the river banks is quite hilly with some segments of the normal water level. At other points the banks rise only ten feet above the normal river level with flat areas and a gentle flow, in some cases connecting with swampy areas.

The surface soils are light and sandy over a greater portion of the area. The northern part of the park would seem to have heavier soils and clay strata which are observable in the steeper river banks.

Crow Wing State Park lies in that portion of the state where the first killing of frost occurs about September 20th and the last frost about May 16th, with a mean average temperature for the year of 40F. The average annual precipitation has been determined to be twenty-four inches.

The present vegetative cover is characteristic of Minnesota's north country. The original timber predominating in this area was red and white pine. The bulk of the original pine cover has been harvested. The present timber stands consist of jack pine, spruce and a few red and white pine in the conifer group. Burr, oak, ash, maple and elm make up the bulk of the deciduous timber types.

The most recently harvested and barren pine areas within the park limits have been replanted primarily to norway pine. The predominating grasses, in open areas, are in the poverty classification due to the light types of soil with snowberry and dogwood dominating the shrubby classes.

Historically, the park was the scene of a major battle between the Sioux and the Chippewa Indians in 1768. The fur trade era brought voyageurs of the northwest and American fur companies and soon traders established post along the rivers. A branch of the Red River trail brought the ox cart through the area. By the year 1848, Crow Wing settlement was in

the transition from furs to logs. Boom companies and sawmills harvested the timber of the area.

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. Selection of actual development sites will be made only after thorough and careful investigation have been made concerning any archaeological and historical evidence. An effort will be made to control and limit the visitor use capacity and to conserve natural values by keeping at least eighty percent of the acreage in a natural condition. Development of structures will be carried out so that it is harmonious with the surrounding environment.

Farm lands that are acquired will be seeded with grass to prevent erosion. Farm buildings will be removed or sold. The local taxing district will lose some revenue from private lands which are acquired. It is expected that the surrounding area will become more residentially developed than it has in the past. 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.

4. Mitigating Measures Included in the Proposed Action - All existing overhead transmission lines on property acquired in the park, which serve no demonstrated need, will be removed. Overhead lines which can be used for development of the park facilities will be buried or screened with vegetative cover to lessen the intrusion on the park atmosphere. New lines will be buried whenever possible.

Buildings acquired through acquisition which cannot be converted to park uses such as shelters, toilets, storage buildings, etc., will be moved, sold or dismantled. In the past, most buildings acquired in state parks have little or no resale value and have been destroyed. Some buildings have been used as residences for park personnel. The building sites are returned to a natural condition 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 chemical 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 location 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 Mississippi and Crow Wing Rivers. (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. River frontage not yet acquired would provide sites for residential development.
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 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 lands 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 continues 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 the park, Mississippi River, and Crow Wing 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 implementing the proposed 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, eventual acquisition of the parks lands will provide valuable open space for future generations.

## ENVIRONMENTAL ASSESSMENT

### WILLIAM O'BRIEN STATE PARK

1. Description of the Proposed Action - Lands to be acquired or developed are within the statutory boundaries of William O'Brien State Park. The park is located in east central Minnesota in northern Washington County on the St. Croix River, a short forty miles from the Metropolitan Twin Cities area.

The park was established with an original acreage of 307 acres in 1945. 180 acres of the property was owned by one of Minnesota's pioneer lumbermen, William O'Brien, and donated by his daughter, Alice O'Brien. In 1959, the legislature increased the statutory limits by 193 acres and again in 1963 the limits were expanded by 80 acres. The 1973 legislature expanded the park to its present acreage of 1330 acres.

Lands to be acquired are to be used to provide additional outdoor recreation facilities needed to complement those existing. Present facilities include a pioneer camp, campgrounds, picnic ground, 10 miles of foot trails, 12 miles of snowmobile trails and a popular swimming beach.

2. Description of the Environment - William O'Brien State Park is situated on the Lower St. Croix River approximately 17 miles south of Taylors Falls. The Lower St. Croix River, from the dam at Taylors Falls flows in a southerly direction for approximately 52 miles, entering the Mississippi River at Prescott, Wisconsin. The river as it passes through the park, flows through a heavily wooded, steep sided valley of pine and deciduous trees which have remained undeveloped. Sandstone and limestone bluffs are visible within the park.

In the immediate area around the park, farming is the dominant land use. Agricultural activity is orientated toward livestock, dairy, corn, small grain and speciality crops such as apples.

Immediately adjacent to the park boundary to the south is the little community of Marine-on-the-St. Croix.

The entire St. Croix River basin was covered with glacial drift which was cut by streams to form the present valley. The oldest rocks in the area are Precambrian in origin and are composed of metamorphic and volcanic materials. These are overlain by interbedded sedimentary and extrusive volcanic rocks which in turn are covered by Cambrian Deesbach, Franconia sandstones, clays, silts, sedimentary rocks and gravels.

The early logging operation left few of the original white or red pine in the park. Several species of deciduous trees densely vegetate the park. Periodic flood of the lowland favors hydrophytic species. Timber stands are composed of mature second growth, dominated by a variety of hardwoods.

The river fishery is strongly influenced by the Mississippi River and its fish species. Game fish are the walleye, sauger, northern pike, bass, and crappie and sunfish.

The mid-continental location and sheltering effect of the St. Croix Valley makes it an attractive habitat for a variety of wildlife. Particularly rich in birdlife, many species of waterfowl and marsh shore birds, upland game birds, songbirds including unusual birds like the Great Blue Heron and American egret, nest or rest in the area. The valley is attractive to numerous small mammals, white tail deer, reptiles and amphibians.

3. The Environmental Impact of the Proposed Action - Acquisition of lands within the park boundaries will protect the environment. It will contribute to the preservation of the scenic values of the St. Croix River which was recently included in the National Wild and Scenic Rivers program. The land acquired will remain undeveloped to insure the scenic and natural character of the river. Timber stand improvement, tree planting, sodding, seeding and erosion control will protect the natural landscape.

Farm lands that are acquired will be seeded with grass to prevent erosion. Farm buildings will be removed or sold. The local taxing district will lose some revenue from private lands which are acquired. It is expected that the surrounding area will become developed with urban residential housing raising the tax base. Experience shows that preservation of open space generally enhance residential values which also increases the property tax yield, a major source of revenue for local governments. Further development of the area as a park will allow more visitations, resulting in additional tourist dollars brought to the surrounding area.

The land area acquired for the park, will become the responsibility of the park staff. Local governmental police and fire protection will be reduced.

Tax breakdown is shown below:

Parcel #10 - Marine Land Company - Total Taxes \$502.19

School District # 831	Washington County	New Scandia Township
\$324.64	\$126.82	\$50.73

Parcel #5 - Mary T. Jannack & Barbara Lyon - Total Taxes \$177.82

School District #831	Washington County	New Scandia Township
\$114.96	\$44.90	\$17.96

Parcel #6 - Alice Reed - Total Taxes \$80.70

School District #831 -	Washington County	New Scandia Township
\$52.17	\$20.38	\$8.15



Parcel #8 - Helen M. Janz & Fredrick A. Janz - Total Taxes \$499.89

School District # 831	Washington County	New Scandia Township
\$323.16	\$126.24	\$40.49

Parcel #7 - Swing Estate - Total Taxes \$196.43

School District #831	Washington County	New Scandia Township
\$126.99	\$49.60	\$19.84

Parcel #9 - Carl Louis Anderson - Total Taxes \$73.44

School District #831	Washington County	New Scandia Township
\$47.48	\$18.54	\$7.42

Parcel #4 - Lee Sandager - Total Taxes \$613.40

School District #831	Washington County	New Scandia Township
\$396.54	\$154.90	\$61.96

Parcel #3 - Sandager & LaBelle - Total Taxes \$143.46

School District #831	Washington County	New Scandia Township
\$92.74	\$36.23	\$14.49

TOTAL LEVY FOR:

Washington - County- - - - -	\$5,563,127.18
New Scandia - Township - - - -	45,697.21
School District #831 - - - - -	5,591,672.81

NOTE - School District #831 takes in parts of three counties.

Land in the proposed acquisition area is generally hilly and wooded. Some dilapidated fences still bear mute testimony to the former use of this rough land for pasture, the present highest and best use. Disappearance of the one bountiful dairy herds has resulted in making this rough land unused. Approximately 200 acres of the high level land is still used for corn and hay production. The former is limited to fields which have been cleared of the stone outcroppings over the years.

Only one residential structure lies within the currently anticipated acquisition area. This property is located on land platted many years ago when the town of Copas appeared to becoming a future city. Of the 14 lots platted some 100 years ago, only one has been developed and used as a residential site. It seems doubtful anymore would be sold as the access road terminates some 300 feet south. The Soo Line Railroad across the road is higher than the lot level, leading the appraiser to wonder why the location was ever considered for a residential site.

4. Mitigating Measures Included in the Proposed Action - All existing overhead transmission lines on property acquired in the park, 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 whenever possible.

Buildings acquired through acquisition which cannot be converted to park use such as shelters, toilets, storage buildings, etc., will be moved, sold or dismantled. In the past, most buildings acquired in state parks have little or no resale value and have been destroyed. Some buildings have been used as residences for park personnel. The building sites are returned to a natural condition 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 chemical 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 by the relocation of families. 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.). The open space will attract new residential development which will broaden the tax base. This is especially true of open space projects such as this on the periphery of the metropolitan area.

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 location of the project will play an important role in serving local, county and metropolitan area needs for outdoor recreational opportunities. The project will: (1). Preserve the geological features of the St. Croix Valley. (2). Preserve the historic character of the area. (3). Maintain the undeveloped natural character of the valley. (4). Provide valuable open space for the rapidly growing metropolitan area and surrounding communities for generations to come. If the acquisition is not completed, the area will continue to provide lands for agriculture on tillable lands. Wooded hillsides might be logged off for hardwood. However this is not being done at the present time. Finally, sites that provide a scenic view of the river will eventually be developed for residential purposes which will harm the St. Croix's aesthetic values.
7. Irreversible and Irretrievable Commitment of Resources - The acquisition of lands within park boundaries will result in the permanent conversion of land from its present use to recreation use. Acquisition 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 lands can be made. No other land use will be permitted in the project area unless a 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 a continued use of the land as it is presently being used such as farming. Occasionally, the economic aspect of the use is overlooked and residential building sites are selected. The unspoiled character of the St. Croix River will be harmed if more residential sites than presently exist were to be developed. If no action is taken timber harvesting will begin on mature hardwoods. The goal of preserving this area and providing for the projected recreational demand could not be accomplished.



By implementing the proposed action at the earliest convenience means that the land would be in private hands until the owner decided to sell his property to the State. Since the Division of Parks and Recreation does not have broad authority of Eminent Domain, the owner is not required to sell to the State. However, eventual acquisition of the park lands will provide valuable open space near a rapidly growing metropolitan area. It will preserve a portion of the St. Croix Valley's scenic and natural character.