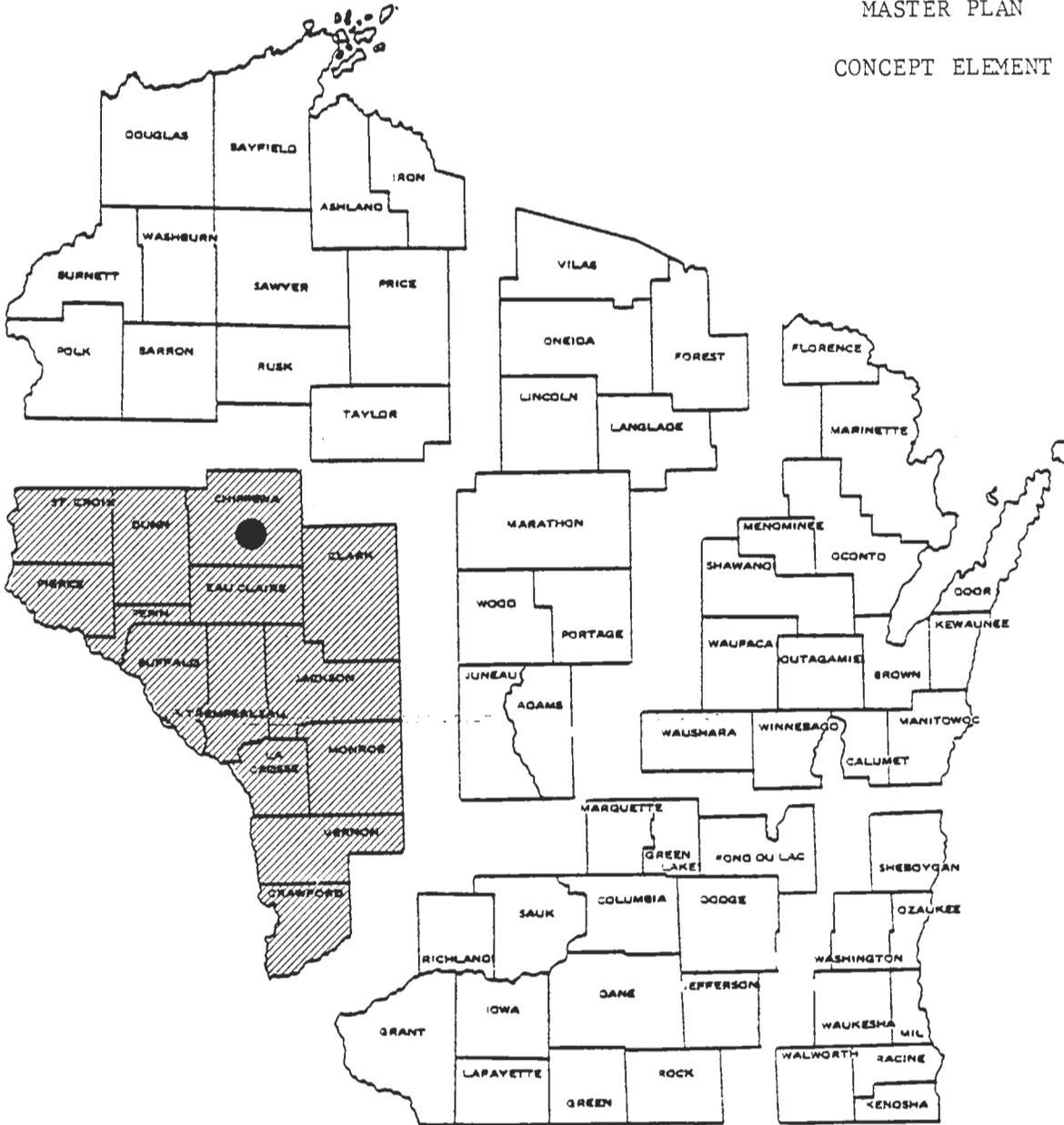


LAKE WISSOTA STATE PARK

MASTER PLAN

CONCEPT ELEMENT



Property Task Force

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LAKE WISSOTA STATE PARK  
CONCEPTUAL MASTER PLAN

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## SECTION I - ACTIONS

### A. GOAL, OBJECTIVES, AND ADDITIONAL BENEFITS

#### Goal

To provide a state park which will serve the recreational, educational, and nature experience needs of 215,000 property visitors annually, while preserving and protecting the resource for present and future generations.

#### Annual Objectives

1. Provide and maintain recreational facilities to accommodate 185,000 picnickers and other day-users.
2. Provide a quality recreational experience for 30,000 campers.
3. Accommodate 20,000 hikers, nature trail users, and cross-country skiers.
4. Provide and maintain interpretive displays and programs for 25,000 user days.
5. Provide boat access to Lake Wissota for 10,000 users.
6. Accommodate individuals who are disabled through the proper design, construction, and management of the property and its facilities.

#### Additional Benefits

Provide for other recreational and educational uses including bird watching, wildlife observation, gathering of nuts, berries, and mushrooms.

### B. RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM

It is recommended that the property remain classified as a state park. This would provide for a full complement of recreational facilities, as well as provide for the protection and preservation of the natural environment. It is anticipated that use will increase 10-15% during the next 10-year period following approval of the master plan and subsequent development of new facilities.

Recreational facilities to be provided include approximately 70 additional family campsites, a group campground to accommodate wheeled camping units, and group camping area expansion for tents. Expanded day-use facilities are also proposed. Items contained in this category are: expanded picnic area parking and tables facilities, additional shelters, upgrading existing trails, trailhead development, a ski trail warming structure, additional electrification of existing campsites in the family campground, redevelopment of the contact station area, and increased emphasis on handicapped accessibility.

Nature interpretation and education will be stressed on the property. Therefore, facilities such as a modest nature center are proposed in conjunction with the existing amphitheater and self-guided nature trails. Vegetative management will include continuing prairie restoration and maintenance, landscape planting in the intensive use areas, and extensive area tree and shrub planting. Other actions will include erosion control and bank stabilization along the Lake Wissota shoreline. In addition, minor renovation of existing day-use areas will be implemented.

The 4 3/4-mile snowmobile trail which serves as a connector to the existing county trail system will be continued until such time as an alternate route is established.

All areas proposed for development will be examined for the presence of endangered and/or threatened animals and plants. If such species are found, development will be suspended until the District Endangered and Non-game Species Coordinator is consulted, the site evaluated, and appropriate protective measures taken. In addition, prior to any major ground disturbing activities within the park, the Department will consult the State Historical Society to determine whether archaeological or historical testing is warranted.

#### 1. Development (Figure 3)

Development needs of the park over the next 10 years have been identified and placed into three development priorities.

##### Priority 1

This priority includes those items needed to safeguard the resource, maximize user services and facilities, and increase the park's operation and maintenance efficiency. The following is a list of those development items.

1. Add an additional 24 electrical services to the existing 81-unit campground, thereby bringing the total electrified sites to 40 which is approximately one-half of the total available sites.
2. Revise the parking and entrance road near the contact station to increase operational efficiency and provide better public contact services.
3. Remodel the office for better user contact, sticker sales, and operations efficiency.
4. Construct walkways to the shelters, bathhouse and other appropriate facilities to maximize accessibility for those individuals who are physically or mentally disabled.
5. Shoreline and bank stabilization will continue to be undertaken to guard against and stop erosion of the resource.

6. A modest nature center is proposed for the area near the existing amphitheater. This building will house various displays covering the historic and natural features of the property and surrounding area, as well as information regarding resource programs. Space will be set aside for restrooms, storage, and for the park naturalist to develop programs and displays. The rest of the building will have an open floor plan which will allow the greatest flexibility for displays.
7. The entrance road and parking lot for the existing amphitheater and proposed nature center will be asphalted.
8. The beach area parking lot will be expanded to accommodate vehicles pulling trailer units.
9. Forty parking stalls will be added to the river's edge picnic area so that the area can accommodate more picnickers and better serve the public during peak use periods.
10. A warming house will be constructed near the Stag Horn trail parking lot to accommodate cross-country skiers and other winter park users.
11. Three miles of the existing hiking and nature trail will be surfaced with fine limestone gravel to maximize accessibility and reduce trail tread erosion.
12. Approximately 200 lineal feet of boardwalk is proposed for the existing nature trail to protect the sensitive marshland resource and provide a better walking surface for the trail user.
13. A sand blanket to be coordinated with fish management is proposed for the beach area for the benefit of the park user.
14. One additional fishing access point is proposed for the river's edge picnic area to provide for the needs of fishers and reduce existing erosion problems.
15. Tree and shrub planting will continue in the intensive and extensive areas of the park according to approved planting plans. These plantings will provide for shade, screening, and general site amenity in the intensive area and reforestation of certain sections of grasslands (abandoned fields) in the extensive area. Prairie management will continue in the three major areas as identified on the land-use cover map.
16. The park roads will be sealcoated as needed to guard against deterioration and costly repairs.

17. It is proposed that the entrance sign be lighted as many campers and evening visitors have difficulty in identifying and locating the park entrance.
18. An irrigation system will be constructed at the park office complex and bathhouse to insure retention of turf cover and watering of shrub and tree stock.
19. A stairway from the family campground's northwest loop to the water's edge will be constructed to help guard against further erosion caused by campers moving up and down the high, steep banks. This should greatly aid in erosion control efforts.
20. A well and hand pump will be provided in the existing campground so that campers can obtain water during the off season when the pressurized water system has been drained.

Estimated costs for priority I development items is \$270,000.

#### Priority II

Priority II centers on providing camping facilities to meet future demand. Items contained within priority II include the following:

1. An additional stairway will be constructed from the family campground's southeast loop to the water's edge.
2. The family campground will be expanded by the incorporation of 70 additional sites if use and demand warrants. Half of these sites will have electrical hookups and flush toilet and shower buildings will be provided. The 1983 camping use survey showed 80 to 100% occupancy on July weekends with turnaways ranging from a high of 50 persons to a low of 11 persons.
3. A group camp area designed to accommodate wheeled camping units is proposed for the area near the former manager's residence. The area will accommodate a maximum of 20 units. Toilet, well, electricity, tables, grills, fire rings, etc will be provided. An existing asphalt surfaced road (which formerly provided access to the now razed manager's residence) will provide access to the facility. Limited additional road work, including graveling spurs, will be needed.
4. It is proposed that the beach curb be replaced to better separate the sand and turf areas and provide a seating area for beach users. The existing railroad tie beach curb is deteriorating and has limited service life.
5. It is proposed that the concession in the bathhouse be enlarged with non-Department capital to increase the efficiency of the concession and provide space for display of concession items.

6. Shoreline and bank stabilization projects will continue as needed.
7. Intensive and extensive landscaping will also continue as needed.
8. A water skier's pickup and delivery area will be marked approximately 500 feet north of the existing swimming beach.
9. A shelter is proposed for group campsite #1 to meet the demand for a shelter at the site.

Estimated development cost of all priority II items is \$377,000.

### Priority III

A minimum of additional development is considered as priority III and includes the following:

1. Group camping area site #3 (for tents only) will be developed if user demand justifies. Parking, trail relocation, toilet, etc. will be provided.
2. General landscape planting will continue in the intensive and extensive use areas. Shoreline and bank stabilization will also continue as needed.

Estimated cost is \$75,000.

Estimated development costs based on 1985 construction figures include \$270,000 for Priority I items, \$377,000 for Priority II items, and \$75,000 for Priority III items. The grand total is \$722,000. All proposed development will be dependent upon available funds and statewide priorities. Additional and/or up-to-date justification may also be required.

## 2. Management

### a. Facility

Presently, the park is the responsibility of the Lake Wissota Work Unit Manager. The park is operated on a year-round basis with three permanent personnel - park ranger, assistant superintendent, and a park work unit manager. In addition, approximately 13-15 limited term employees (LTE's) are hired during the year, predominantly during the summer months. They perform work in the following functions: clerical, sticker sales, life guarding, visitor services, maintenance, development and park interpretation.

It is expected that park staff will be increased within the near future with a seasonal position for clerical, maintenance and visitor services duties. Other future needs due to development and increased use will result in the need for limited additional LTE's and possibly a seasonal naturalist. Equipment and repair facilities at Lake Wissota are used in conjunction with operations in the remainder of the work unit.

A non-profit Foundation or Friends Groups of the park is proposed. One goal of the group will be to provide assistance in building and operating the nature center facility. The organization would also assist in obtaining and displaying various historic items within the nature center. The displays may be loaned from various historical societies and private citizens in the area.

Nature interpretation will be an integral function of property management. The park's interpretive program will include guided nature hikes and evening programs with illustrated slide talks, movies, or an informal campfire chat. Park visitors may also use the Beaver Meadow self-guided nature trail. Two parent/child outdoor learning programs, Junior Ranger and Wisconsin Explorer, encourage family interaction. A Junior Naturalist day-camp program is available for area citizens.

As a unit of the Wisconsin State Park system, Lake Wissota has been developed and managed under Chapter 27, laws of Wisconsin; specifically, section 27.01 which governs state parks. The property is also managed under the provision of Wisconsin Administrative Code 45, which contains rules of the Wisconsin Department of Natural Resources pertaining to the conduct of visitors at state parks, state forests, and other properties under the jurisdiction of the Department.

b. Vegetative Management (Figure 5)

The goal of vegetative management will be to maintain the health, vigor, and diversity of the vegetation in and adjacent to the park's intensive use areas. This will be accomplished by removal, pruning, and planting of trees. Under most circumstances, natural succession will continue to meet the objective of providing a diversity of flora for multiple public resource values, including providing a variety of habitat for wildlife. The following is a description of the forest cover types located adjacent to the intensive use areas (campgrounds, picnic areas, beach, trails, and other day use areas) which are to be intensively managed.

There are approximately 242 acres of pine plantation under intensive management at the present time. These trees will be selectively thinned over five-ten year intervals to promote rapid growth of large, healthy, natural looking pine stands. Where these plantations are located next to main roads or use areas, tree thinning sales have been and will continue to be used to break up the managed "row effect" of the planting, creating small openings at the edge of the plantations, and thereby creating more edge effect for game species and songbirds.

Thirty to 60 acres of abandoned field area north of County Trunk "O" may be used in the future as a test site for planting various strains of white pine from Tennessee to assess their potential for use here in Wisconsin. At present, approximately 3 acres has been set aside for a white pine test site to be planted in the spring of 1986. Future plans may include using part of the area for seed orchards by the state nurseries.

The remaining 20 or so acres directly adjacent to County Trunk O will be left to grassland and natural succession.

A very limited ( $\pm$  5 acres) area on the northwest boundary of the property will be planted with a variety of pine and hardwood species to screen adjacent development, yet retain enough grassland to provide an open view of Lake Wissota from County Trunk O. Only trees which pose a risk or hazard to the public will be cut on the remaining land within the park.

Prescribed burns to maintain the three prairie areas on the park (120 acres) will be implemented by the Forester/Ranger in conjunction with the park superintendent. Such burns will occur on a rotating basis with each area being burned at three-year intervals.

Planting of trees such as burr oak, ash, white pine, and various shrubs will take place in parts of the grass types. These plantings will be done to create additional wildlife edge and to create islands useful to game, as well as breaking up sight lines. Prairie plants will be seeded or planted from stock grown on the park or obtained from other sources.

Specific planting areas, including species, numbers, etc. have been formulated by the Park Planner in conjunction with the forester and property manager.

Oak wilt is a major threat to the park. All pruning, cutting, or park development taking place in oak stands should be done during the dormant season or mid-October to mid-April to reduce infection of oak stands with oak wilt. All tools used to cut diseased oak are to be sanitized in ammonia or household bleach prior to cutting any live oak at any time of the year. This measure will slow the disease spread. A public awareness campaign should be implemented so that campers will be aware of harm caused by damaging the park's trees.

White pine blister rust can best be controlled by eliminating currants and gooseberries in areas with white pine in them. Also, pruning the lower four feet of branches will greatly reduce the loss of white pine to disease. Pruning areas can be selected with the help of the forester.

c. Wildlife Management

No specific fauna are targeted for management. However, in an effort to add to the learning experience, a variety of songbird houses have been and will be placed in strategic locations throughout the property. Woodduck boxes will be erected near the beaver pond. No special management needs are known or anticipated at this time. Problem animals are handled on an individual basis.

A diversity of vegetative types is necessary to provide habitat for a wide variety of wildlife species which in turn will add to the experience of the park users. The overall management activities affecting the cover types present should accomplish this objective.

The deer herd is in balance with its range and there is no need to allow hunting in the park at the present time. If and when the park is opened to deer hunting, it will be periodic and not on a continuing basis.

d. Fish Management

Lake Wissota is presently managed for the following game fish and panfish species: walleye, muskellunge, smallmouth bass, catfish, lake sturgeon, black crappie, perch, and bluegill. Musky is the only species that has been stocked annually in recent years. Perch are also stocked when available. Stocking of muskellunge and perch should continue and bluegill stocking will be considered in the future.

Artificial in-lake habitat should be installed for panfish and other forage fish to try to increase numbers of these species. Severe bank erosion should be stabilized wherever and whenever feasible; and inshore or shallow water fish habitat should be constructed along park shorelines in the big lake basin. Habitat improvement will provide anglers increased fishing opportunities and expand the forage base for fish predators, particularly walleyes. No regulation changes are recommended at this time.

Part of the bank stabilization program should include the planting of willow trees along the shoreline. Fish cribs have been somewhat successful in drawing fish into areas along the Yellow River, such as at the fishing pier which is accessible to disabled individuals.

Anglers are allowed liberal access to all waters adjacent to the property. Some change in fishing access appears needed to reduce the amount of shoreline and bank erosion evident within the park. Bank erosion control efforts such as providing stairs, fishing platforms, and retaining walls seems to have been successful.

e. Revenue Potential

Based on 1985 revenue figures and the 1985-86 fiscal year budget, the present percentage of revenue collected to operation budget is 58.9%. Upon the completion of the proposed improvements there may be a modest increase in this percentage.

f. Roads, Entrances, and Private Inholdings

Lake Wissota is a one-entrance property. However, there is a shortcoming with the parking lot at the contact office. The parking area was designed so that the visitor doesn't have to stop and make contact with personnel at the office before parking and/or continuing through to the property. Redevelopment is needed to insure that visitor contact is made before proceeding into the park.

In conjunction with road and parking redesign, it is proposed that the contact office be modified to include an alcove to be constructed in place of the sliding glass door. This would provide direct drive-up access and thereby eliminate the need for park personnel to leave the building.

There are no private inholdings remaining within the property.

In the past, there has been a slight problem with people parking on township roads located east of the property and then walking into the park to the interior trail system. This also has been a more serious problem during the winter months when people would park on the road and ski into the park ski trails. They most often would travel the wrong way on a one-way trail causing user conflict and safety concerns. It is anticipated that the township will work with the park in signing the road against parking, thereby eliminating this problem.

g. Land Acquisition (Figure 3)

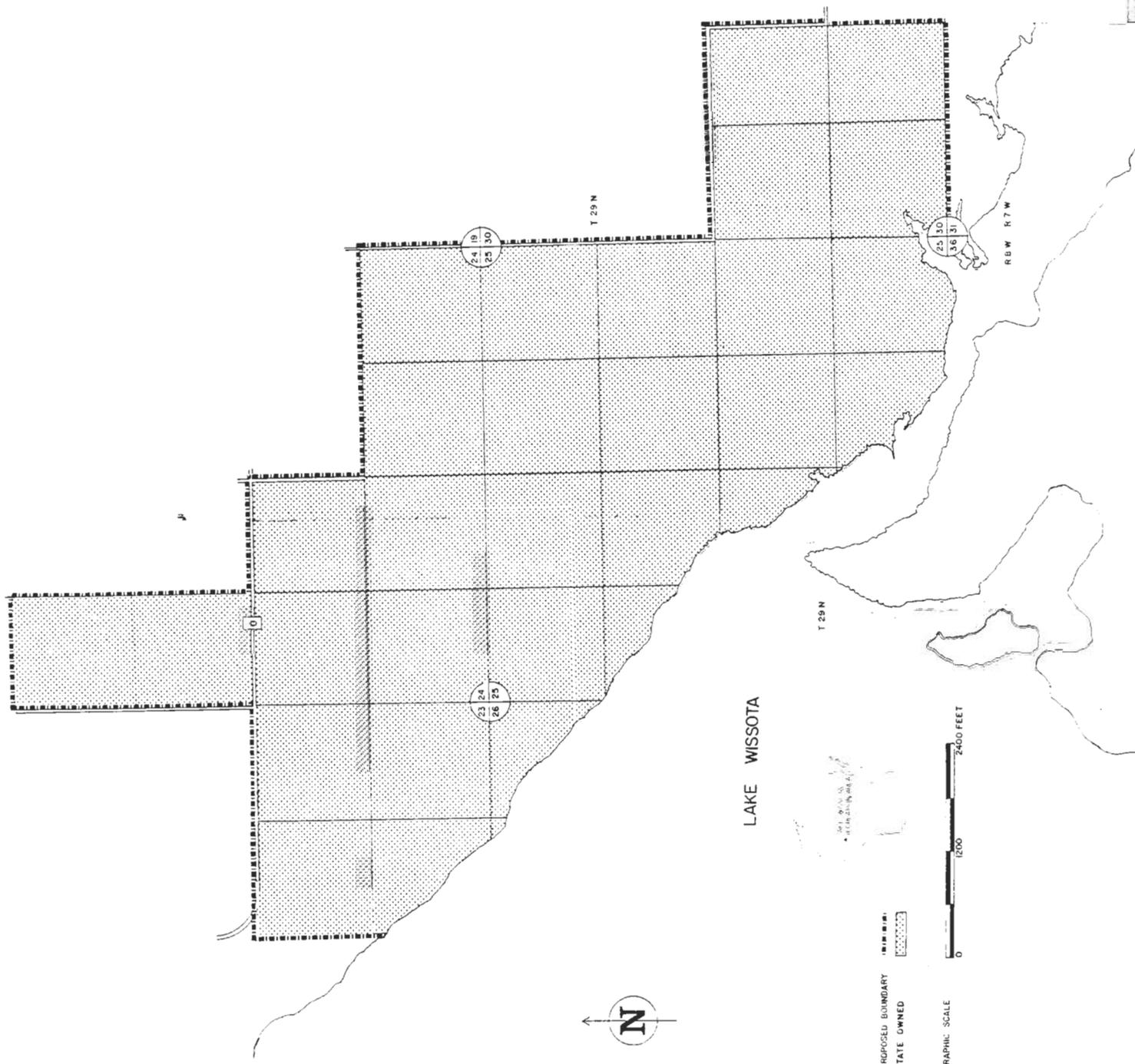
Park land acquisition is complete with having acquired the acreage goal of 1,062.05 acres.

h. Public Involvement in the Master Planning Process

Three hundred master planning workbooks were distributed to campers and day-users at Lake Wissota State Park. Those who wished to do so could comment on the proposals and return their comments to the park office. Their comments and concerns have been taken into consideration in preparation of this document.

During the 45-day review period the master plan was presented at a public meeting in Chippewa Falls on March 27, 1986. Twelve citizens attended the meeting and were in general agreement with the master plan concepts.





Acquisition Map

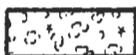
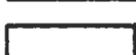
figure 2



# LAKE WISSOTA STATE PARK



**KEY:**

-  Intensive Use Area
-  No Vegetative Management, Except For Safety Or Disease Control
-  Prairie
-  Grasslands
-  Plantation

**Vegetative Management Map**

**figure 4**

# LAKE WISSOTA STATE PARK



Land Use Potential Map

figure 5

## SECTION II - SUPPORT DATA

### A. BACKGROUND INFORMATION

#### 1. Location (Figure 1)

Lake Wissota State Park is located within Anson Township, Chippewa County. It is within five miles of Chippewa Falls, 15 miles from Eau Claire, and within a 2-hour driving distance of the Twin Cities. Major highways in the area include Interstate 94, Highways 29, 124, 51, and 178. Immediate access to the park is provided by County Trunk O.

#### 2. Area History

In the mid-1800's, lands encompassing the park were owned by the Chippewa Lumber and Boom Company. By the late 1800's, unrestricted cutting, fires, and land clearing for agricultural purposes had reduced the forested area within the current park boundary to only several hundred acres. As time passed and lands previously cleared for agriculture were abandoned, more pioneer species such as jack pine and oak became established on the property and were left to grow without major impact by man until the early 1950's. Prior to state acquisition of the land, an American Legion Park existed in the southern area of the park bordering the bay which was formerly part of the Yellow River Valley. The area consisted of about 25 acres and contained facilities for picnicking and launching boats.

#### 3. Chronology of Property Establishment and Development

Lake Wissota State Park was established in 1961 when the Wisconsin Legislature enacted the Outdoor Recreation Action Program (ORAP). In the following years, as land was acquired, development began. Old farm fences and other evidence of past habitation were eliminated. Abandoned fields were planted with over 40,000 trees. By 1970, acquisition was nearly complete. In that year, the first major construction occurred, the development of a beach.

In 1971, four miles of park road, several parking lots, and a boat launching ramp were constructed. Toilet buildings, bathhouse, service building, and sewer and water projects were completed in 1972 and the park was ready for its first full season of operation. In 1973, the group campground and ballfield were completed. Other minor projects have been taken place each year with various projects such as Young Adult Conservation Corp (YACC), Comprehensive Employment Training Act (CETA), and Wisconsin Conservation Corp (WCC).

4. Past and Present Management Activities

Since the park was established in 1961, the property has been managed for camping, boating, picnicking, swimming, fishing, hiking, cross-country skiing, snowmobiling, and general environmental education and interpretive studies. Presently, Lake Wissota State Park has 1,062 acres of which 87 acres of land are developed for intensive recreational use. The majority of the park's facilities are accessible to individuals that have disabilities. The following is general information about the facilities:

Family campground (16 with electrical hookup)	81 sites, 35 acres
2 Group camping areas	capacity - 80 tents
4 Picnic/day-use areas	27.2 acres
Grills	37
Picnic tables	144
Shelters	2
Swimming beach	350 feet
Parking stalls	330
Playground equipment	34 pieces
Hiking trail	9.5 miles
Cross-country ski trail	11.5 miles
Snowmobile trail	4.75 miles
Boat launch area	1
Park roads	4.5 miles
Nature trail	1 mile
Overlook areas	1
Fishing pier	1
Improved shoreline fishing area	1
Amphitheater	1
Lighted trail system from family campground	

The average annual day-use visitation for the past five years is 175,000. Camper use has averaged 25,600 camper days per year for the same period.

There are 120 acres of prairie which are managed with one 40-acre parcel being burned each year. The park also has several hundred acres of red and white pine plantation which is managed continually by thinning and pruning periodically.

## B. RESOURCE CAPABILITIES AND INVENTORY

### 1. Geology

Lake Wissota State Park is located on the northeast end of Lake Wissota. It lies within a flat to gently rolling glaciated terrain. This is the area of older drift. The last glaciation, the Wisconsin stage, stopped just northeast of Lake Wissota. The land encompassed by the park constitutes a high, flat river terrace composed of outwashed sand and gravel. Another lower river terrace extending between this terrace and the Chippewa River is now submerged by the water of Lake Wissota. Outcroppings of weak, Precambrian sandstone are evidenced in the southwest portion of the park bordering the former valley of the Yellow River.

### 2. Soils

Soils within the property consist primarily of the Menahga series which include deep, excessively drained sandy soils which were formed in glacial outwash under coniferous forest on outwash plains and valley terraces. The surface soil is black and very dark greyish brown. It consists of loamy coarse sand and coarse sand 4 inches thick. The subsoil is dark brown to dark yellowish brown and consists of brown coarse sand 20 inches thick. The substratum is pale brown coarse sand. Slopes range from 0-45%.

The secondary soil series consists of Brukhardt soils. These consist of somewhat excessively drained soils formed in loamy deposits overlying sand and gravel which occur on outwash plains, stream terraces, and pitted moraines. The surface layer is very dark brown sandy loam 10 inches thick. The subsoil is dark brown sandy loam in the upper seven inches and dark brown loamy sand in the lower two inches. The substratum is strong brown and dark brown stratified sand and gravel. Slopes range from 0-30%.

There are approximately 20 acres of marshland which is composed of mucky soils.

### 3. Climate

The climate of Chippewa County is classified as humid continental. It is characterized by moderately long, cold winters and short summers that are warm and humid. Mean temperatures drop below freezing in mid-November and freeze-up of lakes follow soon afterward. Ice cover remains until April. The average annual precipitation is 30.5 inches. Maximum precipitation occurs in June with 4.9 inches followed by August, May, and July. Summer rainfall averages 3.48 inches per month during April through October, while winter precipitation is about 8.5 inches. Near the end of November, most of the precipitation falls as snow and accumulates throughout the winter.

#### 4. Water Resources

The park is located on the northeast end of Lake Wissota. It is a soft water drainage impoundment on the Chippewa River. Major feeder streams include the Chippewa and Yellow Rivers, Paint Creek and Stillson Creek. Lake Wissota has a surface acreage of 6,300 acres and a maximum depth of 72 feet. There is a 59-foot high water control structure and power house operated by Northern States Power Company at its outlet. The lake is the largest single body of water in Chippewa County. The most common fish species are walleye, muskellunge, northern pike, smallmouth bass, perch, bluegill, black crappie, channel catfish, bullheads, red horse, and white suckers. Other species present include largemouth bass, rockbass, pumpkinseeds, rock sturgeon, quillback, and carp.

The dam creating this flowage is located at the southwest corner of the lake approximately two miles east of the City of Chippewa Falls. The dam was completed in 1917. The shoreline of the lake has not yet stabilized. Wave cutting is active on the northeast shore resulting in high steep sandy banks. Summer fluctuations from May 1st through September are about 1 foot. However, in late winter the lake is drawn down as much as 15 feet to make storage room in the flowage for spring meltwaters.

Water quality in the vicinity of Lake Wissota State Park is typical of large impoundments on nutrient-rich warm water streams. Blooms of algae commonly occur from mid-June until late September. Nuisance conditions including algae blooms and weed growth in the beach area have been a concern. However, beach closures have not been necessary due to bacteriological contamination. No fish consumption advisories have been necessary based on past analysis of sport and rough fish for PCB's.

#### 5. Vegetative Cover (Figure 4)

The area currently within the park boundary was once covered with woodlands composed primarily of white pine, red pine, red oak, white oak, and jack pine. The best white pine grew in areas along the old Yellow and Chippewa River channels. By the late 1800's, unrestricted cutting, fires, and land claiming for agriculture reduced the forested areas within the current park boundary to only several hundred acres. Some reports also indicated that there may have been large acreages of prairie grasses on or near the site, but this was not substantiated. As time past and lands previously cleared for agriculture were abandoned, more pioneer species such as jack pine and oak became established on the property. It was left to grow without major impact by man until the early 1950's.

During the period 1958-59, the majority of the red pine was planted on old fields and in cutover areas in the center of the park as well as the north 80 and eastern edges of the current park. These stands are now reaching merchantable size. Some more recent plantings (1970's) were a mixture of red and white pine planted at fairly wide spacings which would screen the park from adjacent agricultural lands and rural residential development. The most recent trend (1978-84) has been reestablishment of hardwoods on the park such as burr oak, white birch, white ash, etc. Again, these plantings have been done at wide random spacings to break up sight lines and add diversity to the park.

Current major forest types include the following: Red (Norway) pine - 164 acres, Jack pine - 105 acres, White-red pine - 78 acres, oak - 111 acres which are composed of red, black, pin, and white oak which is dominant, 497 acres of grasslands which consist either of abandoned farm fields and grassland of managed prairie, and 107 acres of other lands including those covered by roads, trails, recreational development, and buildings. Total acreage is identified as 1,062 acres which is the acquisition goal for the property.

6. Wildlife

The park superintendent and other individuals have undertaken a wildlife survey within Lake Wissota park. A listing of fauna including amphibians, birds, mammals, and reptiles which might be encountered in the park are listed in Appendix B of this document.

7. Site Inventory

There are about 458 acres of timber land within the property. Grass lands encompass 497 acres. The remaining 107 acres are devoted to such things as campground, beach, day use area, trails, boat launch, buildings, and roads.

8. Land Use Inventory (Figure 6)

Lands within the park are classified as intensive recreation development (IRD) and extensive recreation area (ERA). The intensive recreation development will encompass approximately 250 acres upon completion of the proposed expanded family campground, enlarged group camp, recreational vehicle group camp, and establishment of the boaters, water ski pickup and delivery area. Currently, there are about 200 acres identified as intensive recreation development. The remaining lands will be classified as extensive recreation area. The Scientific Area Council has been contacted and they have not identified any sites for inclusion within the scientific area or natural area classification.

## 9. Historical and Archaeological Features

According to the State Historical Society, there is one known archaeological site of undetermined size which is located on and adjacent to the access road at the western edge of section 30, T25N, R7W. However, the area has not been surveyed for archaeological resources. Therefore, they recommend that before undertaking any ground disturbing activities in that area, the Department should consult with their office to determine whether an archaeological survey is needed.

There are no structures listed in the National Registry of Historic Places located within the park boundary.

## C. MANAGEMENT PROBLEMS

### 1. Shoreline and Bank Erosion

Due to the nature of the soils and the flowage, the shoreline and banks along Lake Wissota within the park are highly susceptible to erosion. Some erosion is caused by water action associated with fluctuating water levels and high winds. Other erosion is caused by park users moving up and down the banks to gain access to the water's edge.

There is little that can be done to guard against erosion caused by fluctuating water levels and wave action other than riprap or somehow armor the entire bank along the lake shore. This is not economically feasible, however, erosion created or increased by human action can be somewhat controlled. A combination of structures such as stairs and riprapping, terracing and subsequent planting of vegetation coupled with user education has been and will continue to be used to decrease and hopefully eliminate user generated erosion. In addition, a combination of fencing and signing has been and will be used along the Moccasin Trail which parallels the shoreline rim. Finally, one of two additional stairways will be constructed to provide access to the water's edge from the upland park area, thereby eliminating the need to climb up and down the bank.

### 2. Drain Field Malfunction

In 1982, the drain field system was replaced in one of the campground loops at a cost of approximately \$6,000. The drain fields in this soil type have a life expectancy of 10-15 years. The other campground facility may be on the verge of malfunction due to age and soil conditions. Therefore, we anticipate its replacement within the next few years. When the system is deteriorating, there is always the need for more frequent pumping, sometimes three times a year, which could add \$600 or more to the yearly septic maintenance cost.

The failure of the second campground drain field system is of real concern. There is insufficient area near this facility for a new drain field. Therefore, it may be necessary to eliminate up to three campsites, two of which have electricity. This would have a negative impact on park users who want the campsites, and also on revenue generated through camping fees. This may have an impact on the need for developing additional campsites as called for under Phase II of the development scheme.

### 3. Control of Access to the Park

Lake Wissota, as noted earlier, is a one-entrance property. However, there are some problems associated with visitor contact created by the layout of the park entrance visitor station and entrance road complex. Basically, people can enter the park and bypass the contact station by simply driving through the parking lot which was sited across the entrance road from the contact station. The parking lot will be redesigned so that persons entering the park or parking in the lot have to pass by or enter the contact station to obtain information or register for a campsite.

A second problem associated with this facility is a need to replace the sliding glass door with an alcove which would give park personnel closer contact with entering vehicles and thereby eliminate the need for leaving the building to transact business with the park visitor. Based on experiences at other state parks with such facilities, this modification would improve contact operations dramatically.

### 4. Concession Operations

Past Department audits have determined that concession operations are not contributing many dollars to the general park operations account. One possible way the concession can be made more profitable is to enlarge the size of the concession stand within the bathhouse complex. Previous concession operators have stated that the stand is too small, has little or no storage space, and also needs additional room so customers can walk into the stand and examine various items that are for sale. Therefore, it is recommended that another 10-12 feet be added to the front of the existing stand in the area of the walkway between the stand and the change room-rest rooms.

### D. RECREATIONAL NEEDS AND JUSTIFICATIONS

The 1981 State Outdoor Recreation Plan for Region IV, which includes Clark, Eau Claire, Dunn, St. Croix, Polk, Barron, and Chippewa Counties, notes that there is a need for developed campsites, primitive campsites, and pleasure walking trails. The study further indicates that there is no need for additional cross-country ski trails or snowmobile trails.

The Chippewa County Community Outdoor Recreation Plan of 1977 indicates no need for developed campsites through the year 1990. However, it did indicate a need for an additional 259 picnic tables by 1990. Swimming area supply meets present and future needs. Additional cross-country ski trails are identified as being needed, but no specific link figures were provided. Because of the age (1977) of this plan, its validity and use for determining needs at Lake Wissota are somewhat questioned.

Based on the eight criteria contained within A Guide to Help Determine Needs and Priorities for Campground Development prepared by the Department, Lake Wissota State Park scores 64 to 67 in the rating system. This would indicate fair to good potential for expansion of the campground. The existing campground scored quite high (9-10 points in the rating) in the time of year of use, revenue produced, and cost to manage. It also received a 9 rating in the recorded number of turnaways with over 50 on weekdays and over 75 on weekends. The number of present sites compared to the desired optimum (75-150) rated an 8. The occupancy rate of 70% as well as the number of campsites in the area (277) both rated a 7. Existing camper use pressure which is the total annual camper days available divided by the number of sites had the lowest rating at 6. These eight criteria should be closely evaluated in the upcoming years to determine if the total score will increase to the point where future campground expansion is justified. According to the guidelines "scores in the range of 68-80 would appear definitely to have potential "... for campground expansion."

#### E. ALTERNATIVES

##### 1. No additional development

This alternative would provide for no further development. The Department would merely retain and manage the existing natural and man-made resources and recreational facilities. This alternative is not desirable since the property was acquired for recreational purposes in order to meet the needs as identified on a local, regional, and statewide basis. Since the property is at or near maximum user density in some of its day use and camping facilities, the lack of additional development could lead to safety problems, undesirable user experience, and degradation of the resource.

##### 2. Moderate additional development on existing state owned land.

It is recommended that the property remain classified as a state park. This would provide for a full complement of recreational facilities, as well as provide for the protection and preservation of the natural environment. It is anticipated that use will increase 10-15% during the next 10-year period following approval of the master plan and subsequent development of new facilities.

Recreational facilities to be provided include approximately 70 additional family campsites, primitive walk-in campsites, and an RV group campsite as well as group camp expansion. Expanded day-use facilities are also proposed. Items contained in this category are: expanded picnic facilities, additional shelters, upgrading of existing trails and trailhead development, ski trail warming structure, additional electrification of existing campsites in the family campground, redevelopment of the contact station area, and increased emphasis of handicapped accessibility.

Nature interpretation and education will be stressed on the property and therefore, facilities such as a nature center are proposed in conjunction with the existing amphitheater and self-guided nature trails. Vegetative management will include continuing prairie restoration and maintenance, landscape planting in the intensive use areas, and extensive area planting. Other actions will include erosion control and bank stabilization along the Lake Wissota shoreline. In addition, minor renovation of existing day-use areas will be implemented.

The snowmobile trail, which serves as a connector to the well established county trail system, will be continued until such time as an alternate route might be established.

All areas proposed for development will be examined for the presence of endangered and/or threatened animals and plants. If such species are found, development will be suspended until the District Endangered and Non-Game Species Coordinator is consulted, the site evaluated, and appropriate protective measures taken. In addition, prior to any major ground disturbing activities within the park, the Department will consult the State Historical Society to determine whether archaeological or historical testing is warranted.

3. Additional large scale development on lands within the park boundary.

This alternative would entail the development of additional day use areas, trails, ball fields, horseshoe pits, hard surfaced ball court areas, and other urban type park facilities. Even though the park is located near a metropolitan area, current use and projected increases do not warrant greater expansion at this time.

APPENDIX A -- List of Flora

Common Name	Scientific Name	Common Name	Scientific Name
Agrimonies	<i>Agrimonia sp.</i>	Cherry, Pin	<i>Prunus pennsylvanica</i>
Alder, Speckled	<i>Alnus rugosa</i>	Cherry, Virginia Ground	<i>Physalis virginiana</i>
Alfalfa	<i>Medicago sativa</i>	Cinquefoil, Common	<i>Potentilla simplex</i>
Almroot	<i>Heuchera americana</i>	Cinquefoil, Fruited Rough	<i>Potentilla recta</i>
Alyssum, Hoary	<i>Berteroa incana</i>	Cinquefoil, Tall	<i>Potentilla arguta</i>
American Mountain Ash	<i>Sorbus americana</i>	Cinquefoil, Rough	<i>Potentilla norvegica</i>
Anemone, Canada	<i>Anemone canadensis</i>	Clearweed	<i>Pilea pumila</i>
Anemone, Wood	<i>Anemone quinquefolia</i>	Cleavers	<i>Galium aparine</i>
Angelica	<i>Angelica atropurpurea</i>	Clintonia	<i>Clintonia borealis</i>
Apple, Common	<i>Malus sp.</i>	Clover, Alsike	<i>Trifolium hybridum</i>
Arrowhead, Broad-leaved	<i>Sagittaria latifolia</i>	Clover, Hop	<i>Trifolium agrarium</i>
Arrowwood, Downy	<i>Viburnum rafinesquianum</i>	Clover, Low Hop	<i>Trifolium procumbens</i>
Arrowwood, Northern	<i>Viburnum recognitum</i>	Clover, Prairie	<i>Petalostemum purpureum</i>
Artichoke, Jerusalem	<i>Helianthus tuberosus</i>	Clover, Prairie Bush	<i>Lespedeza capitata</i>
Ash, Black	<i>Fraxinus nigra</i>	Clover, Rabbit-Foot	<i>Trifolium arvense</i>
Ash, Green	<i>Fraxinus pennsylvanica</i>	Clover, Red	<i>Trifolium pratense</i>
Ash, Prickly	<i>Xanthoxylum americanum</i>	Clover, White	<i>Trifolium repens</i>
Ash, White	<i>Fraxinus americana</i>	Clover, White Sweet	<i>Melilotus alba</i>
Asparagus, Wild	<i>Asparagus officinalis</i>	Clover, Yellow Sweet	<i>Melilotus officinalis</i>
Aspen, Large Tooth	<i>Populus grandidentata</i>	Columbine	<i>Apocynum androsaemifolium</i>
Aspen, Quaking	<i>Populus tremuloides</i>	Coneflower, Grey-headed	<i>Ratibida pinnata</i>
Aster, Flat-Topped White	<i>Aster umbellatus</i>	Coneflower, Purple	<i>Brauneria purpurea</i>
Aster, Large-Leaved	<i>Aster macrophyllus</i>	Coneflower, Yellow	<i>Rudbeckia lacinata</i>
Aster, Lowries	<i>Aster lowrieanus</i>	Coreopsis	<i>Coreopsis palmata</i>
Aster, Purple Stemmed	<i>Aster puniceus</i>	Cottonwood, Eastern	<i>Populus deltoides</i>
Avens, Long Plumed Purple	<i>Geum triflorum</i>	Crabgrass	<i>Digitaria sanguinalis</i>
Baneberry, Red	<i>Actaea rubra</i>	Cranberry, Highbush	<i>Viburnum trilobum</i>
Basswood, American	<i>Tilia americana</i>	Creeper, Virginia	<i>Parthenocissus quinquefolia</i>
Bedstraw, Northern	<i>Galium, boreale</i>	Cress, Early Winter	<i>Barbarea verna</i>
Bedstraw, Rough	<i>Galium asprellum</i>	Cress, Rock	<i>Arbasis lyrata</i>
Beggar Ticks	<i>Bidens frondosa</i>	Cress, Water	<i>Nasturtium officinale</i>
Bellflower	<i>Campanula aparanoides</i>	Cress, Winter	<i>Barbarea vulgaris</i>
Bellwort, Sessile	<i>Uvularia sessilifolia</i>	Cress, Yellow	<i>Rorippa palustris</i>
Bergamot, Wild	<i>Monarda fistulosa</i>	Cucumber, Wild	<i>Echinocystis lobata</i>
Bindweed, Black	<i>Polygonum convolvulus</i>	Culvers, Root	<i>Veronicastrum virginicum</i>
Bindweed, Field	<i>Convolvulus arvensis</i>	Currant, Skunk	<i>Ribes glandulosum</i>
Bindweed, Hedge	<i>Convolvulus sepium</i>	Daisy, Ox-Eye	<i>Chrysanthemum leucanthemum</i>
Bindweed, Upright	<i>Convolvulus spithameus</i>	Dandelion, Common	<i>Taraxacum officinale</i>
Birch, Paper	<i>Betula papyrifera</i>	Dewberry	<i>Rubus sp.</i>
Birch, Yellow	<i>Betula alleghaniensis</i>	Dogbane, Spreading	<i>Apocynum androsaemifolium</i>
Bittersweet, American	<i>Celastrus scandens</i>	Dock Curled	<i>Rumex Crispus</i>
Blackberries	<i>Rubus sp.</i>	Dodder	<i>Cuscuta gronovii</i>
Black-eyed Susan	<i>Rudbeckia hirta</i>	Dogwood, Alternate Leaved	<i>Cornus alternifolia</i>
Blacknot	<i>Dibotryan-morbosum</i>	Dogwood, Gray	<i>Cornus racemosa</i>
Bladderpod, Indigo	<i>Baptisia leuchophaea</i>	Dogwood, Red-Osier	<i>Cornus stolonifera</i>
Blazing Star Prairie	<i>Liatris pycnostachya</i>	Dogwood, Round Leaved	<i>Cornus rugosa</i>
Blazing Star, Rough	<i>Liatris aspera</i>	Dragonhead, False	<i>Physostegia virginiana</i>
Blister Rust, White Pine	<i>Cronartium ribicola</i>	Duckweed, Lesser	<i>Lemna minor</i>
Blueberry, Highbush	<i>Vaccinium corymbosum</i>	Earthstar	<i>Geaster</i>
Blueberry, Velvet Leaved	<i>Vaccinium myrtilloides</i>	Elder, Black-Berried	<i>Sambucus canadensis</i>
Catchfly, Forked	<i>Silene dichotoma</i>	Elder, Red-Berried	<i>Sambucus pubens</i>
Catnip	<i>Nepeta cataria</i>	Elm, American	<i>Ulmus americana</i>
Cattail	<i>Typha latifolia</i>	Elm, Chinese	<i>Ulmus parvifolia</i>
Cedar, Red Eastern	<i>Juniperus virginiana</i>	Elm, Red	<i>Ulmus rubra</i>
Cedar, White	<i>Thuja occidentalis</i>	Everlasting, Pearly	<i>Anaphalis margaritacea</i>
Cheeses, Common Mallow	<i>Malva neglecta</i>	Everlasting, Sweet	<i>Gnaphalium obtusifolium</i>
Cherry, Black	<i>Prunus serotina</i>	Fern, Bracken	<i>Pteridium aquilinum</i>
Cherry, Choke	<i>Prunus virginiana</i>	Fern, Crested	<i>Dryopteris cristata</i>
Cherry, Ground	<i>Physalis heterophylla</i>	Fern, Cinnamon	<i>Osmunda cinnamomea</i>

Common Name	Scientific Name	Common Name	Scientific Name
Hackberry	<i>Celtis occidentalis</i>	Polypody, Common	<i>Polypodium vulgose</i>
Harebells	<i>Campanula rotundifolia</i>	Woodfern, Evergreen	<i>Dryopteris spinulosa var intermedia</i>
Hawksbeard, Narrow-Leaved	<i>Crepos tectorum</i>	Fern, Fragile	<i>Cystopteris fragilis (L)</i>
Hawkweed, Canada	<i>Hieracium canadense</i>	Fern, Roberts	<i>Gymnocarpium robertianum</i>
Hawkweed, Hairy	<i>Hieracium longipilum</i>	Fern, Interrupted	<i>Osmunda claytoniana</i>
Hawkweed, Orange	<i>Hieracium aurantiacum</i>	Fern, Long Beech	<i>Thelypteris phyegopteris (L)</i>
Hawthorn	<i>Crataegus sp.</i>	Fern, Lady	<i>Athyrium felix-femina</i>
Hazelnut, American	<i>Corylus americana</i>	Fern, Marsh	<i>Thelypteris palustris</i>
Hazelnut, Beaked	<i>Corylus cornuta</i>	Fern, Maidenhair	<i>Adiantum pedatum</i>
Hickory, Bitternut	<i>Carya cordiformis</i>	Fern, Oak	<i>Gymnocarpium dryopteris (L)</i>
Heal-all	<i>Prunella vulgaris</i>	Fern, Ostrich	<i>Matteuccia struthiopteris (L)</i>
Hemlock, Bulb-Bearing	<i>Cicuta bulbifera</i>	Fern, Royal	<i>Osmunda regalis</i>
Water		Fern, Spinulose	<i>Dryopteris spinulosa</i>
Hemlock, Water	<i>Cicuta maculata</i>	Fern, Sensitive	<i>Onoclea sensibilis</i>
Hepatica, Round Lobed	<i>Hepatica americana</i>	Fern, Virginia chain	<i>Woodwardia virginica</i>
Hepatica, Sharp-Lobed	<i>Hepatica acutiloba</i>	Figwort	<i>Scrophularia lanceolata</i>
Holly, Mountain	<i>Nemopanthus mucronatus</i>	Fireweed	<i>Epilobium angustifolium</i>
Honeysuckle, Bush	<i>Diervilla lonicera</i>	Fleabane, Daisy	<i>Erigeron strigosus</i>
Honeysuckle, Mountain	<i>Lonicera dioica</i>	Forget-Me-Not, Small	<i>Myosotis laxa</i>
Honeysuckle, Northern Bush	<i>Diervilla lonicera</i>	Four O' Clock, Wild	<i>Oxybaphus nyctagineus</i>
Honeysuckle, Tartarian	<i>Lonicera tartarica</i>	Frostweed	<i>Helianthemum canadense</i>
Hophornbean (Ironwood)	<i>Ostrya virginiana</i>	Gentian, Closed	<i>Gentiana andrewsii</i>
Eastern		Geranium, Wild	<i>Geranium macalutum</i>
Horehound, Cut Leaved	<i>Lycopus americanus</i>	Germander	<i>Teucrium canadense</i>
Water		Gill-Over-The-Ground	<i>Glechoma hederacea</i>
Hornbeam, American	<i>Carpinus caroliniana</i>	Ginger, Wild	<i>Asarum canadense</i>
Horsemint	<i>Monarda punctata</i>	Ginseng, Dwarf	<i>Panax trifolium</i>
Horseradish	<i>Armoracea lapathifolia</i>	Goldenrod, Canada	<i>Solidago canadensis</i>
Horsetail, Field	<i>Equisetum arvens</i>	Goldenrod, Early	<i>Solidago juncea</i>
Horseweed	<i>Erigeron canadensis</i>	Goldenrod, Gray	<i>Solidago nemoralis</i>
Hound's tongue	<i>Cynoglossum officinale</i>	Goldenrod, Lance-Leaved	<i>Solidago graminifolia</i>
Hyssop, Yellow Giant	<i>Agastache neptoides</i>	Goldenrod, Slender Fragrant	<i>Solidago tenuifolia</i>
Indian Pipe	<i>Monotropa uniflora</i>	Goldthread	<i>Coptis trifolia</i>
Indigobush	<i>Amorpha fruticosa</i>	Goatsbeard	<i>Tragopogon pratensis</i>
Innocense, Bluets	<i>Houstonia coerulea</i>	Gooseberry	<i>Ribes missouriensis</i>
Iris, Blue Flag	<i>Iris versicolor</i>	Gooseberry, Smooth	<i>Ribes hirtellum</i>
Ironweed, Western	<i>Vernonia fascicalata</i>	Goosefoot, Maple-leaved	<i>Chenopodium hybridum</i>
Ivy, Poison	<i>Rhus radicans</i>	Grape, Riverbank	<i>Vitis riparia</i>
Jack-in-the-Pulpit	<i>Arisaema atrorubens</i>	Grass, Barnyard	<i>Echinochloa crus-galli</i>
Jewelweed	<i>Impatiens capensis</i>	Grass, Blue-Eyed	<i>Sisyrinchium montanum</i>
Juneberry	<i>Amelanchier laevis</i>	Grass, Blue-Joint	<i>Andropogon furcatus</i>
Joe Pye Weed, Spotted	<i>Eupatorium maculatum</i>	Grass, Canada Bluegrass	<i>Poa annua</i>
Knapweed, Spotted	<i>Centaurea maculosa</i>	Grass, Foxtail	<i>Setaria verticillata</i>
Lady Slipper, Yellow	<i>Cypripedium reginae</i>	Grass, Grama	<i>Bouteloua curtipenula</i>
Lambs Quarters	<i>Chenopodium albun</i>	Grass, Indian	<i>Sorghastrum nutans</i>
Leadplant	<i>Amorpha canescens</i>	Grass, Kentucky Blue	<i>Poa pratensis</i>
Lettuce, Prickly	<i>Lactuca scariola</i>	Grass, Lovegrass	<i>Eragrostis capillaris</i>
Lettuce, White	<i>Prenanthes alba</i>	Grass, Manna	<i>Glyceria striata</i>
Lichen, Crustose	<i>Pamela</i>	Grass, Orchard	<i>Dactylis glomerata</i>
Lichen, Fruticose	<i>Cladonia</i>	Grass, Panic	<i>Panicum linearfolium</i>
Lichen, Foliose	<i>Physcia</i>	Grass, Pepper	<i>Lepidium virginicum</i>
Lilac	<i>Syringa vulgaris</i>	Grass, Purple Love	<i>Eragrostis spectabilis</i>
Lily, Day	<i>Hemerocallis fulva</i>	Grass, Quack	<i>Agropyron repens</i>
Lily of the Valley, Wild	<i>Maianthemum canadense</i>	Grass, Reed Canary	<i>Phalaris arundinacea</i>
Lily, Tiger	<i>Lilium tigrinum</i>	Grass, Switch	<i>Panicum virgatum</i>
Lily, Turk's Cap	<i>Lilium superbun</i>	Grass, Three-Awn	<i>Aristida sp.</i>
Lobelia, Nuttalls	<i>Lobelia nuttallii</i>	Grass, Timothy	<i>Phleum pratense</i>
Locust, Black	<i>Robinia pseudoacacia</i>	Grass, Witch	<i>Panicum capillare</i>
Locust, Honey	<i>Gledistsia triacanthos</i>	Groundpine	<i>Lycopodium complanatum</i>

Common Name	Scientific Name
Loosestrife	<i>Lysimachia ciliata</i>
Loosestrife, Lance-Leaved	<i>Lysimachia lanceolata</i>
Loosestrife, Whorled	<i>Lysimachia quadrifolia</i>
Lupine	<i>Lupinus perennis</i>
Lychnis, Evening	<i>Lychnis alba</i>
Maple, Red	<i>Acer rubrum</i>
Maple, Silver	<i>Acer saccharinum</i>
Maple, Sugar	<i>Acer saccharum</i>
Marigold, Bur	<i>Bidens cernua</i>
Marsh, Marigold	<i>Caltha palustris</i>
Meadow-Rue	<i>Thalictrum dasycarpum</i>
Meadow-Rue, Early	<i>Thalictrum dioicum</i>
Meadowsweet	<i>Spiraea alba</i>
Milkweed, Common	<i>Asclepias syriaca</i>
Milkweed, Poke	<i>Asclepias exaltata</i>
Milkweed, Swamp	<i>Asclepias incarnata</i>
Milkweed, Whorled	<i>Asclepias vertic</i>
Milkwort, Racemed	<i>Polygala polygama</i>
Mint, Wild	<i>Mentha arvensis</i>
Miterwort	<i>Mitella diphylla</i>
Mocassin Flower	<i>Cypripedium acaule</i>
Monkey Flower, Square Stemmed	<i>Mimulus ringens</i>
Morning Glory, Wild	<i>Convolvulus sepium</i>
Moss, Club	<i>Lycopodium clavatum</i>
Motherwort	<i>Leonurus cardiaca</i>
Mugwort, Saw Leaf	<i>Artemesia serrata</i>
Mullein, Common	<i>Verbascum thapsis</i>
Mustard, Field	<i>Brassica rapa</i>
Nannyberry	<i>Viburnum lentage</i>
Nettle, False	<i>Boehmeria cylindrica</i>
Nettle-Hemp	<i>Galeopsis tetrahit</i>
Nettle, Rough Hedge	<i>Stachys tennifolia</i>
Nettle, Stinging	<i>Urtica dioica</i>
Nettle, Wood	<i>Laportea canadensis</i>
Nightshade	<i>Solanum dulcamara</i>
Nightshade, Common	<i>Solanum nigrum</i>
Nightshade, Enchanters	<i>Circala quadrisulcata</i>
Ninebark	<i>Physocarpus opulifolius</i>
Northern White Cedar	<i>Thuja occidentalis</i>
Nut, Ground	<i>Apios americana</i>
Oak, Black	<i>Quercus velutina</i>
Oak, Burr	<i>Quercus macrocarpa</i>
Oak, Northern Pin	<i>Quercus ellipsoidalis</i>
Oak, Northern Red Oak	<i>Quercus rubra</i>
Oak, White	<i>Quercus alba</i>
Orchis, Small Purple Fringed	<i>Habenaria psycodes</i>
Ox-Eye	<i>Heliopsis Helianthoides</i>
Parasol, Mushroom	<i>Lepiota procera</i>
Partridgeberry	<i>Mitchella repens</i>
Pasqueflower	<i>Anemone patens</i>
Pea Tree, Siberian	<i>Caragana arborescens</i>
Pea, Wild	<i>Lathyrus venosus var. intosus</i>
Peanut, Hog	<i>Amphicarpa bracteata</i>
Pennyroyal, Mock	<i>Hedeoma hispida</i>
Pennywort, Water	<i>Hydrocotyle americana</i>
Phlox, Downy	<i>Phlox pilosa</i>
Pine, Ground	<i>Lycopodium complanatum</i>

Common Name	Scientific Name
Pine, Ground	<i>Lycopodium obscurum</i>
Pine, Jack	<i>Pinus bandsiana</i>
Pine, Scotch	<i>Pinus sylvestris</i>
Pine, Red	<i>Pinus resinosa</i>
Pine, White	<i>Pinus strobus</i>
Pineapple-Weed	<i>Matriceria matricariodes</i>
Pink, Deptford	<i>Dianthus america</i>
Pipsissewa	<i>Chimaphila umbellata</i>
Plantain	<i>Plantago purshii</i>
Plantain, Common	<i>Plantago major</i>
Plantain, Downy Rattlesnake	<i>Goodyera pubescens</i>
Plantain, Seaside	<i>Plantago juncooides</i>
Plum, American	<i>Prunus americana</i>
Poplar, Lombardy	<i>Populus nigra var. italica</i>
Primrose, Evening	<i>Oenothera biennis</i>
Puccoon, Hairy	<i>Lithospermum croceum</i>
Puccoon, Hoary	<i>Lithospermum canescens</i>
Purslane-Milk	<i>Euphorbia supina</i>
Pussytoes, Field	<i>Antennaria neglecta</i>
Pussytoes, Plantain-leaved	<i>Antennaria plantaginifolia</i>
Radish, Wild	<i>Raphanus raphanistrum</i>
Ragweed, Common	<i>Ambrosia artemisiafolia</i>
Ragweed, Giant	<i>Ambrosia trifida</i>
Raspberry, Black Cap	<i>Rubus occidentalis</i>
Raspberry, Red	<i>Rubus idaeus</i>
Rattlesnake Master	<i>Eryngium yuccafolium</i>
Redtop	<i>Agrostis gigantea</i>
Rose, Pasture	<i>Rosa carolina</i>
Rose, Twisted-Stalk	<i>Streptopus roseus</i>
Rush	<i>Juncus interior</i>
Rush, Scouring	<i>Equisetum hyemale</i>
Rush, Soft	<i>Juncus effusus</i>
Rye, Wild	<i>Elymus canadensis</i>
Sage, White	<i>Artemesia ludoviciana</i>
Sarsaparilla, Wild	<i>Aralia nudicaulis</i>
Scarlet Cut Fungi	<i>Pezia coccinea</i>
Sedge	<i>Carex rostrata</i>
Sedge	<i>Carex stipata</i>
Sedge	<i>Carex torta</i>
Sedge	<i>Cyperus filiculmis</i>
Shepherd's Purse	<i>Capsella bursa-pastoris</i>
Shinleaf	<i>Pyrola elliptica</i>
Skullcap, Common	<i>Scutellaria epilabiifolia</i>
Skullcap, Mad Dog	<i>Scutellaria lateriflora</i>
Smartweed, Pink	<i>Polygonum lapathifolium</i>
Snakeroot, Black	<i>Sanicula marilandica</i>
Snakeroot, White	<i>Eupatorium rugosum</i>
Sneezeweed	<i>Helenium autumnale</i>
Solomon's Seal	<i>Polygonatum biflorum</i>
Solomon's Seal Great	<i>Polygonatum canaliculatum</i>
Solomon's Seal False	<i>Smilacina racemosa</i>
Sorrel, Sheep	<i>Rumex acetosella acetosella</i>
Sorrel, Creeping Wood	<i>Oxalis corniculata</i>
Sorrel, Yellow Wood	<i>Oxalis stricta</i>
Sorrel, Large Yellow Wood	<i>Oxalis grandis</i>
Sphagnum Moss	<i>Sphagnum capillaceum</i>
Spiderwort	<i>Tradescantia ohiensis</i>
Spikenard	<i>Aralia racemosa</i>

Common Name	Scientific Name
Spring-Beauty	<i>Claytonia virginica</i>
Spruce, Norway	<i>Picea abies</i>
Spruce, White	<i>Picea glauca</i>
Spurge, Flowering	<i>Euphorbia corollata</i>
Starflower	<i>Trientalis borealis</i>
Stickseed	<i>Hackelia virginiana</i>
St. Johnswort, Common	<i>Hypericum perforatum</i>
St. Johnswort, Great	<i>Hypericum pyramidatum</i>
St. Johnswort, Marsh	<i>Hypericum virginicum</i>
Stonecrop, Ditch	<i>Penthorum sedoides</i>
Strawberry, Common	<i>Fragaria virginiana</i>
Sumac, Fragrant	<i>Rhus aromatica</i>
Sumac, Staghorn	<i>Rhus typhina</i>
Sunflower, Common	<i>Helianthus annuus</i>
Sunflower, Stiff Haired	<i>Helianthus hirsutus</i>
Sunflower, Western	<i>Helianthus occidentalis</i>
Sweetflag	<i>Acorus calamus</i>
Tamarack	<i>Larix laricina</i>
Tea, New Jersey	<i>Ceanothus americanus</i>
Thimbleweed	<i>Anemone virginiana</i>
Tearthumb, Arrow-leaved	<i>Polygonum sagittatum</i>
Thistle, Canada	<i>Cirsium arvense</i>
Thistle, Sow Common	<i>Sonchus olerseus</i>
Thistle, Swamp	<i>Cirsium muticum</i>
Tick-Trefoil, Pointed- Leaved	<i>Desmodium glutinosum</i>
Tobacco, Indian	<i>Lobelia inflata</i>
Tomata, Strawberry	<i>Physalis pruinosa</i>
Trillium, Nodding	<i>Trillium cernuum</i>
Trillium, White	<i>Trillium grandiflorum</i>
Turtlehead	<i>Chelone glabra</i>
Valerian, Greek	<i>Polemonia reptans</i>
Velvet Leaf	<i>Abutilon theophrasti</i>
Vervain, Blue	<i>Verbena hastata</i>
Vervain, Hoary	<i>Verbena stricta</i>
Violet, Dog	<i>Viola conspersa</i>
Violet, Birdfoot	<i>Viola pedata</i>
Violet, Marsh Blue	<i>Viola cucullata</i>
Violet, Sweet White	<i>Viola blanda</i>

APPENDIX B  
Fauna Species List

A. Amphibians

Blue-Spotted Salamander  
Bull Frog  
Chorus Frog  
Common American Toad  
Gray Tree Frog  
Jefferson Salamander\*  
Leopard Frog  
Mudpuppy  
Newt  
Pickeral Frog  
Red-backed Salamander  
Spring Peeper  
Cricket Frog  
Green Frog  
Wood Frog  
Tiger salamander

\*Encounter might be anticipated.

B. Mammals

Badger  
Beaver  
Cottontail Rabbit  
Eastern Chipmunk  
Ermine  
Flying Squirrel  
Gray Squirrel  
Masked Shrew  
Mink  
Muskrat  
Pocket Gopher  
Pygmy Shrew  
Raccoon  
Red-backed vole  
Red Fox  
Red Squirrel  
Short-Tailed Shrew  
Showshoe Hare  
Striped Skunk  
Thirteen-Lined Ground Squirrel  
White-Footed Mouse  
Whitetail Deer  
Woodchuck  
Woodland Deer Mouse  
Otter  
Starnosed Mole  
Meadow Vole  
Brown Bat  
Meadow jumping mouse  
Fox squirrels  
House mouse

D. Reptiles

Brown Snake  
Common Garter Snake  
Common Water Snake\*  
Eastern Hognose Snake  
Eastern Ringneck Snake  
Five-Lined Skink  
Fox Snake\*  
Painted Turtle  
Red-Bellied Snake  
Smooth Green Snake  
Snapping Turtle  
Softshell Turtle  
False map turtle

\*Encounter might be anticipated.

# BIRDS OF LAKE WISSOTA STATE PARK

Lake Wissota State Park, established in 1961 and administered by the Department of Natural Resources, covers 1,062 acres along the Chippewa and Yellow Rivers, which form Lake Wissota. Within the park's boundaries are found five major environments. The varied environments of lake, pine forest, mixed hardwood forest, marsh and prairie are responsible for the goodly number of birds that nest or migrate through the park each year. Some 200 species are regular visitors while another 34 species are irregular migrants.

The following legend indicates the relative abundance for each species in each season.

## Status

**Sp** — March-May

**Su** — June-August

**F** — Sept.-Nov.

**W** — Dec.-Feb.

## Abundance

**a** — abundant, seen in large no. and regularly

**c** — common, seen in fewer no. but regularly

**u** — uncommon, a number of sightings spread out

**r** — rare, a few each year

**o** — occasional, a few but not each year

## Habitat

**M** — Marsh

**W** — Water — lakes and rivers

**P** — Prairie or open areas

**F** — Forested

**E** — Edges, brush thickets

Checklist compiled by Norman Pazderski, Aug. 26, 1982

	H	Sp	Su	F	W
Common Loon	W	c	u	c	
Red-necked Grebe	W	o	o		
Horned Grebe	W	c		u	
Pied-billed Grebe	W	c	u	c	
Double-crested Cormorant	W,F	u	u	u	
Great Blue Heron	M	u	u	u	
Green-backed Heron (Green Heron)	M	u	u	u	
American Bittern	M	r	r		
Tundra Swan (Whistling Swan)	W	c		c	
Canada Goose	W	a	o	a	
Snow Goose	W	u		u	
Mallard	W	a	c	c	u
American Black Duck	W	u	u	c	r
Gadwall	W	c	o	c	
Northern Pintail	W	u	o	c	
American Wigeon	W	u	o	u	
Green-winged Teal	W	c	u	c	
Blue-winged Teal	W	c	u	c	
Northern Shoveler	W	c	u	c	
Wood Duck	W	c	c	c	
Redhead	W	u	o	u	
Canvasback	W	u	o	u	
Ring-necked Duck	W	c	u	c	
Greater Scaup	W	c	o	c	
Lesser Scaup	W	a	o	a	
Common Goldeneye	W	a	c	c	u
Bufflehead	W	c	u	c	
Ruddy Duck	W	c	o	c	
Black Scoter	W			o	
Surf Scoter	W			o	
Hooded Merganser	W	c	o	c	
Common Merganser	W	c		c	
Red-breasted Merganser	W	c		c	
Turkey Vulture	P	u	u	u	
Northern Goshawk	P	u		u	o
Sharp-shinned Hawk	F	c	u	u	u
Cooper's Hawk	F	c	u	c	u
Red-tailed Hawk	P,F	c	c	c	c
Red-shouldered Hawk	M	r	r	r	r
Swainson's Hawk	P	o	o		
Broad-winged Hawk	F	c	c	c	
Rough-legged Hawk	P,F	c	r	u	c
Northern Harrier	P	c	c	c	o
Bald Eagle	W,P	u	o	u	u
Osprey	W	u	r	u	

	H	Sp	Su	F	W
Warbling Vireo	E,F	c	c	c	
Black-and-white Warbler	F	c	u	c	
Blue-winged Warbler	E,P	r	r		
Golden-winged Warbler	E,P	u	u	r	
Tennessee Warbler	E,F	c		c	
Orange-crowned Warbler	E,F	u		u	
Nashville Warbler	E,F	c	u	c	
Northern Parula	F	o		o	
Yellow Warbler	M,F	u	u	u	
Magnolia Warbler	E,F	u		u	
Cape May Warbler	E,F	u		u	
Black-throated Blue Warbler	E,F	o			
Yellow-rumped Warbler	E,F	a	u	a	
Black-throated Green Warbler	E,F	u		u	
Cerulean Warbler	E,F	o			
Chestnut-sided Warbler	E,F	u	u	u	
Bay-breasted Warbler	E,F	u		u	
Blackpoll Warbler	E,F	u		u	
Blackburnian Warbler	E,F	u		u	
Pine Warbler	F	c	u	u	
Palm Warbler	F	c		c	
Ovenbird	F	c	u	u	
Northern Waterthrush	M	u	r	u	
Louisiana Waterthrush	M	r	r		
Connecticut Warbler	M,E	u		u	
Mourning Warbler	M,E	u		u	
Common Yellowthroat	M,E	c	c	c	
Wilson's Warbler	M,E	c	u	u	
Canada Warbler	E,F	o		o	
American Redstart	F	c	c	c	
House Sparrow	—	u	u	u	u
Bobolink	P	u	u	u	
Eastern Meadowlark	P	a	a	a	
Western Meadowlark	P	a	a	a	
Red-winged Blackbird	M,W	a	a	a	
Orchard Oriole	E,F	o	o		
Northern Oriole	E,F	c	c	u	
Rusty Blackbird	M,E	u	u	u	r
Brewer' Blackbird	M,E	u	u	u	r
Common Grackle	M,E	a	c	a	u
Brown-headed Cowbird	E,F	c	c	u	
Scarlet Tanager	F	r	r	r	
Northern Cardinal	F	c	c	c	u
Rose-breasted Grosbeak	F	c	c	c	
Pine Grosbeak	F	u			u
Indigo Bunting	E,F	u	c	u	

	H	Sp	Su	F	W
Dickcissel	P	o	o		
Evening Grosbeak	F	c	u	u	c
Purple Finch	F	u	r	r	u
Common Redpoll	E,F	c			c
Hoary Redpoll	E,F	o			o
Pine Siskin	F	c	u	c	c
American Goldfinch	M,F	a	c	c	u
Red Crossbill	F	u	o		u
White-winged Crossbill	F	u			u
Rufous-sided Towhee	F	c	u	u	
Savannah Sparrow	P	c	c	c	
Grasshopper Sparrow	P	c	c	u	
Henslow's Sparrow	P,M	u	u	u	
Vesper Sparrow	P	c	c	c	
Lark Sparrow	P	o	o		
Dark-eyed Junco	F,E	a	u	c	c
American Tree Sparrow	E	c	u	c	c
Chipping Sparrow	E,F	c	c	c	u
Clay-colored Sparrow	P	c	c	c	
Field Sparrow	P,E	c	c	c	
Harris' Sparrow	E,P			o	
White-crowned Sparrow	F,E	u	u	u	
White-throated Sparrow	F,E	c	u	c	
Fox Sparrow	F,M	c	u	c	r
Lincoln's Sparrow	M,E	o	o	o	
Swamp Sparrow	M,E	u	u	u	
Song Sparrow	M,E	c	c	c	o
Lapland Longspur	P	u		u	r
Snow Bunting	P	o		u	u

	H	Sp	Su	F	W		H	Sp	Su	F	W
Peregrine Falcon	P	r	o	r	o	Eastern Phoebe	E,W	c	c	c	
Merlin	P	u		u	o	Yellow-bellied Flycatcher	E,F	u	u	u	
American Kestrel	P	c	c	c	u	Alder Flycatcher	M,E	u	u	u	
Ruffed Grouse	F	c	c	c	c	Least Flycatcher	F	u	u	u	
Ring-necked Pheasant	P	o	o	o	o	Eastern Wood-Pewee	F	u	u	u	
Sandhill Crane	P	o		o		Olive-sided Flycatcher	M,F	u	u	u	
Sora	M	u	u	u		Horned Lark	P	c	u	u	c
Yellow Rail	M	o		o		Tree Swallow	E,M	a	a	a	
American Coot	M,W	c	u	c		Bank Swallow	E,W	c	c	c	
American Woodcock	M	u	u	u		Northern Rough-winged Swallow	E,W	c	c	c	
Common Snipe	M,W	u	u	u		Barn Swallow	E,W	c	c	c	
Semipalmated Plover	W	o				Cliff Swallow	E,W	u	u	u	
Upland Sandpiper	P	r	r			Purple Martin	—	u	u	u	
Least Sandpiper	M,W	o		o		Blue Jay	F	a	a	a	a
Spotted Sandpiper	W	c	c	c		Common Raven	F	r	o	o	r
Solitary Sandpiper	W	u	o	u		American Crow	F	a	a	a	a
Killdeer	P,M	c	c	c		Black-capped Chickadee	F	a	a	a	a
Herring Gull	W	c	c	c		Tufted Titmouse	F	u	u	u	u
Ring-billed Gull	W	c	c	c		White-breasted Nuthatch	F	c	c	c	u
Bonaparte's Gull	W	u	u	u		Red-breasted Nuthatch	F	c	u	u	c
Forster's Tern	W	u		u		Brown Creeper	F	u	r	u	o
Common Tern	W	u	u	u		House Wren	E,F	u	u	u	
Caspian Tern	W	o		o		Winter Wren	M	o	o	o	
Black Tern	W	u	u	u		Marsh Wren	M	o	o	o	
Rock Dove	—	u	u	u	u	Sedge Wren	M	r	r	r	
Mourning Dove	P,E	u	u	u	u	Gray Catbird	E,F	a	a	a	
Yellow-billed Cuckoo	E,F	o	o	o		Brown Thrasher	E,F	c	c	c	
Black-billed Cuckoo	E,F	o	o	o		American Robin	E	a	a	a	r
Great Horned Owl	F	u	u	u	u	Wood Thrush	F	u	u	u	
Short-eared Owl	P	o		o		Hermit Thrush	F	c	r	c	
Barred Owl	F	u	u	u	u	Swainson's Thrush	F	u	u	u	
Snowy Owl	P				r	Gray-cheeked Thrush	F	u	u	u	
Whip-poor-will	P,F	c	c	u		Veery	F	u	r	u	
Common Nighthawk	P,F	c	u	c		Eastern Bluebird	E	u	u	u	
Chimney Swift	P,W	u	u	u		Blue-gray Gnatcatcher	E,M	o	o		
Ruby-throated Hummingbird	F,E	c	c	c		Golden-crowned Kinglet	F	u	o	u	u
Belted Kingfisher	M,W	c	c	c		Ruby-crowned Kinglet	F	c	u	c	
Northern Flicker	F	c	c	c		Water Pipit	P	r			r
Pileated Woodpecker	F	u	u	u	u	Cedar Waxwing	E	c	c	c	u
Red-bellied Woodpecker	F	u	u	u	u	Bohemian Waxwing	E	o		o	o
Red-headed Woodpecker	F	u	c	u		European Starling	E	c	c	c	u
Hairy Woodpecker	F	c	c	c	c	Northern Shrike	P	r		r	r
Downy Woodpecker	F	c	c	c	c	Loggerhead Shrike	P	r	r	r	
Yellow-bellied Sapsucker	F	u	r	u		Solitary Vireo	E,F	u	u	u	
Eastern Kingbird	P	c	c	c		Red-eyed Vireo	E,F	c	u	c	
Great Crested Flycatcher	E,F	u	u	u		Philadelphia Vireo	E,F	u	u	u	



# The State of Wisconsin

Natural  
~~XXXXXXXXXX~~ AREAS PRESERVATION COUNCIL

Box 7921  
Madison, Wisconsin 53707

IN REPLY REFER TO: 2200

May 15, 1986

Mr. David Weizenicker  
Bureau of Parks and Recreation  
Department of Natural Resources  
Madison, WI 53707

Dear Dave:

We have reviewed the Lake Wissota State Park Concept Master Plan and find that we are in general agreement with the goals, objectives and proposed management.

The section on vegetative management is well written and shows concern for the issues of limiting tree cutting in parks which we have advocated.

Thank you for providing the opportunity for review of this master plan.

Cordially,

A handwritten signature in cursive script that reads 'Forest Stearns'.

Forest Stearns  
Chairman

# CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: April 24, 1986

File Ref: 1430

To: → Dave Weizenicker - PR/4

From: Dick Lindberg - FR/4

APR 25 1986

Subject: Lake Wissota State Park Master Plan

The following comments are submitted by the Wild Resources Advisory Council.

- 1.) Programs for the purpose of advancing nature education and experience are commended and should continue to be a primary emphasis of park management despite the large number of recreation visits.
- 2.) Camping, hiking and X-Country skiing are family type recreational experiences currently emphasized. These should be encouraged in the focus of the park's management.
- 3.) We are particularly pleased with planning alternative #3 on page 18.
- 4.)<sup>a</sup> Thank you for the names of the species (flora and fauna) that are found in the area.

RL:dj

District or Bureau: WCD  
 Docket Number:  
 Type List Designation(s) : NR  
 150.03(2)d4

### ENVIRONMENTAL ASSESSMENT

Applicant: State of Wisconsin  
 Department of Natural Resources

Title of Proposal: Lake Wissota State Park Master Plan-  
 Conceptual Element

Location: Chippewa County  
 Township 29N, Range 7&8W  
 Portions of Sections 23, 24, 25, 26, 30  
 Political Town: Anson

### PROJECT SUMMARY

#### 1. General Description (brief overview)

This environmental assessment is based on the provisions of the 1985 Conceptual Master Plan prepared for Lake Wissota State Park. Basically, the plan identifies Lake Wissota as a State Recreation Park and the management and development alternatives selected for the property allow for moderate increased use and development. It is anticipated that use will increase approximately 10-15% during the next 10-year period following approval of the master plan. A wide range of traditional activities is offered including: camping, swimming, boating, fishing, picnicking, hiking, nature study, and related day-use activities.

The master plan identifies the proposed development, management, and land control (land acquisition) scheduled for the park.

#### Development

Over the next 10 years, minimal new development and a number of major building maintenance items are proposed for Lake Wissota State Park. This will provide for a full complement of recreational facilities, as well as provide for the protection and preservation of the park environment. Recreational facilities to be expanded include: approximately 70 additional family campsites, a group campsite to accommodate recreational vehicles and group camp expansion. Expanded day use facilities are also proposed. Items contained in this category are: expanded picnic area parking and tables, additional shelters, upgrading existing trails, trail head development, ski trail warming structure, additional electrification of existing campsites in the family campground, redevelopment of the contact station area, and increased emphasis on handicapped accessibility.

Nature interpretation will be stressed on the property. A nature center is proposed in conjunction with the existing amphitheater and self-guided nature trails. Vegetative management will include prairie restoration and maintenance, landscape planting in the intensive use areas, and extensive area tree and shrub planting. Other actions will include erosion control and bank stabilization along the Lake Wissota shoreline. In addition, minor renovation of the existing day-use areas will be implemented.

The snowmobile trail which serves as a connector to the existing county trail system will be continued until such time as an alternate route can be established.

#### Management

Presently, the park is the responsibility of the Lake Wissota Work Unit Manager. The park is operated on a year-round basis with 3 permanent personnel including a park ranger, assistant superintendent, and work unit manager. In addition, approximately 13-15 limited term employees (LTE's) are hired during the year, predominantly during the summer months. They perform work in the following functions: clerical, sticker sales, lifeguard, law enforcement, maintenance, development, and park interpretation. It is also expected that park staff will be increased in the near future with a seasonal position for clerical, maintenance, and law enforcement duties. Other future needs due to development and increased use will result in the need for limited additional LTEs and possibly a seasonal or full-time naturalist. Equipment and repair facilities at Lake Wissota are used in conjunction with operations in the remainder of the work unit which includes the Chippewa Moraine Ice Age Unit.

As a unit of the Wisconsin State Park System, Lake Wissota has been developed and managed under Chapter 27, Laws of Wisconsin; specifically, Section 27.01, which governs state parks. The property is also managed under the provisions of Wisconsin Administrative Code 45 which contains rules of the Department of Natural Resources pertaining to the conduct of visitors at state parks, state forests, and other properties under the jurisdiction of the Department.

Lands within the park are classified as intensive recreational development (IRD) and extensive recreation area (ERA). The intensive recreation development will encompass approximately 250 acres upon completion of the proposed expanded family campground, enlarged group camp, recreational vehicle group camp, and establishment of the boaters water ski pickup and delivery area. Currently, there are about 200 acres identified as intensive recreation development. Remaining lands will be classified as extensive recreation area. The Scientific Area Council has been contacted and they have not identified any sites for inclusion within the scientific area or natural area classification.

### Land Control

As of February 11, 1983, park acquisition was completed with an acreage goal of 1,062.58 acres being met.

## 2. Purpose and Need (include history and background as appropriate).

Lake Wissota State Park was established in 1961 when the Wisconsin legislature enacted the Outdoor Recreation Action Program (ORAP). In the following years, as land was acquired, development began. Farm fences and other evidence of past habitation were eliminated. Abandoned fields were planted with over 40,000 trees. By 1970, acquisition was nearly complete. In that year, the first major construction occurred, the development of the man-made beach.

In 1971, four miles of park roads, several parking lots, and a boat launching ramp were constructed. Toilet buildings, bathhouse, service building, and sewer and water projects were completed in 1972 and the park was ready for its first season of operation. In 1973, the group camp ground and ballfield were completed. Other minor projects have taken place each year using various programs such as YACC, CETA, and WCC.

The master plan narrative is being prepared in accord with Natural Resources Board and Department policy. The primary purpose of this conceptual master plan is to guide the development, operations and maintenance of the property for the next 10 years and provide recreational facilities to accommodate approximately 270,000 annual visitations for day-use and 35,000 camper days. Activities offered at the property include camping, picnicking, hiking, swimming, fishing, general nature study and education, as well as a variety of other day use activities.

The 1981 State Outdoor Recreation Plan for Region 4, which includes Clark, Eau Claire, Dunn, St. Croix, Polk, Barron, and Chippewa Counties notes that there is a need for developed campsites, primitive campsites, and pleasure walking trails. The study further indicates that there is no need for additional cross-country ski trails or snowmobile trails.

The Chippewa County Community Recreation Plan of 1977 indicates no need for developed campsites through the year 1990. However, it did indicate a need for an additional 259 picnic tables by 1990. Swimming area supply meets present and future needs. Additional cross country ski trails are identified as being needed; however, no specific length figures were provided. Because of the age (1977) of this plan, its validity and use for determining needs at Lake Wissota are somewhat questionable.

3. Authorities and Approvals (list statutory authority and other relevant local, state and federal permits or approvals required)

Statutory authority - Section 27.01 of Wisconsin State Statutes.

Permit Approvals for septic systems, prescribed burns, shoreline protection projects, etc.

Natural Resources Board and Governor plan approval.

All development as identified in the master plan will comply with applicable state and local zoning requirements. Erosion control structures will be constructed in accordance with provisions of Chapter 30. Construction of rest room facilities (proposed family and group camp areas) will be in accord with H63 and all other township and Chippewa County Zoning Ordinances will be complied with.

4. Estimated Cost and Funding Source

The total estimated development cost based on 1985 figures is \$722,000. ORAP, LAWCON, and other funding sources will be used as they become available.

#### PROPOSED PHYSICAL CHANGES

5. Manipulation of Terrestrial Resources (include relevant quantities - sq. ft., cu. yds., etc.)

The proposed expansion for the family campground (70 units) will be constructed on a site approximately 25 acres in size. The area is composed of red pine plantation with a scattering of jack pine and scrub oak. The campground road will entail two additional one-way loops approximately 4,000 feet in length. The road will be 12 feet wide. As the proposed site is relatively flat, only minor grading will be needed to construct this road system. In addition, approximately 5 acres of trees will have to be cut to accommodate the road system and camp spur development (spurs are 12 X 50 feet). The plan also calls for the construction of two toilet buildings (one with shower). Each structure will encompass approximately 800 square feet. These facilities will also have multi-thousand gallon capacity septic tanks and drainfields to accommodate the effluent generated by campground users. Excavation for the foundations, septic tank, and drainfield should be approximately 200 cubic yards. The material will be spread onsite and graded and landscaped to improve surface drainage and thereby eliminate the need for hauling the surplus soil off-site. Minor excavation will be needed to lay waterlines and electric lines.

Similar to the family campground, development of the group camp and recreational vehicle group camp will entail limited cutting of brush and young trees and will also entail minor grading at the individual sites

and central activity area. The overall development will cover 5-7 acres. The site will have to be excavated to accommodate an 8-unit combination vault type toilet, as well as a shelter building. Approximately 100 cubic yards of material will be excavated and worked into the site and landscaped. Swales and existing drainage patterns will not be interrupted. The site and the family campground will be reseeded with turf grass and planted with a variety of native deciduous species.

The remaining development items include limited tree and shrub removal and/or pruning, limited grading, surfacing, and planting. These activities will take place around the proposed nature center, contact station and near the amphitheater. Some excavation will also occur for expanding parking areas near the picnic and beach area parking lots. It is also anticipated that several hundred cubic yards of rock and rubble will be utilized in the areas where shoreline erosion is severe. Other minor excavations will occur during the burying of 24 electrical services in the campground, revising and adding 6 stalls to the parking area near the contact station, remodeling the contact station, including additional footings for a 4X6' alcove, constructing walk-ways to shelters and the bath house, digging the footings for the proposed nature center, expanding the parking area near the beach and river's edge picnic area (a total of 80 stalls), and constructing a warming house on a floating concrete slab.

Some tree removal and planting will also take place as needed for the health, safety, and welfare of the park visitor and to provide shade and screening in the campground and day-use areas. In addition, some vegetative clearing and pruning will occur to create vistas along trails and at various overlooks located throughout the property. Extensive area vegetative management will be in accord with forest management recommendations. Approximately 242 acres of pine plantations will be managed as they are at the present time. These trees will be selectively thinned over 5-10 year intervals to promote rapid growth of large, healthy, natural-looking pine stands. Where these plantations are located next to main roads or use areas, tree thinning sales have been and will continue to be used to break up the managed row effect. Small openings will be cut at the edge of the plantations to create more edge effect for game species and songbirds. Thirty to sixty acres of abandoned field north of County Trunk 0 may be used in the future as a test site for planting various strains to assess their potential for use. At present, approximately 3 acres has been set aside for a white pine province test site to be planted in the spring of 1986. Future plans may include using part of the area for seed orchards by the state nursery. The remaining 20 or so acres directly adjacent to County Trunk 0 will be left in grassland and allowed to change by natural succession.

A very limited (+5 acres) area on the northwest boundary of the property will be planted with a variety of pine and hardwood species to screen adjacent development yet retain enough grassland so as to provide an open view of Lake Wissota from the County Trunk highway. Only trees which pose a risk or hazard to the public will be cut on the remaining land within the park.

Prescribed burns to maintain three prairie areas on the park (120 acres in total) will be implemented by the forester-ranger in conjunction with the park superintendent. Park personnel will be used to control these burns and a ranger or designee will be present to oversee this operation. Such burns will occur on a rotating basis with each area being burned at 3-year intervals. Plantings of trees such as burr oak, ash, white pine, and various shrubs will take place in parts of the prairie areas. These plantings will be laid out in such a manner as to create additional wildlife edge and to create islands useful to game as well as breaking up site lines.

6. Manipulation of Aquatic Resources (include relevant quantities - cfs., acre feet, MGD, etc.)

Lake Wissota is presently managed for the following game fish and panfish species: walleye, muskellunge, smallmouth bass, catfish, lake sturgeon, black crappie, perch, and bluegill. Musky is the only species that has been stocked annually in recent years. However, perch have been stocked in recent years when they become available. Stocking of muskellunge and perch should continue and bluegill stocking will be considered in the future. Artificial in-lake habitat should be installed for panfish and other forage fish to try to increase numbers of these species. Severe bank erosion should be stabilized wherever and whenever feasible; and inshore or shallow water fish habitat should be constructed along park shorelines in the big lake basin. Habitat improvement will provide anglers increased fishing opportunities and expand the forage base for fish predators, particularly walleyes. No regulation changes are recommended at this time.

Part of the bank stabilization program should include the planting of willow trees along the shoreline. Fish cribs have been somewhat successful in drawing fish into areas along the Yellow River, such as at the fishing pier which is accessible to disabled individuals.

Anglers are allowed liberal access to all waters adjacent to the property. Some change in fishing access appears needed to reduce the amount of shoreline and bank erosion evident within the park. Bank erosion control efforts such as providing stairs, fishing platforms, and retaining walls seems to have been successful.

7. Buildings, Treatment Units, Roads and Other Structures

The proposed family campground calls for the construction of 70 additional campsites. Development items include 4,000 feet of 12-foot wide one-way asphalt road. The campsites will include a 12X50 foot long gravel surfaced spur and 35' diameter grass surfaced pad for setting up tents and other camping units. Two flush toilet buildings approximately 800 square feet will be constructed. One of these toilet buildings will also include shower stalls and laundry facilities. A well and water system will be needed for the projected six water fountains to be located throughout the campground. In addition, electrical conduit will

be needed to service approximately one-half the campsites. One combination sealed vault toilet will be constructed in a central location of the campground for off-season use (size is approximately 11' X 19').

The flush toilet structure calls for a two five-thousand square foot drainfield and appropriately sized septic tank system. The group camp and RV group camp facilities entail the construction of two four-unit combination vault toilets, two wells and handpumps, and a 20' X 40' shelter. The nature center will be approximately 1-2,000 square feet and be located near the existing amphitheater.

Modification to the contact station is proposed to increase operational efficiency and revenue collection. Work will include remodeling one exterior wall, installing larger windows for better visibility, installing a drive-up type window and reconstructing the interior counter. Other structures include a small 16' X 16' foot enclosed warming house with heating source, approximately 2,000 lineal feet of boardwalk on the existing nature trail, a 24X36 foot shelter for the group camp site #1, 2 additional wooden stairs leading from the campground down to the lake's edge, 1 additional fishing platform along the bank of the Yellow River and a new beach curb which is constructed of treated timbers and serves to separate the sand area from the turf area on the beach.

Upgrading the existing trail system will entail minor surfacing with gravel or other material, placement of water diversion structures, and correcting eroded areas.

#### 8. Emissions and Discharges

Proposed additional development and subsequent use of the property is not expected to significantly affect Wisconsin's air quality. However, there will be some local noise and pollution during construction due to the use of heavy equipment and disruption of surface conditions. Vehicular traffic is expected to increase 3-4% into and through the area within the next 10 years and this will add to the noise and potential air pollution. These emissions, however, are not expected to significantly affect the ambient air quality. Fossil fuels and lubricants consumed by construction equipment and those used for labor activities and fabrication for materials will be consumed and will result in some emissions. Secondary emissions and discharges will be created through fuel and electricity used to operate the facility. In addition, some emissions of particulates and gases can be expected during the controlled burn of the prairie areas. This management tool, which will be used every year on a rotating basis, will be done in accord with Department policies and procedures.

## 9. Other Changes

Lands within the park are classified as intensive recreation development (IRD) and extensive recreation area (ERA). The intensive recreation development will encompass approximately 250 acres upon completion of the proposed expanded family campground, enlargement of the group camp, the recreational vehicle group camp, and establishment of the boaters water ski pickup and delivery area. Currently, there are about 200 acres identified as intensive recreation development. The remaining 862 acres is classified as extensive recreation area.

## 10. Attach Maps, Plans and Other Descriptive Material as Appropriate (list)

1. Locator map
2. Development map
3. Ownership map

AFFECTED ENVIRONMENT

Information Based On (check all that apply):

- Literature/correspondence  
 Personal Contacts (list in item 31)  
 Field Analysis By:  Author,  Other (list in item 31)  
 Past Experience With Site By:  Author,  
 Other (list in item 31)

## 11. Physical (topography - soils - water - air - wetland amounts and types)

The topography of the park is predominately level to gently sloping. The only steep grades found within the park are associated with the shoreline environs. This is mainly due to the management of the flowage for hydropower by NSP. Basically, the park lies within the flat to gently rolling glaciated terrain. This is the area of older drift. The last glaciation, the Wisconsin Stage, stopped just northeast of Lake Wissota. The land encompassed by the park constitutes a high, flat river terrace composed of outwash sand and gravel. Another lower river terrace extends between this terrace and the Chippewa River, but it is now submerged by the waters of Lake Wissota. Outcroppings of weak Precambrian sandstone are evidenced in the southwestern portion of the park bordering the former valley of the Yellow River.

Soils within the property consist primarily of the Menahga series which include deep excessively drained sandy soils which were formed in glacial outwash under conifer forests on outwash plains in valley terraces. The surface soil is black and very dark, grayish brown. They consist of loamy coarse sand 4 inches thick. The subsoil is dark brown to dark yellowish brown and consists of coarse sand 20 inches thick. The stratum is pale brown coarse sand located on slopes ranging from 0 to 45%.

The secondary soil series is Burkhardt and consists of somewhat excessively drained soils formed in the loamy deposits overlying sand and gravel which occur on outwash plains, stream terraces, and pitted moraines. The surface layer is very dark brown sandy loam 10 inches thick. The subsoil is dark brown sandy loam in the upper 7 inches and dark brown loamy sand in the lower 2 inches. The substratum is strong brown and dark brown stratified sand and gravel. Slopes range from 0-30%. In addition, there are approximately 20 acres of marshland which is composed of mucky soils and these are located in the area of the boat launch.

The park is located on a northeast end of Lake Wissota. It is a soft water drainage impoundment on the Chippewa River. Major feeder streams include the Chippewa and Yellow Rivers, Paint Creek, and Stillson Creek. Lake Wissota has a surface acreage of 6,300 acres and a maximum depth of 72 feet. The lake is the largest single body of water in Chippewa County. The dam which forms the impoundment was completed in 1917. Wave cutting and ice cutting action occurs on the northeast shore, resulting in erosion to the steep, sandy banks. Summer fluctuations for May 1 through September, mainly due to hydropower plant operations, are about one foot.

Water quality in the vicinity of the state park is typical of large impoundments on nutrient-rich, warm-water streams. Blooms of algae commonly occur from mid-June until late-September. Nuisance conditions include algae blooms and weed growth in the beach area. However, beach closures have not been necessary due to bacteriological contamination.

## 12. Biological

### a) Flora

The area within the current park boundary was once covered with woodlands composed primarily of white pine, red pine, red oak, white oak, and jack pine. The best white pine grew in areas along the old Yellow and Chippewa River channels. By the late 1800's, unrestricted cutting, fires, and land claimed for agriculture reduced the forested area within the current park area to only several hundred acres. Some reports also indicated that there may have been large acreage of prairie grasses on or near the site. However, this has not been substantiated. As time passed and lands previously cleared for agriculture were abandoned, more pioneer species such as jack pine and oak became established on the property and was left to grow without major impact by man until the early 1950's.

During the period 1952 through 1959, the majority of the current red pine population was planted on old fields and cutover areas of the central part of the park, as well as the north 80 and eastern edges of the current park. These trees are now reaching

merchantable size. Some more recent plantings in the 1970's were a mixture of red and white pine planted at fairly wide spacings which would screen the park from adjacent agricultural lands and rural residential development. The most recent trend, 1978 through 1984, has been to re-establish hardwoods in the park and include species such as burr oak, white birch and white ash. Again, these plants had been planted on a wide random spacing to break up site lines and add diversity to vegetation of the park.

b) Fauna

Common wildlife species and furbearers include whitetailed deer, cottontail rabbit, gray squirrel, red fox, raccoon, muskrat, beaver, and various small mammals. A large variety of songbirds, and waterfowl are also present. A complete listing of flora and fauna that is known to be present in the park is listed as an appendix of the master plan.

The most common fish species here are walleyes, northern pike, smallmouth bass, bluegills, black crappies, channel catfish, bullheads, redhorse, and white suckers. Other species present include muskellunge, largemouth bass, perch, rock bass, pumpkinseeds, rock sturgeon, quillback, and carp.

13. Social/Economic (include ethnic and cultural groups, and zoning if applicable)

The property is located on Lake Wissota which has a combination of adjacent land uses including rural residential, cottages, and agricultural lands. However, it is evident that the agricultural lands are giving way to rural residential development and this trend is expected to continue. Primary access to the park is provided by County Trunk O, with major highways in the area including Interstate 94, and Highways 29, 124, 51, and 178.

All revenues collected from the sales of admission stickers and campground registration fees are remitted to a segregated fund from which operation and maintenance are partially subsidized. Based on 1984 revenue figures and the 1984-85 fiscal year budget, the present percentage of revenue collected to operation budget is 63.6%. It is anticipated that this percentage will remain relatively stable.

According to a 1980 Wisconsin Camper Survey conducted by the University of Wisconsin Recreation Resources Center Extension, camper spending has a very substantial economic impact on the local economy. The report stated that "hypothetically, a 100-site campground with 45% occupancy over a 100-day season would generate \$216,000 of direct community spending and an additional \$168,000 in indirect spending. This is assuming a multiplier effect of 1.7. Furthermore, almost 10 full or part-time jobs could be supported by such spending in the community in 1980."

14. Other Special Resources (e.g., archaeological, historical, endangered/threatened species, scientific areas, natural areas)

According to the State Historical Society, there is one known archaeological site of undetermined size which is located on and adjacent to the access road at the western edge of Section 30, T25N, R7W. However, the area has not been surveyed for archaeological resources. Therefore, they recommend that before undertaking any ground disturbing activities in that area, the Department should consult with their office to determine whether an archaeological survey is needed. There are no structures listed in the National Registry of Historical Places located within the park boundary.

Endangered species including the Bald Eagle, Osprey, and Forester's Tern have been observed flying over the property. There are no known nests on the park. Wild Quinine is an endangered plant found on the property.

ENVIRONMENTAL CONSEQUENCES (probable adverse and beneficial impacts including indirect and secondary impacts)

15. Physical (include visual if applicable)

Proposed new development and major building maintenance will have limited impact on the property. Use is expected to increase 10-15% over the next 10-year period. However, this increase should not overtax the man-made or natural resources. Maintenance of the area, its man-made features, and vegetative cover should maximize user enjoyment and perception, as well as provide some diversity of habitat.

Development of the proposed campground expansion, the recreational vehicle campground, trails, nature center, and other support facilities will cause some minor disruption to the soil, mainly through exposure and compaction during the construction phase. Farther away from these specific developments, soils would be affected by such things as compaction caused by maintenance equipment and foot traffic. Maintenance practices will be utilized to guard against destruction of ground cover which may result in erosion or detrimental effects to the resource.

Development plans call for additional planting of trees and shrubs for shade, screenings and space definition in areas such as the campground, group camp, and day use areas.

In the extensive area of the property, all tree harvesting within the pine plantations will be done with aesthetics in mind. Visual impact will be reduced in highly visible areas through the designation of aesthetic zones such as areas along roadways, rivers, and shoreline. Buffer strips, irregular cut boundary lines, and other techniques will be utilized to reduce the visual impact of cutting and development activities.

Development and use of the property is not expected to significantly affect Wisconsin's air quality. However, some local noise and air pollution might be expected during construction due to the use of heavy equipment and disruption of surface conditions. Some increase on vehicular traffic into and through the area will add some noise and potential air pollution. These emissions, however, are not expected to significantly affect the ambient air quality.

A number of interstate, state, and county trunk highways provide immediate access to the property. These highways should easily accommodate the expected 3-4% increase in traffic volume over the next 10-year period.

## 16. Biological

The number and type of plant species at Lake Wissota State Park will change somewhat due to natural succession, interruption of succession, cutting, and planting the various plant stock. Removal of dead and dying trees will occur to ensure a healthy timber stand and ensure visitor safety. Some vegetative clearing and brushing will occur to create vistas in use areas and along trails and overlook sites. This would entail some tree removal, limb cutting, and occasional mowing to keep down woody growth. Timber harvest will occur on the pine plantations located throughout the property. In addition, revegetation will be fostered through underplanting and new planting in such areas as called for by the park planner. Disrupted land near construction sites will be reseeded and planted with native tree and shrub species as well as a variety of ground covers to guard against erosion and provide the user with shade and other amenities associated with vegetative cover.

Trail improvement and the development of the third group campsite and the RV group camp may increase disturbance of those species that are timid and not well adapted to humans. However, most species present in the park are already well adapted to human disturbance. They should not be noticeably affected. Some species such as deer will use the trails as travel lanes and if seeded to grass and legumes, as feeding areas.

Lake Wissota is presently managed for game fish and panfish species. Musky is the only species that has been stocked annually in recent years. However, perch have been stocked in recent years when they become available. Artificial inlake habitat structures should be installed for panfish and other forage fish to try and increase the number of these species. Severe bank erosion should be stabilized whenever and wherever feasible. Shallow-water fish habitat structures should be installed along park shorelines in the big lake basin. Habitat improvements will provide anglers increased fishing opportunities and expanded forage base for predators, particularly walleyes. Part of the bank stabilization program should include planting willow trees along the shoreline. Fish cribs have been somewhat successful in drawing fish into areas along the Yellow River, such as at the fishing pier which is accessible to disabled individuals.

Anglers are allowed liberal access to all waters adjacent to the property. However, some change in fishing access appears needed to reduce the amount of shoreline and bank erosion evident within the park. Bank erosion control efforts such as providing stairs, fishing platforms, and retaining walls seem to have been successful in the past and should be continued in the future.

17. Social/Economic (include ethnic and cultural groups and zoning if applicable)

Expansion and improvement of park facilities will result in better service to the public. Providing the additional family campground sites and group camp areas will serve to meet some of the needs as identified in local, regional, and state outdoor recreational plans. The facilities will also increase campsite utilization and length of stay and, therefore, will increase camping revenue. This should also mean more dollars for the local economy based on information presented in the 1980 Wisconsin Camper Survey. Providing a nature center and additional nature and hiking trails and related facilities will increase the education mission of the property and provide the user with more information about their natural environment and Department programs being undertaken to safeguard those and other resources.

Developing a water ski pickup and drop-off facility will serve to eliminate any present user conflict with swimmers and anglers. Designation of this site by signing should eliminate shoreline and use area conflict as well.

Enlarging, remodeling, and in some instances replacement of obsolete facilities should also increase park user satisfaction and lead to increased use and duration of stay. This in turn will provide economic benefits through increased park admission sticker and campsite rental sales. It is expected that the park will continue to generate local commercial sales for such things as gasoline, picnic and camping supplies, and related items. If the proposed development projects are implemented, at least \$722,000 will be put into the regional economy.

There are four management problems worthy of discussion:

1. Shoreline and bank erosion

Due to the nature of the soils along the flowage, the shoreline and banks along Lake Wissota within the park are highly susceptible to erosion. Some erosion is caused by wave action and ice breakup. Other erosion is caused by park users moving up and down the banks to gain access to the water's edge. To correct this problem, a combination of structures such as stairs and riprapping, terracing, and subsequent planting of vegetation, along with user education, has been and will continue to be used to decrease and hopefully eliminate user generated erosion.

## 2. Drainfield malfunction

In 1982, the drainfield system was replaced in one of the campground loops at a cost of \$6,000. The drainfield and soil type have a life expectancy of 10-15 years. The other campground facility may be on the verge of malfunction due to aging and soil conditions. Therefore, its replacement is anticipated within the next few years. When the system is deteriorating, there is always the need for more frequent pumping, sometimes 3 times a year, which could add \$600 or more to the yearly septic maintenance cost. The failure of the second campground drainfield system is of significant concern. There is insufficient area near this rest room facility for a new drainfield. Therefore, it may be necessary to eliminate up to 3 campsites, 2 of which have electricity. This would have a negative impact on users who use the campsites and also on revenue generated through camping fees. This may have an impact on the need for developing additional campsites if called for under phase 2 of the development scheme.

## 3. Control of access to the park

Lake Wissota is a one-entrance property. However, there are some problems associated with the visitor contact created by the layout of the park entrance visitor station and entrance road complex. Basically, people can enter the park and bypass the contact station by simply driving through the parking lot which was sited across the entrance road from the station. The parking lot will be redesigned so that persons entering the park or parking in the lot have to pass by or enter the contact station to obtain information or register for a campsite.

A second problem associated with this facility is a need to replace the sliding glass door with an alcove. This would give park personnel closer contact with entering vehicles and thereby eliminate the need for leaving the building to transact business with the park visitor. Based on experience at other state parks with such facilities, this modification would improve contact operations dramatically.

## 4. Concession operations

Past department audits have determined that concession operations are not contributing many dollars to the general park operations account. One possible way the concession can be made more profitable is to enlarge the size of the concession stand within the bath house complex. Previous concession operators have stated that the stand is too small, has little or no storage space, and also needs additional room so customers can walk into the stand and examine various items that are for sale. Therefore, it is recommended that another 10-12 feet be added to the front of the existing stand in the area of the walkway between the stand and the change stalls/rest rooms.

- 18. Other Special Resources (e.g., archaeological, historical, endangered/threatened species, scientific areas, natural areas)

The State Historical Society will be informed of all major development proposals and the sites will be surveyed and evaluated prior to initiating any construction in those areas. Protection will be provided for any endangered and/or threatened species that may be found and/or migrating through the park. Guidelines of Manual Code 2328.1 will be followed.

- 19. Probable Adverse Impacts That Cannot be Avoided

Increased presence of man within the park may mean some interference with wildlife habitat and plant damage. The construction stage will expose some soil to water and wind erosion. Some dirt and noise will also be created during construction. Air pollution emissions to the atmosphere will increase slightly due to increased auto traffic into and out of the area. Some minor grading will take place around construction sites; however, this will only minimally alter topography and drainage patterns. Some soil erosion could occur at construction sites but this will be minimized through the use of appropriate erosion control techniques. Increased use will possibly increase the need for public services such as police and fire protection, as well as medical attention. Gasoline and other fuels will be consumed by people coming to the park and by maintenance vehicles used in the park. Traffic will increase on the county trunk highway leading to the property. However, this increase is minimal and is not expected to have a great effect on traffic volume.

ALTERNATIVES (no action - enlarge - reduce - modify - other locations and/or methods)

- 20. Identify, describe and discuss feasible alternatives to the proposed action and their impacts. Give particular attention to alternatives which might avoid some or all adverse environmental effects.

No additional development

This alternative would provide for no further development. The Department would merely retain and manage the existing natural and man-made resources and recreational facilities. This alternative is not desirable since the property was acquired for recreational purposes in order to meet the needs as identified in local, regional, and statewide recreational plans. Since the property is at or near maximum user density in some of its day-use and camping facilities, the lack of additional development could lead to safety problems, undesirable user experience and degradation of the resource.

Moderate additional development on existing stateowned land

It is recommended that the property remain classified as a state recreation park. This would provide for a full complement of recreational facilities, as well as provide for the protection and preservation of the natural resource. It is anticipated that use will increase 10-15% during the next 10 year period following approval of the master plan.

Recreational facilities to be provided include approximately 70 additional family campsites, an RV group camp site, as well as group camp expansion. Expanded day use facilities are also proposed. Items contained in this category are expanded picnic tables, additional shelters, upgrading existing trails and trail head development, constructing the ski trail warming house, additional electricity in existing campsites and the family campground, redevelopment of the contact station, increased emphasis on handicapped accessibility, and enlarged parking at the various day use areas.

Nature interpretation and education have been and will be stressed on the property and therefore facilities such as a nature center is proposed in conjunction with existing amphitheater and self-guided nature trails. Vegetative management will include continuing prairie restoration and maintenance, landscape planting in the intensive use areas and extensive area planting. Other actions will include erosion control and bank stabilization along Lake Wissota shorelines. In addition, minor renovation of existing day-use areas will be implemented.

The snowmobile trail, which serves as a connector to the well established county trail system, will be continued until such time as an alternate route might be established.

Additional large scale development on land within the park boundary

This alternative would entail the development of additional day-use areas, trails, ball fields, horse-shoe pits, hard-surfaced ball court areas, and other urban-type park facilities. Even though the park is located near a metropolitan area, current use and projected increases do not warrant greater expansion at this time.

EVALUATION (discuss each category. Attach additional sheets and other pertinent information if necessary.)

21. Secondary Effects: As a result of this action, is it likely that other events or actions will happen that may significantly affect the environment? If so, list here and reference their discussion in items 15-18 as appropriate.

Providing a new enlarged family campground and group camp will increase the use of the park to the point where park revenues will be increased and secondary economic benefits will be realized by the local economy. Upgrading and enlarging the day-use facilities will also increase use and have secondary economic benefits. This additional use will generate traffic into the area and increase use of local roads.

22. **New Environmental Effect:** Does the action alter the environment so a new physical, biological or socio-economic environment would exist? If so, list here and reference their discussion in items 5-10 or 15-18 as appropriate.

The proposed development action will not result in a significant change to the social, physical, or biological environment of the property because similar facilities and recreational activities have been provided on the property since the early 1970s.

23. **Geographically Scarce:** Are the existing environmental features that would be affected by the proposed action scarce, either locally or statewide? If so, list here and reference their discussion in items 15-18 as appropriate.

Lake Wissota State Park is one of two located on the Chippewa River within Chippewa County and therefore would probably not be scarce on a regional or statewide basis. However, the park is heavily used by people using the interstate highway, thereby meeting its mission established with the 1961 ORAP policy. Removal from the Wisconsin State Park System would have a detrimental local and regional impact on recreational opportunity.

24. **Precedent:** Does the action and its effect(s) require a decision which would result in influencing future decisions? Describe.

The actions proposed are not precedent setting as similar development and management practices and programs which were discussed throughout the master plan have been and will be carried out on a statewide basis. There are over 50 other state parks in the state system being managed similar to Lake Wissota State Park.

25. **Controversy:** Discuss and describe concerns which indicate a serious controversy or unresolved conflicts concerning alternative uses of available resources.

Because there are over 50 other state parks in the state park system being managed similar to Lake Wissota, we do not believe that the proposed development, management, or operations of the property will be controversial. The public has an opportunity to participate in development of the Lake Wissota master plan.

26. **Consistency With Plans:** Does the action conflict with local or agency zoning or with official agency plans or policy of local, state or federal government (e.g., NR 1.95)? If so, how? Refer to applicable comments in item 31.

No conflicts are known or became evident during the initial planning or review process. This project is in accord with local, county, and state recreation plans.

27. Cumulative Impacts: While the action by itself may be limited in scope, would repeated actions of this type result in major or significant impacts to the environment?

Additional actions of this type would generally upgrade existing state park facilities. Due to the location of the proposed development, and modification of existing buildings, there should be little significant impact on the natural environment.

28. Foreclose Future Options: Is the action irreversible? Will it commit a resource (e.g., energy, habitat, historical features) for the foreseeable future?

Some fuel, wear and tear on the machinery and depletion of resource materials is non-recoverable, as is the manpower utilized in the planning, construction, and operation of the park. Fuel and other energy sources used to power vehicles to and from the park would be irretrievable. Similarly, energy used to maintain the property would be permanently committed. Funds used to develop the area will be irretrievably committed as well. For all practical purposes, roads, parking lots, and buildings will be permanently committed and materials will be basically unsalvageable. However, land covered by these facilities could be retrievable as roads are often obliterated, regraded, and revegetated. Abandoned building foundations are also often removed and the site is often regraded and revegetated.

29. Socio-cultural Impacts: Will action result in direct or indirect impacts on ethnic or cultural groups or alter social patterns?

No, the park is open to all ethnic and cultural groups.  
 Yes, refer to item 17.

- 30) Other:

None.

LIST OF AGENCIES, GROUPS AND INDIVIDUALS CONTACTED REGARDING THE PROJECT  
 (Include DNR personnel and title)

31. Date Contact	Comments
7/16/84	Mike Ries contacted by Craig Karr, Assistant Administrator Establish task force assignment
7/84-9/84	General public by Norm Pazderski Distributed master plan work-book and received comments from the general public. Over 300 books were distributed.
7/84	Mike Ries, Park Planner Norm Pazderski, Pk. Mgr. Reviewed initial master planning needs and objectives.

- 9/12/84 Cliff Germain, Bureau of Research by M. Ries Scientific Area input into Lake Wissota State Park master plan  
Finding: no suitable area for scientific or natural areas.
- 10/84 First task force meeting between Mike Ries, chairman of the task force, with Norm Pazderski, park mgr; Brian Marinello, forest manager; Rollie Nesbit, wildlife manager; Doug Erickson, fish mgr; and Gary Olson, Real Estate Agent.  
Began planning as it pertained to resource topics, work assignments, drafting goal and objective statements, and formulation of general conceptual master plan document.
- 10/31/84 Norm Pazderski contacted Richard W. Dexter, Chief, Registration and Compliance Section of the State Historical Society.  
One known archaeological site of undetermined size is located on and adjacent to an access road at the western edge of Section 30, T29N, R7W. They recommend that before undertaking any ground disturbing activities in the park, the DNR should consult with their office to determine whether an archaeological survey is needed.
- 5/85 Mike Ries & Bureau of Parks personnel Draft conceptual master plan submitted for initial comment review.
- 1/2/86 Mike Ries & Tom Woletz, Air Management Engineer Discuss ambient air quality of Lake Wissota State Park site.

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Project Name: Lake Wissota State Park Conceptual Master Plan County: Chippewa

APR 24 1986

RECOMMENDATION

EIS Not Required . . . . . X

Analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion therefore, an environmental impact statement is not required prior to final action by the Department on this project.

Refer to Office of the Secretary . . . . .

Major and Significant Action: Prepare EIS . . . . .

Request EIR . . . . .

Additional factors, if any, affecting the evaluator's recommendation:

Michael J. Ries 11/22/86

Signature of Evaluator Date

W.D. Weizenicker 3/6/86  
Noted: Area Supervisor or Bureau Director Date

T. J. ...  
11/24/86

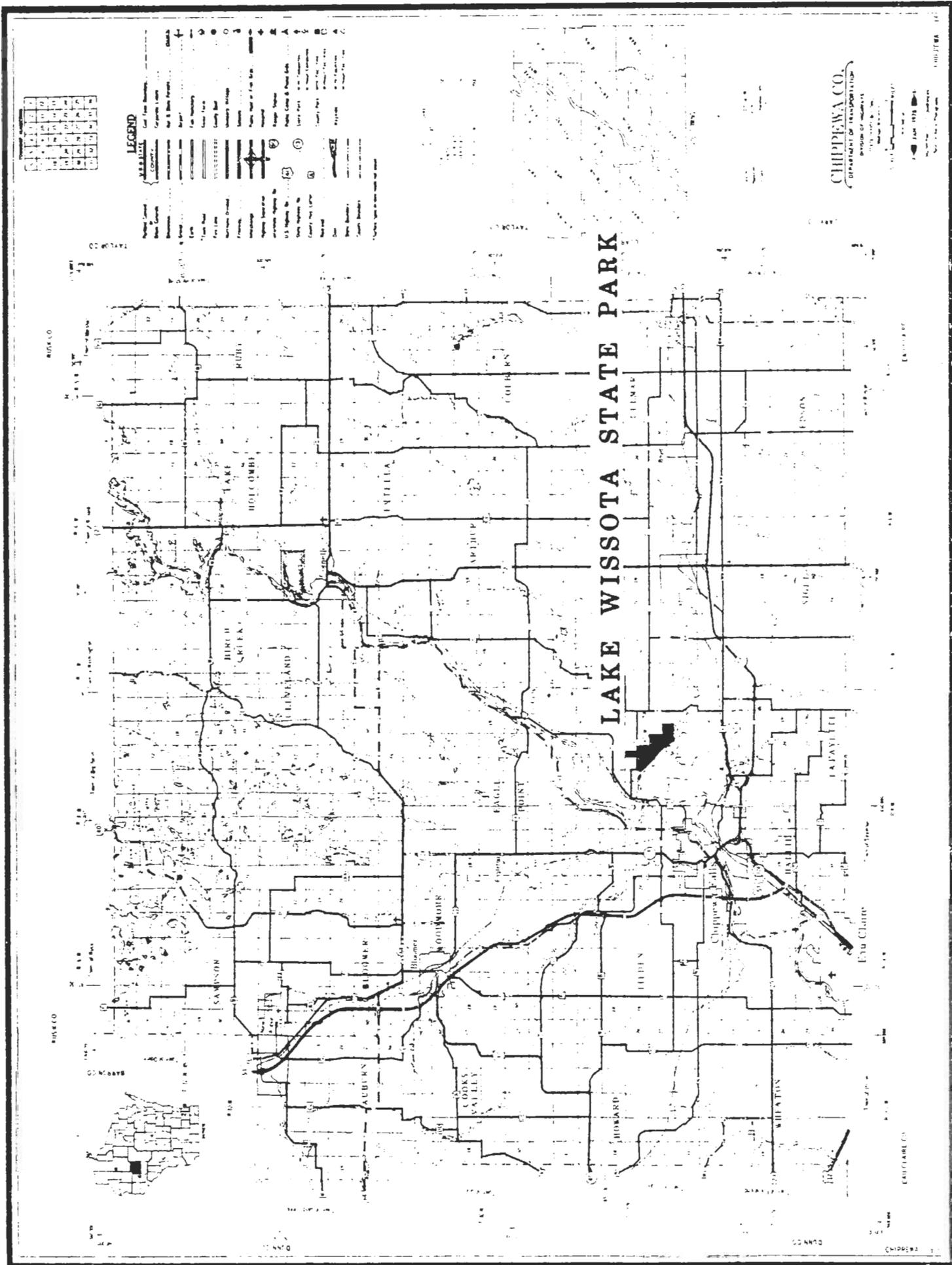
Number of responses to public notice

Public response log attached

CERTIFIED TO BE IN COMPLIANCE WITH WEPA

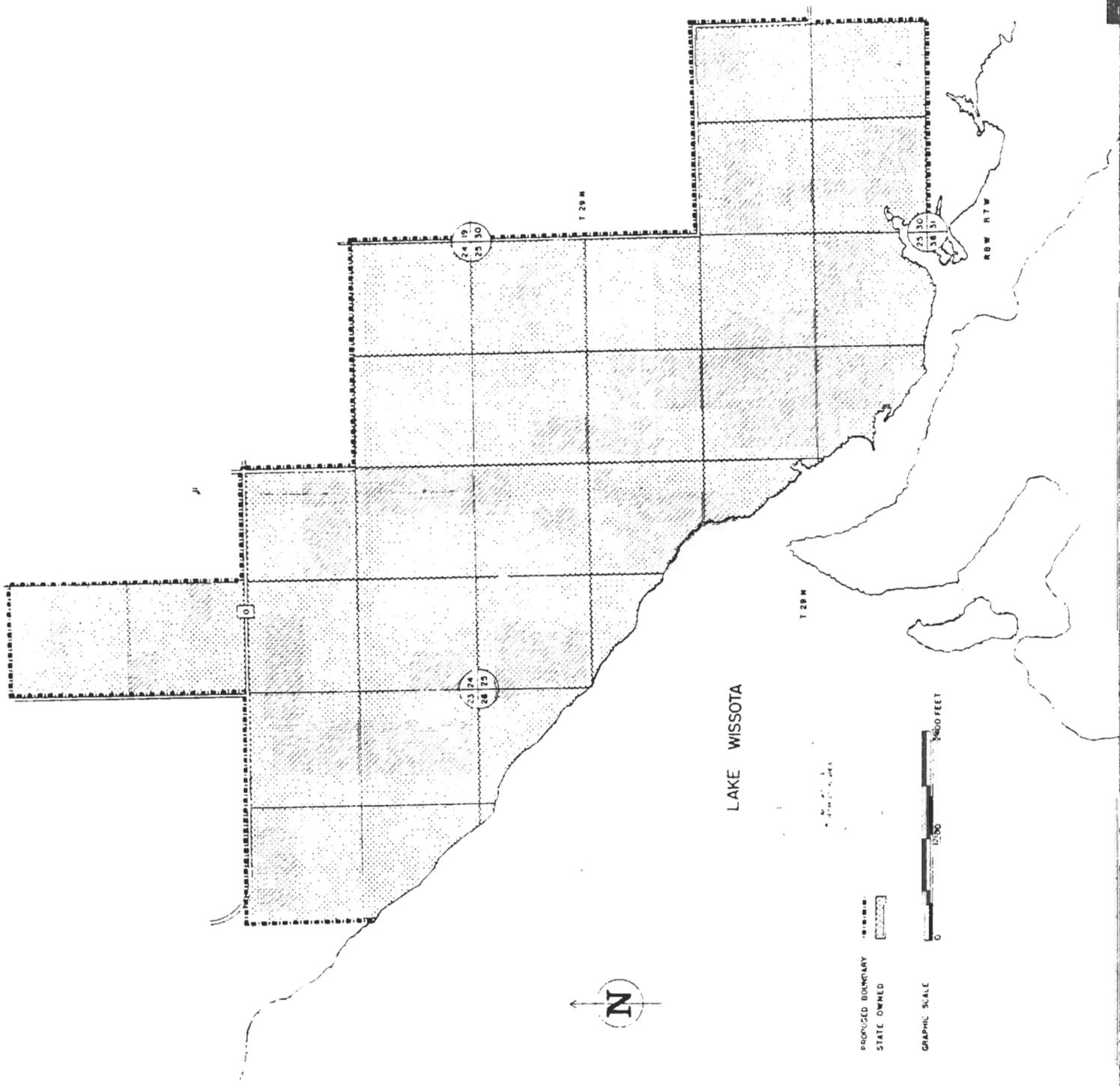
District Director or Director of BEI (or Designee) Date  
John A. B. ... April 23 1986

This decision is not final until certified by the appropriate District Director or the Director of BEI. If you believe you have a right to challenge this decision, you should know that Wisconsin Statutes and Administrative Codes establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.15 and 227.16, Stats., you have 30 days after service of the decision to file your petition for review. The respondent in an action for judicial review is the Department of Natural Resources. You may wish to seek legal counsel to determine your specific legal rights to challenge a decision. This notice is provided pursuant to s. 227.11(2), Stats.



County Location Map

figure 1



Acquisition Map

figure 2

# LAKE WISSOTA STATE PARK



Development Map-Present & Proposed figure 3

