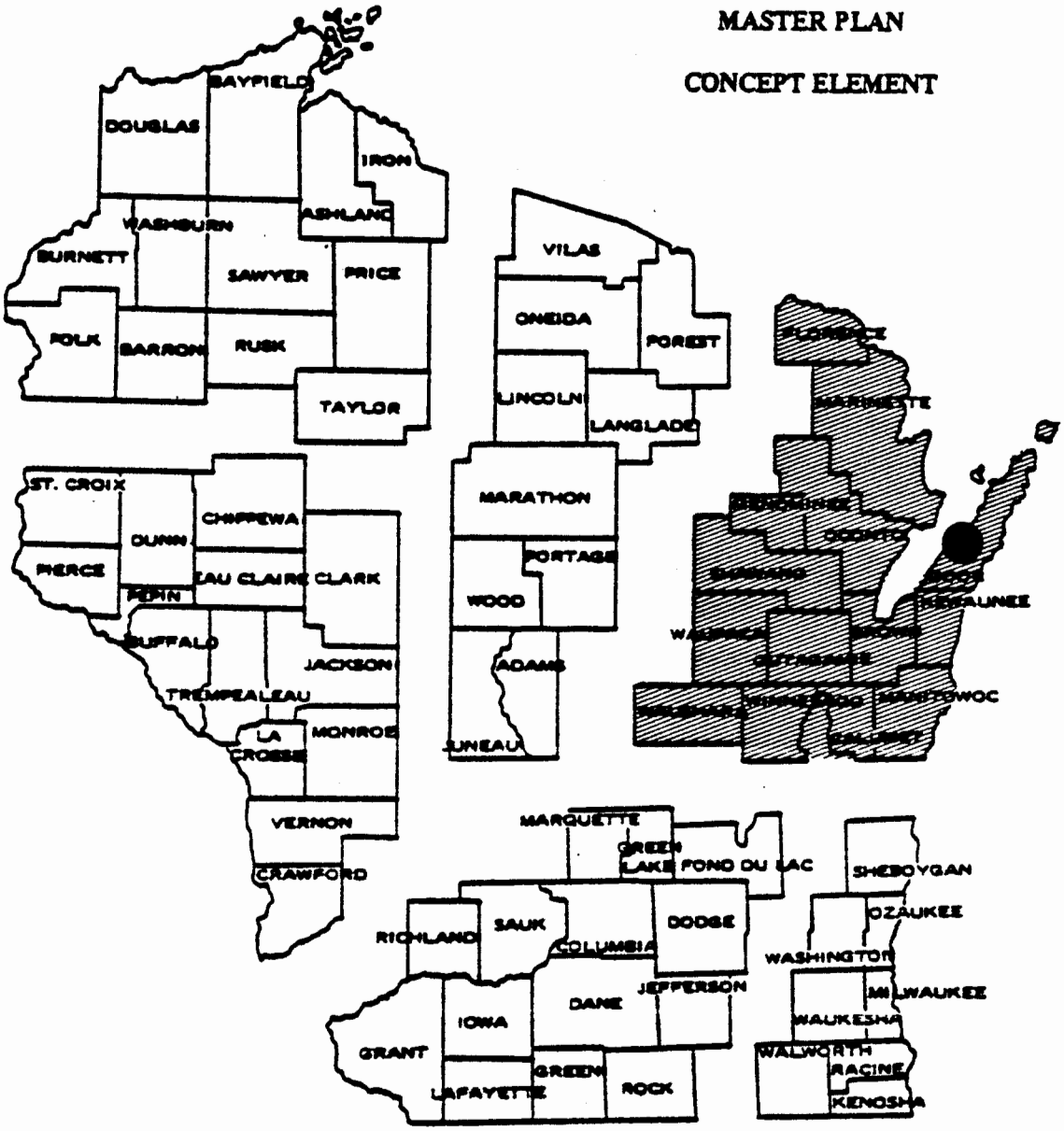
POTAWATOMI STATE PARK

MASTER PLAN

CONCEPT ELEMENT



Property Task Force

Leader: Dan Rogers - Park Planner
Arnie Lindauer - Park Superintendent
Terry Lychwick - Fish Management
Tom Bahti - Wildlife Management
Harry Porter - Forest Management

Approved By: NRB

Date: 5/28/87

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
MADISON, WISCONSIN

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Master Plan Concept Element

Potawatomi State Park

Potawatomi is a scenic state park located in Door County, Wisconsin. It is characterized by dense forest, rocky cliffs and picturesque vistas of the waters of Green Bay and Sturgeon Bay. Traditional recreational activities such as picnicking, camping, hiking and sightseeing are offered as well as cross-county skiing, snowmobiling, fishing and boating. A downhill ski facility, leased by a local ski club group under a not-for-profit arrangement, is available for public recreation.

SECTION I - ACTIONS

A. GOAL AND OBJECTIVES

Goal

Preserve and protect the natural and scenic resources of Potawatomi State Park while providing resource-related recreation and outdoor education opportunities.

Annual Objectives

1. Provide public day use recreation facilities to accommodate 300,000 users.

2. Provide tent/trailer camping opportunities for 50,000 campers, annually.

3. Provide small boat access to the waters of Sturgeon Bay for 20,000 boating occasions.

4. Provide nature, hiking, ski touring and snowmobiling trails to accommodate 100,000 users.

5. Accommodate individuals who are handicapped or disadvantaged through the proper design construction and management of the park facilities.

Additional Benefits

1. Provide for low-impact, non-organized recreational pursuits such as bird watching, wildlife observation, fruit gathering and photography.

2. Provide vegetative management to promote natural composition and density.

3. Provide habitat protection for endangered or threatened species of plants that may inhabit the park.

4. Provide habitat for game and nongame species that may reside in or migrate through the area.

B. RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM

This program will maintain the basic size and character of Potawatomi. Limited expansion and upgrading of facilities will better serve the needs of the public. Among these improvements are renovation of existing campsites, addition of a small indoor group camp, bicycle camping, renovation of the campground electrical system, addition of a new shop storage building, amphitheater, vita exercise course and outdoor group camp.

1. Land Control

The existing property acreage goal for Potawatomi State Park is 1127.20 acres. A land sale of about 3.5 acres is pending. This is being done to correct a boundary encroachment situation.

It is recommended that the current boundary be modified to include an additional 135 acres of land for a buffer zone along part of the west and south boundaries, and adjacent to the park entrance. The location of this land is shown on the Land Control Map (Figure 3).

The above adjustments to the approved acreage goal produce a new acreage goal of 1,259.

A resurvey of the entire property boundary is recommended to reestablish and verify the property lines. The outcome of the survey may or may not influence the overall acreage of the park.

2. Wildlife Management

The management plan for the fauna and amphibian species on the property is to simply maintain the status quo. However, vegetative management will provide habitat for a variety of wildlife species which, in turn, will add to the experience of park users.

Existing statutes prohibit small game hunting and trapping within the park. Deer hunting in Potawatomi State Park could be allowed during the regular November gun season. However, at present the deer herd is in balance with the range and no thinning of the herd is necessary.

3. Vegetation Management (Figure 4)

All vegetative communities of the park will be managed to promote a natural composition and density of species, plus several specific effects that will be achieved. All defective trees within 100 feet or less of designated use areas or facilities will be removed. However, defective trees not in this 100-foot zone will not be removed unless it is necessary to help achieve specific vegetative goals.

An attractive stand of maturing white birch exists near the observation tower. Forest management practices will be used to perpetuate the predominance of the birch type in this location. Selected stands of oak and red pine may also be regenerated and perpetuated and some red pine will be converted to white pine. The

forester will specify the best silvicultural system to achieve this effect.

Much of the park is forested with the northern hardwood type composed primarily of sugar maple, beech, and yellow birch with some basswood and rock elm, etc. in the 11" to 15" diameter breast height (d.b.h.) and 5" to 11" d.b.h. size range. The majority of this type will be allowed to remain in a natural state. An exception to this is aesthetic management in recreational use and service areas and for public health and safety near such areas.

In certain areas of the park, ornamental landscape plantings will be planted. Trees and shrubs native to the area will be used whenever possible. If nursery varieties must be used to achieve a desired effect they should at least be crosses or cultivars of native species.

Big tree silviculture will be employed to produce large specimen trees in selected red pine areas. This will be accomplished by careful thinning to encourage the production of large healthy specimens. Any logging done on the property will be done with the least amount of visual and physical disturbance possible. Skidding logs out by hand or using horses is recommended. Skidding should also be done when the ground is frozen.

Table 1 Vegetative Management Summary

Management Designation	Approximate Acreage
Natural Succession	829 A. (74%)
Big Red Pine Project	159 A. (14%)
White Birch Project	51 A. (4%)
Recreation Area & Misc.	87 A. (8%)
TOTAL	1126 A.

4. Ski Hill Management

The downhill ski area at Potawatomi depends on a private non-profit corporation for operation, maintenance, and development. Interested citizens have been the lifeblood of the ski hill since its inception in 1941. The Potawatomi Ski Club, Inc. leases the ski area from the DNR and provides all staffing and visitor services, including ski patrol, ski instructions and a first aid station.

Profits from the business are reinvested in the ski hill facilities with a small percentage remitted to the DNR as a rental payment.

5. Development (Figure 6)

The following development projects are proposed as a result of this plan.

a. Day-use Area. Day-use development associated with the boat landing area will include toilets, small picnic area, handicap accessible fishing pier and a fish cleaning station. The launching ramp and parking area were renovated in 1984.

b. Shower Building. A shower building with flush toilets will be built in the existing campground.

c. Trailer Dumping Station. This proposed facility is needed for servicing travel trailer and motor-home holding tanks.

d. Shop/Storage Building. A new shop/storage building will replace a smaller building which once served as both park office and shop.

e. Nature Center. A new project is proposed that would upgrade the nature interpretive program at Potawatomi by providing a nature center to house and be a nucleus of the program. The park office/shop building that will be vacated upon completion of the above-mentioned new shop/storage building, will be renovated and remodeled to function as a nature center.

f. Fishing Pier. A fishing pier will be provided near the boat landing to enhance shore fishing opportunities. The pier will be long enough to reach a variety of water depths and it will be accessible to handicapped persons. Water depths and the nearness to existing parking lots, toilets and drinking water are prime considerations for this facility.

g. Indoor Group Camp. A 40-person rustic indoor group camp will be established. Facilities will include a bunkhouse, sealed vault-type toilets, a sheltered common room, drinking water, parking area, access drive and lockable gate. The facility will be located in the general vicinity of the southernmost day-use area.

h. Outdoor Group Camp and Bicyclist Camp. A rustic outdoor group camp is planned to accommodate organized camping groups and touring bicyclists. Drinking water, sealed valut-type toilets, parking and an access drive will be provided. A capacity of 60 persons is projected pending specific site studies.

The Department's 1985 bike camper survey indicated there was demand for bicyclist campgrounds in Door County. Special bike camp facilities at both "ends" of the county at Potawatomi and Newport Parks were recommended as a result of the survey.

i. Camper's Store. The cold storage area of the former park office/shop building will be renovated and converted to a small concession area providing supplies for campers. Items such as lantern fuel, ice, packaged food items and other small camping supplies will be stocked. This facility will be leased out to a concessionaire. The location will be in the same building, but separate from the nature center.

j. Campsite Electrical Outlets. The electrical distribution system in the family style campground will be expanded by adding 40 new campsite electrical service outlets and revising the existing 23 campsite outlets. This will provide a total of 63 code compliant electrical campsites of the 125 sites in the park or 50% of the total. Other portions of the electrical system in the campground such as the service panel and related parts and wiring will also be evaluated and replaced if necessary.

k. Amphitheatre. An outdoor amphitheatre will be developed on the site of a former boat landing near the Daisy Field Campground. An area of about 1/2 acre will be involved.

l. Stairway and Path. A pedestrian stairway and path will be constructed, connecting the area adjacent to the existing observation tower with the boat landing area.

m. Electric Service. A project designed to provide electric service to the day-use area and picnic shelter near Hill's Point will be implemented.

6. Estimated Development Costs

Total estimated development cost based on 1986 figures is $840,000. All proposed development will be dependent upon the availability of funds and upon statewide priorities. Additional and/or up-to-date justification will also be required before development projects are funded.

All areas of development will be examined for the presence or absence of endangered and threatened wild animals and wild plants and appropriate protective measures taken for significant sites. If any list species are found during development, construction would be suspended until the District Endangered and Nongame Species Coordinator is consulted.

Since a complete biological inventory of the entire park does not exist, it is recommended that one be conducted as funds permit or through volunteer efforts of a college or university.

Phase I	
Boat Landing	50,000
Accessible Fishing Pier	20,000
Campground Renovation	62,500
Campground Electrical Replacement	66,300
Shop/Storage Building	75,000
Shoreline Erosion Protection	10,000
Trailer Dumping Station	75,000
Stairway Project	20,000
TOTAL	$378,800

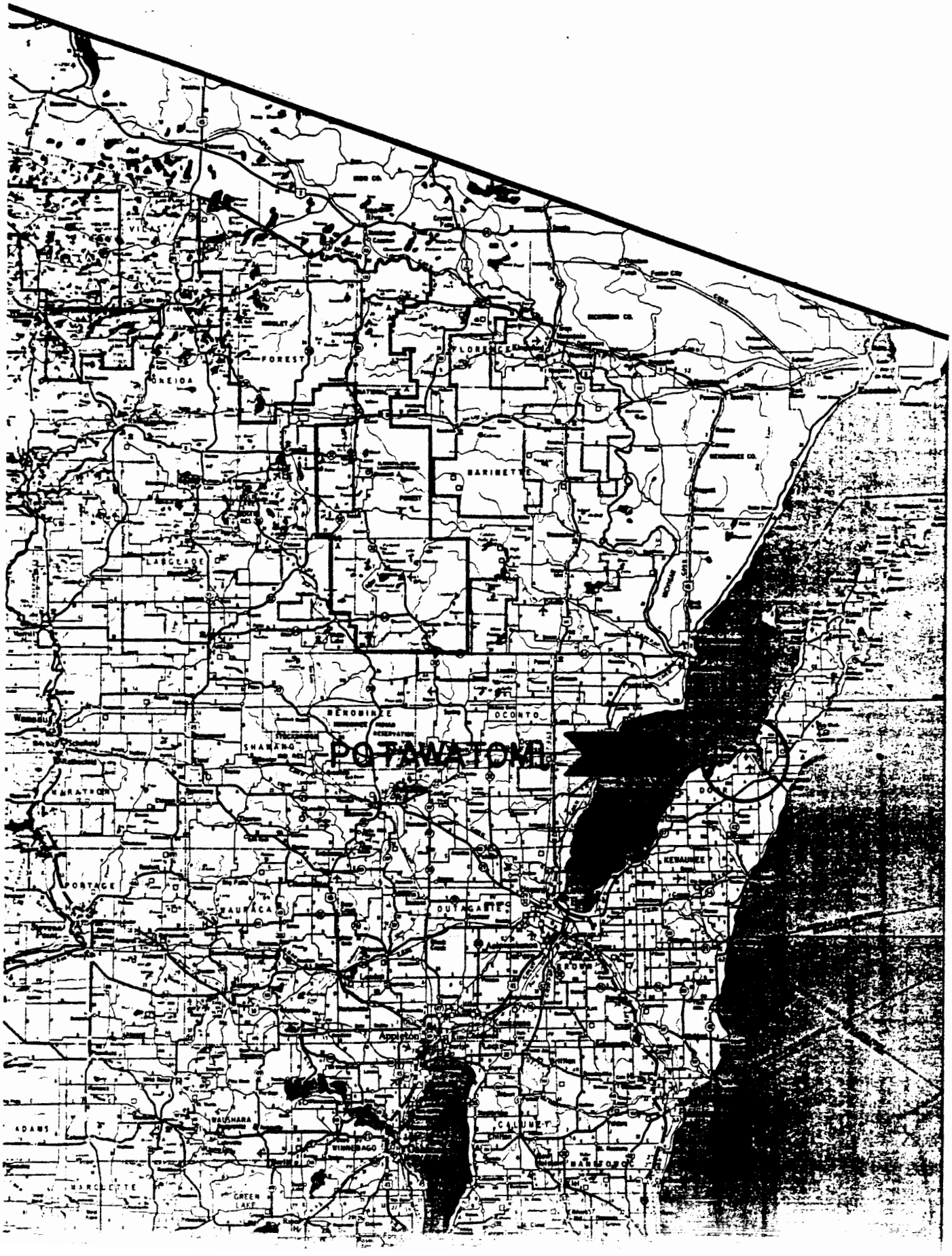
Phase II

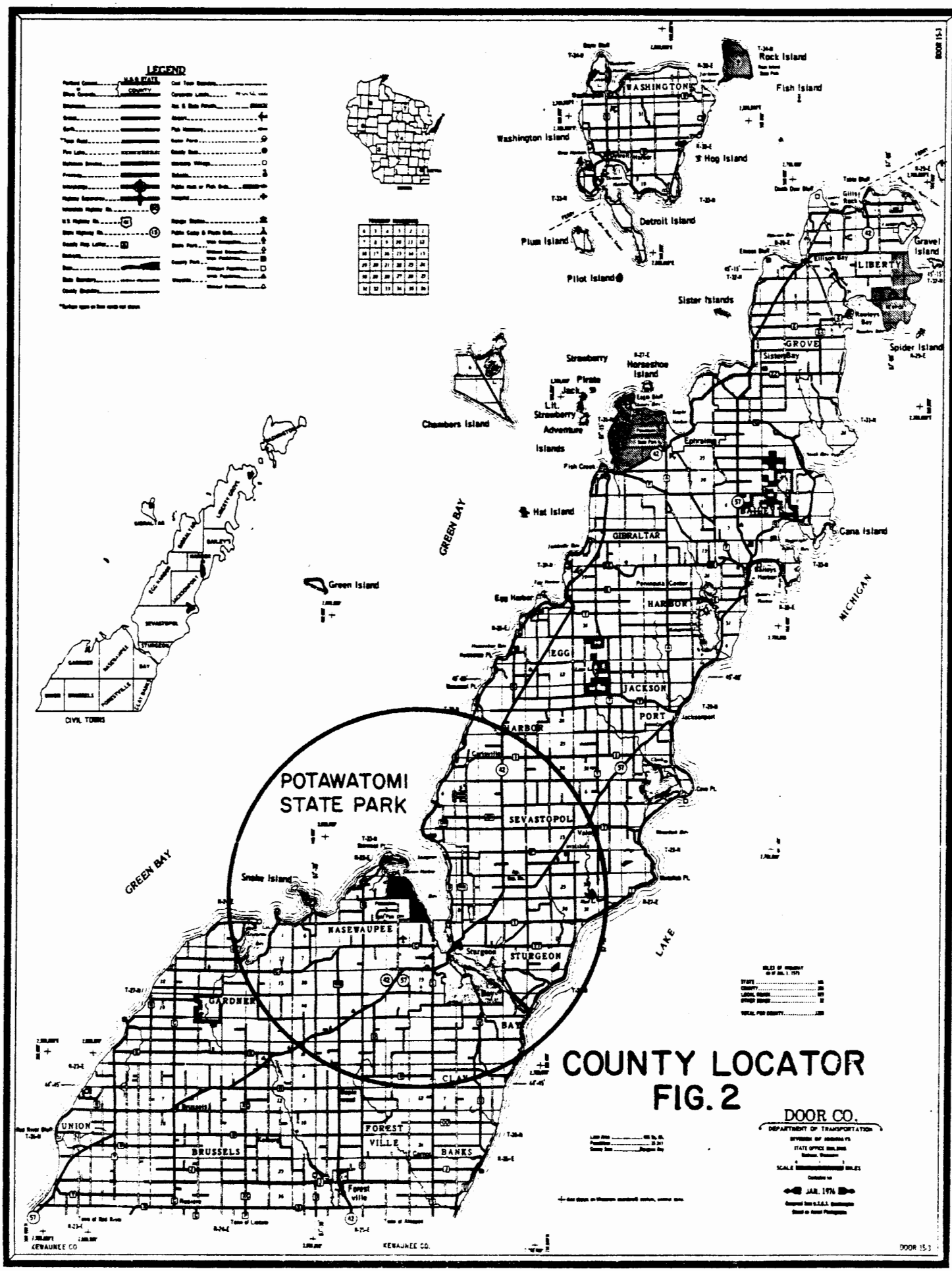
Indoor Group Camp	250,000	
Outdoor Group Camp	125,000	
Trail Expansion	1,200	
Nature Center	25,000	
Campers Store	25,000	
Ampitheater	20,000	
Day-Use Area Electrification	20,000	
TOTAL		$461,200
GRAND TOTAL BOTH PHASES		$840,000

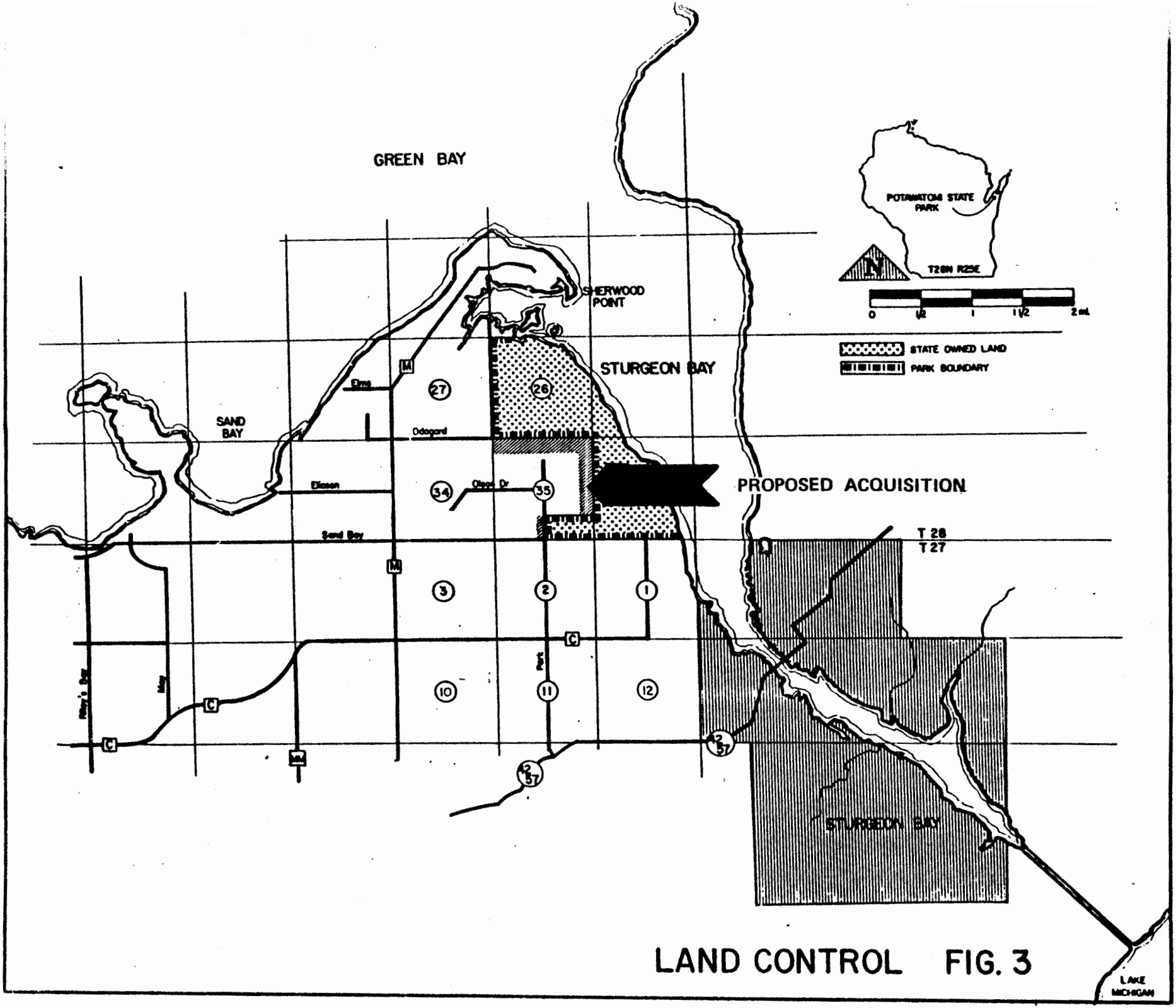
7. Operations Cost and Revenue Potential.

The 1986 cost to operate Potawatomi was $122,980. Revenue for the same period is estimated to be $114,600, making the park about 93% efficient.

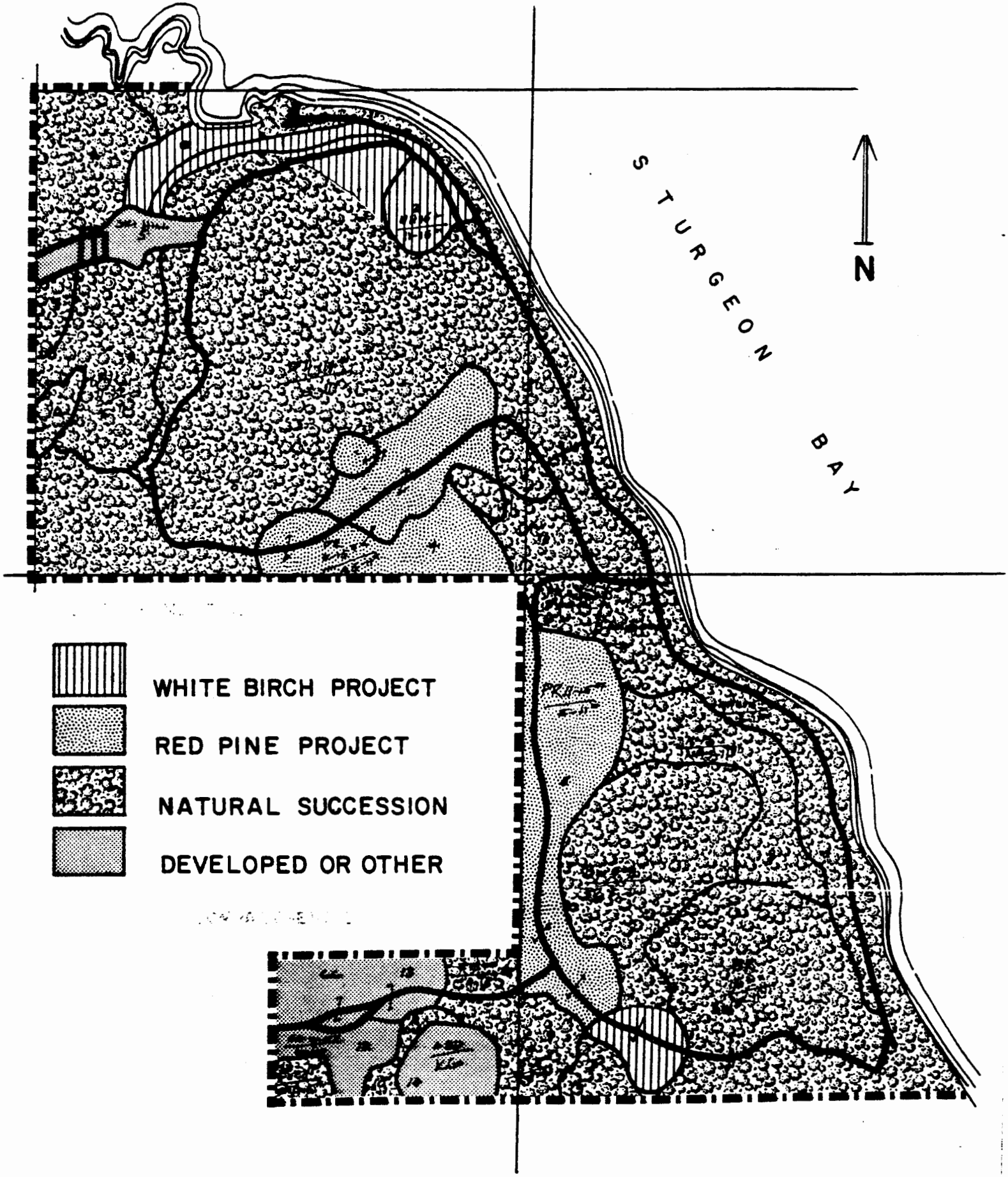
REGIONAL LOCATOR FIG. I




LEGEND
POTAWATOMI STATE PARK
COUNTY LOCATOR
FIG. 2
DOOR CO.
DEPARTMENT OF TRANSPORTATION
JAN. 1976
GREEN BAY
LAKE MICHIGAN
Rock Island
Fish Island
Washington Island
Hog Island
Detroit Island
Plum Island
Pilot Island
Gravel Island
Sister Islands
Spider Island
Chambers Island
Strawberry Island
Horseshoe Island
Pirate Jack
Lit. Strawberry
Adventure Islands
Hat Island
Cana Island
Green Island
Snake Island
WASHINGTON
LIBERTY GROVE
GIBRALTAR
EGG HARBOR
JACKSON
PORT
SEVASTOPOL
NASEWAUPEE
STURGEON BAY
GARDNER
UNION
BRUSSELS
FORESTVILLE
CLAY BANKS
CIVIL TOWNS
KEWAUNEE CO.
DOOR 15-3

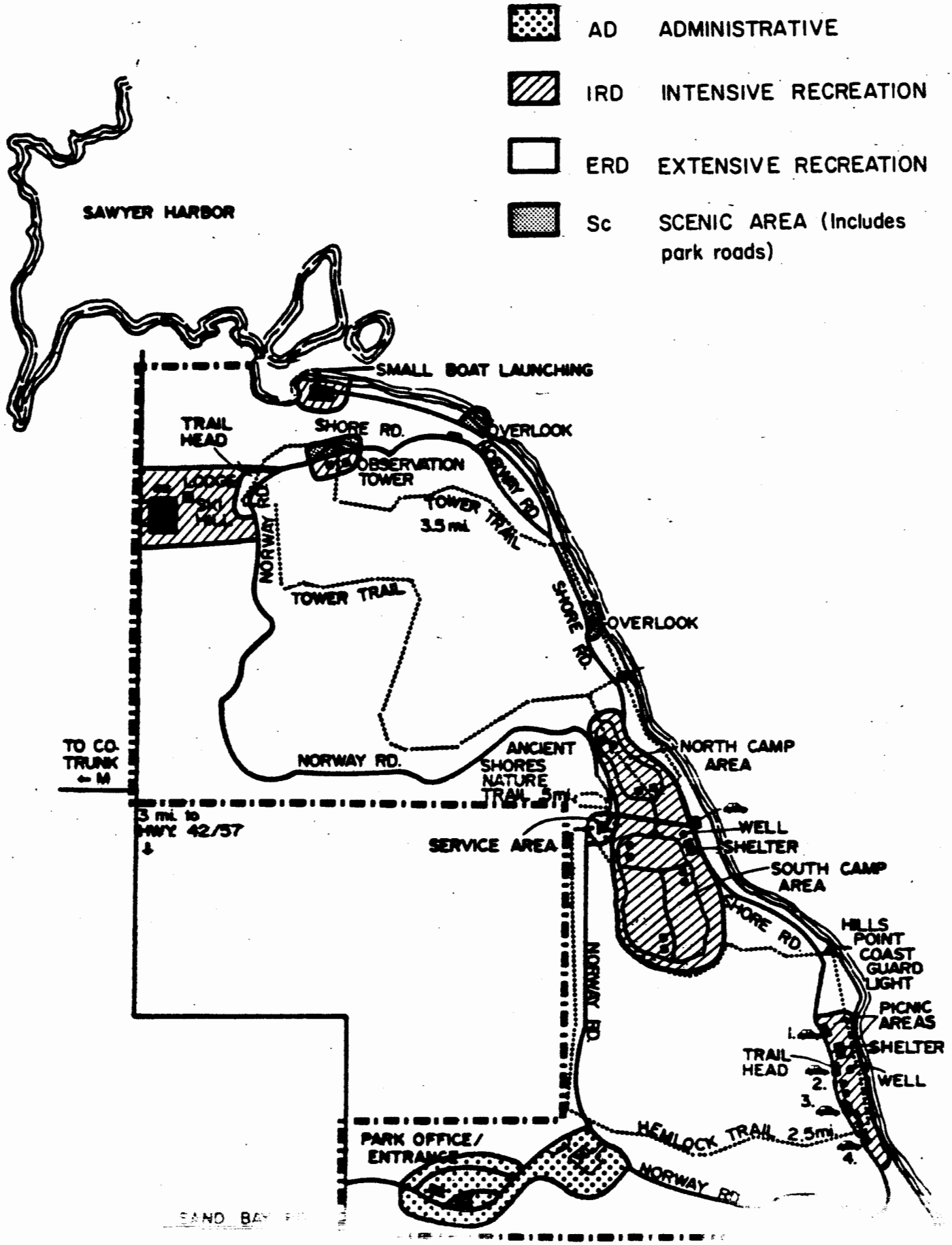


LAND CONTROL FIG. 3

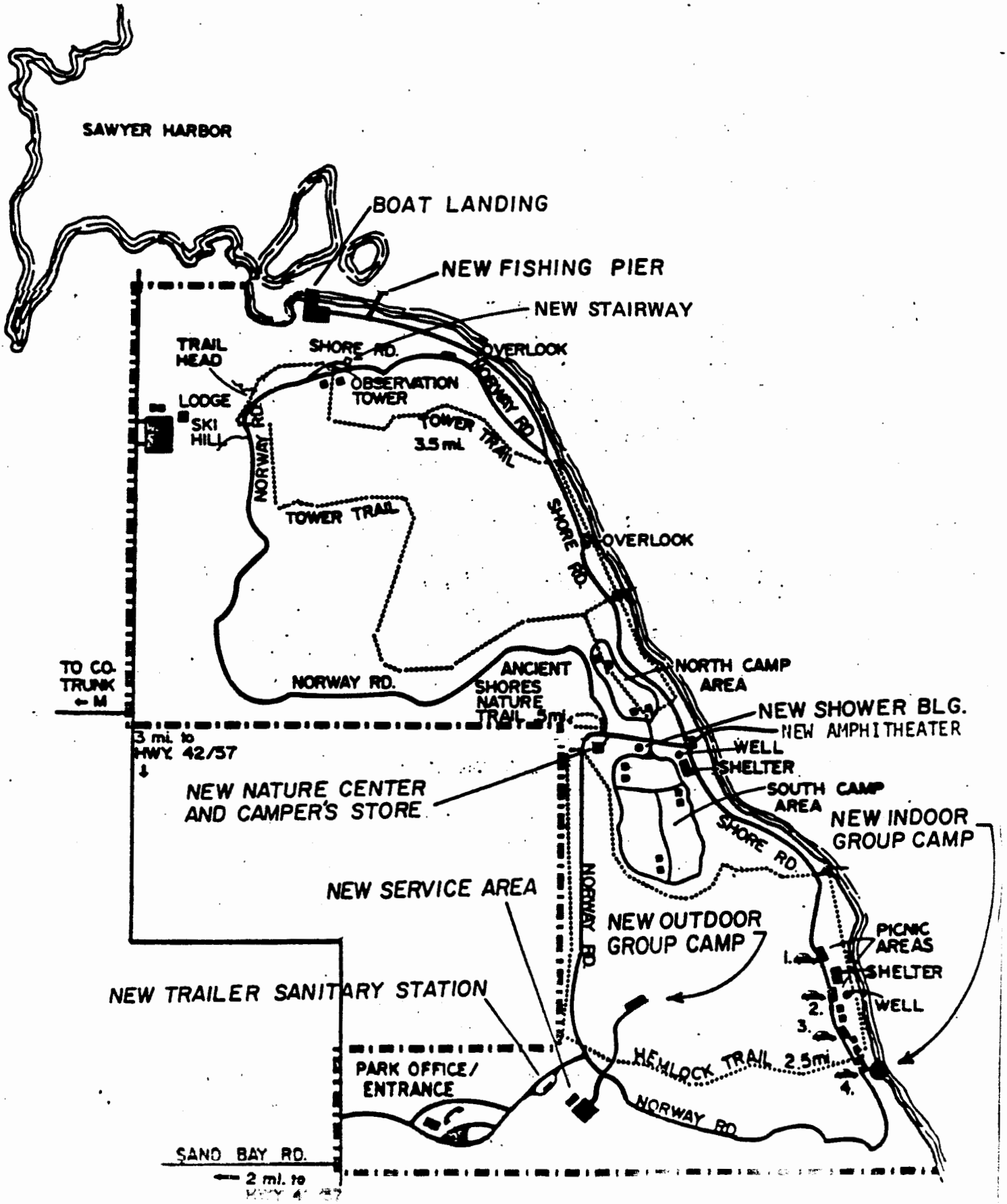


VEGETATIO[illegible]AGEMENT FIG. 4

LAND USE FIG. 5



DEVELOPMENT FIG. 6



SECTION II - SUPPORT DATA

A. BACKGROUND INFORMATION

1. Location (Figures 1 and 2)

2. Regional Context

Potawatomi State Park is located on the western edge of the City of Sturgeon Bay in the Township of Nasewaupee, Door County. It is about midway between Green Bay and Gill's Rock on the peninsula separating the waters of Green Bay and Lake Michigan. This region, known popularly as "The Door Peninsula", is a favorite resort and recreation area because of its combination of scenic qualities and moderate climate. Two state highways (42 and 57) bring tourists from southern Wisconsin and northern Illinois communities.

3. History of the Area

When the first white man (Jean Nicolet) entered the area in 1634, he found a land populated by Woodland Indians of the Fox, Sauk, Chippewa, Menominee, Potawatomi and Winnebago tribes. These peoples persisted into the early 1800's, but generally declined as more and more white immigrants arrived.

The fur trade was very active during the late 1700's and the major trade route in the vicinity of the present park site was the water of Green Bay. Many settlers remained at the mouth of Sturgeon Bay exploiting the rich resources of the forest and waters.

The prominent limestone headland at the mouth of Sturgeon Bay become known as "Government Bluff" and in 1834 the Federal government started a rock quarry there. A thriving resort business sprang up in the late 1800's on the narrow spit of land enclosing Sawyer's Harbor below Government Bluff.

The harbor, viewed from the top of Government Bluff, was and is still very scenic. More recently, hotels and resorts have been replaced by private cottages and year-round dwellings, but the names Idlewild, Sherwood Point and Cabot's Cove remain.

The City of Sturgeon Bay was officially plotted in 1855, and business and industry began to grow. Notable among local businesses were lumbering, shipbuilding, fruit production and stone quarrying.

4. History of the Property

The United States Government held title to the land now comprising the site of Potawatomi State Park as a part of the Northwest Territory and later the Wisconsin Territory. Early explorers and government surveyors knew of the value of "Government Bluff" both for

strategic military purposes -- because of its commanding view of the Sturgeon Bay and Green Bay coastlines and for the high quality limestone found beneath the shallow soil.

The federal government began quarry operation there in 1834 and in 1837 enacted a 1,000-acre reservation on the site. The result was that while surrounding lands were eventually sold and deeded to settlers, the 1,000-acre reservation remained intact and in public ownership.

The natural and scenic resources of Government Bluff were apparently coveted by the local inhabitants. Historical accounts given the distinct impression that the reservation inaccessibility to the public was an unpopular restriction. Quarry operation never grew to the extent of several of the other local quarries, but the property remained in federal ownership until 1928.

Potawatomi State Park was created in 1928 by the Legislature of the State of Wisconsin after the purchase of 1046.10 acres from the Federal Government.

During the ten succeeding years after the property was purchased, facilities for camping, picnicking and hiking were developed. In the 1950's, other improvements to the park were made, including new toilets, park service building and a new picnic shelter. A new park office building was built in 1983-84.

An interesting facet to the history of Potawatomi is the development of a winter sports recreation area. The facilities were developed in 1941 in cooperation with a group of winter sports enthusiasts known as the Sturgeon Bay Winter Sports Club. Downhill skiing, tobogganing and ski-jumping were popular activities. Tows for skiers and tobogganers were provided as were rental equipment, food and beverages.

The area was operated by different groups with various names over the years. Currently, the area is exclusively a downhill ski hill with two main ski runs and a recently installed chairlift. A non-profit corporation, the Potawatomi Ski Club, leases the ski area from the state and operates it for public recreation.

5. Existing Development and Park Uses

Potawatomi State Park currently functions as a popular multi-season recreational facility. Traditional activities such as picnicking, camping, hiking, sightseeing and fishing, as well as the more modern activities of snowmobiling and cross-country skiing. A downhill ski hill within the park is operated by a local ski club.

Recently the park became a one entrance/exit facility by the permanent closure of three of the four access roads. All traffic entering or leaving the park passes the park entrance visitor station. All roads within the park are state-owned.

112-acres of the park are developed for recreation. An inventory of facilities available to the park user is provided in Table 2.

Table 2. Facility Inventory

Picnic Area	6.9 acres
75' observation tower	1
Family Campground	125 units
Parking Stalls	162
Park Roads	10.3 miles
Toilet Buildings	17
Hiking Trails	6.5 miles
Nature Trail	0.5 miles
Snowmobile Trail	10.0 miles
Park Entrance Visitor Station	1
Cross County Ski Trail	10.4 miles
Shelter Buildings	2
Boat Launch	1 (35 car/trailer stalls)

B. RESOURCE CAPABILITY AND INVENTORY

1. Soils, Geology and Hydrogeology

The soils of Potawatomi range in quality from stoney and rocky to sandy loam to clay. Generally 36" or less soil exists over most of the site. In some areas bedrock limestone is directly exposed at the surface, although one area of clay and glacial till 76' deep is also known. The slope of the ski hill has been created by filling and contouring.

The underlying bedrock is dolomite of the Niagara Cuesta which forms all of the Door Peninsula. The fractured nature of this limestone layer allows surface runoff to enter the aquifer directly in many places. It also provides the raw material for local masonry work and road building.

2. Fish and Wildlife

Fish are abundant in the waters adjacent to Potawatomi. Game fish species include salmon, trout, walleye, smallmouth bass and yellow perch. Other panfish and forage and rough fish species are also present. A significant sport fishery has developed particularly with trout and salmon. Good water quality, an excellent supply of fish-holding underwater structure habitat coupled with scientific management techniques have enhanced the fishery of the region.

Wildlife resources at Potawatomi consists of those species associated with dense forest. Deer are present, but not abundant. Also present are field mice, moles, voles, rabbits, mice, skunks, raccoons, squirrels and cottontail rabbits. Many species of birds are attracted as residents and as migrants. Included are birds in all of the following groups: loons, swans, geese and ducks, vultures, hawks, gulls and terns, woodpeckers, owls, warblers and sparrows. No endangered species of mammal or bird is known to inhabit the site.

3. Vegetation

Potawatomi State Park is over 90% forested. The 1983 forest reconnaissance shows several major stands of northern hardwood, red pine, oak, white birch, aspen and white cedar. Some white birch, oak, and red pine stands are declining in quality and regeneration by proven silvicultural practices is recommended.

Open areas of the park are populated by various grass species and pioneer plants. Edges of the forest stands contain various shrub species including red osier dogwood, grey dogwood, hawthorn, thimbleberry, blackberry and others. Notable among the groundlayer plants is the yellow lady's slipper, a threatened species. The endangered dwarf lake iris may also occur at Potawatomi, although at this time its presence is undocumented. It does exist in some area of Door County.

4. Water Resources

There are no streams or lakes in the interior of Potawatomi State Park.

The park does have about 2-1/4 miles of shoreline on the waters of Sturgeon Bay and Sawyer Harbor. The configuration of the shoreline ranges from gravelly beach to sheer limestone bluff. The water quality is generally good. Clarity is high and the temperatures generally cold. Bottom types are diverse including muck, sand, gravel and rock.

One small pond was created near the ski hill to serve as a water cooling and storage tank for the artificial snow making equipment. Well water is diverted to this pond.

Concerns over contamination have arisen recently over wells in the vicinity of the park. Even the municipal water supply of Sturgeon Bay has been affected. Wells inside the park are tested regularly throughout the year and corrective action taken if there is bacteriological contamination. Source of contamination is usually impossible to determine.

5. Historical and Archaeological Resources

While traces of quarrying activity can be found in the park, there is little other apparent evidence of historical occupation or use of the site. Indian villages and encampments existed near Potawatomi on the lower elevations near the waters of Sawyer Harbor and other nearby areas where hunting, fishing and food gathering opportunities were advantageous.

Prior to any development involving disturbance of the ground, the construction site will be tested by a qualified field archeologist. Should the tests uncover any cultural material deriving from ancient inhabitants, further detailed testing will be done to evaluate the find and determine whether design changes are necessary to avoid obliterating it.

6. Scenic Resources

Potawatomi has several landscape features that provide high quality visual experiences. Views and vistas overlooking the waters of Sturgeon Bay, Sawyer Harbor and Green Bay are created at many locations in the park. At the water's edge the expansive flat surface of the Bay attracts the eye.

A 75' observation tower atop a 150' bluff provides a different and extended perspective of the same scenery. All of Sawyer Harbor and Cabot's Point are visible with a more distant horizon beyond. Another contrasting view is available at the top of the ski run where a view to the southwest reveals glimpses of lower Green Bay and the mainland of southern Door County.

Scenic roads are a valuable resource of the park. Their narrowness and tree-lined shoulders bring the traveler to a closer relationship with the forest. Fall colors are spectacular along certain portions. In several sections the lanes are separated and pass around large pine trees, a novel device but one much appreciated by the visitor.

7. Land Use Classification

In accordance with the Department's Land Use Classification System, park lands are given the following designations:

Administrative Areas	(AD)
Intensive Recreational Development	(IRD)
Extensive Recreation Area	(ERA)
Scenic Area	(SC)

About 56 acres of Potawatomi is designated as Administrative Area. This includes the Park Entrance Visitor Station, shop/storage building, storage yard, and associated driveways and parking spaces.

Intensive Recreational Development totalling 112 acres includes the campground, picnic areas, boat landing, observation tower and the downhill ski area. These are the developed and heavily used areas of the park.

Extensive Recreation Area takes in those scenic lands outside the other land use areas. These are lightly developed or undeveloped and are generally used for trails and other low impact recreation. About 854 acres are involved at Potawatomi.

Scenic Area designation has been assigned to certain parts of the park because of their value as vistas and other esthetic qualities. About 112 acres are involved.

C. MANAGEMENT PROBLEMS AND RELATED CONCERNS

1. Need for Buffer

The development of land in Door County for recreational and second-home use is rapidly increasing. Because of the land ownership pattern adjacent to the park and the general configuration of the park, two areas of the property exist where development adjacent to the property boundaries would degrade the park user's experience. These are areas where the scenic park drives are located close to the edge of the property. Open fields are visible from these roads now, but condominium or cottage development could encroach on the view. Acquisition of land directly adjacent to the boundary in these two areas would effectively eliminate this threat. Land now covered by scenic easement (5.22 acres) directly across the road from the park entrance area should be acquired in fee. This action is needed to completely safeguard the visual qualities of the park entrance from degradation.

2. Survey Errors

A related issue is the accuracy of the actual boundary lines. At least two apparent survey errors have been discovered. A resurvey of the total perimeter of the park is needed to verify accuracy or correct any errors.

3. Lack of Shore Fishing Opportunities

Shore fishing opportunities are currently limited due to inaccessibility of productive water depths and fish holding bottom structure. Currently there is no opportunity for the wheelchair handicapped for shore fishing.

4. Deteriorated Indoor Group Camp

A juvenile indoor group camp has existed at Potawatomi for a number of years. The facility is not up to standard and is in need of extensive repair.

5. Need for Camper's Store

Campers at Potawatomi's family-style campground have expressed a desire to have a small "camper's store" within the park. Items such as ice, lantern fuel, packaged food items and other camping supplies would make up the inventory.

6. Need for Nature Center

The park's nature interpretive program needs a physical base of operation. A place of assembly for programs and presentations, naturalists office and workshop are the basic needs. A location central to the campground is desirable.

7. Declining Forest Stands

A 1983 forest reconnaisance at Potawatomi showed that several major stands of white birch, oak, and red pine were declining in quality. About 90% of the park is forested.

8. Need for Bicycle Campsites

Recently, the number of persons touring on bicycles has increased significantly. The need has arisen to provide for unscheduled overnight camping for bicyclist. Some accommodation apart from the regular family-style tent/trailer campground is needed.

9. Lack of Outdoor Group Camp

Requests for outdoor group camping have been noted by the park staff. Such a facility might also incorporate the bicycle campsites mentioned in 8. above.

10. Outdated Electrical System in Family Campground

The existing family campground of 125 sites has 23 sites with electrical hookups which were installed sometime in the 1930's. Numerous requests for more electrical hookups have been noted. Besides the need for more hookups, the existing system needs to be refurbished or replaced.

11. Need for Family Campground Renovation

The campsites in the Family Campground need extensive repairs. Some of the camp pads are on the wrong side of the spurs, many sites require regrading, leveling, filling and surfacing.

12. Requests for Stairway

Several requests have been received for a stairway that would allow pedestrians to traverse the cliff separating the observation tower area from the boat landing area below. This would become an integral part of the existing hiking trail system in the park.

13. Opportunity for Amphitheatre Development

A former boat landing site across the road from the Daisy Field Campground would easily be adapted to use as an outdoor amphitheater. The scenic bayshore setting and the convenient location make this an ideal place to establish a facility that can be utilized for interpretive programs, presentations and gatherings.

14. Need for Shop/Storage Building Replacement

The present shop/storage building at Potawatomi has become outmoded and no longer serves the modern maintenance, construction and storage needs of the park. A taller structure is needed to allow for larger overhead doors and more space for shop work and vehicle maintenance and storage is needed. The present structure cannot feasibly be [illegible] these needs.

15. Shoreline Erosion

The shoreline adjacent to the family campground is eroding due to high water levels and storm-driven waves. Recent conditions have aggravated this situation to the point of needing repairs and protection.

16. Need to Expand Skiing/Cross-Country Ski Trails

Trails need to be expanded into the northwest quadrant of the park.

17. Need for Electrical Service in Picnic Area

The picnic shelter and day-use area near Hill's Point lack electric service. Lighting should be provided in these areas for public safety and security.

D. RECREATION NEEDS AND JUSTIFICATION

Wisconsin's 1986-91 Statewide Comprehensive Outdoor Recreation Plan (SCORP) Needs Assessment section sets priority ratings on various outdoor recreation activities to serve as an indicator of needs. For the Green Bay area, which includes Door County, recreation activities pertaining to Potawatomi State Park and ranked as "high priority" are bicycling, camping, cross-country skiing, fishing, picnicking, and walking/jogging.

E. ANALYSIS OF ALTERNATIVES

1. Increase the Scope and Intensity of Park Development

Development might include such features as a game room, gift shop, rental cabins, boat livery and full hookups in the campground. No doubt this type of development would draw additional park visitors, however, it may infringe on local private sector business initiatives; and also infringe on the overall low key theme of the park. Therefore, this alternative is not desirable.

2. Decrease the Scope and Intensity of Park Development

This alternative would decrease the level of development below the present status quo. Reductions in the overall program would result from closing or removing facilities. Cost savings to the operating budget might be an immediate result, however, long-term attendance would suffer and a reduction of maintenance matching funds would be necessary. Therefore, this alternative is not considered feasible, at this time.

3. Limited Expansion

This alternative (the recommended one) would maintain the basic size, theme and character of Potawatomi. Limited expansion and upgrading of facilities to better serve public needs would be implemented. Among these might be improvement of existing campsites, addition of small indoor group camp, bicycle camping, refurbishing and expansion of the campground electrical system, trail expansion and other related features.

THE STATE HISTORICAL SOCIETY OF WISCONSIN
shs
1846

HISTORIC PRESERVATION DIVISION

January 6, 1986

Mr. Daniel C. Rogers, District Park Planner
Department of Natural Resources
1125 North Military Avenue
P. O. Box 10448
Green Bay, Wisconsin 54307-0448

SHSW: 85-1252
RE: Potowatomi State Park Master Plan

Dear Mr. Rogers:

We have searched our records for information on properties of architectural, historical, or archeological significance in and adjacent to Potowatomi State Park.

There are no structures listed in the National Register of Historic Places located within the study area. However, there may be buildings in the area that have not been evaluated for eligibility for the National Register. Therefore, we recommend that before undertaking any development that would affect any buildings, the Department of Natural Resources send us a recent photograph of the building so that its possible historical and/or architectural significance can be determined.

There are no known archeological sites in or adjacent to the study area, but most of the area has never been surveyed for such resources. The park area has high archeological potential. Therefore, we recommend that prior to any ground-disturbing activities in the park, the Department of Natural Resources should consult with our office to determine whether an archeological survey is needed.

If there are any questions concerning this matter, please contact me at (608) 262-2732.

Sincerely,

Richard W. Dexter
Chief, Registration and
Compliance Section

RWD:cm
3551a-1

THE UNIVERSITY OF WISCONSIN—MILWAUKEE/ P.O. Box 413, Milwaukee, Wisconsin 53201

COLLEGE OF LETTERS AND SCIENCE
DEPARTMENT OF BIOLOGICAL SCIENCES

(414) 963-4214

February 9, 1987

MAR 16 1987

D. L. Weizenicker
Chief, Bureau of Parks
Recreation, Wisconsin Department of
Natural Resources
P. O. Box 7921
Madison, WI 53707

Dear Dave:

I have examined the Potawatomi State Park Plan with interest and find the alternative suggested appropriate.

Under vegetation management, I am intrigued by the statement on page 2, item 3, that a stand of white birch and selected stands of oak and white pine may be regenerated and perpetuated, however, the silvicultural system to achieve this is not stated. All three of these species are disturbance-oriented, and it would be of interest to know what methods are proposed to regenerate them. (red 1)

The meaning of the first paragraph (page 3) is unclear; if this is a northern hardwood forest, presumably, it is no longer undergoing succession. Nowhere do I find a description of the type nor mention of the age of the major component species.

Big tree silviculture is commendable. Under the circumstances, however, it should be approached with great care, since older red pine are highly susceptible to windthrow and the situation where these trees are located probably increases windthrow potential. A better vegetation description would be appropriate and useful. Much of the coding on the map (Figure 4) is illegible, particularly that regarding the northern hardwood forest. The statement on page 10, paragraph 1, that careful harvesting would upgrade the overall health and vigor of the strands is, I suspect, open to question.

Another omission which would be helpful to the reviewer is any mention of sewage disposal, save for the new trailer-dumping station. With the shallow soils and general waste disposal problems of Door County, it would seem appropriate to be specific on how waste will be treated, particularly with plans for a new group camp. A related statement that needs expansion (page 10, item 4) is that concerning contamination of wells in the vicinity of the park. Whence the contamination? Likewise, it would be helpful to have specifics on why the (page 12, No. 7) forest stands are declining in quality.

Clearly, this is an interesting and highly valuable park that deserves further attention. The master plan should be reworked to clarify these questions and their solution.

Cordially,

Forest

Forest Stearns,
Professor of Botany

FS/mf

(AD-75)

CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: April 8, 1987 *File Ref:* 2100-1

To: Paul Matthiae-ER/4

From: D. L. Weizenicker-PR/4 D. L. Weizenicker

Subject: SAPC Comments on Potawatomi State Park Master Plan

This is in response to the Council's comments on the Potawatomi State Park Master Plan.

Comment #1

Under vegetation management, I am intrigued by the statement on page 2, item 3, that a stand of white birch and selected stands of oak and red pine may be regenerated and perpetuated, however, the silvicultural system to achieve this is not stated. All three of these species are disturbance-oriented, and it would be of interest to know what methods are proposed to regenerate them.

Department Response:

The master plan states that the forester will specify the best silvicultural method to regenerate the birch, oak and pine. He will probably choose between the two-cut shelterwood or clear cutting in small patches in stages. Cutting and skidding of logs would take place in the winter when the ground is frozen.

Comment #2

The meaning of the first paragraph (page 3) is unclear; if this is a northern hardwood forest, presumably, it is no longer undergoing succession. Nowhere do I find a description of the type nor mention of the age of the major component species.

Department Response:

The second sentence of the first paragraph on page 3 will be reworded to say that the majority of the northern hardwood type will be allowed to remain in an unmanaged, natural state. It will also be mentioned that the northern hardwood type is made up primarily of sugar maple, beech and yellow birch with some basswood and rock elm, etc., in the 11" to 15" d.b.h. and 5" to 11" d.b.h. size range.

Comment #3

Big tree silviculture is commendable. Under the circumstances, however, it should be approached with great care, since older red pine are highly susceptible to windthrow and the situation where these trees

are located probably increases windthrow potential. A better vegetation description would be appropriate and useful. Much of the coding on the map (Figure 4) is illegible, particularly that regarding the northern hardwood forest. The statement on page 10, paragraph 1, that careful harvesting would upgrade the overall health and vigor of the strands is, I suspect, open to question.

Department Response:

The forester will choose a cutting method such as two-cut shelterwood to reduce the risk of windthrow.

Figure 4 is a forest recon map modified to only show the areas of the park where the vegetation will or will not receive some type of recommended management. A recon map prepared by the forester is on file.

The last sentence in paragraph 1 on page 10 will be reworded as such. "Some existing tree stands are declining in quality and regeneration by proven silvicultural practices is recommended."

Comment #4

Another omission would be helpful to the reviewer is any mention of sewage disposal, save for the new trailer-dumping station. With the shallow soils and general waste disposal problems of Door County, it would seem appropriate to be specific on how waste will be treated, particularly with plans for a new group camp. A related statement that needs expansion (page 10, item 4) is that concerning contamination of wells in the vicinity of the park. Whence the contamination? Likewise, it would be helpful to have specifics on why the (page 12, No. 7) forest stands are declining in quality.

Department Response:

As with any state park development involving sewage disposal, state and local codes will be complied with. Because of the soil and bedrock conditions at Potawatomi, mound systems will likely be necessary for the shower building and trailer dumping station. Sealed vault-type toilets will be recommended for the proposed indoor and outdoor group camps.

Wells in Door County are subject to contamination primarily because of the fractured limestone bedrock. Wells inside the park are tested regularly throughout the year and corrective action taken if there is bacteriological contamination. Source of contamination is usually impossible to determine.

The park's white birch and red pine are the tree species showing the greatest decline in quality. White birch is a relatively short-lived tree and stands are reaching maturity. Much of the red pine is overcrowded and in need of thinning to improve the vigor of the stand.

We thank the Council for reviewing the Potawatomi State Park Master Plan.

DLW:DJK:bt
M1025

cc: J. Treichel-PR/4
D. Kulhanek-PR/4
C. Higgs-Green Bay

For All DNR Type II Actions, Except Adm. Rules NOV 28 1986

Department of Natural Resources

District or Bureau

Type List Designations(s)

ENVIRONMENTAL ASSESSMENT

Applicant: Wisconsin Department of Natural Resources - Potawatomi State Park

Title of Proposal: Master Plan Concept Element

Location:
County Door
Township 27 North, Range 25 East
Section(s) 25, 26, 36
Political Town Nasewaupee

PROJECT SUMMARY

1. General Description (brief overview)

The Master Plan Concept Element will guide the management and development of Potawatomi State Park for the next ten years, or until amended. The plan describes goals and objectives for the future of the park using available regional planning information, known environmental data, public input and observations of the park staff members as supporting rationale.

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

The purpose is to make available to the public facilities and areas for recreation while protecting the natural and scenic resources of Potawatomi State Park. A list of specific projects to implement this purpose follows:

a. Boat Landing renovation - existing project
Construct 4 - unit pit toilet

b. Shower Building and Flush Toilets - underway
(Covered under separate EA)

c. Trailer Dumping Station

d. Shop/Storage Building

e. Nature Center (Renovation of existing indoor space for this purpose.)

f. Fishing Pier

g. Indoor Group Camp

h. Outdoor Group Camp

i. Campers Store (Renovation of existing interior space for this purpose.)

j. Renovate Campground Electrical System

k. Outdoor Amphitheater

k. Vita Course

Other actions proposed in this plan not involving construction include:

Acquisition of about 130 acres of land for buffer zone.

Sale of about 3.5 Acres of land to settle boundary dispute.

Acquisition of about 5.22 acres of land now under scenic easement.

Implementation of vegetation management to achieve specific desired effects in vegetative communities.

Continuation of all other phases of park operation.

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

Wis. Statutes Ch. 27.01 (Public Parks and Recreation)

State and local Building Codes, H78 regarding campgrounds.

Natural Resources Board approval of master plan.

4. Estimated Cost and Funding Source

$793,700 ORAP bonding, ORAP formula, LAWCON, other available sources

PROPOSED PHYSICAL CHANGES

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

a. Boat landing pit toilets - 27 cu.yd. excavation

b. Shower Building - covered under separate EA

c. Trailer Dumping Station - 8 cu.yd. excavation, 4000 sf. paving

d. Shop/Storage Building - 1 acre site prep, 300 cu.yd. excavation

e. Indoor Group Camp - 2 acre site preparation, 500 cu.yd excavation (Estimate of total for all buildings involved.)

f. Outdoor Group Camp - 6 acre site preparation

g. Outdoor Amphitheater - 1/2 acre site preparation

h. Vita Course - about 1/2 mi. length X 6' wide

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

None (Fishing pier anticipated to be removable type.)

7. Buildings, Treatment Units, Roads and Other Structures

a. Shower Building parking lot ±6 cars - 1200 sf.

b. Trailer Dumping Station road - 4000 sf.

c. Shop/Storage building - ±3000 sf.

d. Indoor Group Camp - ±3000 sf.

8. Emissions and Discharges

Wastewater from Shop/Storage Building and Trailer Dumping Station will be treated using mound system. The two facilities, being near each other may share one appropriately sized treatment system.

All other facilities in the park will use existing treatment systems or will utilize the sealed - vault design.

9. Other Changes

Vegetative Management - entire property (230 acres intensively)

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

Locator Map

Development Map

Vegetation Management Map

AFFECTED ENVIRONMENT

Information Based On (Check all that apply):

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

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

Soils and Geology

The soils of Potawatomi range in quality from stony and rocky to sandy loam and clay. Generally 36" or less soil exists over most of the site. In some areas limestone bedrock is directly exposed at the surface, although one area of glacial till and clay is known to exist which is 76' deep. The slope of the ski hill has been created by filling and contouring.

The underlying bedrock is limestone of the Niagara Cuesta which forms all of the Door Peninsula. The fractured nature of this layer allows surface runoff to enter the aquifer directly in many places. The rock layer also provides the raw material for local masonry work and road building.

Water Resources

There are no lakes or streams within the boundary of Potawatomi State Park.

The park does have about 2¼ miles of shoreline on the waters of Sturgeon Bay and Sawyer Harbor. The character of the shoreline ranges from gravelly beach to sheer limestone bluff. The water quality is generally good with high clarity and generally low temperatures. Bottom types are diverse, including muck, sand, gravel, and rock.

One small pond was created.near the ski hill to serve as a water cooling and storage tank to supply the snow making equipment. Well water is diverted into this pond.

12. Biological

a. Flora

Potawatomi is over 90% forested. The 1983 forest recon shows several major stands of northern hardwood, red pine, oak, white birch, aspen, and white cedar. In forestry terms, some of the existing stands are declining in quality and regeneration through careful harvesting would upgrade their overall health and vigor.

Open areas of the park are populated by various grass species and pioneer plants. Edges of the forest stands contain various shrub species including red osier dogwood, grey dogwood, hawthorn, thimbleberry, blackberry and others. Notable among the groundlayer plants is the yellow lady's slipper, a threatened species. The endangered dwarf lake iris may also occur at the park, although its presence is undocumented at this time. It does exist in similar settings in Door County.

b. Fauna

Fish are abundant in the waters adjacent to Potawatomi. Game species include salmon, trout, walleye, smallmouth bass and yellow perch. Other panfish, forage fish and rough fish species are also present. A significant sport fishery has developed, especially where trout and salmon are concerned. Good water quality, an excellent supply of underwater fish - holding habitat, coupled with scientific fish management techniques have enhanced the fishery in this region.

Wildlife resources at Potawatomi consist of those species associated with dense forest cover. Deer are present, but not abundant. Also present are field mice, moles, voles, rabbits, mice, squirrels, skunks and raccoons. Many types of birds are attracted as residents and migrants. Included are birds in all of the following groups: loons, swans, geese and ducks, vultures, hawks, gulls and terns, woodpeckers, owls, warblers and sparrows.

No endangered species of bird or mammal is known to inhabit the site.

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

The region surrounding the park site is a popular summer tourist area. The Sturgeon Bay economy relies on tourism, ship building, agriculture and small business.

Settlers in the area came principally from Middle - European and Nordic ethnic backgrounds. Prior inhabitants were Native American.

Potawatomi State Park serves an average of 200,000 visitors annually.

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

None.

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

15. Physical (include visual if applicable)

Construction of facilities will cause temporary effects of machinery noise, engine emissions, visual disturbance, and in some cases altered traffic patterns during actual construction. Other more lasting effects will be the visual presence of the new structures or facilities, disturbance of the ground for footings and foundations, and the placement of pavement for access drives and parking lots.

16. Biological

Removal of groundlayer vegetation from construction sites and replacement with grass/turf species after construction is completed. Removal of a limited number of trees and shrubs in the direct path of construction. About ½ acre in all will be involved.

Intensive management of 51 acres of white birch type will result in the perpetuation of white birch as a majority component of said stands. Management of 159 acres of red pine type will result in the predominance of large red pine trees in those areas.

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

An increased number and higher quality of facilities will increase the quality of service to the public. It is anticipated that the average length of stay for campers will increase due to the availability of showers. The length of the use season may also be extended as well.

The provision of outdoor group camping and indoor group camping facilities will broaden the scope of activities provided at Potawatomi and may attract different segments of the population. Also, the overall attendance is expected to increase as a direct result of these actions. An increase of undetermined size in park revenue can also be anticipated.

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

None.

19. Probable Adverse Impacts That Cannot Be Avoided

Excavation of building sites and slight reduction of vegetation cover. Visual presence of completed structures. Construction - related noise, engine emissions, dust and temporary traffic congestion. Construction machinery will consume a certain amount of motor fuel and lubricant.

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.

a. No Action

Potawatomi State Park would function satisfactorily for some time without the benefits of new management or development. The main impact of this alternative would be in lost opportunities for serving the public in a better manner. Unrealized potential is difficult to measure, but the park would probably continue to be a popular recreation area for some time to come without any big change in quality. It is unlikely, however, that much growth in use would occur and without expansion or replacement of key facilities an overall lowering of program quality would ensue.

b. Enlarge Scope

Much could be done to enlarge the scope of the proposed actions. Examples would be a major increase in the number of campsites, establishment of a recreation hall with snack bar or restaurant, provision of tourist cabins or the construction of a marina. This type of park would, no doubt, prove popular and draw many more visitors. It may also overextend the capabilities of the site and infringe on the local private sector business initiatives.

c. Reduce Scope

This alternative would decrease the degree of development below the present levels. Reductions in the overall program would result from closing of removing facilities. Cost savings to the operating budget would be an immediate result, but, long term attendance and revenue income would also be reduced. This could have have serious consequences to the future of the parks program and our ability to operate. Reduced service to the public would not be appropriate.

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.

No.

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.

Yes, Vegetation management applied to two timber stands totalling 230 acres will perpetuate white birch type and promote the growth of large individual red pines.

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.

Undeveloped frontage on the bay and Sawyer Harbor is a locally scarce resource. Protection provided under current State Spark status will continue. Proposed actions do not reduce supply.

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

Yes, the proposed land use designations and vegetation management actions do require certain restraints on use and management.

Violation of these constraints will result in compromising the original concept's intent.

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

None.

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.

27. Cumulative Impacts: While the action by itself may be limited in scope, would repeated actions of this type resul in additional or more severe impacts? Are there other activities occurring locally that would compound the impacts?

Action not likely to be repeated nearby.

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

No.

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

[x] No

[ ] 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	Comment Summary
	12/85	R. Dexter (State Hist. Soc.)	Request for hist./arch information: written response received 1/6/86.

Project Name: Potawatomi Master Plan County: Door

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' recommendation:

Daniel C Rogers 11/25/86
Signature of Evaluator Date

Noted: Area Director or Bureau Director Date

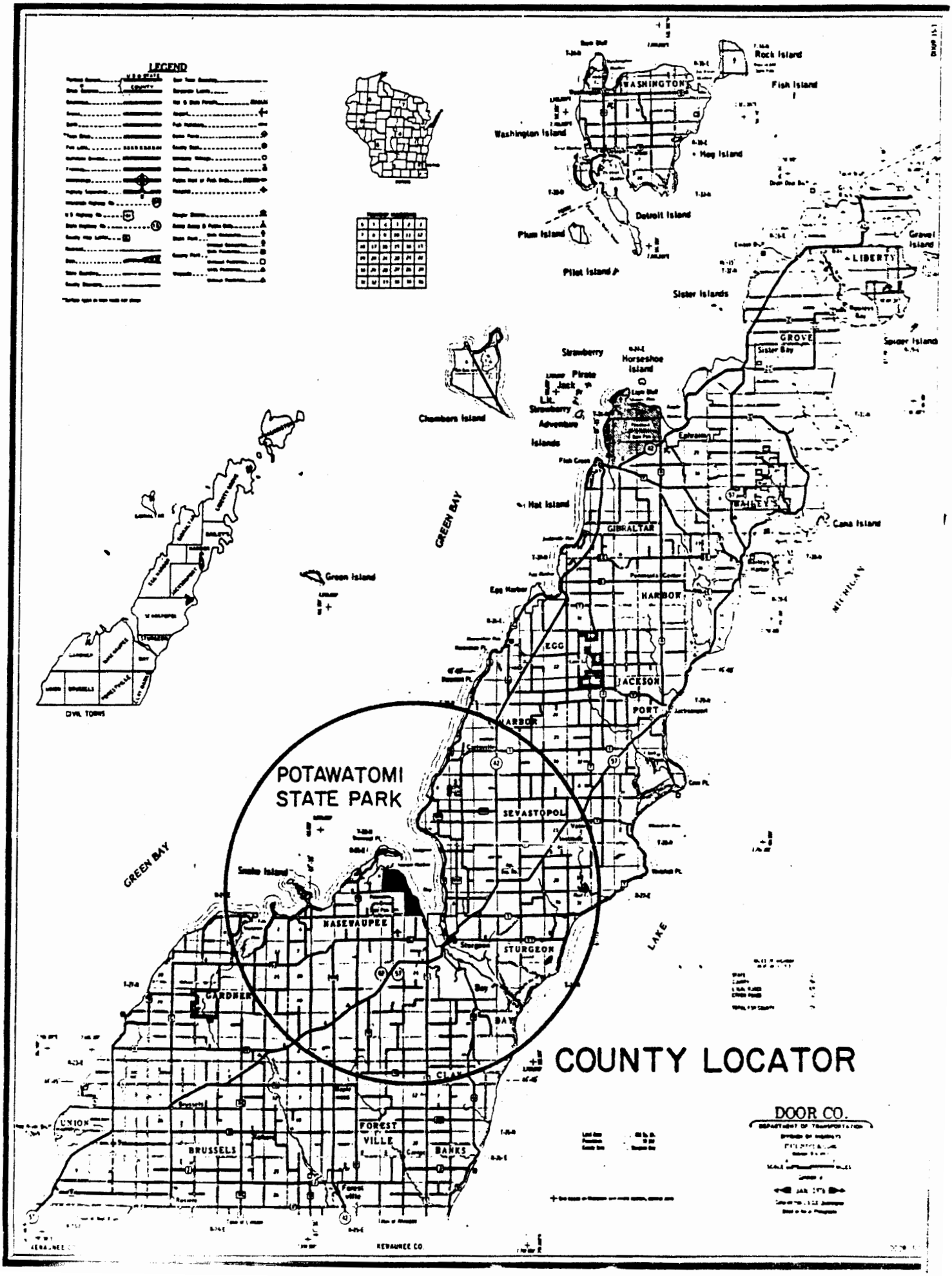
Number of responses to public notice 1

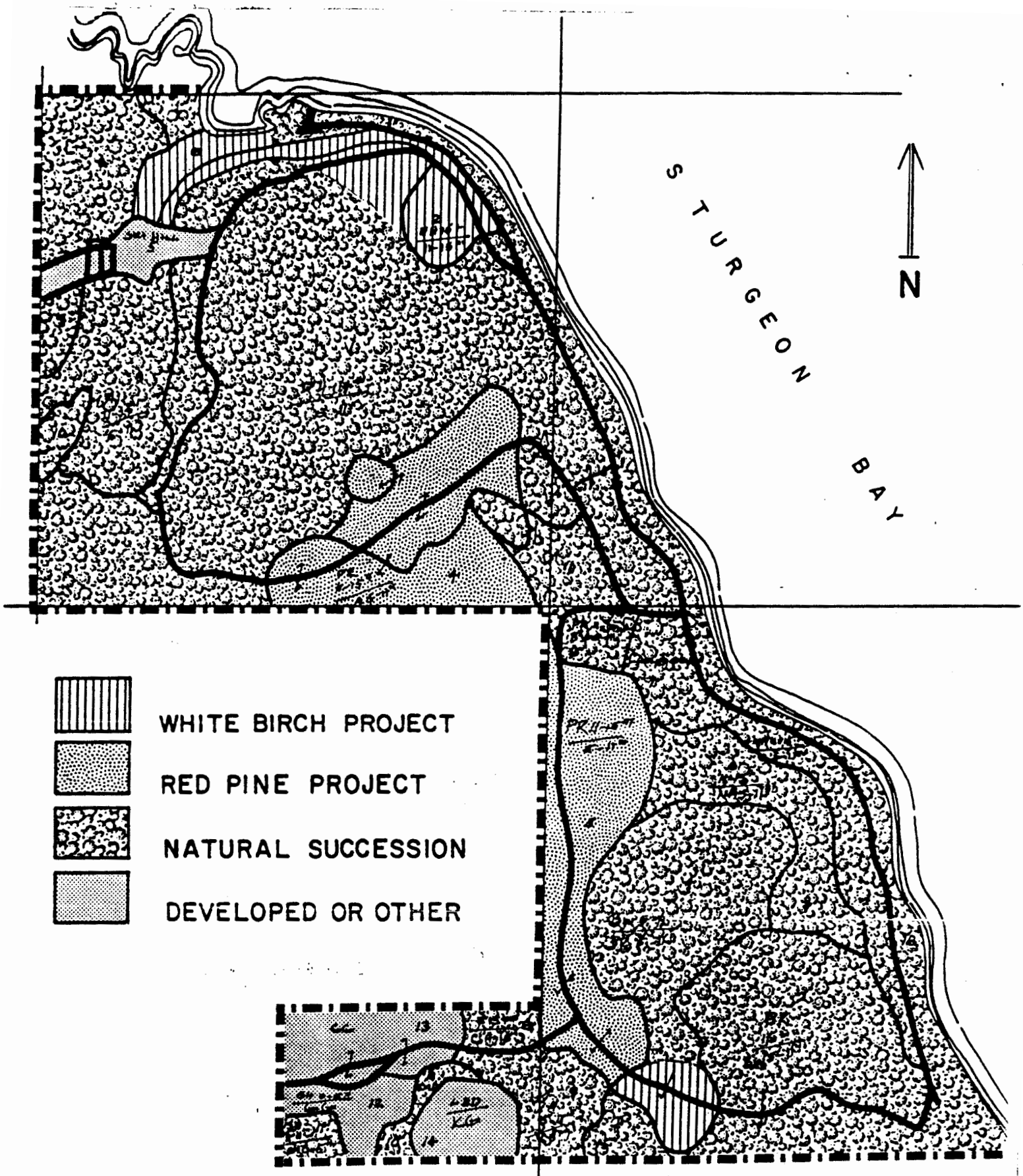
Public response log attached?..... yes

CERTIFIED TO BE IN COMPLIANCE WITH WEPA

District Director or Director of BEI (or Designee) Date March 13, 1987

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.


LEGEND
POTAWATOMI STATE PARK
COUNTY LOCATOR
DOOR CO.
GREEN BAY
LAKE MICHIGAN
WASHINGTON
Washington Island
Rock Island
Fish Island
Hog Island
Detroit Island
Plum Island
Pilot Island
Sister Islands
LIBERTY GROVE
Sister Bay
Gravel Island
Strawberry Island
Horseshoe Island
Pirate Jack
Lil. Strawberry Adventure Islands
Chambers Island
Hat Island
GIBRALTAR
Cana Island
Green Island
Egg Harbor
EGG HARBOR
JACKSON
PORT
SEVASTOPOL
Snake Island
NASEWAUPEE
STURGEON BAY
GARDNER
UNION
BRUSSELS
FORESTVILLE
BANKS
CIVIL TOWNS
KEWAUNEE CO.


STURGEON BAY
N
WHITE BIRCH PROJECT
RED PINE PROJECT
NATURAL SUCCESSION
DEVELOPED OR OTHER

VEGETATIC

DEVELOPMENT