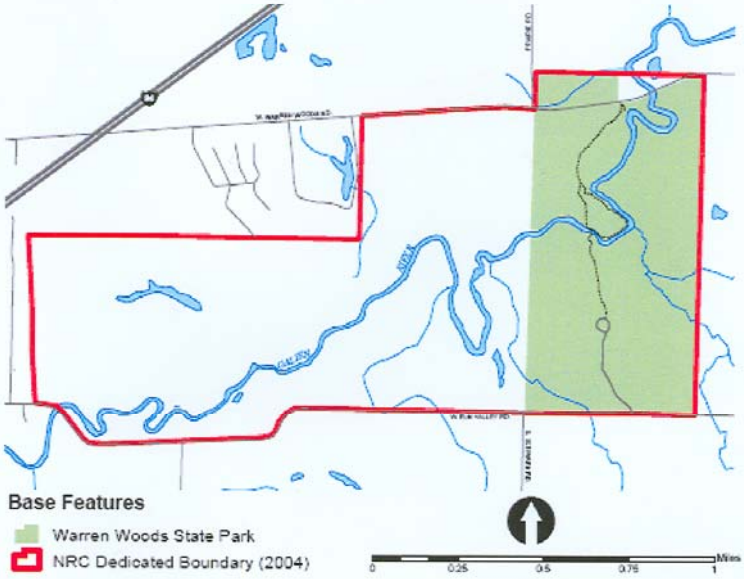
GENERAL MANAGEMENT PLAN

Long-range management guidance focused on the specific natural resources, historic-cultural resources, recreation opportunities, and the education-interpretation opportunities for…

WARREN WOODS STATE PARK



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PLAN APPROVALS:

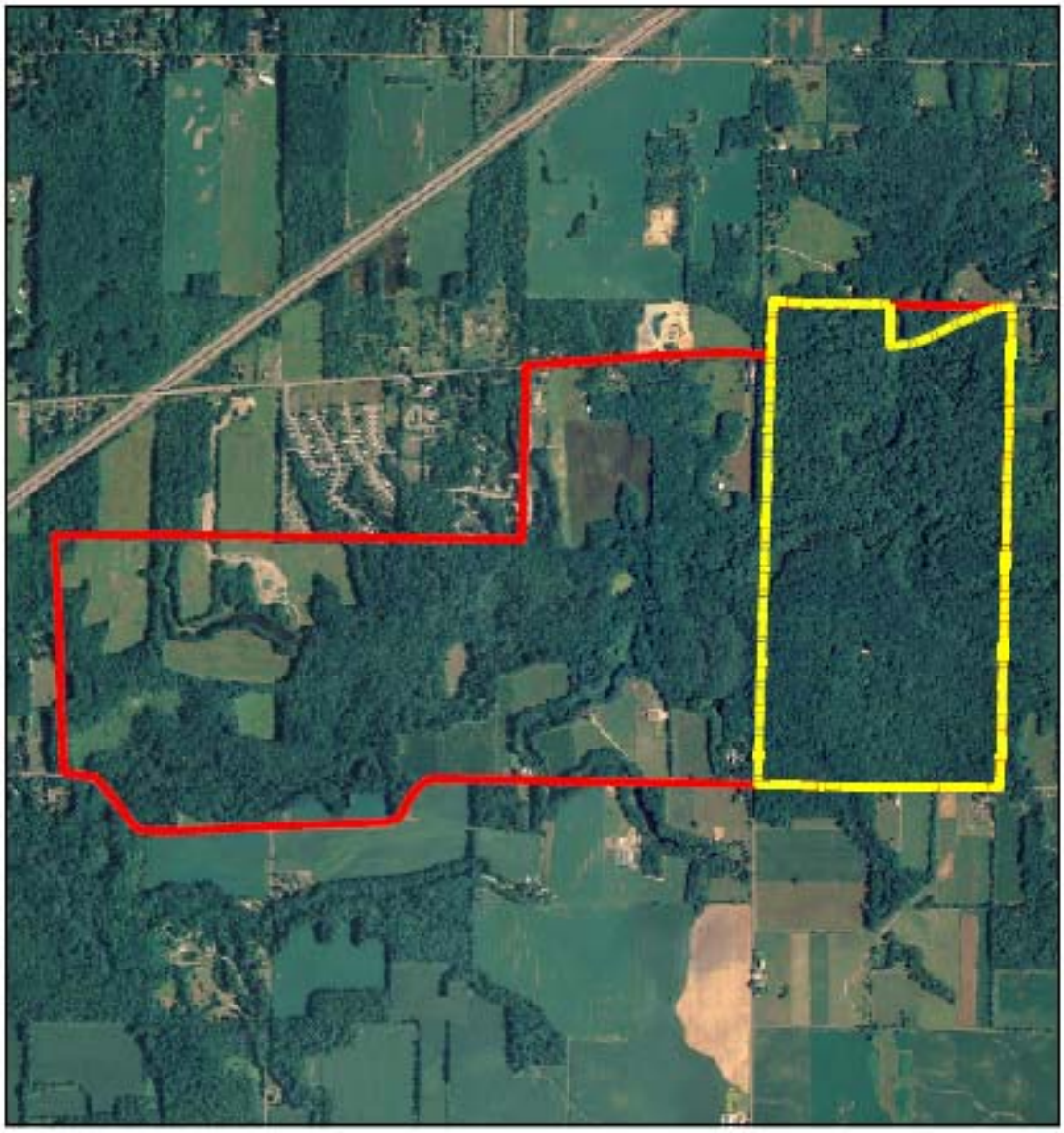
Chief, Recreation Division — Date 3/15/10

Deputy Director, Stewardship — Date 3/23/10

Director, Department of Natural Resources and Environment — Date 3/25/10

DNRE

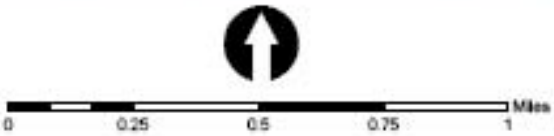
AERIAL IMAGE



Legend

Warren Woods State Park

NRC Dedicated Boundary (2004)



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- Equipment inventory and needs
- Training (required and desired)
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- Public health, safety and welfare
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EXECUTIVE SUMMARY

Galien River

Management Planning is a defined strategic process within the PRD Strategic Plan (2009), reflecting the following Goals and Objectives:

- **Goal 1, Objective 1.2:** "Strengthen, update, and implement Management Plans."
- **Goal 3, Objective 3.1:** "Perform landscape level assessment of recreation opportunities in decision making."
- **Goal 8, Objective 8.1:** "Continue to use the CCMSP, MSWC, NRC, SWC, and Ecoregion Teams and partners to advise in PRD planning, policy development, and issue resolution."

Warren Woods State Park (Warren Woods SP) is a 309 acre park located in Berrien County, just north of the town of Three Oaks, Michigan. Long-range planning for Warren Woods SP began in September of 2006 when a new Michigan Department of Natural Resources (MDNR) planning philosophy was implemented. "Management Planning", a comprehensive resource based process, is our adaptation of the National Park Service planning methodology. In our iteration, which focuses on the four tenants of our Mission Statement, we; inventory the (1) natural resource values of the park, establish its (2) historic/cultural resources, identify the (3) recreational opportunities and explore the (4) educational and interpretation opportunities; establish the "significance" (identity) of the park; and apply appropriate management zones that prescribe how the park will be managed.

Warren Woods SP was leased to the State of Michigan by Edward K Warren. The lease for Warren Woods SP was signed on April 9, 1949, and expires on November 23, 2037. Heirs to Mr. Warren challenged the lease in court. In April

of 2009, a judgement for the DNR was declared, that stated the DNR will retain the property until 2037, and that a reassessment will be conducted in 2015.

When he was still a small merchant, Mr. Warren bought 309 acres of woodland in an effort to preserve a forest "primeval" (only seven years after Yellowstone National Park was acquired). Approximately 196 acres of this parcel contains what is considered to be one of the finest examples of beech-maple forests which exist in southern Michigan.

His idea in buying Warren Woods was to preserve and protect one of the last surviving stands of virgin beech-maple left in this part of the country, and that was the intent in leasing the land to the DNR.

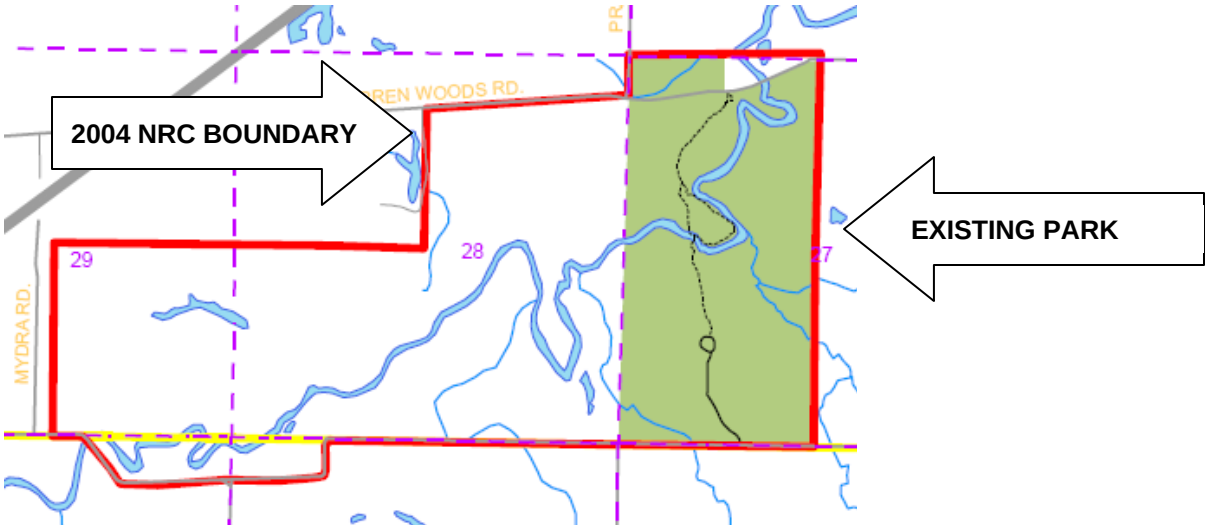
A Planning Team representing all DNR resource programs, with stakeholder and public input, defined the purpose and significance of Warren Woods SP as preservation of the exemplary beech-maple forest, protection of its historic/cultural resources, and making available opportunities for education and interpretation of these unique and special resources. The 'natural' essence of the park is what defines the identity for Warren Woods SP.

In concert with the purpose and significance of the park, the Planning Team established the appropriate Management Zones and their extent of influence on the park. From a palette of nine standard zones, we utilized two zones for the park. The Management Zone Plan is found on the cover of this document and a thorough review of all zones is found within. A condensed review of those zones applied at Warren Woods SP is as follows:

- Primitive Zone – Of the total 309 acres in the park, 305 acres (99%) of undeveloped land falls into this zone description. This area includes the floodplain of the Galien River and the upland beech-maple forest. Under the Primitive Zone designation, only foot traffic will be allowed. No mountain bike or equestrian riding will be permitted, and no hunting is allowed in the park. The "Natural Area" and National Natural Land Mark (NNLM) designation of most of the property supports assigning this as a Primitive Zone. Any future zone proposals need to take these designations into consideration.

- Natural Resource Recreation Zone – The Natural Resources Recreation Zone is comprised of four acres of the park (1%). It is utilized for general recreation, including a small parking area with picnic tables and an area for potential future improvement for educational and interpretive purposes. Warren Woods SP has the history and support of its visitors to keep it a primitive recreation experience.

The 2004 NRC Dedicated Boundary for Warren Woods SP nearly triples the size of the park with inclusion of the Galien River watershed to the west. The Planning Team strongly endorsed this, and suggested consideration of additional boundary expansion to the northeast of the park for similar purposes.



INTRODUCTION

Planning Process Overview – The Management Planning Process develops a series of planning steps, each built upon the previous, that keep all planning and action decisions focused on (1) the mission of the Parks and Recreation Division, and (2) the specific Purpose and Significance of the park (the park's "Identity").

There are four phases of planning, implemented in the following order:

- **Phase 1** - General Management Plan (GMP) - Long-range (20 yr) goals
- **Phase 2** – Long-range Action Goals Plan - long range (10 yr) goals to attain the GMP (requires review of Phase 1)
- **Phase 3** - 5-Year Implementation Plan – specific actions to implement (requires review of Phase 1 and Phase 2)
- **Phase 4** - Annual Action Plan and Progress Report – what will be done this year and what progress was made on last year's plan

This is the **General Management Plan**, the first step in our planning process. In this phase of planning, we are defining what the park will look like in twenty years. What will be the condition of flora and fauna? How will we address historic and cultural resources? What recreational opportunities will be provided? What education and interpretation efforts will meet the visitor? What will guide the manager's operational decisions? What will be the visitor's overall experience?

A key tool of this plan is the identification of "Management Zones" which define specific characteristics of the land, addressing management for:

- Natural resources
- Historic/cultural resources
- Recreational opportunities
- Education opportunities

These four elements represent the primary goals of the PRD Mission Statement, and provide guidance for both planning and management decisions. Within the parameters of this guidance, "Purpose" and "Significance" statements are developed for the park that establishes its unique identity and focus. No two parks are the same and this emphasis is directed at ensuring that the differences found from park to park are acknowledged, highlighted and celebrated.

Planning Objectives - The objective of this General Management Plan is to bring together Department staff, impacted and impacting stakeholders, and the public who use the park in a planning process that will define and clarify the unique "Purpose" and "Significance" of Warren Woods SP. Collectively, we will reinforce those attributes in the planning and management decisions that impact the park through the implementation of the Management Zone Plan. Future action plans, whether focused on a development proposal, a resource improvement initiative, an interpretive program, or day-to-day management of the park will be guided by this General Management Plan.

PLANNING TEAM

Accomplishment of our planning objectives was and is dependent upon the valuable input provided by all members of the 'Planning Team'. The following persons were participants in this planning process:

Name	Representing
Paul Curtis	MDNR-PRD, Management Plan Administrator
Joe Strach	MDNR-PRD, District Planner
Paul Yauk	MDNR-PRD, Lands Manager
Roland Johnson	MDNR-PRD, District Supervisor
Michael Terrell	MDNR-PRD, Unit Manager
Andrew Montgomery	MDNR-PRD, Park Staff
Ray Fahlsing	MDNR-PRD, Stewardship Program Manager
Jeff Johnson	MDNR-PRD, Student Assistant
Scott Lambert	MDNR-PRD, Student Assistant
Jay Wesley	MDNR-FD, Supervisor
Kim Dufresne	MDNR-FMFMD, Fire Supervisor
Steve Cross	MDNR-FMFMD, Fire Management Specialist
Tom Hoane	MDNR-FMFMD, Minerals
Dave VanSumeren	MDNR-LED, Conservation Officer (Lt.)
Steve Chadwick	MDNR-WD, Wildlife Biologist
Mark Mackay	MDNR-WD, Planner
John Lerg	MDNR-WD, Karner Blue Butterfly Habitat Conservation Plan Coordinator
Rob Corbett	MDNR-OLAF, Lands
Shana McMillan	MDNR-OC, Education and Outreach
Janet Canode	MDNR-OC, Education and Outreach
David Birchler	Birchler Arroyo Associates *
Jill Bahm	Birchler Arroyo Associates *

* (We were assisted in this effort by the planning consultants, Birchler Arroyo Associates, who graciously accommodated our planning input needs as part of their contractual work with us in developing management plans for Holland SP, Saugatuck Dunes SP, Grand Mere SP, and Warren Dunes SP.)

CORE VALUES

Guidance for the General Management Plan stems from the Mission Statements of the Department and the Division, and the Purpose and Significance Statements that have evolved through the planning process. The core values found in these statements must be reflected in this long-range General Management Plan for Warren Woods State Park and subsequently reflected in any shorter range action plans:

DNR Mission Statement - *"The Michigan Department of Natural Resources is committed to the conservation, protection, management, accessible use and enjoyment of the State's natural resources for current and future generations."*

PRD Mission Statement - *"The Parks and Recreation Division's Mission is to acquire, protect, and preserve the natural and cultural features of Michigan's unique resources, and to provide access to land and water based public recreation and educational opportunities."*

The core values derived from these statements are that PRD will acquire, preserve and protect; (1) natural resources, (2) cultural resources, (3) provide public recreation, and (4) provide educational opportunities.

Park Purpose - Park purpose statements are based on park legislation, legislative history, special designations and DNR policies. These statements reaffirm the reasons for which Warren Woods State Park was identified as part of the State Park system.

- Edward K. Warren bought 309 acres of woodland in an effort to preserve and protect what is considered to be one of the finest examples of beech-maple forests in southern Michigan.

- The property was leased to the state to be administered as a state park.

- To preserve and protect the park's unique natural resources for current and future generations.

- To preserve and protect the park's historic/cultural resources.

- To provide opportunities for recreational uses and experiences in an area lacking in same, that are compatible with the park's resource(s) base.

- To provide educational and interpretive opportunities for the public that reflects the mission of the DNR and the unique qualities of Warren Woods State Park.

Park Significance - Park significance statements capture the essence of the park's importance to carry out the core values of our PRD Mission. They recognize the natural and cultural heritage values of the park and the recreational and educational opportunities afforded. These statements describe the distinctiveness of Warren Woods State Park. Understanding these distinctions help managers make decisions that preserve those special resources and values necessary to accomplish the park's purposes.

- A lease (DNR retains lease until 2037) from the Edward K. Warren Foundation (now dissolved) was for a tract of 309 acres of land situated north of Three Oaks in Berrien County. The significance of this park is the approximately 196 acres that contains what is considered to be one of the finest examples of beech-maple forests which exist in southern Michigan. This tract was to be used for recreation and education, with certain portions preserved forever in their natural state.

Legal Mandates - For all park General Management Plans, all legal mandates will be identified and will serve to further guide the development of the General Management Plan and subsequent Action Plans. For our planning purposes, the term "Legal Mandates" refers to not only state law, but also the administrative tools of "Policy" and "Directive" of the Natural Resource Commission, the Department, and Parks and Recreation Division. Specific to Warren Woods SP, the following legal mandates have been identified:

PA 451 OF 1994, PART 741 - STATE PARK SYSTEM, NATURAL RESOURCE AND ENVIRONMENTAL PROTECTION ACT - This act is a recodification of law that established the Michigan State Park System and defined its powers and duties. Notable in this law is the Section 324.74102, which identifies the duties of the department and reinforces those core values cited above.

This section reads:

(1) "The legislature finds:
   - (a) Michigan State Parks preserve and protect Michigan's significant natural and historic resources.
   - (b) Michigan State Parks are appropriate and uniquely suited to provide opportunities to learn about protection and management of Michigan's natural resources.
   - (c) Michigan State Parks are an important component of Michigan's tourism industry and vital to local economies.

(2) The department shall create, maintain, operate, promote, and make available for public use and enjoyment a system of state parks to preserve and protect Michigan's significant natural resources and areas of natural beauty or historic significance, to provide open space for public recreation, and to provide an opportunity to understand Michigan's natural resources and need to protect and manage those resources."

Within this law, 324.74101 (e), "state park" means a *state park* or *state recreation area* designated by the director.

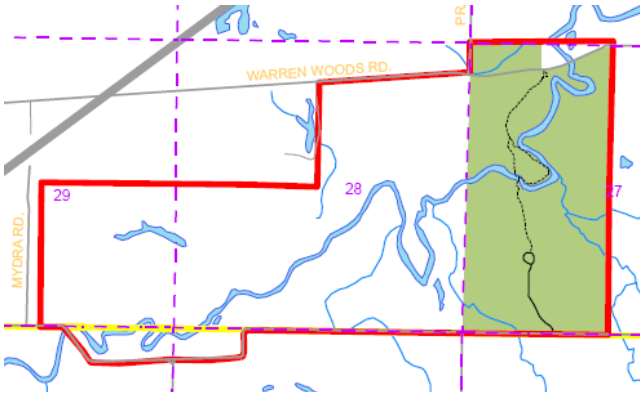
PA 451 OF 1994, PART 351 - WILDERNESS AND NATURAL AREAS - DEDICATION OF THE WARREN WOODS NATURAL AREA PRESERVE – In 1976, 179 acres of the 309 acre park are designated as State Natural Area under part 351 of NREPA of 1994. This legislation provides guidelines for the identification, management and protection of Wilderness, Wild and Natural Areas. The legislation prohibits most cutting, gathering or other alteration of vegetation, extraction of minerals, establishment of commercial uses and easements, and use of mechanized devices of travel.

49 Stat. 666; 16 U.S.C. sections 461-467 - HISTORIC SITES ACT OF 1932 FEDERAL REGISTRATION OF WARREN WOODS AS A NATIONAL NATURAL LANDMARK – The entire park was registered with the National Park Service in 1967 as a National Natural Landmark. This is a voluntary program, in which areas of high environmental significance are nominated for recognition. The designation is meant to raise public awareness and encourage conservation of areas important to understanding our natural history. It does not restrict specific activities within the designated area.

LIBER 112 PAGE 484, REGISTER OF DEEDS, BERRIEN COUNTY, RECEIVED FOR RECORD 4/21/1949 - LEASE OF WARREN WOODS FROM THE EDWARD K. WARREN FOUNDATION TO THE STATE OF MICHIGAN – The lease, signed on April 9, 1949, expires on November 23. 2037. A Circuit Court ruling determined that it (Circuit Court) would hold the property in trust for the DNR to administer. It affirmed the lease and requires a reassessment in 2015. The lease language provides specific management direction for compliance. In general terms, the lease directs that the property will be preserved "…as an exhibit and laboratory of nature for the education, entertainment and inspiration of future generations…" The lease specifies management for preservation, and prohibits hunting.

The case is currently before the Court of Appeals. The Attorney General is arguing that the DNR should be the one to hold the property in trust, not the Circuit Court.

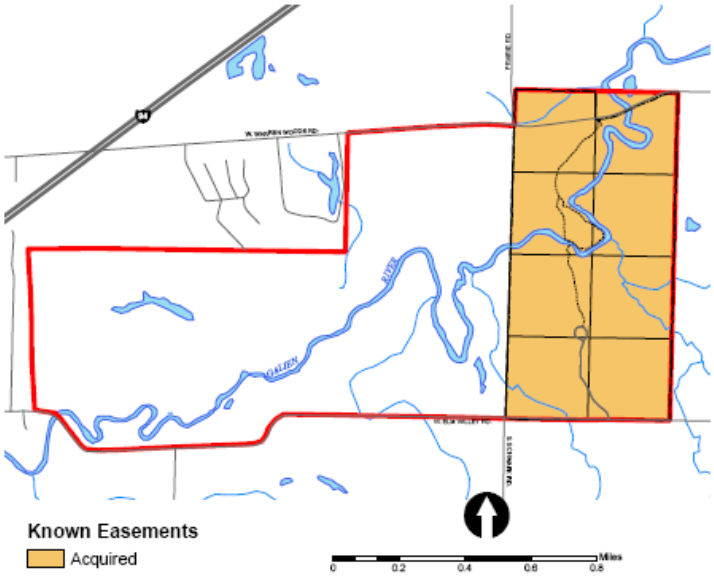
Land Ownership / Land Acquisition



Township 7 South
Range 20 West
Section 27

LOTS (Land Ownership Tracking System) declares the park undedicated and administered by Warren Dunes State Park. The exact acreage isn't indicated. However, LOTS describes the property as the entire west ½ of section 27 (except public roads). Land was acquired by other than purchase (lease).

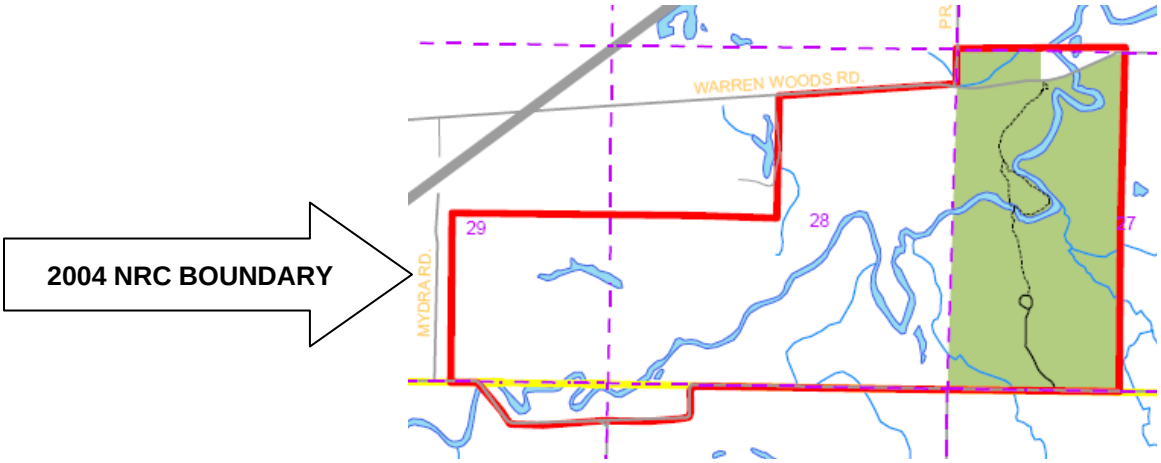
Easements



Township 7 South
Range 20 West
Section 27

The LOTS program indicates that the entire park is an undedicated Acquired Easement. The easement came from the Edward K. Warren Foundation for recreation and educational purposes.

2004 NRC Boundary



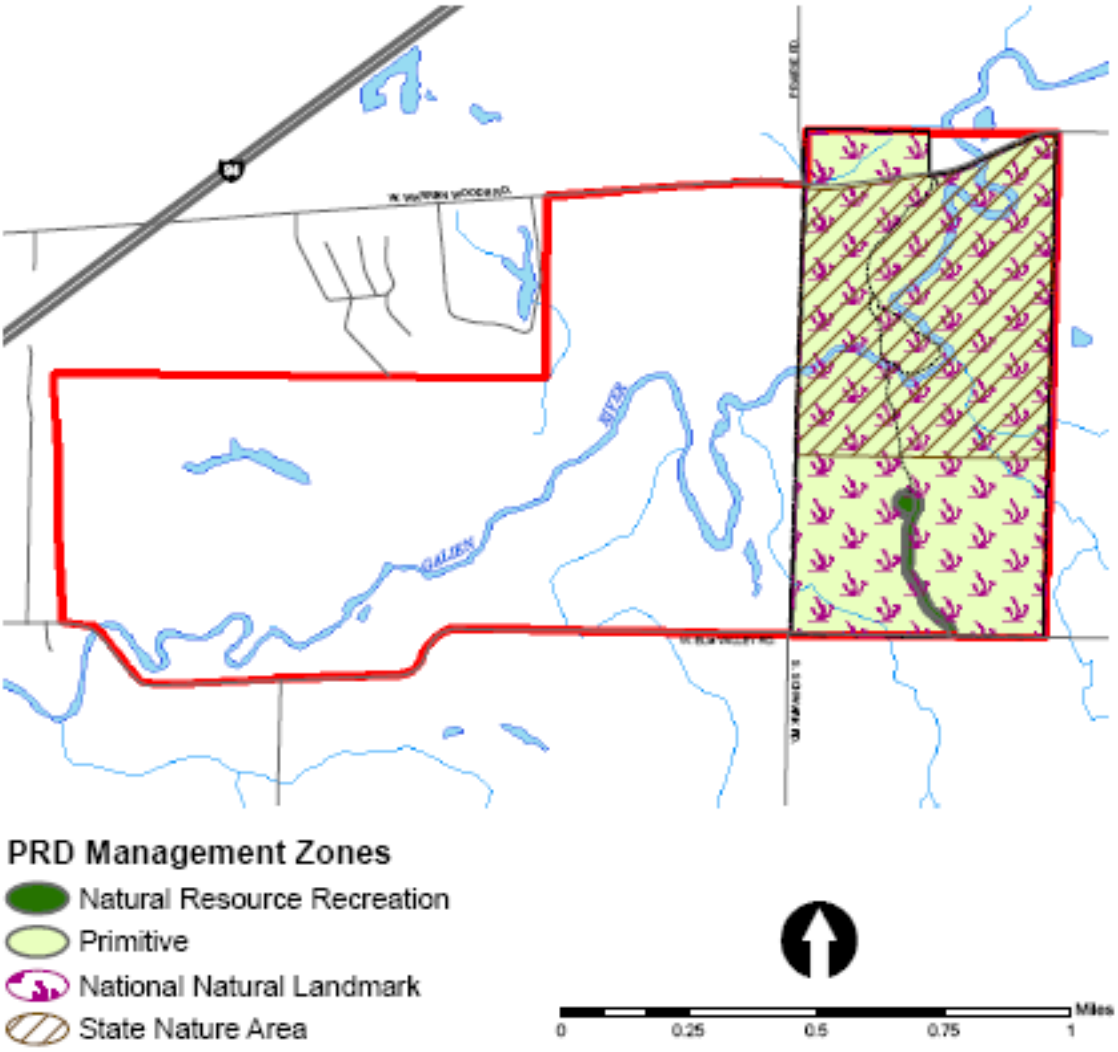
The 2004 NRC Dedicated Boundary for Warren Woods SP nearly triples the size of the park with inclusion of the Galien River watershed to the west. The Planning Team strongly endorsed this dedicated boundary, and suggested consideration of additional boundary expansion to the northeast of the park for similar purposes.

GENERAL MANAGEMENT PLAN

With the guidance of the Warren Woods SP Planning Team (made up of Department resource staff, stakeholders, and public), the park "Purpose and Significance" statements were drafted and adopted. These statements established an identity for the park, to include the following: Warren Woods SP was established for the purpose of preserving an educational natural resource.

Based on this 'identity' for the park, a Management Zone Plan" was subsequently drafted and adopted with stakeholder and public support. The Management Zone Definitions apply to each zone used, with special considerations highlighted in the descriptive narratives of management guidance for each zone of the park.

MANAGEMENT ZONE PLAN



PRIMITIVE ZONE

Of the total 309 acres of the park (current ownership), 305 acres (99%) fall under this zone description. This zone emphasizes the park's high quality natural resources. Attaining and maintaining a high quality natural resource condition dictates the extent to which recreational improvements or uses are allowed.

The low wetland areas within the park represent the Galien River floodplain. The soils in these areas are loam or silt loam and are easily subject to damage. Under the Primitive Zone designation, only dispersed and low frequency use, such as foot traffic, will be allowed. No mountain bike or equestrian uses are permitted.

The wooded wetlands along the Galien River are primarily an Oak Hickory forest with other wetland plants. 196 acres of the park uplands are the pristine Beech-Maple forest for which this park was established. Primitive Zone designation will continue to protect this special resource.

Following are the prescribed qualities for the Primitive Zone:

- Natural Resources – The Natural Resources Management Plan outlines several management objectives for this zone. A survey is proposed for non-native invasive species and then control of these invasive species as much as practical.

  This zone will reflect natural processes, with vegetative management only allowed to restore and maintain natural ecological structure and processes (such as removing of invasive species), to address hazard trees, and to manage pests and disease. The entire park is a designated National Natural Landmark. Most of the Northern half of the park is a State designated Natural Area.

- Historic/Cultural Resources – No known historic sites or cultural resources exist in this zone. If any activity in this zone requires earthwork, it must first be reviewed and approved by Stewardship.

- Recreational Opportunities – With the focus of this zone to maintain and restore the high-quality Beech-Maple primeval forest, and to comply with the legal requirements of the Natural Areas Act, only low impact recreation (hiking, birding, educational and interpretive activities, etc.) will be allowed in this zone. No equestrian or mountain biking trails will be allowed. No hunting is allowed.

- Education Opportunities – The ecological significance of the park provides excellent educational opportunities. Specific planning recommendations for education and interpretation will require input from Communications Division and others. Signed kiosks currently exist at the south side of the Galien River Bridge.

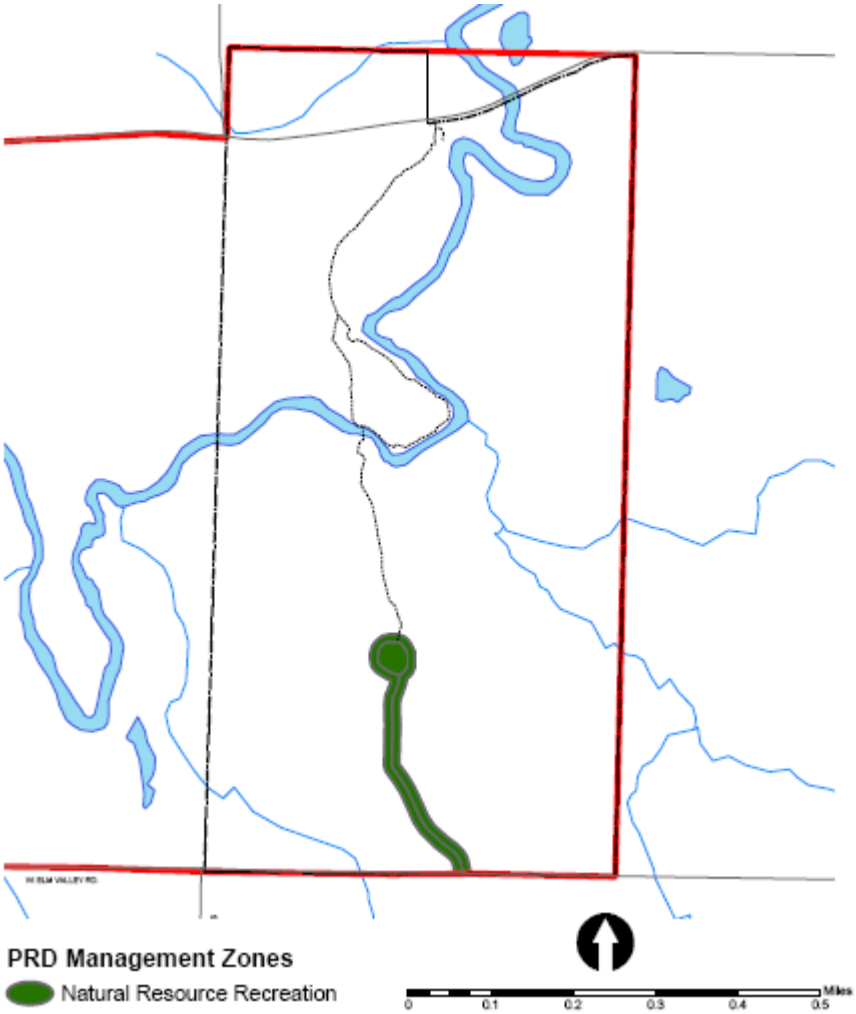
- Visitor Experience – This area will reflect a 'natural' feel, a significant sense of solitude, and a lack of man-made improvements.

- Management Focus – Management of this zone will be focused on the Natural Resources Management Plan, the Natural Area Act, and the lease, which includes maintaining the low-impact character of this area with an emphasis on natural resource quality.

- Development – Only trail improvements (can include boardwalks and/or overlooks) and educational or interpretive signage will be the evidence of man-made elements in this zone. Any improvements needed for resource protection, such as erosion control, shall be 'natural' in character. The focus is to maintain as little evidence of human activity as possible. All development will meet the approval requirements of the planning process and the Natural Area Act.

NATURAL RESOURCE RECREATION ZONE

The Natural Resource Recreation Zone is approximately 4 acres (1%) of the park. This zone is established to address the need for visitor services. Under this zone designation, PRD is able to provide visitors with limited recreational activities such as parking, picnicking, and education / interpretation.



Following are the prescribed qualities for the Natural Resource Recreation Zone:

- Natural Resources – In general, the natural resources can be modified to support visitor activities provided it still falls within the guidance of the Natural Resource Management Plan.

  This zone will reflect natural processes, with vegetative management only allowed to restore and maintain natural ecological structure and processes (such as removing of invasive species), to address hazard trees, and

to manage pests and disease. Vegetation may also be managed to facilitate recreational use and maintaining an aesthetically appealing landscape.

- Historic/Cultural Resources – No known historic sites or cultural resources exist in this zone. **If any activity in this zone requires earthwork, it must first be reviewed and approved by Stewardship**.

- Recreation Opportunities – This zone is utilized for general recreation, including: hiking, birding, and picnicking.

- Education Opportunities – Information regarding the park can be made available at areas of congregation and fortified through educational opportunities. Informational kiosks are one good way to dissimulate this information. Signed kiosks currently exist at the park trailhead.

- Visitor Experience – The visitor can expect limited encounters with other park visitors during all four seasons.

- Management Focus – The management focus in this zone is minimizing potential user conflicts and implementing educational efforts.

- Development – Development activity will focus on complementing the educational efforts to reduce user conflict. Meeting visitor needs for access, parking, and related services such as picnicking. Future development could address expanded education / interpretation needs.

  All development will meet the approval requirements of the planning process.

FUTURE PLAN INSERTS

10-Year Action Goals Plan (LONG-RANGE ACTION GOALS TO ATTAIN GMP) - Phase-2 of the Management Planning Process. Includes review and update of General Management Plan.

5-Year Implementation Plan (SPECIFIC ACTIONS TO IMPLEMENT) - Phase-3 of the Management Planning Process. Includes review and update of General Management Plan and Phase 2 Plan.

Annual Work Plan and Progress Report - Phase-4 of the Management Planning Process.

Operational/Management Resources - The following categories are established as a guide for the park manager to use to supplement this working document. Other categories can be added as needed.

- Annual Work Plan (NOTE…this should tie-in with Phase 4 – Annual Report of Management Planning)
- Phase III Natural Resources Management Plan
- Staffing plan
- Budget plan
- Equipment inventory and needs
- Training (required and desired)
- Public relations / marketing / outreach
- Programming (special events, MCCC activities, volunteers, etc.)
- Public health, safety and welfare
  - Water system
  - Wastewater system
  - Electrical system
  - Law enforcement
  - Emergency access plans
  - Wildfire management plan
  - Dam Safety reports
- CRS
- FOIA
- Raster Image Index
- Raster Images of historic park plans
- Park Infrastructure data
- Parcel mapping of land ownership
- Other…

SUPPORTING ANALYSIS

309 acres (1.25 km²)
Latitude: 41.82795075
Longitude: -86.62329358

(Latitude and Longitude at park entrance)

PARK SETTING

Location and Surrounding Community

Warren Woods SP is a 309 acre state park located in Three Oaks Township, Berrien County, Michigan, near the town of Three Oaks. In 1949 it was leased to the State of Michigan by the Edward K. Warren Foundation. (The lease expires Nov. 23, 2037)

The park is home to what is considered to be one of the finest examples of beech-maple forests in southern Michigan.

Because of the size and age of the trees, and the rarity of the ecosystem, the entire park has been designated as a National Natural Landmark since 1967. Approximately 179 acres were dedicated as a “State Natural Area” under state law in 1976.

The park has few facilities and is administered by nearby Warren Dunes State Park. Most visitors come to walk the 1.5 miles of hiking trails, which lead into the forest and follow the Galien River. Birders cite the park as a particularly good place to spot pileated woodpeckers. Other visitors come to picnic. In addition, the park is often the subject of ecological studies, since, in combination with the ecosystems preserved in nearby Warren Dunes State Park, it completes a progression of ecological seres.

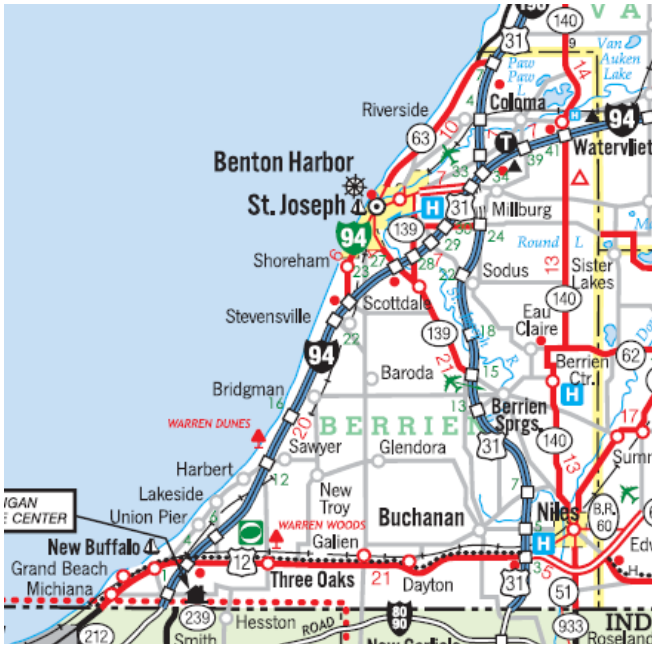
Berrien County Demographics

Berrien County's excellent location in the heart of "Michigan's Great Southwest" makes it a prime market for business, industry and tourism. Its substantial and wide variety of agriculture has established locally grown crops as major attractions for tourists and food processors. Strategically located on the Chicago/Detroit, Grand Rapids/Indianapolis vectors, Berrien County is served by major interstate highways, airports, rail transportation and shipping--both deep draft and river barge. Scenic natural beauty and 50 miles of shoreline on Lake Michigan make Berrien County a choice destination for tourists, artists and naturalists.

Berrien County was reported to have an estimated population in 2006 of 161,705. The population density in this part of the state is higher than average. The county consists of 571 square miles, with an average population density of 285 people per square mile. The average for the state of Michigan is 179 people per square mile.

The 2000 census population of the city of Bridgman is 2,428 (13.5% increase from 1990), the city of New Buffalo is 2,200 (5% decrease), the city of Three Oaks is 1,829 (2.4% increase), and the city of Buchanan is 4,681 (6.2% decrease). The population changes over time do not indicate a significant gain or loss of residents.

The per capita personal income in Berrien County was $19,952. The average male year-round worker makes an annual income of $36,582. This is approximately 35% more than the average female year-round workers annual salary of $23,800. The average travel time to work is 20 minutes. 82% of the workforce drives to work alone. 1 out of every 10 people carpool to work. 79.6% of the counties population is white. The 2000 Census showed 24,119 citizens, 5 years and older with disabilities.

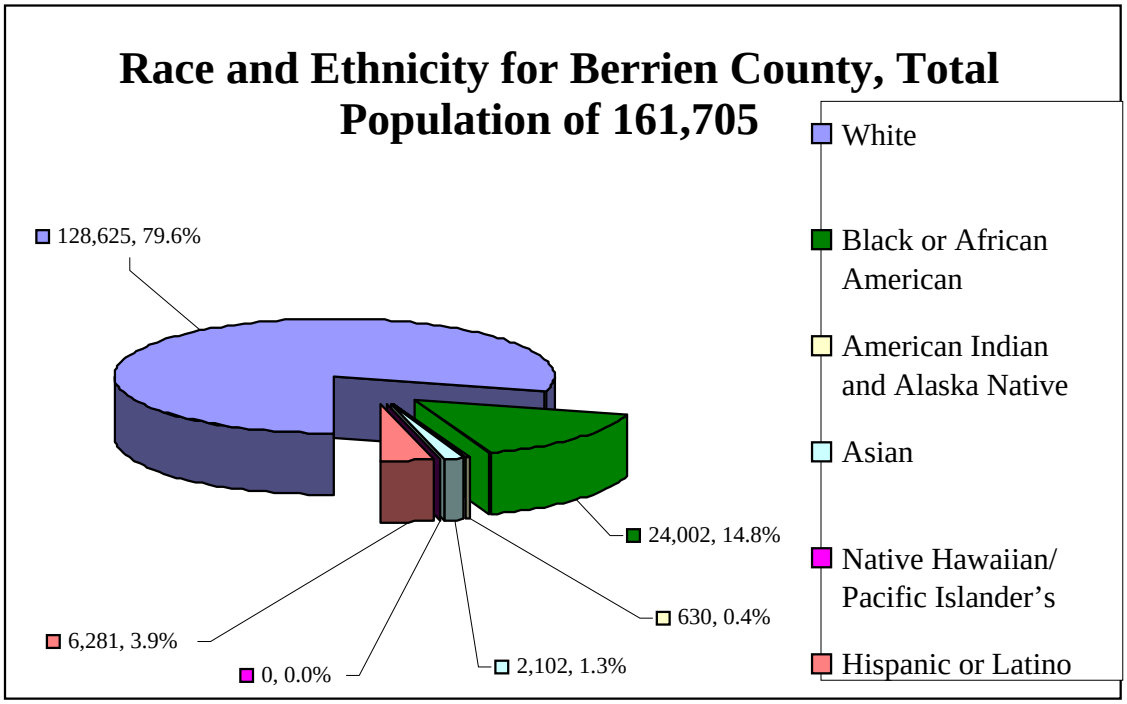


Berrien County Labor Market Information

Current Employment Statistics (CES)

Year	Time Period	CES Industry Title	No. of Employed
2007	Oct	Total Nonfarm	66,400
2007	Oct	Total Private	56,400
2007	Oct	Service Providing	49,500
2007	Oct	Private Service Providers	39,500
2007	Oct	Goods Producing	16,900

Michigan Department of Labor & Economic Growth



Data from: (http://factfinder.census.gov)

Berrien County Economic Characteristics

Employment Status as of 2006 Census

	Total	Percent
Employed civilian population 16 years and over	**126,966**	**78.5%**
In labor force	80,925	63.7%
Civilian labor force	80,851	63.6%

Employed	73,262	57.7%
Unemployed	7,589	5.9%
Percent of unemployed civilians in labor force	9.4	(X)
Armed Forces	74	0.0%
Not in labor force	46,041	36.2%

Civilian employed population 16 years and over	**Total**	**Percent**
Occupation	**73,262**	**100.0%**
Management, professional, and related occupations	21,227	28.9%
Service occupations	13,248	18.1%
Sales and office occupations	17,827	24.3%
Farming, fishing, and forestry occupations	371	0.5%
Construction, extraction, maintenance and repair occupations	6,684	9.1%
Production, transportation, and material moving occupations	13,905	18.9%

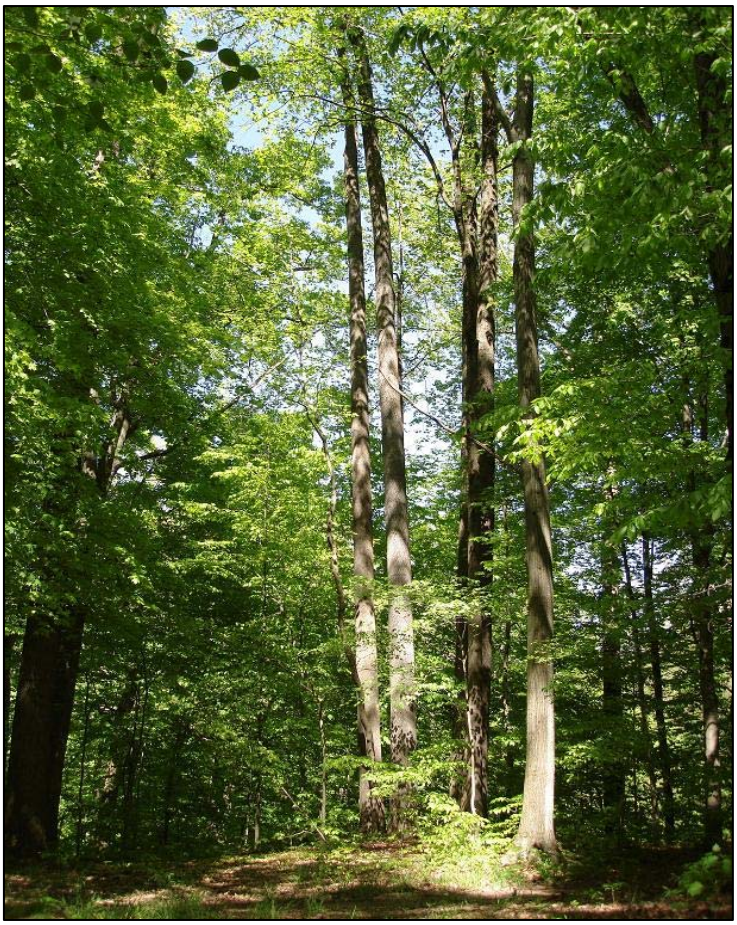
	Total	**Percent**
INDUSTRY	**73,262**	**100.0%**
Agriculture, forestry, fishing and hunting, and mining	1,139	1.5%
Construction	4,887	6.6%
Manufacturing	15,901	21.7%
Wholesale trade	1,342	1.8%
Retail trade	8,237	11.2%
Transportation and warehousing, and utilities	4,202	5.7%
Information	965	1.3%
Finance and insurance, and real estate and rental and leasing	3,597	4.9%
Professional, scientific, mgmt, admin and waste mgmt services	4,827	6.5%
Educational services, and health care, and social assistance	15,076	20.6%
Arts, entertainment, recreation, accommodation, and food services	6,451	8.8%
Other services, except public administration	3,955	5.4%
Public administration	2,683	3.6%

	Total	**Percent**
CLASS OF WORKER	**73,262**	**100.0%**
Private wage and salary workers	61,049	83.3%
Government workers	6,957	9.5%
Self-employed workers in own not incorporated business	5,032	6.8%
Unpaid family workers	224	0.3%

INCOME	Total	Percent
Total households	**61,974**	**100.0%**
Less than $10,000	5,201	8.4%
$10,000 to $14,999	4,685	7.6%
$15,000 to $24,999	8,032	13.0%
$25,000 to $34,999	7,749	12.5%
$35,000 to $49,999	9,812	15.8%
$50,000 to $74,999	12,407	20.0%
$75,000 to $99,999	6,333	10.2%
$100,000 to $149,999	5,033	8.1%
$150,000 to $199,999	1,554	2.5%
$200,000 or more	1,168	1.9%
Median household income (dollars)	**$41,875**	
Mean household income (dollars)	**$55,248**	

General Park History

1878 - Edward K. Warren bought over 300 acres of woodland in an effort to preserve a forest "primeval" (only seven years after Yellowstone National Park was acquired). His idea behind buying Warren Woods was to protect one of the last surviving stands of virgin beech-maple left in southern Michigan for recreation and education purposes. Wildlife abounds around the meandering trails through Warren Woods which remains an undisturbed natural treasure.



1949 - A lease to the Department of Conservation from the Edward K. Warren Foundation for a tract of 309 acres of land situated north of Three Oaks in Berrien County. Approx. 200 acres of this parcel contains what is considered to be one of the finest examples of beech-maple forests which exist in southern Michigan. This tract Is to be used for recreation and education, with certain portions preserved forever in their primeval state. The lease expires Nov. 23, 2037.

Warren Woods leased area incorporated into the state park system

1966 – This entire area was dedicated as the Warren Woods Natural Area Preserve.

1967 – The entire park was dedicated as a National Natural Landmark.

1971-72 - The capital outlay funded development at Warrant Woods, including some fencing for added site protection, two foot bridges to allow hikers to cross the Galien River, a small parking area, and rustic toilet facilities.

1976 – "State Natural Area" of the park was dedication under state law of the northerly 179 acres.

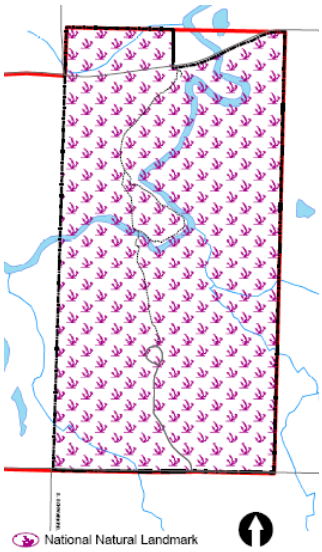
1996 - A 100-year flood event occurred in southwest Michigan causing about $7 million in flood damage to the farmers of Berrien County. Recently the Michigan Department of Natural Resources (MDNR) Natural Areas Program and the MDNR Parks and Recreation Bureau denied permission for the removal of about 50 log jams in the Warren Woods portion of the Galien River, citing degradation to the natural area and potential impacts to state protected species.

2006 – A new $750,000 Foot bridge was constructed at the Galien River which bisects Warren Woods SP. The Michigan Natural Features Inventory recognizes two high quality natural communities, Southern Floodplain Forest and Mesic Southern Forest.

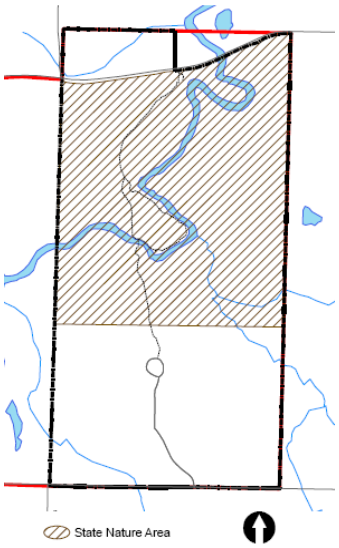
2009 - Five heirs to Mr. Warren approached the state because the end of the lease was drawing near. The heirs wanted the property deeded back to the foundation (which was dissolved several decades ago). In April of 2009 a judgment for the DNR was declared. The judgment stated that the DNR will retain the property until 2037. A reassessment will be conducted in 2015.

Current Land Use

National Natural Landmark

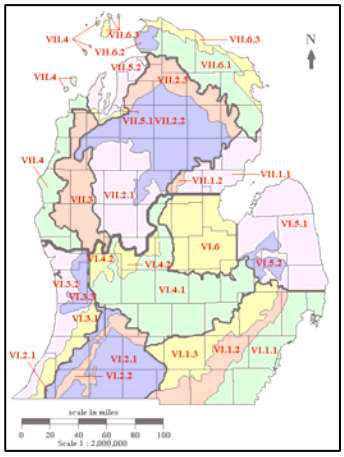


State Natural Area



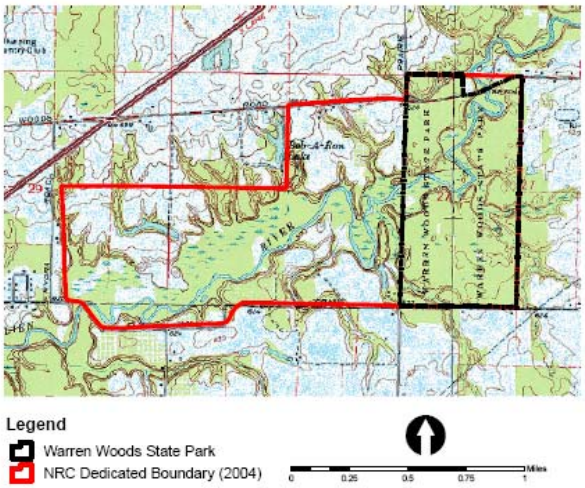
NATURAL RESOURCES

Eco-Regional Context



Sub-subsection VI.3.2 (Southern Lake Michigan Lake Plain) consists primarily of lacustrine deposits, but it also contains both fine-textured end and ground moraines that have been reworked by water. Along much of the Lake Michigan shoreline, there is a narrow band of steeply sloping sand dunes.

Topography and Geography



The Watershed consists of a mix of gently sloping moraines and till plains with nearly level lake plains and outwash plains near the mouth of the River. The lowest area is 500 feet above sea level at the Lake Michigan shoreline. The glacial lake plain, just inland, rises only 10 to 15 feet, and wet and mucky soils are found in the low

areas and depressions in this region. The lake plain is encountered further inland extending for approximately 7 miles and rising to 40 to 80 feet above Lake Michigan. Stratified lacustrine deposits and layers of sand, remnants of the extinct Lake Chicago, characterize this area. Ancient beaches are identified by the ridges of sand, which reveal an interlaced pattern of wet and dry soils (Soil Conservation Service (SCS), 1979). 07/28/2003

Smooth crests and high plains of the moraine 80 to 120 feet above Lake Michigan form the area that cradles the upper reaches of the Watershed. Wave action from a glacial lake may be the cause of the eroded ridges and depositions (SCS, 1979).

Water Resources

The Galien River enters the northeast section of the park and winds through the old growth beech-maple forests before exiting at the western boundary of the park before emptying into Lake Michigan in the city of New Buffalo, Michigan.

The Galien River was named in 1829 after Rene Brehant de Galinee, a priest and mapmaker for the missionaries in the 1600s (Multimag, 2001). The communities in the Galien River Watershed have expressed concerns of water resource conditions that have threatened public safety, wildlife habitats, and financial livelihoods. The Michigan Department of Environmental Quality (MDEQ) has included several reaches in the Watershed on the Clean Water Act, Section 303(d) list for not meeting water quality standards. In consequence, a Total Maximum Daily Load (TMDL) process was initiated. The identified pollutants that are impairing those uses include sediment, nutrients, and bacteria. Complaints and concerns received from the communities led the Berrien County Drain Commissioner (BCDC) to research the causes and potential solutions to water quality and quantity issues, which are described in this Galien River Watershed Management Plan.

A watershed management plan was developed for the Galien River Watershed with funding from the Michigan Department of Environmental Quality. The Galien River Watershed Project is now in the implementation phase. The grantee for the implementation project is Chikaming Open Lands. Chikaming Open Lands are a non-profit conservation organization working with landowners in the Galien River watershed and southwest Berrien County to preserve open space and the diverse, natural character of the area. Southwest Michigan Planning Commission (SWMPC) is a partner in the project.

Climate

The Watershed lies in the temperate zone with an average annual temperature of 49oF. Summers are warm and humid, while winters are cold and very snowy. Lake Affect snows from November through February can be quite heavy, yielding an average of 70 inches of snow per year. Annual precipitation is approximately 37 inches, over half of which falls between April and September. Skies are often overcast and thunderstorms occur on about 42 days per year, mainly in the summer months (NOAA, 1995).

The climate is favorable for livestock, cash crops, and feed grain crops, mostly corn, wheat, soybeans, and hay. The area is also known for its fruit orchards and vineyards. (SCS, 1979).

CLIMATE		
MONTH	**AVG. MIN TEMP**	**AVG. MAX TEMP.**
January	18F/-8C	32F/0C
July	61F/16C	82F/28C
PRECIPITATION	**RAINFALL**	**SNOWFALL**
Average Annual	37in./94cm	70in./178cm.
GROWING SEASON	**DAYS ABOVE 90F/32C**	**DAYS BELOW 0F/-18C**
162	11	4
		Source: NOAA Climate Summary, 1995

Soils

A layer of glacial drift 100 to 400 feet thick covers the shale and bedrock of this region. The bedrock consists of Antrim Shale, which forms the edges of bowl-like rock formations that fill the Michigan Basin. The glacial drift was deposited during the Wisconsin Glacial period as the ice melted 12,000 to 13,000 years ago (SCS, 1979).

Berrien County is comprised of over 40 different soil types, most of which are represented in the Watershed. The soils have a wide range of texture, natural drainage, slope, and other characteristics; however, many of the soils in the Watershed tend to be wet. Artificial drainage in agricultural areas over the years has created favorable conditions for field crops (SCS, 1979).

The dominant soil type in the Watershed is the Blount Rimer association. It is described as nearly level and gently sloping, somewhat poorly drained, loamy, and sandy soils on till plains and moraines. Elm Valley is a low floodplain area, consisting of the Pella-Kibbie association. These soils are nearly level, poorly drained to somewhat poorly drained, silty and loamy soils, outwash plains, lake

plains, and deltas. The headwaters of the River and its eastern tributaries are in the Riddles-Ockley-Oshtemo association. These soils are nearly level to very steep, well drained, loamy soils on outwash plains, moraines, and till plains. Elm Valley has the most silty and erodible soils in the Watershed.

The erosion potential for most soils on slopes in the Watershed is severe (SCS, 1979). Streambank erosion and sedimentation in the streams are identified as concerns in the Watershed.

Wooded Floodplain

Flora

Warren Woods State Park, classified as mesic southern and southern floodplain forests, includes one of the few remaining old growth beech-maple communities in southern Michigan and the entire Great Lakes region. Over 300 species of native plants and wildflowers have been identified within the area. Threatened (T) or Special Concern (SC) plants include:

Valerianella chenopodiifolia (T)	- Goosefoot Corn-Salad
Trillium recurvatum (T)	- Prairie Trillium
Silphium perfoliatum (T)	- Cup-Plant
Morus rubra (T)	- Red mulberry

Hybanthus concolor (SC) - Green Violet
Diarrehena americana (T) - Beak Grass
Chasmanthium latifolium (T) - Wild-Oats
Carex davisii (SC) - Davis' Sedge
Carex crus-corvi (T) - Ravens-Foot Sedge
(http://epa.gov/greatlakes/fund/2000/guidreview/109.pdf)

Davis Sadge

Prairie Trillium

Cup-Plant

Red Mulberry

Fauna

White-tailed deer, Fowler's Toads, Red Shouldered Hawks, and numerous migratory songbirds can also be found. Warren Woods provides a sanctuary for many of the songbird populations that are at risk due to loss of fragmented forests caused by urban sprawl.

The Michigan Natural Features Inventory recognizes two high quality natural communities, Southern Floodplain Forest and Mesic Southern Forest, and 14 species of interest from Warren Woods. Threatened (T) or Special Concern (SC) animals include:

Dendroica dominica (T) - Yellow -Throated Warbler (pictured below)
Trachopteryx thoreyi (SC Insect) - Grey Petaltail (pictured below)
Microtus pinetorum (SC) - Woodland Vole (pictured below: *brown*)
Microtus orchrogaster (Endangered) - Prairie Vole (pictured below: *gray*)
Pomatiopsis cincinnatiensis (SC) - Snail
Warren Woods is not only rich floristically but is known as an important area for migrating and nesting forest interior birds.

(http://epa.gov/greatlakes/fund/2000/guidreview/109.pdf)

Yellow – Throated Warbler

Grey Petaltail

Woodland Vole

Prairie Vole

Conservation Concerns

On a broader scale, Sub-subsection VI.3.2 contains important tracts of sand dune (as does Subsection IV.4, directly to the north), many of which are protected in dedicated natural areas or as State parks. Residential development, sand mining, and off-road vehicle use remain threats to these dunes. The coastal plain marshes contain some of the highest concentrations of species on Michigan's list of threatened and endangered species; these shallow wetlands are constantly under threat from residential development, dredging and flooding for game management, and off-road vehicle use.

Specific to Warren Woods SP, several invasive species occur. Garlic mustard is common along the southern boundary, and also occurs in the northeast portion of the forest. Adjacent landowners have garlic mustard on their properties. Some Japanese barberry occurs along the southern boundary. With the extensive beech-maple forest, the potential for beech bark disease (Cryptococcus fagisuga Lindinger) is of concern.

HISTORIC / CULTURAL RESOURCES

General Cultural Resources

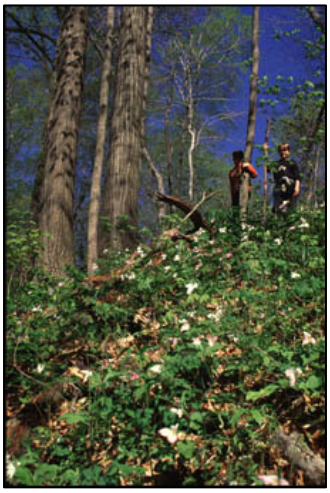
The Preliminary Inventory of Archeological and Historical Sites in Michigan State Parks and Recreation Areas were completed in 1996. The inventory suggests that any expansion or development within Warren Woods SP would require a Phase 1 Archaeological Study. The preservation that has been insured by Mr. Warren and the State of Michigan has left this park relatively untouched by post Native American occupation. There is a very good chance that any archeological artifacts found would be in excellent condition.

EDUCATION / INTERPRETATION / VISITOR SERVICES

A few signs and a kiosk provide the majority of visitor services within the park. Warren Woods SP is an educational jewel. Local schools and universities are able to study habitats that have had little or no human interference.

RECREATION RESOURCES

The recreational resources are minimal and relate to the pristine condition of the park. The hiking trail is a way for visitors to explore the untouched natural resources within Warren Woods SP. A few picnic tables and cooking grills are available at the parking area. Per the requirements of the lease, no hunting is allowed in the park.



Activities

- Wildflower viewing
- Hiking
- Education
- Birding

Warren Woods is a virgin beech-maple forest, the last of its type known in Michigan. There are outstanding individual trees of several species, including many greater than five feet in diameter and more than 125 feet in height.

Spectacular displays of wildflowers are best viewed in April and early May.

Facilities

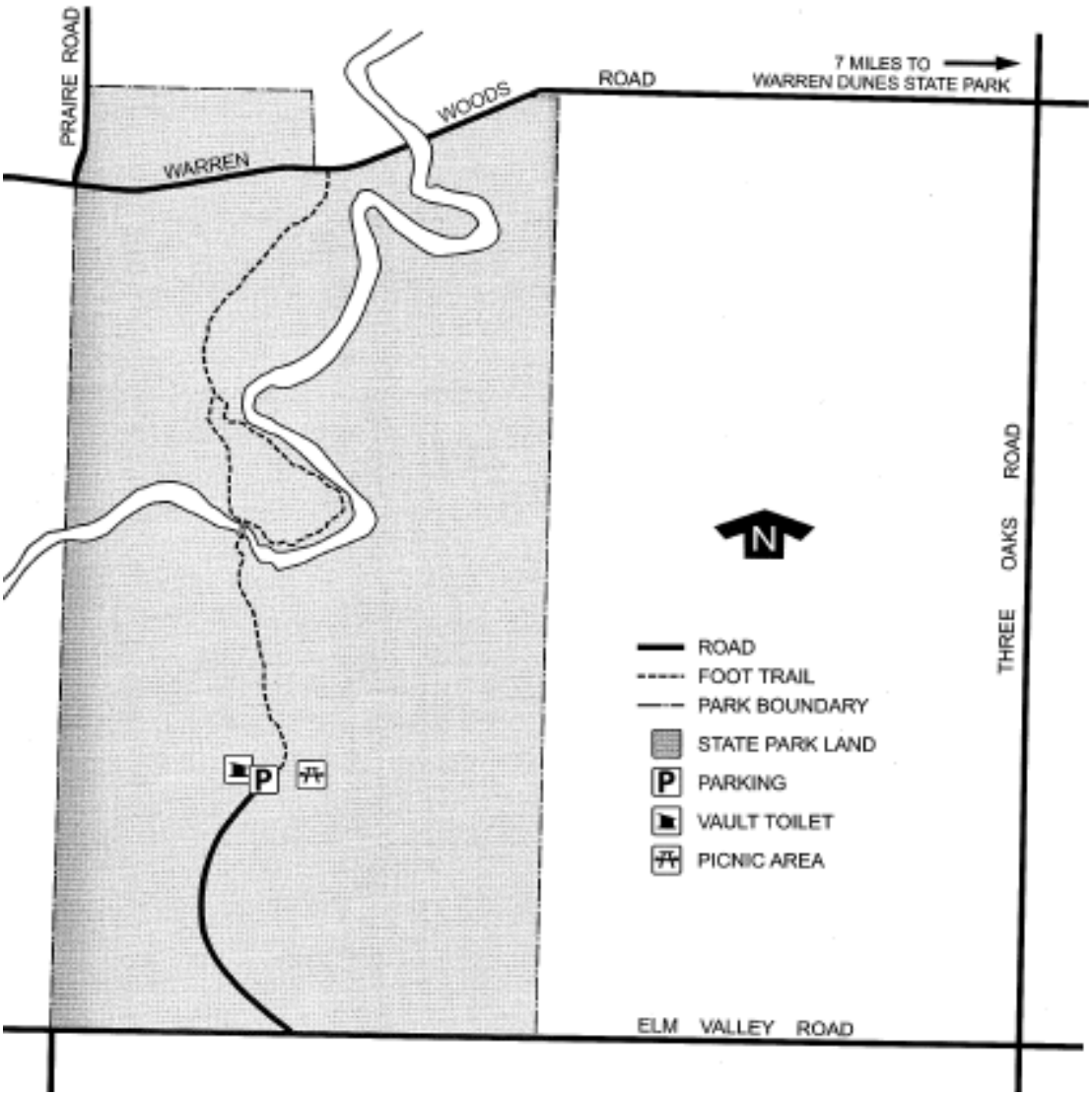
Warren Woods has been preserved as a forest. Very little development has been added to this park.

- Picnic tables
- Park entrance sign
- Vault toilet
- Footbridge
- Kiosks at the trailhead and before crossing the bridge

Trails

The trail within Warren Woods SP is approximately 1.5 miles long. It runs through the center of the park and includes a short loop section that follows the Galien River.

TRAIL MAP


PRAIRE ROAD
WARREN
WOODS
ROAD
7 MILES TO
WARREN DUNES STATE PARK
THREE OAKS ROAD
N
ROAD
FOOT TRAIL
PARK BOUNDARY
STATE PARK LAND
PARKING
VAULT TOILET
PICNIC AREA
ELM VALLEY ROAD

Local Campgrounds surrounding Warren Woods SP (within 20 miles)

OTHER CAMPGROUNDS/RESORTS		
Name	**Address**	**Phone**
BEAR CAVE RESORT	4085 BEAR CAVE ROAD BUCHANAN, MI 49107	616-695-3050
Fuller's Resort and Campground	1622 East Clear Lake Road Buchanan, MI 49107	616-695-3785
Mini Mountain Campground	32351 State Road 2 New Carlisle, IN 46552	219-654-3307
Michigan City Campground	1601 N Hwy 421 Michigan City, IN 46360	800-813-2267
Turtle Lake Campground	2116 Monroe La Porte, MI 46350	616-275-7353
Benton Harbor / St. Joseph KOA	3527 Coloma Road Box 136M Riverside, MI 49084	616-849-3333
Benton Harbor/ST Joseph KOA	3527 Coloma Road Riverside, MI 49084-0136	800-562-5341
South Bend East KOA	50707 Princess Way Granger, IN 46530	800-562-2470
Shady Shores Resort	51256 Garret Road Dowagiac, MI 49047	616-424-5251
Dune Lake Campground	80783 CR 376 Coloma, MI 49038	616-764-8941

http://www.rvusa.com/rvcamping2.asp?type=camping&miles=20&zipcode=49125&Submit=Go

Relationship of Warren Woods SP to other State Park Resources

Situated on two and a half miles of Lake Michigan shoreline, Warren Dunes State Park (WDSP) is a 1,439 acre park located approximately five miles north of Warren Woods SP. WDSP is more developed and caters to visitors that want more recreationally intensive activities.

Grand Mere State Park (GMSP) is located approximately 12 miles north of Warren Woods SP. GMSP is 1,127 acres of undeveloped park on nearly two miles of Lake Michigan shoreline. It is a day-use park that is a significant location for waterfowl hunting, birding and hiking. With its four inland hydrographic features, it is also an excellent example of the progression of lake evolution from open water to bog.

Other Recreation in the Area

- There are 19 golf courses in Berrien County
- 89 parks (not including Grand Mere, Warren Woods and Warren Dunes State Parks) in Berrien County
- Two Casino's are within 30 miles of WARREN WOODS SP

Areas of Conflict

- Some visitors let their dogs run around the park without a lead. Signs are posted but Warren Dunes SP does not have the park staff to dedicate an employee to Warren Woods SP full time.

- The one trail within the park is not ADA accessible due to existing terrain.

- An unauthorized parking lot occurs on the shoulder of Warren Woods Road in order to gain access to the trail (shown in the picture on the right). People who try to find the park think that the entrance to Warren Woods SP is off of Warren Woods Road when they see a gathering of cars at the north entrance of the trail.

- Unfortunately, many of the trees, are heavily scarred by hand-carved graffiti, some of it decades old; however, this practice seems to have fallen out of favor in recent years.

PARK USE STATISTICS AND ECONOMIC IMPACTS

Park Use – Warren Woods SP is in close proximity to I-94, making it easy for visitors to experience the park. However, Total MVP's (Motor Vehicle Permits) generated by the park are too small to account for. The revenue is added to the Warren Dunes SP figures. The contact station at Warren Woods SP is staffed on an "as needed" basis. Park use is estimated at 2,000 visits per year.

Stakeholder Input

The stakeholder input meeting for Warren Woods SP was held at the Chickaming Township Hall on April 30th 2009. A few local land owners were in attendance but no groups where present for the meeting. Topics of discussion were focused on keeping Warren Woods SP preserved and undeveloped. The unanimous opinion of the people in attendance was to continue the current park purpose and significance.

PLANNING OVERVIEW

Documents:

- Stewardship Management Plan (Contact Stewardship)
- Michigan Natural Features Inventory (Contact Stewardship)
- Lease from the Warren Foundation (attached)

Meeting Minutes:

- September 16, 2008 Start-up meeting with park staff
- November 4, 2008 Planning team meeting
- March 11, 2009 Planning team meeting
- March 12, 2009 Stakeholder meeting
- April 30, 2009 Public Input meeting

Plan Reviews:

- November 30, 2009 PRD - Section Chiefs
- December 9, 2009 Citizen's Committee for Michigan State Parks
- December 15, 2009 SLP – Ecoteam
- December 15, 2009 PRD – Management Team
- February 2, 2010 Statewide Council

SCANNED LEASE DOCUMENT (Edward K. Warren Foundation)

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E 723

LEASE

Whereas, the premises herein described were conveyed to and now are the property of The Edward K. Warren Foundation upon the following conditions:

> Said premises are to be held in perpetuity by said Corporation, "The Edward K. Warren Foundation", as a theater for the recreation and the education of the people of the State of Michigan and elsewhere; and the Forest and River Portions thereof shall be preserved by the said grantee, FOREVER, in their primeval state as an exhibit and laboratory of nature for the education, entertainment and inspiration of future generations, embodying the creative power of Almighty God; and said premises are designated and shall be FOREVER known as "WARREN WOODS". In no event shall any timber, land or land area be sold. In the event the purposes of the donor in the establishment and maintenance of said Edward K. Warren Foundation shall, for any reason, fail in the said purposes then, in that event, it is understood that said property hereby conveyed and all thereof shall revert to the heirs of my body.

Now therefore, in performance of and in conformance with those conditions, it is hereby agreed, between THE EDWARD K. WARREN FOUNDATION, a corporation organized and existing under the laws of the State of Michigan, party of the first part, and THE STATE OF MICHIGAN, the party of the second part, as follows: The said party of the first part, in consideration of the rents and covenants herein specified, does hereby Let and Lease to the said party of the second part, the following described premises, situated and being in the Township of Chikaming, County of Berrien, State of Michigan, to-wit:

> All of the West half of Section 27, Town 7 South Range 20 West, Chikaming Township, Berrien County, Michigan, except public highways, and also excepting therefrom that part of the Northeast 1/4 of the Northwest 1/4 of said Section 27 lying North of the Highway that traverses the Northeast 1/4 of the Northwest 1/4 of said Section 27.

for the term expiring November 23rd, 2037, A.D. to be used as a theater for the recreation and the education of the people of the State of Michigan and

-1-

elsewhere; and the Forest and the River Portions thereof shall be preserved by the said grantee, FOREVER, in their primeval state as an exhibit and laboratory of nature for the education, entertainment and inspiration of future generations, embodying the creative power of Almighty God; and the said premises are designated and shall be FOREVER known as "WARREN WOODS"; And to be occupied and used by the State of Michigan and the public for State Park purposes and administered and governed in accordance with the statutes, rules and regulations applicable thereto, subject, however, to the limitations and restrictions herein; Provided, that if default shall be made in any of the covenants herein contained, then it shall be lawful for the said party of the first part, its certain attorney, representatives and assigns, to re-enter into, repossess the said premises, and the said party of the second part, and each and every other occupant, to remove and put out. And the said party of the second part does hereby hire the said premises for the term as above mentioned, and does covenant and promise to pay to the said party of the first part, its representatives and assigns, for rent of said premises the sum of One Dollar and other valuable considerations in hand paid, the receipt thereof is hereby acknowledged, and as a further consideration for this lease, the second party is to keep and perform all the covenants and conditions herein set forth, and observe the restrictions and limitations herein set forth.

It is further agreed and understood that said lands and premises are now exempt from general taxes under the provisions of the laws and statutes of the State of Michigan, and in the event any general or special taxes, or any special assessment of any kind, should be levied against said lands and premises during the term of this Lease, same shall be paid by the second party.

It is further agreed and understood that the said second party will, at all times, maintain suitable and proper toilet rooms, rest rooms,

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shelter, parking areas, and comfort stations to accommodate the public, as second party may allow the public to use said lands and premises. And, in this connection, it is expressly agreed and understood that at all times second party shall keep said lands open for the use of the public for the purposes herein mentioned.

It is further agreed and understood that at all times second party shall properly police said lands and premises so as to amply protect the trees, shrubbery, vines, fauna and flora thereon and to properly maintain peace and good order.

It is further agreed and understood that, notwithstanding any of the conditions contained in this Lease, the collecting Botanical and Ornithological specimens from said lands may be allowed only upon obtaining the written consent of both parties hereto.

It is further agreed and understood that at the termination of this Lease, all buildings and improvements of every kind and nature which may have been constructed on said lands and premises by the second party shall be left thereon, and the title thereto shall become vested in first party.

Said party of the second part further covenants that it will not assign nor transfer this Lease, nor sub-let said premises or any part thereof, without the written assent of said party of the first part, provided that said second party may lease such concessions and public service privileges as may be required for the proper administration of the area.

And Also, that said party of the second part, will at its own expense, during the continuance of this Lease, keep the said premises and every part thereof in as good repair, and at the expiration of the term, yield and deliver up the same in like condition as when taken, reasonable use and wear thereof and damage by the elements excepted.

Second party further covenants that in no event shall any timber, land or lands area be sold or removed from said premises nor shall any hunting or gathering of herbs or taking of fauna or flora from said premises be allowed on said premises except as above provided and [that wherever possible and whenever possible there shall be a reforestation and replanting of barren and sparsely wooded portions of said premises.] provided however, that additional paths to facilitate the better enjoyment of these premises for the purposes hereinabove set forth, shall be developed and constructed by second party. Second party further covenants that it will not allow camping, nor the erection of camp-sites or lodging places nor entry of any but pedestrians in the wooded section of the premises herein leased, as said wooded section is indicated in the attached map of these premises which map is marked "Exhibit A" and made a part hereof.

And the said party of the first part does covenant that the said party of the second part, on performing all the conditions and covenants aforesaid, shall and may peacefully and quietly have, hold and enjoy the said demised premises for the term aforesaid.

The covenants, conditions and agreements, made and entered into by the several parties hereto, are declared binding on their respective representatives and assigns.

In witness whereof, the parties have hereunto set their hands and seals this 9th day of April, 1949.

Witnesses:

Thayer D. Child, Jr.

June Krone

THE EDWARD K. WARREN FOUNDATION

Fred P. Warren, Chairman of the Board of Trustees

by Leon Van Benschoten

Leon Vandenbosch, Secretary of the Board of Trustees

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Witnesses:

Jane Bower

M. Irene Goreline

DEPARTMENT OF CONSERVATION
FOR THE STATE OF MICHIGAN

By P. J. Hoffmaster, Director

* * * * * * * * * * * *

State of Michigan)
) ss.
Berrien County)

On this 9th day of April, 1949, before me a Notary Public within and for said County, personally appeared Fred W. Warren and Lena VanGenderen to me personally known, who, being by me duly sworn, did each for himself say that they are respectively the Chairman of the Board of Trustees and Secretary of the Board of Trustees of the Edward K. Warren Foundation, the Corporation named in the foregoing instrument, and that the seal affixed to said instrument is the corporate seal of said Corporation; and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and said Fred P. Warren, Chairman of the Board of Trustees and Lena VanGenderen, Secretary of the Board of Trustees acknowledged said instrument to be the free act and deed of said Corporation.

Jane Krone
Notary Public, Berrien County,
Michigan

My Commission Expires Feb. 8, 1952

* * * * * * * * * *

State of Michigan)
) SS
County of Ingham)

On this 25th day of March, A.D. 1949, before me, a Notary Public in and for said county personally appeared P. J. Hoffmaster, Director of the Department of Conservation for the State of Michigan, to me known to be the same person who executed the within instrument, and who acknowledged the same to be his free act and deed and the free act and deed of the Department of Conservation for the State of Michigan in whose behalf he acts.

M. Irene Goreline
Notary Public, Ingham County
Michigan

My Commission Expires May 28-1951

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RECEIVED FOR RECORD 4-21-49 at 8:40 AM

Catherine Weber,
Register of Deeds,
Berrien Co., Mich.

-5-

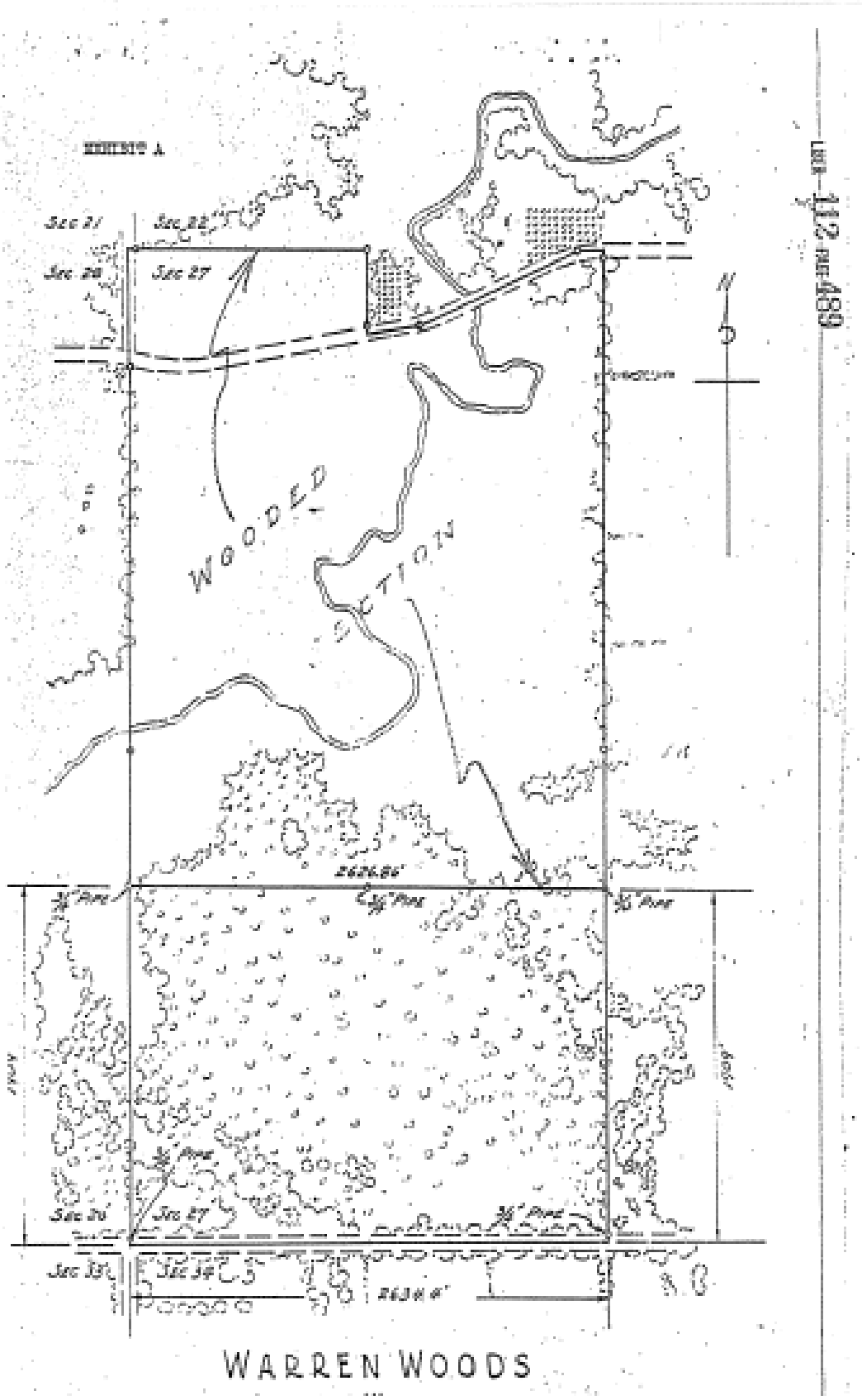
EXHIBIT A
Sec 21
Sec 22
Sec 28
Sec 27
WOODED
SECTION
2626.00'
Sec 34
2634.0'
WARREN WOODS

E-771

IT IS HEREBY AGREED, Between THE EDWARD K. WARREN FOUNDATION, a Corporation organized and existing under the laws of the State of Michigan, party of the first part, and THE STATE OF MICHIGAN, the party of the second part, as follows: The said party of the first part, in consideration of the rents and covenants herein specified, does hereby let and Lease to the said party of the second part, the following described premises, situated and being in the Township of Lake, County of Berrien, State of Michigan, to-wit:

The South Fractional Half of the Southwest Fractional Quarter of Section 24.

The Northeast Quarter of the Northwest Quarter of Section 25, and the South Half of the Southwest Quarter of the Northwest Quarter of Section 25.

The North Fractional Half, and the North Half of the South Fractional Half of Section 26.

All in Township 6 South, Range 20 West, in all Two Hundred [illegible] and eighty-six hundredths (290.86) acres, more or less;

for the term of ninety-nine years from date hereof, on the terms and conditions hereinafter mentioned, to be occupied and used by the State of Michigan and the public for state park purposes and administered in accordance with the statutes, rules and regulations applicable thereto, subject, however, to the limitations and restrictions hereinafter set forth.

Provided, that if default shall be made in any of the covenants herein contained, then it shall be lawful for the said party of the first part, its certain attorney, representatives and assigns, to re-enter into, repossess the said premises, and the said party of the second part, and each and every other occupant, to remove and put out. And the said party of the second part does hereby hire the said premises for the term of ninety-nine years (99), as above mentioned, and does covenant and promise to pay to the said party of the first part, its representatives and assigns, for rent of said premises the sum of One Dollar and other valuable considerations in hand paid, the receipt whereof is hereby acknowledged.

As a further consideration for this Lease, the second party is to keep and perform all the covenants and conditions hereinafter set forth, and observe the restrictions and limitations hereinafter set forth.

It is understood and agreed that all of said lands were conveyed

to the first party by Edward K. Warren in his lifetime, and said lands are now known as the "Warren Dunes," and hereafter the name "Warren" shall be used in all signs and advertising matter in any way relating to said lands.

It is further expressly agreed and understood that said lands and premises shall be operated as a public park, and that no cutting or removal of trees or shrubs, no removal of sand, gravel, or soil, no construction of roads, and no construction of buildings for permanent camps or amusement places will be permitted on or from the lands or premises, or the adjacent waters, except as may be necessary for the proper development, improvement, and maintenance of the lands for their proper use for state park purposes.

It is further agreed and understood that said lands and premises are now exempt from general taxes under the provisions of the laws and statutes of the State of Michigan, and in the event any general or special taxes, or any special assessment of any kind, should be levied against said lands and premises by the second party, or any taxing body, during the term of this Lease, same shall be paid by the second party.

It is further agreed and understood that the said second party will, at all times, maintain suitable and proper toilet rooms, rest rooms, comfort stations and bath houses to accommodate the public, as second party may allow the public to use said lands and premises. And, in this connection, it is expressly agreed and understood that at all times second party shall keep said lands open for the use of the public for the purposes herein mentioned.

It is further agreed and understood that at all times second party shall properly police said lands and premises so as to amply protect the trees, shrubbery and vines thereon, and to properly maintain peace and good order.

It is further agreed and understood that the New First Congregational Church of Chicago, Illinois, has a certain agreement and lease with the first party, dated July 1, 1920; and that said lease has been exhibited to the second party, and this lease is made subject to the terms and conditions of said lease between first party and the said New First Congregational Church of Chicago, Illinois.

It is further agreed and understood that, notwithstanding any of the conditions contained in this lease, the Museum Division of the Edward K. Warren Foundation shall have the exclusive right of collecting botanical and

ornithological specimens from said lands and premises at all times.

It is further agreed and understood that at the termination of this lease, all buildings and improvements of every kind and nature which may have been made on said lands and premises by the second party shall be left thereon, and the title thereto shall become vested in first party.

It is further agreed and understood that this lease cancels and supersedes a former lease covering these same lands executed by both parties hereto and dated December 31, 1929.

Said party of the second part further covenants that it will not assign nor transfer this lease, or sub-let said premises, or any part thereof, without the written assent of said party of the first part, provided that said second party may lease such concessions and public service privileges as may be required for the proper administration of the area for public park use.

And Also, that said party of the second part, will at its own expense, during the continuance of this lease, keep the said premises and every part thereof in as good repair, and at the expiration of the term, yield and deliver up the same in like condition as when taken, reasonable use and wear thereof and damage by the elements excepted.

And the said party of the first part does covenant that the said party of the second part, on performing all the conditions and covenants aforesaid, shall and may peacefully and quietly have, hold and enjoy the said demised premises for the term aforesaid.

The covenants, conditions and agreements, made and entered into by the several parties hereto, are declared binding on their respective representatives and assigns.

In witness whereof the parties hereto have set their hands and seals as of November 23, 1938.

THE EDSEL B. FORDEN FOUNDATION

By [signature]
Chairman

ATTEST:
[signature]
Secretary

THE STATE OF MICHIGAN - DEPARTMENT OF CONSERVATION

By [signature]
P.J. Hoffmaster, Director

ATTEST:
[signature]

Signed - Department of Conservation
December 8, 1938.