



MICHIGAN DEPARTMENT OF NATURAL RESOURCES *and*
WASHTENAW COUNTY PARKS AND RECREATION COMMISSION



Watkins Lake
(Photo by Kenny Price)

Watkins Lake State Park & County Preserve

GENERAL MANAGEMENT PLAN

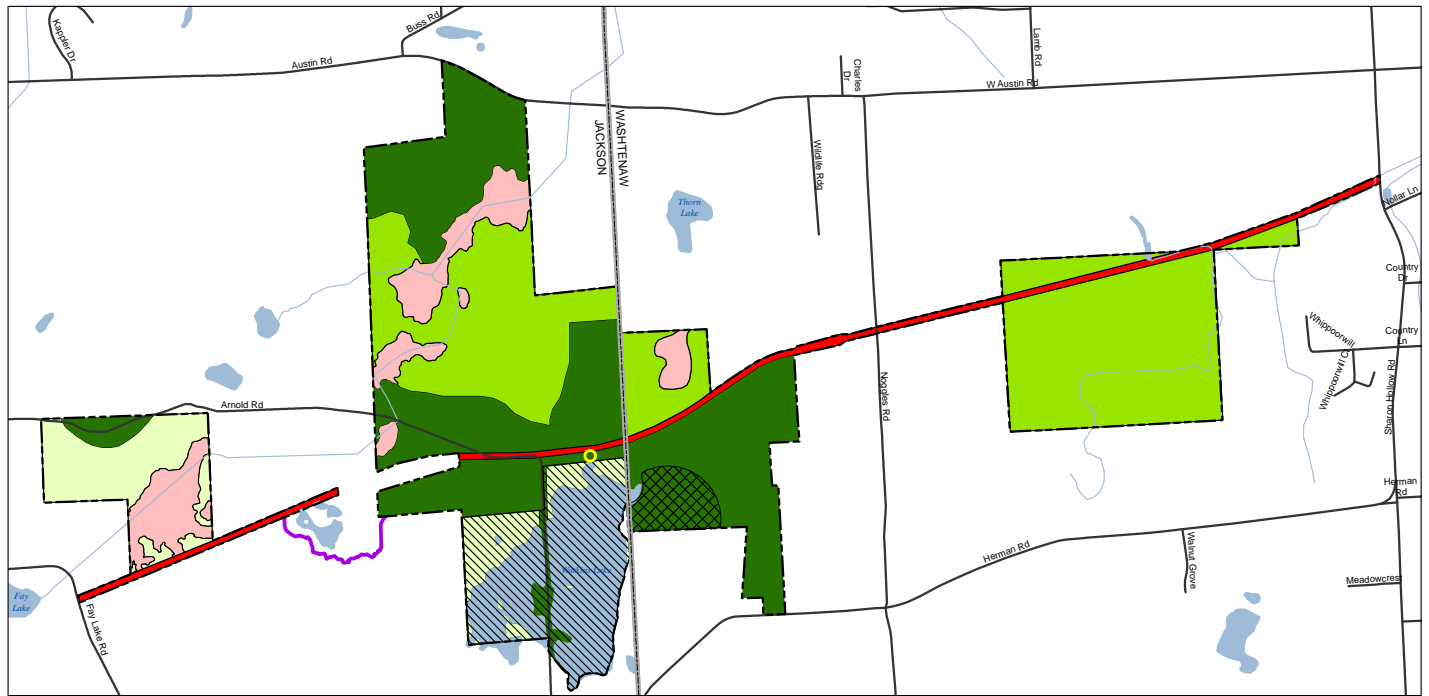
Approved October 10, 2018

Prepared with the assistance of

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STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES
**Watkins Lake State Park and County Preserve
 Management Zones Map**



- | | | | |
|----------------|-----------------------------|------------------------|---|
| Counties | Developed Recreation | Primitive | Cultural Landscape Overlay |
| Park Boundary | Natural Resource Recreation | Ecologically Sensitive | Ecologically Sensitive Overlay (Seasonal) |
| Trail Easement | Backcountry | Scenic Overlay | |

0 0.125 0.25 0.5 Miles



Update January 17, 2018

This project was directed by Deborah Jensen, Management Plan Administrator, Department of Natural Resources, Parks & Recreation Division with assistance from Beckett & Raeder, Inc.

PLAN APPROVALS

Michigan DNR

Chief, Parks & Recreation Division 10.9.18

Natural Resources Deputy

Director, Department of Natural Resources

10/9/18
 Date

10/10/18
 Date

10/10/18
 Date

Washtenaw County Parks and Recreation Commission

Chair, WCPARC

Director, WCPARC

31 August 2018
 Date

8-31-18
 Date

PLAN APPROVALS

PLAN APPROVAL RECOMMENDATIONS

The following dates reference when the plans were presented for recommendation. In some instances, additional time was allotted for plan review following the presentation with subsequent approval received by email.

PRD- Section Chiefs	6/11/18
	Date
DNR- Resource Management Bureau	7/10/18
	Date
MSPAC- Stewardship Subcommittee	7/18/18
	Date
MSPAC	9/8/18
	Date
Washtenaw County Parks and Recreation Commission	9/14/18
	Date

Note: Minor changes made to correct inconsistent acreages 5/6/2019

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Washtenaw County Parks and Recreation Commission

MEMORANDUM

To: Washtenaw County Parks and Recreation Commission
From: Coy P. Vaughn, Director
Date: August 14, 2018
Re: Watkins Lake State Park and County Preserve General Management Plan Approval

Background

In December 2015, WCPARC purchased 405 acres of land in Manchester Township from the Trolz family. The following year, the Michigan Department of Natural Resources Parks and Recreation Division (DNR-PRD) purchased an additional 717 acres of adjacent land in Jackson County. Together, the 1,122-acre Watkins Lake State Park and County Preserve (WLP) became Michigan's 103rd State Park and the first state park to be operated in partnership with a county agency.

Discussion

In February 2017, the Parks and Recreation Commission entered into an agreement with DNR to develop a joint General Management Plan (GMP) for WLP, as is mandatory for all new DNR properties. The Plan sets a framework for future management, development, and natural/cultural resource protection for the next 10-20 years. DNR contracted with their planning consultant, Beckett & Raeder, to complete the GMP and facilitate all planning team and stakeholder/public meetings. Since the site is jointly managed, WCPARC appointed representatives to be part of the planning team, together with DNR staff, and contributed funds toward the completion of the management plan.

Staff from WCPARC and MDNR began monthly meetings in May 2017 to develop the supporting analysis and preliminary concepts. On September 12, 2017, two meetings were held with stakeholders and members of the public to gather input on site development. In addition, a survey was conducted to allow public input on the desired amenities at the facility. In February 2018, the Parks and Recreation Commission was provided a copy of the Draft Plan for additional input.

On March 7, 2018, the Draft Plan was presented at a public meeting in Brooklyn, Michigan. Public comments were considered and integrated into the Final Draft Plan as appropriate. At the June 12, Parks and Recreation Commission meeting, the final draft was available for review. On August 9, WCPARC staff attended the MDNR Park Advisory Committee meeting, where the plan was recommended for approval. In accordance with DNR policy, the GMP will be reviewed every five years. At present, staff is developing a Memo of Understanding to guide operations of the jointly managed facility.

Recommendation

I recommend that the Parks and Recreation Commission adopt the General Management Plan for Watkins Lake State Park and County Preserve.

Action

Moved by Ms. Fuller, seconded by Ms. Anschuetz, to adopt the General Management Plan for Watkins Lake State Park and County Preserve." All ayes, motion carried.

RESOLUTION NO. 08-2018-05**MICHIGAN STATE PARKS ADVISORY COMMITTEE (MSPAC)****RESOLUTION TO RECOMMEND APPROVAL OF THE
“WATKINS LAKE STATE PARK AND COUNTY PRESERVE GENERAL
MANAGEMENT PLAN”****ADOPTED: August 9, 2018**

WHEREAS, the Michigan Department of Natural Resources’ (DNR) Parks and Recreation Division, in association with the Washtenaw County Parks and Recreation Commission, has completed the General Management Plan for Watkins Lake State Park and County Preserve; and

WHEREAS, the planning process reflects balancing of natural resource protection values, historic and cultural resource values, recreation and education opportunities, including various DNR and Washtenaw County Parks and Recreation Commission programs and events; and

WHEREAS, the planning process included multiple stakeholder, constituent, and public input; and

WHEREAS, the General Management Plan represents sound guidance for future planning that is consistent with the missions of the DNR, the Parks and Recreation Division, and Washtenaw County Parks and Recreation Commission; and

WHEREAS, the General Management Plan is in alignment with the recommendations of the Michigan State Parks and Outdoor Recreation Blue Ribbon Panel report submitted to Governor Rick Snyder; and

WHEREAS, the General Management Plan has been reviewed and recommended for approval by the Parks and Recreation Division, and Washtenaw County Parks and Recreation Commission.

THEREFORE, BE IT RESOLVED, that the Michigan State Parks Advisory Committee recommends to the DNR approval of the Watkins Lake State Park and County Preserve General Management Plan; and

THEREFORE, BE IT FURTHER RESOLVED that the Michigan State Parks Advisory Committee further recommends that the DNR, Parks and Recreation Chief and the Director approve the Watkins Lake State Park General Management Plan.

Submitted by: MSPAC Stewardship Subcommittee

Motioned by: Committee member, Chris Graham

Seconded by: Committee member, Ann Conklin

Yeas: 10

Nays: 0

Abstained: 0

Absent: 5

This Resolution was adopted by the Michigan State Parks Advisory Committee at their regular meeting on August 9, 2018 as Resolution No. 08-2018-05.

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View of Watkins Lake

General Management Plan Executive Summary

Located between the cities of Ann Arbor and Jackson, Watkins Lake State Park and County Preserve (WLP) straddles the border of Washtenaw and Jackson counties. WLP is approximately 25 miles southwest of Ann Arbor and 16 miles southeast of Jackson within the Irish Hills region. Designated as Michigan's 103rd state park, WLP is jointly owned and managed by the Department of Natural Resources (DNR) and Washtenaw County Parks and Recreation Commission (WCPARC), the first such partnership for a state park in Michigan.

WLP features 1,122 acres of beautiful rolling hills with a mixture of open meadow, hardwood forest, wetland areas, and open water. Of the 1,122 acres, WCPARC owns and manages 405 acres, while the state owns and manages the remaining 717 acres. Although largely undeveloped, the recreation area provides a variety of recreational opportunities such as hiking, fishing, and bird watching. As a popular wildlife viewing destination, Watkins Lake is the most prominent feature of the park, holding large numbers of waterfowl during the spring and fall migration. The property also includes a 4.5-mile former rail corridor that traverses the property from east to west.

The purpose of this General Management Plan (GMP) is to guide the future long-term management of WLP. Overall, this plan seeks to uphold the DNR's Parks & Recreation Division's (PRD) Mission: "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," and WCPARC's Mission: "to enhance the quality of life in the County by promoting a healthy lifestyle, efficiently providing high quality facilities and programs reflective of current and anticipated recreational needs of County residents and visitors-with particular emphasis on preserving fragile lands, water quality, wildlife habitat, creating pedestrian and greenway connections, and providing high quality services to those of all backgrounds." The management plan brings together DNR staff, WCPARC staff, stakeholders, and the public into a process that defines the following for the state park and county preserve:

- Purpose and significance that captures the unique identity of Watkins Lake State Park and County Preserve
- 20-year Management Zone Plan reflecting the resource protection goals and level of development appropriate for different areas of the park
- Ten-year action goals that address the desired future condition within the park as a whole and within each of the designated management zones

While the GMP addresses some specific natural resource goals for the park, separate Stewardship Plans have been developed for both the state and county land to identify targets for conservation and related natural resource goals and management strategies. A copy of the PRD and WCPARC Stewardship Plans are included in Appendix C. Michigan Natural Features Inventory (MNFI) completed a survey of exemplary natural communities and rare plant and animal species at WLP in 2016-17. The MNFI report was used to inform the Stewardship Plans.

The Supporting Analysis, included as Appendix A of this plan, provides important background information on WLP that informs this planning initiative. It includes a comprehensive review of the park setting, area demographics, history, land ownership, legal mandates, and cultural, natural, and recreation resources. Furthermore, several existing planning documents, including the Michigan State Parks Outdoor Recreation Blue Ribbon Panel Report and the Michigan Statewide Comprehensive Outdoor Recreation Plan, were used as guiding references (See Chapter 1).

Significance of Watkins Lake State Park and County Preserve

This General Management Plan (GMP) developed by the Michigan Department of Natural Resources (DNR) Parks & Recreation Division (PRD) and Washtenaw County Parks and Recreation Commission (WCPARC) is derived from the property's significant features that make it distinct from other parks in the state's and county's system. Watkins Lake State Park and County Preserve (WLP) was determined significant due to the following:

Inter-agency Partnership

Watkins Lake State Park and County Preserve, Michigan's 103rd State Park, is the result of a partnership between the DNR and Washtenaw County Parks and Recreation Commission. This is the first state park to be jointly managed by the DNR and a county recreation agency, exemplifying the benefits of inter-agency cooperation.

Natural Features

The variety of habitats within WLP, including wetlands and a large Prairie Fen complex of exceptional quality, create a heightened potential for the presence and observation of rare or threatened and endangered species. The eastern massasauga rattlesnake, bald eagle, Mitchell's satyr butterfly, and rare grassland birds make their homes here. The park is another link in a chain of protected lands in the region.

Peaceful Recreation

The rolling topography and expansive undeveloped areas within this park create beautiful vistas that are easily accessible from the former rail corridor running through the property. Such vantage points are rarely found on public

land in the region. The scenic Watkins Lake provides a calm-water paddling and fishing experience with the absence of shore development. These recreation opportunities at WLP complement the more developed amenities and experiences offered at nearby Walter J. Hayes State Park.

Waterfowl Viewing

WLP's waterfowl refuge provides an excellent opportunity to see a wide variety of Michigan's waterfowl, including diving ducks, such as scaup, canvasbacks, and wading birds. The refuge draws birders from the surrounding area and beyond, boosting the park's attendance, particularly during the spring and fall migration. The road bisecting Watkins Lake provides easy access to exceptional waterfowl viewing opportunities.

Community Connectivity

Within the greater Irish Hills area, between the urban centers of Jackson and Ann Arbor, WLP is situated in a region long associated with recreation and tourism. The preservation of WLP for public benefit and use reinforces and perpetuates the region's character. The former rail corridor that runs through the park not only provides connectivity within the park, but creates the potential for future trail connections to the nearby village centers of Manchester and Brooklyn.

Rural Michigan History

WLP's history represents a well-documented example of the pioneering spirit in rural Michigan, providing many opportunities for interpretation. Its settlement story begins when the Watkins family moved to Michigan in 1834 and farmed their 800 acres of land, growing crops and raising livestock. The Watkins farm has close ties to the Underground Railroad network that operated in the area, assisting a number of those fleeing slavery. As rail transportation expanded, L. D. Watkins traded the railroad right-of-way through the property for his own private flag stop depot that once stood on the land now part of the park. Evidence in the surrounding area suggests the potential for historic and pre-historic sites here.



Birdwatching at WLP

Management Zones

A key goal in the development of this General Management Plan is to continue to protect the park's natural and cultural resources, while providing recreation and education opportunities. Taking this into account, the planning team, with stakeholder and public input, established appropriate management zones for the park. From a palette of nine standard zones, five zones and three overlays were applied to Watkins Lake State Park and County Preserve (WLP). The Management Zone Map and a thorough review of each management zone are found in Chapter 4 of this plan. A condensed description of each of the applied management zones is as follows:

Ecologically Sensitive Zone

The purpose of this zone is to enhance and protect the native communities and natural processes above all other uses, including recreation. Development will not be allowed in this zone (except for resource protection) and visitor access will be discouraged. This zone makes up approximately 9% of the park and includes the prairie fen.

Primitive Zone

This zone reflects a desired condition that emphasizes the natural resources. It is managed to allow only dispersed and low frequency use for low impact recreational purposes. The primitive zone covers approximately 10% of the park and includes wetlands between Arnold Road and the former rail corridor at the west end of the property and land surrounding Watkins Lake in recognition of its status as a wildlife refuge.

Backcountry Zone

The character of this zone is natural, with minimal evidence of human impact. This zone allows for increased use, including non-motorized trails and low-impact modifications of the landscape to accommodate that use. The Backcountry Zone comprises approximately 38% of the park and includes land east of Noggles Road characterized by active and abandoned agricultural land, forested wetland and wet prairie, and lowland areas in the center of the park, north of the former rail corridor.

Natural Resource Recreation Zone

The Natural Resource Recreation Zone allows for active recreation with medium to high density of use conducted in natural settings. There is still an emphasis on resource quality over recreation, but in this zone, higher levels of use are allowed. The Natural Resource Recreation Zone makes up approximately 38% of the park and includes the land south of the former rail corridor west of Noggles Road, except for the land within the Wildlife Refuge, and much of the upland on the state land.

This zone allows active recreation with high density of use conducted in areas not designated for natural resource significance. In this zone, recreation dominates with natural resource attributes enhanced as possible. The Developed Recreation Zone is approximately 5% of the park land and includes the former rail corridor, which is currently being used for an active trail corridor.

Ecologically Sensitive Overlay (Seasonal)

This overlay addresses the critical habitat that must be preserved and protected on a seasonal basis. This overlay is approximately 13% of the park and includes Watkins Lake and the designated waterfowl refuge, which is closed to access from February 15th through May 15th (spring closure) and September 1st through January 1st (fall closure).

Cultural Landscape Overlay

The Cultural Landscape Overlay is used to highlight not only historic structures, but also non-structural evidence of the traditions, beliefs, practices, arts, crafts, and social intuitions of any community. This overlay is a tiny fraction of the park, approximately 0.5 acres, and includes the area in which L.D. Watkins' privately owned flag stop depot once stood, located directly north of Watkins Lake.

Scenic Overlay

The Scenic Overlay recognizes that there are aesthetic qualities to be preserved and protected at WLP. This overlay comprises approximately 2% of the park and includes the scenic viewshed overlooking Watkins Lake.

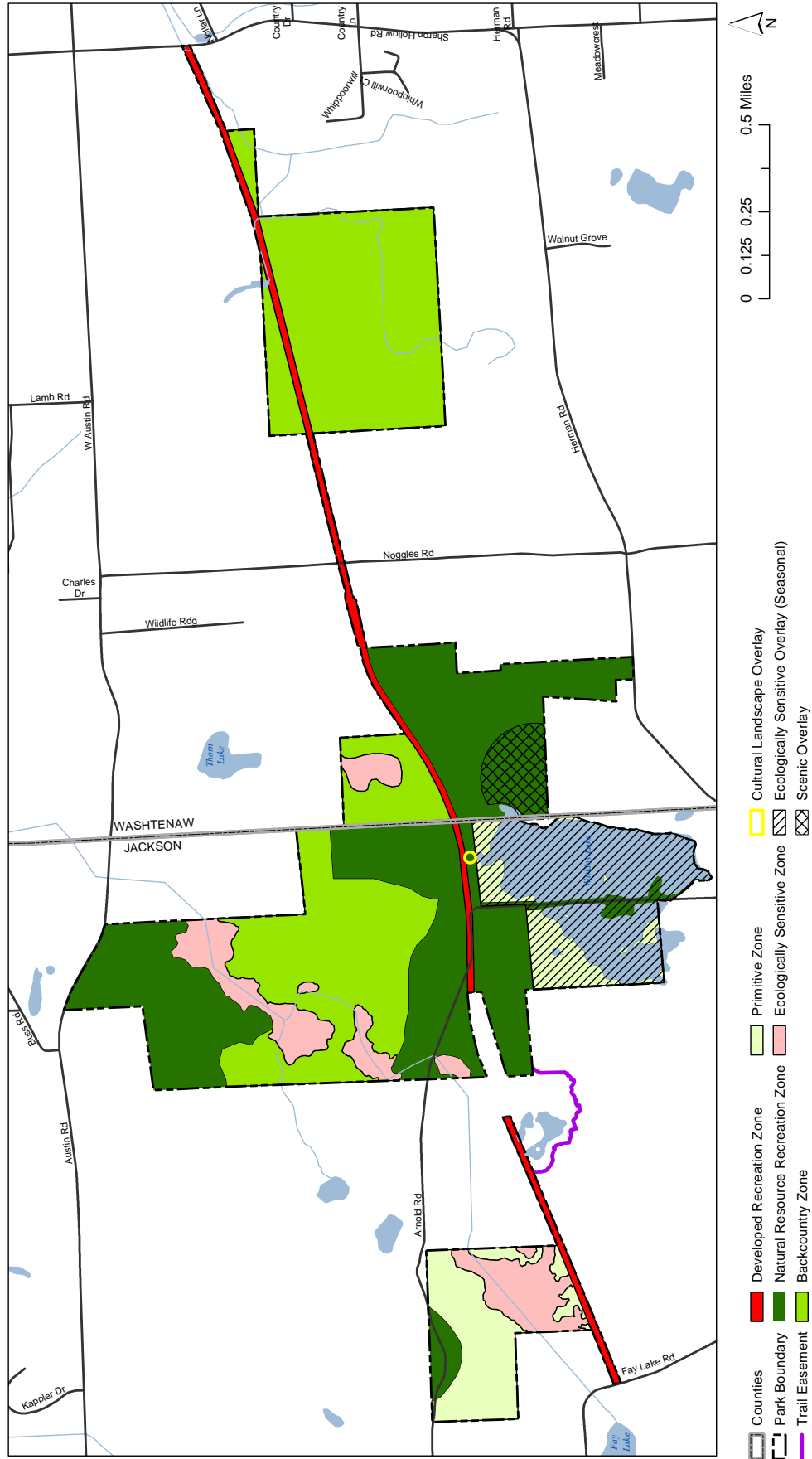


Deer at Watkins Lake
(Photo by Kenny Price)



STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES

Watkins Lake State Park and County Preserve Management Zones Map



Update May 3, 2018

Ten-Year Action Goals

Once the planning team has established management zones to guide Watkins Lake State Park and County Preserve (WLP) for the next 20 years, a series of action goals are identified. The planning team has determined these actions as the items that can be accomplished in the next 10 years. The action goals are broken down into categories pertaining either to a single management zone or to the park as a whole. Below is a summary of the action goals for each zone. The full list of 10-year action goals can be found in Chapter 5.

General Action Goals (apply park-wide)

The general action goals for WLP focus on managing the park's natural resources, controlling invasive species, protecting cultural resources, developing opportunities for education and interpretive programming, creating a trail connection between Manchester and Brooklyn, establishing compatible rules and regulations between the Michigan Department of Natural Resources (DNR) and Washtenaw County Parks and Recreation Commission (WCPARC), and developing a signage and wayfinding program for WLP.

Ecologically Sensitive Zone

Continuing to protect, maintain, and restore the prairie fen and other natural communities within the park is the goal of this zone.

Primitive Zone

Maintaining and restoring prairie fens and other natural communities is the goal in the primitive zone.

Backcountry Zone

Establishing open hunting, with the proper restrictions, north of both Arnold Road and the former rail corridor in Jackson County is the primary focus in the backcountry zone.

Natural Resource Recreation Zone

Within this zone, action goals focus on establishing a non-motorized carry-in boat access at Watkins Lake and developing a hiking trail system that highlights major points of interest.

Developed Recreation Zone

Developing trail connectivity through the park by designating the former rail corridor for biking and hiking is the focus for this zone.

Ecologically Sensitive Overlay

Within this overlay, continuing to protect and preserve the waterfowl habitat and other natural communities during fall and spring migration is the priority.

Cultural Landscape Overlay

The goals of this overlay zone focus on the evaluation and interpretation of cultural resources that pertain to the train depot site.

Scenic Overlay

The focus of the scenic overlay is to continue to protect and promote the scenic viewsheds that overlook Watkins Lake.



WLP entrance sign



Pollinators at WLP
(Photo by Kenny Price)

Chapter One:

Core Values and Guiding Resources

1.1 Mission Statements

Throughout the planning process, the core values of the Department of Natural Resources (DNR) and Washtenaw County Parks and Recreation Commission (WCPARC) were the foundation of the planning team's decisions. These include the mission statement of the DNR, the five goals of the DNR, and the DNR Parks & Recreation Division (PRD) and WCPARC mission statements. These values set the protection of natural and cultural resources and the provision of recreational and educational opportunities at the forefront of the plan.

DNR Mission Statement

The Michigan Department of Natural Resources is committed to the conservation, protection, management, use, and enjoyment of the state's natural and cultural resources for current and future generations.

Five Goals of the DNR

1. Protect the natural and cultural resources
2. Ensure sustainable recreation use and enjoyment
3. Enable strong natural resource-based economies
4. Improve and build strong relationships and partnerships
5. Foster effective business practices and good governance

PRD Mission Statement

The Parks & 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.

WCPARC Mission Statement

The Washtenaw County Parks and Recreation Commission's mission is to enhance the quality of life in the County by promoting a healthy lifestyle, efficiently providing high quality facilities and programs reflective of current and anticipated recreational needs of County residents and visitors – with particular emphasis on preserving fragile lands, water quality, wildlife habitat, creating pedestrian and greenway connections, and providing high quality services to those of all backgrounds.

1.2 Guiding References

The general management planning process is guided and shaped by several resources developed to provide recommendations for managing Michigan's and Washtenaw County's parks and recreation system. In particular, these resources have helped shape the 10-year action goals established in this plan.

Michigan State Parks & Outdoor Recreation Blue Ribbon Panel Report (2012)

The Blue Ribbon Panel's report to Governor Snyder identifies a number of recommendations for system-wide changes to programs, management, infrastructure type, and investment strategies that set up the visionary framework for the next 30-50 years of park and outdoor recreation management in Michigan. Recommendations in the report include:

- Identify and protect important natural, cultural, historic, and prehistoric resources
- Diversify funding
- Prioritize development of statewide and regional systems of connected trail networks
- Connections between communities and their recreational assets to strengthen regional identities
- Integrate tourism and economic development marketing
- Prioritize investment in parks and recreation



Michigan Statewide Comprehensive Outdoor Recreation Plan 2018-2022 (SCORP)

SCORP is a five-year strategic plan that shapes investment by the state and local communities in priority outdoor recreation infrastructure and programming. The Plan's overarching goal is to "Protect and manage Michigan's diverse and abundant natural and cultural assets to provide relevant, quality experiences that meet the fun, relaxation, and health needs of Michigan's residents and visitors, and support economic prosperity" by meeting the following objectives:

- Foster stewardship and conservation
- Improve collaboration
- Raise awareness
- Improve recreational access
- Provide quality experiences
- Enhance health benefits
- Enhance prosperity

Managed Public Land Strategy (2013)

The DNR-Managed Public Land Strategy provides a framework for the continued conservation, use and management of public lands to provide an enhanced quality of life for Michigan residents, create jobs and protect the essence of Michigan, its woods, waters, wildlife and other natural and cultural assets. The Strategy identifies three broad goals with desired outcomes, metrics, and measurable objectives identified for each goal. These goals are to:

- Provide quality outdoor public recreation opportunities
- Foster regional economic prosperity
- Protect natural and cultural resources for future generations

Michigan Comprehensive Trail Plan (2013 - 2018)

The Trail Plan, developed by an 11-member committee appointed by Governor Snyder, includes eight priority recommendations with associated key actions that should be implemented to assist in achieving the vision of establishing a high quality, nationally-recognized, state-wide trail system. The eight recommendations are as follows:

- Trails are maintained to ensure a sustainable and quality trail system
- Expand trails, trail experiences, opportunities to ensure accessibility to trail systems, outdoor recreation opportunities, and natural and cultural resources
- The Michigan Snowmobile and Trails Advisory Council leads the effort to maintain and enhance Michigan's reputation as the trail state



- Link trails, trail users and adjoining towns to create memorable trail experiences and enhance economic prosperity
- Develop, enhance and celebrate partnerships and collaborations
- Implement a marketing plan including an electronic portal that allows citizens and visitors to be aware of all trails and related amenities
- Develop funding sources and mechanisms for trail maintenance, acquisition and development
- Ensure that the state's trail system compliments other plans and planning efforts

PRD Strategic Plan (2017-2022)

The PRD Strategic Plan is the overarching document that guides the Parks & Recreation Division in carrying out its mission. This plan establishes long-range goals, objectives, and strategies for Michigan's state parks and recreation system for the 5-year period beginning in 2017. It identifies the most important issues facing the PRD and helps to define where resources should be focused for maximum benefit. The goals identified in the plan are:

- Be exemplary stewards of Michigan's natural and cultural resources
- Provide users with quality outdoor recreation experiences in balance with resource protection
- Continue to advance Michigan as the "Trail State"
- Provide a relevant gateway to connect people to nature and Michigan's cultural heritage, and foster understanding and support for PRD's mission among future generations
- Improve and maintain strong public, stakeholder and department communication, relationships and partnerships
- Engage in strategies to increase community and state economic prosperity
- Sustainably support PRD programs, operations, and facilities
- Foster and adopt effective and safe business practices

Washtenaw County Parks and Recreation Master Plan (2015-2019)

The WCPARC Master Plan provides an outline for the fundamental benefits that parks, open space, and recreational opportunities have on the quality of life for residents of the community. This plan establishes goals, objectives, and strategies for Washtenaw County's parks and recreation system that aim to provide a place for families and friends to interact, exercise, and experience available natural and cultural resources. This master plan identifies the following five goals:

- Develop, operate, manage, and maintain a comprehensive parks and recreation system
- Provide recreation opportunities to all patrons
- Preserve and enhance the existing natural, historic, and cultural resources
- Develop an interconnected network of open space, recreation facilities, bikeways/pathways, and nature trails
- Seek opportunities to cooperate and collaborate with a variety of partners

1.3 Summary of Legal Mandates

For all park General Management Plans, legal mandates are identified that serve to further guide the development of the general management plan, park management, and park operations.

For all park general management plans, legal mandates are identified that serve to further guide the development of the plan, park management, and park operations. For the DNR's 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, the Parks & Recreation Division, and Washtenaw County Parks and Recreation Commission. The general and site specific legal mandates applicable to Watkins Lake State Park and County Preserve are listed in Appendix A: Supporting Analysis.

The legal mandates that most directly impact planning and management at Watkins Lake State Park and County Preserve focus on the following areas:

- Protection of threatened and endangered species, including eastern massasauga rattlesnake and Henslow's sparrow
- Preservation of cultural and historic resources
- Water resources, wetlands, and inland streams protection
- Requirement for a Recreation Passport for entry into the park (DNR land only)
- Land Use Order of the Director designating Watkins Lake as a Wildlife Refuge (DNR land only)
- Washtenaw County Natural Areas Ordinance 128



Rolling hills at WLP

Chapter Two: Plan Process Overview

2.1 Planning Objectives

General management planning sets out a framework for protecting park resources while providing for meaningful visitor experiences. The long-range vision and management objectives for Watkins Lake State Park and County Preserve (WLP) are derived from the mission of the Department of Natural Resources (DNR) and the Parks & Recreation Division (PRD), the mission of Washtenaw County Parks and Recreation Commission (WCPARC), applicable legal directives, the purpose of the park, and the park's significant natural and cultural resources.

The objective of the General Management Plan (GMP) is to bring together Parks & Recreation Division staff, staff from other resource divisions, WCPARC staff, stakeholders, and the public into a planning process that defines and clarifies the unique "Purpose and Significance" of Watkins Lake State Park and County Preserve. Collectively, those attributes will be reinforced in the planning and management decisions that impact the park through the implementation of the 20-year management zone plan used to guide park planning decisions and 10-year action goals that establish specific action strategies for the park as a whole and within each of the management zones. The plan must allow for a certain level of flexibility to react to changing circumstances or opportunities.

Each GMP is reviewed every 5 years to ensure there have been no major changes that would warrant a revision to the approved plan.

2.2 Planning Process

The WLP planning team met periodically over a 14 month period to develop the General Management Plan, beginning in March of 2017 and ending in May of 2018. Throughout the process, the team sought the input of the public and stakeholders to guide the decisions made in the plan. Stakeholder and public workshops were held in September of 2017 to gather insight from organizations tied to the park and interested park visitors and neighbors. In addition, an online public input survey was available for interested parties to comment on their current use of the park and their priorities for the future. Following the input sessions and survey, the team developed a list of action plan priorities and developed the draft plan.

2.3 Planning Team

This plan was developed with the direct assistance, input, and expertise provided by all members of the planning team. Please refer to Appendix E for summaries of all planning team meetings.

PLANNING TEAM		
MICHIGAN DEPARTMENT OF NATURAL RESOURCES		
Division	Title	Name
PRD	Management Plan Administrator	Debbie Jensen
PRD	Planning Student Assistant	Sarah Burton
PRD	Lands Liaison	Matt Lincoln
PRD	Acting Park Manager	Jim Knox
PRD	District Supervisor	Murdock Jemerson
PRD	Regional Planner	Joe Strach
PRD	Stewardship Unit Manager	Ray Fahlsing
PRD	Cultural Resources Analyst	Lisa Gamero
PRD	Southern Michigan Trail Specialist	Nikki VanBloem
FD (Fisheries)	Fisheries Biologist	Jeff Braunscheidel
FRD (Forestry)	Forester	Mike Hanley
LED (Law)	Conservation Office	Brandon Hartleben
MOD (Marketing)	Park Interpreter	Katie McGlashen
WLD (Wildlife)	Wildlife Biologist	Kristen Bissell
WLD	Acting Wildlife Biologist	Dennis Tison
OMM (Minerals)	State Geologist	Peter Rose
MSHDA	State Archaeologist	Dean Anderson
MHC (History)	Museum Director	Suzanne Fischer
MHC	Southern Lower Peninsula Historian	Laurie Perkins
WASHTENAW COUNTY PARKS AND RECREATION COMMISSION		
Title	Name	
Director	Coy Vaughn	
Park Planner	Kira Macyda	
Park Planner	Peter Sanderson	
Stewardship Manager	Allison Krueger	

PLANNING TEAM, CONTINUED		
PLANNING CONSULTANTS		
Division	Title	Name
Beckett & Raeder, Inc.	Principal	Christy Summers
Beckett & Raeder, Inc.	Project Professional	Caitlin Jackson
Beckett & Raeder, Inc.	Project Professional/ GIS Specialist	Marisa Laderach
Beckett & Raeder, Inc.	Project Professional	Morgan Haffey

2.4 Summary of Input Opportunities

Public input is a critical part of the planning for Watkins Lake State Park and County Preserve. Below is a summary of the public and stakeholder input methods that were used to inform the development of the General Management Plan. Several different methods were used to ensure everyone had an opportunity for input. Full reports for each of the outreach methods are included in Appendix B of this plan.

Project Website

A public-facing website was maintained throughout the duration of the General Management Plan process. This website was updated with general information about the park and park maps, results of the public input survey, and the draft of the GMP. The website contained a contact form so that the public could contact the planning team at any time with questions, concerns, and input.

Stakeholder and Public Input Workshops

In order to gather targeted input from governmental, non-profit, and business/tourism entities, the planning team invited a group of stakeholders to attend an input workshop held on September 12, 2017. Similarly, the public was invited to attend an input workshop held on the same day, following the stakeholder workshop.

The public meeting was advertised via a DNR press release/ email bulletin, which went to 17,418 individuals that have expressed an interest in DNR news in the region, and via promotion by Washtenaw County on their website and social media. In addition, over 50 park neighbors with property within 500 feet of the park boundary were notified of the meeting by mail. Of the 34 individuals who attended the public input workshop, 18 of them are considered park neighbors.

All meetings followed a similar format. Representatives of the DNR and WCPARC provided the attendees with a brief overview of WLP, including its natural and historic resources, its jointly-managed status, and its current recreational offerings. Attendees were also presented the General

Management Plan process, timeline, and an explanation of the plan elements that their input would inform: the Statements of Significance, the Management Zone map, and a list of Action Items intended to be accomplished over the next ten years. Then, participants were divided into groups and completed a series of exercises describing the park's context, the park features, the participants' vision for the park's future, as well as the park's potential benefit to the larger community.

Online Public Input Survey

One of the methods the planning team used to gather input from current and potential users of WLP was an online survey. This survey was advertised through the same means as the public input workshop. This online approach provides a convenient way for those who have access to the internet to provide feedback and accurately transfers all responses for analysis. However, it is not designed to be statistically representative of WLP users or uses, as respondents self-select. They are not sampled on a random or systematic basis that would ensure statistically accurate representation of users or uses. Nevertheless, the on-line survey does provide valuable information about what certain individuals or groups (those who are motivated to comment about the park, those likely to receive DNR communication about the survey, and those who have easy access to the internet) hope to see in the park's future management.

Two-hundred and forty-eight individuals completed the online survey. The survey included questions regarding the activities users currently participate in, activities or enhancements visitors would like to see in the future, the importance of available recreation opportunities versus the protection of natural and cultural resources, and their demographic information.



Public Input Workshop participants

Public Input Meeting

The public was invited to share their thoughts about WLP Draft General Management Plan at a public meeting hosted by the DNR and WCPARC on March 7, 2018, at the Super 8 Hotel in Brooklyn, MI. The general public was notified about the meeting through press release, internet postings, and email notifications. A total of 33 attendees were recorded on sign-in sheets.

The meeting included a short overview of the general management plan process and plan contents, followed by an opportunity to provide input on the statements of significance, draft management zones, and ten-year action goals. Participants were presented with the opportunity to affix comments, through the use of sticky notes, directly onto the presentation boards. Flip charts and a comment sheet were also made available to participants for means of commenting. In addition, participants were given ten dots to prioritize their preferred action goals from the ten-year action goals. Four copies of the complete Draft Management Plan were available to attendees during the meeting for review.

Primary changes made in response to the comments are as follows:

- Goal relating to hunting north of the former rail corridor was modified to only allow hunting north of Arnold Road
- Goal added regarding the encouragement of establishing a friends group
- Minor edits were made to the Ecologically Sensitive Zone description to clarify that visitors access will be discouraged
- Goal pertaining to scenic viewsheds was divided into two parts, resulting in a new action goal to provide access to scenic viewsheds through signed foot trails

Tribal Communication

The planning team reached out to the Nottawaseppi Huron Band of Potawatomi Indians, the Pokagon Band of Potawatomi Indians, and the Gun Lake Band of Pottawatomi Indians with a letter notifying them of the General Management Plan process and timeline and asking for any input.



Picnic area off of Arnold Road

Chapter Three: Purpose and Significance

3.1 Park Purpose

Park purpose statements are based on park legislation, legislative history, special designations and policies. These statements reaffirm the reasons for which Watkins Lake State Park and County Preserve (WLP) was identified as part of the state park and Washtenaw County park system.

Watkins Lake State Park and County Preserve was purchased under the Authority of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Michigan Public Act 261 of 1965 for the following purposes:

- To provide additional outdoor recreation land in southern Michigan;
- To provide access to and enhance recreation opportunities through partnerships;
- To protect the area around Watkins Lake as a seasonal waterfowl refuge for the migratory water birds with associated watchable wildlife opportunities; and
- To preserve and protect the site's natural and cultural resources for future generations.

The Natural Resources Commission approved the state land acquisition for the following management purpose: "The property will be managed and maintained as Watkins Lake

State Park and provides additional hiking, hunting, trail activities and recreational activities as allowed under State Land Use Rules for Parks and Recreation Areas."

3.2 Statements of Significance

This General Management Plan (GMP) developed by the Michigan Department of Natural Resources (DNR) Parks & Recreation Division (PRD) and Washtenaw County Parks and Recreation Commission (WCPARC) is derived from the park's significant features that make it distinct from other parks in the state's system. Watkins Lake State Park and County Preserve (WLP) was determined significant due to the following:

Inter-agency Partnership

Watkins Lake State Park and County Preserve, Michigan's 103rd State Park, is the result of a partnership between the DNR and Washtenaw County Parks and Recreation Commission. This is the first state park to be jointly managed by the DNR and a county recreation agency, exemplifying the benefits of inter-agency cooperation.

Natural Features

The variety of habitats within WLP, including wetlands and a large Prairie Fen complex of exceptional quality, create a heightened potential for the presence and observation of rare or threatened and endangered species. The eastern massasauga rattlesnake, bald eagle, Mitchell's satyr butterfly, and rare grassland birds make their homes here. The park is another link in a chain of protected lands in the region.

Peaceful Recreation

The rolling topography and expansive undeveloped areas within this park create beautiful vistas that are easily accessible from the former rail corridor running through the property. Such vantage points are rarely found on public land in the region. The scenic Watkins Lake provides a calm-water paddling and fishing experience with the absence of shore development. These recreation opportunities at WLP complement the more developed amenities and experiences offered at nearby Walter J. Hayes State Park.

Waterfowl Viewing

WLP's waterfowl refuge provides an excellent opportunity to see a wide variety of Michigan's waterfowl, including diving ducks, such as scaup, canvasbacks, and wading birds. The refuge draws birders from the surrounding area and beyond, boosting the park's attendance, particularly during the spring and fall migration. The road bisecting Watkins Lake provides easy access to exceptional waterfowl viewing opportunities.

Egret on Watkins Lake



Birdwatching at WLP

Community Connectivity

Within the greater Irish Hills area, between the urban centers of Jackson and Ann Arbor, WLP is situated in a region long associated with recreation and tourism. The preservation of WLP for public benefit and use reinforces and perpetuates the region's character. The former rail corridor that runs through the park not only provides connectivity within the park, but creates the potential for future trail connections to the nearby village centers of Manchester and Brooklyn.

Rural Michigan History

WLP's history represents a well-documented example of the pioneering spirit in rural Michigan, providing many opportunities for interpretation. Its settlement story begins when the Watkins family moved to Michigan in 1834 and farmed their 800 acres of land, growing crops and raising livestock. The Watkins farm has close ties to the Underground Railroad network that operated in the area, assisting a number of those fleeing slavery. As rail transportation expanded, L. D. Watkins traded the railroad right-of-way through the property for his own private flag stop depot that once stood on the land now part of the park. Evidence in the surrounding area suggests the potential for historic and pre-historic sites here.

3.3 Public Affirmation of Significance

Stakeholder and public input assisted the planning team with affirming the significant features and opportunities at Watkins Lake State Park and County Preserve. The feedback from the online survey confirmed that the variety of ecosystems, scenic view sheds, assortment of recreational activities, and the historical and cultural value are key aspects of the park. Comments from survey respondents relating to those significant features are provided below.

“Cultural, political, and environmental aspects of Watkins Lake State Park are all of immense historical value. Thank you for all of your efforts to develop, restore and preserve this valuable piece of Michigan history.”

“I am a relative of the Watkins family and love being able to walk the trails and enjoy the waterfowl. Thank you for acquiring this piece of property for Michigan residents to enjoy for generations to come.”

“This property has interesting variety – it’s a lovely place.”

“This place is amazing! The state has really picked a gem.”

“Watkins Lake has some special ecosystems such as the large areas of Prairie Fens with their unique species of flora and fauna.”

3.4 Community Connection

As the newest state park in Michigan, and the only state park to be managed jointly between the DNR and a county agency, WLP has attracted a lot of interest and support from neighboring communities, recreation, tourism and business interests, and local residents. Watkins Lake State Park and County Preserve complements the character of the greater Irish Hills area, known for its rolling hills, scenic beauty and recreation offerings. The park is within easy reach of the urban centers of Jackson and Ann Arbor. The former rail corridor that traverses the site provides an opportunity for future trail connections to the neighboring communities of Manchester and Brooklyn, which serve as local commercial centers for the rural population.

WLP straddles the boundary of two regional planning entities, South East Michigan Council of Governments (SEMCOG) and Region 2 Planning Commission, whose focus is to bring together public and private partners to enhance local and state economic prosperity. Providing an attractive living and working environment, with nearby recreation and trail assets, is one component of attracting and retaining residents and workers. Presenting unique recreational opportunities where viewsheds and natural communities are preserved and protected is what motivates visitors to explore WLP. Watkins Lake provides an excellent opportunity to view a wide variety of Michigan’s waterfowl, attracting birders from outside of the region, particularly during the spring and fall migration, beyond the typical tourist season. The rich history of WLP builds on other nearby historic resources, such as the Historic Walker Tavern, Sharon Mills, and a number of state designated historic sites in the Village of Manchester, promoting cultural interest in the area.



Joint facility management

MANAGEMENT ZONE PROGRESSION

MANAGEMENT ZONE	RESOURCE CONDITION	VISITOR EXPERIENCE	DEVELOPMENT LEVEL
ECOLOGICALLY SENSITIVE	Pristine	Restricted	None
PRIMITIVE			
BACKCOUNTRY			
CULTURAL LANDSCAPE			
HISTORY EDUCATION			
SCENIC			
NATURAL RESOURCE RECREATION			
DEVELOPED RECREATION	Active Management	Significant Use	Extensive Development
ADMINISTRATIVE SERVICES			

Chapter Four: Management Zones

The 20-Year Management Zone Plan was developed in keeping with the park's purpose and significance. The primary goal in the development of the management zones is to protect and enhance the park's natural and cultural resources while also supporting outdoor recreation opportunities at the park. From a palette of nine management zones, the planning team studied the park and applied zones that best fit each area of the park. Management zones describe a variety of activities that may be appropriate within the zone and address the desired future condition for the following categories:

- Natural Resources
- Historic/Cultural Resources
- Recreation Opportunities
- Education/Interpretation Opportunities
- Visitor Experience
- Management Focus

The resource condition, visitor experience, and development level varies in each of the nine standard zones, as indicated in the figure above. Watkins Lake State Park and County Preserve (WLP) was divided into the following five zones and three overlays:

- Ecologically Sensitive Zone
- Primitive Zone
- Backcountry Zone
- Natural Resource Recreation Zone
- Developed Recreation Zone
- Ecologically Sensitive Overlay

- Cultural Landscape Overlay
- Scenic Overlay

Project Boundary

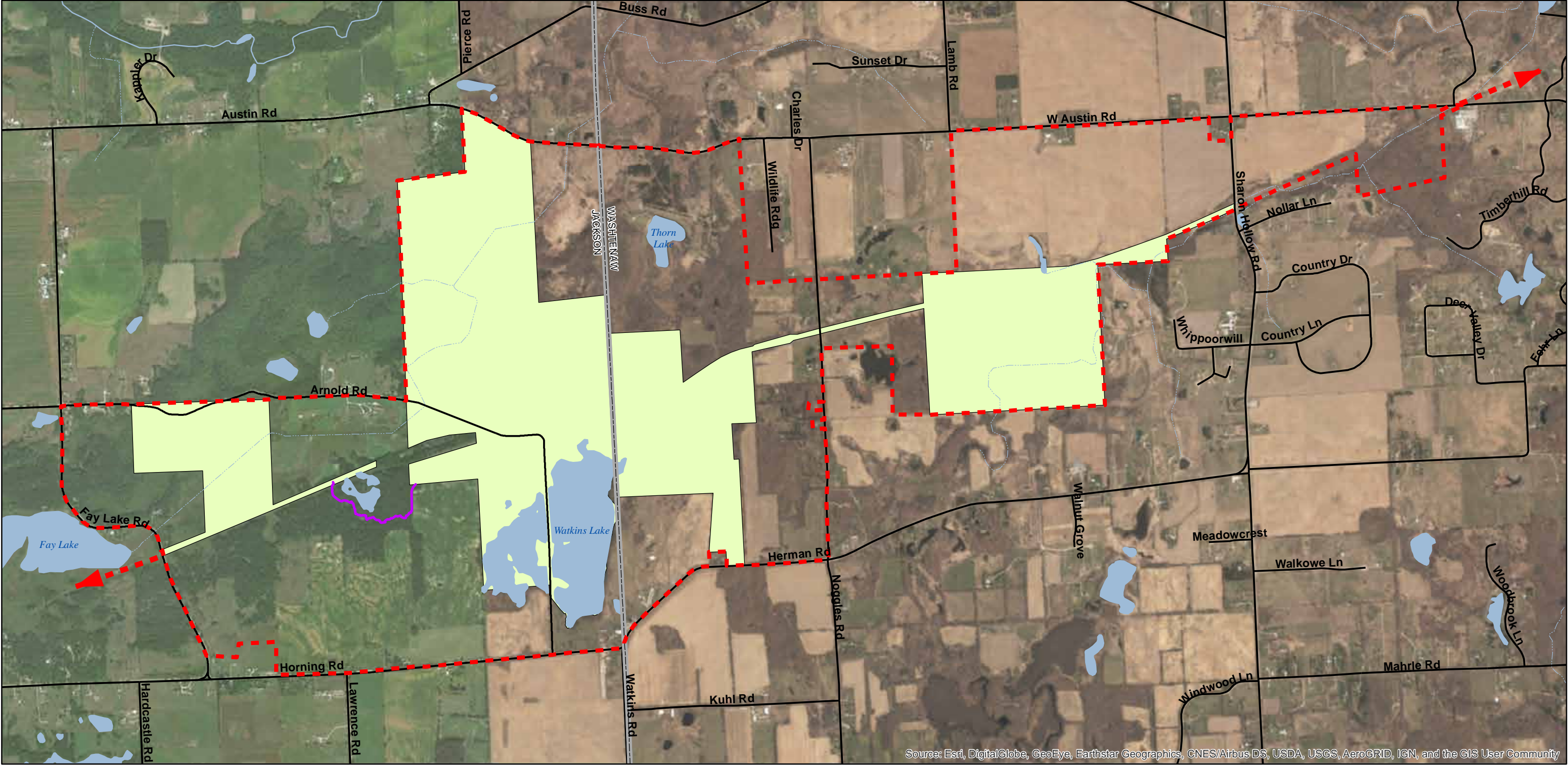
A Project Boundary is a geographic area in which the DNR is seeking to acquire property over the long-term future that supports the mission of the DNR on a willing buyer/ willing seller basis. During the general management planning process, the planning team recommended a proposed project boundary for WLP that encompassed neighboring land that has natural, cultural resource and/or recreational value to complement the existing park land. The proposed project boundary includes parcels that the DNR and Washtenaw County seek to acquire in the future in order to consolidate ownership and provide clear boundary delineation and ease of access and management (such as provided by road corridors). The proposed project boundary also includes land that, if acquired, could provide additional recreation opportunities, including hunting, in the heavily populated southern Michigan. The planning team determined that private land related to the existing prairie fen habitat, that isn't already protected, should be included in the proposed project boundary in order to protect, preserve, and maintain existing natural communities.

The current WLP boundary and the proposed project boundary are illustrated on the Proposed Project Boundary map that follows. In addition, PRD and WCPARC desire to connect the park to the communities of Manchester and Brooklyn through a linear trail along the former railroad corridor. This may be accomplished through acquisition, easements or partnerships with recreation providers.



Watkins Lake State Park and County Preserve

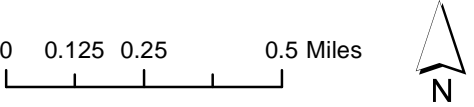
Proposed Project Boundary Map



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- WLP Current Land Ownership
- Trail Easement
- WLP Proposed Project Boundary
- County Boundary
- Linear Trail Continuation

* A project boundary is a geographic area in which the DNR is seeking to acquire property that supports the mission of the DNR/WCPARC on a willing seller/willing buyer basis.



Some lands adjacent to WLP are protected from development by conservation easements. Conservation easements protect the natural resources on these lands in perpetuity and become part of the deed, regardless of future landowners. Those lands that are protected and fall within the project boundary for the park may contribute to the goals of WLP either through acquisition or through a partnership with the adjacent landowner.

Future land additions associated with Watkins Lake State Park and County Preserve will be evaluated upon acquisition to determine the appropriate management zoning. The zoning for the additional land will be recorded in an amendment to the general management plan.



Prairie Fen
(Photo by Jesse M. Lincoln)

4.1 Ecologically Sensitive Zone

The Ecologically Sensitive Zone encompasses 98 acres (approximately 9% of the park) and contains the prairie fen habitat, which includes threatened and endangered species. The purpose of this zone is enhancement and protection of the native community and natural processes over and above any other uses that might be contemplated. This zone restricts development and visitor access will be discouraged.

Natural Resources

Native species and natural processes take precedence over visitor accommodation in this zone and the overall character is pristine. Native Michigan natural communities/ecosystem components and processes are maintained, restored, and protected, and human-caused habitat fragmentation is eliminated.

Historic/Cultural Resources

Although no cultural resources have been documented in this zone, there is evidence of prehistoric sites and Native American activities in the area. In addition, it is possible that the land purchased for WLP contains evidence associated with the historic Watkins family farm or the adjacent former Detroit, Hillsdale, and Indiana Railway, currently known as the former rail corridor.

Recreation Opportunities

There will be no recreational development allowed in this zone due to the protection of the native community.

Education Opportunities

Off-site interpretation of the prairie fen habitat, endangered species, and threatened species is encouraged. Access for research may be permitted upon request.

Visitor Experience

This zone is highly restricted for visitor use with no developed access.

Management Focus

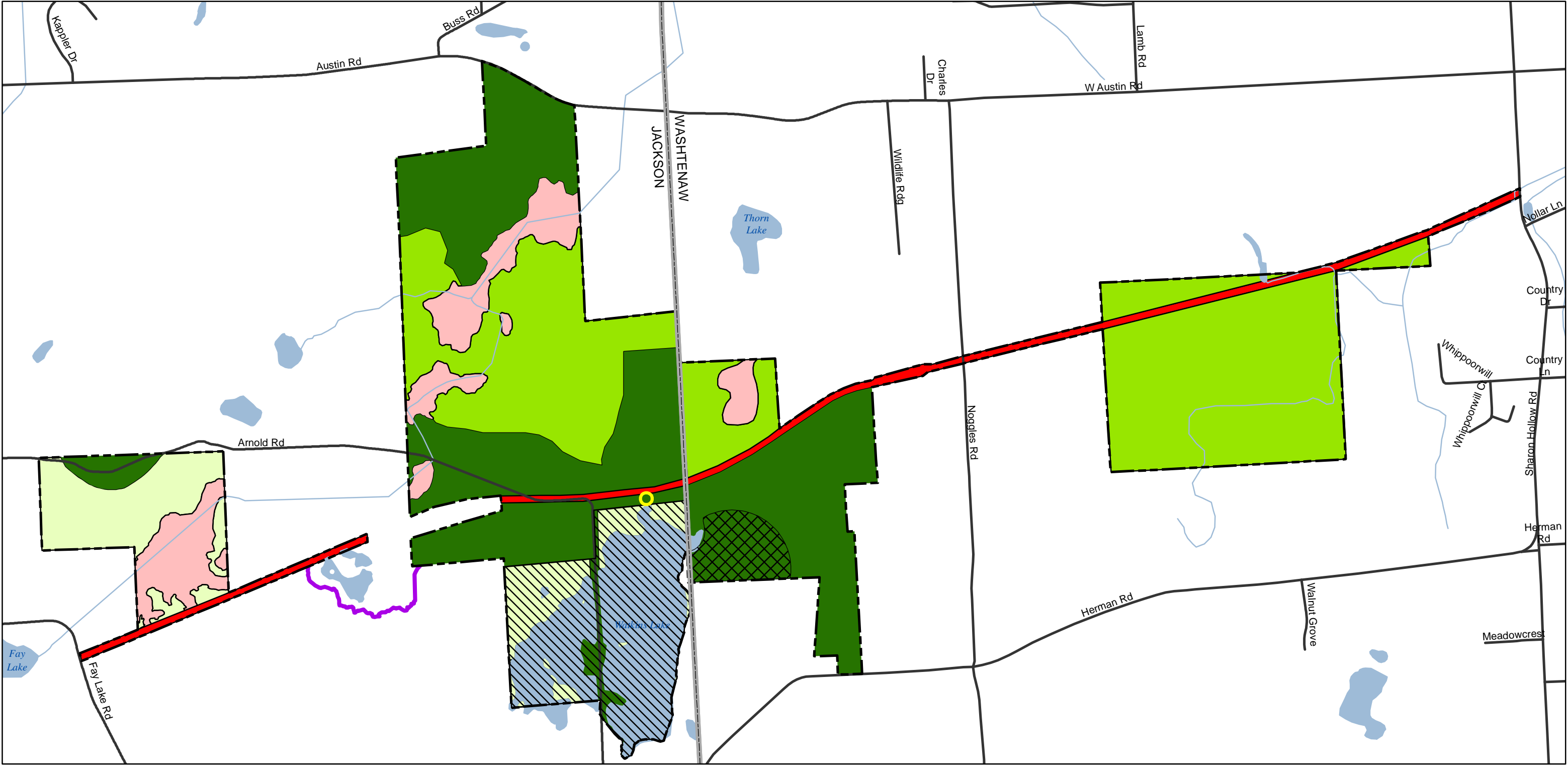
Management focuses on maintaining, preserving, and protecting the natural resources and native communities in this zone.

Development

This zone does not allow for development, except as needed for resource protection.



Watkins Lake State Park and County Preserve Management Zones Map



- | | | | |
|----------------|----------------------------------|-----------------------------|---|
| Counties | Developed Recreation Zone | Primitive Zone | Cultural Landscape Overlay |
| Park Boundary | Natural Resource Recreation Zone | Ecologically Sensitive Zone | Ecologically Sensitive Overlay (Seasonal) |
| Trail Easement | Backcountry Zone | | Scenic Overlay |

0 0.125 0.25 0.5 Miles



4.2 Primitive Zone

The Primitive Zone reflects a desired condition that emphasizes the natural resources, and is managed to only allow dispersed and low frequency use in the zone for low impact recreational purposes. Attaining and maintaining a high quality natural resource condition dictates the extent to which recreational improvements or uses are allowed. The primitive zone covers 110 acres (approximately 10% of the park) and includes wetlands between Arnold Road and the former rail corridor at the west end of the property and land surrounding Watkins Lake in recognition of its status as a waterfowl refuge.

Natural Resources

Native species and natural processes take precedence over visitor accommodation in this zone. Native Michigan natural communities/ecosystem components and processes are maintained, restored, and protected, and human-caused habitat fragmentation is eliminated. The Stewardship Plan will determine the appropriate habitat management for the park. In the primitive zone, management will focus on maintaining the wetlands to improve the landscape context of the prairie fens and maintaining Watkins Lake as a high quality resting and feeding area for migratory waterfowl.

Historic/Cultural Resources

Although no cultural resources have been documented in this zone, there is evidence of prehistoric sites and Native American activities in the area. In addition, it is possible that the land purchased for WLP contains evidence associated with the historic Watkins family farm or the adjacent former Detroit, Hillsdale, and Indiana Railway, currently known as the former rail corridor.

Recreation Opportunities

This zone allows dispersed, low density, off-trail or trailed, self-reliant (no bicycle or equestrian use) outdoor activities (e.g., hiking, backpacking, cross-country skiing, hunting/trapping, fishing, nature observation).

Education Opportunities

Education opportunities in this zone are primarily off-site. Interpretive signage is allowed at trail heads and with low frequency on trails and at overlooks.

Visitor Experience

The visitor can expect a low frequency of encounters with other visitors. Visitors are engaged in high solitude, off-trail or trailed outdoor activities. This zone requires a higher time commitment, and high levels of challenge and adventure. It is considered a “discovery” area with minimal on-site interpretation. The noise tolerance in this zone is low, and visitors can expect low interaction with DNR staff.

Management Focus

The focus is to maintain the low-impact character of this zone, with an emphasis on natural resource quality.

Development

This zone maintains a very low level of development for visitor accommodation (e.g., foot trails). Site hardening is only allowed to protect sensitive resources (e.g., boardwalk). There should be little evidence of human activity in this zone. There is currently no development in the Primitive Zone at Watkins Lake State Park and County Preserve.



View of Watkins Lake



Agricultural land at WLP

4.3 Backcountry Zone

The character of the Backcountry Zone is natural, with minimal evidence of human impact through recreational use. While the “Primitive Zone” is highly restrictive for recreational use and human impact, this zone allows for increased use, including bicycle and equestrian, and modifications of the landscape (e.g., trail development) to accommodate that use. This zone comprises 436 acres (approximately 38% of the park) and includes land east of Noggles Road characterized by active and abandoned agricultural land, forested wetland and wet prairie, and lowland areas in the center of the park, north of the former rail corridor.

Natural Resources

Natural resources may be modified slightly to support visitor use, but tolerance for natural resource impacts is typically low. Native Michigan natural communities/ecosystem components and processes are maintained, restored, and protected, and human-caused habitat fragmentation is eliminated. The WCPARC and PRD Stewardship Plans will determine the appropriate habitat management for the park. For Washtenaw County, a portion of active agriculture will be maintained to preserve the farming heritage and maintain the views, with best practices observed for resource protection.

Historic/Cultural Resources

Although no cultural resources have been documented in this zone, there is evidence of prehistoric sites and Native American activities in the area. In addition, it is possible that the land purchased for WLP contains evidence associated with the historic Watkins family farm or the former Detroit, Hillsdale, and Indiana Railway, currently known as the former rail corridor.

Recreation Opportunities

Moderate levels of recreation (non-motorized) that are compatible with the natural character of the zone are allowed. Activities that may be allowed in this zone include hiking, backpacking, bicycling, horseback riding, canoeing, kayaking, nature observation, cross-country skiing, back-country camping, hunting, fishing, and snowshoeing. At Watkins Lake State Park and County Preserve, this zone includes active agricultural lands and some of the park’s foot trails, which are used for hiking and wildlife viewing. In Washtenaw County, the Preserve designation prohibits bicycle or equestrian use.

Education Opportunities

Education opportunities such as interpretive signage at trail heads, on the trail, and at overlooks are allowed.

Visitor Experience

Moderate visitor encounters are accommodated in this zone. Visitors will be engaged in non-motorized outdoor activities. Moderate challenge and adventure should be expected, with low noise tolerance and interaction with DNR staff.

Management Focus

The management focus is to maintain the low-impact character of this zone, with an emphasis on natural resource quality.

Development

This zone may contain a low level of development to support visitor access to outdoor activities, such as trails, trailhead parking, marked routes, pit toilets, water pumps, and educational opportunities. Development shall be unobtrusive and blend with the natural environment. Site hardening, such as boardwalks, fencing, and pedestrian paths, may be necessary to protect sensitive resources.

4.4 Natural Resource Recreation Zone

The Natural Resource Recreation zone supports active recreation with medium to high density of use conducted in natural settings. There is still an emphasis on resource quality over recreation, but in this zone, higher levels of use are allowed. This zone contains 427 acres (approximately 38% of the park) and includes much of the land south of the former rail corridor west of Noggles Road and the upland grassland and forested areas north of the former rail corridor west of the county line.

Natural Resources

In this zone, the natural resources may be managed or modified to support visitor activities with only moderate impacts, while being protected to the degree possible and maintaining a natural appearance. This zone will reflect natural processes, with vegetative management 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

There is a known historic resource in this zone, the former flag stop depot, which is reflected in a Cultural Landscape Overlay. All development that may impact cultural resources should be cleared by PRD Stewardship Unit and the State Archaeologist before proceeding.

Recreation Opportunities

Moderate to high levels of recreation compatible with the natural character of the zone are permitted. Visitors may be engaged in outdoor activities in diverse land and water natural

settings. Activities that may be allowed in this zone include hiking, backpacking, bicycling, horseback riding, canoeing, kayaking, nature observation, cross-country skiing, rustic camping, hunting, fishing, and snowshoeing. Most areas of the park are undeveloped. In Washtenaw County, the funding source for this zone has additional restrictions such as the prohibition of bicycle or equestrian use.

Education Opportunities

Interpretive signage may be provided at trail heads, on the trails, and at overlooks.

Visitor Experience

Visitors can expect high encounters with other visitors and moderate interaction with DNR staff. Visitors may be engaged in outdoor activities in diverse land and water settings for recreation and education. This zone requires a variable time commitment as well as variable challenge and adventure. There is a moderate noise tolerance in this zone.

Management Focus

The management focus is to maintain use of the zone appropriate to the PRD and WCPARC missions, to protect public safety, protect natural resources, and provide accessibility.

Development

A moderate level of development of facilities for support of visitor activities is acceptable, including restrooms, concrete/asphalt/gravel walkways and parking, trails, benches, picnic tables, and shelters for recreation and educational opportunities. Site hardening including boardwalks, fencing, and surfaced pedestrian paths is allowed as necessary to protect sensitive resources. A moderate level of accessibility should be expected in this zone.



Upland grassland and forested areas at WLP



Former rail corridor at WLP

4.5 Developed Recreation Zone

This zone allows active recreation with high density of use conducted in areas not designated for natural resource significance. In this zone, recreation dominates with natural resource attributes enhanced as possible. This zone is 51 acres (approximately 5% of the park land) and includes the former rail corridor, which is currently being used for an active trail corridor.

Natural Resources

Natural resources may be actively managed and modified to support visitor activities. Vegetative management in this zone will address hazard trees, invasive species, and pests and disease, and will also be allowed for purposes of facilitating development and recreational use and maintaining an aesthetically appealing landscape.

Historic/Cultural Resources

Although no cultural resources have been documented in this zone, there is evidence of prehistoric sites and Native American activities in the area. In addition, it is possible that the land purchased for WLP contains evidence associated with the historic Watkins family farm or the former Detroit, Hillsdale, and Indiana Railway, currently known as the former rail corridor.

Recreation Opportunities

High levels of recreation in a highly structured environment may be permitted in this zone, including bicycle, equestrian and snowmobile use in designated areas as appropriate. Visitors may be engaged in recreation along the former rail corridor, which is currently open to hiking.

Education Opportunities

Interpretive signage is permitted at trail heads, on the trail, and at overlooks.

Visitor Experience

Visitors should expect a high frequency of encounters with other visitors and DNR staff. Visitors may be engaged in outdoor activities in diverse land and water settings for recreation and education. Activities in this zone may require a variable time commitment, variable levels of challenge and adventure, and low to moderate exertion. This zone has a high noise tolerance.

Management Focus

The management focus in this zone is to maintain use of the zone appropriate to the PRD and WCPARC missions, protect the park's resources, maintain public safety, effectively manage visitors, and provide universal access.

Development

A high level of development of facilities to support visitor activities is permitted in this zone, such as restrooms, hard surfaced walkways, parking, trails, benches, picnic tables, and shelters for recreation and educational opportunities. Site hardening is allowed as necessary to facilitate activities, protect natural resources, and provide accessibility.

4.6 Ecologically Sensitive Overlay (Seasonal)

The Ecologically Sensitive Overlay covers 147 acres (approximately 13% of park land), encompassing the area around Watkins Lake that is protected by a Land Use Order of the Director. This seasonal overlay prohibits public access in the vicinity of Watkins Lake (except for Arnold Road and the associated upland roadside edge) during the spring and fall migration from February 15 through May 15 and September 1 through January 1. The purpose of this seasonal overlay is to protect waterfowl from human disturbance and to provide exceptional waterfowl viewing opportunities. Outside of the migration season, use reverts to that allowed in the underlying zone.

Natural Resources

Natural resource protection takes precedence over and above any other uses, including recreation or visitor accommodations, in this overlay. Natural resource management will be consistent with the underlying zone, but will focus on maintaining the conditions that make Watkins Lake favorable as a waterfowl stop-over.

Historic/Cultural Resources

Although no cultural resources have been documented in this overlay, there is evidence of prehistoric sites and Native American activities in the area. In addition, it is possible that the land purchased for WLP contains evidence associated with the historic Watkins family farm or the former Detroit, Hillsdale, and Indiana Railway, currently known as the adjacent former rail corridor.

Recreation Opportunities

Access is prohibited in this overlay during the seasonal closure, although bird watching and other activities are allowed and encouraged in the Arnold Road corridor. Outside of the seasonal restriction, recreation shall be consistent with the underlying zone (Primitive or Natural Resource Recreation).

Education Opportunities

Education shall be off-site only for the general public during the seasonal closure. Researchers/scientists may have access by permission. Interpretation of the wildfowl or other natural resources of Watkins Lake may be appropriate outside of the overlay, in accordance with the underlying zone.

Visitor Experience

Visitors are highly restricted during the seasonal closure. At other times, the visitor experience will be consistent with the underlying zone.

Management Focus

Management focuses on maintaining and protecting the natural resources of the overlay and the integrity of the waterfowl refuge.

Development

Development will be consistent with the underlying zone and will not negatively impact the natural resources/wildlife habitat.



Canvasback ducks on Watkins Lake
(Photo by Kenny Price)

4.7 Cultural Landscape Overlay

The Cultural Landscape Overlay comprises 0.5 acres and includes the area in which L.D. Watkins' privately owned flag stop depot once stood, located directly north of Watkins Lake. The overlay ensures that any development, guided by the underlying zone designation, is sensitive to the cultural resources present. The public interpretation of these cultural resources should also be considered.

Natural Resources

Vegetation management will be in accordance with the underlying zone (Natural Resource Recreation). Vegetation may also be managed to enhance education/interpretation uses which can include non-native species specific to the era and/or location, and maintaining an aesthetically appealing landscape that is sensitive to the historical resource and interpretation of the zone.

Historic/Cultural Resources

Cultural resources are the focus of this overlay and will be preserved for visitor education and understanding.

Recreation Opportunities

Visitors may be engaged in sightseeing, birding, and educational activities compatible with and sensitive to the cultural setting.

Education Opportunities

Education/interpretation opportunities may be provided on or off-site and shall be consistent with the underlying zone.

Visitor Experience

The visitor experience will be consistent with the underlying zone.

Management Focus

Management focuses on maintaining and preserving the cultural resources in the area consistent with the underlying zone.

Development

Development will be consistent with the underlying zone and will not negatively impact the cultural resources.



Historical significance of WLP

4.8 Scenic Overlay

This designation recognizes that there are aesthetic qualities to be preserved and protected at WLP. The area overlooking Watkins Lake provides visitors with exceptional waterfowl viewing opportunities during migratory seasons. Approximately 2%, or 26 acres, of WLP is designated as scenic overlay.

Natural Resources

Natural resources management will be in accordance with the underlying zone (Natural Resource Recreation). Vegetation may also be managed to enhance the views of the zone.

Historic/Cultural Resources

Although no cultural resources have been documented in this zone, there is evidence of prehistoric sites and Native American activities in the area. In addition, it is possible that the land purchased for WLP contains evidence associated with the historic Watkins family farm or the former Detroit, Hillsdale, and Indiana Railway, currently known as the adjacent former rail corridor.

Recreation Opportunities

Moderate levels of recreation are allowed, compatible with the purpose of viewing and the underlying zone.

Education Opportunities

Interpretive signage may be used as key viewing points, trailheads, or observation areas. There may be opportunities for off-site interpretation as well.

Visitor Experience

Moderate encounters may be expected in this zone. A moderate time commitment, off-site interpretation and noise tolerance would be expected.

Management Focus

The management focus in this overlay is to maintain and preserve the scenic views of Watkins Lake and the park as a whole.

Development

Development will be appropriate with the underlying natural resource recreation zone to accommodate interpretive activities and sightseeing.



View of Watkins Lake



WLP Ribbon Cutting

Chapter Five: Ten-Year Action Goals

The planning team has developed 10-year action goals that it believes are necessary to guide management and development within Watkins Lake State Park and County Preserve (WLP) in order to achieve the desired resource protection and user experience. Action goals are recommended that address the following categories: natural resources, cultural resources, recreation opportunities, education/interpretation opportunities, and development. These goals apply either to the whole park (general action goals) or to specific locations within the park, as appropriate and according to the management zone. Refer to the zone descriptions in Chapter 4 for appropriate activities in each zone.

In determining action goals for the park, the planning team focused on several main priorities: protecting natural and cultural resources, enhancing trail connectivity from Brooklyn to Manchester, establishing a hiking trail system, improving wayfinding and directional signage, opening a portion of the park for hunting, and developing a plan for educational opportunities throughout the park.

WLP has significant natural resources and sensitive environmental areas, as well as known historic value. Several of the action goals revolve around protecting and enhancing these specific areas, such as removing invasive species, continuing to maintain and restore the prairie fens, and evaluating any existing cultural or historic resources. The Parks & Recreation Division's (PRD) and Washtenaw County Parks and Recreation Commission's (WCPARC) Stewardship Plans, included in Appendix C of this report, provide more detailed actions pertaining to the natural resource management of the property.

An important stewardship goal for the park is to enroll WLP in the Eastern massasauga rattlesnake Candidate Conservation Agreement with Assurances (CCAA) with the U.S. Fish and Wildlife Service. Through this agreement, land enrolled as "managed land" will be managed to protect the habitat of this federally listed species, which will impact new development and mowing practices (see agreement extract in appendix D).

Connectivity with and circulation within WLP were also target areas for the planning team. Access and parking areas will be evaluated throughout the park and will be developed as determined. A major step in enhancing the connectivity of WLP will include the creation of a non-motorized trail connection through WLP, with the prospect of providing trail connectivity from Brooklyn to Manchester in the future. Establishing a hiking trail system that highlights points of interest and overlook locations will provide additional recreation and education/interpretation opportunities for park visitors without having a major impact on the park's resources.

In considering the future trail development at Watkins Lake State Park and County Preserve, the planning team carefully evaluated the suitability of the land for different trail use types. In Washtenaw County, bicycle and equestrian use is prohibited under the Natural Areas and Preservation Program (NAPP) used to purchase all land except for the former railroad corridor. In Jackson County (state land), bicycle and equestrian use is prohibited in the ecologically sensitive zone and the primitive zone, which accounts for a total of approximately 200 acres. It was felt that the remaining 517 acres did not provide a large enough area for multiple trail use types. Using trail density analysis as a guide, the land area of approximately 0.75 square miles could support less than 3 miles of

equestrian or bike trails, which would not be sufficient to sustain visitors for any length of time. Another consideration is concern over increased disturbance and additional avenues for introduction of invasive species to a site with ecologically sensitive and high quality natural communities and wildlife habitat. This decision may be reconsidered if additional land suitable for trail development is added to the property in the future.

There is a desire to improve wayfinding signage within the park as well as directional signage to and from WLP. A coordinated signage and wayfinding program within the park, including trail signage and maps, would communicate appropriate trail uses as well as land management designations (those managed primarily for wildlife or for recreation). The development of directional signage outside of the park is necessary in order to help guide visitors to their intended destinations.

Management plans do not guarantee future funding to achieve the actions identified, but are based on funding realities and sound investment policies. PRD and WCPARC will seek internal funding, alternative funding sources, partnerships and other potential mechanisms for implementing the desired future conditions defined in this plan. On an annual basis, PRD districts determine priorities for project planning and project capital outlay. Each district's top projects are then evaluated at a state-wide level for available funds.

TEN-YEAR ACTION GOALS

The following 10-year action goals are ranked in terms of priority based on health, safety, and welfare, as well as ease of implementation (cost, ability to implement with own staff, partnerships etc.). Priority Level 1 projects indicate those that should be addressed within the next 2 years. Priority Level 2 projects include those that should be addressed within 2-5 years. Priority Level 3 projects are desired, but can be tackled in the next 5-10 years, once funding has been identified.

GENERAL ACTION GOALS			
Many of the 10-year action goals for WLP are general in nature and apply within all of the management zones. These often deal with park-wide issues, such as invasive species control, universal access, developing Stewardship and Emergency plans, or marketing the park's recreational opportunities to wider audience of potential users. Many of the overall maintenance and operational issues of running a state park and county preserve also result in the need for actions across all zone boundaries, such as law enforcement.			
ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
NATURAL RESOURCES			
Implement the Natural Resource Stewardship Plans, with an emphasis on invasive species early detection and rapid response, and on protecting high quality natural communities and sites occupied by protected species	Ongoing	Park Manager Stewardship Washtenaw County Parks and Recreation Commission (WCPARC)	Stewardship Ecologist WCPARC
Enroll land as appropriate within WLP as managed land in the Eastern Massasauga rattlesnake Candidate for Conservation with Assurances agreement with the U.S. Fish and Wildlife Service	1	Park Manager Stewardship WCPARC	Stewardship WCPARC
CULTURAL RESOURCES			
Evaluate existing above ground structures relating to historic agricultural use of the land and determine priorities for preservation, relocation, or removal	1	Park Manager Regional Planner History Center WCPARC	Park Manager WCPARC
Complete a phase one archaeological study	3	Stewardship WCPARC	Stewardship WCPARC
RECREATION OPPORTUNITIES			
Finalize the trail easement that connects State property across private land	1	Regional Planner Park Manager Lands Liaison	Lands Liaison
Establish hiking trail systems, highlighting overlook locations and points of interest	2	Park Manager Regional Planner WCPARC	Park Manager WCPARC
EDUCATION/INTERPRETATION OPPORTUNITIES			
Explore opportunities for natural/environmental and historical interpretive programming through internal and external partners	Ongoing	Park Manager History Center WCPARC Marketing and Outreach (MOD)	Park Manager WCPARC
Develop a plan for historical interpretation using various resources, including available oral history and historic photographs	2	Park Manager Stewardship History Center WCPARC	Historian WCPARC
MANAGEMENT FOCUS			
Continue to remove existing interior fencing, public hazards, and other structures in accordance with recommendations of the site evaluation	Ongoing	Park Manager WCPARC	Park Manager WCPARC
Work with partners to establish a non-motorized trail connection between WLP, Brooklyn, and Manchester	Ongoing	Trails Specialist Park Manager WCPARC Local Partners	Trails Specialist WCPARC

GENERAL ACTION GOALS, CONTINUED			
ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
MANAGEMENT FOCUS, CONTINUED			
Continue to explore land acquisition of properties within the GMP Proposed Project Boundary	Ongoing	Park Manager Lands Liaison WCPARC	Park Manager Lands Liaison WCPARC
Finalize park Emergency Plan including Safety Plan and Wildfire Plan in coordination with WCPARC	1	Park Manager WCPARC	Park Manager WCPARC
Complete property boundary marking	1	Park Manager WCPARC	Park Manager WCPARC
Establish compatible rules and regulations for WLP between WCPARC and DNR	1	Regulatory Unit WCPARC Park Manager	Regulatory Unit WCPARC
Establish land use order and/or local watercraft control ordinance prohibiting gas motor boat launching and operation	1	Regulatory Unit Park Manager Fisheries Law Enforcement (LED) Norvell Township	Regulatory Unit
Establish Wildlife Conservation Order to open a portion of the land to hunting (with appropriate restrictions) that is north of both Arnold Road and the former rail corridor in Jackson County	1	Park Manager Wildlife Regulatory Unit	Regulatory Unit
Explore potential for establishing WLP as a Dark Sky viewing location	2	Park Manager WCPARC	Park Manager WCPARC
Encourage establishment of formally recognized friends group	1	Park Manager WCPARC	Park Manager WCPARC
DEVELOPMENT			
Develop and implement a coordinated signage and wayfinding program	Ongoing	Park Manager WCPARC	Park Manager WCPARC
Evaluate need for additional parking areas and develop as determined	2	Park Manager Regional Planner WCPARC	Park Manager WCPARC
Develop and implement directional signage to the park	1	Park Manager WCPARC	Park Manager WCPARC

ECOLOGICALLY SENSITIVE ZONE			
This zone addresses the critical habitat that must be preserved and protected. Public access may be restricted to protect the resource. At WLP this includes sensitive prairie fen habitat, which includes threatened and endangered species.			
ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
Continue to protect, maintain, and restore prairie fens and other natural communities in accordance with the Stewardship Plan	Ongoing	Park Manager Stewardship WCPARC	Stewardship WCPARC

PRIMITIVE ZONE

The Primitive Zone emphasizes the natural resources of the area. It is managed to allow only dispersed, low frequency and low impact recreational use in the zone. Maintaining a high quality natural resources condition dictates the extent to which recreational improvements are allowed. For this reason, native species and natural processes take precedence over visitor accommodation. The following 10-Year Action Goals propose only very low levels of development, in order to protect the important habitat.

ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
Continue to maintain and restore wetlands and other natural communities	Ongoing	Park Manager Stewardship	Stewardship

BACKCOUNTRY ZONE

The character of the Backcountry Zone is intended to be natural, with minimal evidence of human impact. The zone allows for various low-intensity, non-motorized recreational opportunities such as hiking and cross-country skiing. The natural features of this zone also provide opportunities for hunting and nature observation. The Backcountry Zone allows for slight modifications of the landscape (such as trails) to accommodate a use where it is consistent with the protection of the resource.

ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
Partner with Ducks Unlimited to improve waterfowl habitat	1	WCPARC	WCPARC

NATURAL RESOURCE RECREATION ZONE

Active recreation, at a medium to high density of use, conducted in natural areas is the hallmark of the Natural Resource Recreation Zone. There is an emphasis on resource quality over recreation, but in this zone, moderate levels of uses are allowed. Vegetation may be managed to facilitate recreational use and to maintain an aesthetically appealing landscape, as well as to address such things as hazard trees, and to manage pests and disease. The 10-Year Action Goals are intended to promote moderate to high levels of recreation compatible with the natural character of the zone. Action goals are designed to ensure that visitors will be engaged in outdoor activities in diverse natural land settings.

ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
Study the feasibility of establishing a non-motorized carry-in boating access site on Watkins Lake	1	Park Manager Regional Planner	Regional Planner

DEVELOPED RECREATION ZONE

Active recreation with high density of use, conducted in areas not designated for natural resource significance, is characteristic of the Developed Recreation Zone. In this zone, recreation dominates with natural resource attributes enhanced where possible. This zone encompasses the former railroad corridor through the park.

ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
Explore opportunities for non-motorized trail connectivity west of Arnold Road	Ongoing	Park Manager Regional Planner Lands Liaison	Park Manager
Designate the former rail corridor within the park as hike and bike east of Arnold Road and hike only west of Arnold Road (until connections are made)	1	Park Manager WCPARC	Park Manager WCPARC

ECOLOGICALLY SENSITIVE OVERLAY

This zone addresses critical habitat that must be preserved and protected. A seasonal ecologically sensitive overlay prohibits public access in the vicinity of Watkins Lake in the spring and fall in accordance with the Land Use Order of the Director to protect migrating waterfowl.

ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
Refer to general action goals			

CULTURAL LANDSCAPE OVERLAY

This zone addresses the overall setting in which may be found historic structures, and/or non-structural evidence of the traditions, beliefs, practices, arts, crafts, and social intuition of any community.

ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
Evaluate and record any extant cultural resources associated with the train depot site	2	Park Manager Stewardship State Archaeologist	Cultural Resource Analyst
Provide interpretation (in association with the park-wide interpretive plan) either on or off site	3	Park Manager Stewardship History Center	Park Manager Historian

SCENIC OVERLAY

The Scenic Overlay recognizes that there are aesthetic qualities to be preserved and protected at Watkins Lake State Park and County Preserve.

ACTION GOALS	PRIORITY LEVEL	PROGRAM INPUT FROM	RESPONSIBLE PROGRAM POSITION
Continue to recognize, protect, and promote the scenic viewsheds over-looking Watkins Lake.	Ongoing	WCPARC	WCPARC
Provide access to the scenic views through the development of signed foot trails.	1	WCPARC	WCPARC



Supporting Analysis

PARK PROFILE	
AREA	1,122 acres
COUNTY	Jackson and Washtenaw Counties
TOWNSHIP	Norvell and Manchester Townships
LATITUDE	42.1297° N
LONGITUDE	-84.1379° W
ADDRESS	42.129723, -84.137981 Brooklyn, MI 49230
PHONE	(516) 467-7401



Appendix A: Supporting Analysis

A.1 Park Overview

Watkins Lake State Park and County Preserve (WLP) is owned and managed by the Department of Natural Resources (DNR) and the Washtenaw County Parks and Recreation Commission (WCPARC), the first such partnership for a state park in Michigan. It was designated as Michigan's 103rd state park in August 2016. WLP straddles the border of Washtenaw and Jackson counties, between the cities of Ann Arbor and Jackson.

The park features beautiful rolling land with a mixture of open meadow, mixed hardwood forest, wetland areas and open water. It offers a variety of recreational opportunities, such as hiking, fishing, cross country skiing, and bird watching. Watkins Lake is the park's most prominent natural feature. As a popular watchable wildlife destination, Watkins Lake holds large numbers of waterfowl during the spring and fall migration. The property includes a 4.5-mile former rail corridor that traverses the property from east to west.

There is a well documented history of the park property and surrounding land before the park was established. The land was first farmed by Royal and Sally Carpenter Watkins, who played a key role in the Underground Railroad.

Location, Surrounding Communities, and Transportation

Watkins Lake State Park and County Preserve is located approximately 25 miles southwest of Ann Arbor and 16 miles southeast of Jackson within the Irish Hills region. The history of the Irish Hills dates back to the 19th century when stagecoaches made this area a stopping point along their journey between Detroit and Chicago. The historic Walker Tavern (now part of Cambridge Junction Historic State Park) was one of the first attractions in the area and from there the region saw development as a tourist destination with resorts and theme parks. The many lakes, picturesque landscape and hometown charm continues to draw people to the area, along with the Michigan International Speedway.

The area is rural in character, with scenic rolling hills, kettle lakes, farmsteads, woodlands and cultivated fields, and a large amount of protected land. The closest built-up locales are the Village of Manchester, five miles northeast from the center of the park, and the Village of Brooklyn, five miles to the west. WLP is four miles south of Sharon Mills County Park (264 acres), which is directly connected to The Nature Conservancy's Nan Weston Nature Preserve (248 acres). Sharonville State Game Area (4,387 acres) abuts the Nan Weston Preserve to the west. Therefore, only a few miles

to the north of WLP, there are 4,899 contiguous acres of protected land straddling the Jackson/Washtenaw County border. WLP is also approximately four miles north of William J. Hayes State Park, a multi-use park on the shores of Wamplers Lake in Jackson County.

The nearest highways in the area are M-52, which runs north-south through the Village of Manchester, M-50, running northwest-southeast to Jackson, and US-12 to the south, running east-west. Several rural roads, Sharon Hollow Road, Herman Road, Horning Road and Arnold Road, provide good access to the park. Noggles Road (unpaved) provides access to the portion of the old railroad grade within the park in Washtenaw County.

Community Role

Watkins Lake State Park and County Preserve is a valuable resource for residents of southeast Jackson County and southwest Washtenaw County. The park is available to patrons for recreational activities such as walking, jogging, birdwatching, nature studies, and picnicking. The state park currently permits fishing in Watkins Lake and has opportunities for hunting in the future (currently closed), both popular activities with limited opportunities in southern Michigan. The abandoned railroad corridor ties the parcels of land together and has potential for development as a non-motorized trail, which could connect the villages of Manchester and Brooklyn in the future. This land is a recreation resource and vehicle for economic development within the region.

Planning and Zoning

The Washtenaw County portion of the park is located in Manchester Township in a Rural Agricultural (AR) zoning district in which preserves and parks are a permitted use. The Jackson County section of WLP is located in Norvell Township in an Agricultural (AG-1) zoning district where preserves and parks are also a permitted use. Parkland and natural area preserves complement the land uses of this predominantly rural, agricultural area known for its hills, lakes, and high scenic quality.

A.2 Demographics

In evaluating demographic data for use in developing this Management Plan, it is important to consider that no conclusion can be drawn from any one trend; several factors must be considered together when analyzing social and economic dynamics.

Regional Overview

Washtenaw County is situated in southeast Michigan and covers 722 square miles of area, spanning urban, suburban, and rural settings. It is home to five cities, three incorporated

villages, and 20 townships. There are two major universities (University of Michigan and Eastern Michigan University), and a community college (Washtenaw Community College). Two major rivers (the Huron River and River Raisin) and dozens of lakes are located within the region.

Jackson County, to the west of Washtenaw County, covers 723 square miles. Jackson is the only city in the county, but there are seven incorporated villages, 19 townships, and 12 unincorporated communities. There are two major rivers that traverse Jackson County, the Grand River and the Kalamazoo River, along with several lakes and tributaries. Jackson Community College is located within the County.

Population Profile

Washtenaw County's population has been growing steadily since 1990 when it stood at 282,937. According to the US Census Bureau, the county's population in 2010 was 344,791 and is estimated by the Southeast Michigan Council of Governments (SEMCOG) to be 386,235 by 2040. According to SEMCOG, while the net outward movement of people from southeast Michigan is high, it is somewhat counterbalanced by an influx of international, college-educated people, ages 20 to 34, relocating to the region, resulting in an addition to the area's labor force.

Jackson County's population has also been growing at a fairly steady pace. In 2010, the county's population was 160,248, compared to 149,756 in 1990 (U.S. Census Bureau), but is estimated to show a slight decline by 2040 to 158,304 (REMI & Region 2 Planning Commission).

The highest population densities in Washtenaw County are concentrated within the city and village limits of Ann Arbor, Ypsilanti, Chelsea, Saline and Milan. However, the need for county parks is lessened in these areas because the local communities fulfill recreation needs through their own facilities, programs, mini-parks, and neighborhood parks. Consequently, Washtenaw County Parks and Recreation Commission (WCPARC) has distributed their parks, accordingly, near or bordering urban concentrations.

The city of Jackson is the most densely populated area of Jackson County. With it being the only city, the rest of the population is broken down into urban townships and rural townships. Since the 1930's, the city of Jackson has shown a population decrease of 38.7% and is projected to continue decreasing. Although the city's population has decreased, the urban and rural townships' population has increased, which contributes to the relatively steady overall population for the County.

TABLE 2.1 POPULATION SUMMARY FOR WASHTENAW AND JACKSON COUNTIES

	2010 CENSUS WASHTENAW		2010 CENSUS JACKSON	
TOTAL POPULATION	344,791		160,248	
MEDIAN AGE	33.5		39.5	
AGE				
0-17	71,953	20.9%	37,195	23.2%
18-24	58,306	16.9%	14,888	9.3%
25-34	49,337	14.3%	18,608	11.6%
35-59	112,537	32.6%	33,685	21.0%
60-74	37,144	10.8%	33,193	20.7%
AGE 75+	15,5140	4.5%	22,679	14.2%

Sources: 2010 U.S. Census Bureau, American Community Survey; SEMCOG

Table 2.1 summarizes the median age distribution among the populations of Washtenaw and Jackson counties. In 2010, approximately 15% of the citizens in Washtenaw County and about 35% of citizens in Jackson County were ages 60 years and older. Washtenaw County shows a higher number of young adults (18-34) than Jackson County (31% vs. 20%, respectively) which could be attributed to the number of students attending the larger universities in Washtenaw County.

Racial Distribution

The racial distribution of Washtenaw and Jackson counties is predominantly white (not Hispanic or Latino), while African American, Asians, and other races make up the balance (Table 2.2). Although this racial composition is not expected to drastically change in the future, it is worth noting that the Asian, African American, and Hispanic populations are on the rise in Washtenaw County. The urban areas have a higher percentage of African Americans and other minority populations; Ann Arbor, in particular, has a higher than average Asian population.

TABLE 2.2 RACIAL DISTRIBUTION

RACE	2010 CENSUS WASHTENAW		2010 CENSUS JACKSON		2010 CENSUS STATE OF MICHIGAN	
WHITE	248,675	72.1%	140,747	87.7%	7,803,120	78.9%
AFRICAN AMERICAN	43,152	12.5%	12,940	7.9%	1,400,362	14.2%
ASIAN	27,005	7.8%	1,176	0.7%	238,199	2.4%
HISPANIC	13,830	4.0%	4,859	3.0%	436,358	4.4%
MULTI-RACIAL	10,159	2.9%	3,452	2.5%	230,319	2.3%
OTHER	1,940	0.6%	1,942	1.2%	211,640	2.2%

Persons with Disabilities

According to the 2010 US Census, approximately 8% of Washtenaw County's population has some form of physical disability. The American Community Survey reported that a significant portion of Jackson County's population (14.6%) had some sort of disability between 2008 and 2012. The distribution of physical disabilities by age group is illustrated in the table below. Washtenaw County Parks and the Michigan DNR embrace the concept of universal design in their buildings, products, and environments so that they are usable and effective for everyone—not just people with disabilities—without the need for adaptation or specialized design.

TABLE 2.3 AGE DISTRIBUTION OF PEOPLE WITH DISABILITIES

	WASHTENAW COUNTY		JACKSON COUNTY	
	NUMBER PER AGE	PERCENTAGE	NUMBER PER AGE	PERCENTAGE
POPULATION, AGES 0-18 YEARS				
TOTAL POPULATION SAMPLE	71,478		37,007	
UNDER 18 WITH PHYSICAL DISABILITY	2,408	3.4%	2,155	5.8%
POPULATION, AGES 18-64 YEARS				
TOTAL POPULATION SAMPLE	235,875		94,354	
18 TO 64 WITH PHYSICAL DISABILITY	15,729	6.7%	11,958	12.7%
POPULATION, AGES 65+				
TOTAL POPULATION SAMPLE	34,659		21,742	
65+ WITH PHYSICAL DISABILITY	10,783	31.1%	8,272	38.0%

Sources: 2010 U.S. Census Bureau, American Community Survey

Income

In 2010, the median income for a household in Washtenaw County was \$59,065 compared to \$46,572 for Jackson County. The per capita income was \$31,316 in Washtenaw County and \$22,388 in Jackson County (total personal income divided by population). Approximately 13.7% of the population was below the poverty line in Washtenaw County and about 16.2% in Jackson County.

Income in the region may continue to decrease over the next 25 years. Two segments of society with the capacity to influence the region's future prosperity are knowledge-based industry and senior citizens. If the people that make up these demographics remain within the community, the local economy should improve. One of the ways to retain these people is through recreational opportunities.

Education

Data shows that a high educational achievement for a community is directly proportional to a higher income per capita, thus better economic welfare. Michigan tends to show weak performance in educational achievement versus the rest of the United States. Therefore, any method—including recreational opportunities—to help retain highly skilled workers for knowledge-based industries is welcomed.

The education level of Washtenaw County is one of the highest in the state with just over 50% of people with at least a bachelor's degree. However, in Jackson County, only about 20% have a bachelor's degree or higher with most of the population (45%) having no college level education. Parks, greenspaces, and outdoor recreational opportunities can be catalysts for building vibrant and prosperous communities that attract businesses and a talented workforce.

TABLE 2.4 HIGHEST LEVEL OF EDUCATION COMPLETED*

	WASHTENAW	JACKSON
GRADUATE/PROFESSIONAL DEGREE	28.3%	6.7%
BACHELOR'S DEGREE	26.8%	15.2%
ASSOCIATE DEGREE	6.8%	9.6%
SOME COLLEGE, NO DEGREE	17.8%	23.6%
HIGH SCHOOL GRADUATE	14.8%	34.8%
DID NOT GRADUATE HIGH SCHOOL	5.4%	10.1%

*population, age 25+

Sources: American Community Survey (ACS) 2015

A.3 Regional Recreation Resources

The Michigan Department of Natural Resources (MDNR) is the main provider of regional parks and recreation facilities in the vicinity of WLP. State parks and recreation areas generally provide a range of recreational opportunities, while state game areas are primarily managed for wildlife and provide hunting and fishing opportunities.



Playing at the beach at Walter J Hayes State Park

Michigan State Parks and Recreation Areas

- Walter J Hayes State Park is about 5 miles south of WLP and covers 654 acres. The state park is located in Norvell Township in Jackson, Lenawee and Washtenaw counties. The park offers a modern campground and fishing and boating opportunities on its lakes, including the 780-acre Wampplers Lake.
- Cambridge Junction Historic State Park is the site of Walker Tavern, historically a stopping place for stagecoaches traveling between Detroit and Chicago in the 19th century. Located about 7 miles southwest of WLP in Lenawee County, this 80-acre historic park offers a look back into a piece of Michigan's history.
- Waterloo Recreation Area offers a wide variety of recreational opportunities. The park is located 12 miles north of WLP and its 20,500 acres are split between Jackson and Washtenaw counties. Some main attractions at Waterloo Recreation Area (WRA) include a vast network of mountain biking trails, equestrian trails, various camping opportunities, hunting, fishing and wildlife viewing and the Gerald Eddy Discovery Center.
- Pinckney Recreation Area is directly adjacent to WRA in Washtenaw County, approximately 17 miles northeast of WLP. This recreation area also has a wide array of recreation opportunities on its 11,000 acres, including an extensive trail system serving mountain bikers, hikers and equestrians, modern and rustic camping, and fishing and hunting opportunities.
- Lake Hudson Recreation Area is about 2,796 acres in size and is located in Lenawee County, 20 miles south of WLP. The park is a premier location for muskie fishing and game hunting. The recreation area was designated as a Dark Sky Preserve in 1993 for nighttime stargazing.
- Meridian-Baseline State Park is approximately 22 miles northwest of WLP. Located on the Jackson-Ingham county line in Henrietta and Rives townships, this park is where all township, range and section measurements begin for the entire state. This 108-acre park offers a short 1.5 mile trail loop around the two survey monuments.

Michigan State Game Areas (SGA)

The following SGAs are managed out of the Waterloo Wildlife Office, by DNR Wildlife Division staff at 13578 Seymour Road, Grass Lake, MI.

- Sharonville State Game Area is approximately 1 mile directly north of WLP, in Jackson and Washtenaw counties, and covers 4,387 acres. The SGA includes a Designated Field Trial Area, which has specific rules for dog training and public use. The Pierce Road Unit (600 acres) is designated for use by people with health challenges during specific hunting periods. The area is also a primary site for the Michigan Pheasant Restoration Initiative (MPRI). The area supports upland gamebirds, turkey, deer, rabbits and squirrels. Sharonville is also a birding "hotspot" and supports several Species of Greatest Conservation Need (SGCN).
- Onsted State Game Area is approximately 8 miles southwest of WLP in northwestern Lenawee County and covers 876 acres. The SGA provides access to five lakes, with three having some type of boat access. In addition to game species, the area supports several SGCN.
- Grass Lake Unit State Game Area is 125 acres located 9 miles northeast of WLP in Jackson County and neighbors the 160-acre Schlee Federal Waterfowl Production Area (WPA) (managed by the DNR in concert with the US Fish and Wildlife Service). Together, these areas provide nesting habitat for a plethora of birds, including pheasants, ducks, and song birds. Both areas are open to hunting; however, any shot used on the WPA must be non-toxic.
- Goose Lake State Game Area is 9 miles north of WLP in Washtenaw County. The 202-acre area is managed for waterfowl production and a variety of other game species. Goose Lake is accessible by foot traffic only and is frequented by waterfowl hunters willing to take a walk.
- Chelsea State Game Area is approximately 15 miles northeast of WLP in Washtenaw County. The 803-acre game area is dominated by water and provides access to the 257-acre Four-Mile Lake. The area is popular for waterfowl hunting and small game hunting, as well as fishing.
- Somerset State Game Area is approximately 15 miles southwest of WLP in Hillsdale County. The 796-acre area provides access to Lombard Lake, which is a total of 156 acres in size. A wildlife refuge encompassing 75 acres of Lombard Lake must not be entered from April 15 to November 14. The game area is popular for waterfowl, deer, and small game hunting; it also supports rare wildlife species for which habitat is managed and protected.

State Trails

The hiking route of the Iron Belle Trail, a 1,259-mile linear trail from Belle Isle in Detroit to Ironwood in the Upper Peninsula, will use a combination of portions of existing trails and new routes just north of WLP and is about 69% complete. The Iron Belle Trail utilizes a number of trails between 15-22 miles northeast, north, and northwest of WLP including the Border to Border in Washtenaw County, Lakelands Trail State Park to Jackson County's Downtown Art Trail, Martin Luther King Equality Trail, and Falling Waters Trail.



Scouts participating in the 2016 Iron Belle Trail Challenge-

The Great Lake-to-Lake Trail Route 1 connects South Haven on Lake Michigan and Port Huron on Lake Huron. This 280-mile trail follows the trail system in Jackson County and the Lakelands Trail State Park and is 15-22 miles northwest and north of WLP. This trail links sections of existing trails with new and is about 55% complete using a combination of multi-use paths and on-road bike facilities through scenic woodlands, farms, and towns.

County and Local Recreation Facilities

Washtenaw County has a comprehensive park system consisting of nearly 2,000 acres of parks, with an additional 3,400 acres of land protected through the Natural Areas Preservation Program. Washtenaw County parks within a 20 mile radius of Watkins Lake State Park and County Preserve include the following:

- Sharon Mills County Park (264 acres): This historic park is located on the banks of the River Raisin. Its main attraction is a restored former Greek revival gristmill that was converted into a small Ford Motor Company factory in the 1930s. Since its original purchase in 1999, the park has expanded to include adjacent natural areas and farmland, a portion of which is still in production. The park is open to hiking and includes a 3.8-mile mountain bike trail. There are also two canoe drop-in sites. A portion of the park (78-acres) was purchase with Natural Areas Preservation Program funds and is restricted to passive recreation use.
- Cavanaugh Lake County Park (59 acres): This roadside park features lakeside picnic areas, covered picnic shelters, a children's play area, restrooms, and shoreline fishing opportunities. The majority of the park (56 acres) consists of lake bottom.
- Pierce Lake Golf Course and Park (232 acres): This facility features an 18-hole golf course, clubhouse, pro-shop, and concessions area. While golf is the main attraction, there are also picnicking opportunities at a rentable pavilion, and nature trails with a wetland boardwalk and observation decks around Pierce Lake.
- Park Lyndon (340 acres): Located in the hilly northwestern portion of Washtenaw County, Park Lyndon is one of southern Michigan's finest natural areas. Over 500 plant species are found in a wide variety of habitats including fens, marshes, bogs, lakes, ponds, forest, and prairie. The park is divided by North Territorial Road. It contains hiking trails, picnic areas and picnic shelter with a grill and fireplace, a cabin (not open to the public), and toilets. Two miles of marked nature trails wind through the steep, glacially sculpted hillsides connecting to the MDNR's Waterloo-Pinckney Trail for a combined hiking experience of more than 35 miles.

In addition to the above, within a 20-mile radius of WLP, Washtenaw County has 2,000 acres of nature preserves. Of particular note is the 259-acre Leonard Preserve, located in the Village of Manchester and Manchester Township, about five miles east of WLP. Many nearby attractions can be found on the Washtenaw County website: www.ewashtenaw.org.



Sharon Mills County Park entrance sign

Jackson County's park system comprises 17 parks encompassing 1,026 acres of parkland and 10.5 miles of trails. Some of the parks within a 20-mile radius of WLP include:

- **Sparks Foundation County Park (465 acres):** This park, in the City of Jackson, has an extensive trail system around three ponds/wetlands, a 27-hole golf course, the historic Cascades Manor House, and an historic (1932) water fall attraction known as "The Cascades." The park also has picnic areas, playgrounds, an ice cream shop, a splash pad, and walking trails.
- **Little Wolf Lake County Park (9 acres):** This park, on the shores of Little Wolf Lake, is adjacent to the 208-acre Lefglen Nature Sacturay, a woodland/wetland preserve owned by the Michigan Nature Association with 3.5 miles of hiking trails. A partnership between the Michigan Nature Association and Jackson County Parks will combine this land to create a large regional county park that has hiking trails, picnicking, and an accessible kayak/canoe launch on the lake.

Jackson County Parks is developing a 100-acre parcel off of Jefferson Road just west of the Brooklyn city limits on Goose Creek. Development plans focus on creating nature/hiking trails and access to the creek. Jackson County Parks is working on a partnership with the Irish Hills Legacy Committee to develop a connector trail to Lake Columbia and Clark Lake County Park through this property.

Jackson County Parks operates two campgrounds at Swains Lake and Pleasant Lake county parks. More information on nearby attractions can be found at the Jackson County website: www.experiencejackson.com.

Preserves/Sanctuaries

There are many other preserves and sanctuaries in the region. The list below encompasses an area from I-94 to the north, M-52 to the east, Hudson to the south, and M-127 to the west.

PRESERVE	SIZE (AC)	LOCATION	OWNER
Columbia Nature Sanctuary	40	Near Cement City, Jackson County	Michigan Nature Association
Goose Creek Grasslands Sanctuary	70	Near Cement City, Lenawee County	Michigan Nature Association
Lefglen Nature Sanctuary	208	Near Wolf Lake, Jackson County	Michigan Nature Association
Joan Rodman Memorial Plant Preserve	18	Near Saline, Washtenaw County	Michigan Nature Association

PRESERVE	SIZE (AC)	LOCATION	OWNER
Robert Powell Memorial Nature Sanctuary	55	Near Hudson, Lenawee County	Michigan Nature Association
MacCready Nature Reserve	408	Near Clark Lake, Jackson County	Michigan State University
John and Mary Dahlem Environmental Education Center	300	Near Jackson, Jackson County	Dahlem Conservancy
Leonard Preserve	259	Near Manchester, Washtenaw County	Washtenaw County NAPP
Nan Weston Preserve at Sharon Hollow	248	Near Sharon Hollow, Washtenaw County	The Nature Conservancy
Ives Road Fen	735	Near Tecumseh, Lenawee County	The Nature Conservancy

Water Recreation

There are more than 30 boating access sites located within a 20-mile radius of WLP in Jackson, Washtenaw, and Lenawee counties.

The River Raisin is an important resource for paddling in the region. A canoe launch into this waterway is available at Sharon Mills County Park (Washtenaw County).

Semi-public/Private Recreation Facilities

The area surrounding WLP provides a variety of semi-public or private recreation facilities and activities, the largest of which are described below.

- **Hidden Lake Gardens** is owned and operated by Michigan State University. The Gardens is open 362 days of the year. In addition to more than 6 miles of one-way paved drives, there are 5 miles of hiking trails to allow the visitor a closer look at the beauty the Gardens provides.
- **Michigan International Speedway (MIS)**, the State's largest sporting venue. Tens of thousands of race fans flock to the track each summer to enjoy NASCAR and ARCA series racing on the two-mile super speedway. There are a number of private campgrounds in the area that receive many visitors associated with MIS events.
- **Bundy Hill Off-Road Park** in Jerome, offers groomed trails through varying terrain for ATVs, ORVs, Jeeps, bikes, side-by-sides, 4x4 rigs and crawlers.

- YMCA Storer Camps in Napoleon, has a summer overnight camp, day camps, and other programs that offer paddling, sailing, swimming, ropes course activities, horseback riding, archery, and more.
- McCourtie Park is a 42-acre historic estate in Somerset Center. It features concrete bridges sculpted to look like wood as well as tennis courts, a ball diamond, and a picnic area.

Many nearby attractions can be found on the Brooklyn-Irish Hills Chamber of Commerce website: <http://irishhills.com/>.

Natural Beauty Road Designation

Shortly after the acquisition of WLP, a neighbor of the park, Mike Arnold, successfully petitioned the Jackson County Road Commission to have Arnold Road designated as a Natural Beauty Road. The goal of this program is to identify and preserve county-local roads of unusual or outstanding beauty due to their vegetation or natural features, for the use and enjoyment of the public. Natural Beauty Road signs now identify the length of the designated road.

A.4 History of Watkins Lake State Park and County Preserve

Potawatomi People

Native American trails crisscrossed the region surrounding WLP for centuries before Europeans arrived. Early surveyors, such as Joseph Wampler, namesake of Wampers Lake, often noted these trails on their survey maps. US-12 began as one of these Native American trails. In the early nineteenth century, one hundred Potawatomi lived in a village at the north end of Devils Lake, led by principal chief Metataugh (Me-te-au). William Blackmar, an early pioneer resident of Cambridge Township, Lenawee County, recalled traveling with his father on a number of hunting trips among the lakes in the 1820s where they encountered Metataugh and his people. Blackmar described Metataugh as a “large, powerful man, (who) trod the earth like a monarch.” Metataugh was believed to have fought with Tecumseh at the Battle of the Thames during the War of 1812.

Siam, who followed Metataugh as principal chief in this region, still lived in the area of Watkins Lake as late as 1852. Little is known of his life, though he was highly respected among the settlers in northern Cambridge Township who named one of their district schools in his honor.

“Never again will the vast succession of coming people know how beautiful this land was in nature. No pen picture can describe the park-like plains and rolling openings or the solemn grandeur of the timber land.”----L. D. Watkins

The Watkins Family

With the completion of the Erie Canal through the heart of New York State (1825) and the availability of cheap government land in Michigan, thousands of settlers from the eastern United States and Canada began filling up the lands located in Lenawee (1822), Washtenaw (1822-26), and Jackson (1829) counties. One of those early pioneers was twenty-two-year-old Freeman Carpenter Watkins, who purchased 800 acres of land in Norvell Township, Jackson County in 1833. Watkins returned to his native Surry, New Hampshire to help his family members move to the Michigan Territory. The Watkins family, including Freeman’s parents and siblings, Royal and Sally, Elosia, Ruth, Cordelia and Lucius Denison (L.D.), arrived at their new home on May 10, 1834.

Freeman divided his 800 acres with his father, Royal, who built his first log cabin in 1834. Fire subsequently destroyed both this and a later cabin. While many of his neighbors built more substantial homes, Royal Watkins lived in a log cabin until 1860. The Watkins family lived among and alongside local Potawatomi; L.D. Watkins hired several Native Americans to build his new brick farm house in 1860.

The Underground Railroad

A firm believer in education, Royal Watkins sent his younger children to the Raisin Institute, Raisin Township, Lenawee County, run by Quaker abolitionist Laura Haviland. Haviland was connected to the Underground Railroad network, which operated in the area near the Watkins’ cabin. The village of Parma, Jackson County (northwest of the Watkins farm) was a known hot bed of Underground Railroad activity. On a number of occasions the Watkins family assisted those fleeing slavery,

most notably John White, who eluded recapture on land not currently owned by the Watkins Lake State Park and County Preserve.

Enslaved in Kentucky, John White arrived in Michigan during the winter of 1846. White was working on the Watkins farm in the fall of 1847 when his owner, George W. Brazier, portraying himself as a journalist for an abolitionist magazine, arrived at the Raisin Institute. Laura Haviland saw through Brazier's disguise and sent word to Royal Watkins to move White to Canada as quickly as possible. Brazier confronted Watkins the next day about White, but White was already in Canada.

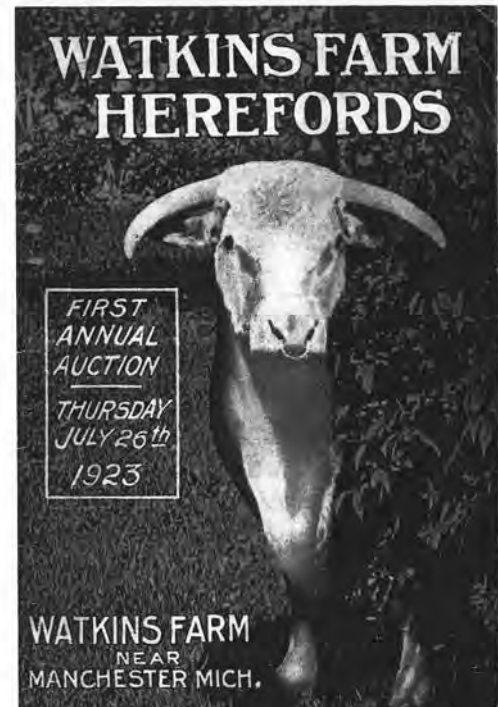
L.D. Watkins and William Ockrow

Improving such a large parcel of land required more hands than the Watkins men could provide alone. They hired an African American laborer, William Ockrow. Ockrow went to the Watkins farm first as a tenant farmer and then a household servant. One of Ockrow's tasks was to drive L.D. Watkins to school at the Raisin Institute.

As Ockrow grew older, L.D. built an addition on the back of his brick house for him. Ockrow died in 1892 and L.D. buried him in the Ockrow family plot with a grave marker reading "for 40 yrs a Faithful Servant to L.D. Watkins."



William Ockrow holding Clarkson Child



Farm Improvements

Around 1900, L.D. and his son Lucius Whitney began to move the farm from growing fruit and pasturing sheep to raising cattle. By 1923 Whitney had engineered the Watkins Farm breeding stock into a world class herd of Hereford cattle. To manage a herd of this quality the Watkins employed a number of herdsman who lived at Fairview Farm

L.D.'s Fairview Farm established peach and apple orchards, hay fields, well stocked ponds, sheep, and prize-registered Hereford cattle. A deal with the Detroit, Hillsdale, and Indiana Railroad Company in 1869 gave the farm its own private flag stop for shipping farm commodities. Other additions included a hay barn large enough that a team of horses could walk up to the mow level to off load hay, a gasoline pump to move water for the house and stock (1915) and electric power (1920).

The Detroit, Hillsdale and Indiana Railroad

Running diagonally along the north end of WLP are the remains of the old Detroit, Hillsdale and Indiana Railway bed. An unassuming piece of real estate, the railroad bed is one piece of the larger story of Michigan's railroading past.

After attaining statehood in January of 1837, the Michigan legislature and its young Governor, Stevens T. Mason, considered rail line expansion an integral part of the state's internal improvement projects. Following the national economic panic of 1837, a general distrust of those in government and banking resulted in investment in private enterprise. Working in partnership with three other Detroit

businessmen, James F. Joy purchased the “central line” from the State of Michigan. Completed in 1852, the central line connected the counties of Wayne, Washtenaw, Jackson, Calhoun, Kalamazoo, Van Buren, Cass, and Berrien before dipping into Indiana and on to Chicago. Passing just north of Manchester and Fairview Farm, the Michigan Central was not yet able to provide a direct commercial transportation network to the local farmers and manufacturers.

As Michigan’s small towns and villages began to grow and boom in the 1870s, the need for a dependable commercial transportation network increased. The businessmen of Manchester pressed their township government into offering a bond to the Detroit, Hillsdale and Indiana Railroad to lay track to Manchester in May of 1869. Nearby Salem Township challenged the plan in court, and the Michigan Supreme Court ruled in favor of Salem Township. Un-swayed by their neighbors, the residents of Manchester voluntarily pledged a separate bond to the railway company to establish a connecting line to the Michigan Central Railroad. The track was laid to Manchester in September of 1870.

The backers of the Detroit, Hillsdale and Indiana had plans to connect their railway line to Indiana, which would require tracks to be laid into Jackson County before turning south to Hillsdale and the state line. Standing in their path was Fairview Farm and L.D. Watkins, who had his own demands to the railroad. In exchange for granting the railroad right-of-way through his property, L. D. wanted his own flag stop depot that would connect Fairview Farm to the outside world. The private depot (constructed in 1869) allowed Watkins family members to stop the train for commercial or private passenger use, but was inaccessible to the outside public.

The Detroit, Hillsdale and Indiana was reorganized in 1875 becoming the Detroit, Hillsdale and Southwestern. Controlled by Boston and New York financiers, the Detroit, Hillsdale and Southwestern was slowly absorbed into the even larger national railroad network. L.D. sold the depot to neighbor Allen Schaffer who dismantled it for lumber and hauled it away leaving only the remains of the pier foundation. The railroad company was sold in 1961 and the line, called the Ypsilanti Branch, was abandoned in sections until it finally closed in 1972.

Whitney Watkins

Whitney Watkins attended Michigan Agricultural College (MAC), graduating in 1893. After 1920, Whitney continued to expand the Hereford cattle herd. He found time to serve on the State Board of Agriculture (MAC’s governing board), serve in the Michigan Senate, and run unsuccessfully for Michigan Governor in 1912. In 1944, Whitney sold Fairview Farm to a cousin, Dr. Harry Watkins of Washington State.

Trolz Family

Sold a number of times after 1944, the Watkins Farm was purchased by Glynn Trolz in the mid-1960s. Trolz continued the pastureland operation until his death in 1998. During his tenure at the farm, Trolz developed a wild game preserve on part of the land surrounding Watkins Lake. Here Trolz raised elk and deer for hunting, often giving tours on well-worn paths along Arnold Highway.

WLP Acquisition History

In the late 1980s, the Michigan DNR began discussions with the Trolz family regarding purchase of this land for wildlife conservation or parks and recreation. Gary Trolz sold 405 acres to Washtenaw County Parks and Recreation Commission in 2015 and subsequently sold an additional 717 acres to the MDNR in 2016, which paved the way to creating the Watkins Lake State Park and County Preserve as the state’s 103rd state park. Gary Trolz still farms the remaining acres as part of his private farming operation, keeping the home built by L.D. Watkins in the Trolz family.

Sources:

Dunbar, Willis F. & George S. May. Michigan: A History of the Wolverine State. Grand Rapids: William B. Eerdmans Publishing Company. Revised 1981.

Meints, Graydon M. Railroads for Michigan. East Lansing: Michigan State University Press. 2013.

Sutton, Laura. A Piece of America, Four Townships and One Town. Kalamazoo College. 1983.

Watkins Family Informants

A.5 Land Ownership

Land Funding Sources

The state land within Watkins Lake State Park and County Preserve (WLP) were acquired by the state using Michigan Natural Resources Trust Fund (MNRTF) for the purpose to provide additional recreation opportunities in southern Michigan. The county lands included in WLP were acquired using multiple funding sources such as Parks millage funding, Natural Areas Preservation Program funding (NAPP), and the Enbridge Fund. Conditions associated with the land acquisition, or other restrictions imposed on the land, may encumber future use. Below are the funding sources used at both the state and county level to acquire the land that comprises WLP.

State Funding Sources:

Michigan Natural Resources Trust Fund (MNRTF)

The MNRTF began as the Kammer Recreational Land Trust Fund Act of 1976. A state constitutional amendment in 1984 required that oil, gas, and other mineral lease and royalty payments be placed into the Trust Fund, with proceeds used to both acquire and develop public recreation lands. To implement the constitutional amendment, the Legislature passed the Michigan Natural Resources Trust Fund Act of 1985 (P.A. 101 of 1985, Act 101). Restrictions of this funding source include:

- o Land must remain open for public recreation use in perpetuity
- o All development on the site must be for public recreation purposes

County Funding Sources:

Parks Millage Funding

The primary source of funding for the Washtenaw County Parks and Recreation Commission (WCPARC)—not including the Natural Areas Preservation Program—are two separate County millages at ¼ mills apiece, levied countywide to pay for parks. One millage funds primarily capital improvements (including land acquisition and park development), and the other is allocated to general park operations and expenses such as park maintenance, personnel, fuel and utilities. Originally, the two tax levies were 0.25 mills, but were rolled back to 0.2367 mills as the total value of property grew countywide.

The 29-acre railroad corridor at Watkins Lake State Park and County Preserve in Washtenaw County was purchased for a total of \$119,485 with Parks millage funds. There are limited recreational use restrictions, consistent with adopted County park rules.

Natural Areas Preservation Program (NAPP) Funding

The Natural Areas Preservation Program (NAPP) receives funding through a countywide millage (¼ mills) generated from the Natural Areas Ordinance No. 128. WCPARC manages the program, identifying and caring for lands with special ecological characteristics. In order to protect valuable habitat, lands purchased with NAPP fund restrict use to passive recreation, such as walking, nature study, and other quiet activities.

378 acres of land at Watkins Lake State Park and County Preserve were purchased with NAPP millage funds for a total of \$689,104.

Enbridge Fund

A \$369,806 grant from the Enbridge Mitigation Fund helped with Washtenaw County's acquisition. The Conservation Fund and the U.S. Fish and Wildlife Service partnered to manage these voluntary mitigation funds and provide grants to implement local conservation measures in Indiana and Michigan to protect and restore critical habitat for migratory birds under the Migratory Bird Treaty Act.

State Land Oil and Gas Deed

GT Ranch, LLC, assumes all of the oil and/or gas that may be produced from the land, "together with the right of ingress and egress for the purpose of exploring, drilling for, and producing oil and/or gas from said lands". The rights will return to the state after 20-years or at the end of oil and/or gas production, whichever occurs last.

Subsurface Rights, Washtenaw County

GT Ranch, LLC, retains the right to perform subsurface testing and extraction of mineral, oil and gas commodities through means of access from adjoining properties only, as shown on the deed in D (recorded in Liber 5129, Page 763, Washtenaw County Records)

Acquired Easements

An easement has been granted to the Michigan DNR for the permanent nonexclusive right to construct and maintain a public used recreational trail way for non-motorized activities.

Granted Easements

Easements and rights-of-way in place when the property was purchased are transferred to the current ownership, including an easement granted to Consumers Power Company (as recorded in Liber 1514, Page 96, Washtenaw County Records)

Watkins Lake Water Rights

An agreement between the Michigan DNR and GT Ranch, allows GT Ranch to access the park property to maintain and operate existing in-ground agricultural irrigation pumps and wells. The agreement stipulates that the water level of Watkins Lake must be maintained between 974 and 976 feet in elevation.

County Drains

The Norvell Manchester Intercounty Drain runs northeast to southwest through WLP, beginning south of Austin Road and ending near the eastern point of Fay Lake.

A.6 Legal Mandates

For all park General Management Plans, all legal mandates are identified that 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 to federal and state law, but also the administrative tools of “Policy” and “Directive” of the Natural Resource Commission, the Department, the Parks & Recreation Division. Examples include Orders of the Director, Park and Recreation Areas State Land Rules and all other laws, commission orders, and rules or directives that apply to the park. Washtenaw County land use rules or ordinances apply to the county owned land.

The following Federal and State Statutes apply to County and state owned land encompassing Watkins Lake State Park and County Preserve.

FEDERAL STATUTE	
ENDANGERED SPECIES ACT, 1973	
This Act authorizes the determination and listing of species as endangered and threatened, and prohibits unauthorized taking, possession, sale and transport of endangered species.	
NATIONAL HISTORIC PRESERVATION ACT, 1966 AS AMENDED	
This is the primary federal law governing the preservation of cultural and historic resources in the United States. The law establishes a national preservation program and a system of procedural protections which encourage the identification and protection of cultural and historic resources of national, state, tribal and local significance.	

STATE STATUTE	
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (NREPA) AND AMENDMENTS	
PA 451 of 1994, Part 31 Water Resources Protection	Provides authority to DEQ to require a permit for any occupation, construction, filling, or grade change within the 100-year floodplain of a river, stream, drain, or inland lake.
PA 451 of 1994, Part 301 Inland Lakes and Streams	Requires a permit from the state (DEQ) to undertake certain activities relating to inland lakes and streams, such as dredging, fill, marinas, structures, alteration of flow, etc.
PA 451 of 1994, Part 303 Wetlands Protection	Requires a permit from the state (DEQ) to undertake certain activities in regulated wetlands, such as, dredging, fill, construction or drainage.

The following State Statutes, Land Use Orders and Rules apply to only the state owned land within Watkins Lake State Park and County Preserve.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (NREPA) AND AMENDMENTS	
PA 451 of 1994, Part 5	Gives the DNR authority to make rules to support its mission. This includes State Land Rules, Land Use Orders, Wildlife Conservation Orders, Fisheries Orders and Watercraft Control.
PA 451 of 1994, Part 741 State Park System	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 the need to protect and manage those resources.
PA 35 of 2010, Part 741 Recreation Passport	This act amended the Michigan Motor Vehicle Code to provide for a State Park and State-operated public boating access site “Recreation Passport” that a Michigan resident may obtain by paying an additional fee when registering a motor vehicle.
PA 451 of 1994, Part 761 Aboriginal Records and Antiquities	The state reserves the exclusive right and privilege to all aboriginal records and other antiquities including those found on the bottomlands of the Great Lakes.

ORDERS

The following Orders apply to Watkins Lake State Park and County Preserve (WLP).

LAND USE ORDERS OF THE DIRECTOR

5.12 CERTAIN STATE PARKS AND RECREATION AREAS, REQUIREMENTS FOR USE, CERTAIN CONDUCT PROHIBITED.

Order 5.12. The following conduct shall apply to use of Michigan state parks and recreation areas:
Watkins Lake State Park and County Preserve, prohibited conduct.

(25) Annually from September 1 through January 1 and from February 15 through May 15, a person shall not enter or take any animals from Watkins Lake and the state-owned lands surrounding, unless authorized in writing by the Department, specifically being the SE 1/4, the SE 1/4 of the NE 1/4, and the S 1/2 of the SW 1/4 of the NE 1/4 of section 13, T04S R02E, within Watkins Lake State Park and County Preserve; except Arnold road and the associated upland roadside edge shall remain open to entry.

5.16A ENTRY, USE AND OCCUPANCY OF CERTAIN STATE PARKS, RECREATION AREAS AND SCENIC SITES PROHIBITED CONDUCT.

Order 5.16a (1) A person shall not do any of the following:

(a) Enter any of the following state-owned lands with a motor vehicle unless a valid Michigan recreation passport has been purchased and affixed to the vehicle:

(90) Watkins Lake State Park and County Preserve, Jackson County.

STATE LAND RULES

Parks and Recreation Areas – State Land Rules are issued by authority conferred on the Michigan DNR by Section 504 of 1994 PA 451 MCL 324.504. The rules cover entry, use and occupation of state lands and unlawful acts.

WASHTENAW COUNTY NATURAL AREAS ORDINANCE

Natural Areas Ord. 128 – Section 1:

Enables Washtenaw County to purchase natural areas stating “passive recreation would be appropriate use of this land.”

Section 2 (6):

“Passive Recreation” means walking, jogging, bird watching, nature studies, quiet picnicking and other quiet inactive pastimes.

Section 3:

Pursuant to MCLA 46.358, the Parks and Recreation Commission have the right to purchase and hold real estate in the name of the County.

A.7 Natural Resources

Regional Landscape

Watkins Lake State Park and County Preserve (WLP) is located in the ecoregion sub-subsection VI.1.3. Jackson Interlobate. The following information was obtained from Regional Landscape Ecosystems of Michigan, Minnesota and Wisconsin, prepared by Dennis Albert in 1995. The sub-section is the northern portion of an interlobate area between three glacial lobes, which formed approximately 13,000 to 16,000 years ago. The interlobate is more than 150 miles long. This sub-subsection consists of most of the northeastern two-thirds of the interlobate, which is characterized by relatively steep end-moraine ridges surrounded by pitted outwash deposits; kettle lakes and wetlands are common within the outwash.

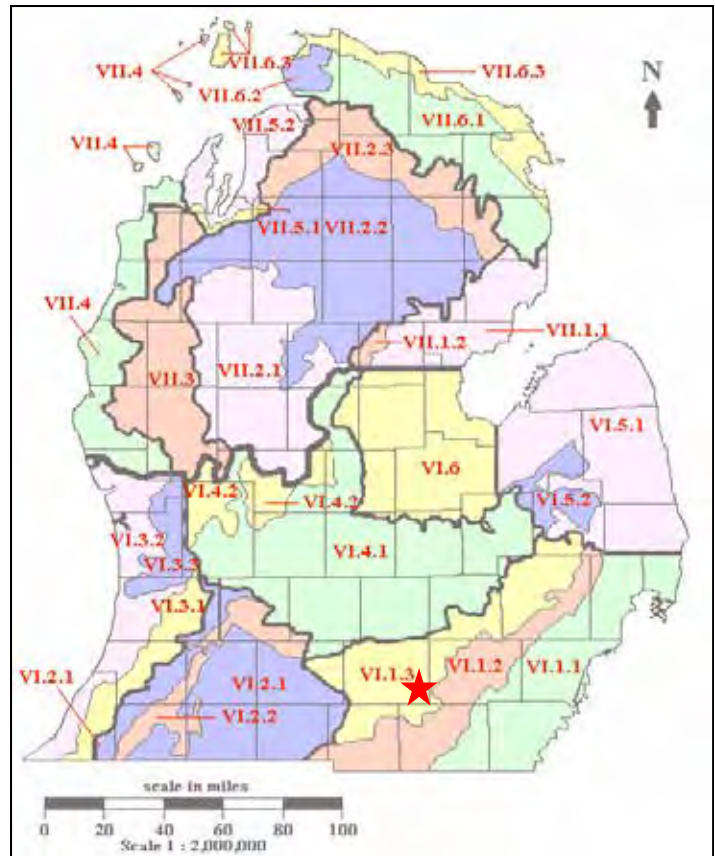
Climate

The growing season in the region is about 140 to 150 days long, with that range generally decreasing in the northern portion of the region. In late spring, frost can be a concern due to the presence of a high number of lowland depressions such as outwashes and kettle lakes. The average annual rainfall is 30 to 32 inches and the annual snowfall averages 40 to 50 inches. Low temperature extremes can be observed in the range of -22.5°F to -28.5°F.

Geology and Mineral Resources

The area of WLP is covered by greater than 100 feet of glacial drift consisting of an end moraine of coarse-textured till as well as some glacial outwash. The coarser sediments are frequently quarried in the state for sand and gravel, primarily for use in road construction and maintenance. Several former sand and gravel pits are located in the vicinity. There appears to be good gravel potential within the park on the uplands. Bedrock immediately underlying the glacial drift in the park consists of Mississippian age shales, siltstone, and sandstone. These rocks do not currently have any significant economic value.

As noted previously in Section A.5, the State of Michigan does not currently own the rights to any potential oil and gas resources beneath the park, and the state must provide the mineral rights owner reasonable access to the surface for the purpose of oil and gas exploration and development, if the owner of the mineral estate elects to develop their interest in the property. There has been significant Trenton-Black River oil production along a narrow trend just to the west of the park. In addition, some minor oil and gas exploration occurred on the property in the past before the land was purchased by the state and county. Based on the relatively limited knowledge of the local geology provided by these wells and other sources, the potential for oil or gas in the Trenton and Black River formations beneath the park appears to be low.



Source: Albert, Dennis A. 1994. Regional landscape ecosystems of Michigan, Minnesota and Wisconsin: a working map and classification.

Land Cover

Interpretations of the GLO surveyor notes by MNFI ecologists indicated that the Watkins Lake State Park and County Preserve and surrounding area contained several distinct vegetation assemblages (Comer et al. 1995, Figure 4). Surveyors recorded information on the tree species composition, tree size, and general condition of the lands within and surrounding WLP. Circa 1800, the park was predominantly forested with 53% of the area supporting Oak-Hickory Forest. A significant portion of the park (17% of the area) supported Black Oak Barren. Outwash channels and depressions historically supported forested swamps (13% of the area) with Mixed Conifer Swamp mapped for this area. Wet Prairie – Prairie Fen (7% of the area) was also prevalent within the park, occurring in areas of outwash adjacent to the upland margin. The remainder of the park (10% of the area) was characterized by lakes.

Forested systems were found on steep end moraine and steep ice-contact ridges. Areas classified as Oak-Hickory Forest were described by the GLO surveyors as “well timbered oak and hickory.” The most prevalent tree species recorded in this area by the GLO surveyors in the forested uplands were white oak (*Quercus alba*) (overwhelmingly the most common tree

noted) with prevalent canopy associates including black oak (*Q. velutina*), chinquapin oak (*Q. muehlenbergii*), bur oak (*Q. macrocarpa*), and hickories (*Carya spp.*)

Areas mapped as Black Oak Barren within the park and throughout the surrounding landscape likely included both dry savanna systems (oak barrens) as well as dry-mesic savanna (oak openings). Small pockets of prairie inclusions likely occurred within this savanna/barrens matrix. GLO surveyors noted pockets of upland prairie within the surrounding area including a “beautiful prairie” northwest of the park. Areas classified as Black Oak Barren were described by the GLO surveyors as “first rate oak openings,” “barren,” “barren land,” “thinly timbered oak and hickory” with undergrowth of oak and willows, “scattering shrub oak,” and “open oaks.”

Present-day vegetation within the WLP has changed significantly since 1800 due to agriculture, logging, grazing, deer herbivory, fire suppression, hydrologic alteration, and invasive species. Lands that remained forested were typically areas of steep slope or poor drainage. Many of the forested patches that persisted were nevertheless selectively logged with many hardwoods, especially oaks, being harvested. In addition, where forests and wetlands occurred adjacent to agricultural lands, grazing was prevalent. Much of the park was formerly agricultural lands that have since been abandoned due to unfavorable slope, drainage, and/or soil conditions. Many of these former agricultural areas remain as “old fields” that were likely kept open by grazing. Other areas of former agricultural fields are transitioning to habitat dominated by upland shrubs and/or low density trees or have reverted to early-successional forest.

Current land cover in WLP still includes a significant component of deciduous upland forest (26% of the park). This forest is primarily composed of oak-hickory forest (dry-mesic southern forest) and early-successional forest. The majority of the upland forested systems within WLP are young forest with over 73% of the total forested acreage being less than 100 years old and 27% being over 100 years old. The stands of upland forest within the older age-class were recently logged. This logging event occurred after the sale of the land to the state and prior to the transfer of the land. The logging was a high grade, with the largest and best quality timber (mostly oaks) being removed from the overstory. Michigan Forest Inventory (MiFi) upland forest stand types delineated in WLP include White, Black, Northern Pin Oak (11%), Other Mixed Upland Deciduous (10%), Mixed Upland Deciduous with Cedar (4%), Maple, Beech, Cherry Association (0.8%), and Mixed Upland Forest (0.2%) (Figure 6). These forests occur throughout the park and are especially prevalent on moderate to steep end moraines and ice-contact ridges.



Grass-dominated upland provides habitat for grassland birds
(Photo by Aaron P. Kortenhoven)

Soils

Soil textures include sand, clay, peat and muck; the most common soil textures within the property boundaries are sandy loam and muck. Most of the property has well drained soils, but areas near wetlands where a muck texture is present are very poorly drained. There are also areas of poorly drained soils that consist of clay and loam textures and are in areas with signs of agricultural use. Illuviation is responsible for the formation of a clay-rich horizon in many of the soils on moraines, providing better water holding capacity than many of the outwash soils.

Water Resources

Many kettle lakes and ponds on the pitted outwash, end moraines, and ice-contact topography can be found in the area. The park is located in the River Raisin watershed. The headwaters of many major rivers originate in the extensive wetlands of the ecoregion sub-subsection, including the River Raisin. There are three unnamed tributaries to River Raisin within the boundaries of the park, two in the northwest portion and one in the eastern portion. Watkins Lake (~106 acres) is the largest water resource in the park, located south of the rail corridor.

Flora and Fauna

The following table displays the rare animals that have been documented by the Michigan Natural Features Inventory, Michigan State Extension (MNFI) in the park. No rare plants have been documented in the boundary of the park, but several species are documented on nearby private land and are likely to be found within the park, tall green milkweed (*Asclepias hirtella*) (T), side-oats grama grass (*Bouteloua curtipendula*) (E), white lady slipper (*Cypripedium candidum*) (T), Leiberg's panic grass (*Dichanthelium leibergii*) (T), stiff gentian (*Gentianella quinquefolia*) (T).

In 2017, MNFI scientists discovered a population of the federal endangered Mitchell's Satyr butterfly with Watkins Lake State Park.

This is the first new population of Mitchell's Satyr to be discovered in almost 20 years. The satyr may also occur within the privately owned Arnold fen.

The park supports several declining but un-listed grassland bird species, bobolink (*Dolichonyx oryzivorus*) upland sandpiper (*Bartramia longicauda*), and savannah sparrow (*Passerculus sandwichensis*).

The species listed below are protected under the federal Endangered Species Act, the Endangered Species Act of the State of Michigan (Part 365 of PA 451, 1994 Michigan Natural Resources and Environmental Protection Act). Species of Special Concern (SC) are also included in the list.

FAUNA				
Rare animals present at WLP				
SCIENTIFIC NAME	COMMON NAME	STATE STATUS	FEDERAL STATUS	YEAR LAST OBSERVED
<i>Alasmodonta viridis</i>	Slippershell mussel	Threatened		2017
<i>Ammodramus henslowii</i>	Henslow's sparrow	Endangered		
<i>Ammodramus savannarum</i>	Grasshopper sparrow	Special Concern		2016
<i>Haliaeetus leucocephalus</i>	Bald eagle	Special Concern		2012
<i>Neonympha mitchellii mitchellii</i>	Mitchell's satyr	Endangered	Endangered	2017
<i>Oecanthus laricis</i>	Tamarack tree cricket	Special Concern		2017
<i>Sistrurus catenatus catenatus</i>	Eastern massasauga	Special Concern	Threatened	2017
<i>Spiza americana</i>	Dicksissel	Special Concern		2016



Henslow's sparrow (Photo by Daniel Behm)



Eastern massasauga (Photo by Terrence Cox)

The Michigan DNR has entered into a [Candidate Conservation Agreement with Assurances \(CCAA\)](#) with the United States Fish and Wildlife Service (USFWS) for the Eastern Massasauga Rattlesnake (EMR). The EMR was protected by listing under the Endangered Species Act of 1973 in 2015. The CCAA provides an opportunity to conserve EMR while reducing the uncertainty that land managers face in managing lands with candidate species. The intent of the CCAA is to identify and minimize threats where EMR have either been documented or where extensive suitable EMR habitat occurs. The presence of EMR has been well documented at WLP and on adjacent private lands. Much of the undeveloped land encompassing WLP will be enrolled as “Managed Land” in the CCAA (MAP). Managed Land will be managed according to management strategies identified in Section 7.1 of the CCAA, which is included in Appendix D of this plan. WCPARC has also signed onto the CCAA for their Park Lyndon facility. It is likely that Washtenaw County land at WLP will be enrolled in the near future.

Exemplary Natural Communities

The only exemplary natural community documented within WLP is prairie fen. Prairie fen is a groundwater influenced wetland community dominated by graminoids, forbs, and shrubs. The community occurs in glacial outwash plains and outwash channels on moderately alkaline peat and marl in the southern Lower Peninsula. Prairie fen is often associated with headwater streams and cold, calcareous, groundwater-fed springs at the margins of steep end moraine ridges. Natural processes that determine species composition and community structure include calcareous groundwater seepage and lateral flow, fire, insect outbreaks, and flooding by beaver. Variation in the flow rate and groundwater volume influences vegetation patterning and results in distinct zones of vegetation, some of which support a diversity of calciphilic plants. Prairie fen is dominated by sedges, grasses, and other graminoids.¹

Wildlife Habitat

WLP supports habitat for an abundance of wildlife species, both game and non-game. White-tailed deer, wild turkey, rabbit, and squirrel have all their life requisites provided for on the diversely vegetated property. The openlands on the property are part of a greater grassland complex within the area and can help to support the local ring-necked pheasant population. Ruffed grouse and American woodcock may also be present in this park. A unique feature of the area is Watkins Lake, which attracts diverse waterfowl species as a stop-over site. This includes geese, diving ducks, and puddle ducks. It is one of the few places in the region where nearly all the waterfowl species that occur in Michigan can be observed.

Invasive Species

Invasive species pose significant threats to ecosystems across the state. Invasive species are defined as species that are both non-native and cause harm to our economy, environment, or human health (www.michigan.gov/invasives). Invasive species can be plants, animals, invertebrates, and disease-causing fungi and bacteria. Due to the difficulties in managing invasive species, prioritization for resource allocation is recommended. In the context of WLP, the management of invasive species will occur in order to protect high quality native ecosystems as a priority.

WLP’s agricultural fields, formerly managed for forage production (hay) and cattle grazing, are not native ecosystems, but they provide noteworthy habitat for rare and declining grassland bird species, as well as more common species such as ring-necked pheasant and American turkey. In these grasslands, limiting the establishment of trees and shrubs and promoting the dominance of grasses in vegetation cover will be a priority.

As noted in inventories conducted across both state and county owned parcels, WLP includes over 90 acres of high quality prairie fen habitat. Significant for supporting many species, in particular rare species, the prairie fen is a special wetland habitat in WLP. To preserve resources and biodiversity, stewardship staff from both Michigan DNR Parks and Recreation Division and WCPARC have identified the management of invasive species in prairie fens and surrounding wetlands as a priority. Glossy buckthorn is of particular concern within prairie fen. Oak wilt and oriental bittersweet are of concern in the upland forests.

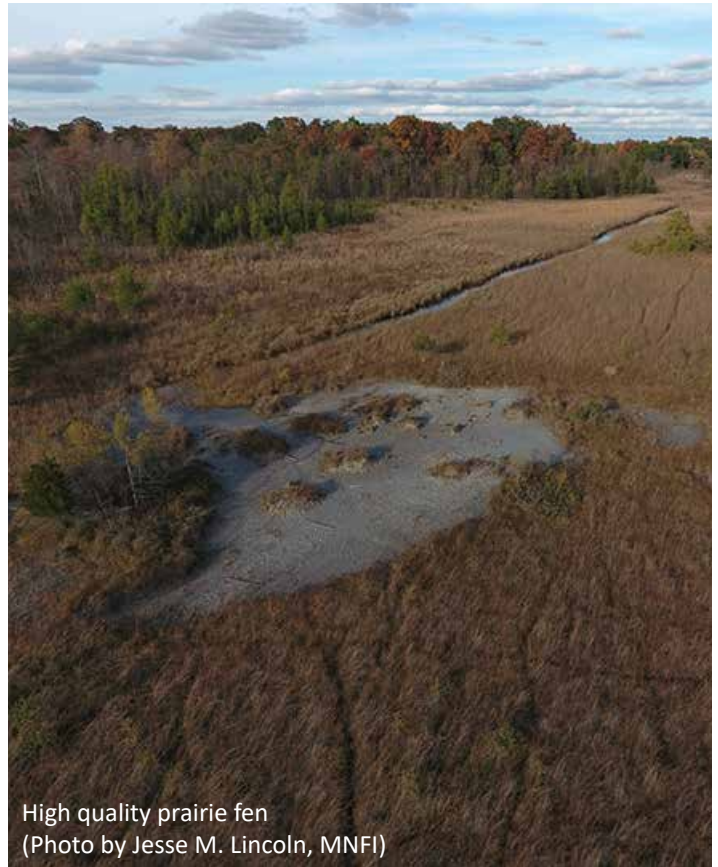
Across prairie fens and other ecosystems in WLP, partners will also support continued surveys for invasive species, specifically those identified by the State in the “Watch List”. The “Watch List” contains species that are currently rare, though have been identified as significant risks by natural resource experts. Recommendations for management of these species stress the need to identify infestations early in order to minimize the extent of the damage. Beyond the “Watch List,” stewardship staff will also be managing for other invasive species that could significantly degrade habitats that provide resources for rare species. An example of this can be the need to remove Tree of Heaven from open grasslands to protect grassland bird nesting habitat.

The Natural Resource Stewardship Plans for WLP, collaboratively developed by WCPARC and DNR, comprehensively address invasive species management of WLP (See Appendix C).

¹ Source: Kost et al. 2007, Cohen et al. 2015



Groundwater-fed headwater stream feeding into the Norvell Manchester Drain
(Photo by Joshua G. Cohen)



High quality prairie fen
(Photo by Jesse M. Lincoln, MNFI)

A.8 Recreational Resources

Many recreational activities at WLP have not been developed yet due to it being a new park. However, wildlife watching and birding opportunities are currently available. Watkins Lake provides a temporary home for many waterfowl species in the spring and fall migrations, and is a designated waterfowl refuge, which creates restricted access periods to protect waterfowl nesting and migrations. From February 15 to May 15 and September 1 to January 1, Watkins Lake and the surrounding park area are closed other than the use of Arnold Road (see map below).

Outside of this closure, fishing on Watkins Lake is allowed from the shore or with small, carry-in watercraft. Canoes and kayaks may be launched from the undeveloped shoreline subject to the restricted access periods.

The former rail corridor is used for walking through the property. Another trail has been cleared from the parking lot that leads to a scenic grassland loop trail (see trail map on the following page). WLP is not currently open to hunting.

Programming and Events

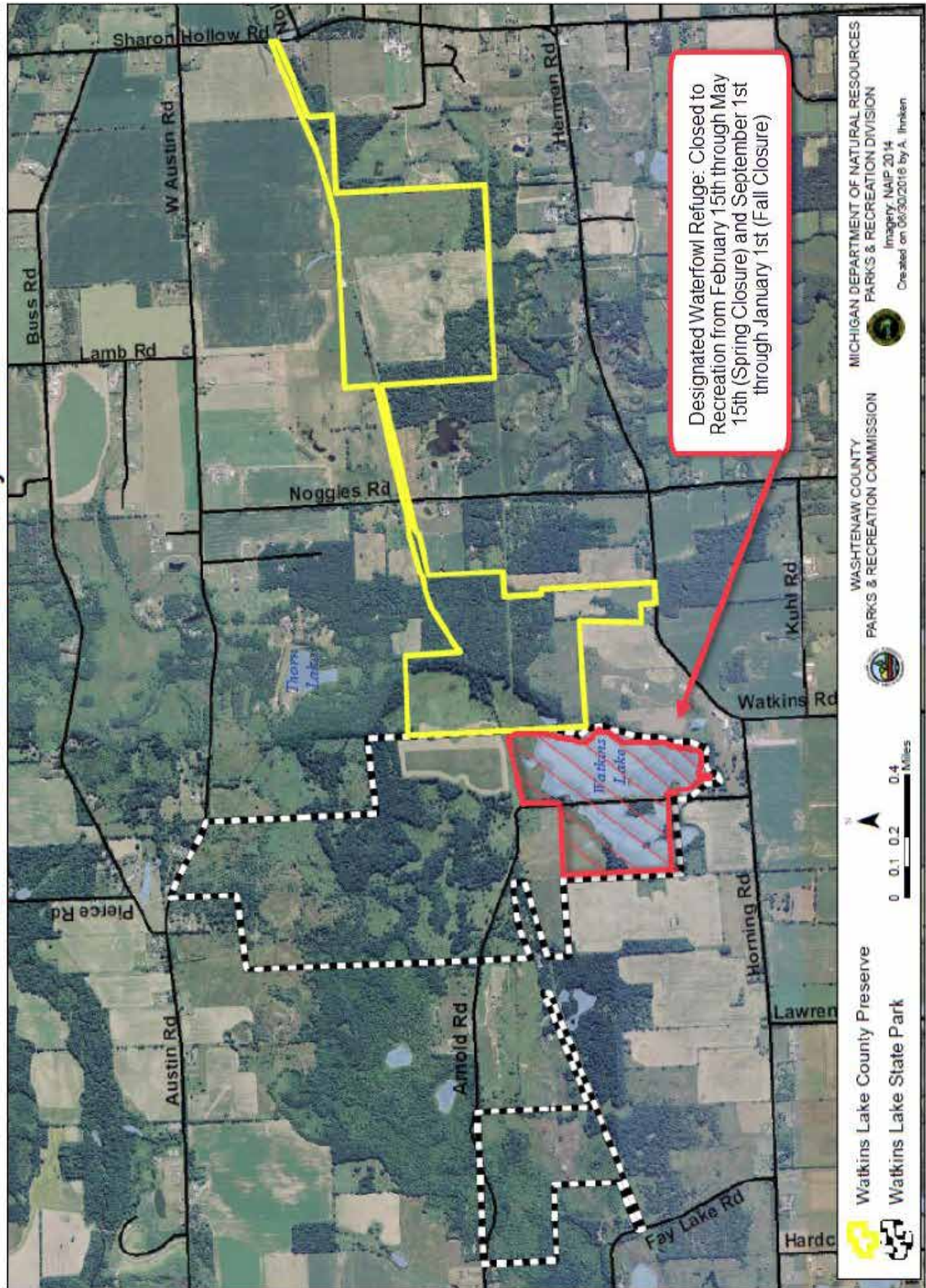
Given the diverse landscape and natural and cultural resources protected within WLP, there exist many opportunities for public programming. Both MDNR and WCPARC have

dedicated outreach staff collaborating on current and future programming opportunities that will focus on natural and historical interpretation, exploration of the land, and community involvement.

WLP provides a rich landscape for the exploration of natural resources, especially waterfowl and migrating birds. In following the guidelines for the waterfowl refuge designation, the partners will continue to support birding and photography enthusiasts' use of the site. Additional programming interpreting birding and other natural resources is planned by partners. Specifically, MDNR is planning to expand their Explorer Guide Program into WLP. Collaboration with the Michigan History Center will also allow for public programming events focused on the historical and cultural resources protected in WLP.

Capitalizing on the excitement during the acquisition and grand opening, the partners presented WLP at a public meeting and hosted a public volunteer workday in 2016. Both partners are interested in promoting volunteerism in order to gain public support and manage the natural resources, recreational amenities, and cultural assets for public enjoyment. As involvement grows, both partners will work to support the development of a 'Friends Group' in order to further public support and care of WLP.

Watkins Lake State Park and County Preserve



Watkins Lake State Park & County Preserve

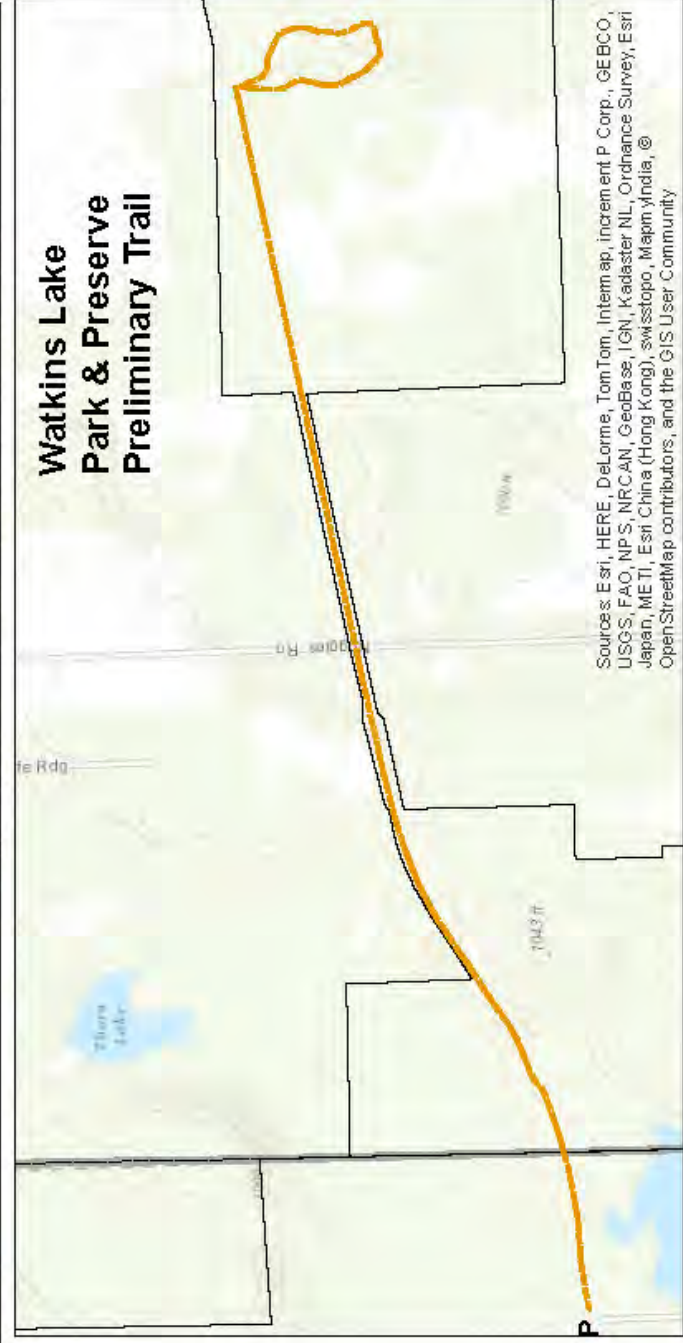


Legend

- Preliminary Trail
- Park & Preserve Boundary
- County Border
- Public Parking

Watkins Lake State Park & County Preserve (SP & CP) is collaborative effort between the Michigan Department of Natural Resources and Washtenaw County Parks and Recreation Commission.

In total, Watkins Lake SP&CP contains over 1,100 acres of forests, grasslands, wetlands, and open water in Jackson and Washtenaw counties. Since ownership, a parking lot off Arnold Road was constructed and is available for public use. A preliminary trail from the parking lot was cleared along the former railroad bed and leads east to a scenic grassland loop trail. A hike from the parking lot, to the grassland loop and back is roughly 5 miles. Hikers will cross Noggles Road to reach the eastern grassland loop.





Historical photo of the flag stop depot

A.9 Historic and Cultural Resources

The history of the Watkins Farm is documented in section A.4. There are no structures remaining on the park site. However, remains of farm and other buildings, and other evidence of past uses, may be present. Native American village sites and trails are known to be present in the region and sites within the park area are likely, although none have currently been confirmed.

Sites Present on the Property

Railroad Activities on the Site

The Detroit, Hillsdale and Indiana Railway (later becoming the Detroit Hillsdale and Southwestern) ran northeast to southeast through the center of the park site, connecting Brooklyn to Manchester and beyond. The line was closed in 1972, but majority of the railroad grade remains through the property. Some of the materials from the line were reported to have been used for farm fencing, still visible on the land today. The private Watkins Station built on what is now park property was removed, although the foundations may still be visible.

Peach and Apple Orchards

Some evidence may still be found of L.D. Watkins's orchards, planted in the 1850 and 60s.

Cattle Grazing Operation

Distinctive fencing, of unknown date, feed troughs and cattle pens remain on the property as evidence of the Watkins/Trolz cattle ranching activities. Further investigation is needed to determine the cultural significance of these elements

Sites Closely Associated with the Property

Celery Growing

Celery proved to be an ideal crop for the townships around the Watkins' Fairview Farm. The swampy terrain produced a rich muck soil. Interviews with descendants of the Arnold family indicate that celery was grown on their land, too.

Brick Home of Lucius Denison (L. D.) Watkins (privately owned)

Lucius Denison (L.D.) Watkins arrived with his family in 1834. L. D. began building the brick home in 1860 and completed it by the end of the Civil War.

Cushman Family Home (privately owned)

L.D. Watkins's oldest daughter Cora Susan married Elmer Cushman in 1879 and for a time they lived in this house.

Schoolhouse (privately owned)

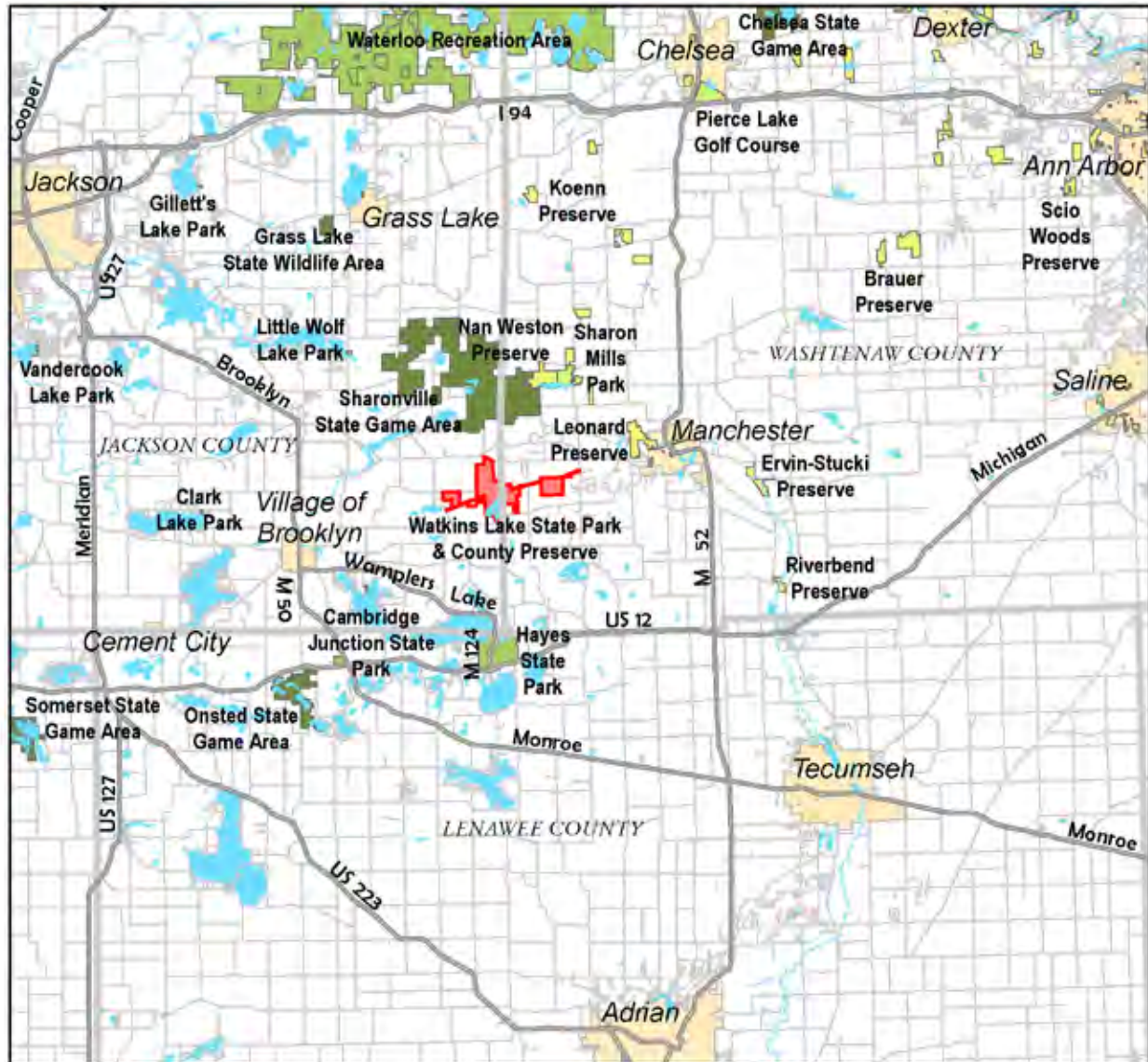
Lucius Whitney Watkins and his children attended this school.



Map created by WCPARC
Created on: 6/27/2017
Sources: MiGDL, Washtenaw County GIS,
ESRI Canada



STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES
Watkins Lake State Park & County Preserve
 Public Regional Recreation



0 3 6 9 Miles



Legend

- Watkins Lake State Park & County Preserve
- Park and Recreation Facilities**
- State Park or Recreation Area
- State Game Area
- County, Regional, or Local Park
- Nature Preserve

Other Map Features

- Major Road
- Minor Road
- City or Village
- County Boundary
- Lake (>10ac.)

Map created by
 WCPARC
 Created on: 6/27/2017
 Sources: MiGDL,
 Washtenaw County GIS



STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES
Watkins Lake State Park & County Preserve
 Boundary and Aerial Imagery



Legend

Watkins Lake Boundary

Park Boundary

Trail Easement Connection*

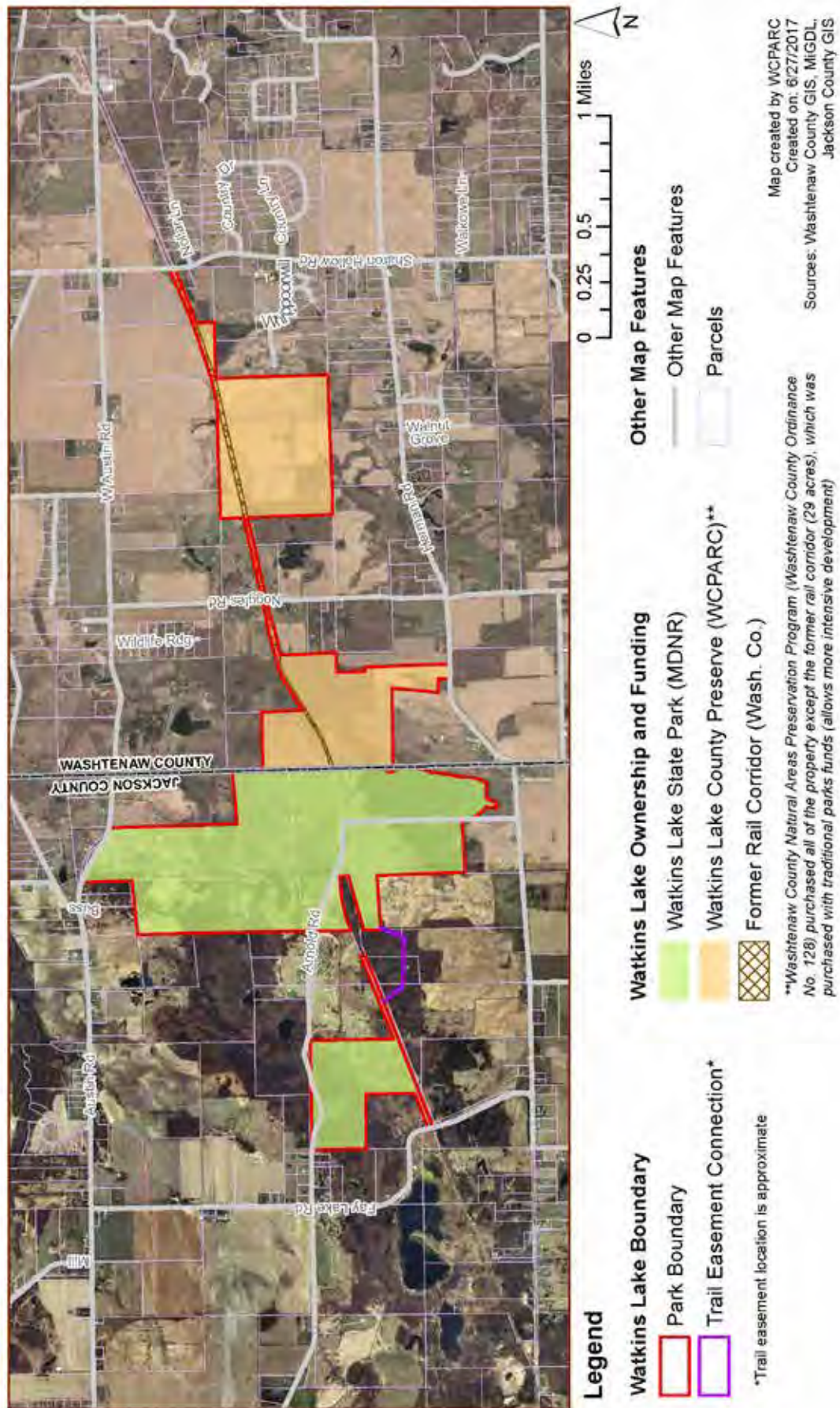
Roads

*Trail easement location is approximate

Map created by WCPARC
 Created on: 6/23/2017
 Sources: Washtenaw County GIS, MiGDL,
 Jackson County GIS

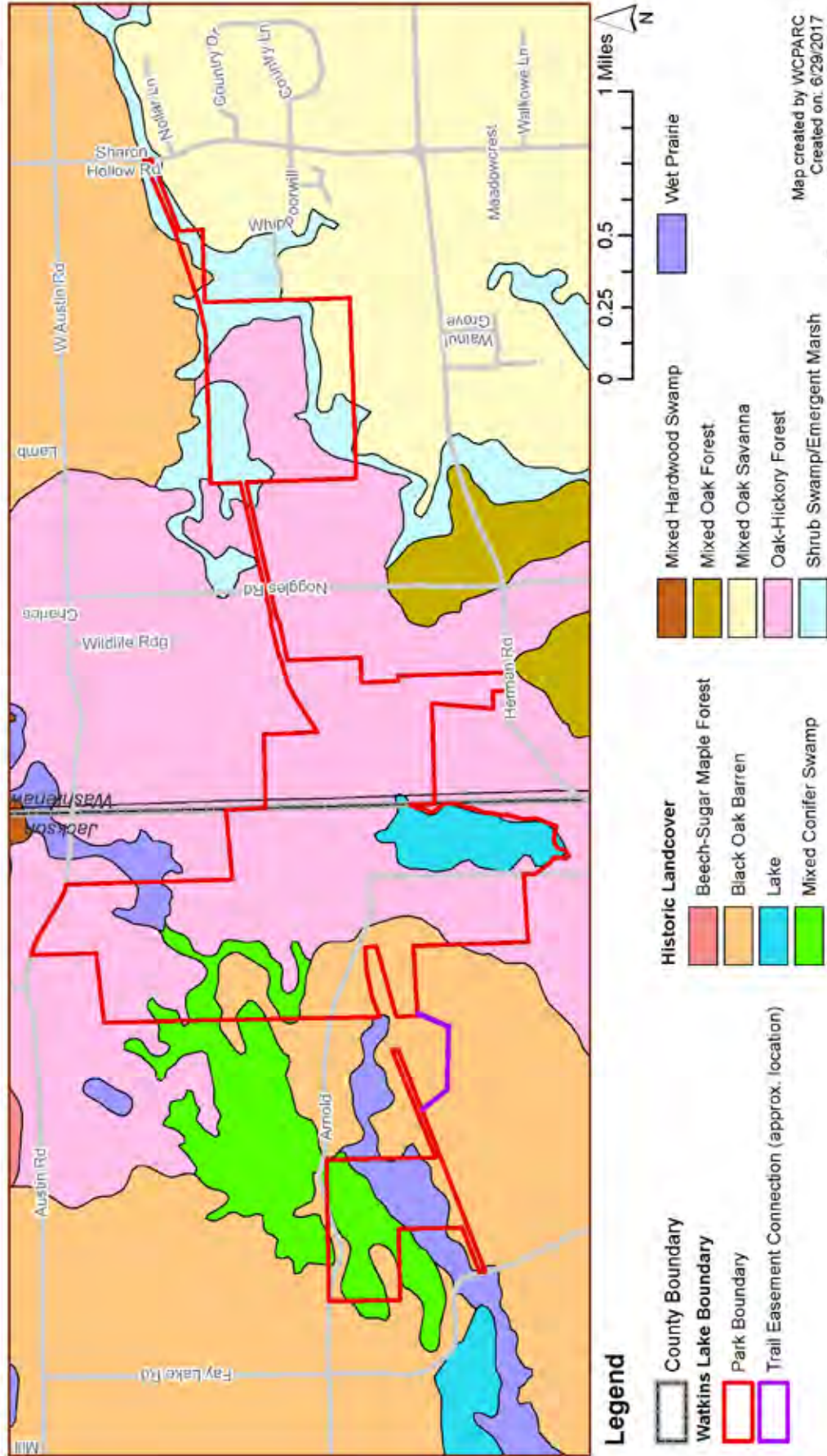


STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES
Watkins Lake State Park & County Preserve
Land Ownership





STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES
Watkins Lake State Park & County Preserve
 Land Cover, c.1824



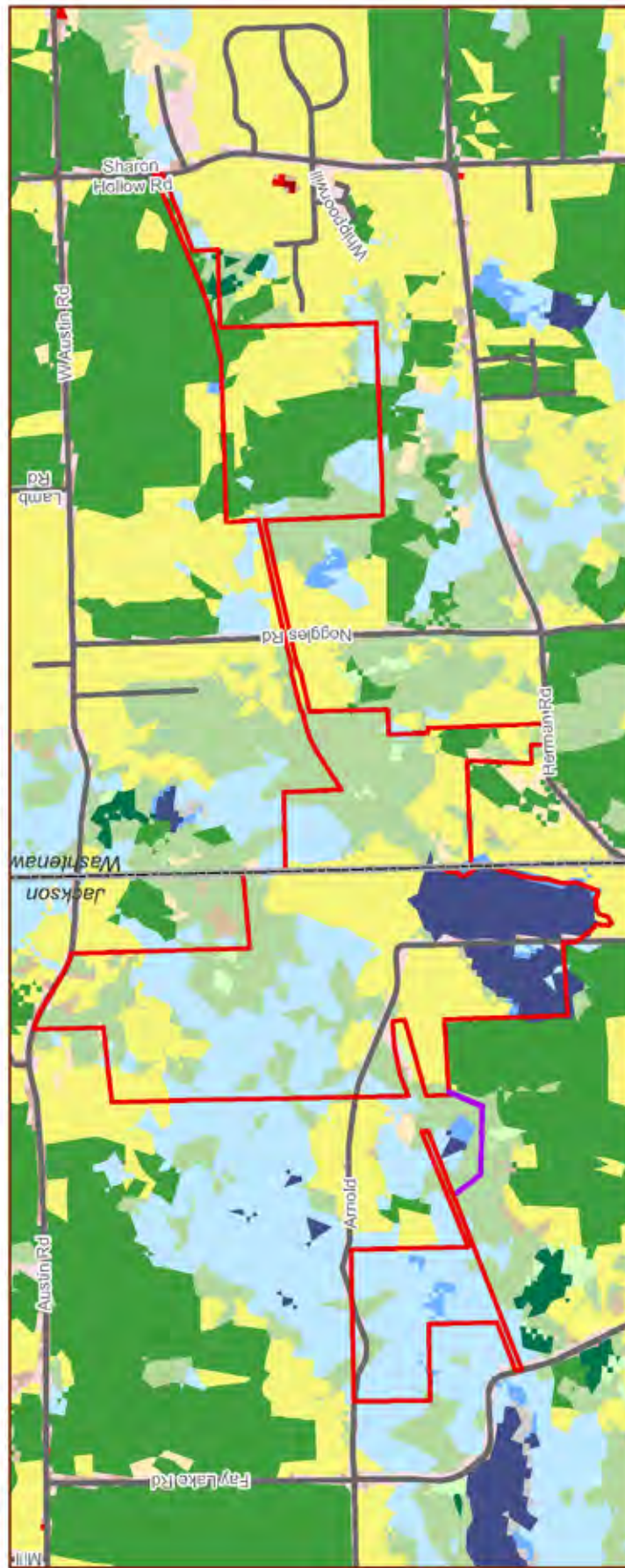
Map created by WCPARC
 Created on: 6/29/2017
 Sources: Washtenaw County GIS,
 National Land Cover Dataset 2011



STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES

Watkins Lake State Park & County Preserve

Land Cover, 2011



Legend

County Boundary

Watkins Lake Boundary

Park Boundary

Trail Easement Connection*

Other Surrounding Land Cover

Barren Land (Rock/Sand/Clay)

Developed, High Intensity

Developed, Medium Intensity

Land Cover In Watkins Lake

Cultivated Crops

Deciduous Forest

Developed, Low Intensity

Developed, Open Space

Emergent Herbaceous Wetlands

Evergreen Forest

Grassland/Herbaceous

Mixed Forest

Open Water

Pasture/Hay

Shrub/Scrub

Woody Wetlands

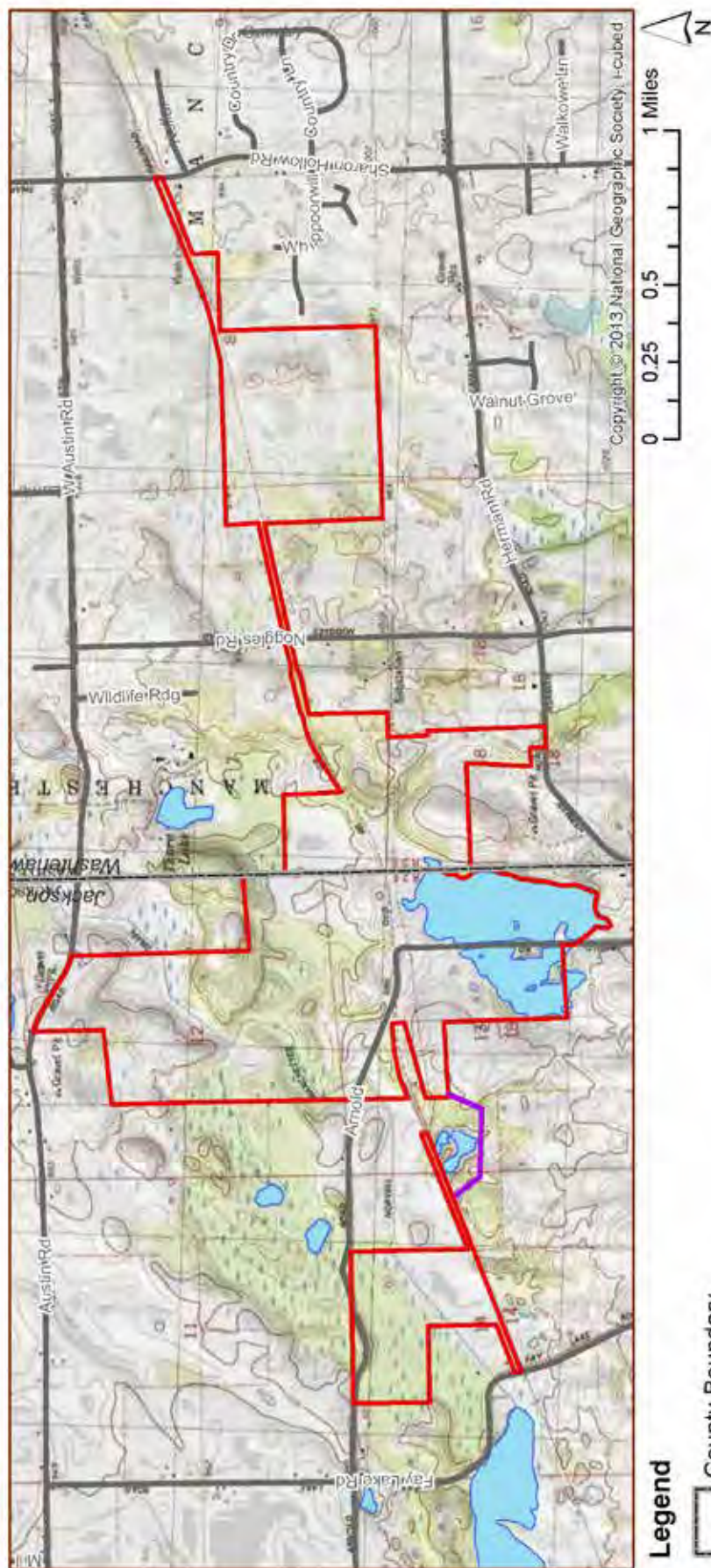
0 0.25 0.5 1 Miles
Road Centerlines

*Trail easement location is approximate

Map created by WCPARC
Created on: 6/23/2017
Sources: Washtenaw County GIS,
National Land Cover Dataset 2011



STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES
Watkins Lake State Park & County Preserve
 USGS Topographic Quadrangle

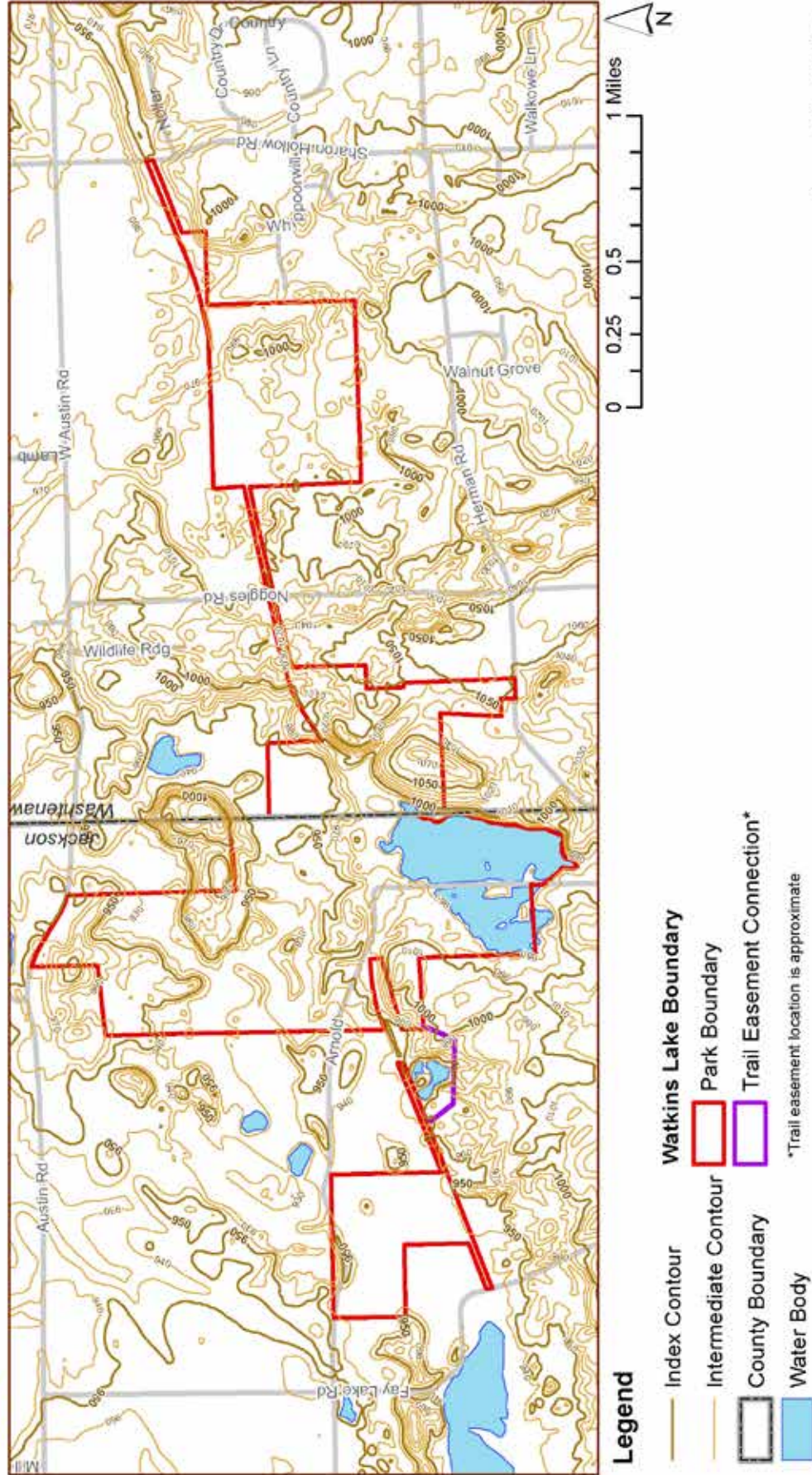


Map created by WCPARC
 Created on: 6/23/2017
 Sources: Washtenaw County GIS, USGS

*Trail easement location is approximate



STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES
Watkins Lake State Park & County Preserve
 Elevation (10' Contour Interval)



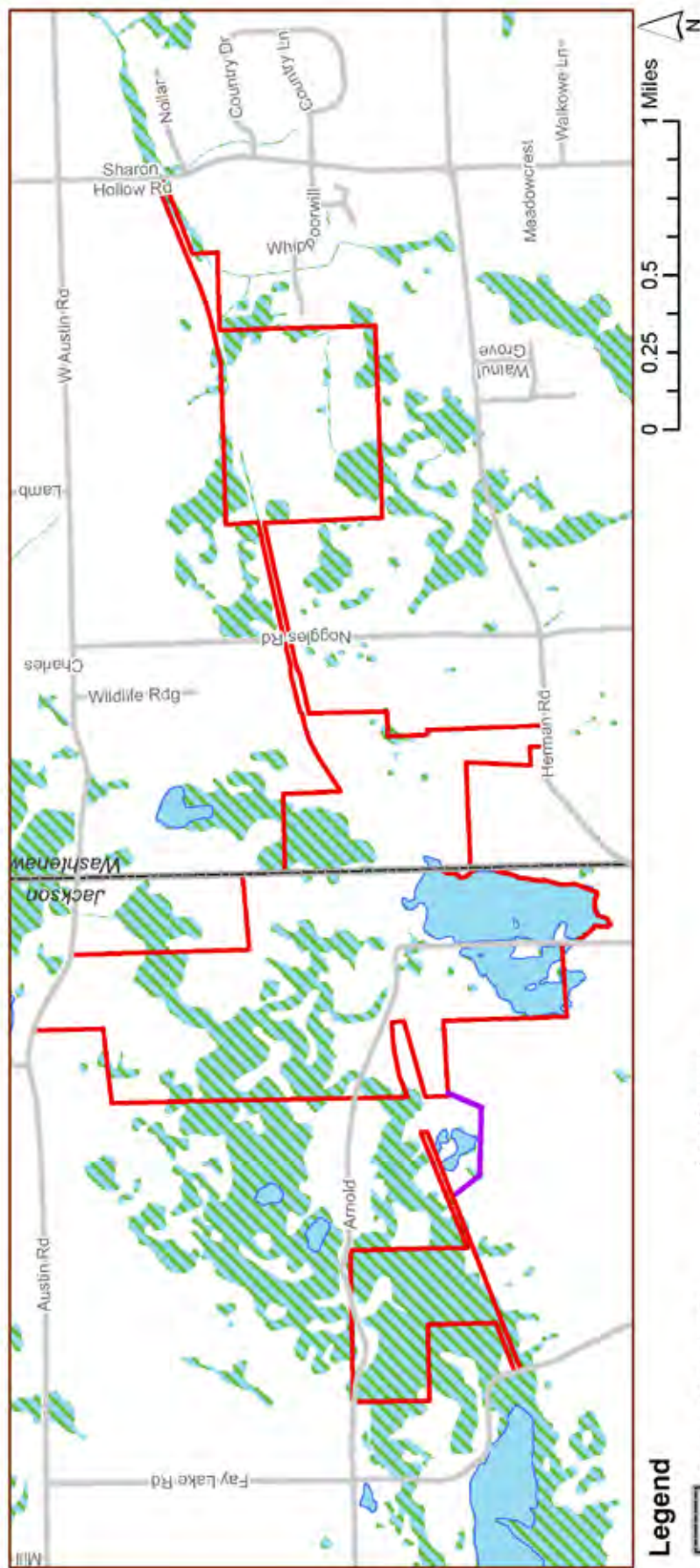
Map created by WCPARC
 Created on: 6/23/2017
 Sources: Washtenaw County GIS, USGS



STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES Watkins Lake State Park & County Preserve



Wetlands



Legend

- County Boundary
- Watkins Lake Boundary
- Park Boundary
- Trail Easement Connection*
- Landcover
 - Wetlands
 - Water Body

*Trail easement location is approximate

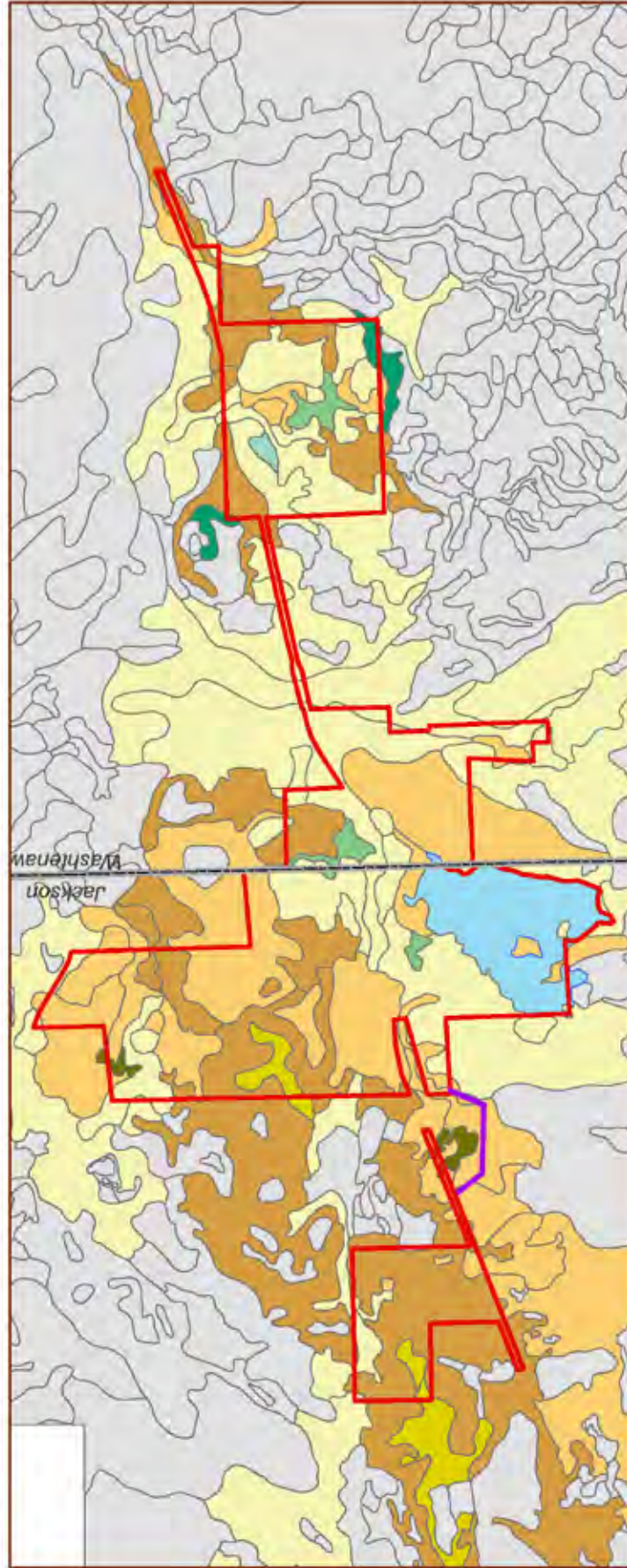
Map created by WCPARC
Created on: 6/23/2017
Sources: Washtenaw County GIS, US
FWS National Wetlands Inventory



STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES Watkins Lake State Park & County Preserve



Soil Texture



Legend

- County Boundary
- Watkins Lake Boundary
- Park Boundary
- Trail Easement Connection*

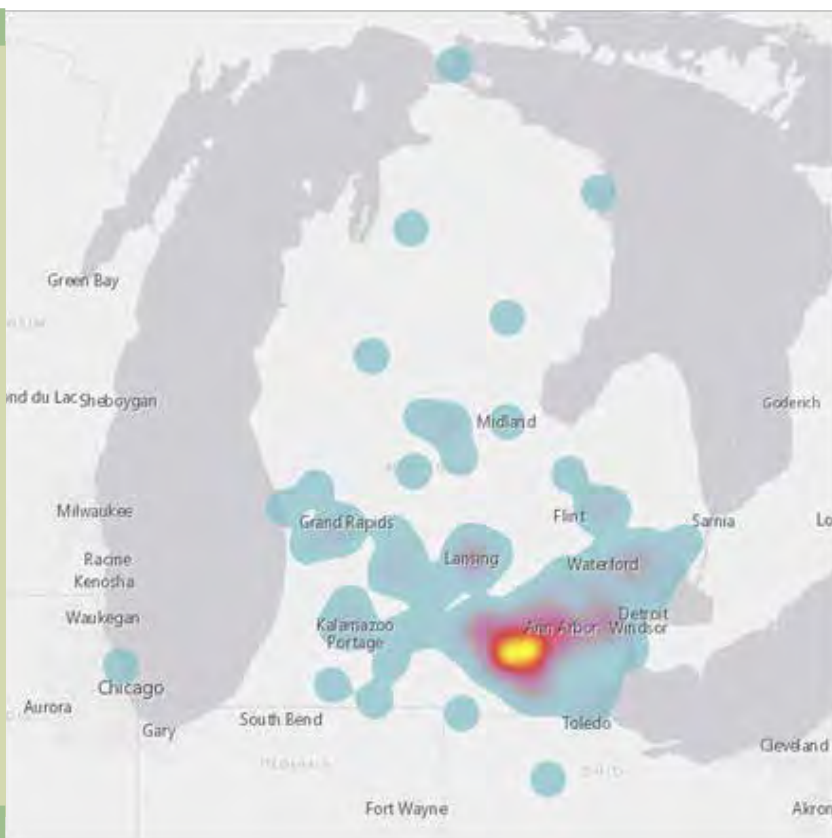
- Soil Texture
- Loamy Sand
- Sandy Loam
- Sand
- Silty Loam
- Muck

- Peat
- Clay Loam
- Loamy Disintegration
- Moraine
- Water

*Trail easement location is approximate

Map created by WCPARC
Created on: 6/23/2017
Sources: Washtenaw County
GIS, USDA Natural Resources

An online survey gathered input from the public. Two-hundred and forty eight individuals completed the online survey. Most respondents were from southeast Michigan, as can be seen on the adjacent map. Three respondents from out of the area (near Washington DC, Dayton OH, and Bridgeport CT) are not shown.



Appendix B: Public and Stakeholder Input

Project Website

On the adjacent page is a snapshot of the project website at www.mdnrmanagementplans.org/watkins-lake. The website was available for public viewing throughout the duration of the planning process and was updated with maps, survey results, and the draft plan. Members of the public could contact the planning team through the website contact form.

Online Public Survey



Summary of Survey Results

The DNR recognizes that public input is a critical component of park planning, thus input is sought through multiple venues in hopes of gathering the opinions of a variety of users. One of the methods the planning team used to gather input from current and potential users of Watkins Lake State Park and County Preserve (WLP) was an online survey. This survey was advertised through an official DNR press release/email bulletin to over 17,400 individuals that have expressed an interest in DNR news in the region and via promotion by Washtenaw County on their website and social media. In addition, a letter was mailed to those who live adjacent to the park.

Two-hundred and forty eight (248) individuals completed the online survey. Of those who reported their zip code, 125 live within 50 miles of the park, with the most respondents living in Manchester and Brooklyn. The map above shows the zip codes of survey respondents, with the brighter colors indicating higher concentrations of survey respondents.

Those that took the survey were nearly evenly split in gender and were somewhat evenly distributed between the age ranges given, except for a lower response from the 18-24 age range and no responses from those under 18. The planning team also asked if respondents have a recreation passport; an overwhelming majority (93%) reported that they do.

The survey was broken into the following sections to gather targeted input:

WATKINS LAKE STATE PARK AND COUNTY PRESERVE GENERAL MANAGEMENT PLAN

MORE ABOUT THE PARK

Watkins Lake State Park and County Preserve (MDNR)

MORE ABOUT THE PROJECT

[Presentations and Meetings](#)
[Maps](#)
[Documents](#)

MORE ABOUT MDNR MANAGEMENT PLANS

[Park Management Plans \(MDNR\)](#)
[Planning Process \(MDNR\)](#)
[Management Zones \(MDNR\)](#)

CONTACT US

Comments and questions are always welcome!

* Indicates required field


Name:*

Email:*

Subject:*

Park:

Message:*



About the Park

Watkins Lake State Park and County Preserve is located approximately 30 miles southwest of Ann Arbor and 20 miles southeast of Jackson in the Irish Hills region, straddling the border of Washtenaw and Jackson counties. The 1,122-acre site is jointly owned and managed under a partnership between the Michigan DNR and Washtenaw County Parks and Recreation Commission. It became Michigan's 103rd State Park in 2016.

The property is a popular watchable-wildlife destination and features beautiful rolling land with a mixture of open meadow, mixed hardwoods, low wetland areas and open water. The property's most popular feature, Watkins Lake, holds large numbers of waterfowl in the spring and fall migration and is a designated Waterfowl Refuge. The parkland has a well-documented history beginning with the purchase of 800 acres by the Watkins family for farming in 1833. The family played a role in the Underground Railroad, assisting those fleeing slavery.

About the Plan

The Department of Natural Resources (DNR) Parks & Recreation Division (PRD), in partnership with Washtenaw County Parks and Recreation, is in the process of developing a General Management Plan for Watkins Lake State Park and County Preserve. The General Management Plan will define a long-range planning and management strategy that protects the resources of the site while addressing recreation needs and opportunities. Stakeholder and public input will be incorporated as a critical component of the planning process.

CATEGORY	INPUT RECEIVED
Your Visit	Participants could select multiple answers from a predetermined list in order to provide general information about whether respondents have visited the park and how frequently, activities they participated in, what is most important to their visit, and reasons respondents have not visited the park.
Park Future	Respondents indicated the activities, enhancements, and facilities they would like to see at the park, whether they prefer recreation or preservation, and general comments about the park.
Tell Us About Yourself	Demographic data and contact information

Your Visit

Although nearly half (46%) of survey respondents have never visited the park, 24% visited WLP at least 5 times per year, 17% have been to the park two to five times, and 13% have visited once. Respondents tend to visit the park most often in the spring (74%), fall (68%) and summer (65%), while only 40% have visited the park in the winter.

Visitors participate in a range of activities at WLP (multiple answers could be selected by participants), with scenic viewing (70%) being most common. Wildlife and nature observation (68%), hiking, walking, and/or running (66%), and bird watching (51%) were other popular activities. Other notable activities that visitors participate in when they visit the park include fishing (14%), non-motorized watercraft use (11%), picnicking (11%), and foraging (9%).

Of these activities, respondents were asked to choose which one activity at WLP was most important to them. Overall, wildlife and nature observation was the most important (35%), with hiking, walking, or running also an important activity to visitors (20%). Bird watching was a somewhat important activity with 17% of responses. Respondents were also given the option to specify an activity that was not listed, and 7% of respondents noted that hunting would be the most important activity if it were allowed. There were also a few respondents that said they participated in biking or horseback riding at WLP, which are not currently allowed on the property.

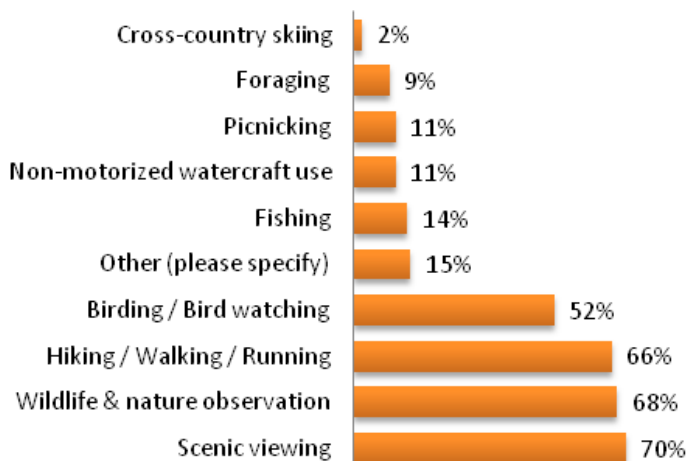
Of the 46% of respondents that have never visited the park; the most frequently cited reason for not visiting was a lack of information or not knowing about the park (69%). Distance from the park and a lack of time were the next most common reasons (14% and 15%, respectively). Lack of park

amenities and the park entry fee was only a small portion of respondents' reasoning for not visiting the park (5% and less than 1%, respectively).

Park Future

The planning team devised a series of questions to determine what the public desired for WLP's future. First, participants

Activities Participated in at WLP



were asked which activities, enhancements, or facilities they would like to see at WLP (they could select multiple responses from a pre-determined list). Foot trails and wildlife & nature observation were at the top of the list, each with 60% of respondents indicating they would like to see those amenities and activities. Other top amenities and enhancements were: habitat restoration (46%), scenic viewing (45%), bird watching (41%), night sky viewing (41%), and waterfowl viewing (40%). Ranging from 25% to 35% of responses were natural resource education/interpretation, a developed non-motorized trail on the rail corridor, fishing, non-motorized boating access, expanded park boundary, cross-country ski trails, and picnic areas. Other items with at least 17% but less than 25% of responses included historical education/interpretation, hunting, programming/events, and snowshoeing.

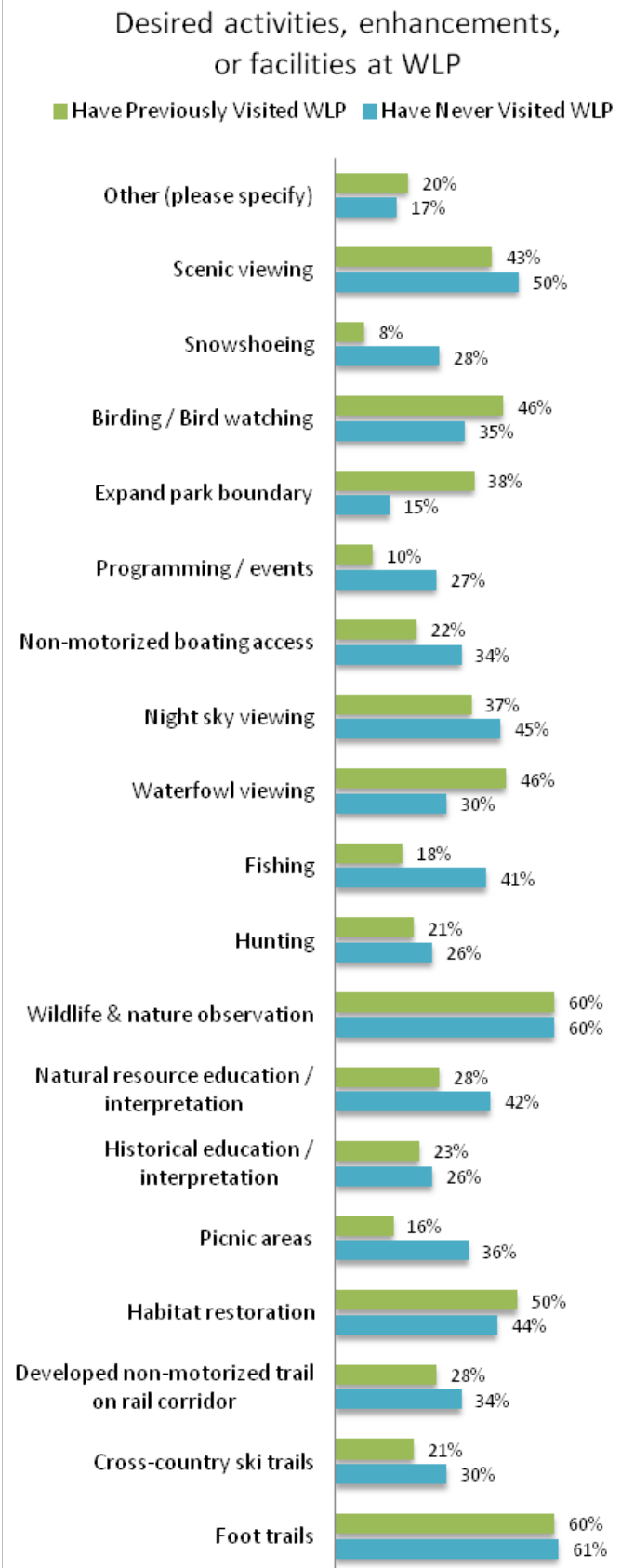
The adjacent graph compares the desired amenities and activities between those who have visited WLP in the past and those who have never visited. Both groups were relatively equally interested in the most popular improvements: foot trails, wildlife & nature observation, scenic viewing, and habitat restoration. There was greater difference between the two groups (more than 10%) in the following categories:

Picnic areas, natural resource education/interpretation, fishing, non-motorized boating access, programming/events, and snowshoeing were more desired by those who haven't visited the park.

Waterfowl viewing, expanding the park boundary and bird watching were more desired by those who have visited the park.

When the respondents were sorted by age group, a trend could be seen that younger age groups are more likely to engage in active recreation pursuits such as hunting, fishing, and non-motorized boating, while older age groups prefer passive activities such as wildlife & nature viewing, birding, and waterfowl viewing. However, foot trails were popular among all age groups.

After being asked to select items from a pre-determined list, respondents were given the opportunity to share, through

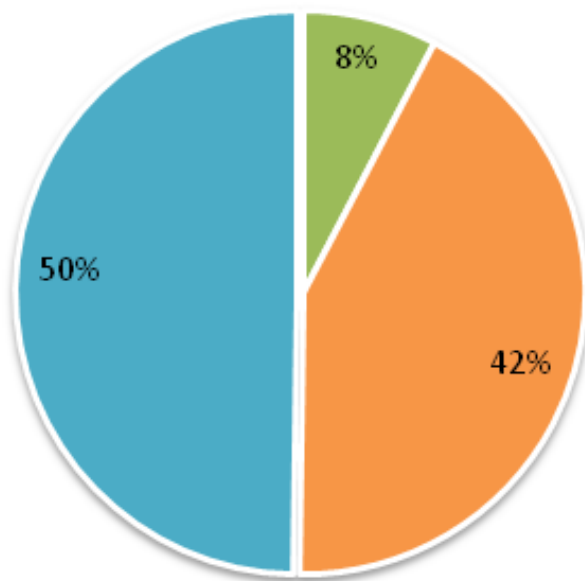


an open-ended question, one activity, enhancement, or facility they would most like to see at WLP. The top item listed by participants was foot trails (23%), and hunting followed as second most mentioned with 15% of responses. Other somewhat popular items include camping and habitat restoration/preservation (8% each), fishing (6%), and paved trails for biking (6%). Other activities, enhancements, or facilities, with less than 5% of responses for each, were: educational programs, night sky viewing, horse trails, parking, non-motorized boat access, expanding park boundaries, and wildlife and scenic viewing.

Throughout the survey, there was a wide range of activities, enhancements, and facilities listed that respondents wanted for WLP. When asked whether recreation development or preservation was more important, 50% of the respondents felt that the future of WLP should strike a balance between the two, while 42% percent of respondents preferred that WLP focus only on preserving and protecting natural and cultural resources. In general, respondents appreciate the natural beauty and ecological importance of WLP and would prefer that development protect the park for future generations.



What is your preference for the future of WLP?



- Develop more recreation opportunities
- Preserve and protect natural and cultural resources
- Recreation opportunities and preservation are equally important



Watkins Lake State Park and County Preserve - General Management Plan

Your Visit

*** 1. Have you visited the Watkins Lake State Park and County Preserve (WLP) in the past, and if so, how often do you visit?**

- ☐ Never Visited
- ☐ Once
- ☐ 2-5 times
- ☐ More than 5 times



Watkins Lake State Park and County Preserve - General Management Plan

Your Visit

* 2. Why did you visit WLP?

- ☐ Wildlife & nature observation
- ☐ Birding / Bird watching
- ☐ Hiking / Walking / Running
- ☐ Picnicking
- ☐ Non-motorized watercraft use
- ☐ Fishing
- ☐ Hunting
- ☐ Snowshoeing
- ☐ Cross-country skiing
- ☐ Photography
- ☐ Foraging (mushrooms, berries)
- ☐ Other (please specify)



Watkins Lake State Park and County Preserve - General Management Plan

Your Visit

* 3. Of these, what is your primary interest?

- ☐ Wildlife & nature observation
- ☐ Birding / Bird watching
- ☐ Hiking / Walking / Running
- ☐ Picnicking
- ☐ Non-motorized watercraft use
- ☐ Fishing
- ☐ Hunting
- ☐ Snowshoeing
- ☐ Cross-country skiing
- ☐ Photography
- ☐ Foraging (mushrooms, berries)
- ☐ Other (please specify)

*** 4. What activities, enhancements, or facilities would you most like to see at Watkins Lake State Park and County Preserve in the future?**

	No need	Would be nice	A must
Foot trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cross-country ski trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developed non-motorized trail on rail corridor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Habitat restoration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Picnic areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Historical education / interpretation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Natural resource education / interpretation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wildlife & nature observation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fishing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waterfowl viewing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Night sky viewing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-motorized boating access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programming / events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expand park boundary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Birding / Bird watching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Snowshoeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Photography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)



Watkins Lake State Park and County Preserve - General Management Plan

Your Visit

*** 5. What ONE activity, enhancement or facility would you most like to see?**

*** 6. What is more important to you regarding WLP?**

- ☐ Develop more recreation opportunities
- ☐ Preserve and protect natural and cultural resources
- ☐ Recreation opportunities and preservation are equally important

7. Please provide any additional comments you may have about Watkins Lake State Park and County Preserve.



Watkins Lake State Park and County Preserve - General Management Plan

Tell Us About Yourself

This section will help the planning team understand who uses the park.

*** 8. What is the ZIP code of your primary residence?**

9. What is your age? (optional)

- ☐ 17 or younger
- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-63
- ☐ 64 and older

10. What is your gender? (optional)

- ☐ Male
- ☐ Female

*** 11. Do you have a DNR Recreation Passport?**

- ☐ Yes
- ☐ No
- ☐ I don't know what a Recreation Passport is

12. If you would like to be kept informed about the General Management Plan process and upcoming meetings for Watkins Lake State Park and County Preserve, please leave your contact information below:

Name

Email Address

Thank you!

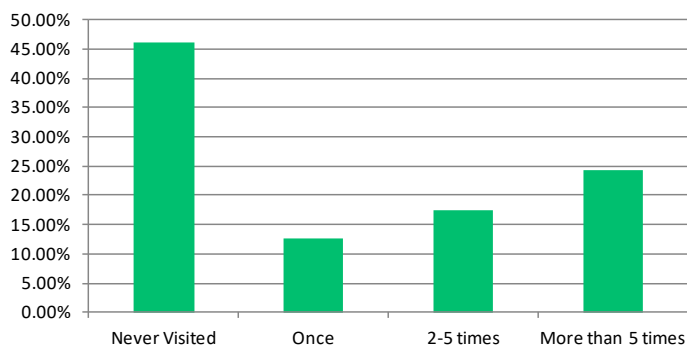
Thank you for participating in the Watkins Lake State Park and County Preserve General Management Plan survey! Your input is appreciated. Visit <http://www.mdnrmanagementplans.org/watkins-lake/> for more information!



Public Input Survey Results

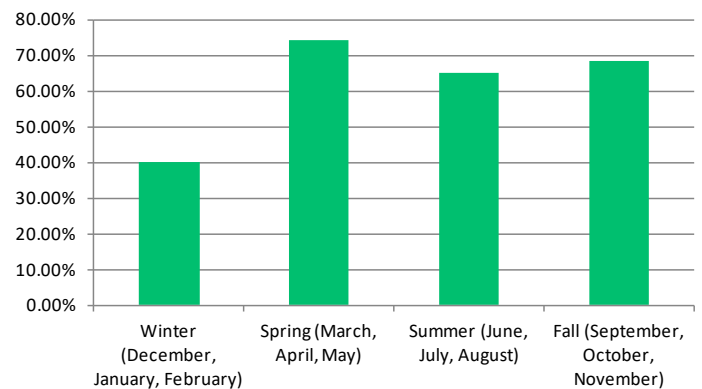
Q1: HAVE YOU VISITED WATKINS LAKE STATE PARK AND COUNTY PRESERVE (WLP) IN THE PAST, AND IF SO, HOW OFTEN HAVE YOU VISITED?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
NEVER VISITED	45.97%	114
ONCE	12.50%	31
2-5 TIMES	17.34%	43
MORE THAN 5 TIMES	24.19%	60
ANSWERED QUESTION		248
SKIPPED QUESTION		0



Q2: IN WHICH SEASONS HAVE YOU VISITED? CHECK ALL THAT APPLY

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
WINTER (DECEMBER, JANUARY, FEBRUARY)	40.00%	54
SPRING (MARCH, APRIL, MAY)	74.07%	100
SUMMAR (JUNE, JULY, AUGUST)	65.19%	88
FALL (SEPTEMBER, OCTOBER, NOVEMBER)	68.15%	92
ANSWERED QUESTION		135
SKIPPED QUESTION		113



Q3: PLEASE CHECK ALL THE ACTIVITIES IN WHICH YOU PARTICIPATED AT WLP?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
SCENIC VIEWING	70.00%	91
WILDLIFE AND NATURE OBSERVATION	67.69%	88
HIKING/WALKING/RUNNING	66.15%	86
BIRDING/BIRD WATCHING	51.54%	67
FISHING	13.85%	18
NON-MOTORIZED WATERCRAFT USE	10.77%	14
PICNICKING	10.77%	14
FORAGING (MUSHROOMS, BERRIES)	9.23%	12
CROSS-COUNTRY SKIING	2.31%	3
SNOWSHOEING	0.77%	1
OTHER (PLEASE SPECIFY)	14.62%	19
ANSWERED QUESTION		130
SKIPPED QUESTION		118

Other (please specify):

- Mountain bicycle riding on rail bed trail
- Visiting family homestead
- Cycling with our dogs
- Enjoying this beautiful place
- Shed antler hunter
- Exercising my dog
- Photographing wildlife
- Examining the remaining evidence of the railroad and the activities connected to it
- Hunting in future please
- Wood love camping
- Would like to kayak in lake when access points are available
- Biking the trail
- Photography
- Did not know that this was a State Park. Now that we are aware we are very excited about what this will become!!!! Love to bike, hike, walk, nature watch, forage, fish, cross country ski, picnic
- Photography
- Habitat type informal viewing
- Botanizing
- Wild plants and wild flowers observation

- Horse back riding but would love to be able to hunt there also season appropriate

Q4: OF THESE ACTIVITIES, WHICH ONE IS THE MOST IMPORTANT TO YOU?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
SCENIC VIEWING	1.57%	2
WILDLIFE AND NATURE OBSERVATION	34.65%	44
HIKING/WALKING/RUNNING	20.47%	26
BIRDING/BIRD WATCHING	16.54%	21
FISHING	8.66%	11
NON-MOTORIZED WATERCRAFT USE	0.00%	0
PICNICKING	0.79%	1
FORAGING (MUSHROOMS, BERRIES)	3.15%	4
CROSS-COUNTRY SKIING	0.00%	0
SNOWSHOEING	0.00%	0
OTHER (PLEASE SPECIFY)	14.17%	18
ANSWERED QUESTION		127
SKIPPED QUESTION		121

Other (please specify):

- Would like to be able to ride our horses here
- Hunting would be #1 if allowed
- Biking
- I cannot limit myself to one of the above; it's impossible to engage in birding or scenic viewing without also hiking/walking...
- Hunting
- Hunting
- I would like to preserve as much of the park as possible as it is, and try to keep human activity to a minimum. We are in a position, and have a very unique opportunity to provide a tremendous conservational/educational use for the prairie fen on the Western part of the park. We owe future generations the preservation of the prairie fen that borders Arnold Rd. on the North, Fay Lake Rd. to the West and the old railroad bed to the South. Don't allow any hunting on this Western end of the park (keep human impact very minimal) and allow limited foot traffic (marked trails only) along key points of interest. The state has a very small percentage of prairie fen left and I think using it for educational purposes along a marked foot trails system would be a responsible way to use this part of the park. We need to do our part to keep these rare plants and grasses and wildlife intact.

8. Biking the trail
9. Most all of the above and enjoy taking pictures
10. All are important and significant....my personal favorites would be biking and hiking!!!
11. Hunting
12. Hunting
13. Horseback trail riding
14. Horse trails
15. Horse back trail riding and hunting
16. Hunting
17. Hunting
18. Hunting

Q5: WHY HAVEN'T YOU VISITED WLP? CHECK ALL THAT APPLY

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
LACK OF INFORMATION	68.75%	77
LACK OF TIME	15.18%	17
TOO FAR TO TRAVEL	14.29%	16
LACK OF PARK AMENITIES	5.36%	6
PARK ENTRY FEE (RECREATION PASSPORT)	0.89%	1
I HAVE A DISABILITY THAT PREVENTS ME FROM VISITING THE PARK	0.00%	0
OTHER (PLEASE SPECIFY)	24.11%	27
ANSWERED QUESTION		112
SKIPPED QUESTION		136

Other (please specify):

1. I live in Maryland
2. New to the area
3. Didn't know of it
4. I didn't know it was there
5. Never knew it was there
6. Did not know about it
7. Didn't Know it was there
8. Just learned of it
9. No camping
10. I didnt know about it
11. Never heard of it

12. Never heard of it
13. Didn't know it existed
14. JUST found out about this park via facebook
15. Just haven't explored that area yet
16. Didn't know about it
17. I want to. Just haven't had the time. Planning on it soon.
18. Didn't even know about it!
19. I do not know where or how to appropriately access the property.
20. Didn't really know it existed
21. I would like to see ORV trails.
22. Lack of time but retiring soon and exploring more!
23. Recently heard about the new park being created.
24. I used to raise cattle there.
25. Not are of it.
26. xx
27. Didnt know it was a park

Q6: PLEASE SELECT THE ACTIVITIES, ENHANCEMENTS, OR FACILITIES YOU LIKE TO SEE AT WATKINS LAKE STATE PARK AND COUNTY PRESERVE IN THE FUTURE?

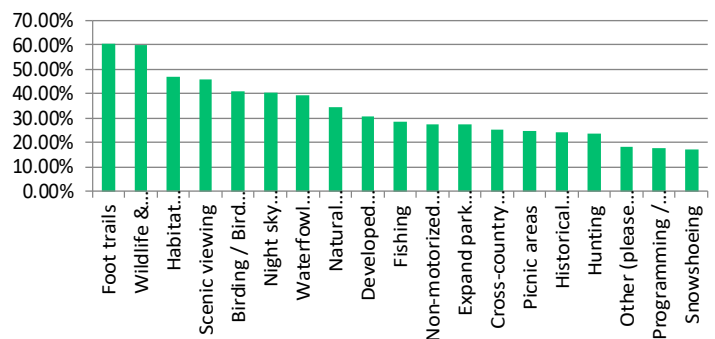
ANSWER OPTIONS	RESPONSE PRECENT	RESPONSE COUNT
FOOT TRAILS	60.26%	138
WILDLIFE AND NATURE OBSERVATION	59.83%	137
HABITAT RESTORATION	47.16%	108
SCENIC VIEWING	45.85%	105
BIRDING/BIRD WATCHING	41.05%	94
NIGHT SKY VIEWING	40.61%	93
WATERFOWL VIEWING	39.30%	90
NATURAL RESOURCE EDUCATION/ INTERPRETATION	34.50%	79
DEVELOPED NON-MOTORIZED TRAIL ON RAIL CORRIDOR	30.57%	70
FISHING	28.38%	65
NON-MOTORIZED BOATING ACCESS	27.51%	63
EXPAND PARK BOUNDARY	27.51%	63

CROSS-COUNTRY SKI TRAILS	25.33%	58
PICNIC AREAS	24.89%	57
HISTORICAL EDUCATION/ INTERPRETATION	24.45%	56
HUNTING	23.58%	54
PROGRAMMING/ EVENTS	17.90%	41
SNOWSHOEING	17.03%	39
OTHER (PLEASE SPECIFY)	18.34%	42
ANSWERED QUESTION		229
SKIPPED QUESTION		19

Other (please specify):

- Equine trail development
- Restoration of the house to it's original state
- Equestrian trails
- I like it the way it is. It feels natural- unlike a designated park
- Restore and Include the old Watkins farmhouse as part of the park
- Bike trails
- With the defacing of Sanilac Petroglyphs recently I think it's necessary for the public to be educated about the rich indigenous history in this county.
- Swimming beach
- I would have also checked "non motorized boat access" PROVIDED that the consensus is that paddlers do NOT disturb/displace the waterfowl
- I would like to preserve as much of the park as possible as it is, and try to keep human activity to a minimum. We are in a position, and have a very unique opportunity to provide a tremendous conservational/ educational use for the prairie fen on the Western part of the park. We owe future generations the preservation of the prairie fen that borders Arnold Rd. on the North, Fay Lake Rd. to the West and the old railroad bed to the South. Don't allow any hunting on this Western end of the park (keep human impact very minimal) and allow limited foot traffic (marked trails only) along key points of interest. The state has a very small percentage of prairie fen left and I think using it for educational purposes along a marked foot trails system would be a responsible way to use this part of the park. We need to do our part to keep these rare plants and grasses and wildlife intact.
- Accessible trails (for wheelchair users and those with mobility issues), bathrooms- accessible bathrooms
- camping
- Archery

- Tent Camping
- Mountain biking
- Waterfowl hunting
- Camping
- Camping
- Campground
- Interpretive signage, deer hunting
- In the hunting comment "Bow" hunting because of safety
- Tent camping
- Waterfowl hunting
- More trails
- Camping
- Camping
- Would very much like to see some type of rail-2-trail added to area for possible connections between Manchester to Brooklyn and beyond
- Restrooms
- Bike trails
- Biking, walking, hiking trails...also for making paths that wheel chair bound can get out and enjoy nature more.
- Public promotion
- Additional hiking trails
- Preserve house
- Camping
- Motorized trails, ORV, UTV
- Horseback riding
- Horse trails
- Horse trails
- Limit rustic camping
- Hunting
- I would enjoy motorized trail riding both in the winter and warmer months at this park.



Q7: WHAT ONE ACTIVITY, ENHANCEMENT OR FACILITY WOULD YOU MOST LIKE TO SEE?

ANSWER OPTIONS	RESPONSE COUNT
ANSWERED QUESTION	199
SKIPPED QUESTION	49

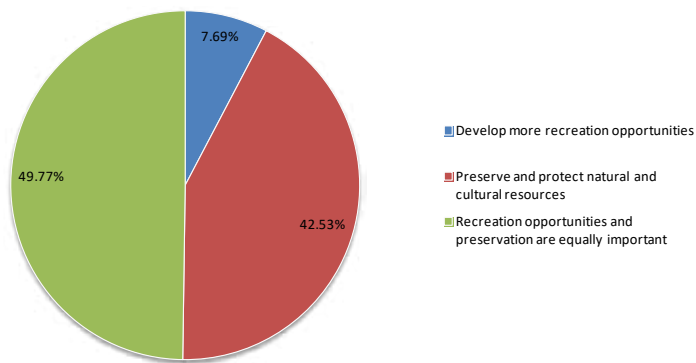
1. Equine use access
2. Restoration of home and barns
3. Historical information about the Watkins family and land.
4. Complete trail west to Fay Lake. Also, mow trail around grassland NE of main parking lot and into woods (old logging trails) that connect to the grassland.
5. More trails
6. Maybe more information on waterfowl that can be seen on the lake
7. A wild bird sanctuary with feeders to attract birds, especially during migration. Also perhaps a facility with educators, where visitors could learn about birds, nature and the area in general.
8. Habitat restoration
9. Scenic viewing
10. Inclusion and restoration of the old Watkins farmhouse as part of the park
11. Observing waterfowl and creatures on land and water
12. Hunting/ maybe a youth only hunting area. As a parent, I would love to mentor my kids in hunting at this park.
13. Hunting would be great. Would understand if waterfowl was not allowed though.
14. Eliminate the Public Road, Arnold Road which goes straight thru Watkins Lake. Make it a gravel bike path, but not for vehicles.
15. Hunting
16. Rustic camping
17. A museum or section of a museum that depicts the different eras of Native history i.e. Paleoindians, Early & late woodland etc up to recent challenges of the pottawotomie to stay in MI, etc.
18. Wildlife Viewing
19. A rustic campground.
20. Beach
21. Walk/ hike trail improvement and expansion. Most of the existing trail is very straight, I prefer a wandering curvy path
22. More non motorized use trails
23. Maybe some raised platforms or decks into the water so that you can see over the cattails at the southern side
24. Picnic facility, bathroom
25. Trail extension
26. Swimming beach
27. Foot trails
28. NO....NO.....NO... WATERFOWL HUNTING did I mention NOOOO WATERFOWL HUNTING
29. Safer exit from parking area on Arnold Road--turning left means exiting just beyond a blind curve
30. Walking trails
31. A FOOT ONLY trail through the wooded high ground south of the rail bed which takes people to the highest point (near the old flag pole) and back along the base of the ridge to the rail bed (I've done this walk MANY times and one can return to the rail bed without entering the off-limits area). This provides both an introduction to the history of the area and an opportunity to enjoy a spectacular view
32. Habitat improvement
33. Habitat Restoration
34. Fishing
35. Hunting
36. Hunting
37. Waterfowl viewing
38. Fish stocking
39. Horse access- trailer
40. Bird watching
41. Trails
42. Paved trail for biking.
43. Preserve the fen; no hunting in that area; foot trails for education in that area
44. Accessibility in everything you do
45. Non motorized trails connecting WLP to Manchester and Grass Lake.
46. Mtb trail, rustic bike/hike camp site
47. Restroom or portapot
48. Archery range
49. Fishing
50. Hiking
51. Walking trails, historical interpretation or wildlife displays, play areas for children
52. N/a
53. Non motorized trails
54. Trails
55. Camping
56. Bow Hunting
57. Nature/outdoor recreation education
58. Hunting
59. Mom motorized boat access
60. Hunting
61. Trails
62. Rail trail development

63. Hiking
64. Trails
65. Hunting
66. Natural habitat management
67. Waterfowl observing
68. Hiking trails
69. Restroom
70. Education building
71. Open for hunting
72. Foot trails
73. Fishing pier
74. Camping
75. Non motorized boat access
76. Fishing
77. Hunting
78. Camping
79. Campground
80. A campground even primitive would be a great enhancement
81. Keep it as close to nature as possible
82. Hunting
83. Interpretation
84. Fishing area
85. Bike trails
86. Hunting
87. Something like the Carl T Johnson center in Cadillac
88. Interpretive signage
89. Hiking trails
90. Trails
91. Night sky viewing
92. Trails
93. A fishing pier--I have never been, so I know there may be one there already, but as someone with out a boat or kayak, being able to get out over the water is so much more fun than finding the shore spot only.
94. Scenic viewing
95. Natural resource interpretation
96. Bike trails
97. Full hookup RV sites
98. Trail on rail
99. Hunting
100. Trail Improvements
101. Hunting
102. Hiking trails
103. Bow Hunting
104. Off leash dog area
105. Haven't been yet, so it's hard to say. Camping and trails to walk is always a great thing to have
106. Camping
107. Camping
108. plenty of trash cans (to try to stop littering), recycling can if possible. some kind of vault toilet near parking area (if there is not already one- i have not been here yet!)
109. Hiking trails!!
110. Not sure, do not know enough about the area yet to give a good answer.
111. Trails
112. Hiking
113. Trails
114. Open to hunting of all kinds including waterfowl
115. Community events to educate the community about DNR, conservation, etc.
116. Camping
117. Bike trail.
118. Equestrian trails
119. Night sky viewing
120. Night sky viewing
121. Camping
122. Fishing and stocking.
123. A parking area
124. rail-2-trail added in connection with longer trails between communities in Washtenaw & Jackson counties and further beyond.
125. Development of foot trails other than that along former railroad
126. Keep bicycles out
127. Dark sky preserve
128. Hunting
129. Managed hunting of waterfowl, deer, turkey.
130. Bike trail
131. Kayaking
132. Habitat restoration
133. camping (but if that is not an option, night sky viewing)
134. long hard packed/paved hiking biking trails...get people and bikes off the main roads...
135. A small canoe or kayak launch area. Connection to Nan Weston Preserve via the rail trail.
136. Habitat enhancement and restoration.
137. Education programs
138. Restoration
139. Natural resource education/interpretation
140. Habitat restoration
141. Expansion of park boundaries

142. A restoration management team for that site
143. Cross country ski trails
144. Perhaps an observation tower.
145. I am not thoroughly familiar with existing amenities, but in general I'd really love a place to swim! I understand the liability issues there, but if the lake is swimmable, I'd love to be able to use it.
146. Walking trails
147. Habitat restoration
148. Hiking trails
149. Preserve/restore house for historic interpretation
150. Habitat Restoration
151. Preservation of natural area for bird sanctuary.viewing.
152. Birdwatching
153. Camping
154. ORV Routes
155. Habitat for birds and wildlife. Limited to foot traffic via boardwalk or foot path.
156. Hiking trails to previously unavailable areas of the park.
157. Development of the trail system
158. Dispersed/backpack camping opportunities!
159. Clear indications of where to park, and what the park hours are.
160. restrict access to the lake. leave it to the wildlife.
161. Habitat restoration
162. American flag pole
163. Expansion of park boundaries
164. Wildlife (birds) viewing
165. Hunting
166. Non-motorized connection to Manchester
167. Development of the rail corridor into a PAVED multi-use trail for biking, walking, running, and skating.
168. Natural habitat restoration.
169. Development of non-motorized trail
170. Wildlife viewing platform
171. Non-motorized transportation/ trails
172. Allow livestock grazing to preserve the open meadows.
173. Addition of waterfowl hunting
174. Non motorized trail to the Village of Manchester.
175. Trails for hiking
176. Fishing
177. More trails through out the park
178. Bike trail
179. Hunting
180. Hunting
181. The ability to access lands purchased with MNRTF monies for hunting and fishing
182. Several Horse back riding trails starting off the entrance On Austin Rd, separate from all other activities in the Watkins Lake State Park, you need to double the size of The Park. Mike&Diana Arnold, Arnold Rd
183. Expand park boundaries to allow for loop trails.
184. Trails for foot traffic only- no mountain bikes
185. Horseback trails, trailer parking area
186. Horse trails
187. Hunting
188. Both hunting and horse trails
189. Somewhere to put kayaks in
190. Rustic camping
191. Hunting
192. Hunting
193. Viewing area for the egret rookery
194. Hunting, I cannot understand why this is not on your list of choices.
195. More fishing opportunity
196. Waterfowl hunting
197. Motorized trail riding limmited to 20 miles per hour.
198. Leave it as it..
199. Hiking

Q8: WHAT IS YOUR PREFERENCE FOR THE FUTURE OF WLP?		
ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
DEVELOP MORE RECREATION OPPORTUNITIES	7.69%	17
PRESERVE AND PROTECT NATURAL AND CULTURAL RESOURCES	42.53%	94
RECREATION OPPORTUNITIES AND PRESERVATION ARE EQUALLY IMPORTANT	49.77%	110
ANSWERED QUESTION		221
SKIPPED QUESTION		27

What is your preference for the future of WLP?



Q9: PLEASE PROVIDE ANY ADDITIONAL COMMENTS YOU MAY HAVE ABOUT WATKINS LAKE STATE PARK AND COUNTY PRESERVE.	
ANSWER OPTIONS	RESPONSE COUNT
ANSWERED QUESTION	106
SKIPPED QUESTION	142

1. Picnicing, camping and fishing are available at nearby Hayes State Park. Would like to keep Watkins Lake State Park as undeveloped as possible.
2. Cultural, political, and environmental aspects of Watkins Lake State Park are all of immense historical value. Thank you for all of your efforts to develop, restore and preserve this valuable piece of Michigan history.
3. Thanks for your efforts! I'm a direct descendant.
4. My wife and I love the park and have enjoyed it many times. Keep up the good work!
5. I am a relative of the Watkins family and love being able to walk the trails and enjoy the waterfowl. Thank you for

acquiring this piece of property for Michigan residents to enjoy for generations to come

6. I would hope this park would not allow hunting and prohibit guns.
7. Has anyone considered acquisition and restoration of the Watkins homestead adjacent to the park for historic preservation purposes? The family and that home hold rich historical significance to the area.
8. Very opposed to hunting there
9. Please let it remain as natural and pristine as it is now with no additional developments. There are plenty of activities elsewhere- this place is special and deserves to be treated as such!
10. This place on earth is spectacular. Let's keep it that way. Ban pesticide use. Keep as a game refuge (no hunting). Let future generations learn by observing this natural area as my parents and my generation have.
11. I know at early meetings hunting was mentioned more than once as a high probability. Why is it not open?
12. Thanks
13. Rustic Camping should be considered.
14. Preserve its historical and natural beauty
15. Would love to see more trails throughout the park. Such a fun place to explore!
16. We've been taking our children there for 10 years to observe the birds, deer, fish, and frogs. It would be nice to be able to see better on the southern part of the access road
17. It would be nice to be able to swim at a nature preserve without a developed beach area.
18. NEED SLOT LIMITS FOR PERCH FISHING. A lot of ice fisher people took advantage of it in its first season
19. the historical farmhouse should be somehow annexed and restored
20. As a person who has been enjoying that area for the past 60 plus years, I hope it will be reserved as a wildlife sanctuary, just as Mr. Trolz planned.
21. buying land to connect to the sharonville game area would enhance both parks
22. 1. I am VERY nervous visiting this park during the fall given that it is currently impossible to ascertain where hunting is allowed and where it is not, so this needs to be addressed sooner rather than later 2. The one thing this park DOES NOT NEED is mountain biking. Mountain biking is completely incompatible with virtually EVERY activity which I have checked. I was first introduced to this park through a walk with Faye; the group, which included seniors and children, stopped FREQUENTLY to discuss features of the park, and that type of activity would be COMPLETELY IMPOSSIBLE if we were dodging bikes every ten seconds. Southeast Michigan has ALREADY turned over countless miles of single-track trail to mountain bikers, and the line has to be drawn SOMEWHERE. Watkins Lake would be a good start.

23. With waterfowl migration staging protected, the opportunity to enrich the visit by education and expansion to park would be beneficial to south central Michigan and its communities.
24. To the greatest extent possible, hunting opportunities should be included as a compatible park use.
25. I would like to see hunting out there
26. Hunting opportunities would greatly benefit the area.
27. There is a unique opportunity to preserve this park in a natural state and enhance wildlife/waterfowl habitat. I'm a hunter, but hunting should not be allowed on this acreage.
28. Horse trailer parking
29. Fish stocking
30. If you incorporate contemporary or historical information about Native Americans- please consult unbiased resources and reach out to nearby federally recognized tribal offices for their input and cultural perspective.
31. Restrooms. Drinking water stations. Please discourage parking on Noggles Rd.
32. we have numerous acres of public land to hunt in Southern Michigan; some of this park should remain off limits to hunting in return for preservation of resources
33. mountain biking is not a compatible activity--there are already too many areas that have been taken over by the mountain bikers--they destroy the opportunities for a nice hike.
34. No hunting.
35. I would be a frequent visitor if there are activities for children!
36. Keep it in it's natural state as much as possible. Rustic camping only.
37. No e
38. Thank you!
39. none...
40. keeping the land as natural as possible is most important
41. Allow hunting, but restrict access to foot traffic only.
42. Love the area and would love the opportunity to camp and enjoy what the park has to offer
43. I just learned about this at a NRC meeting and it is at top of my list to go and visit it
44. "Wildlife & nature observation" and "Birding/Bird watching" categories in this survey sound too similar.
45. I really don't know anything about WLSP, but believe it's important for our State to provide natural areas for both preservation and low-impact recreation.
46. This place is amazing! The state has really picked a gem.
47. ONLY SO MANY LICENSES SHOULD BE GIVEN BY LOTTERY, SO IT WOULD PRESERVE DEER POPULATION AND ANTLER SIZE SHOULD BE CONSIDERED.
48. Will be curious to visit.
49. Washtenaw county has opened many parks but they are restrictive as far as what you are allowed to use them for. They don't allow hunting or to even walk your dog on their parks and it would be a shame to see that happen here to.
50. More info/maps too
51. Great place, a lot of potential. Keep up the great work.
52. Be sure to put up security cameras for those who like to vandalize and destroy property
53. Thank you for your hard work and deep thought in regards to our shared lands.
54. I love this park and hope that it remains pretty close to what it is now. Thank you for your hard work and deep thought toward our shared lands.
55. More advertisement is needed. I forgot about it.
56. This is a great park.
57. I would like to see more natural recreation possibilities and less hunting/motorized activities in this state park & preserve in the future.
58. This property has interesting variety--it's a lovely place.
59. enjoy the peace and quiet of the place...once it gets too popular, I would not go as often
60. Needs restrooms/running water
61. Southern Michigan needs more public land access for hunting but it needs to be managed properly.
62. I have been going to Watkins lake since the early 1980's. I would like to see the area preserved.
63. I would like to see the entirety of the park to be under a stewardship plan.
64. Please complete trail to Manchester, convey Native American and underground rail road history
65. JUST DO IT!!!! Build it and they will come!!!!
66. It would be awesome to connect the trail to Nan Weston preserve rail trail and village of Manchester. I understand it would take land acquisition and coordination with the village of Manchester.
67. Live nearby and no idea it existed
68. It's such a beautiful piece of land, I think restoring the parts that were farmed to native habitat would only increase that beauty, while allowing some trails beyond just the rail bed for hiking loops and enjoying the bounty of it's beauty.
69. Connecting the trails to Brooklyn and Manchester should be a high priority, as well as to other state lands in the area.
70. Expansion of park boundaries to include the adjacent Arnold property- home to a third of the state's highest-quality fen- should be an extremely high priority. Other adjacent properties, especially those which make up other parts of the same wetland complex, should also be strongly considered for acquisition. Habitat restoration and natural areas preservation- including

the reintroduction of fire disturbance in the form of controlled burns- should be prioritized over recreation in the majority of the park. An emphasis on educational programming or interpretive features should be used to communicate to the public about what services the land provides to us even when we aren't able to physically access ever corner of it. Motorized recreation should be kept to an absolute minimum, if provided for at all. Horse access should be carefully considered, as horses may contribute to erosion and the spread of invasive plant species. If boat access of any kind is provided for, detailed signage should address how to appropriately clean watercraft before and after putting in at the park. Water access facilities should include features which assist people in the appropriate cleaning, limiting the potential spread of certain invasive aquatic species.

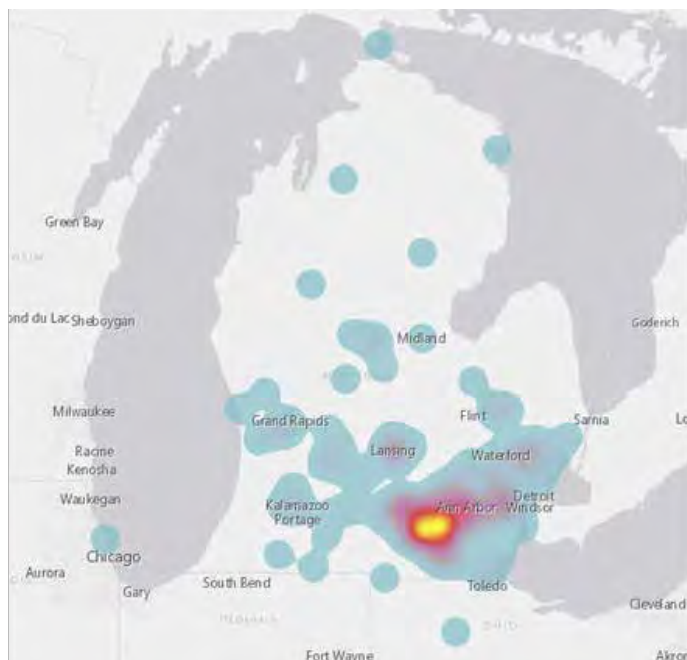
71. Protect key habitats from human impact
72. Now that I know about the park, I will be visiting it soon. The thing I would like most is long trails to walk on, that are maintained (i.e. mowed), and occasional places to sit down and maybe have lunch. Maybe some little signs here and there to tell me what I am seeing, i.e. the names of plants and trees.
73. We'd like an easy hiking trail for our family (toddlers) to enjoy nature and burn energy! :)
74. This park is critical to migratory birds and should not be further developed for "recreation". The park already has a rail-trail and an improved parking lot. More is not necessary or desirable.
75. I live out of county, but hold ownership of my family farm (17037 W. Austin Rd.). I remember visiting the Watkins house as a child. Glad to see this area preserved.
76. Please add more land to the park! It's a lovely spot
77. Please preserve the natural beauty and habitat of this place by responsible management; i.e. no cutting of meadows or destruction of woods and wetlands to replace with swaths of grass like so many Metroparks have done!
78. I have seen more nature while on my ATV then just walking around. Please consider ORV routes.
79. We have less and less animal and bird habitat. We are losing touch with the natural world. every possible effort should be made in all the parks to protect habitat.
80. After traveling to the lakes for years to see birds, I was thrilled when this became a park. My hope now is that we can keep it safe for birds and allow access.
81. We like to birdwatch from the road multiple times per month. The lake does not seem to be well suited for boating/ fishing. due to its shallowness and many years of nutrient loading, it is mostly covered with emergent vegetation that makes kayaking/ canoeing difficult. I would not recommend any type of boat launch. The only fish that i have caught out of the lake on the east side of the road were stunted panfish. I have never tried to fish the west side of the lake. The continued ability to birdwatch from the road should be preserved as well as the grasslands that surround the lake. I would not be in favor of developing those into multi use fields. This park should be left as undeveloped as possible, though vault toilets near the current parking area would be great.
82. Would love to see the field just NE of the parking lot replanted with native grasses and managed with prescribed fire. Habitat restoration!
83. I am an amatuer radio operator, I would like to set my portable radio station up on a picnic table that is adjacent to the parking area.
84. maintain limited parking on the island near the picnic area. Crowds could ruin this unique habitat.
85. Watkins Lake have some special ecosystems such as the large areas of Prairie Fens with their unique species of flora and fauna. More will be found as additional surveys and restoration is made.
86. Please preserve the wildlife as was intended by Mr. Trolz
87. I think it is important to keep watercraft off of the lake so that birds are not disturbed.
88. Please seriously consider developing the rail corridor for multi-use and make sure it is paved also.
89. None
90. Please look to western states to see how they work with the local farmers and ranchers to preserve their open spaces.
91. The occasional bench would be nice
92. Just keep it beautiful.
93. As the chairman of Michigan United Conservation Clubs, Parks & Rec. Comm., I am very interested in this DNR project.
94. We need ample hunting opportunities in this property.
95. Conservation- not preservation should be the orientation of the management plan- whether the recreational uses are consumptive (hunting and fishing) or non-consumptive, they all rely upon the underlying natural resources and their conservation and wise management using all tools to sustain the biodiversity of the area- the larger the area- the easier this is to do.
96. We feel the Watkins Lake Park should be increased to twice the size it is now, protect sensitive areas of the park, such as Fens, water area's, and futher study the Indian cultural area's that were here in the past. We have a chance to make this a very interesting new park.
97. The grassland habitat is every bit as important to birds and wildlife as the wetland and woodlands and should be protected as much as possible while allowing ample opportunities for quiet recreation.
98. It would be great to have an area with mountain bike free trails. Mountain biking is not compatible with hiking or cross-country skiing. The Potawatomi Trail in Pinckney has been lost to hikers and XC skiers due to damage from mountain bikes.
99. Beautiful and so much potential for horseback trails!
100. Beautiful area and close to my home which is great. Will

use this more now

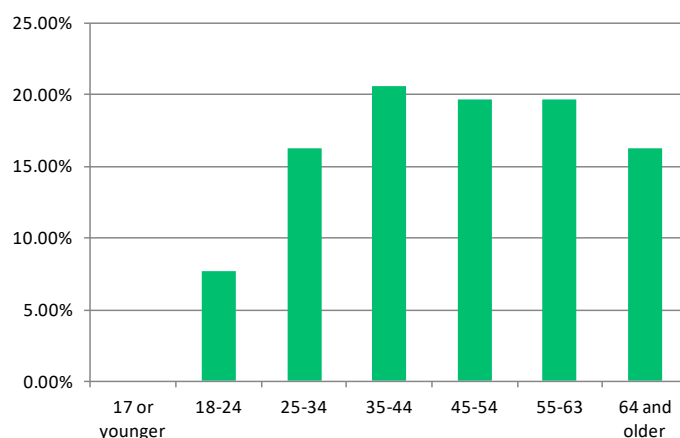
101. I grew up on Horning Road and driving through this property was a common happening, which I have now carried on with my husband and kids, and which my kids have carried on with their friends. Nice to be able to actually walk on the land that we admired for the last 40 years, but also kind of sad to see it be touched. Hoping it is always cared for.
102. parking lot across from the lake(old feed lot). rustic camping. a new historic sign about Royal Watkins to replace the one taken down. BBQ grills. more picnic tables
103. Needs rest room facility. The opportunity for hunting on 1000 acres is not out of the question. Upland, deer, turkey.. waterfowl outside the refuge. Conservation is a must.. we can not a let waterfowl hunting happen on the lake.
104. Hunting should be a primary activity for any new state land in southern Michigan. Are you doing some back door deal with Washtenaw County to prohibit it here?
105. This property is quite large and multi-use trail systems should be considered including motorized trail riding.
106. Leave as untouched as possible

Q10: WHAT IS THE ZIP CODE OF YOUR PRIMARY RESIDENCE?	
ANSWER OPTIONS	RESPONSE COUNT
ANSWERED QUESTION	212
SKIPPED QUESTION	36

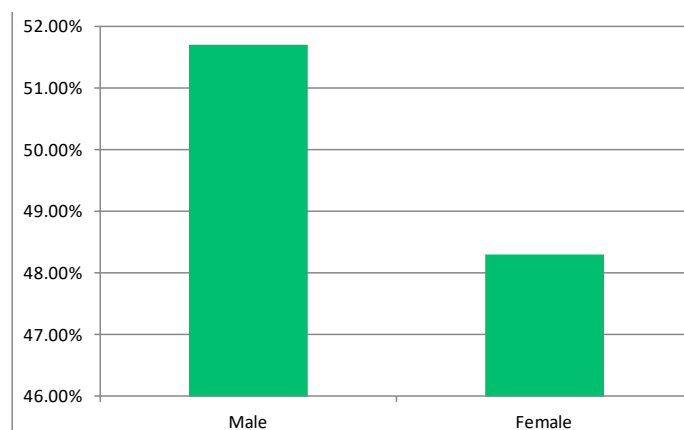
The map below shows respondents' reported zip codes. Brighter colors denote a higher concentration of respondents. Three respondents from out of the area (near Washington DC, Dayton OH, and Bridgeport CT) are not shown.



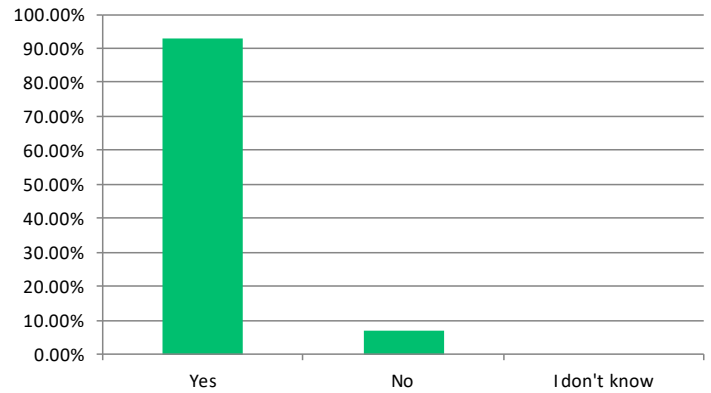
Q11: WHAT IS YOUR AGE?		
ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
17 OR YOUNGER	0.00%	0
18-24	7.66%	16
25-34	16.27%	34
35-44	20.57%	43
45-54	19.62%	41
55-63	19.62%	41
64 AND OLDER	16.27%	34
ANSWERED QUESTION		209
SKIPPED QUESTION		39

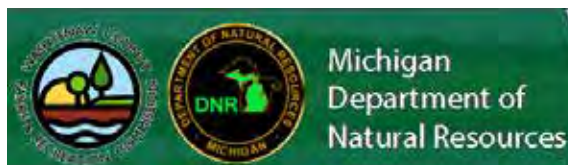


Q12: WHAT IS YOUR GENDER? (OPTIONAL)		
ANSWER CHOICE	RESPONSE PERCENT	RESPONSE COUNT
MALE	51.71%	106
FEMALE	48.29%	99
ANSWERED QUESTION		205
SKIPPED QUESTION		43



Q13: DO YOU HAVE A DNR RECREATION PASSPORT? (OPTIONAL)		
ANSWER OPTION	RESPONSE PERCENT	RESPONSE COUNT
YES	92.86%	195
NO	7.14%	15
I DON'T KNOW	0.00%	0
ANSWERED QUESTION		210
SKIPPED QUESTION		38





Michigan
Department of
Natural Resources



You're invited!

What

Watkins Lake State Park and County Preserve
General Management Plan
Stakeholder Input Meeting

When

Tuesday, September 12th
2:00 - 4:00 pm

Please RSVP to:
Plan Administrator Debbie Jensen
JensenD1@michigan.gov
517-284-6105

Where

Super 8 Banquet Room
419 S. Main Street, Brooklyn, MI 49230

About the plan

The Department of Natural Resources (DNR) Parks & Recreation Division (PRD) and Washtenaw County Parks and Recreation Commission (WCPARC) are in the process of developing a General Management Plan for Watkins Lake State Park and County Preserve. General Management Plans are used to define a long-range planning and management strategy that protects the resources of the site while addressing recreation needs and opportunities. Public and stakeholder input is a critical component of the planning process.

About the meeting

The Watkins Lake State Park and County Preserve General Management Plan team cordially invites you to attend a stakeholder input meeting! The team hopes to gather valuable insights from your organization and other key players. This session will include a brief presentation from the DNR and WCPARC on the planning process and progress, followed by individual and group exercises to gather input to inform the plan. We request that your organization send a maximum of three representatives so we may accommodate everyone. If your organization is unable to attend due to scheduling conflicts, we welcome you to attend the evening session from 6:00-8:00pm of the same day. We hope to see you there!

Input survey

In addition, we are collecting input from park users via an online survey. You may share this link with anyone who may be interested.
<https://goo.gl/MxrKxD>

Project website

www.mdnmanagementplans.org/watkins-lake/

For more information and to RSVP, please contact:

Plan Administrator Debbie Jensen
JensenD1@michigan.gov
517-284-6105



Stakeholder Input Workshop

Summary of Stakeholder Input Workshop

In order to gather targeted input from governmental, non-profit, and business/tourism entities, the Planning Team invited a group of stakeholders to participate in a facilitated input workshop held on September 12, 2017, from 2:00 to 4:00 p.m. at the Super 8 in Brooklyn, MI. Representatives of the Michigan Department of Natural Resources (MDNR) and Washtenaw County Parks and Recreation Commission (WCPARC) provided the stakeholders a brief overview of Watkins Lake State Park and County Preserve (WLP), including its natural and historic resources, its jointly-managed status, and its current recreational offerings. The stakeholders were also presented the General Management Plan process, timeline, and an explanation of the plan elements that their input would inform: the Statements of Significance, the Management Zone map, and a list of Action Items intended to be accomplished over the next ten years.

The 30 stakeholder attendees were divided into small-table discussion groups, which completed a series of exercises describing the park's context, the park itself, the stakeholders' vision for the park's future, as well as the park's potential benefit to the larger community. Each table then reported out to the larger group. The results of the table exercises are outlined below.



Stakeholder Input Workshop participants

STAKEHOLDER INPUT MEETING ATTENDEES	
NAME	REPRESENTING
Bob Jenson	Village of Brooklyn
Dan Ezekiel	Washtenaw County Parks and Recreation Comm.
Pamela Johnson	Norvell Township
Pat Vailliencourt	Village of Manchester
Jeff Wallace	Village of Manchester
Jae Guetschow	Village of Brooklyn
Barb Fuller	Washtenaw County Parks and Recreation Comm. & Washtenaw Road Comm.
Cindy Hubbell	Brooklyn Irish Hills Chamber of Commerce
James Cole	Jackson County Department of Transportation
Laura Sutton	Manchester Historical Society
Michael Overton	Jackson County
Scott Damon	Cambridge Township Fire
Kenny Price	Jackson County Conservation District
Diane Huhn	Michigan Audubon Society
Roy Townsend	Washtenaw County Road Comm.
Coy Vaughn	Washtenaw County Parks and Recreation Comm.
Jim & Jan Knutson	Knutson's Sporting Goods
Bob Marans	Washtenaw County Parks and Recreation Comm.
Julieanna Frost	Walker Tavern & Sienna Heights University
Maggie Bilby	Friends of Walker Tavern
Eric Johnson	Norvell Township
Grant Bauman	Region 2 Planning Comm.
Mark Vysoky	Jackson County Parks & Recreation Comm.
Lori Fitzgibbons	Jackson County Conservation District
Al Petrulis	Camp Dainaya
Bill VanderZouwen	Pheasants Forever
Dane Cramer	Ducks Unlimited
Tanya DeOliveira	Region 2 Planning Comm.
Matt Dame	Norvell Township
Frank Bolak	Walker Tavern & Boy Scouts of America

Exercise 1: Say one word or phrase that describes the Irish Hills area.

Stakeholders' impression of the Irish Hills area include its recreation, wildlife and nature, beauty, lakes and water, rolling hills, vacation homes and cottages, history, and how scenic and peaceful the area is. The words and phrases that were mentioned at two or more tables are listed below.

EXERCISE 1	
ITEMS	TIMES MENTIONED
RECREATION	4
WILDLIFE/NATURAL	4
LAKES/WATER	3
BEAUTY	2
HILLS	2
PEACEFUL/CALMING	2
VACATION CABINS/COTTAGES	2
HISTORIC	2
SCENIC	2

Exercise 2: Say one word or phrase that describes WLP right now.

The stakeholders recognized WLP's abundance of nature and wildlife, but also described the park as hard to find or unknown. Below are words and phrases that were mentioned at two or more tables.

EXERCISE 2	
ITEMS	TIMES MENTIONED
BEAUTIFUL/SCENIC	6
NATURE/WILDLIFE	5
HARD TO FIND/UNKNOWN	4
PEACEFUL/TRANQUIL	4
WATERFOWL/BIRDING	3
HISTORIC	3
OPPORTUNITY/POTENTIAL	3
TRAILS	2

Exercise 3: Say one word or phrase that you want to describe WLP in the future.

Stakeholders would like to see WLP as a place for trail connections, education, birding, and a destination, providing economic advantages, and expanded through acquisition of additional property. The table below shows items mentioned by two or more tables.

EXERCISE 3	
ITEM	TIMES MENTIONED
TRAIL CONNECTIONS	6
EDUCATION	4
DESTINATION	3
BIRDING	2
ECONOMIC ADVANTAGES	2
ADDITIONAL PROPERTY	2

Exercise 4: What natural or cultural aspects should be prioritized at WLP?

Stakeholders prioritized the following for WLP: protecting endangered species, preserving the Underground Railroad history and Native American history, having non-motorized lake access, and prioritizing the lake and other water features. The items that were mentioned at two tables or more are listed in the table below.

EXERCISE 4	
ITEM	TIMES MENTIONED
ENDANGERED SPECIES	4
UNDERGROUND RAILROAD HISTORY	4
NATIVE AMERICAN HISTORY	3
LAKE/WATER FEATURES	3
NON-MOTORIZED LAKE ACCESS	2

Exercise 5: What recreational activities should be prioritized at WLP?

The stakeholders were asked to prioritize recreational activities at WLP, and some even chose to mention activities that were not desirable. Activities they want at WLP include hiking, biking and mountain biking trails, kayaking, cross-country skiing, and star-gazing. Activities they find undesirable include anything motor-vehicle related and camping. The table below lists the "wants" and "don't wants" for items that were mentioned at two or more tables.

EXERCISE 5: "WANTS"	
ITEMS	TIMES MENTIONED
HIKING	5
BIRDING	5
BIKING TRAILS/MOUNTAIN BIKING/FAT TIRE BIKING	4
KAYAKING	4

EXERCISE 5: "WANTS", CONTINUED

ITEM	TIMES MENTIONED
CROSS-COUNTRY SKIING	3
STAR-GAZING	3
FISHING	3
PHOTOGRAPHY	2
PICNICKING	2
REGULATED HUNTING	2
WILDLIFE OBSERVATION	2

EXERCISE 5: "DON'T WANTS"

ITEM	TIMES MENTIONED
MOTORIZED VEHICLES	5
MOTORIZED BOATS	4
OVERNIGHT CAMPING	4

Exercise 6: What are some of the resources in WLP that, if properly leveraged, could benefit the larger community?

Resources stakeholders thought could benefit the larger community were trail connections, educational programs in schools and outdoor classrooms, website information, and off-site rental opportunities. Below, resources mentioned at two or more times are listed.

EXERCISE 6

ITEM	TIMES MENTIONED
TRAIL CONNECTIONS	4
EDUCATION/OUTDOOR CLASSROOM/PROGRAM IN SCHOOLS	4
WEBSITE INFORMATION	2
OFF-SITE RENTAL OPPORTUNITIES	2

Exercise 7: What are some collaboration and partnership opportunities that WLP presents for local communities and stakeholders?

Stakeholders listed schools and libraries, friends group, and government/state and county partnerships as some collaboration and partnership opportunities. The collaboration and partnership opportunities mentioned at three or more times are listed below.

EXERCISE 7

ITEMS	TIMES MENTIONED
SCHOOLS/LIBRARY	5
WILDLIFE GROUPS	4
FRIENDS GROUP	3
GOVERNMENT/STATE AND COUNTY COLLABORATION	3

When the groups were finished with the exercise, a representative of each table presented their group's results to the stakeholders and the planning team. The team will take the results of the stakeholder workshop into account when determining the final 10-year action goals.



Statewide DNR News

Aug. 23, 2017

Contact: [Debbie Jensen](#), 517-284-6105

DNR seeks public input on Watkins Lake State Park and County Preserve general management plan

The Michigan Department of Natural Resources and [Washtenaw County Parks and Recreation Commission](#) are seeking public input on a new general management plan for Watkins Lake State Park and County Preserve in Jackson and Washtenaw counties. The DNR and county officials will host a public meeting Tuesday, Sept. 12, 6 to 8 p.m. at the Super 8 Hotel banquet room, 419 S. Main St. in Brooklyn, Michigan.

The public also is invited to share their opinions and ideas for the park via an online survey available through Sept. 22. A link to the survey is available at www.michigan.gov/watkinslake.

The general management plan will be used to define a long-range planning and management strategy that protects the resources of the park, while addressing recreation and education needs and opportunities. Public and stakeholder input is a critical component of the planning process.

"Public input and feedback is a critical step in thoughtful long-range planning," said DNR Parks and Recreation Chief Ron Olson. "Watkins Lake State Park and County Preserve's location in southern Michigan expands public land access and outdoor recreation opportunities in this part of the state and helps to protect important natural and wildlife habitat."

Watkins Lake State Park and County Preserve is jointly owned and managed by the DNR and the Washtenaw County Parks and Recreation Commission. It is the first state park in Michigan to be jointly managed with a county recreation agency. Designated as Michigan's 103rd state park in August 2016, the park straddles the border of Washtenaw and Jackson counties, located between the cities of Ann Arbor and Jackson.

The 1,122-acre property is a popular watchable-wildlife destination and features beautiful rolling land covered in a mixture of open meadow, mixed hardwoods, low wetland areas, open water and the property's most prominent natural feature, Watkins Lake. The park currently offers hiking, picnicking, fishing and bird-watching, with a small parking area provided off Arnold Road. The property also includes a 4.5-mile former rail corridor that traverses the property from east to west, linking state and county parcels. This corridor has the potential to be developed into a non-motorized, multiuse trail with the possibility of connecting the villages of Manchester and Brooklyn in the future.

The Sept. 12 meeting will begin with a brief presentation on the planning process and progress to date, followed by individual and group exercises to gather input to inform the plan.

Additional information on the DNR's management plan process can be found at www.michigan.gov/parkmanagementplans.

For more information about the public meeting or the proposed plan, contact DNR park management plan administrator Debbie Jensen at 517-284-6105 (TTY/TDD 711 Michigan Relay Center for the hearing impaired) or via email at jensenD1@michigan.gov. Anyone with disabilities who needs accommodations for the meeting should contact Jensen at least five business days before the meeting.

/Editor's note: Accompanying photos are available below for download. Suggested caption information follows.

Watkins Lake State Park and County Preserve, Michigan's newest state park, is located in southern Michigan between the cities of Ann Arbor and Jackson. People are invited to share their ideas on long-term plans for the park, both through an online survey and an upcoming public meeting.

- [WatkinsLake.jpg](#)



The Michigan Department of Natural Resources is committed to the conservation, protection, management, use and enjoyment of the state's natural and cultural resources for current and future generations. For more information, go to www.michigan.gov/dnr.



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Public Input Workshop

Summary of Public Input Workshop

The Planning Team determined that seeking public input to inform the park's preservation and development priorities was advantageous at this stage in the planning process due to the relatively recent acquisition of Watkins Lake State Park and County Preserve (WLP). In order to gather such input, the Planning Team hosted a publicly-advertised input workshop held on September 12, 2017, from 6:00 to 8:00 p.m. at the Super 8 in Brooklyn, MI. The meeting was advertised via a DNR press release/email bulletin, which went to 17,418 individuals that have expressed an interest in DNR news in the region, and via promotion by Washtenaw County on their website and social media. In addition, over 50 park neighbors with property within 500 feet of the park boundary were notified of the meeting by mail. Of the 34 individuals who attended the public input workshop, 18 of them are considered park neighbors.

Representatives of the Michigan Department of Natural Resources (MDNR) and Washtenaw County Parks and Recreation Commission (WCPARC) provided attendees with a brief overview of the park, including its natural and historic resources, its jointly-managed status, and its current recreational offerings. Attendees were also presented the General Management Plan process, timeline, and an explanation of the plan elements that their input would ultimately inform: the Statements of Significance, the Management Zone map, and a list of Action Items intended to be accomplished over the next ten years.

The 34 attendees were divided into small-table discussion groups, which completed a series of exercises describing the park's context, the park itself, the participants' vision for the park's future, as well as the park's potential benefit to the larger community. Some exercises included a voting component. Each table then reported out to the larger group. The results of the table exercises are outlined below.

PUBLIC INPUT WORKSHOP ATTENDEES	
NAME	REPRESENTING
Andrew Bonkowski	Tamara Denby
Shaun Bonkowski	Sybil Kolon
Gerald Rensi	Bill Searles
Tom Dyer	Charles Baker
Linda Dyer	Erleen Clark
David Lamb	Jerry Clark
Sylvia Kay	Shane Morse
Jeff Darr	Laura Watkins Koelewijn
Kathy Brown	Tim Koelewijn
Tim Mulcahy	Maureen Heslip
Jack Martin	Steven Duvall
Janice Kessler	Tammy West-Brown
Clayton Kessler	Diana Arnold
Len Benfant	Mike Arnold
Ryan Johnson	Cameron Denby
Bill Hubbell	Gary Trolz
Scott Engel	Barb

Exercise 1: Say one word or phrase that describes the Irish Hills area.

When people think about the Irish Hills area today, recreation, lakes and water, rolling hills, greenery, peacefulness, nature, and Native American history come to mind. The words and phrases that were mentioned at two or more tables are listed below.

EXERCISE 1	
ITEMS	TIMES MENTIONED
RECREATION/CAMPING	5
HILLS	5
PEACEFUL/QUIET	3
FORGOTTEN/RUN DOWN	3
NATURE/WILDLIFE	2
GREENERY	2
LAKES/WATER	2
NATIVE AMERICAN HISTORY	2
OPEN SPACE/RURAL	2

Exercise 2: Say one word or phrase that describes WLP right now.

The public described WLP right now as peaceful or quiet, historical, and having abundant nature and wildlife. Below are the words and phrases that were mentioned by two or more groups.

EXERCISE 2	
ITEMS	TIMES MENTIONED
PEACEFUL/QUIET	4
NATURE/WILDLIFE	4
HISTORICAL	4
PRISTINE	3
UNDERUTILIZED/UNDERDEVELOPED	3
BEAUTIFUL	2
WATERFOWL	2
VIEWS/VISTAS	2

Exercise 3: Say one word or phrase that you want to describe WLP in the future.

Public participants that attended the input sessions would like to be able to describe WLP as a place for human and animal sanctuary, history, education, and pristine with trail opportunities. The table below shows items mentioned by two or more tables.

EXERCISE 3	
ITEM	TIMES MENTIONED
TRAILS	5
SANCTUARY/REFUGE	3
HISTORICAL	3
EDUCATIONAL	2
PRISTINE	2
FARMHOUSE/LAND ACQUISITION	2
QUIET/PEACEFUL	2

Exercise 4: What natural or cultural aspects should be prioritized at WLP?

When asked about prioritizing natural or cultural aspects at WLP, attendees thought that WLP's history, including Native American history, lake and waterways, wildlife and habitat preservation, and trails should be prioritized. Once lists of items were created, each group was asked to pick their top three natural/cultural priorities among their own group's items. The list below compiles each group's items and votes,

and shows only the items that received at least one vote. The Underground Railroad history and restoration and preservation of native species and habitat received the highest votes in at least three of the groups, with Native American history also of high importance among five groups.

EXERCISE 4		
ITEM	TIMES MENTIONED	VOTES
UNDERGROUND RAILROAD HISTORY/GENERAL HISTORY	6	19
RESTORATION/PRESERVATION OF NATIVE SPECIES/HABITAT (SENSITIVE AREAS)	3	18
NATIVE AMERICAN HISTORY	5	12
PRESERVE DARK SKY/DARK PARK	2	8
TRAILS/CONNECTIVITY	3	7
LAKES/WATERWAYS	4	5
WATERFOWL/BIRD VIEWING	1	5
ADDITIONAL PARKING	1	3
GAME REFUGE	1	3
HISTORY OF WATKINS LAKE	1	3
GET RID OF COYOTES	1	3
NO HUNTING	1	2
WATER QUALITY IMPROVEMENT	1	1
HORSE TRAILS	1	1

Exercise 5: What recreational activities should be prioritized at WLP?

Meeting attendees were asked to prioritize recreational activities that they do and do not desire at WLP. Activities they want incorporated include hiking and biking trails, horseback riding trails, picnic areas, and areas for wildlife viewing. Items they felt were undesirable at WLP include hunting, motorized vehicles, and camping. After "wants" and "do not wants" were listed, each group was asked to pick their top three recreational priorities among their own group's "wants"; "do not wants" were not voted on. The table below compiles each group's votes and items, and shows only the items that received at least one vote. Hiking is the highest voted recreational priority mentioned in all six public groups, with picnicking, biking, and horseback trails of somewhat high priority mentioned in at least four groups.

EXERCISE 5: "WANTS"

ITEMS	TIMES MENTIONED	VOTES
HIKING	6	21
PICNICKING	5	12
BIKING	4	11
HORSEBACK TRAILS	5	10
BIRD WATCHING	4	5
CAMPING	1	5
DREDGING OF LAKE (FOR MORE BIRDS)	1	4
WILDLIFE EDUCATION	1	4
HISTORICAL TOURS	1	4
PORTABLE RESTROOMS	1	4
GUIDED NATURE WALKS	1	3
STARGAZING	1	2
FISHING	2	2
PROPERTY LINE IDENTIFICATION	1	2

EXERCISE 5: "DON'T WANTS"

ITEM	TIMES MENTIONED
HUNTING	6
MOTORIZED VEHICLES	6
CAMPING	3

EXERCISE 6 - NATURAL/CULTURAL ITEMS

ITEM	VOTES
WILDLIFE DIVERSITY/GAME REFUGE (PROTECT SENSITIVE AREAS)	18
TRAILS/CONNECTIVITY	15
DARK SKIES/DARK PARK	9
NATIVE AMERICAN HISTORY	6
UNDERGROUND RAILROAD	4
RAILROAD HISTORY	4
WATERFOWL	4
NATIVE SPECIES (RESTORATION/ PROTECTION)	1
LAKE (KEPT NATURAL)	1

EXERCISE 6 - RECREATIONAL ITEMS

ITEM	VOTES
HIKING	17
HORSEBACK RIDING	13
BIRD WATCHING	7
WILDLIFE EDUCATION	7
PROPERTY LINE IDENTIFICATION	4
BIKING	3
HISTORICAL TOURS	2
KAYAK LAUNCH	2
PICNICKING	1
PORTABLE RESTROOMS	1

Exercise 6: What are some of the resources in WLP that, if properly leveraged, could benefit the larger community?

As each group presented the highest-voted items for natural/cultural and recreational activities, the planning team transferred those ideas into a separate exercise, combining similar items. As the attendees left the input session, they voted on their top two items from the Natural/Cultural collective priorities list and top two items from the Recreational collective priorities list. This afforded them the opportunity to vote on an item that was not mentioned at their own table. Below are all of the collective priorities. The two Natural / Cultural items receiving the most votes were wildlife diversity / game refuge, and trails / connectivity. The two Recreational items receiving the most votes are hiking and horseback riding.

The team will take the results of the public workshop into account when determining the final 10-year action goals.

Public Input Meeting

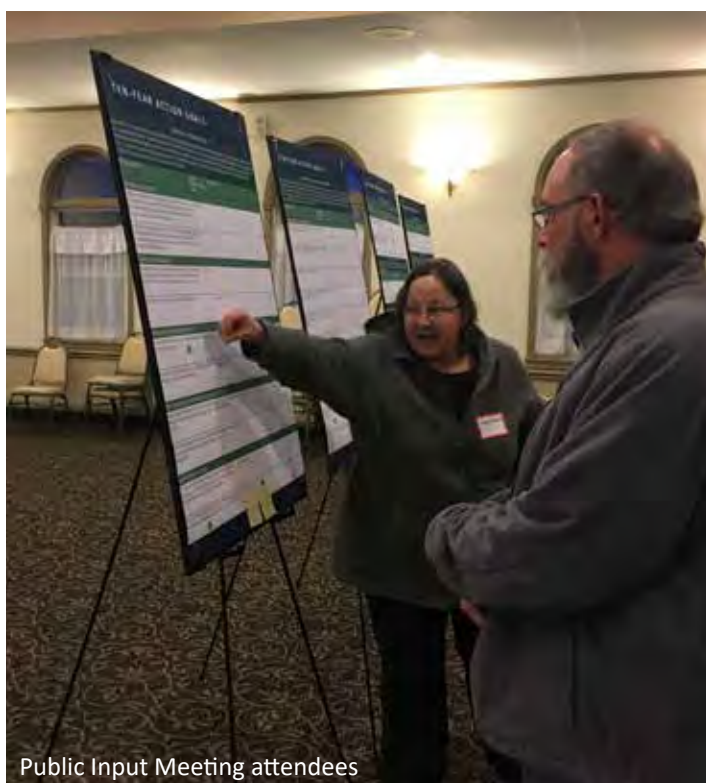
Summary of Public Input Meeting

The public was invited to share their thoughts about Watkins Lake State Park and County Preserve Draft General Management Plan at a public meeting that was hosted by the DNR and Washtenaw County Parks and Recreation Commission on March 7th, 2018, from 6:00-8:00 p.m. at the Super 8 Hotel in Brooklyn, MI. The general public was notified about the meeting through a press release, internet postings, and email notifications. A total of 33 attendees were recorded on sign-in sheets.

The meeting began with a brief introduction of planning team members. Introductions were followed by a short overview of the general management plan process, Watkins Lake State Park and County Preserve (WLP), and its Draft General Management Plan contents. The presentation was followed by a short question and answer period. Questions related to topics such as hunting and potential conflicts with users, equestrian use, the trail easement, dog friendly trails, and consistent use of rules and regulations between the state and county owned land. After the question and answer period, attendees were asked to review the presentation boards that included the following excerpts of the Draft General Management Plan: Statements of Significance, Management Zone Plan, and 10-Year Actions Goals.

Participants were presented with several optional methods to express their comments, thoughts, and opinions. These methods included “sticky notes” for affixing comments directly onto the presentations boards, as well as a comments sheet, which included six questions pertaining to the Draft General Management Plan contents, that could be filled in and left behind. Two copies of the complete Draft General Management Plan were available to attendees during the meeting for review and they were also advised of the project website, <http://mdnrmanagementplans.org/watkins-lake>, where they could access the draft plan at their leisure and submit comments via e-mail. Online commenting was available until March 20th. Most attendees used the sticky note method of commenting, as well as, the comment sheet.

In addition to soliciting comments on the Draft General Management Plan contents, prioritization of the action goals was also sought. Participants were given six dots to vote for their preferred action goals from the 10-year Action Goals list. Some of the top voted action goals included items related to establishing hiking trail systems and connections between WLP, Brooklyn, and Manchester, exploring the potential for a Dark Sky viewing location, addition of parking areas, maintaining and restoring wetlands and other natural communities, and establishing a carry-in boat access site. Below is a list of all action goals, their number of votes, and all sticky note comments that attendees wrote. These items, along with other input from the public, will be considered as the planning team finalizes the General Management Plan.



Public Input Meeting attendees



Public Input Meeting attendees

PUBLIC INPUT MEETING ATTENDEES	
NAME	REPRESENTING
David Lamb	RRWS
Janice Kessler	
Steven Duvall	
Matt Dame	
Pat Vaillencourt	Village of Manchester
Jerry Rensi	Norvell Township
Reed Bright	Manchester Township
Linda Bright	Manchester Township
Sylvia Kay	
Sabrina Blaine	Manchester Township
Jae Guetschow	Village of Brooklyn
Dan Heslip	Manchester Township
Ryan Johnson	Manchester Township
Steve Enzer	Brroklyn
Kathleen Noggle	
Matt Noggle	
Jenny Noggle	
Erleen Clark	Humans
Tim Koelewijn	
Laura Watkins Koelewijn	Watkins Ancestors
Maureen Heslip	Property Owner
Bill Sweeney	Manchester Township
Lisa Sweeney	Manchester Township
Ron Bonner	
Lynn Okenka	Park User
Charity Steere	Park User
Tom Dyer	
Linda Dyer	
Jeff Wallace	Village of Manchester
Martin Way	Village of Manchester
Michael McDonald	MSPAC
Margaret Bialecki	Property Owner
John Hummer	Brooklyn Exponent

PLANNING TEAM ATTENDEES	
NAME	REPRESENTING
Debbie Jensen	DNR-PRD
Jim Knox	DNR-PRD
Ray Fahlsing	DNR-PRD
Nikki VanBloem	DNR-PRD
Vicki McGhee	DNR-PRD
Dennis Tison	DNR-WLD
Jeff Braunscheidel	DNR-FD
Brandon Hartleben	DNR-LED
Kira Macyda	WCPARC
Allison Krueger	WCPARC
Christy Summers	Beckett & Raeder, Inc.
Morgan Haffey	Beckett & Raeder, Inc.

SIGNIFICANCE STATEMENTS

Inter-agency Partnership

Watkins Lake State Park and County Preserve, Michigan's 103rd State Park, is the result of a partnership between the DNR and Washtenaw County Parks and Recreation Commission. This is the first state park to be jointly managed by the DNR and a county recreation agency, exemplifying the benefits of inter-agency cooperation.

Natural Features

The variety of habitats within WLP, including wetlands and a large Prairie Fen complex of exceptional quality, create a heightened potential for the presence and observation of rare or threatened and endangered species. The eastern massasauga rattlesnake, bald eagle, Mitchell's satyr butterfly, and rare grassland birds make their homes here. The park is another link in a chain of protected lands in the region.

Peaceful Recreation

The rolling topography and expansive undeveloped areas within this park create beautiful vistas that are easily accessible from the former rail corridor running through the property. Such vantage points are rarely found on public land in the region. The scenic Watkins Lake provides a calm-water paddling and fishing experience with the absence of shore development. These recreation opportunities at WLP complement the more developed amenities and experiences offered at nearby Walter J. Hayes State Park.

Waterfowl Viewing

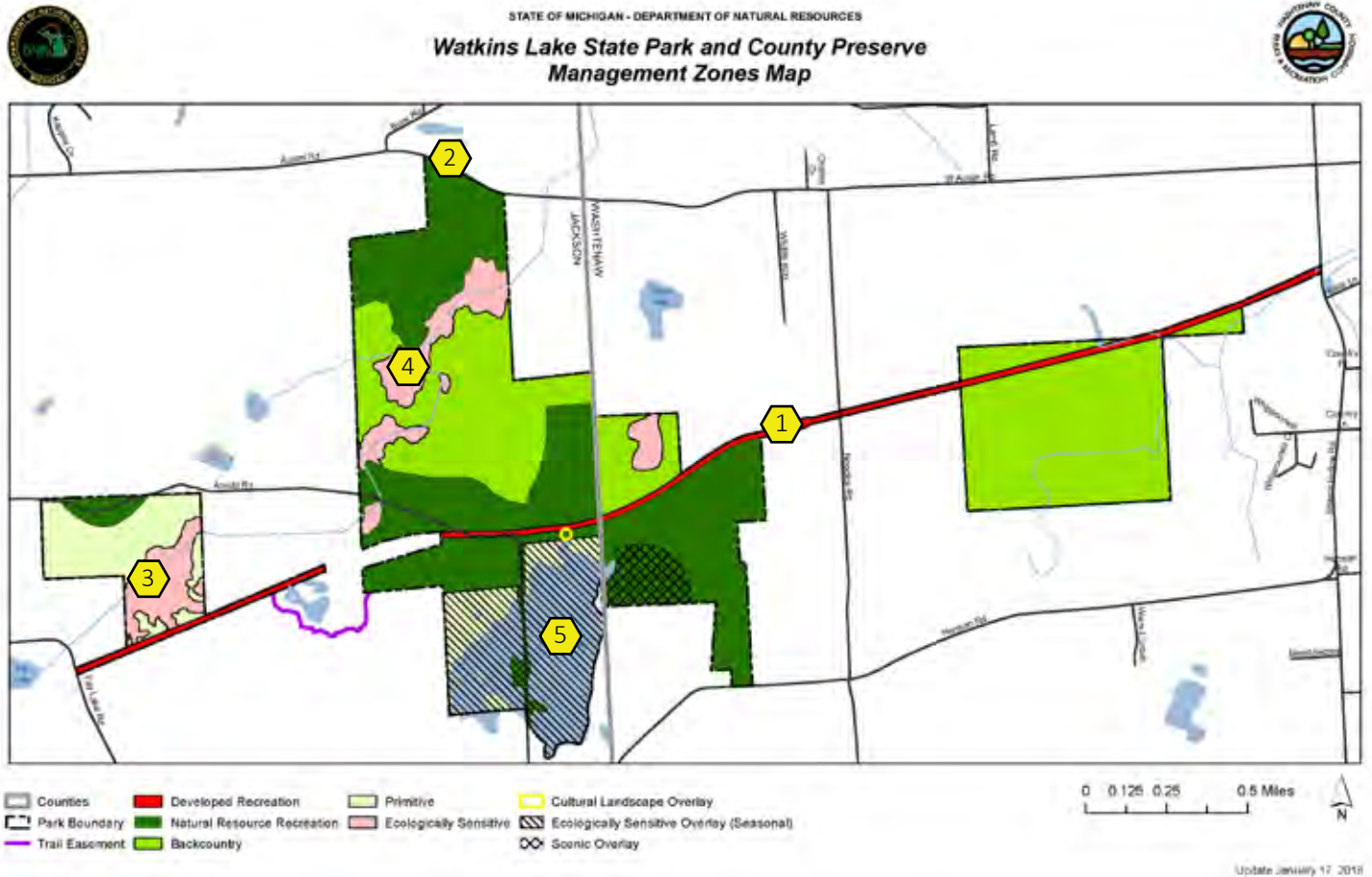
WLP's waterfowl refuge provides an excellent opportunity to see a wide variety of Michigan's waterfowl, including diving ducks, such as scaup, canvasbacks, and wading birds. The refuge draws birders from the surrounding area and beyond, boosting the park's attendance, particularly during the spring and fall migration. The road bisecting Watkins Lake provides easy access to exceptional waterfowl viewing opportunities.

Community Connectivity

Within the greater Irish Hills area, between the urban centers of Jackson and Ann Arbor, WLP is situated in a region long associated with recreation and tourism. The preservation of WLP for public benefit and use reinforces and perpetuates the region's character. The former rail corridor that runs through the park not only provides connectivity within the park, but creates the potential for future trail connections to the nearby village centers of Manchester and Brooklyn.

Rural Michigan History

WLP's history represents a well-documented example of the pioneering spirit in rural Michigan, providing many opportunities for interpretation. Its settlement story begins when the Watkins family moved to Michigan in 1834 and farmed their 800 acres of land, growing crops and raising livestock. The Watkins farm has close ties to the Underground Railroad network that operated in the area, assisting a number of those fleeing slavery. As rail transportation expanded, L. D. Watkins traded the railroad right-of-way through the property for his own private flag stop depot that once stood on the land now part of the park. Evidence in the surrounding area suggests the potential for historic and pre-historic sites here.



DRAFT MANAGEMENT ZONE MAP COMMENTS		
ZONE	COMMENT LOCATION	COMMENT
DEVELOPED RECREATION	1	Do not allow dogs
NATURAL RESOURCE RECREATION	2	Not good for a driveway
NATURAL RESOURCE RECREATION	2	Too dangerous for a driveway
ECOLOGICALLY SENSITIVE	3	Hunting in Ecologically Sensitive areas???
ECOLOGICALLY SENSITIVE	4	Crossing wetlands and recreation path to get to hunt
ECOLOGICALLY SENSITIVE OVERLAY (SEASONAL)	5	Prioritize early detection/rapid response for phragmites and reed canary in the pond

0 0.125 0.25 0.5 Miles











Update January 17, 2018

110

TEN-YEAR ACTION GOALS

GENERAL ACTION GOALS









Many of the 10-year action goals for Watkins Lake State Park and County Preserve are general in nature and apply within all of the management zones. These often deal with park-wide issues, such as invasive species control, universal access, developing Stewardship and Emergency plans, or marketing the park's many recreational opportunities to a wider audience of potential users. Many of the overall maintenance and operational issues of running a state park also result in the need for actions across all zone boundaries, such as law enforcement.

ACTION GOALS	TARGET COMPLETION DATE	PRIORITIES
NATURAL RESOURCES		
Implement the Natural Resource Stewardship Plans, with an emphasis on early detection and rapid response, and on protecting high quality natural communities and sites occupied by protected species	Ongoing	
Enroll land as appropriate within WLP as managed land in the Eastern Massasauga rattlesnake Candidate for Conservation with Assurances agreement with the U.S. Fish and Wildlife Service	1 Year	
CULTURAL RESOURCES		
Evaluate existing above ground structures relating to historic agricultural use of the land and determine priorities for preservation, relocation, or removal	1 Year	
Complete a phase one archaeological study	5-10 Years	
RECREATION OPPORTUNITIES		
Finalize the trail easement that connects State property across private land	1 Year	
Establish hiking trail systems, highlighting overlook locations and points of interest	1-5 Years	
EDUCATION/INTERPRETATION OPPORTUNITIES		
Explore opportunities for natural/environmental interpretive programming through internal and external partners	Ongoing	
Develop a plan for historical interpretation using various resources, including available oral history and historic photographs	3-5 Years	
MANAGEMENT FOCUS		
Continue to remove existing interior fencing, public hazards, and other structures in accordance with recommendations of the site evaluation	Ongoing	
Work with partners to establish a non-motorized trail connection between WLP, Brooklyn, and Manchester	Ongoing	

TEN-YEAR ACTION GOALS

GENERAL ACTION GOALS, CONTINUED

Many of the 10-year action goals for Watkins Lake State Park and County Preserve are general in nature and apply within all of the management zones. These often deal with park-wide issues, such as invasive species control, universal access, developing Stewardship and Emergency plans, or marketing the park's many recreational opportunities to a wider audience of potential users. Many of the overall maintenance and operational issues of running a state park also result in the need for actions across all zone boundaries, such as law enforcement.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
MANAGEMENT FOCUS, CONTINUED		
Continue to explore land acquisition of properties within the GMP Proposed Project Boundary	Ongoing	
Finalize park Emergency Plan including Safety Plan and Wildfire Plan in coordination with WCPARC	1 Year	
Complete property boundary marking	1 Year	
Establish compatible rules and regulations for WLP between WCPARC and DNR	1 Year	
Establish land use order and/or local watercraft control ordinance prohibiting gas motor boat launching and operation	1 Year	
Establish Wildlife Conservation Order to open a portion of the land to hunting (with appropriate restrictions) north of the former rail corridor in Jackson County	1 Year	
Explore potential for establishing WLP as a Dark Sky viewing location	3-5 Years	
DEVELOPMENT		
Develop and implement a coordinated signage and wayfinding program	Ongoing	
Evaluate need for additional parking areas and develop as determined	1-3 Years	
Develop and implement directional signage to the park	1 Year	

TEN-YEAR ACTION GOALS

ECOLOGICALLY SENSITIVE ZONE

This zone addresses the critical habitat that must be preserved and protected. Public access may be restricted to protect the resource. At WLP this includes sensitive prairie fen habitat, which includes threatened and endangered species.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
Continue to protect, maintain and restore prairie fens and other natural communities in accordance with the Stewardship Plan	Ongoing	

PRIMITIVE ZONE

The Primitive Zone emphasizes the natural resources of the area. It is managed to allow only dispersed, low frequency and low impact recreational use in the zone. Maintaining a high quality natural resources condition dictates the extent to which recreational improvements are allowed. For this reason, native species and natural processes take precedence over visitor accommodation. The following 10-Year Action Goals propose only very low levels of development, in order to protect the important habitat.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
Continue to maintain and restore wetlands and other natural communities	Ongoing	

BACKCOUNTRY ZONE

The character of the Backcountry Zone is intended to be natural, with minimal evidence of human impact. The zone allows for various low-intensity, non-motorized recreational opportunities such as hiking and cross-country skiing. The natural features of this zone also provide opportunities for hunting and nature observation. The Backcountry Zone allows for slight modifications of the landscape (such as trails) to accommodate a use where it is consistent with the protection of the resource.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
Partner with Ducks Unlimited to improve waterfowl habitat	1-3 Years	

NATURAL RESOURCE RECREATION ZONE



Active recreation, at a medium to high density of use, conducted in natural areas is the hallmark of the Natural Resource Recreation Zone. There is an emphasis on resource quality over recreation, but in this zone, moderate levels of uses are allowed. Vegetation may be managed to facilitate recreational use and to maintain an aesthetically appealing landscape, as well as to address such things as hazard trees, and to manage pests and disease. The 10-Year Action Goals are intended to promote moderate to high levels of recreation compatible with the natural character of the zone. Action goals are designed to ensure that visitors will be engaged in outdoor activities in diverse natural land settings.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
Study the feasibility of establishing a non-motorized carry-in boating access site on Watkins Lake	1-3 Years	

TEN-YEAR ACTION GOALS

DEVELOPED RECREATION ZONE

Active recreation with high density of use, conducted in areas not designated for natural resource significance, is characteristic of the Developed Recreation Zone. In this zone, recreation dominates with natural resource attributes enhanced where possible. This zone encompasses the former railroad corridor through the park.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
Explore opportunities for non-motorized trail connectivity west of Arnold Road	Ongoing	
Designate the former rail corridor within the park as hike and bike east of Arnold Road and hike only west of Arnold Road (until connections are made)	1-3 Years	



ECOLOGICALLY SENSITIVE OVERLAY

This zone addresses critical habitat that must be preserved and protected. A seasonal ecologically sensitive overlay prohibits public access in the vicinity of Watkins Lake in the spring and fall in accordance with the Land Use Order of the Director to protect migrating waterfowl.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
Refer to general action goals		


CULTURAL LANDSCAPE OVERLAY

This zone addresses the overall setting in which may be found historic structures, and/or non-structural evidence of the traditions, beliefs, practices, arts, crafts, and social intuition of any community.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
Evaluate and record any extant cultural resources associated with the train depot site	1-3 Years	
Provide interpretation (in association with the park-wide interpretive plan) either on or off site	5-10 Years	

SCENIC OVERLAY

The Scenic Overlay recognizes that there are aesthetic qualities to be preserved and protected at Watkins Lake State Park and County Preserve.

ACTION GOALS	TARGET COMPLETION DATE	VOTES
Continue to recognize, protect, and promote the scenic viewsheds over-looking Watkins Lake and provide access through the development of signed foot trails.	Ongoing	

GENERAL ACTION GOALS COMMENTS	
ACTION GOAL	COMMENT
NATURAL RESOURCES	
Enroll land as appropriate within WLP as managed land in the Eastern Massasauga rattlesnake Candidate for Conservation with Assurances agreement with the U.S. Fish and Wildlife Service	Love this! L. Whitney Watkins would occasionally bring one of these shy snakes into the living room of the big house at the farm for educational purposes
CULTURAL RESOURCES	
Evaluate existing above ground structures relating to historic agricultural use of the land and determine priorities for preservation, relocation, or removal	Highlight the agricultural history in the area raising of livestock
EDUCATION/INTERPRETATION OPPORTUNITIES	
Explore opportunities for natural/ environmental interpretive programming through internal and external partners	There should be substantial interpretation and info regarding the fen areas and WHY this public owned land will not be open to the public. Otherwise people will be angry because they don't understand how fragile the fens are
MANAGEMENT FOCUS	
Work with partners to establish a non-motorized trail connection between WLP, Brooklyn, and Manchester	Connecting to Manchester and Brooklyn ASAP is very critical
Work with partners to establish a non-motorized trail connection between WLP, Brooklyn, and Manchester	Please be sure that any proposed equestrian use trail is totally separate from hike and bike trail
Work with partners to establish a non-motorized trail connection between WLP, Brooklyn, and Manchester	Equestrian must pick up after their horse
Work with partners to establish a non-motorized trail connection between WLP, Brooklyn, and Manchester	I love horses but unfortunately this can be hard on the land
Continue to explore land acquisition of properties within the GMP Proposed Project Boundary	Horseback riding maybe 2 day a month
Establish Wildlife Conservation Order to open a portion of the land to hunting (with appropriate restrictions) north of the former rail corridor in Jackson County	The Watkins family historically did not hunt on this property
NATURAL RESOURCE RECREATION ZONE COMMENTS	
ACTION GOAL	COMMENT
Natural Resource Recreation Zone	There needs to be a contingency plan for SLEDDING. WLP has the best and safest places in the area!

Public Input Meeting Comment Sheet

1. Do you agree with the park Significance Statements? Would you add or change anything to the statements?

COMMENT
COMMENT
Yes

2. Do you agree with the Draft Management Zones? If not, What would you change?

COMMENT
COMMENT
Yes
Generally, I would have more Backcountry and less Nature Resource Recreation.

3. Are there any additional Action Goals you would like to propose?

COMMENT
COMMENT
Horseback riding. This is a great place to see the stars!
Dark Sky!
Prescribed Fire! Replanting of native grasses. Develop volunteer work crew for removal of invasive species (low impact control such as pulling of herbaceous invasives)
Annual wild life species list. Create a volunteer work list for invasive removal or species count list, etc. (friends of WLP)

4. Are there any proposed Action Goals you don't think should be included? If so, please explain.

COMMENT
COMMENT
Hunting

Public Input Meeting Comment Sheet, Continued

5. Other Comments:

COMMENT
COMMENT
I am sad that we lost some great pasture land.
1. Would prefer NO HUNTING (don't consider killing recreational) if permitted, understand will provide clear dividing lines between hunting and non-hunting areas.
2. Would prefer NO DOGS. Pristine areas have not experienced canines. If you can post clear dividing lines for hunting, you can do so to keep dogs out of portion of park and for persons.
I have a particular interest in this property due to my family history. My father was born in the farm house and 5 generations of relatives lived on that property. I am please with the respect and thought that has gone into this process. I do, however, strongly advocate for no hunting on this property. My great great grandfather Lucius Dennison (L.D. Watkins) hunted worldwide. This property was considered sacred – Allow these creatures to live in conjunction with the public in peace. There are abundant opportunities for hunting elsewhere, including nearby! Thanks!
Love the Dark Sky Park
Like the dark sky idea but we live nearby and have a hill to gaze stars on and ambient light from Brooklyn is a problem.

6. Provide any comments you may have on the Management Zone Map below.

COMMENT
COMMENT
Invasive plants/species control – Is that phragmites on lakeshore along Arnold Road? If so, can it be stopped now?

Public Input Meeting Flip Chart Comments

Equestrians should pick up their horse's waste

Dog owners MUST clean up after their dogs ^{excellent!}
Purchase property the Watkins home is on and restore it!

Don't pave anything! ← excellent!!!
—Agreed

No Hunting — there is abundant area hunting property — it is not needed or, based on earlier groups wanted here. Is mentioning this again ^{the} political reasons??
—AGREE!!

No motors on lake — gas or electric!
—AGREE!!

COMMENT

note: The comments stated below are a more formal replication of the comments illustrated in the image above

COMMENT

Equestrian should pick up their horse's waste

Dog owners MUST clean up after their dogs

Purchase property the Watkins home is on and restore it!!

Don't pave anything

No hunting — there is abundant area hunting property — it is not needed or, based on earlier groups, wanted here. Is mentioning this again for political reasons!?!?

No motors on lake — gas or electric!

Online Comments Received

Online Comment #1, Received 02/24/2018

Hello. I enjoy the park in winter ice fishing. I think you're closing too early at Feb 15 as no birds seem to be migrating yet. The eagles are really enjoying the little fish I leave for them.

Online Comment #2, Received 03/05/2018

Dear Debbie,

As a resident of the area surrounding the Watkins Lake State Park and County Preserve, I would like to add some comments to the discussion on shared use.

It is my hope that the 4.5 mile trail be made for use to people such as myself who enjoy recreation and the natural and beauty aspects of this area on horseback. The equine animal is a non-motorized opportunity to experience the world without the noise and threat to native wildlife that call the park their home.

Of course, just as there are considerations to be made for use by all visitors of the park in fragile areas, so too should consideration be made to contain horses and others to certain trails.

Thank you for this opportunity to express my hopes and dreams for this wonderful park

Online Comment #3, Received 03/15/2018

Comments on the development of Watkins Lake State Park:

My dog Otis and I have enjoyed the park for over 18 months through long walks, either on the rail trail or into the open pasture and surrounding woodland.

The beauty of the park is that it is quiet and has low usage- often we are the only vehicle in the Arnold parking lot.

Realizing that we won't have the park to ourselves as it becomes more popular I hope that the development will not include pavement, mountain biking, camping, and other "modern" recreational activities.

A fishing dock would be nice as well as a covered small pavilion overlooking the lake.

As it is now it does offer hiking, cross country skiing, as well as star gazing without need of further development.

It is a great place to go for a day trip.

Thank you,

Online Comment #4, Received 03/15/2018

I live in Manchester and believe part of this park should be open for hunting. My son and I are avid hunters and hunting property is hard to obtain these days. It is only fair that all outdoor lovers get to enjoy this large piece of property, not just hikers, bikers and bird watchers. I think dividing the property as proposed is perfect with the 320 acres north of the railroad bed open for hunting. The railroad bed is a nice visual border so there would be no confusion as to where hunters can hunt and where they can't.

Online Comment #5, Received 03/16/2018

I heard from old timers that the Trolz ranch, that I believe comprises most of the Watkins Lake SP was at one time one of the largest cattle ranches in the Mid West.

If so a plaque or at least a sign might be appropriate to commemorate the history.

At the intersection of Arnold Rd. and Herman Rd. there is an old hand painted sign warning of the consequences of “rustling” cattle on the Trolz spread (I know in Montana rustlers were hung on the nearest tree.

Online Comment #6, Received 03/20/2018

I would like to comment on the plan for the 110 acre parcel on the far West end of the park which Arnold Rd. borders on the North, and the old rail trail on the South. Approximately half of the that is fen, or the Ecologically Sensitive Zone and the rest is considered Primitive and even a smaller section Natural Resource Recreation.

The Primitive and Natural Resource Recreation Zone area in this parcel combined would only be about 5% of the whole park. I would propose that the State of Michigan not jeopardize the fen or interfere with the wildlife in this area of the park by allowing any off trail use at all. Keep the fen and mixed conifer swamp in this 5% part of the park preserved as natural as possible while keeping the public restricted to walking paths only, which would allow access to key features on the fen. Keep this small percentage of the park a Game Sanctuary where hunting is not allowed and only foot-traffic is allowed on marked trails, and focus is on maintaining the wetlands to improve the landscape context of the fen. Do not allow the public to trample grasses and vegetation in this area, which will occur with some of the activities they are currently allowed in the Primitive Zone (eg, hiking, hunting/trapping, fishing)this is only 5% of the whole park, Why not consider keeping this small section dedicated as a “totally natural & pristine” part of the park small foot-trails, unmolested wildlife, wetlands, grasses and plants etc.



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
LANSING



KEITH CREAGH
DIRECTOR

August 29, 2017

To: Chairman Stuck, Nottawaseppi Huron Band of Potawatomi Indians
Chairmen Warren, Pokagon Band of Potawatomi Indians
Chairman Sprague, Gun Lake Band of Pottawatomi Indians

Dear Chairman:

The Parks and Recreation Division (PRD) of the Department of Natural Resources (DNR), in association with Washtenaw County Parks and Recreation Commission (WCPARC), is in the process of developing a general management plan for the jointly owned and managed Watkins Lake State Park and County Preserve. Designated as Michigan's 103rd state park in August, 2016, the park straddles the border of Washtenaw and Jackson counties, between the cities of Ann Arbor and Jackson.

The 1,122-acre property is a popular watchable-wildlife destination and features beautiful rolling land covered in a mixture of open meadow, mixed hardwoods, low wetland areas, open water and the property's most popular feature, Watkins Lake. The lake attracts diverse waterfowl species as a stop-over site during the spring and fall migration. A large prairie fen complex has been identified on the property, along with several threatened and endangered species, including the Mitchell's satyr butterfly and the Eastern massasauga rattlesnake. The park currently offers hiking, picnicking, fishing and bird-watching and includes a 4.5-mile former rail corridor that traverses the property from east to west, linking state and county parcels.

The DNR uses general management plans (GMPs) to define a long-range planning and management strategy that will protect the natural, cultural and historic resources of the site, while considering education and recreation opportunities. A planning team, representing various specialties within the DNR, has been established and is meeting regularly to develop the GMP for this site.

The planning process includes several opportunities for input. An on-line survey is currently available by following a link on the Watkins Lake State Park and County Preserve webpage at www.michigan.gov/watkinslake, the results will be used to inform the planning team. A stakeholder focus group has been scheduled for Tuesday, September 12, 2017, from 2:00 p.m. to 4:00 p.m. at Super 8 Brooklyn, 419 South Main Street, Brooklyn, Michigan 49230, with an open public meeting from 6:00 p.m. to 8:00 p.m. the evening of September 12. In addition, the draft plan will be available for review and comment prior to adoption early next year.

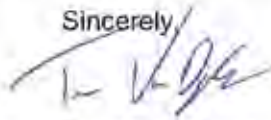
For additional information on our management plan process, please visit our website at www.michigan.gov/parkmanagementplans.

Watkins Lake State Park and County Preserve General Management Plan
Page 2
August 29, 2017

We would like to give the Tribes the opportunity to meet with us independently of the larger group to discuss the management plan process and any thoughts you may have in relation to Watkins Lake State Park and County Preserve. In addition, you are welcome to send representatives to the stakeholder focus group meeting or the public meeting in September.

Please contact either Ms. Debbie Jensen, PRD Management Plan Administrator at 517-284-6105, or myself, if you have any questions or would like to arrange a meeting.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Trevor VanDyke', is written over a horizontal line.

Trevor VanDyke
Legal and Legislative Director
Tribal Coordinator
517-284-6237

cc: Mr. Coy Vaughan, WCPARC
Ms. Debbie Jensen, DNR
Mr. Murdock Jemerson, DNR
Mr. Jim Knox, DNR



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
LANSING



KEITH CREAGH
DIRECTOR

August 22, 2017

Dear Neighbors,

The Michigan Department of Natural Resources, in association with the Washtenaw County Parks and Recreation Commission, is developing a general management plan for Watkins Lake State Park and County Preserve. As a park neighbor, you are being invited to participate in an interactive community engagement workshop to help park planners and managers look to the future with your perspective in mind. The public input meeting will be held on Tuesday, September 12, from 6:00 to 8:00 pm, at the Super 8 Hotel banquet room, 419 S. Main St., Brooklyn, MI 49230.

The general management plan for Watkins Lake State Park and County Preserve will be used to define a long-range planning and management strategy that protects the resources of the site while addressing recreation and education needs and opportunities.

Public input is an important part of the DNR's planning process. The meeting will begin with a brief presentation on the property, the planning process and progress to date, followed by individual and group exercises to gather input to inform the plan. This meeting is one of several opportunities for the public and stakeholders to be involved. In addition, people are invited to share their opinions and ideas through an online survey available until September 22 through a link at www.michigan.gov/watkinslake. The public will also be given the opportunity to review and comment on the draft plan in the future.

Additional information on the DNR's General Management Plan process is available at www.michigan.gov/parkmanagementplans.

For more information about the public meeting or the general management plan, please contact DNR park management plan administrator Debbie Jensen via Email at Jensend1@michigan.gov or phone 616-204-2979.

Sincerely,

Debbie Jensen
Park Management Plan Administrator
DNR Park and Recreation Division

Coy P. Vaughn
Washtenaw County Parks and
Recreation Commission
Interim Director



Appendix C: PRD and WCPARC Stewardship Plans

Natural Resource Stewardship Plan

Watkins Lake State Park & County Preserve (State Park Portion)



July 2018

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Note: Excerpt of the Natural Resource Stewardship
Plan does not include Appendix D.

Scope

The scope of this plan is stewardship (protection and management) of natural resources within the state land portion of Watkins Lake State Park & County Preserve (WLP). This document is guided by and falls under the WLP General Management Plan approved in 2018 (*pending*). This plan does not cover the important work of cultural resource stewardship, recreation management (except for recreational impacts on natural features), or management of the Washtenaw County side of the park. The county portion of the park will be managed according to Washtenaw County's Stewardship Plan for the site. The other topics are already addressed by the General Management Plan or other documents. The timeframe for this plan is the 10-year period 2018–2027.

Overview

Watkins Lake State Park & County Preserve is 1,109 acres, spanning Jackson and Washtenaw Counties. The Jackson County portion is 704 acres of state-owned land and administered as a state park. The Washtenaw County portion is 405 acres of county-owned land and administered as a county preserve. The land in both counties was purchased from one private landowner. More information about the history and context of WLP can be found in the general management plan.

This park contains the following exceptional natural features recognized by the Michigan Natural Features Inventory (MNFI):

- Prairie Fen
- Mitchell's Satyr (*Neonympha mitchellii mitchellii*)
- Eastern Massasauga (*Sistrurus catenatus*)
- Slippershell Mussel (*Alasmidonta viridis*)
- Henslow's Sparrow (*Ammodramus henslowii*)
- Grasshopper Sparrow (*Ammodramus savannarum*)
- Dickcissel (*Spiza americana*)
- Bald Eagle (*Haliaeetus leucocephalus*)
- Tamarack tree cricket (*Oecanthus laricis*)

Michigan DNR, Parks & Recreation Division (PRD) has used the MNFI information along with information provided by Michigan DNR staff to develop a set of conservation targets for the park. These are the natural features that will be the focus of stewardship (protection, management, or restoration) for the duration of this plan:

- Watkins Lake
- Prairie Fen & Associated Wetlands
- Grassland
- Dry-mesic and Dry Southern Forest

Each of these conservation targets contains individual species or other elements that will receive special consideration when developing management and protection actions. High-level, long-range stewardship goals are identified for each conservation target.

Four broad threats have been identified to the integrity of the above conservation targets. These include invasive species; altered disturbance regimes: fire, hydrology, herbivory (mowing/grazing); lack of knowledge; and fragmentation.

The focus of natural resource stewardship is to reduce or eliminate threats to the resources we are trying to protect and to restore conservation targets that have been damaged. To this end, a series of strategies and specific objectives and tasks have been identified for 2018–2027 to address each of the threats. The tasks range from invasive species control to staff training, prescribed burning, and field surveys.

Implementation of these tasks will require many people, including PRD staff in the Operations Section, Stewardship Unit, and Planning Section; collaboration with the Washtenaw County Parks & Recreation Commission; plus other stakeholders and volunteers. A lead person has been identified in the plan to be responsible for each task, but there are few tasks in this plan that can be completed by one person alone; they may need to call upon others both inside and outside Michigan DNR to assist.

WLP has been divided into five stewardship management units to better communicate about resource management. Stewardship management units are shown in the Desired Future Cover Types and Stewardship Management Units Map (attached to this plan). Forested and non-forested “stands” have also been mapped and numbered across the entire park, and will be used to communicate about resource management activity.

Conservation Targets & Goals

What are we trying to conserve at this park?

The following natural resources are designated as targets for conservation and protection at WLP.

- **Watkins Lake**

Watkins Lake, an impoundment, is the namesake of the park and clearly one of the most important features of the property. This lake is well known for attracting a diverse and abundant array of waterfowl and wading birds during spring and fall migrations. Arnold Road bi-sects the lake and provides excellent wildlife viewing from within vehicles. A DNR Land Use Order of the Director closes the lake to hunting and all entry during the waterfowl migration seasons to minimize disturbance of the birds, but viewing is still available during that time from the road. As a condition of sale, an agreement allows the former owner to use water from the lake for irrigation.

There are no known rare species associated with the lake, other than occasional unusual migratory bird species that pass through.

- **STEWARDSHIP GOAL:** Maintain an open water body with primarily native aquatic and emergent vegetation to provide a high-quality resting and feeding area for migratory waterfowl.

- **Prairie Fen¹ and Associated Wetlands**

The only exemplary natural community at WLP is prairie fen. The fen at this park occurs in a mosaic with other wetlands such as wet meadow and rich conifer swamp, and degraded uplands along the margins. "Prairie fen is a wetland community dominated by sedges, grasses, and other graminoids that occurs on moderately alkaline organic soil and marl south of the climatic tension zone in southern Lower Michigan. Prairie fens occur where cold, calcareous, groundwater-fed springs reach the surface." (MNFI) This community is ranked as vulnerable (S3) in Michigan by MNFI. The reference description for prairie fen is here: <http://mnfi.anr.msu.edu/communities/community.cfm?id=10667> and in Appendix D.

Associated prairie fen species to receive special management attention:

- **Mitchell's satyr¹** (*Neonympha mitchellii mitchellii*, a federal and state endangered butterfly)
- **Eastern massasauga¹** (*Sistrurus catenatus*, a federal threatened and state special concern snake)
- **Slippershell¹** (*Alasmidonta viridis*, a state threatened mussel)
- **Tamarack tree cricket¹** (*Oecanthus laricis*, a state special concern insect)
- **STEWARDSHIP GOAL:** Restore and maintain the integrity of all extant prairie fen at WLP including constituent plant and animal species, with a special focus on providing quality habitat for the species listed above. Target 5-star² ecosystem recovery (fully-functional ecosystems with full range of native species and structure and few to no invasive plants) within 50% of the prairie fen within 10 years. Extend restoration treatments into adjacent wetlands and upland edges to improve the fens' landscape context.

- **Grassland**

While only tiny pockets of remnant native prairie vegetation exist at WLP, the former agricultural hayfields and pastures currently provide good habitat for rare and declining grassland-dependent birds. Note that while all of these species prefer large contiguous grasslands, the general habitat structure requirements for each of these species differ, with some preferring denser standing vegetation and thatch and some preferring less dense vegetation and thatch.

Associated grassland species to receive special management attention:

- **Henslow's sparrow**¹ (*Ammodramus henslowii*, a state endangered songbird)
- **Grasshopper sparrow**¹ (*Ammodramus savannarum*, a state special concern songbird)
- **Dickcissel**¹ (*Spiza americana*, a state special concern songbird)
- Bobolink, upland sandpiper, savannah sparrow, eastern meadowlark, sedge wren, and other grassland-dependent bird species
- **STEWARDSHIP GOAL:** Maintain the current grassland areas (mostly cool-season grass) in an open condition that provides suitable habitats for all the species listed above, especially Henslow's sparrow. Maintain the small remnant dry-mesic prairie openings (e.g., stands 16 and 26) by controlling invasive species. Remove woody plants to re-open stands 9, 10, 18, and 22 within the next 10-20 years, and maintain in a grassland condition.

- **Dry-mesic and Dry Southern Forest**

While the existing forest at WLP is not of particularly high quality, there is some area with remnant old oaks and potential to restore these communities. Much of the WLP forest was logged just prior to acquisition by the state. It appears that most of the high timber value trees were selectively harvested. Restoring oak and oak-hickory-dominated forest, woodland, or savanna on uplands adjacent to the high quality prairie fen wetlands would enhance the landscape context and ecological function of the larger landscape complex. The wetlands cannot exist in a vacuum without reasonably intact uplands that provide groundwater recharge, and uplands dominated by native species will contribute less invasive species seed to adjacent wetlands. Oak is not currently regenerating well at this park, and will eventually decline and be replaced by mesic tree species over the next 50-100 years if no management action is taken. These oak-dominated communities are both ranked as vulnerable (S3) in Michigan by MNFI. The reference description for dry-mesic southern forest is here: <http://mnfi.anr.msu.edu/communities/community.cfm?id=10685> and the reference description for dry southern forest is here:

<http://mnfi.anr.msu.edu/communities/community.cfm?id=10685>

There are presently no known rare species associated with the degraded dry-mesic and dry southern forests at WLP.

- **STEWARDSHIP GOAL:** Maintain and restore oak and hickory-dominated canopies in all upland areas not otherwise designated for grassland or development. Reduce mesic hardwoods (e.g., red maple) in the canopy and subcanopy, and reduce the prevalence of invasive woody species. Canopy closure should vary from 40-90 percent (savanna, woodland, and forest). Target 2-star² ecosystem recovery (management initiated and some structure and species composition developing) within 10 years over 20% of the area designated for these forest types.

Additional information about the natural community and rare animal conservation targets is available from the MNFI community and special animal abstracts. These can be found on MNFI's website at <http://mnfi.anr.msu.edu/>.

¹ Element occurrences tracked by Michigan Natural Features Inventory (MNFI)

² McDonald T, GD Gann, J Jonson, and KW Dixon. 2016. International standards for the practice of ecological restoration – including principles and key concepts. Society for Ecological Restoration, Washington, D.C. <http://www.ser.org/?page=SERStandards>

Threats

What problems are threatening the Conservation Targets and need to be addressed?

1. Non-native invasive species

Non-native invasive species threaten the ecological integrity of all conservation targets at the park. Invasive species reduce biological diversity and alter ecological systems. Autumn olive, glossy buckthorn, purple loosestrife, narrow-leaved cat-tail, reed canary grass, honeysuckle, Japanese barberry, multiflora rose, hedge parsley, garlic mustard, and several other invasive plants are known to occur in WLP and immediately adjacent. Any new construction (including trail construction) would have the potential to increase this threat by providing a disturbed pathway for these species to establish. Oak wilt has the potential to significantly impact the oak resource in the uplands. Emerald ash borer, an invasive insect species, has eliminated any mature ash that may have been present in the recent past. Invasive species should never be deliberately planted at WLP, and efforts will be made to remove these species throughout the park, especially in the prairie fens.

2. Lack of fire

Fire is a key natural disturbance component of all native upland and emergent wetland natural communities at WLP, including the oak forests and prairie fens, historically occurring at intervals ranging from about one to several surface fires per decade. Fire maintained oak dominance in the uplands by periodically setting back mesic hardwoods like red maple. Fire also, in conjunction with hydrology, maintained the open structure of prairie fens and other emergent wetlands.

3. Excessive human disturbance

Watkins Lake will not remain an important waterfowl stopover site in migration if human disturbances frequently flush these birds and interrupt their resting and feeding. Even a small amount of boating, fishing, or shoreline wildlife viewing on this relatively small lake during waterfowl migration season could be enough to displace these birds. Likewise, significant numbers of hikers or large groups of people moving through the large grass fields would likely disrupt the grassland birds during nesting season (primarily spring and early summer).

4. Mowing and haying, or lack thereof

While mowing may be essential to maintain recreational use and aesthetics of some developed portions of WLP, excessive mowing where it is unnecessary or improperly timed can reduce wildlife nesting and feeding habitat. On the other hand, in areas being maintained as open grassland, lack of mowing or haying (or burning) for an extended period can result in growth of shrubs and trees and eventual loss of grassland habitat. Mowing and haying can have both positive and negative impacts to native plants and animals. Frequency and timing of mowing along the rail-trail is critical to reducing massasauga mortality and reducing the spread of invasive plants.

5. Alteration of hydrology

The prairie fens and other wetlands at WLP are groundwater fed, with seeps, marl flats, and small rivulets. The Norvell Manchester Intercounty Drain and the railroad beds and roads within and adjacent to these wetlands have altered their hydrology.

6. Lack of knowledge about the natural resources

Many park visitors are probably unaware of the significance of the natural features at WLP. By understanding the significance of the resource, visitors may be more likely to support the protection and restoration of these natural features. Park staff must also be made aware of the resources to protect them. All state parks and recreation areas, including WLP, require a balance of protecting natural resources while providing appropriate recreational use. Both the recreation and the resource must be understood by staff to strike an appropriate balance.

7. Fragmentation

Many of the forested and grassland areas at WLP are currently fragmented by roads, old railroad beds/trails, and forest canopy gaps created by past forest management activity. While many wildlife species thrive in edge habitats, other “forest interior” and grassland-dependent animal species depend on large acreage of contiguous closed canopy forest or open grassland with low levels of human disturbance. These species are faced with reduced interior forest area, reduced patch size of grassland habitat, and less dispersal ability where trails/roads and past management practices have fragmented the park’s landscape into smaller blocks.

8. Collection and killing of rare animals

Collection and killing of massasauga rattlesnakes are direct threats and have occurred at other state parks in the recent past. Collection is also a direct threat to the Mitchell’s satyr and other rare species.

9. Road kill

This has been a consistent threat to massasauga at the park. Any new trail or road construction would have the potential to increase this threat.

10. Incomplete ownership

Lack of ownership is a threat especially to some of the prairie fen at WLP in places where the state does not own the entire fen and wetland complex. Blocking in ownership around the high quality prairie fens is particularly important to protecting their long-term integrity. Lacking ownership of these parcels also increases cost and time spent on management such as creating additional burn lines and addressing trespass and safety zone issues.

11. Excessive deer browse

The area of this park was hunted regularly when it was in private ownership, which helped maintain deer populations at a level that would not seriously negatively impact vegetation. Increased deer populations due to the elimination of hunting on this property would be expected to change vegetative composition and potentially damage high-quality native vegetation. Opening all or a portion of the park to hunting would alleviate this potential threat.

Strategies

What are the general stewardship strategies or approaches that we can use at this park to reach our goals?

1. Eastern massasauga – Candidate Conservation Agreement with Assurances

Prior to the federal listing of Eastern massasauga, the Department entered into a Candidate Conservation Agreement with Assurances with the U.S. Fish and Wildlife Service. WLP will be added to the EMR CCAA. The majority of the park will be enrolled under the CCAA as managed lands. The CCAA will constrain how mowing and other management is done at the park. (Addresses threat #8).

2. Control invasive species

Control species such as glossy buckthorn, autumn olive, honeysuckle, Japanese barberry, reed canary grass, and others in specific areas where they pose the most significant threat to the conservation targets through a combination of mechanical, chemical, and possibly biological treatments. Newly detected invasive species with small populations will be the highest priority; species with the greatest potential to harm the conservation targets will be the highest priority among those. Next priority will be species that are already more widespread and established at the park, but have the greatest potential to damage or destroy the integrity of the fens, grasslands, or forests. Within each species, small outlier populations and those with the greatest potential to spread into uninvaded areas are most important to control, followed by working inward towards the larger populations. Outside the conservation targets, also control invasive species in high use and high visibility areas like trailheads and parking lots wherever possible to reduce sources of spread. (Addresses threat #1).

3. Use prescribed burning to reintroduce fire to the landscape, and appropriately manage wildfire

Determine where prescribed burning can feasibly be used to reintroduce fire to key parts of WLP. Prioritize the prairie fens for burning, while also incorporating fire use in adjacent uplands. Consider the use of fire as a tool to maintain the grasslands and oak hickory forest. Determine appropriate locations for fire lines, using natural breaks and existing roads/trails wherever possible. Plan and conduct prescribed burns, following established DNR policies and procedures. Also complete a wildfire plan for WLP to direct appropriate wildfire suppression in a manner that protects public safety while minimizing resource damage from suppression action. (Addresses threat #2).

4. Educate staff and recreation area visitors

Ensure staff is aware of the significance of all conservation targets and associated rare species. Make sure staff is aware of the potential for introduction of invasive insects and diseases through transport of firewood, tree trimming, and disturbance along roads and trails. Train staff to identify key invasive plants that they are likely to transport, or that are likely early detection species in the area. Work through DNR's Marketing and Outreach Division to educate visitors about the significant natural features at WLP and the associated threats that impact them. (Addresses threats #1, #3, #6, and #8).

5. Maintain Watkins Lake as a seasonal wildlife refuge

To address the threat of excessive human disturbance of migrating waterfowl, maintain the current entry restrictions on the lake during the migration seasons. (Addresses threat #3).

6. Appropriately site and sustainably construct trails and infrastructure

When determining the location of new trails and while developing the new linear trail or other infrastructure in WLP, be sure to consider the impacts of development and increased human traffic to each of the conservation targets. Trails, observation areas, parking, picnic areas, and other development can have both positive and negative stewardship implications. On the positive side, for example, trails and observation areas can be designed and used to help inspire visitors to appreciate the natural features at the park with minimal disturbance. Trails can also serve as fire breaks and access routes for resource management activity. At the same time trails and other infrastructure have the potential to directly damage the conservation targets and increase human disturbance in sensitive areas. Trails and other infrastructure must be designed in a manner that limits their impact to hydrology, fragmentation, human disturbance, and invasive species spread. (Addresses threats #1, #3, #5, #6, #7, and #9).

7. Decontaminate equipment and clothing to reduce the spread of invasive species

DNR staff should brush off boots and clean equipment of seed and plant fragments before entering the park, especially away from developed areas. Set up and encourage the use of boot brush stations by park visitors at all trailheads. (Addresses threat #1).

8. Judiciously mow or hay to maintain grassland

The grasslands need to be maintained in an open state to continue to provide adequate habitat for grassland birds and other wildlife. Haying or mowing will be used to maintain appropriate structure and remove encroaching trees and shrubs. Haying or mowing will be timed appropriately and hay fields will be cut spiraling out from the center. Both will lessen the potential to directly harm breeding birds, massasauga, or other wildlife. All mowing in CCAA-designated managed habitat will follow CCAA mowing requirements. (Addresses threats #1, #4, and #7).

9. Acquire property that completes ownership of prairie fen

Acquire complete ownership of the prairie fens that are partially within the park (preferred) or otherwise secure long-term conservation through easements or other means. (Addresses threats #7, #10 and possibly others).

10. Proactively work with the county drain commission to reduce impacts of future drain maintenance work on prairie fen and other wetlands

The Norvell Manchester Intercounty Drain flows through and impacts the hydrology of the prairie fens and other wetlands at the park. Work with the Jackson County Drain Commissioner to reduce any additional future impacts to these wetlands from dredging or other maintenance activity. (Addresses threat #5).

11. Open a portion of the park to hunting

To minimize potential negative impact to native vegetation from excessive deer browse, open a portion of the park to hunting, especially deer hunting. (Addresses threat #11).

Objectives and Task List

What are the specific measurable objectives and associated tasks to be completed at WLP in 2018–2027?

The lead responsibility for each task is indicated after the task number:

PS=Park Supervisor (Knox)

E=Ecologist (Palmgren)

RS=Ecological Restoration Specialist (Clancy)

WB=Wildlife Biologist (Tison)

DS=District Supervisor (Jemerson)

RP=Regional Planner (Strach)

SA=Stewardship Analyst (Ihnken)

FH=PRD Forest Health Analyst (Frei)

The tasks are not listed in any particular order except where specifically noted. All are considered important and should be implemented as fully as possible as time and resources allow.

The Ecological Restoration Specialist will be responsible for coordinating this overall task list to ensure all tasks are completed. Other individuals will take the lead on specific tasks as indicated below. Stewardship Unit staff will be available to provide technical guidance on all tasks as needed.

OBJECTIVE A. Work cooperatively with Washtenaw County Parks & Recreation Commission and other partners to accomplish the specific objectives and tasks in this plan.

TASK A.1. PS Maintain open, regular communication with cooperators.

TASK A.2. PS Coordinate resource management efforts to ensure they accomplish the tasks outlined in this plan and comply with all DNR & Parks and Recreation Division (PRD) policies.

OBJECTIVE B. Inventory and map invasive species at WLP.

TASK B.1. PS Encourage the local Cooperative Invasive Species Management Area (CISMA), volunteers, and visitors to map new invasive species locations and check the status of existing mapped points. Prioritize searching for any new locations of the early-detection species listed under Objective D below, or any species not mentioned in this plan (new to the park). New reports should be submitted to the Midwest Invasive Species Information Network (MISIN, www.misin.msu.edu).

TASK B.2. SA Regularly download invasive species data from MISIN and other sources. Produce and update invasive species maps for park staff and stewardship based on available mapping data as needed/requested.

OBJECTIVE C. Prevent the introduction of new invasive plants.

TASK C.1. PS Install and maintain boot brush stations at trail heads.

TASK C.2. PS Educate staff to decontaminate equipment and clothing/footwear per PRD policy.

- TASK C.3. PS Educate and encourage park visitors to decontaminate equipment and clothing/footwear every time they enter and leave the park.
- OBJECTIVE D. Control “early-detection” invasive plants with only a few known occurrences at WLP, with an objective of complete eradication of these species as soon as possible. Species are prioritized below, but all species listed under this objective are high priority.
- TASK D.1. RS Provide detailed direction on invasive plant control/treatment technique and herbicide use to ensure effective control and adherence to relevant state (DNR, Department of Environmental Quality (DEQ), Department of Agriculture & Rural Development (MDARD)) policies and procedures and Aquatic Nuisance Control and National Pollutant Discharge Elimination System (NPDES) permit requirements.
- TASK D.2. PS/RS Treat all known and newly-discovered swallow-wort (*Vincetoxicum* spp.) populations in WLP.
- TASK D.3. PS/RS Treat all known and newly-discovered oriental bittersweet (*Celastrus orbiculata*) populations in WLP.
- TASK D.4. PS/RS Treat all known and newly-discovered tree-of-heaven (*Ailanthus altissima*) populations in WLP.
- TASK D.5. PS/RS Watch for new occurrences of Japanese stilt grass (*Microstegium vimineum*) in WLP. This species was recently found for the first time in Michigan near WLP.
- TASK D.6. PS/all Watch for any new occurrences of the following additional watch list species: non-native phragmites, Japanese knotweed, flowering rush, and European frog-bit. If any of these are found, treat any early detections of these species as soon as possible.
- OBJECTIVE E. Control well-established invasive plants, prioritizing isolated occurrences first, then working towards larger populations in high quality areas, then larger populations in lower quality areas. Species are prioritized below based on current information. This prioritization may be revised by the Ecologist as new information becomes available.
- TASK E.1. RS Provide detailed direction on invasive plant control/treatment technique and herbicide use to ensure effective control and adherence to relevant state (DNR, DEQ, MDARD) policies and procedures and Aquatic Nuisance and NPDES permit requirements.
- TASK E.2. PS/RS Treat the following well-established invasive species strategically at WLP as resources allow. Focus control efforts first on the prairie fens, then on the open grasslands, at trailheads, then in the surrounding landscape working outwards from the fens and grasslands:
- glossy buckthorn (*Rhamnus frangula*)
 - autumn olive (*Elaeagnus umbellata*)

- non-native honeysuckle (*Lonicera* spp.)
 - Japanese barberry (*Berberis thunbergii*)
 - reed canary grass (*Phalaris arundinacea*)
 - non-native cat-tail (*Typha angustifolia* and *T. xglauca*)
 - purple loosestrife (*Lythrum salicaria*)
 - Canada thistle (*Cirsium arvense*)
 - garlic mustard (*Alliaria petiolata*)
 - wild parsnip (*Pastinaca sativa*)
 - multiflora rose (*Rosa multiflora*)
 - common buckthorn (*Rhamnus cathartica*)
- TASK E.3. PS Treat spotted knapweed (*Centaurea maculosa*) within any existing grasslands where the current populations are isolated. Some fields were noted to have only very small patches of this species as of 2016. This species is sufficiently common that park-wide control is not expected.
- TASK E.4. PS Other known widespread invasive plants, including Kentucky and Canada bluegrass, smooth brome, orchard grass, common St. John's-wort, and sweet-clover may be treated outside hayfields in some areas where they are especially threatening to a conservation target, or elsewhere as resources allow, but will not be a primary focus.
- OBJECTIVE F. Remove all trees and shrubs from the areas designated for grassland and maintain their open structure.
- TASK F.1. PS Develop a haying or mowing schedule in consultation with stewardship unit staff sufficient to keep existing grassland areas open while also protecting nesting grassland birds. Allow continued harvest of hay through an agricultural lease. Minimize impact to nesting grassland birds by prohibiting cutting before July 15 and by using center-out spiral cutting. Follow massasauga CCAA requirements if applicable.
- TASK F.2. PS/WB Mow grassland areas as funding and resources allow. Leverage the assistance of partner organizations such as Pheasants Forever or others if possible to accomplish mowing/clearing in areas that cannot be managed with haying.
- TASK F.3. PS/RS In the small pockets of degraded prairie adjacent to prairie fen (especially stands 16 and 26), control trees and shrubs through cutting and stump treating or girdling.
- TASK F.4. PS Remove trees and shrubs from stands 9, 10, 18, and 22 as resources allow to gradually convert these to grassland.
- OBJECTIVE G. Ensure park staff and visitors are educated about stewardship issues at WLP annually.
- TASK G.1. PS Include WLP stewardship information (conservation targets, identification info for invasive plants, etc.) in seasonal orientation.

- TASK G.2. PS/RP/E Identify opportunities to interpret natural features and resource management activity at WLP, and work with DNR Marketing and Outreach Division and Wildlife Division (WLD) as appropriate to develop interpretive materials.
- OBJECTIVE H. Ensure hazard trees are properly identified and appropriately limbed or removed.
- TASK H.1. PS **To prevent the spread of oak wilt, do not cut or prune oak trees during the growing season.** If oak trees must be pruned or are wounded, spray the wound immediately with clear shellac to create a barrier. Watch for natural and human-caused tree wounding in high-use areas and seal wounds as soon as possible. Consider treating wounds after wind events where practical.
- TASK H.2. PS/FH Ensure individuals conducting hazard tree identification and removal are appropriately trained. Hazard trees need to have targets to be considered hazards. Avoid excessive removal of non-hazardous trees.
- OBJECTIVE I. Consider initiating prescribed burning at WLP.
- TASK I.1. E Scout for potential burn line locations that encompass high quality prairie fen to determine if/where burning is feasible. Focus first on the fen in Stewardship Management Unit 1.
- TASK I.2. E Weigh the priority of WLP against other priority burns statewide to determine when capacity exists to initiate burning at WLP.
- TASK I.3. E If it is determined that a burn is feasible, submit a Forest Treatment Proposal (FTP).
- TASK I.4. E/RS Work with Forest Resources Division (FRD) fire staff to write burn plan(s). Prepare burn lines and conduct prescribed burns based on FTP(s) submitted.
- OBJECTIVE J. Create and update a wildfire management plan
- TASK J.1. PS Write a wildfire management plan for WLP, using PRD's standard template, to be reviewed and approved by FRD Fire Supervisor, PRD Stewardship, Local Fire Department(s), and others as appropriate.
- TASK J.2. PS Review wildfire plan annually with FRD fire officer and local fire departments. Update and submit plan for new approvals if needed.
- OBJECTIVE K. Enroll WLP in the eastern massasauga Candidate Conservation Agreement with Assurances.
- TASK K.1. SA Work with the Stewardship Unit Manager to enroll WLP in the CCAA.
- TASK K.2. PS Follow eastern massasauga CCAA requirements
- OBJECTIVE L. Monitor and control oak wilt and other forest pests.

- TASK L.1. PS/FM Watch for any evidence of oak wilt or other forest pests within WLP annually.
- TASK L.2. FH Initiate and coordinate appropriate treatments of any oak wilt or other forest pest or disease that is detected.
- OBJECTIVE M. Gather new data on flora/fauna presence/absence and locations.
- TASK M.1. PS Encourage reporting of eastern massasauga sightings by park staff and the public, with specific location details noted and photos taken whenever possible. Send reports to the Ecologist (who will also relay them to MNFI).
- TASK M.2. E As funding allows, contract for bat surveys at WLP (because both northern long-eared bat and Indiana bat are known from the vicinity), and additional flora and fauna surveys focused on the prairie fens.
- TASK M.3. E Ensure the Mitchell's satyr population is surveyed annually by USFWS, MNFI, or other trained professionals as appropriate.
- TASK M.4. E Locate and compile as much existing data as possible on plants, birds, reptiles, amphibians, fish, and other species. Include presence/absence (species lists) and locational information as available, and use it to populate Appendix B.
- TASK M.5. E/PS Encourage birders to record bird observations in all seasons by reporting checklists and counts to eBird using the hotspot. Encourage reporting of rare species locations to the Ecologist for transmittal to MNFI and for use in monitoring the impacts of management activities on those species in the future.
- TASK M.6. E/PS Encourage birders to conduct meander surveys or point counts to document grassland bird use of grassland habitats during spring and early summer. Record data on field forms and submit to the Ecologist, or submit data to the eBird hotspot with information in the comments regarding precise location of survey.
- TASK M.7. PS Encourage volunteer botanists to explore and report rare plant observations and send any plant lists they create to the Ecologist. Document all rare plant populations with GPS waypoints and/or tracks, and complete and submit MNFI rare plant forms for species that have not been recently updated in MNFI's database. Submit invasive plant observations to MISIN.
- OBJECTIVE N. Consider the resource implications of all new development, especially trails. Minimize disturbance and intrusion into the prairie fens and associated wetlands, disturbance of nesting grassland birds, and disturbance of migratory waterfowl. Design and construct any new trails sustainably for enhanced erosion control and reduced maintenance costs.
- TASK N.1. RP Lead the effort to designate an appropriate system of trails at WLP, consistent with the management zones, in consultation with PRD staff in operations and stewardship. Map the

- approved locations, uses, and appropriate construction/surface for all trails throughout the park.
- TASK N.2. PS Sign trails based on the approved designations.
- OBJECTIVE O. Maintain and repair trails and other infrastructure that has resource impacts.
- TASK O.1. PS Maintain and repair trails and other infrastructure, with special attention to repairing water and wetland crossings (including regular inspection and cleaning of all culverts) to reduce hydrologic disruption, erosion, and wetland disturbance.
- OBJECTIVE P. Open a portion of the park to hunting.
- TASK P.1. PS/WB If the general management planning process identifies opportunities to open portions of the park to hunting, then ensure the wildlife conservation orders are amended accordingly.
- TASK P.2. WB/PS If an area is opened to hunting, then promote hunting at WLP, especially deer hunting to reduce deer browse damage.
- OBJECTIVE Q. Submit a Work Item Proposal for all infrastructure development projects and all projects that involve earth disturbance. Work Item Proposals allow the natural resource impacts of a proposed project to be assessed and rejected, modified or mitigated as appropriate.
- TASK Q.1. PS Submit WIPs for all development projects and those that involve earth disturbance.
- OBJECTIVE R. Proactively work with the Jackson County Drain Commissioner to minimize impacts of future drain maintenance activity within the park.
- TASK R.1. PS Upon receiving any notice or indication that maintenance work on the Norvell Manchester Intercounty Drain is planned, reach out to the Jackson County Drain Commissioner to inform them of the sensitive nature of the wetlands at the park, presence of endangered species, and our desire to work with them to minimize any negative impacts of maintenance work.

Monitoring and Follow-Up

How will we monitor progress and adapt our actions?

1. Document stewardship activities that occur in the field

A Stewardship Treatment Record (R3142) must be completed for every stewardship (resource management) action that occurs at WLP. A Pesticide Treatment Record (R3148) must be attached whenever pesticide of any kind is used. Always attach a map to the Stewardship Treatment Record with sufficient detail to document exactly where the work was completed. Contact Alicia Ihnken in the Stewardship Unit to have a custom map created for a project if it would be helpful to complete or document the work.

Stewardship Treatment Records (and associated pesticide records if applicable) must be submitted to Alicia Ihnken in the Stewardship Unit within 2 weeks of completing the work.

Invasive mapping GIS data (points and polygons) shall be updated every time an invasive plant treatment occurs, and every time a new invasive plant location is discovered that is not already included in the GIS.

2. Document the completion of each task in this plan annually

The Ecological Restoration Specialist should keep an annual log (electronic or paper) to record the date of completion of each task listed in this plan.

3. Check stewardship and local records and data in 2022 and 2027 to determine whether tasks were completed

Revisit this plan and review all objectives to determine whether they were met. Unless further specified below, information contained in Stewardship Treatment Records and local unit files should be sufficient to determine whether an objective was met.

4. Revise this plan in 2027 based on progress and new data

The Ecologist, Ecological Restoration Specialist, Stewardship Unit Manager, Unit Supervisor, District Supervisor, Regional Field Planner, and other DNR staff (as appropriate) should meet or communicate via email to revise this plan. Input should be gathered from Washtenaw County, and other groups as appropriate. Review the Conservation Targets, Threats, Strategies, and specific Objectives and Tasks and revise as needed.

5. Collect photographic monitoring data and establish new points as needed

Establish photo-monitoring points in select areas (especially prairie fens) to monitor progress on key field tasks. The Ecologist will establish new locations for photo-monitoring points prior to initiation of field work in those key areas, based on the objectives outlined in this plan.

6. Have MNFI re-assess the prairie fen element occurrence in 2026 or 2027 to see whether quality is maintained or improved

Determine whether the condition rank and size of the element occurrences has been maintained or improved from baseline survey data.

7. Compile plant and animal lists to fill out Appendix B

Appendix A: Planting Guidelines

- No plantings should occur outside the Developed Recreation or Administrative Zones unless otherwise specified in this Stewardship Plan, without input from Stewardship Unit staff. The majority of the park is an undeveloped area that should be maintained as natural vegetation without artificial landscaping.
- Any planting of large trees in the Developed Recreation or Administrative Zones shall be as follows:
 - Michigan DNR, Parks & Recreation Division's tree planting standards will be followed. Pursuant to those standards, the preference is for local genotype trees (propagated from seed collected locally in the park, or the Jackson Interlobate ecoregion), but other provenance such as Michigan or Great Lakes region is acceptable if it is not feasible to acquire local genotype trees. All of the trees listed below are currently or formerly known to occur naturally in the vicinity of the park and could be considered for planting, depending on site conditions and aesthetic or functional needs.
 - i) *Acer nigrum* (black maple)
 - ii) *Acer rubrum* (red maple)
 - iii) *Acer saccharum* (sugar maple)
 - iv) *Carya cordiformis* (bitternut hickory)
 - v) *Carya glabra* (pignut hickory)
 - vi) *Carya ovata* (shagbark hickory)
 - vii) *Celtis occidentalis* (hackberry)
 - viii) *Juglans nigra* (black walnut)
 - ix) *Larix laricina* (tamarack)
 - x) *Liriodendron tulipifera* (tuliptree)
 - xi) *Platanus occidentalis* (sycamore)
 - xii) *Prunus serotina* (black cherry)
 - xiii) *Quercus alba* (white oak)
 - xiv) *Quercus bicolor* (swamp white oak)
 - xv) *Quercus ellipsoidalis* (northern pin oak)
 - xvi) *Quercus macrocarpa* (bur oak)
 - xvii) *Quercus palustris* (pin oak)
 - xviii) *Quercus rubra* (red oak)
 - xix) *Quercus velutina* (black oak)
 - xx) *Sassafras albidum* (sassafras)
 - xxi) *Tilia americana* (basswood)
 - xxii) *Ulmus rubra* (slippery elm)
 - Various ash species should not be planted because of the likelihood that they will succumb to emerald ash borer. Likewise, American elm (*Ulmus americana*) should not be planted as a landscape tree because of the likelihood that it will succumb to Dutch elm disease prior to reaching shade-tree size. American beech should not be planted in developed use areas because of the likelihood of Beech Bark Disease.
 - Other native, large-tree species in WLP that are not generally considered suitable for landscape trees in developed areas include cottonwood (*Populus deltoides*), other aspens/poplars (*Populus* spp.), silver maple (*Acer saccharinum*), and box-elder (*Acer negundo*). There is no ecological reason to avoid these, but they are not likely to be desirable from a landscaping perspective.

- Species lists and sourcing for any proposed small tree, shrub, or herbaceous vegetation in developed areas (other than turf grass) shall be developed in coordination with Stewardship Unit staff.
- If seeding is required for erosion control associated with construction projects, or to re-establish turf grass areas, the following guidelines shall apply:
 - Outside the Developed Recreation and Administrative Zones, contact Stewardship Unit staff for guidance. In general, the preference is to leave sites unplanted and let native vegetation colonize naturally wherever possible. If that is not possible due to erosion or other concerns then the recommended seed mix will depend on the long-term goal for the specific site. A typical mix will likely be either oats or annual rye only to hold the site until native vegetation develops on its own.
 - In developed areas with turf grass, re-establish an appropriate turf grass mix, to include a cover crop of annual oats or rye if necessary for rapid stabilization/erosion control. Any standard turf grass mix suitable for growing in the soils present at the project site is acceptable. Fertilizer may be used if necessary in developed/turf areas. One suggestion is to follow MDOT 2012 standard landscaping specification 917.12 and associated Table 917-1 for seed mixes, purity, and germination rates. Other similar standard turf grass specifications would likely also be acceptable.
 - A weed-free straw mulch or other weed-free inert, biodegradable mulch may be used as needed. Cellulose mulch (as used in hydro-seeding) is also acceptable.
 - Other weed-free, inert erosion control mats or other products are acceptable, as long as **NO mesh netting** is used to anchor any mulch or erosion control materials. Such netting, especially monofilament, poses risk for entanglement of snakes, birds, or other animals. Other methods, such as crimping straw or chemical tackifiers, shall be used instead if needed.
- Avoid importing topsoil or fill from outside the park wherever possible, to prevent introducing new invasive plant seed. If it is absolutely necessary to import topsoil or fill then ensure it is certified to be free of weed seed if possible and plan for park staff to monitor the area annually for several years and control any invasive weeds that grow. Borrowing soil or fill from within the park should be taken from area free of invasive weeds.

Appendix B: Flora and Fauna Lists

Comprehensive flora and fauna lists have not yet been compiled for the park.

Plant and animal lists for the park should be compiled as resources allow and included here in a later plan revision.

Appendix C: Natural Resource Management History

Based on work documented by Stewardship Treatment Records

Detailed records of treatments are available in GIS (contact Alicia Ihnken)

2017 Progress

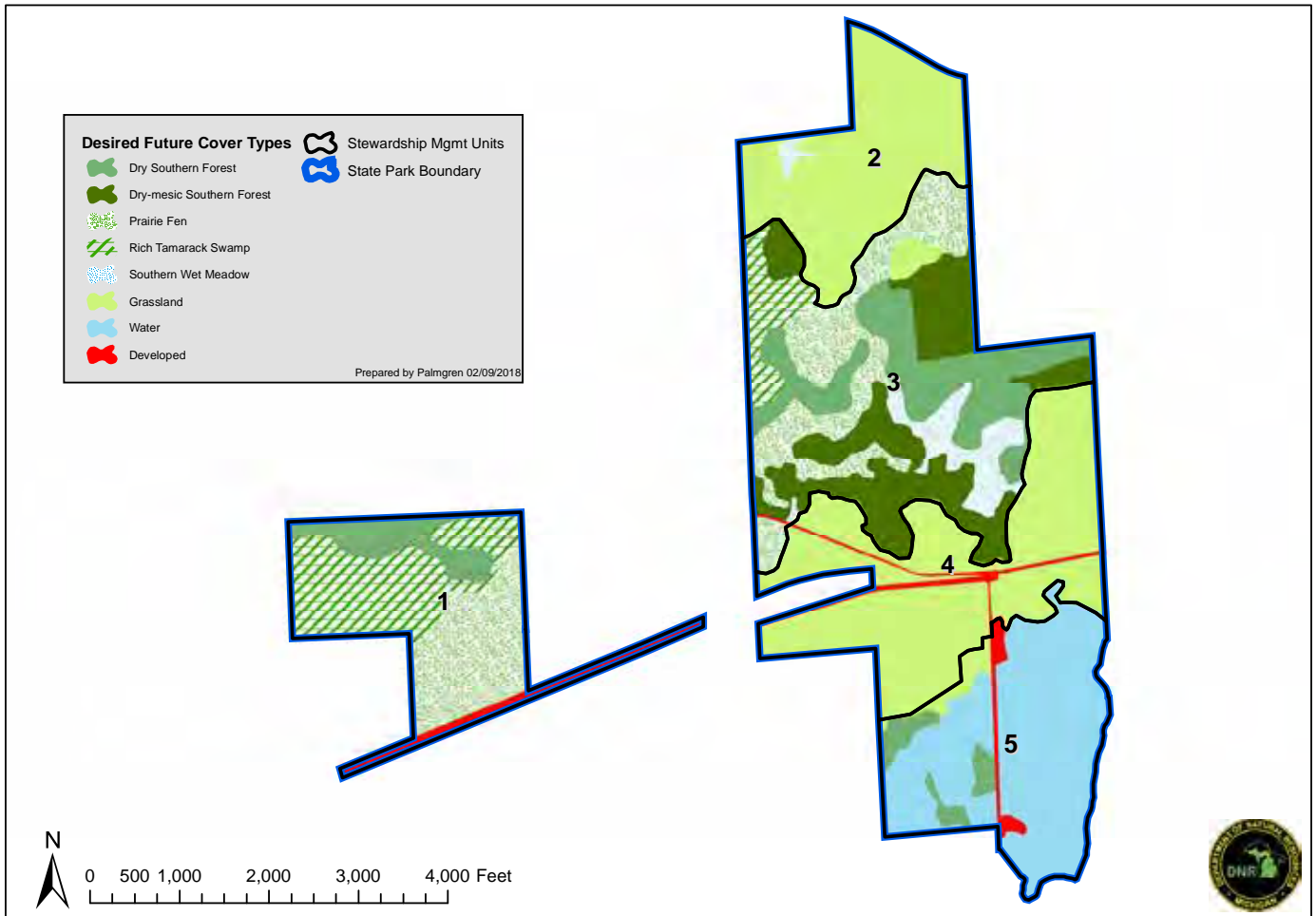
- MNFI completed an initial natural features inventory report, mapped vegetative cover using the MiFI protocol, and conducted additional targeted rare species surveys.
- DEQ's Early Detection and Response staff removed 18 water lettuce and 1 water hyacinth plant from Watkins Lake.

2018 Progress

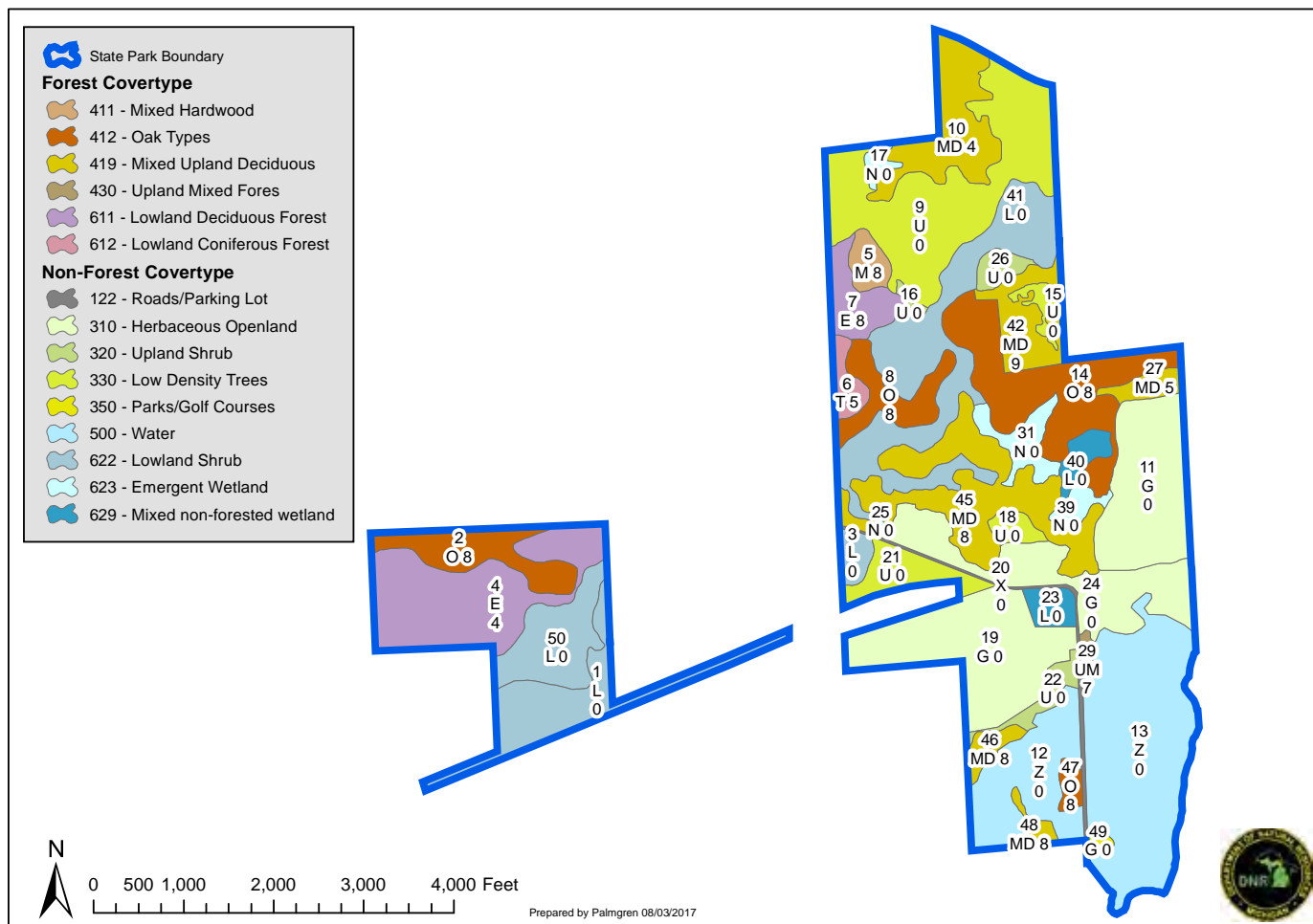
- The Stewardship Plan was completed.

The management history will be developed as Stewardship Treatment Records are submitted for 2018–2027 and beyond.

Watkins Lake State Park Desired Future Cover Types and Stewardship Management Units



Watkins Lake State Park Current Cover Types





River Raisin Recreation Area: Trolz Property Acquisition

Proposal for assistance through the Enbridge6B Pipeline Funds

Stewardship Plan

Submitted by Washtenaw County Parks and Recreation Commission
Allison Krueger, WCPARC Stewardship Coordinator



Image 1: View across Watkins Lake to Trolz property

Project Introduction

Situated in scenic Manchester Township, the 409 acre Trolz family property includes two large parcels along a 2.5 mile stretch of former railroad bed in Washtenaw County. The parcels have been nominated to Washtenaw County's Natural Areas Preservation Program (NAPP) for purchase. Since ballot approval in 2000, Washtenaw County Parks and Recreation Commission (WCPARC) has managed NAPP for the benefit for residents of, and visitors to, Washtenaw County. The millage supports the purchase and preservation of unique natural resources while providing meaningful recreational opportunities. To date, NAPP has protected over 3,900 acres, including 27 Preserves containing over 30 miles of trails, all available for public exploration.

As requested by Conservation Fund and the Enbridge6B pipeline Funds grant application, this Stewardship Plan will include an inventory of existing habitats, an initial plan for restoration and preservation, and preliminary concepts for recreational amenities for the Trolz family property in Washtenaw County.

These parcels are adjacent to 1,257 acres of land in Jackson County that is being considered for purchase by the State of Michigan Department of Natural Resources. Combined, this partnership could result in 1,666 acres of land held for preservation and public recreational use and will collectively be known as the River Raisin Recreation Area (Fig. 1).

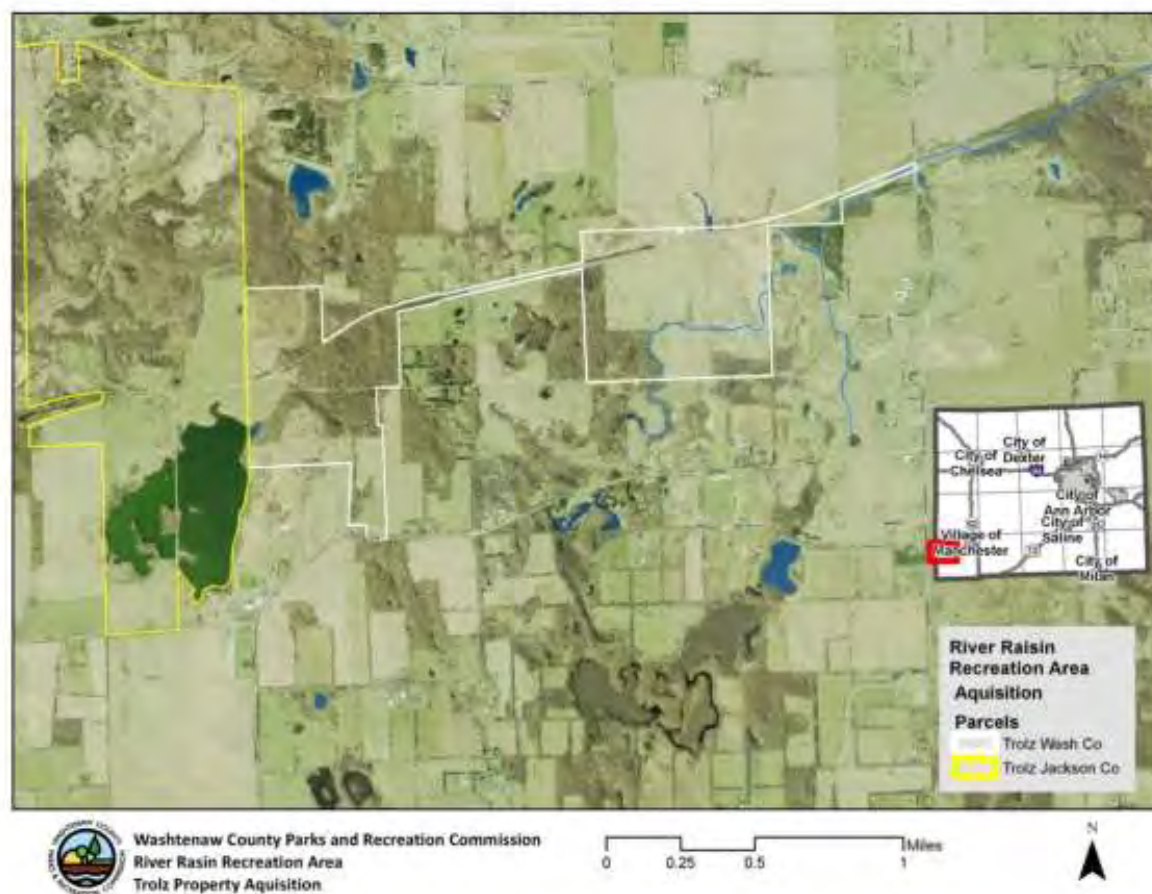


Figure 1: Trolz property in Washtenaw County and portions of the property in Jackson County

Stewardship Planning Process

WCPARC defines stewardship to include: active ecological land management to preserve or restore natural resources, the development of appropriate public recreational amenities, and efforts to build community, partner, and research involvement. This evaluation includes: considerations of rare or endangered species documented to use the site; an assessment of historic aerial photography, soils and pre-settlement vegetation data; and staff site visits. The result of this evaluation is a preliminary inventory of site resources, defined stewardship units, and recommendations for field work. Natural communities are described as ecological groups and classes, as defined in the book A field Guide to the Natural Communities of Michigan (Cohen, 2015).

This report follows the WCPARC staff evaluation and prioritization for stewardship. This plan forecasts the first five years of stewardship work to preserve habitat and create meaningful recreational opportunities. Included are maps and descriptions of the habitats and a timeline of expected work.

Staff site visits to the property evaluate the quality of the existing habitat, specifically focusing on the quantity of invasive species present, native plant diversity and structure, and potential trail development. Detailed inventories are vital for planning management but have not been completed during these initial site visits. The site visit is followed up with the creation of an existing landcover map and an evaluation of historic aerals, soils data, and pre-settlement vegetation cover data.

Evaluating historic aerals guides the field assessment by determining areas that have received the least amount of disturbance. Areas with minimal disturbance likely contain quality natural communities with potential high biodiversity. These areas with minimal disturbance will be designated as 'core habitat' and will be significant in directing stewardship activities, such as documenting biological inventories. The presence of endangered or threatened species directly impacts stewardship activities, including the development of recreational amenities. WCPARC will work as an active partner in research of rare species and habitats.

From this evaluation, the resulting Stewardship Plan breaks each parcel into units with defined goals and work recommendations. Stewardship work could include requests for botanical surveys, areas prioritized for invasive plant removal, prescribed fire priorities, preliminary trail and public entrance concepts, installation of conservation practices for agricultural lands, and goals for public programming and volunteer development.



Trolz Property Summary

In Washtenaw County, the Trolz property contains two main parcels connected by a former railroad bed. This Stewardship Plan will focus on these parcels- referred to as Trolz East (TE) and Trolz West (TW) (Fig. 2). The connecting railroad bed has been maintained as a private access road and will be developed into a trail (RR Trail) for public use. The RR Trail will provide visitors and WCPARC staff access to the natural areas through a series of hiking trails.

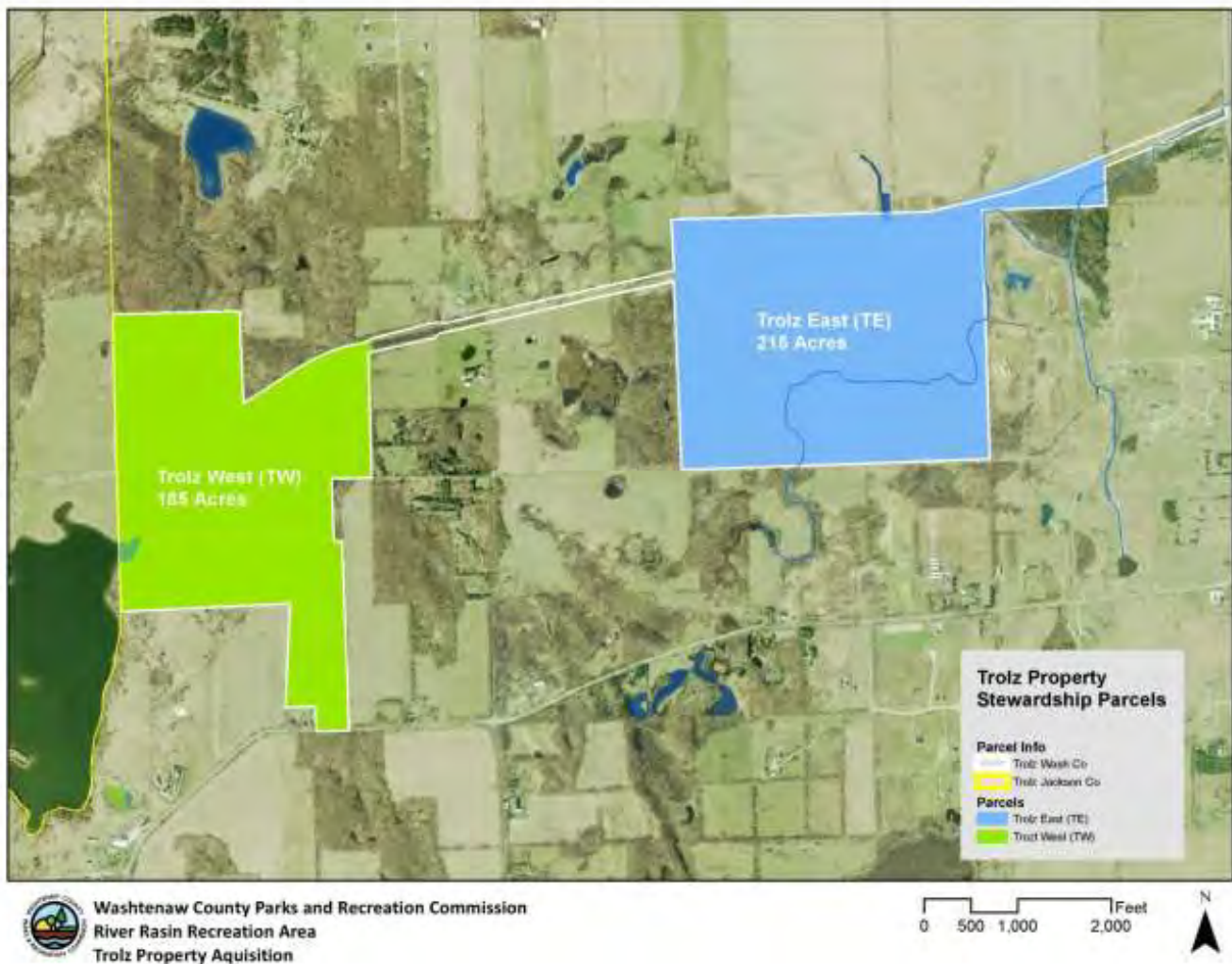


Figure 2: Trolz property parcels



Figure 3: Trolz East parcel

Trolz East Site Description

Trolz East (TE) encompasses 215 acres and includes forests, wetlands, grasslands, and agriculture (Fig. 3). The RR Trail Connects the parcel to Sharon Hollow Road to the east and Noggles Road to the West. Currently, the parcel contains 83 acres in active agriculture, 35 acres of forested wetland across three tracts, 9 acres of upland forest, 36 acres of former pasture, and 52 acres of open wetland habitat across 3 small tracts. A fallow field, now grassland, exists along the eastern boundary. Historic aerials show minimal disturbance throughout the western forests (Fig. 5). Along the east and southern portions of the property, wetland communities are connected through a drain, or intermittent creek (Fig. 6 & 7). The entire parcel is bordered to the south by a large power line easement. To the north the site bounded by the RR Trail with the exception of a small wetland in the NW corner. Much of the surrounding landscape is either in agricultural production, low-density residential ownership (over 5 acres/home), or in a natural state (ie with limited management). From this evaluation, 4 stewardship units have been created in TE (Fig 8).



Picture 2: Grasslands existing in TE along the RR Trail

TE Inventory and Assessment

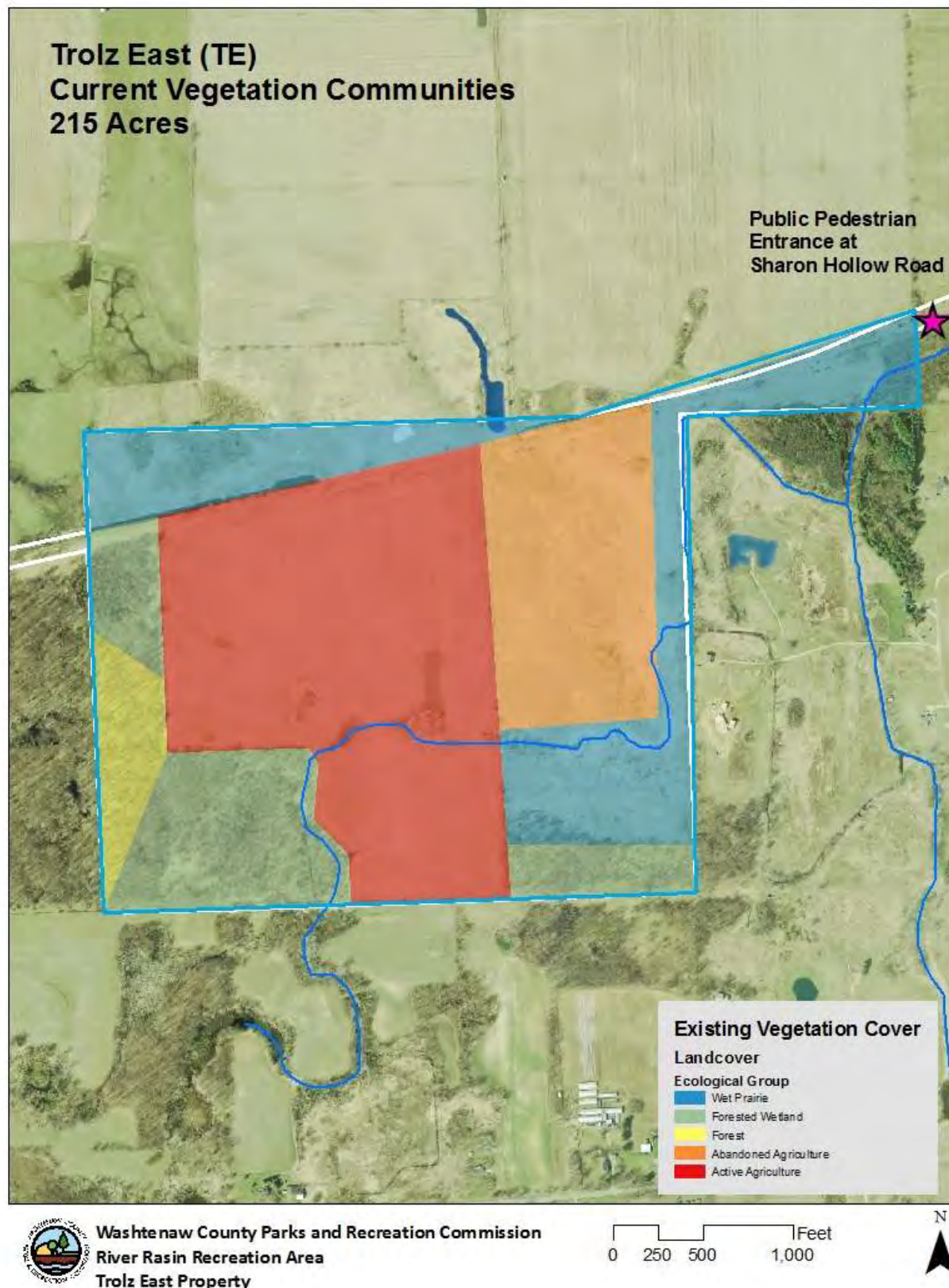


Figure 4: Existing vegetation cover as initially determined through site visits and preliminary evaluations

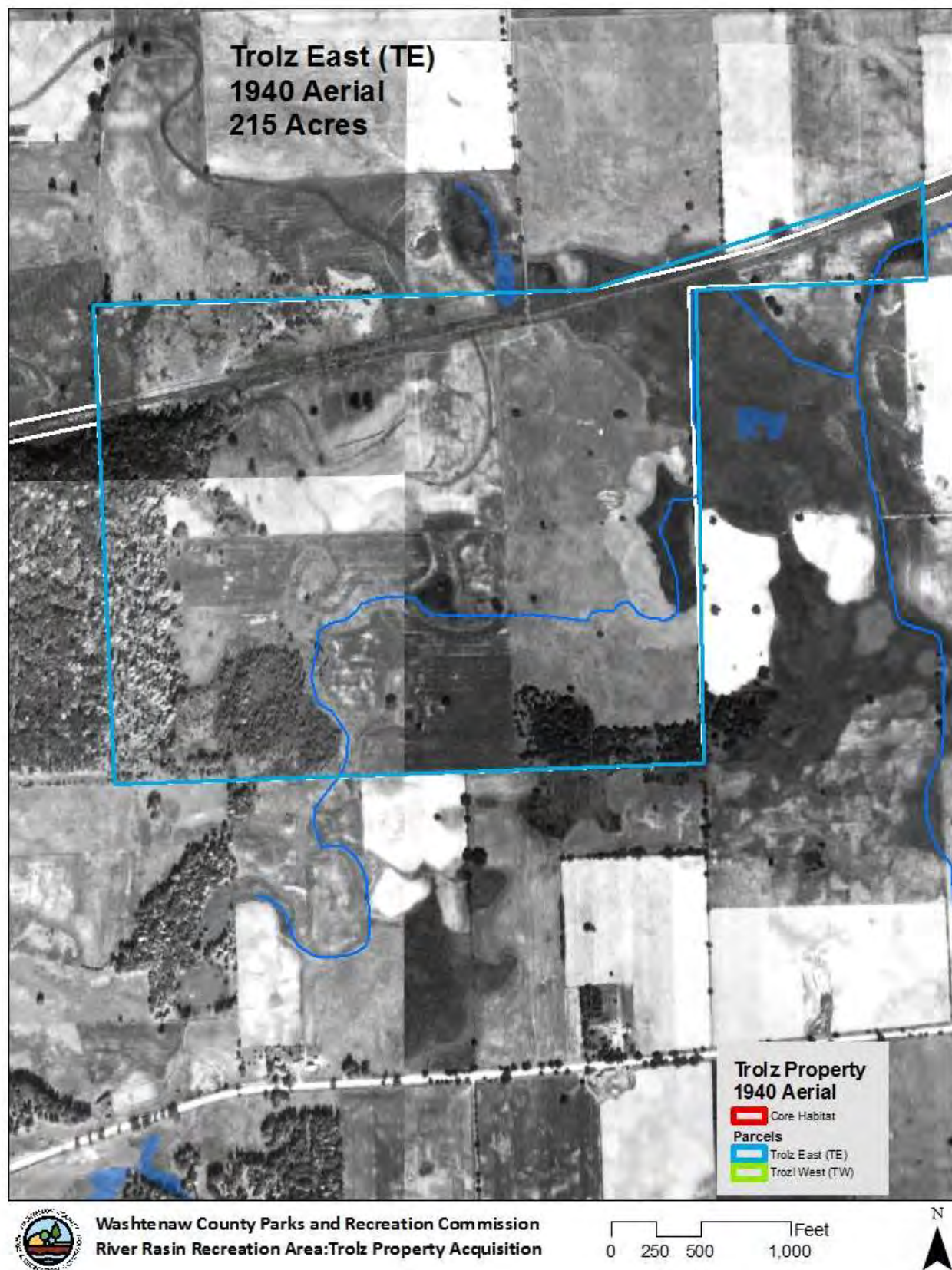


Figure 5: 1940s aerial of TE showing areas defined as core habitat

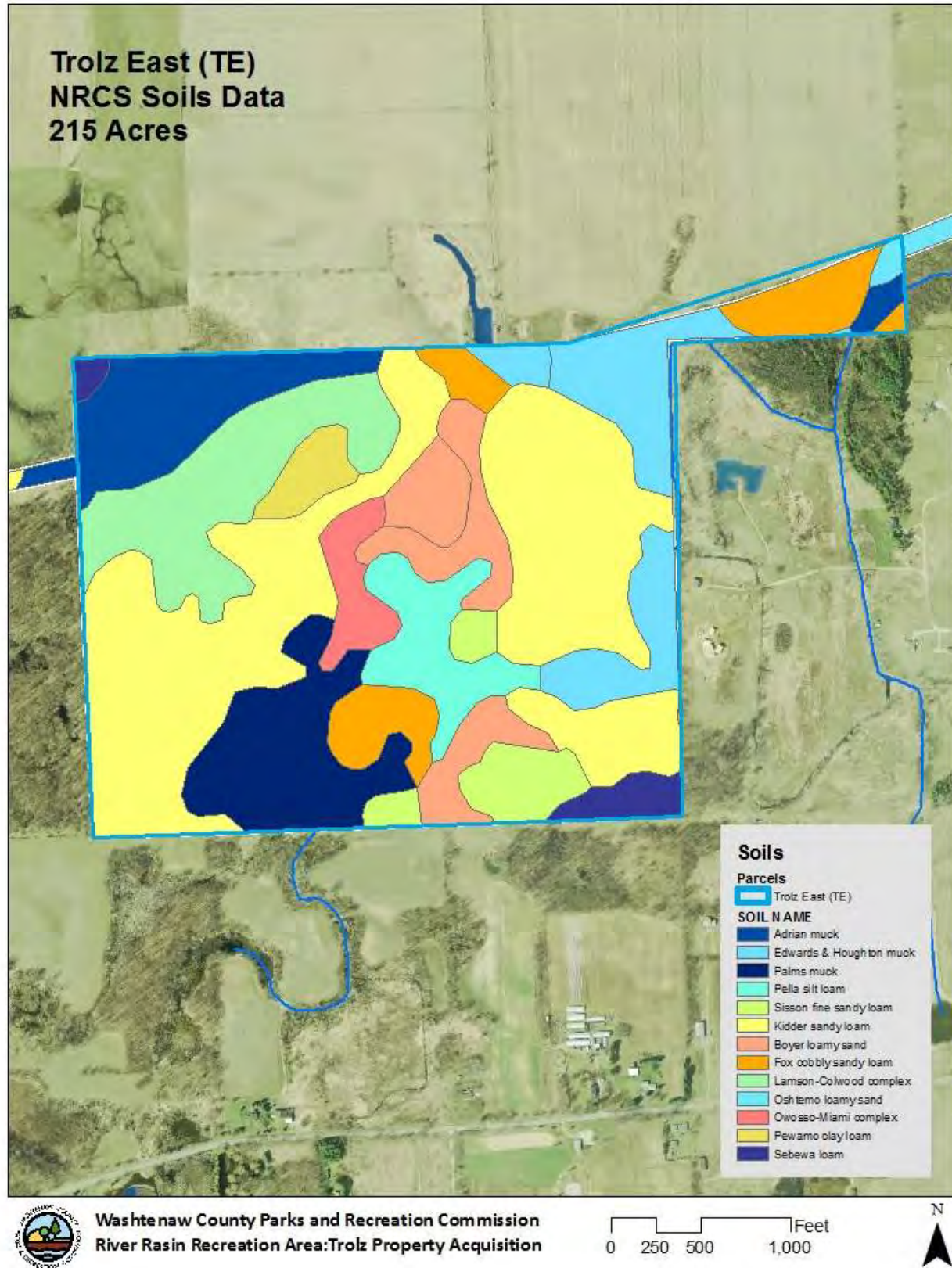


Figure 6: Soils data for TE

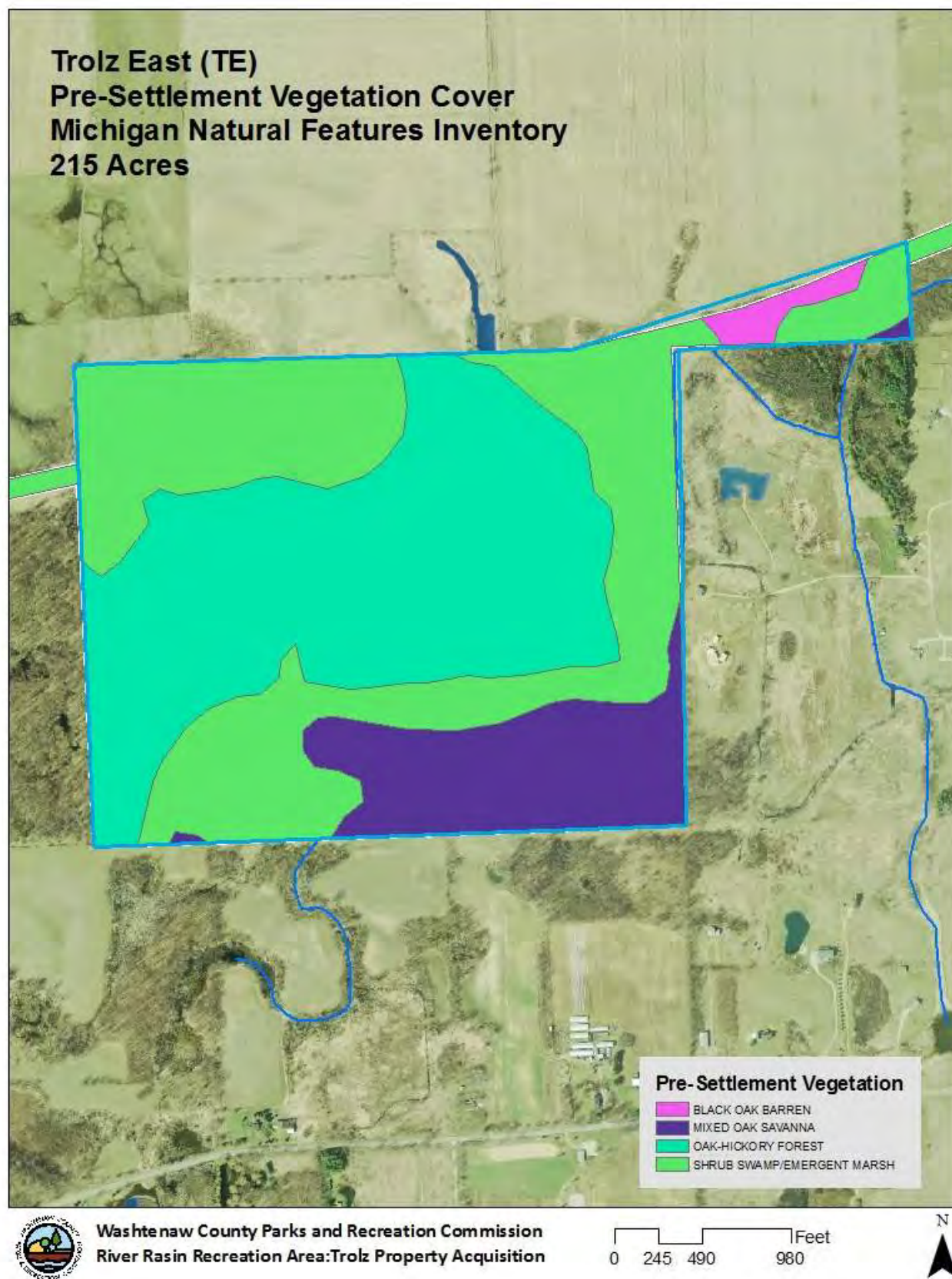


Figure 7: Pre-settlement vegetation based on historic records, soils data, topography, and hydrology

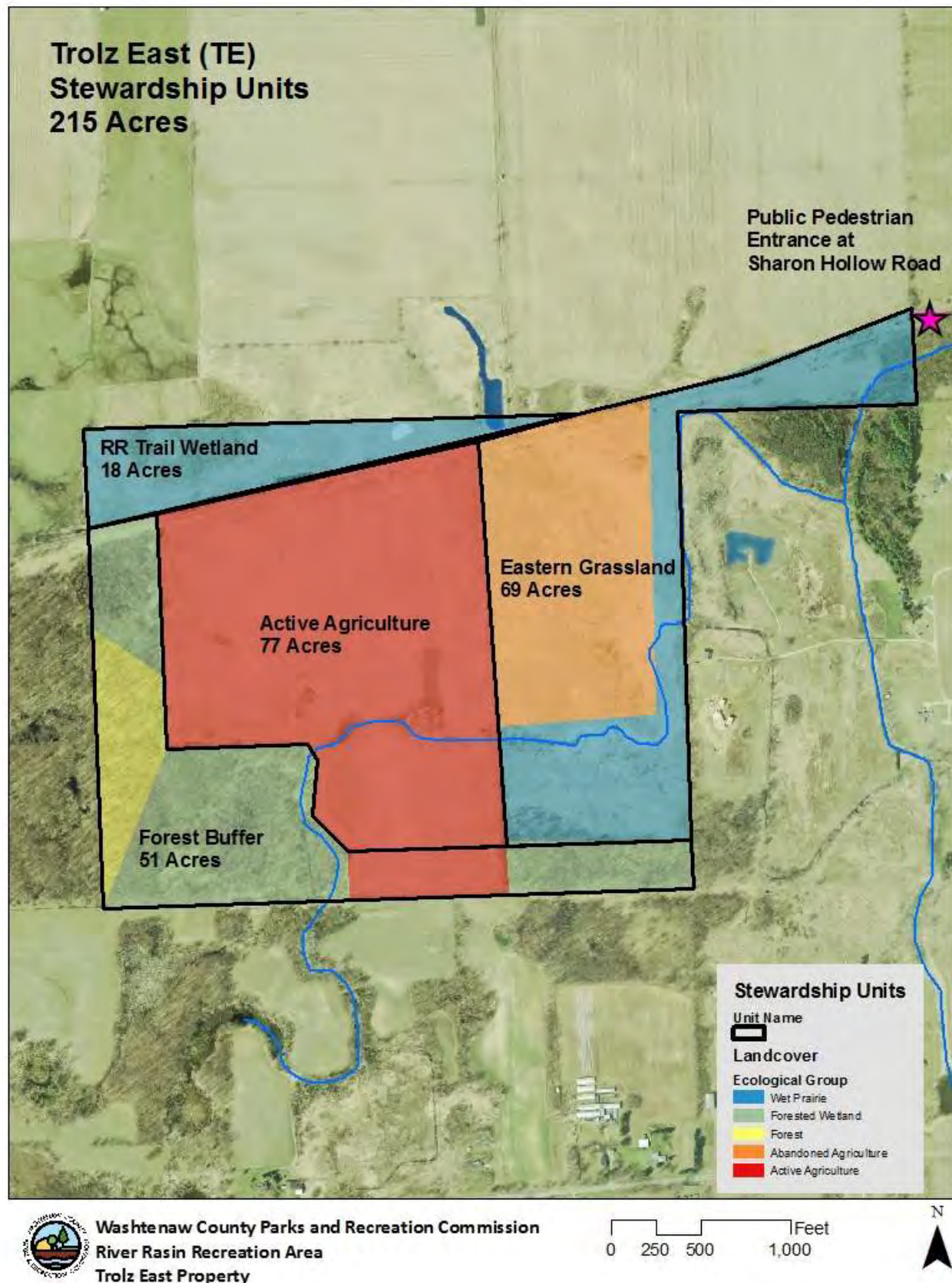


Figure 8: TE Stewardship Units

TE Stewardship Units

Eastern Grassland



Image 3: Looking south across the Eastern Grassland from a high point

Inventory: 69 acres grassland, adjacent wooded and open wetlands, and habitat resources existing along the RR Trail leading from Sharon Hollow Road.

Description: Former pasture and/or cropped agricultural land that is currently left fallow. The uplands are dominated by non-native brome, with limited shrub cover and some populations of milkweed. Wet areas in this unit appear to have had limited disturbance and could include greater native biodiversity. To the south is a small wooded wetland. With limited canopy cover, this habitat could provide habitat for ground nesting, or grassland, birds. This area has been actively used as for agriculture since the 1940s, likely before. The heavy agricultural use likely diminished much of the native species, but some species do survive along the edges and RR Trail. To maintain the open habitat the area will be divided and managed under a three year mowing, or burning rotation. Each sub-unit will be mowed every third year to reduce vigor of invasive shrubs. Only a third is mowed yearly to maintain refugia (areas not disturbed) for wildlife resources.

Native species found in this unit include: *Andropogon virginicus* (big bluestem), *Mondarda fistulosa* (bergamont), *Pycnatheum* sp (Mountain Mint), and *Asclepias speciose* (common milkweed). Burning the

uplands might allow for native species increase across this landscape. The open wetland habitat and the adjacent uplands might support habitat for the Massasauga Rattlesnake, a species under consideration for federal endangered listing and currently listed as special concern in Michigan. The topography, views, and potential wildlife viewing resources all validate trail development into this area.



Image 2: Big Bluestem existing along the RR Trail at the entrance from Sharon Hollow Road

Stewardship Goal: Maintain open habitat to minimize shrub and tree succession, conduct surveys to understand species use

Stewardship Actions

- Maintain open grassland habitat through either mowing or prescribed fire.
- Develop a trail through the uplands, capitalizing on views and topography.
- Conduct surveys to determine breeding bird use.
- Build partnerships to encourage research of the Massasuaga use on the site.

Forest Buffer



Image 3: Looking across TE to the Forest Buffer.

Inventory: 51 acres of forest following the southern and western border.

Description: Given the soil data and field observations the unit consists of forested wetland and upland communities which encompass the entire western and partial southern borders of the property. Forested wetlands exist in the northwest, southwest, and southeast corners and are expected to be southern hardwood swamp communities, dominated by maples and ash (likely snags). There is a small upland connecting the forested wetlands, which exists on a kidder sandy loam soil. In this upland patch, a dry mesic or mesic southern forest community could exist. Historic aerals show minimal disturbance throughout the matrix and so it has been defined as core habitat, which could contain significant biodiversity. Indiana Bats, federally listed as endangered, might use the wooded wetlands during breeding season. Minimal disturbance into their habitat, specifically keeping standing snags, is recommended for protection.

Along the southern border, a patch of wetland forest exists in the southeastern corner, but the forest buffer is disconnected by agricultural land. Through soil data, it appears this should be a wetland forest community. The historic aerals the area shows minimal disturbance, though logging was likely conducted at some point before the 1970s. Building connectivity from the SE forest to the existing western forest could provide significant habitat resources. WCPARC will undertake a forest restoration project in the southern section of active agriculture to restore contiguous canopy. Roughly 6 acres will be removed from agriculture and planted with a variety of native species. Details to this plan are included in the Active Agriculture unit description. In landscape terms, this forest is a portion of a larger patch existing to the west, much of which is outside of the TE parcel borders.

Stewardship Goal: Encourage native canopy establishment and document species present**Stewardship Actions**

- Remove woody invasive species in the most southern wetland forest patch. Removal will reduce invasive cover and support the forest restoration.
- Conduct staff surveys to determine quality of plant communities and species present while evaluating overall access needed for stewardship activities to occur.
- Build partnerships with Indiana Bat researchers at Michigan Natural Features Inventory and Michigan State University to document if species is present

Active Agriculture

Inventory: 83 acres of row crops, currently corn.

Description: Cropland with a drain running E/W in the southern section which provides some diversity in wet uncropped patches. Given the community's agricultural heritage, WCPARC will continue its relationship with the current farmer to produce across 77 acres. Maintaining farming will also preserve the current viewshed. Farming practices will be improved to protect water quality and soil resources through the development of an NRCS Conservation Plan.

Along the southern border of the site, adjacent to the power line easement, WCPARC will restore 6 acres into a forest community. In the pre-settlement data, conditions might have supported a mixed oak savannah community. Given the soil data, the specific community could have been an oak openings community, dominated by *Quercus alba* (white oak) and *Q. macrocarpa* (bur oak) in the canopy, with an open understory including *Corylus americana* (hazelnut), *Andropogon gerardii* (little bluestem), and *Ratibida pinnata* (grey coneflower). To restore this community, land will be removed from farming and planted with up to 30 trees per acre. The trees will include sizes ranging from 2" caliber to whips. Additional plantings will include bare-shrubs and the seeding of native species for grass and forb development. Maintenance, including invasive shrub removal and watering large trees will be planned for the first 3-5 years. The ability to burn this area for long-term maintenance is limited by the adjacency to the power line easement and the overall narrow size of the buffer. The community composition observed 5-7 years after installation will also impact the need or ability to burn this restoration.

Stewardship Goal: Maintain farming and install best management practices to reduce impact on adjacent habitats and to benefit water quality. Restore 6 acres of forest connecting patches to the east and west along the southern border.

Stewardship Actions

- Request NRCS produce a conservation plan for this property that outlines best management practices to protect habitat and water quality resources.
- Design forest restoration plan, including planting design and determine contractor. Restoration work should occur in the first fall following acquisition. This restoration will be monitored and managed in the first 3 years to promote healthy native plant development and to minimize native species establishment.

RR Trail Wetland

Inventory: 18 acres to the north of the RR Trail in the NW corner of the property.

Description: A small wetland including open water habitat. The small patch size under ownership limits stewardship abilities. Only a portion of this wetland exists on WCPARC property. Overall the wetland is dominated by reed canary grass. The open water habitat increases wildlife viewing opportunities from the trail.

Stewardship Goal- Maintain open water habitat and views into this wetland.

Stewardship Actions

- Maintain open views along RR Trail, cutting invasive shrubs and trees as needed.



Image 4: Butterfly along the RR Trail in TE.

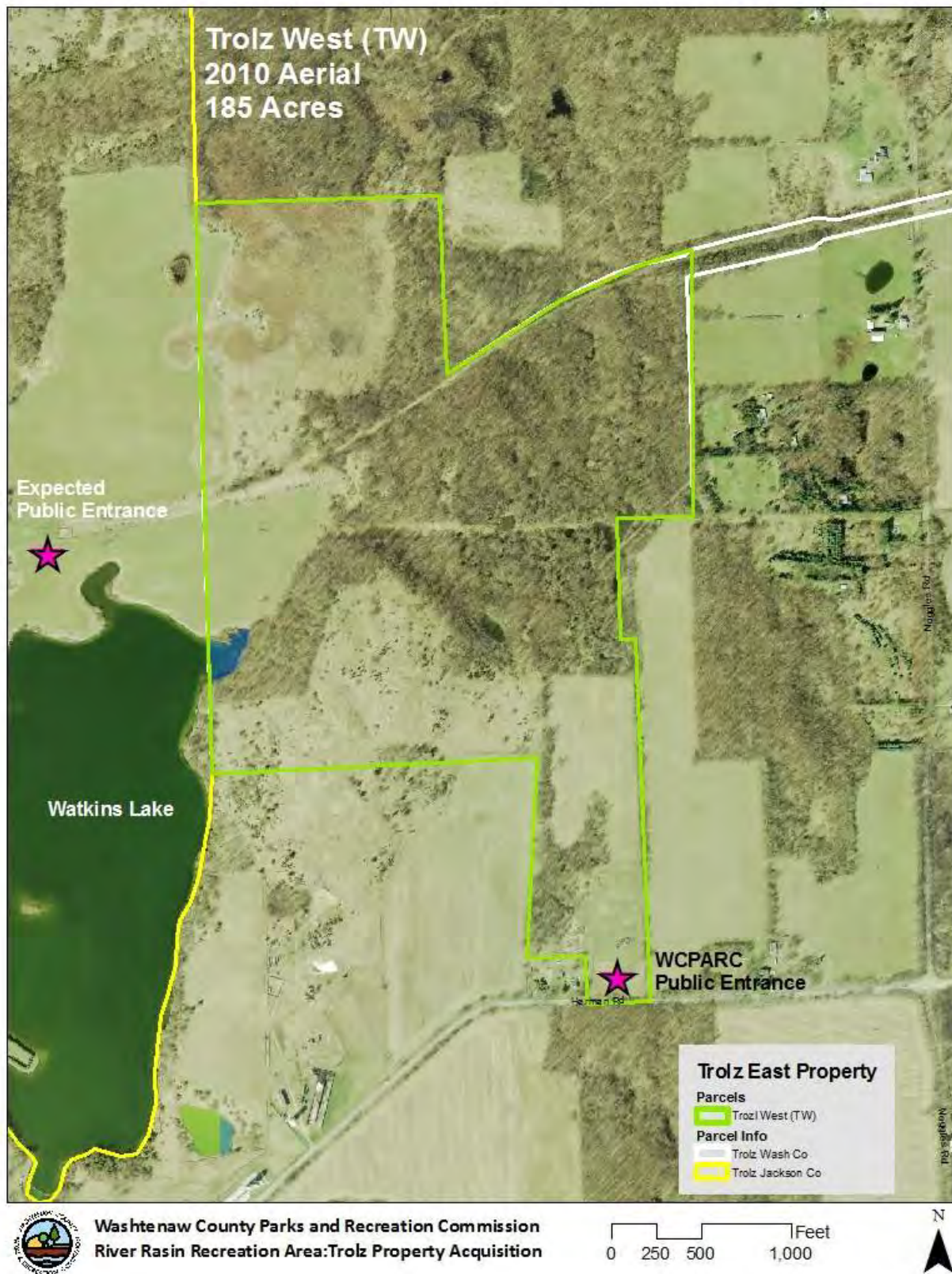


Figure 9: Trolz West adjacent to Watkins Lake.

Trolz West Site Description

Trolz West (TW) encompasses 185 acres and is adjacent to the Jackson County border and Watkins Lake (Fig. 9). The site contains 28 acres of active agriculture in two tracts, 28 acres of grassland (formerly agriculture), 94 acres of forest, and 35 acres of open wetland (Fig. 10). Minimal disturbance through the forested edge along Watkins Lake and in the Northern Wetland has resulted in these areas being designated as core habitat (Fig. 11). The pre-settlement vegetation data (Fig. 12) and the soils data (Fig. 13) show this area was dominated by forest and wetland communities before European settlement. The RR Trail cuts through the northern portion of the property. To the south a small area of active agriculture with forested buffers abuts to Herman Road. The rolling topography of the site allows for spectacular views to Watkins Lake to the west. There is interest from all partners to have a parking area built near Watkins Lake along Arnold Road. Depending on the timeline for that entrance, WCPARC might build an alternative public entrance along Herman Road. The experience of hiking dramatic forest and grassland environments to the historic RR Trail is captivating, and trail development throughout will be a priority. Given the diversity and size of habitats represented in TW, there will also be significant wildlife viewing opportunities for visitors.



Image 5: Diversity observed in the Northern Wetland edge, note the forb and sedge diversity.

TW Inventory and Assessment

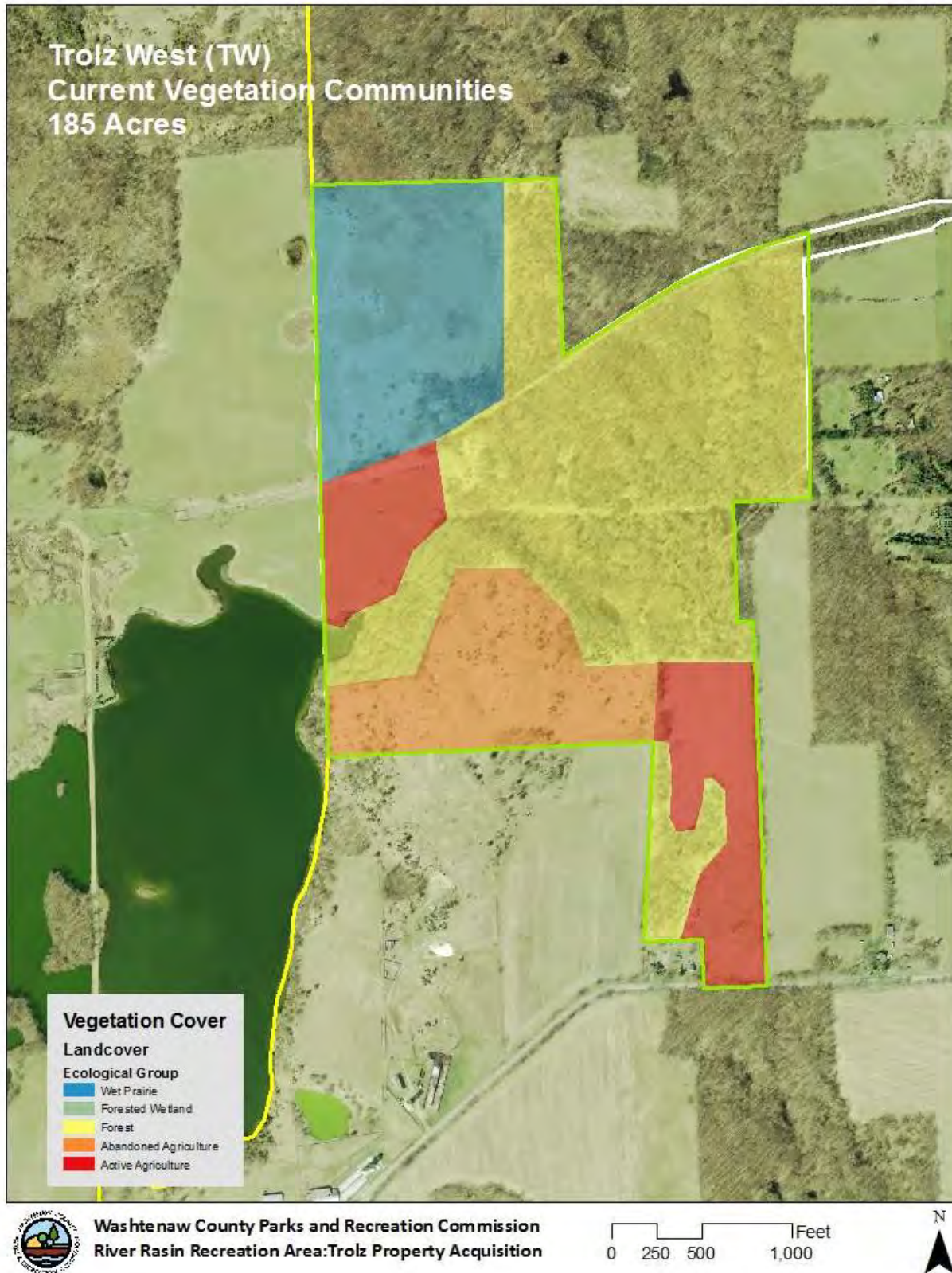


Figure 10: Existing vegetation communities as observed and assessed by WCPARC staff

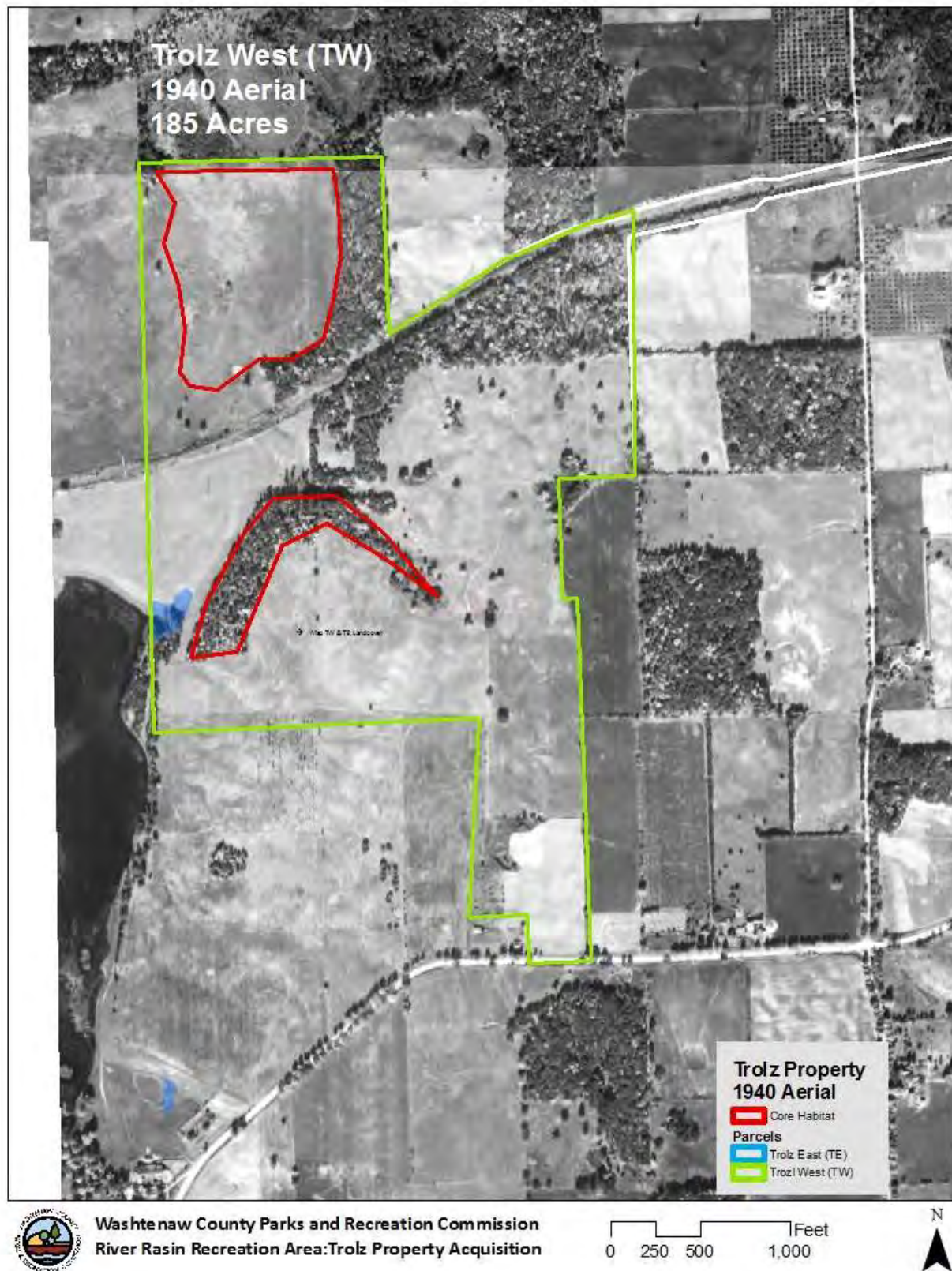


Figure 11: 1940s aerial with core habitat noted.

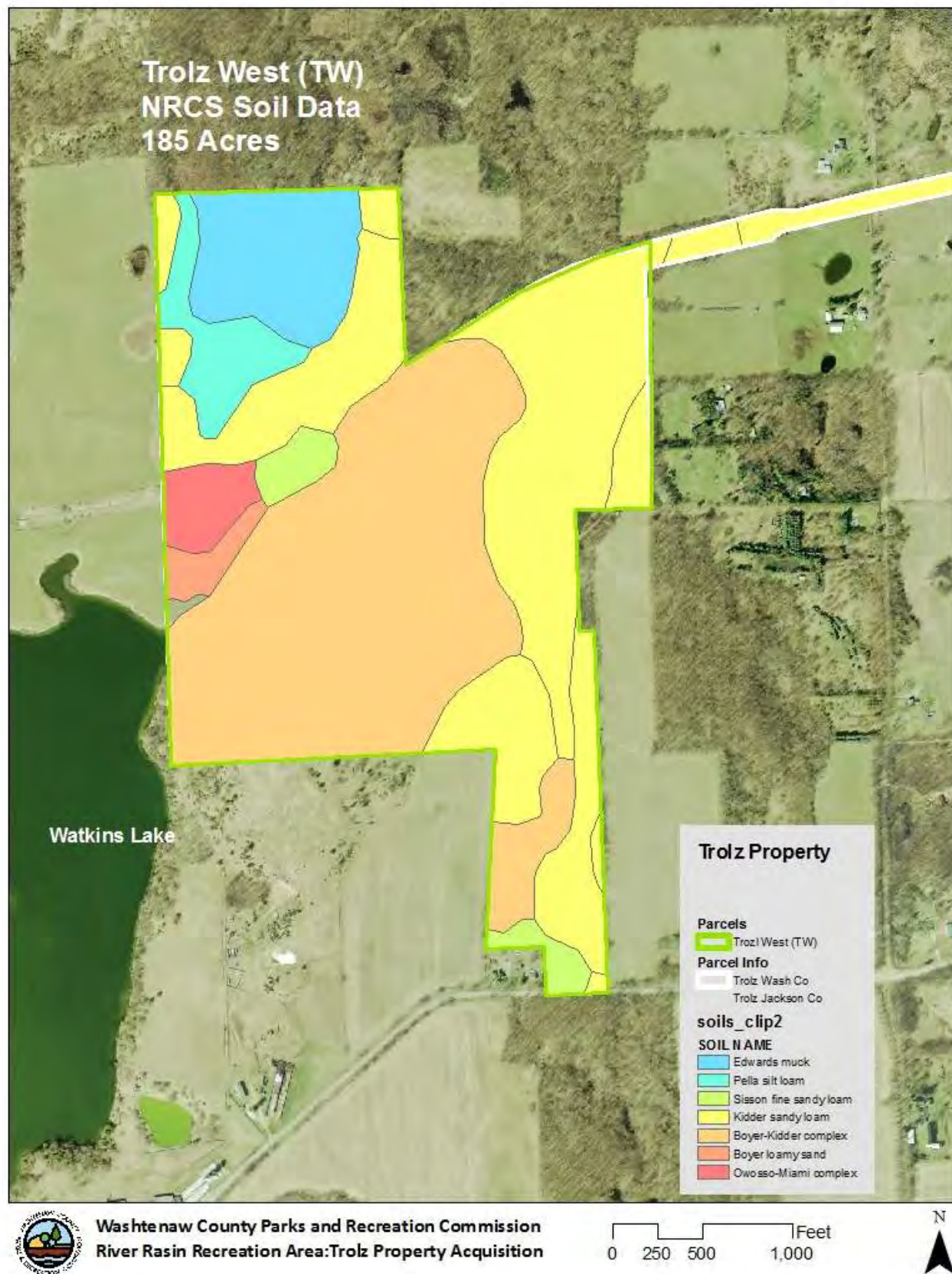


Figure 12: Soils data for TW, not the hydric soils to the north

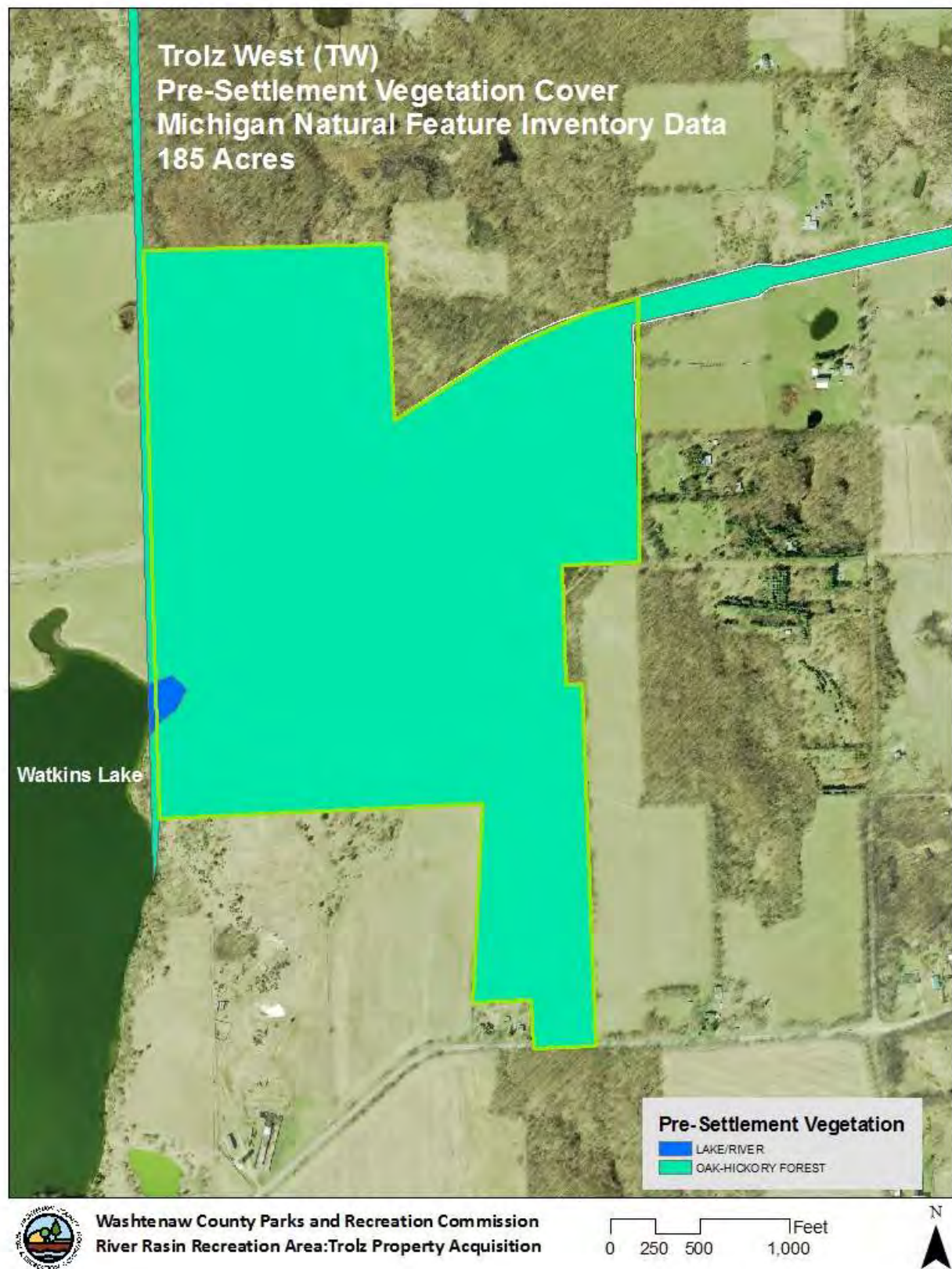


Figure 13: Pre-settlement cover

TE Stewardship Units

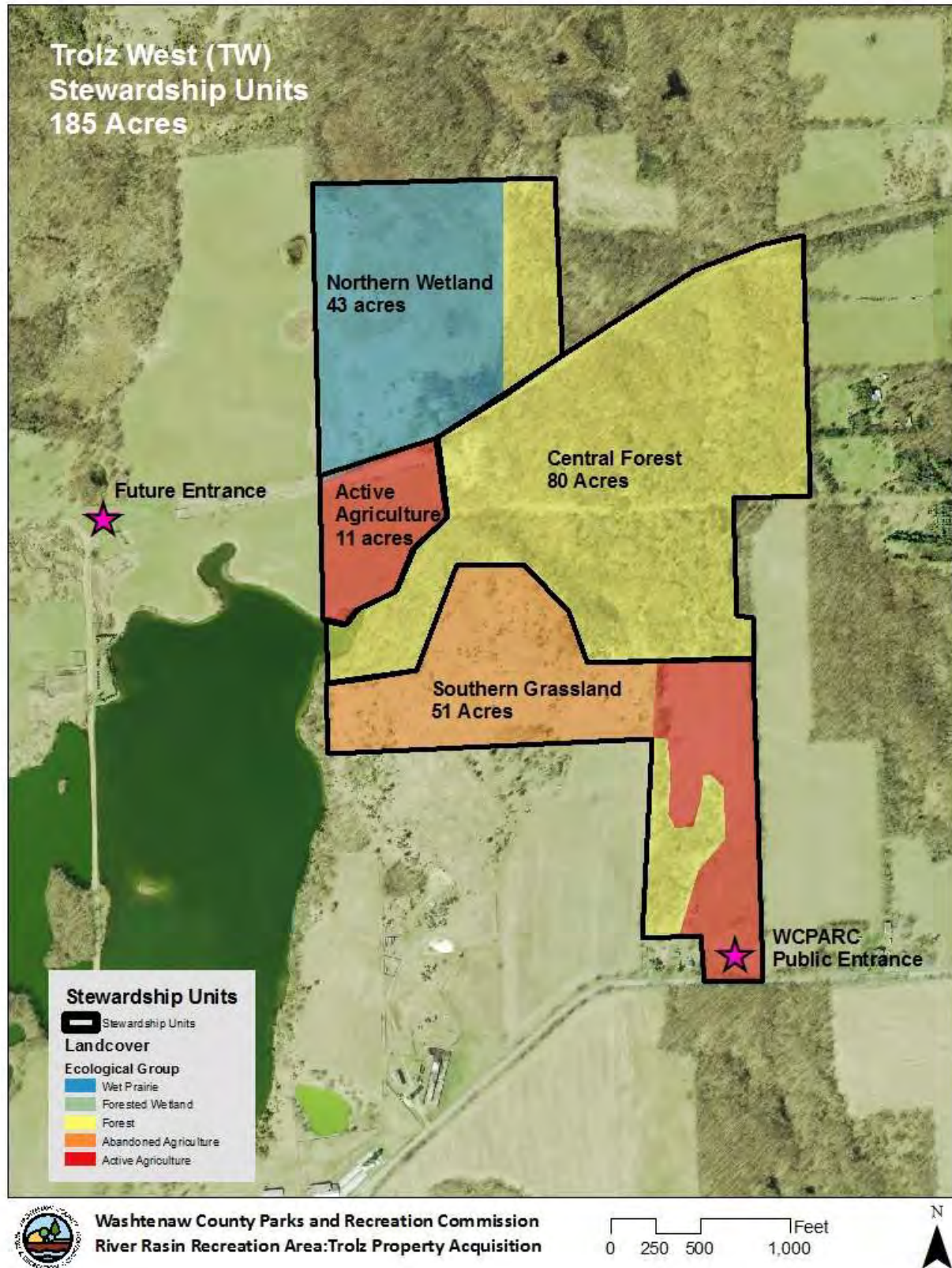


Figure 14: WCPARC Stewardship units for TW, including planned public entrances.

Central Forest



Image 6: The central forest, photo taken from along a former logging road

Inventory: 80 acres of dry mesic southern hardwood forest community often referred to as oak-hickory forests. This forest has been actively logged as recent as a few years ago.

Description: This unit encompasses the remaining forests to the south of the RR Trail. The forest includes rolling topography that supports upland forests intermixed with small wetland pockets. During field visits, staff noted Buttonbush prevalent in two wetlands. Over the last 50 years, and as recent as a few years ago, the site has been commercially logged. Though logging can help to promote healthy and diverse canopies, the footprint of the access roads and abandoned crowns have degraded the botanic quality of this forest. During site visits, staff noted medium to high coverage of invasive herbaceous species (garlic mustard) and shrub species (buckthorn and autumn olive) throughout the unit.

Historically oak hickory forests would have been maintained through periodic fires, and WCPARC will work to include areas of this forest into our burn program with the goal of improving diversity and reducing invasive species cover. Repeated burning might be needed over the next few years to mitigate the pressure of invasive species establishment. WCPARC will work to develop a simple, repeatable monitoring program (through either plot or transect study) for staff to collect data on burn response.

Despite the degraded quality of the botanic community, the size of the parcel means it provides significant, and regionally important, resources for wildlife. The topography surrounding the RR Trail is varied and provides ample opportunities for quality hiking experiences. Former logging road cross throughout the site and will be repurposed for trails and to define prescribed fires units.

There is one significant area of this forest that can be considered core habitat- the forest existing along the sloped edge leading to Watkins Lake (SE corner of the unit). This area includes large oak and hickory specimens and a diverse herbaceous understory including *Carex pennsylvanica* (pennsylvania sedge), *Podophyllum peltatum* (mayapple), and *Arisaema* sp (Jack-in-the-pulpit). In this section of the forest, the open structure provides views and access to Watkins Lake and should be included into the trail system.

Stewardship Goal- Provide public access and promote the development of a diverse dry mesic southern hardwood community (oak-hickory forest).

Stewardship Actions

- Design trails for public exploration and land management.
- Begin burning sections of 10-15 acres over the next 3-5 years. Burns should be conducted and assessed to determine improvements to the biodiversity. Specifically, we hope burning will rejuvenate oak in the understory and reduce density of invasive shrubs.
- Partner with students to produce a monitoring plan to assess prescribed fire outcomes.
- Conduct FQI in the core habitat along Watkins Lake. Begin surveying and removing invasive plants as discovered during field surveys through manual removal or spot treatment with herbicide.

Northern Wetland



Image 7: View across hayfields (in Jackson County) to the Northern Wetland unit.

Inventory: 43 acres of wetland habitat including a forested edge to the east.

Description: Minimal disturbance appears to have occurred across the open wetland habitat since the 1940s. Field observations confirm a varied botanic inventory including significant sedge and forb diversity existing in the open wetland. The habitat could support rare, or uncommon species and detailed botanical, ornithological, or butterfly surveys could be very useful in guiding long term management decisions. The forested edge was logged in summer 2015 and has been disrupted by numerous logging roads and abandoned crowns.

Given the views into the wetland from the RR Trail, this area will be valuable to the bird watching community. The northern wetland will be designated as an eBird hotspot. As a citizen science website maintained by the Cornell Lab of Ornithology, eBird captures volunteer data of observed bird species. WCPARC has utilized data from eBird in making stewardship decisions in other preserves. Currently Watkins Lake is already a hotspot with over 140 species observed. There is significant woody invasive shrub growth along the RR Trail foundation along the Northern Wetland that will need to be removed. The recent logging has put significant stresses on the eastern forested edge, stewardship options will have to be evaluated once vegetation is again established. At a landscape scale, this edge, and the

entire central forest are regionally significant for wildlife by providing over 100 acres of continuous canopy.

Stewardship Goal –Preserve the open structure and increase knowledge of the natural resources using the northern wetland

Stewardship Actions

- Conduct FQI of wetland habitat
- Remove invasive shrubs along RR Trail and into edge of wetland
- Monitor logging roads to determine management needs based on vegetation establishment.
- Designate as an eBird hotspot, promote through hosted birding walks with WCPARC staff Naturalists



Image 8: Disturbance caused by logging the Northern Wetland Unit forested edge.

Southern Grasslands

Inventory: 51 acres of former pasture, agriculture, and forest buffer.

Description: Containing some of the most dramatic views of the site, the rolling topography of the grasslands near Watkins Lake are stunning. Along Herman Road, WCPARC plans to build a public entrance with parking lot. A trail will begin at this entrance and travel to the grasslands overlooking Watkins Lake and into the core habitat in the Central Forest. A second entrance is under consideration off Arnold Road which would connect to the RR Trail. This entrance would be on property in Jackson County currently being considered for acquisition by the State of Michigan.

Formerly used for pasture and other agriculture, the grassland near Watkins Lake is covered with a non-native brome species, intermixed with invasive woody shrubs. The invasive Tree of Heaven was noted in this area along the edge to the central forest. The structure of this habitat is similar to the Eastern Grassland Unit in the TE parcel and by maintaining the open structure, this area could provide habitat for many species, including grassland nesting birds. To maintain the open habitat the area will be divided and managed under a three year mowing rotation. Each sub-unit will be mowed every third year to reduce vigor of invasive shrubs. Only a third is mowed yearly to maintain refugia (areas not disturbed) for wildlife resources.

WCPARC plans to convert the area currently dedicated to agriculture adjacent Herman Road to native prairie across 11 acres. Additional invasive removal into the wooded edge will also be considered. This native prairie will increase the size of grassland habitat. As in the TW parcel, the larger the grassland the more species diversity could be supported. The native seed established in the prairie could spread into the former pasture area adjacent to Watkins Lake. Burn tolerant tree species, especially native oaks will be added to the planting at a rate of 10 per acre. If the opportunity presents itself for purchase, acquiring more acres of this habitat existing to the east could be valuable for preservation.

Stewardship Goal –Restore native prairie across 11 acres of current agricultural land adjacent to Herman Road. Maintain open habitat across grasslands extending to the northern boundary of the unit.

Stewardship Actions

- Manage Tree of Heaven with using a concentrated herbicide and ‘drill and fill’ technique.
- Begin mowing 1/3 of the site yearly to keep woody species establishment.
- Design trail and designate areas available for prairie restoration
- Herbicide current ground cover and seed native prairie species in fall
- Mow to control invasive species in the first year and follow with an annual prescribed fire through year 3-4, depending on native grass establishment. Spot treat aggressive weeds with herbicide as needed.

Active Agriculture

Inventory: 11 acres of pasture.

Description: If parking exists near Watkins Lake in Jackson Co, this small pasture will be highly visible as a public entrance. Future management plans of this area are highly dependent to the development of the site in Jackson County by the State of Michigan. This area could be restored to native prairie to improve habitat resources and improve the entry experience for visitors. This area could also be used as a picnic area. Options will be discussed with the state of Michigan as the property is purchased and developed. Until then, the agriculture will continue as is across this unit.



Image 9: The view across Watkins Lake showing the Public Entrance Prairie Unit and Central Forest Unit.

General Stewardship work for public opening:

- Design and construct trail system, including clearing the RR Trail and building connecting trails into TE and TW.
- Design and construct public parking area along Herman Road

Yr. 1

- **TE Eastern Grassland:** Remove invasive shrubs from southern forest patch through cut stump treatment of a triclopyr salt at 30% active ingredient.
- **TE Forest Buffer:** Conduct staff survey to determine quality of plant communities and species present and evaluate overall access.
- **TE Active Agriculture:** Design and contract forest restoration project
- **TW Central Forest:** Conduct FQI in the core habitat along Watkins Lake, request additional invasive plant removal as needed.
- **TW Northern Wetland:** Define as eBird Hotspot, increase views to the wetland by removing invasive shrubs and trees along RR Trail.
- **TW Southern Grasslands:** begin removal of Tree of Heaven from forested edge and fields, using a basal bark treatment of triclopyr ester at 50% active ingredient.

Yr. 2

- **TE Active Agriculture:** maintain tree plantings and remove aggressive invasive species as needed.
- **TE Eastern Grassland:** Conduct surveys to determine breeding bird use.
- **TW Central Forest:** Begin burning a 5-10 acre section in spring, with another section in fall. Develop a simple monitoring plan that could include quadrants or transects to assess burning results.
- **TW Northern Wetland:** Conduct FQI in wetland habitat, assess plant establishment in logging roads to determine if management is feasible, request additional invasive removal as necessary.
- **TW Southern Grasslands:** begin mowing regiment to maintain open structure and keep woody invasive shrubs minimized.
- **TW Southern Grassland:** contract prairie planting recommending fall seeding, contract to include invasive species management through two years.

Yr. 3

- **TE Eastern Grasslands:** after the breeding bird survey has been conducted, begin mowing/burning regiment to maintain open structure and keep woody invasive shrubs minimized.
- **TE Active Agriculture:** maintain tree plantings and remove aggressive invasive species as needed.
- **TW Southern Grassland:** monitor contracted restoration services.
- **TW Southern Grasslands:** continue mowing regiment to maintain open structure and keep woody invasive shrubs minimized.

Yr. 4

- **TE Active Agriculture:** maintain tree plantings and remove aggressive invasive species as needed.
- **TW Southern Grassland:** monitor contracted restoration services.
- **TE Northern Wetland:** Work with eBird data to determine bird species using the wetland
- **TE Eastern Grasslands:** continue mowing/burning regiment to maintain open structure and keep woody invasive shrubs minimized.
- **TW Southern Grasslands:** continue mowing regiment to maintain open structure and keep woody invasive shrubs minimized.
- **TW Central Forest:** continue burning regiment, burning the same 5-10 acre section, collect data on community response.

Yr. 5

- **TW Southern Grassland:** conduct prescribed burn to promote native grass establishment (or Yr. 5 depending on establishment).
- **TW Northern Wetland:** Contract a burn across the wetland, to repeated no more frequently than 5 years.
- **TE Eastern Grasslands:** continue mowing/burning regiment to maintain open structure and keep woody invasive shrubs minimized.
- **TW Southern Grasslands:** continue mowing regiment to maintain open structure and keep woody invasive shrubs minimized.
- **TW Central Forest:** continue burning regiment, burning the same 5-10 acre section, collect data on community response.



Watkins Lake

Appendix D: Deeds, Easements, and Agreements



OIL AND GAS DEED

5

THIS INDENTURE, made this 15th day of June, 2016 BY AND BETWEEN the DEPARTMENT OF NATURAL RESOURCES for the STATE OF MICHIGAN, P.O. Box 30448, Lansing, Michigan 48909-7948 by virtue of the authority of Act 451, Public Acts of 1994, as amended, Party of the First Part, and

GT Ranch, LLC, a Michigan Limited Liability Company
P.O. Box 249
Jackson, Michigan 49204

Party of the Second Part,

WITNESSETH, That the said DEPARTMENT OF NATURAL RESOURCES for the STATE OF MICHIGAN, Party of the First Part as aforesaid, acting for and in behalf of the STATE OF MICHIGAN, for and in consideration of the sum of One and No/100 (\$1.00) Dollar to it in hand paid by the said Party of the Second Part, the receipt whereof is hereby confessed and acknowledged, does by these presents grant, bargain, sell, remise, and release and QUIT-CLAIM unto said Party of the Second Part, and its successors and assigns, all of the oil and/or gas as hereinafter provided in and under, and that may be produced from the following described land situated in the Township of Norvell, County of Jackson, State of Michigan, to-wit:

T04S, R02E, Sections 12, 13 and 14 as described in Exhibit A.

Together with the right of ingress and egress for the purpose of exploring, drilling for and producing oil and/or gas from said lands, and removing same therefrom.

It is understood and agreed that during the term of this instrument, all of the revenues which may be paid under any lease entered into by Second Party for oil and/or gas exploration and production purposes from said land, shall be owned by said Second Party.

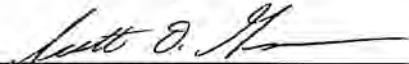
The Estate created by the conveyance shall terminate at the end of twenty (20) years from and after the date hereof, provided, however, that if at the end of said twenty (20) year period, oil and/or gas are being produced from said land in paying or commercial quantities, the estate hereby created shall continue for so long as said oil and/or gas produced from said land in paying or commercial quantities. At the end of said 20 year period, or at the end of such production in paying or commercial quantities from said land, whichever occurs last, the estate hereby conveyed shall terminate and First Party, its successors and assigns, shall hold the land herein described free of said estate.

Exemption from County Real Property Transfer Tax is claimed under authority of Section 5(a), 207.505, Compiled Laws.
Exemption from Michigan Real Estate Tax is claimed under authority of Section 6(a), 207.526, Compiled Laws.

IN WITNESS WHEREOF, the said Party of the First Part, by the Manager, Scott D. Goeman, Real Estate Services thereof, has hereunto subscribed its name and affixed the seal of aid THE DEPARTMENT OF NATURAL RESOURCES the day and year first here in above written.

Signed, Sealed and Delivered

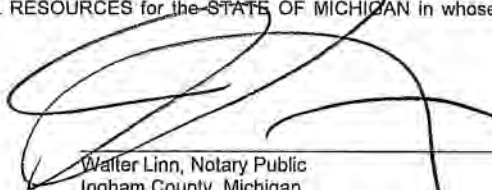
DEPARTMENT OF NATURAL RESOURCES
FOR THE STATE OF MICHIGAN



Scott D. Goeman, Manager
Real Estate Services

STATE OF }
MICHIGAN } ss.
County of Ingham }

On this 14th day of June, 2016, before me a Notary Public in and for said County personally appeared Scott D. Goeman, Real Estate Services Manager, of the DEPARTMENT OF NATURAL RESOURCES 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 NATURAL RESOURCES for the STATE OF MICHIGAN in whose behalf he acts.



Walter Linn, Notary Public
Ingham County, Michigan
My Commission Expires: October 10, 2019
Acting in the County of Ingham

* Prepared by and after recording return to:
Debbie Strzelec
Department of Natural Resources
P.O. Box 30448
Lansing, Michigan 48909-7948

OIL AND GAS DEED

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EXHIBIT A

Township of Norvell, County of Jackson, State of Michigan
Town 04 South, Range 02 East

Section 12

Beginning at the intersection of the centerline of Austin Road with the East line of the West 1/2 of the Northeast 1/4 of Section 12; thence South along the East line of said West 1/2, 700 feet; thence West 370 feet; thence North parallel to said East line to the centerline of Austin Road; thence Southeasterly along the centerline of Austin Road to the Place of Beginning.

Parcel Number: 000-20-12-251-002-00

The Northwest 1/4 of the Southeast 1/4; ALSO the West 1/2 of the Northeast 1/4 of Section 12 lying South of Austin Road EXCEPT land described in Liber 770, Page 1172, Jackson County Records, as beginning at the intersection of the centerline of Austin Road with the East line of the West 1/2 of the Northeast 1/4 of Section 12; thence South along the East line of said West 1/2, 700 feet; thence West 370 feet; thence North parallel to said East line to the centerline of Austin Road; thence Southeasterly along the centerline of Austin Road to the Place of Beginning.

Parcel Number: Part of 000-20-12-251-001-00

The Southeast 1/4 of the Northwest 1/4 AND the Northeast 1/4 of the Southwest 1/4.

Parcel Number: Part of 000-20-12-176-001-00

The Southeast 1/4 of the Southwest 1/4 AND the South 1/2 of the Southeast 1/4.

Parcel Number: 000-20-12-376-001-00

Section 13

That part of the Northeast 1/4 lying North of the Southerly right-of-way line of the LS & MS Railroad right-of-way; ALSO that part of the Northeast 1/4 of the Northwest 1/4 lying North of the center of angling highway [Arnold Road].

Parcel Number: 000-20-13-201-001-00

That part of the West 1/2 of the Northeast 1/4 lying South of the Southerly right-of-way line of LS & MS Railroad; ALSO the Northwest 1/4 of the Southeast 1/4; ALSO beginning in the North-South 1/4 line of Section 13 at a point distant 1149 feet South of the North 1/4 post; thence S 70°15' W 1346 feet to the West 1/8 line; thence South along the West 1/8 line to the East-West 1/4 line; thence East along the East-West 1/4 line to the Center of Section; thence North along North-South 1/4 line to beginning; EXCEPT the South 740.0 feet of the Southeast 1/4 of the Northwest 1/4 of said Section 13.

AKA per survey done by Robin Reed, PS 34974, Project #1654B dated 02/03/2016: That part of the Northwest 1/4 and that part of the Northeast 1/4 and that part of the Southeast 1/4 of Section 13 described as Commencing at the North 1/4 Corner of said Section 13, thence run S 01°07'10" E along the North and South 1/4 line of said Section 13 a distance of 1149.00 feet to the Point of Beginning; thence run S 73°06'45" W along the Southerly line of land described in the first paragraph of Schedule A of deed recorded in Liber 1189, Page 82, Jackson County Records, a distance of 1347.12 feet [as measured] [S 70°15' W 1346 feet as indicated in Quit Claim Deed dated 12/20/1988, recorded in Liber 1189, Page 82] to the West line of the East 1/2 of the said Northwest 1/4; thence run S 01°00'47" E along the said West line a distance of 389.51 feet; thence run N 87°02'41" E a distance of 1297.82 feet to the said North and South 1/4 line; thence run S 01°07'10" E along the said North and South 1/4 line a distance of 786.97 feet to the Center of said Section 13; thence continuing S 01°07'10" E along the said North and South 1/4 line a distance of 1323.01 feet to the Southwest Corner of the Northwest 1/4 of the said Southeast 1/4; thence run N 85°33'16" E along the South line of the said Northwest 1/4 of the Southeast 1/4 a distance of 1301.20 feet to the Southeast Corner of the said Northwest 1/4 of the Southeast 1/4; thence run N 01°20'21" W along the East line of the said Northwest 1/4 of the Southeast 1/4 a distance of 1325.22 feet to the Northeast Corner of the said Northwest 1/4 of the Southeast 1/4; thence run N 01°07'02" W along the East line of the West 1/2 of the said Northeast 1/4 a distance of 1551.58 feet to the Southerly line of the LS & MS Railroad; thence run S 87°49'10" W along the said South line a distance of 1294.21 feet to the said North and South 1/4 line; thence run S 01°07'10" E along the said North and South line a distance of 104.34 feet to the Point of Beginning.

Parcel Number: Part of 000-20-13-251-001-00

OIL AND GAS DEED

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Township of Norvell, County of Jackson, State of Michigan
Town 04 South, Range 02 East

Section 13

All that part of the East 1/2 of the East 1/2 of Section 13 lying South of land owned by the LS & MS Railroad EXCEPT all that portion of land lying Southerly and Easterly of the water's edge of Watkins Lake. AKA per survey done by Robin Reed, PS 34974, Project #1654B dated 02/03/2016: That part of the Northeast 1/4 and that part of the Southeast 1/4 of Section 13 described as Commencing at the Northeast Corner of said Section 13, thence run S 01°06'54" E along the East line of said Section 13 a distance of 1080.24 feet to the Southerly line of the LS and MS Railroad and the Point of Beginning; thence continuing S 01°06'54" E along the said East Section line a distance of 960 feet, more or less, to a contour line of 977.36 feet, being the overflow elevation of Watkins Lake as determined by a chiseled square in the Southerly inside corner of the top of a concrete structure 108 feet East of Arnold Road and 678 feet South of the [LS and MS] Railroad; thence run Southwesterly and Southeasterly along the said 977.36 feet contour line to the East and West 1/4 line of said Section 13; thence continuing Southeasterly along the said contour line to the East line of said Section 13; thence run S 01°33'30" E approximately 300 feet along the said East Section line to the said 977.36 feet contour line; thence run Southerly, Westerly and Northerly along the said 977.36 feet contour line to a point N 01°20'21" W 1066.21 feet and N 88°39'39" E approximately 13 feet from the Southwest Corner of the Southeast 1/4 of the said Southeast 1/4; thence run S 88°39'39" W approximately 13 feet to the West line of the said Southeast 1/4 of the Southeast 1/4, being N 01°20'21" W 1066.21 feet from the said Southwest Corner of the Southeast 1/4 of the Southeast 1/4 (The 977.36 feet contour Property Line is supplemented by an Intermediate Traverse Line that is approximately parallel with and Easterly, Southerly and Westerly of the said 977.36 feet contour line, with its Point of Beginning being S 01°33'30" E along the said East Section line at a distance of 323.17 feet from the said East 1/4 Corner; thence run along the said Intermediate Traverse Line South of and near the 977.36 feet contour line S 19°19'31" W a distance of 410.13 feet; thence continuing along the said Intermediate Traverse Line S 06°19'30" W a distance of 997.33 feet; thence continuing along the said Intermediate Traverse Line S 25°09'49" W a distance of 362.71 feet; thence continuing along the said Intermediate Traverse Line S 83°27'59" W a distance of 390.11 feet; thence continuing along the said Intermediate Traverse Line S 14°22'19" W a distance of 143.68 feet; thence continuing along the said Intermediate Traverse Line S 60°20'35" W a distance of 147.76 feet; thence continuing along the said Intermediate Traverse Line N 44°53'49" W a distance of 129.12 feet; thence continuing along the said Intermediate Traverse Line N 09°51'45" E a distance of 190.46 feet; thence continuing along the said Intermediate Traverse Line N 38°23'48" W a distance of 408.85 feet to the said West line of the Southeast 1/4 of the Southeast 1/4 and the Point of Ending of the said Intermediate Traverse Line, said point being N 01°20'21" W a distance of 1066.21 feet from the said Southwest Corner of the Southeast 1/4 of the Southeast 1/4; thence run N 01°20'21" W along the said West line a distance of 259.01 feet to the Northwest Corner of the Southeast 1/4 of the said Southeast 1/4; thence continuing N 01°20'21" W along the said West line a distance of 1325.22 feet to the Northwest Corner of the Northeast 1/4 of the said Southeast 1/4; thence run N 01°07'02" W a distance of 1551.58 feet to the said Southerly line of the LS & MS Railroad; thence run N 87°49'10" E along the said South line a distance of 33.01 feet; thence run S 01°07'02" E a distance of 48.00 feet; thence run N 85°08'37" E along the said South line a distance of 823.00 feet; thence run N 63°26'14" E along the said South line a distance of 83.00 feet; thence run Easterly along a 3118.96 feet radius non tangent curve concave to the North a distance of 216.94 feet, the chord bears N 78°36'43" E 216.90 feet to the Point of Compound Curvature; thence run Easterly along a 4241.94 feet radius curve to the left a distance of 155.55 feet, the chord bears N 75°34'08" E 155.54 feet to the said East Section line and the Point of Beginning.
Parcel Number: Part of 000-20-13-400-001-00

Beginning at a point of intersection of the Northerly right-of-way line of the LS & MS Railroad with the West 1/8 line of Section 13; thence North along the West 1/8 line to the center of angling highway [Arnold Road]; thence Southeasterly along said centerline to the Northerly right-of-way of said railroad; thence Southwesterly along said right-of-way to the Beginning.
Parcel Number: 000-20-13-126-001-00

Commencing at the Northwest corner of the Southwest 1/4 of the Northwest 1/4 of Section 13; thence East along the North East-West 1/4, 1/4 [North 1/16th] Section line of the Southwest 1/4 of the Northwest 1/4, 660 feet for a Place of Beginning; thence 90° to the left to the North line of the LS & MS Railroad; thence Westerly along said North line to a point in the West North-South Section line of Section 13 (also called the West line of said Section 13); thence South in said Section line to a point in the South line of the LS & MS Railroad; thence Northeasterly along said South line to a point in a line 660 feet East of the West North-South Section line of Section 13; thence North to the Place of Beginning.
Parcel Number: 000-20-13-151-003-00

OIL AND GAS DEED

Page 5

Township of Norvell, County of Jackson, State of Michigan
Town 04 South, Range 02 East

Section 14

The Northeast 1/4 of the Northwest 1/4 AND the West 1/2 of the Northeast 1/4 of Section 14 EXCEPT the land situated South of the South line of the LS & MS Railroad right-of-way.

Parcel Number: Part of 000-20-14-201-001-00 ✓

Commencing at the Northeast corner of the Southeast 1/4 of the Northeast 1/4 of Section 14; thence South on the East Section line to a point on the North line of the LS & MS Railroad for a Place of Beginning; thence Southwesterly along said North line to the centerline of Fay Lake Highway; thence South on the centerline of the highway to a point on the South line of the LS & MS Railroad; thence Northeasterly along said South line to a point on the East Section line of Section 14; thence North on said line to the Place of Beginning.

Parcel Number: 000-20-14-276-001-00 ✓



LIBER 2079 PAGE 1233 1 of 3
 STATE OF MICHIGAN - JACKSON COUNTY
 Received 06/20/2016 12:36:03 PM 2743121
 Processed 06/20/2016 12:38:17 PM EAS
 Amanda L. Riska, Clerk/Registrar of Deed

EASEMENT FOR RECREATIONAL TRAILWAY PURPOSES

FOR AND IN CONSIDERATION OF One Dollar (\$1.00) in hand paid, the receipt of which is hereby acknowledged, GT RANCH, LLC, 3460 Ann Arbor Road, Jackson, Michigan 49202, hereinafter referred to as GRANTOR, does hereby convey and quit-claim to the MICHIGAN DEPARTMENT OF NATURAL RESOURCES for the State of Michigan, whose post office address is P.O. Box 30448, Lansing, MI 48909-7948, hereinafter referred to as GRANTEE, and to its successors and assigns the permanent nonexclusive easement and right to place, construct, operate, repair and maintain a public use recreational trail way, subject to the mutual agreement of Grantor and Grantee, following the most direct and practical route upon and across the parcels described herein and for the sole purpose of providing a non-motorized trail way between certain parcels owned by the Grantee without having to pass over property owned by a third party, upon and across, the following described parcels of land situated in Township of Norvell, County of Jackson, State of Michigan, to wit:

PARCEL 1

That portion of Assessor's Permanent Parcel Number: 000-20-14-201-001-00 to be retained by the grantor AND DESCRIBED AS: That part of the W ½ of the NE ¼ of lying S of the LS & MS Railroad Right-of-Way, Section 14, T4S, R2E. Containing 5.5 acres, more or less.

PARCEL 2

Permanent Parcel Number: 000-20-14-400-001-00. That part of the E ½ of the E ½ of Section 14 lying S of the Railroad Right-of-Way EXCLUDING THEREFROM the S 9 rods of the E 2.5 rods for school purposes. Section 14, T4S, R2E. Containing 103.33 acres, more or less.

PARCEL 3

Permanent Parcel Number: 000-20-13-151-001-00. That part of the W ½ of the SW ¼ of the NW ¼ lying S of the Railroad Right-of-Way, Section 13, T4S, R2E. Containing 16.75 acres, more or less.

PARCEL 4

Permanent Parcel Number: 000-20-13-301-001-00. The S 5 acres of the E ½ of the SW ¼ of the NW ¼ and also the W ½ of the SW ¼, EXCLUDING THEREFROM the S 7 rods of the W 6 rods thereof for a school site. Section 13, T4S, R2E. Containing 84.75 acres, more or less.

PARCEL 5

That portion of Assessor's Permanent Parcel Number: 000-20-13-251-001-00 to be retained by the grantor AND DESCRIBED AS: The E ½ of the SW ¼ of Section 13, and the S ½ of the SE ¼ of the NW ¼ of Section 13, T4S, R2E. Containing 96 acres, more or less.

This easement is subject to the following conditions and requirements:

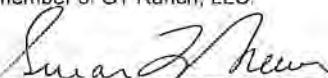
- (1) That this Recreational Trail Easement is for public use for recreational trail purposes, and the Grantor retains all rights in and to the surface of said premises, and beneath the surface thereof, including the right to install or grant to others the right to install underground pipes and conduits under said easement trail as may be deemed necessary by the Grantor. The Grantor shall restore the property and Grantees improvements as near as possible to their original condition upon completion of any work in the easement trail by Grantor, its successors, invitees or assigns.
- (2) Grantor agrees not to install or grant to others the right to install curb cuts or access drives along the length of the easement trail without the approval of the Grantee.
- (3) Grantee has the right to install adequate ditches, bridges, and culverts where necessary for the maintenance of the trail.
- (4) Grantee has the right to the removal at any time of such trees, shrubs and vegetation as necessary to the construction and maintenance of the trail, further notice of such removal being hereby expressly waived; provided, that all desirable trees, shrubs and vegetation which do not interfere with the construction, maintenance or use of the trail are to be preserved and shall not be removed or disturbed.
- (5) Grantee accepts this easement subject to all prior and valid easements, permits, licenses, leases, and other rights existing or pending at the time of the issuance of this easement, which may have been granted for said lands.

If, after the intended trail way is established, a particular parcel is not included in the trail way, then the easement for that particular parcel shall be void and further, if subsequent circumstances render the purposes of the trail easement unnecessary or impossible to fulfill, then this Trail Easement may be entirely terminated or modified only by agreement of Grantor and Grantee or judicial proceedings.

This instrument shall be binding upon and inure to the benefit of the parties, hereto, their heirs, representatives, successors and assigns.

IN WITNESS WHEREOF, we have hereunto set our hand and seals this 15 day of June, 2016.

GT RANCH, LLC

By 
Gary Trolz managing memberSTATE OF MICHIGAN)
)SS
COUNTY OF JACKSON)The foregoing instrument was acknowledged before me this 15 day of
June, 2016, by Gary Trolz, managing member of GT Ranch, LLC.SUSAN L. BREWER
NOTARY PUBLIC, Jackson County, MI
My Commission Expires Dec. 8, 2018
Acting in Jackson County
Susan L. Brewer, Notary Public
State of Michigan, County of Jackson
Acting in the County of Jackson
My Commission Expires: 12-8-2018X Prepared by and Return to:
Rob Corbett
REAL ESTATE SERVICES
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
PO BOX 30448
LANSING, MI 48909-7948



Agreement Permitting Agricultural Water Use

THIS AGREEMENT, Made this 31st day of May, 2016 BY AND BETWEEN the **DEPARTMENT OF NATURAL RESOURCES** for the **STATE OF MICHIGAN**, Post Office Box 30448, Lansing, Michigan 48909-7948 (GRANTOR) by virtue of the authority of Act 451, Public Acts of 1994, as amended, and Gary Trolz, 3460 Ann Arbor Road, Jackson, Michigan 49202 (GRANTEE);

WITNESSETH, that the **DEPARTMENT OF NATURAL RESOURCES** for the **STATE OF MICHIGAN**, acting for and in behalf of the **STATE OF MICHIGAN**, does by these presents grant, Grantee, the right to enter on to State-owned land in the Northeast 1/4 of Section 13, T04S, R02E, Norvell Township, Jackson County, Michigan for the purpose of maintaining and operating existing in-ground pumps and wells for the purpose of providing water for agricultural purposes on adjacent land owned by Grantee together with the right of ingress and egress for these purposes.

It is understood that this agreement creates a non-transferrable permission granted only to the Grantee and his agents, workmen and tenants for as long as the following conditions are met:

- 1) The right created by the conveyance shall terminate at the end of twenty (20) years from and after the date hereof, or, when the adjacent and nearby lands served with irrigation from this source (Watkins Lake and the associated pumps and wells) pass from the ownership and control of Grantee whichever condition occurs first, whereupon the rights conveyed under this agreement shall terminate the Grantor shall hold the land herein described free of any obligation assigned through this agreement.
- 2) The Grantee will be solely responsible for the operation and maintenance of the pre-existing wells and pumps associated with the irrigation operations at Watkins Lake and agrees to keep all wells, pumps and associated equipment in good working order for the term of this agreement.
- 3) The Grantee agrees to maintain the water level of Watkins Lake at between 974 feet and 976 feet above sea level, the normal historical level of the lake.
- 4) The Grantee may terminate this agreement by notifying the Grantor of the termination via a certified letter to that effect.


The Grantor agrees to make reasonable accommodation to the Grantee in order to enable Grantee's access to the pumps and wells for the purpose of maintenance and operation as such seasonal needs require.

The Grantor, through the its local unit manager, will monitor the level of Watkins Lake every August and as otherwise required to ensure Grantee's compliance with the lake level requirement noted in item 3 above.

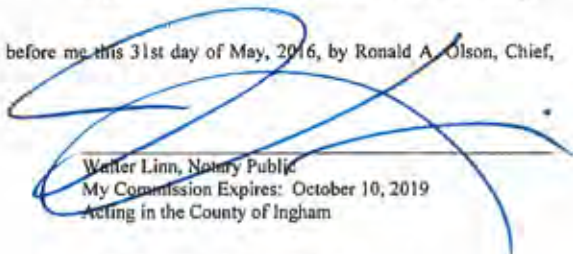
The said Grantor, by its Chief, Parks and Recreation Division, has signed and affixed the seal of the State of Michigan by virtue of action taken by Grantor on May 31, 2016, and Grantee has signed and affixed its seal the day and year written below.

ACKNOWLEDGEMENT BY GRANTOR

Signature:



 Ronald A. Olson, Chief
 Parks and Recreation Division
 Department of Natural Resources for the State of Michigan

The foregoing instrument was acknowledged before me this 31st day of May, 2016, by Ronald A. Olson, Chief, Parks and Recreation Division.


 Walter Linn, Notary Public
 My Commission Expires: October 10, 2019
 Acting in the County of Ingham

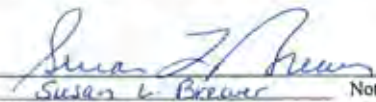
ACKNOWLEDGEMENT BY GRANTEE

Signature:


 Gary Trolz, Managing Member
 GT Ranch, LLC

The foregoing instrument was acknowledged before me this 15 day of June, 2016, by Gary Trolz, Managing Member, GT Ranch, LLC.

SUSAN L. BREWER
 NOTARY PUBLIC, Jackson County, MI
 My Commission Expires Dec. 8, 2018
 Acting in Jackson County


 Susan L. Brewer Notary Public
 State of Michigan, Jackson County
 Acting in Jackson County
 My Commission Expires: 12-8-2018

Candidate Conservation Agreement with Assurances -- Agreement Number:

Candidate Conservation Agreement with Assurances for the Eastern Massasauga Rattlesnake in Michigan



This Agreement, effective and binding on the date of the last signature below, is between the Michigan Department of Natural Resources (DNR), the Michigan Department of Military and Veterans Affairs (DMVA) and the U.S. Fish and Wildlife Service (Service). Participating property owners and oil, gas and mineral development companies may also be included under the Agreement by signing a Certificate of Inclusion (CI Participants).

Participating Landowners: Michigan Department of Natural Resources and
Michigan Department of Military and Veterans Affairs

Permit Holder: Michigan Department of Natural Resources

Service: The Service designates the following individual as the Agreement Administrator:

Scott Hicks
Field Supervisor
East Lansing Field Office
2651 Coolidge Road
East Lansing, Michigan 48823

Tracking Number:

Note: Excerpt of the Candidate Conservation Agreement with Assurances (CCAA) includes pages 18-42 of the signed agreement.

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7) Conservation Measures

7.1 Management Strategies for Managed Lands

These habitat management guidelines were developed to provide land managers with a framework to protect EMR populations while creating and/or restoring suitable habitat needed to sustain EMR populations on enrolled lands. These guidelines reflect current knowledge of researchers and resource managers in Michigan. However, we also recognize that our understanding of the factors, including management actions, influencing EMR population dynamics are limited. There are varying degrees of support for the efficacy for the conservation measures currently available for EMR (e.g., informed judgment of experienced land managers, well-documented research across multiple types of sites, etc.). Therefore as resources allow, an adaptive management approach that targets key assumptions and uncertainties related to management actions is critical to meeting the CCAA standard over the life of this agreement (Section 10). These guidelines will be followed on enrolled lands identified as 'Managed Land' and may be modified if population levels decline due to changed circumstances (see Section 12.2.1).

When deviations from these guidelines are necessary, a written request to the Service must be submitted as described in "Modifications of the CCAA" on page 25 of the CCAA. If a non-DNR Enrolled Landowner is requesting the modification, the DNR must be notified as well. In cases where a quick review is necessary (i.e. short burn windows in the spring, urgent situations), approval must be obtained from the Service. In emergency human health and safety situations (to be decided by the land manager) when pre-approval to deviate from these guidelines is impractical, descriptions of the actions taken will be carefully documented and provided to the DNR and the Service after the fact. Development activities, such as new buildings, parking lots or transportation infrastructure, in enrolled lands designated as managed habitat will require modifications to the CCAA. Development activities in Unmanaged Land will not require modifications; however, they will be subject to Section 7 reviews if a federal nexus exists.

7.1.1 Wetland Protection

The primary threat to the EMR is habitat loss, in particular the effects of past, widespread wetland loss. While the DNR lands may have been intended for recreation, forestry, game species, or other purposes they have nonetheless played an important role in conserving EMR by providing places where wetlands have been conserved. The effectiveness of DNR lands as part of conservation landscape for the EMR is demonstrated by the number of remaining EMR populations they support. Conserving wetlands is one of the most significant EMR conservation measures provided by the DNR lands.

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7.1.2 Prescribed Fire

Fire is a natural process that occurs in many natural communities, including fens and other vegetation types occupied by EMR (Spieles *et al.* 1999). Fire in fens and savannas serves to keep the vegetation open, reduce shrub and tree cover, reduce surface cover and encourage germination and reproduction of many plant species.

Prescribed fire will be allowed in managed habitat even though it has the potential to kill individual snakes. At some managed sites, prescribed fire may be the preferred or only effective management treatment for invasive species or discouraging woody growth for the purpose of maintaining important habitat. The following guidelines will allow managers to enhance or increase suitability of EMR habitat while minimizing the potential loss of individual snakes. Heat from prescribed fire does not reach far into the soil. Therefore, burning during the inactive season is not expected to harm hibernating EMR. Smith *et al.* (2001) observed that snakes exposed to low intensity fire were more likely to survive than those exposed to high intensity fires. Mortality from prescribed fire is possible, even when steps are taken to reduce that mortality (Durbian 2006, Cross 2009), but the impacts of fires likely vary with other threats, snake population size, fire intensity, and fire frequency. Snakes and other reptiles may move from the burn unit, but in order to provide them more time and potential refuges these guidelines include recommendations to decrease rate of spread and intensity. Rattlesnakes have been known to seek subterranean refuges and may survive less intense fires (Smith *et al.* 2001).

Prescribed fire promotes dynamic changes in the landscape that set back succession, improve EMR habitat, and may be beneficial to EMR populations in the long run. The impacts from prescribed fire on EMR populations are uncertain and, therefore, will be evaluated for its positive and negative effects to EMR populations and habitat (See Section 10). The following guidelines will be observed when using prescribed fire to increase habitat suitability for rattlesnakes.

1. Burning in managed EMR habitat when snakes are inactive or not emergent is unrestricted except when current conditions could possibly result in snake emergence. If available, use a Snake Emergence Prediction Model (SEPM). If the model predicts that snakes may be emergent, burning will be conducted according to the protocols described below. If the model predicts snakes are not active, then burning is unrestricted.
2. Land managers will leave unburned areas adjacent to prescribed burns to serve as snake refugia whenever possible.
3. Prescribed burn plans will use 'back burning' as the primary ignition strategy. This approach will minimize entrapping snakes between flame fronts. However, the burn manager may make the judgment, during a burn treatment, that encirclement ignition or strip firing is necessary to protect human safety or property.

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4. A scientific fire behavior model, such as the United States burn model, the Canadian burn model or equivalent will be used to formulate a burn prescription for a maximum rate of spread no faster than 16 chains per hour (17.6 feet per minute) with an average targeted rate of 10 chains per hour or less (11 feet per minute), except in known hibernacula areas. A slower rate of spread may allow snakes within the burn unit adequate time to find refugia.
5. Where hibernacula are known to be dense (greater than 5 hibernacula per acre), no burning is allowed from March 15 to May 15, unless the Snake Emergence Prediction model predict snakes to be inactive and not yet emerged. Where hibernacula are known to be diffuse (less than 5 hibernacula per acre) across the landscape, burns between March 15 and May 15 can move at no faster than 8 chains per hour (8.8 feet per minute).
6. Fire breaks will be established following existing fuel breaks (roads, rivers, trails...) to the greatest extent possible. Cultivation (disking or roto-tilling) of burn breaks will be minimized to the extent that human health and safety are not jeopardized. Cultivation and mowing fire breaks will be established during the inactive season to the extent possible (See 7.1.2 & 7.1.3).

7.1.3 Mowing and Hydro-axing

In Michigan, mowing has been used to set back succession, control invasive species or establish fire breaks. Mowing is also used to maintain dikes, trails, and other areas designated for human use. While mechanical treatments are an important wildlife management tool, they have been identified to cause direct snake mortality. Mechanical treatments are intensive management techniques that may threaten the long-term survival of localized EMR populations.

The following guidelines will be observed when mechanical treatments are used in managed habitat to increase habitat suitability for rattlesnakes and minimize mortalities:

1. Set mower deck heights to maintain turf grass at <15 cm (6 inches) at all times.
2. In areas with known hibernacula, mowing and hydro-axing are not allowed at any time of year.
3. Management will follow the most recent rutting guidelines for the DNR.
4. Mowing or hydro-axing of grasses over 6 inches will occur only during the inactive season, except to control non-native vegetation in degraded habitats.

After snakes have emerged, mowing and hydro-axing will only be allowed when land managers are trying to improve EMR habitat in highly degraded sites (>90% canopy closure or >75% nonnative invasive species). For example, a land manager may want to control invasive species or convert agricultural fields to native grasslands.

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7.1.4 Cultivation

In Michigan, cultivation has been used to establish new habitat plantings, set back succession, and establish fire breaks. Cultivation is strongly discouraged in managed habitat regardless of snake activity.

However, the following cultivation practices will be considered acceptable in managed habitat:

1. Areas that are to be treated with mechanical soil disturbance will be mowed during the inactive season to less than 15 cm (6 in) in height so that they are unattractive to snakes the following spring.
2. Areas may be continuously maintained as row-cropped agriculture.
3. Narrow strips of land may be cultivated for the establishment of fire breaks, as outlined in the prescribed fire guidelines.
4. Cultivation may be used when necessary to protect human or natural resource health and safety (e.g., wildfire suppression.)

7.1.5 Water Level Manipulation

Maintaining the natural hydrology is critical for maintaining viable populations of amphibians and reptiles. In some wetland complexes, the natural fluctuations in water levels help maintain open landscapes. The groundwater or saturated soils protect hibernating snakes from freezing during winter. Draining removes the heat sink capabilities of the water and weakens the thermal link to warmer areas farther underground. Therefore, alterations to wetland hydrology may have negative impacts on amphibian and reptile populations. EMR, like other wetland snakes, have been shown to tolerate submersion for short periods (about 2 weeks) of time when water temperatures are near freezing. They then rely on cutaneous gas exchange. Individuals will be able to respond to flooding during the active season by moving. Flooding will not kill the snakes during the active season, but may force them out of suitable habitat. Extended flooding may destroy elements of the habitat. Beavers promote dynamic changes in the landscape, and may be beneficial to the snake population in the long run. Beaver activity should be evaluated for its positive and negative effects on EMR habitat and also on human interests.

The following guidelines will be observed when manipulating water levels in managed habitat:

1. Water levels in managed habitat will not be drawn down during the inactive season, except for human health and safety reasons.
2. Water levels may not be raised for more than two continuous weeks during a single inactive season, except for health and safety concerns.
3. Permanent flooding or drainage that results in loss of EMR habitat is prohibited.

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4. Water levels may be raised during the active season.
5. This agreement does not obligate the DNR to manage beaver to maintain water levels.
6. Temporary flooding to mimic the restorative effects of beaver activity for one to five years will need written pre-approval from the Service.

7.1.6 Forest Management

Most forestry activities that are conducted in accordance with sustainable forest management principles are not expected to negatively impact EMR populations. In most cases forest management practices will benefit EMR, especially when the following guidelines are observed on Managed Lands.

1. Conduct timber harvesting operations when substrate is firm and dry in mid to late summer or when the ground is adequately frozen so that rutting and compaction is minimized.
2. Reforest stands through natural regeneration or tree planting (including appropriate site preparation, such as trenching and scarification). Planting densities should be at levels that assure a similar cover type pattern, or retain or mimic more open forest communities (e.g., pine barren or savanna). Savanna and pine barren restorations are encouraged.
3. Consider increasing fine and coarse woody debris retention, creating brush piles and favoring other habitat elements. Slash burning will occur only during the inactive season.

7.1.7 Chemical Control

Chemicals have been used by many natural resource professionals to achieve specific habitat management goals and objectives. Currently, many land managers use herbicides because of their effectiveness, ease of use and because herbicides can be relatively inexpensive. Although herbicide use may be an effective habitat management tool, a paucity of research exists on the effects of chemicals on reptiles and, specifically, to EMR. Therefore, it is strongly recommended that land managers consider specific biological factors and utilize a cautious approach when choosing an herbicide, application method, application rate, time of application, and time between applications.

Due to the unknown impacts of herbicides to EMR, broadcast applications in Managed Land is prohibited except when land managers are re-establishing suitable habitat at highly degraded sites (e.g. converting row crops to native grasslands or to control monocultures of invasive species). Land managers may use other herbicide treatments such as spot spraying or wicking to control invasive plant species in Managed Land.

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7.1.8 Collection, Release, Relocation and Persecution

Collection of EMR for personal pets and commercial trade is an ongoing problem. Poachers have posed as researchers or collaborators of researchers to obtain information on where to find EMR. Pet EMR held in captivity will not be released into the wild because the potential for introducing diseases into an area is significant. Mixing stocks could also have undesirable genetic effects.

The following guidelines will be observed to minimize the potential negative impacts from the collection, release, relocation and persecution of rattlesnakes:

1. Details on specific locations of snakes or hibernacula will be treated with the same sensitivity as location of state or federally listed species because collection or killing at hibernacula could devastate a population.
2. EMR legally maintained in captivity will not be released back into the wild. Those snakes that have been held temporarily for research purposes may be released where they were captured if they are in good health and have been held in isolation from other reptiles.
3. EMR will only be moved to protect the snake or people. EMR that must be moved should be moved less than 500 m and into the same wetland system, but not across barriers (e.g., roads). If a snake is moved across property lines, permission will be obtained from the landowner. EMR lacking knowledge of their surroundings have elevated levels of mortality.
4. Staff will be routinely educated about EMR because they are in an excellent position to provide public education.
5. Priority will be given to placing snakes that cannot be released or are confiscated into the EMR Species Survival Plan population maintained by the Association of Zoos and Aquariums where they may have both an education benefit and contribute to the captive population and possible future assurance breeding.

7.1.9 Trails and Pathways

Trails and pathways are an important component of managing DNR administered land. For human safety, use and enjoyment of trails and pathways, it is necessary to perform maintenance on the trails, including grading, tree-trimming and other activities.

The following guidelines will be observed when performing trail and pathway maintenance:

1. Set mower deck heights to maintain turf grass at <15 cm (6 inches) at all times.
2. In areas with known hibernacula, mowing and hydro-axing are not allowed at any time of year.
3. Management will follow the most recent rutting guidelines for the DNR.

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4. Outside areas of known hibernacula, mowing or hydro-axing of grasses over 6 inches will occur only during the inactive season, except to control non-native vegetation in degraded habitats.
5. Development of new trails/pathways or substantive changes to existing trails/pathways within Managed Land must include consultation with the DNR Endangered Species Coordinator prior to initiation of construction.
6. Trail/pathway construction will be complete during the inactive season.

7.2 Management Strategies for Unmanaged Lands

On Unmanaged Lands other goals and mandates require that the management strategies outlined in Section 7.1 will not apply. The Enrolled Landowners will use the following guidelines on Unmanaged Land:

1. Possession of EMR will continue to be prohibited. This will be accomplished by maintaining the Director's Order (No. DFI-166.98, Regulations on the Take of Reptiles and Amphibians; Act 165 of the Public Acts of 1929, as amended, Sec. 302.1c(1) and 302.1c(2) of the Michigan Compiled Laws) which prohibits take of "special concern" reptiles and amphibians without a permit from the DNR.
2. Upon documentation of more than one individual, evidence of reproduction, and availability of suitable habitat on enrolled lands previously designated as Unmanaged Land, signatories may re-classify enrolled areas as Managed Land, but are not required to do so. Consideration will be given to whether the EMRs found are associated with a known and viable population nearby.
3. Management of Unmanaged Land where EMR are unwelcome will focus on management techniques that discourage EMR use. For example, grassy areas around buildings or campsites will be frequently mowed because tall vegetation could attract EMR.
4. Avoid or minimize the potential for actions on the Unmanaged Lands that may restrict EMR dispersal between Managed Lands that are separated by less than 1 km. Activities that may limit dispersal may include new or expanded paved roads or motorized vehicle trails. In order to provide incidental take coverage for these types of activities pursuant to the CCAA the DNR and the Service must first confirm the action proposed is consistent with the CCAA standard.
5. The following guidelines will be observed to minimize the potential negative impacts from the collection, release, relocation and persecution of rattlesnakes:
 - a) Details on specific locations of snakes or hibernacula will be treated with the same sensitivity as location of state or federally listed species because collection or killing at hibernacula could devastate a population.

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- b) EMR legally maintained in captivity will not be released back into the wild. Those snakes that have been held temporarily for research purposes may be released where they were captured if they are in good health and have been held in isolation from other reptiles.
- c) EMR will only be moved to protect the snake or people. EMR that must be moved should be moved less than 500 m and into the same wetland system but not across barriers (e.g., roads). If a snake is moved across property lines, permission will be obtained from the landowner. EMR lacking knowledge of their surroundings have elevated levels of mortality.
- d) Staff will be routinely educated about EMR because they are in an excellent position to provide public education.
- e) Priority will be given to placing snakes that cannot be released or are confiscated into the EMR Species Survival Plan population maintained by the Association of Zoos and Aquariums where they may have both an education benefit and contribute to the captive population and possible future assurance breeding.

7.3 Management Strategies for Oil, Gas and Mineral Development

Should the EMR be listed as threatened or endangered under the ESA, authorization for incidental take under the Section 10(a)(1)(A) Enhancement of Survival Permit will be applicable when it is determined that the measures proposed for the lease collectively meet the CCAA standards. Oil, gas and mineral development activities within EMR managed areas may be authorized as a form of incidental take if the DNR determines that the activities proposed for that lease will result in a clear conservation benefit for the EMR.

The goal for an oil, gas, or mineral Certificate of Inclusion is for leaseholders to avoid and minimize negative impacts to EMR and to voluntarily contribute funding or in-kind actions to benefit the EMR. The intent is to provide options that would ensure measurable benefits to EMR conservation consistent with the purposes of the CCAA standard (i.e., preclusion or removal of the need to list). This will include compensating for any of the potential biological impacts associated with habitat loss or fragmentation for EMR as well as costs for EMR management in a more complex landscape (e.g., reduced ability to use prescribed fire or increased law enforcement costs).

Conservation measures will be site specific, but fall into general categories of habitat enhancement or avoidance of negative habitat impacts, implementing conservation measures, and addressing critical research needs. These activities will be assessed through leasing or the land use permitting processes and will consider well density, well location, access road surface, length and width, voluntary contributions to EMR conservation, and ongoing and future reclamation activities.

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It is the responsibility of the oil, gas, and mineral developer to contact the DNR and develop a plan for DNR review, and to sign a Certificate of Inclusion for incidental take coverage authorized under the CCAA when the proposed plan is determined to meet the CCAA standard. Without a signed Certificate of Inclusion the CCAA does not cover oil, gas, and mineral development activities on 'managed' lands.

7.4 Education and Outreach

Education and outreach efforts are needed to raise awareness and understanding about the species for all stakeholders, reduce persecution or indiscriminate killing and promote conservation of species. A general approach is to conduct research to identify appropriate content and delivery of education and outreach efforts, learn from other efforts, model after successful efforts such as the Ontario program, identify and recruit conservation partners and target audiences, develop and distribute materials/provide resources, evaluate effectiveness of efforts, develop a volunteer network and ultimately, develop and maintain local, long-term presence/outreach effort in communities around the state within the species' range.

8) Obligations of the Cooperators

8.1 All Enrolled Participants (DNR, DMVA and CI Participants) agree to:

1. Abide by all terms of this Agreement, including 1) the specific management strategies (Section 7.1) to minimize risk of harm to EMR on enrolled lands designated as Managed Land and 2) the management strategies (Section 7.2) to minimize risk of harm to EMR on enrolled lands designated as Unmanaged Land.
2. Oil, gas and mineral development companies must work with the DNR to ensure overall measurable benefits to EMR conservation as documented through the DNR's leasing and Land Use permitting processes.
3. Work with the DNR and Service to develop a mutually agreeable site specific plan or with applicable lease or Land Use permit for oil, gas and mineral development companies.
4. Allow the Service and DNR staff reasonable access to their enrolled property to survey and monitor EMR and their habitat.
5. Notify the DNR Wildlife Division and the Service at least 30 days in advance for activities that deviate from this Agreement;
6. Report on activities as described in Monitoring (Section 9) and any applicable activities identified in the Certificate of Inclusion.

8.2 The DNR agrees to:

1. Hold the 10(a)(1)(A) Enhancement of Survival Permit issued under the Agreement;
2. Work with interested landowners or oil, gas and mineral development company lessees in the State of Michigan who participate in this Agreement by administering a program for Certificates of Inclusion.

Candidate Conservation Agreement with Assurances -- Agreement Number:

3. Work with potential landowners and the Service to develop mutually agreeable site specific plans with interested non-DNR landowners. The DNR will work with oil, gas and mineral development companies to avoid and minimize impacts to EMR via leasing and land use permitting process in place of a site specific plan.
4. Notify the Service if discernible declines in statewide EMR populations or occupied habitat occur.
5. Suspend, in whole or part or revoke, the Certificates of Inclusion of CI Participants found to be in non-compliance with the requirements of the Agreement or their mutually-developed site-specific plans or with applicable lease or Land Use permit for oil, gas and mineral development companies. The DNR and Service may suspend or revoke the Certificate of Inclusion for cause in accordance with the laws and regulations in force at the time of such suspension or revocation (50 CFR 13.28(a)). If DNR or the Service determines that a CI Participant is violating the terms of the site specific plan or with applicable lease or Land Use permit for oil, gas and mineral development companies, written notice shall be sent to the CI Participant advising the CI Participant of the nature of the violation and identifying corrective actions required to bring the CI Participant back into compliance with the site-specific plan or with applicable lease or Land Use permit for oil, gas and mineral development companies. Take authorization and the regulatory assurances associated with the Certificate of Inclusion may be suspended or revoked if the CI Participant does not remedy the violation within seven (7) days after receipt of the notice. Notices of compliance violations will be copied to the Service. A summary of noncompliance variances also will be included in the DNR annual report.
6. Actively seek funds to implement management practices on DNR property and on properties of enrolled landowners with site specific plans. Funds do not need to be sought or given specifically for EMR conservation. Funds for management of lands for primarily game species, recreation activities, or forest management that also benefits EMR on enrolled lands are sufficient.
7. Submit modification or addendum requests to the Service as appropriate or necessary at least 30 days in advance for activities on enrolled lands that deviate from this agreement.
8. Assemble annual reports for activities under this Agreement by January 31 for the previous calendar year. Reports will include results of monitoring, any take or natural mortality observed, and the number of landowners participating through Certificates of Inclusion and the total acres of managed and unmanaged area enrolled under this Agreement.

8.3 The Service agrees to:

1. Not require additional conservation measures beyond those of this agreement or impose additional incidental take restrictions beyond those identified in the draft Enhancement of Survival Permit (Appendix E.)
2. Issue a 10(a)1(A) Enhancement of Survival Permit simultaneously with the federal listing of EMR, in the event that the EMR is federally listed as threatened or endangered under the federal Endangered Species Act.

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3. Work with the Enrolled Landowners to develop mutually agreeable site-specific plans. Work with the DNR and oil, gas and mineral development companies to avoid and minimize impacts to EMR via leasing and land use permitting process.
4. Review and issue decisions on modification or addendum requests within 30 days of receipt.
5. Provide oversight on the issuance of Certificates of Inclusion and approval of site-specific plans. Review and reach a determination (i.e. approve or deny) on Certificate of Inclusion issuance of individual site-specific plans or with applicable lease or Land Use permit for oil, gas and mineral development companies. The Service will make these determinations within 30 days of receipt. Certificates will not be issued until the Service renders its determination.
6. Suspend, in whole or part, or revoke, the Certificates of Inclusion of CI Participants found to be in non-compliance with the requirements of the Agreement or their mutually-developed site-specific plans or with applicable lease or Land Use permit for oil, gas and mineral development companies. The DNR and Service may suspend or revoke the Certificate of Inclusion for cause in accordance with the laws and regulations in force at the time of such suspension or revocation (50 CFR 13.28(a)). If DNR or the Service determines that a CI Participant is violating the terms of the site specific plan or with applicable lease or Land Use permit for oil, gas and mineral development companies, written notice shall be sent to the CI Participant advising the CI Participant of the nature of the violation and identifying corrective actions required to bring the CI Participant back into compliance with the site-specific plan or with applicable lease or Land Use permit for oil, gas and mineral development companies. Take authorization and the regulatory assurances associated with the Certificate of Inclusion may be suspended or revoked if the CI Participant does not remedy the violation within seven (7) days after receipt of the notice. Notices of compliance violations will be copied to the Service. A summary of noncompliance variances also will be included in the DNR annual report.
7. Suspend in whole or part, or revoke the Enhancement of Survival Permit if the Permit terms are not being properly implemented.
8. Assist DNR with the compilation of information and the preparation of annual reports.

9) Duration of Agreement and Permit

The CCAA, including any commitments related to funding under Service programs, will be in effect for 25 years following its approval and signing by the Parties. CI Participants signing this Agreement under the umbrella Agreement will sign on for a minimum of five (5) years. The section 10(a)(1)(A) permit authorizing take of the species will become effective on the date of the final rule listing EMR and will expire when this CCAA expires or is otherwise suspended or terminated. The permit and CCAA may be extended beyond the specified terms prior to permit expiration through the permit renewal process and with agreement of the Parties.

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9.1 Renewal

DNR will encourage all CI Participants to participate for longer periods of time, but we do not wish to exclude potential participants who may wish to initially try a short-term agreement and later, if satisfied, renew for a longer period. DNR will contact all CI Participants at least 90 days prior to expiration of their agreement; at this time the CI Participant can either request a CCAA renewal or can allow their CCAA to expire. If the CI Participant renews the CCAA before the expiration date the same commitments and assurances will be continued. If the CI Participant does not wish to renew, it may simply let the CCAA expire; then the conservation activities may cease, and the CI Participant will no longer receive the assurances provided by the Enhancement of Survival permit. If the CI Participant wishes to renew after the original agreement has expired, DNR and Service will decide whether an "as-is" renewal is acceptable or if changed circumstances merit changes in the agreement. Changed circumstances may include modifications and updates to the management guidelines contained in this CCAA. If DNR decides to terminate this Agreement or not to renew upon expiration of this Agreement, the CI Participants have the option of negotiating a new CCAA with the Service.

10) Adaptive Management

This CCAA is based on adaptive management principles. Adaptive management is a process of monitoring the implementation of conservation measures, then adjusting future conservation measures according to what was learned. Adaptive management can also include testing of alternative conservation measures, monitoring the results, and then choosing the most effective and efficient measures for long-term implementation. Inclusion of adaptive management in a CCAA allows for up-front, mutually agreed upon changes to conservation measures in response to changing conditions or new information.

We expect that the conservation measures will effectively achieve the biological goals and objectives. However, there is uncertainty associated with some management techniques under specific field conditions (e.g., how well do specific prescribed fire management prescriptions help protect EMR?). Additionally, the status of the EMR could change in unexpected ways during CCAA implementation. It is possible that additional and different management measures not identified in the CCAA will be identified and proven to be more cost-effective in achieving biological goals and objectives than those currently being implemented. Results of effectiveness monitoring may also indicate that some management measures are less effective than anticipated. To address these uncertainties, the adaptive management program will as resources allow (1) gauge the effectiveness of the proposed conservation measures and (2) propose alternative or modified management measures as the need arises consistent with existing funding. The adaptive management program incorporates four primary elements:

- Identify uncertainties and the questions that need to be addressed to resolve the uncertainties. Develop alternative strategies.

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- Evaluate pilot projects implementing alternative strategies on a small scale to determine which strategies to implement more broadly.
- Integrate a monitoring program that is able to detect the necessary information for strategy evaluation.
- Incorporate feedback loops that link implementation and monitoring to a decision-making process.

The DNR has already begun investing in a number of these primary elements. The DNR funded Michigan Natural Features Inventory to identify and delineate known extant EMR populations in Michigan and to assess the condition or estimated viability of these delineated populations. The results of this study will help with the integration of a monitoring program. In addition, the DNR was recently awarded a competitive State Wildlife Grant (October 1, 2014 to September 30, 2017) that will focus on EMR conservation through refined modeling, habitat management and snake fungal disease. This project will help to refine uncertainties and questions related to surveys, detection rates at occupied sites and occurrence of snake fungal disease, provide information about habitat suitability that will help with integration of a monitoring program, and assess alternative strategies for improving habitat suitability.

The DNR and the Service agree and recognize that implementation of the conservation measures herein must be consistent with the concepts and principles of adaptive management. The effectiveness of the conservation measures, monitoring methods, and new technologies will be reviewed by the DNR and Service on an annual basis.

Upon such evaluation, mutually agreed to modifications to the conservation measures will be incorporated to further enhance the goals of this CCAA. Additionally, research projects that are designed to determine the effectiveness of management practices will be encouraged and utilized to determine what adaptive management is necessary. A Michigan EMR Working Group, including representatives from the DNR and the Service, species experts and other conservation partners, will be established to provide a forum for discussions about adaptive management and priority needs for the four primary elements.

11) Monitoring

11.1 Population Monitoring

The DNR, Service, and other cooperators will collaborate to implement a monitoring strategy to track status and trends of EMR populations. Surveys will include quantitative data on select populations and habitat. The survey design will reflect the available funding resources and may include selecting a subset of sites that can serve as representatives for other similar situated populations (size, geographically, etc.) or help to provide a periodic benchmark for the status of the species.

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As resources allow, the DNR and the Service will also seek to target population monitoring efforts on key managed lands or population monitoring to help address uncertainties related to critical management questions. The DNR and the Service will continue to seek reliable, cost-effective survey methodologies. Given the reality of limited non-game funding and the intensity of Service's currently recommended protocols if utilized, the DNR does not anticipate increasing EMR surveys beyond current levels.

Monitoring the status and trends of the EMR will take place once the CCAA is permitted and will build on existing baseline data or baseline data acquired during early implementation. For status and trends monitoring, survey protocols and schedules will be established during the initial phase of implementation (years 1 through 5). Where feasible, the DNR and the Service will draw from relevant and established monitoring protocols.

Unless the DNR and the Service agree to adopt an alternative monitoring approach the Service's Recommended Standard Survey Protocol for the Eastern Massasauga Rattlesnake (<http://www.fws.gov/midwest/endangered/reptiles/eama-survey.html>) will be used to inform cooperative and collaborative monitoring efforts. These protocols stress that surveys at each site be intensive (40 hours of searching per site) and only be done by highly trained observers. Survey results will be recorded in Michigan's natural heritage database. These surveys will be the responsibility of each Enrolled Landowner and survey intensity and frequency will likely depend on time and funding constraints of individual Enrolled Landowners. Survey data, findings, and any assessment of trends will be reported to the DNR within the calendar year of performing the surveys.

11.2 Habitat Monitoring

Habitat monitoring is a rapidly developing discipline, and will likely change during the 25 year term of this Agreement. Enrolled Landowners will monitor EMR habitat using tools that are effective and available. These might include IFMAP, photo-monitoring, coarse level metrics, Habitat Suitability Indexes or niche modeling. O'Connor (2006) discusses a variety of monitoring techniques that might be adapted to habitat monitoring for the CCAA. Enrolled Landowners may choose to evaluate and monitor EMR habitat components and vegetation structure at other sites, which may be very valuable especially if management is intense.

The DNR, experts, and other conservation partners will continue to evaluate and refine monitoring techniques and analysis and protocol will be adapted accordingly. Any new applicable information from EMR research projects will also be considered in the adaptation of a monitoring protocol.

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11.3 Take Monitoring

Managed areas burned or mowed during the active season will be surveyed to identify live and dead snakes within 2 days post-treatment. All EMR observed to be killed from management activities will be reported to the Service within 30 days. In addition, reports of illegal take (i.e., unpermitted collection or persecution) on enrolled lands will be reported to the Service's Office of Law Enforcement within 48 hours.

11.4 Compliance Monitoring and Reporting

On an annual basis the DNR will provide a report to the Service for activities covered under this Agreement. The DNR will submit a final report to the Service by March 1. The report will include, but is not limited to:

1. Acres of habitat managed by year and by management technique
2. Brief description of habitat management implemented each year
3. Number of observed EMR mortalities associated with management activities
4. Number of other observed EMR mortalities, and suspected cause(s) (i.e., road mortalities)
5. Results of any population or habitat monitoring for EMR
6. Summary of new CI Participants enrolled under the Agreement over the past year, including copies of the completed Certificates of Inclusion for all CI Participants and number of acres enrolled for CI Participants with enrolled lands.

The CI Participants with enrolled lands will be responsible for monitoring and reporting specified herein related to implementation of the CCAA and fulfillment of its provisions, including implementation of agreed-upon conservation measures, and 'take' authorized by the permit. The Service, after reasonable prior notice to the CI Participant, may enter enrolled lands to ascertain compliance with the CCAA. Reports from CI Participants with enrolled lands will be submitted to the DNR annually and due on December 31. Information in the CI Participant reports will include, but is not limited to:

1. Acres of habitat managed by year and by management technique
2. Brief description of habitat management implemented each year
3. Summary of any studies pertaining to EMR
4. Number of observed EMR mortalities associated with management activities
5. Number of other observed EMR mortalities (i.e., road mortalities)
6. Results of population monitoring for EMR
7. Other information the CI Participant deems pertinent to the EMR conservation program.

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12) Incidental Take, Regulatory Assurances, and Unforeseen Circumstances

12.1 Level/Type, and Impact of Incidental Take

The objective of this Agreement is to maintain, conserve and secure EMR populations across Michigan for the duration of this Agreement. However, the DNR expects that during maintenance and management of both managed habitat and unmanaged habitat some take of EMR will occur (see Section 7.1). Upon approval of this CCAA, and satisfaction of all other applicable legal requirements, the Service will issue a permit, in accordance with section 10(a)(1)(A) of the ESA to the DNR. This permit will become effective on the date of the final rule listing the EMR and will authorize incidental take of EMR that results from management within the covered area. Although management practices will be scheduled to avoid EMR to the extent possible, take from allowed activities may not be avoidable. Incidental take could occur as a result of many activities within DNR and DMVA managed and unmanaged lands, as well as any non-Federal cooperator lands covered through Certificates of Inclusion. The implementation of the CCAA is intended to avoid and minimize the sources of incidental take from these activities and reduce threats to EMR. Incidental take could occur as a result of prescribed fire, mowing and hydro-axing, cultivation, forest management and chemical control management practices. Most of these impacts are expected to be limited and sporadic in nature. Incidental take is also expected by visitors to these properties, through road-kill, and other activities. Educational and outreach efforts are expected to reduce this type of take. Incidental take on managed and unmanaged lands may also occur from occasional activities such as construction and trail maintenance, but these instances of take are expected to be rare events. Take must be incidental to otherwise lawful ongoing activities on enrolled lands in the action area and consistent with implementation of the CCAA.

Conservation benefits for EMR under the CCAA will likely accrue well beyond the duration of the conservation period especially from habitat enhancement and protection measures. This should result in long-term reduced impacts and reduced incidental take of these species. Overall, although impacts and incidental take are expected to occur, impacts are not expected to be great enough to compromise the establishment and viability of EMR within the covered area. No requirement is made in this CCAA for Participating Landowners to notify DNR or FWS prior to any expected incidental take of EMR. For purposes of this CCAA, the FWS does not believe that such a notification requirement is practicable or appropriate.

The actual level of take of individual EMR is largely unquantifiable due to secretive nature of the species, and the degree to which individuals may be able to move and avoid impacts during some treatments. As a surrogate for the number of individuals taken, areas of occupied habitat in actively managed and unmanaged areas have been quantified. The

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estimates provided below are based upon the last 2-5 years of management activities within covered DNR & DMVA lands.

12.1.1 Managed Lands

Managed lands consist of state owned lands considered significant for the conservation of EMR in Michigan. These lands will be managed according to management strategies identified in Section 7.1 and will be applied to reduce and/or eliminate a particular threat. The amount of land managed by prescribed fire, mowing and hydro-axing, cultivation, forest management and chemical control is less than 1% for each of these major management strategies on managed lands (Table 2).

Table 2. Acreage estimates for each of the major management strategies on Managed Lands.

Activity Type	Prescribed Fire	Mowing & Hydro-Axing	Cultivation	Forest Management	Chemical Control	Total
Average Annual Managed Land Acres Treated	592	283	1328	638	639	3,479
Percent of Total Managed Land Treated	0.43%	0.21%	0.97%	0.47%	0.47%	2.55%

12.1.2 Unmanaged Lands with Potential EMR Habitat

The unmanaged lands category includes lands that are not considered significant to the conservation of the EMR.

The unmanaged lands are generally not suitable habitat for the species or not suitable to sustain the conservation of the species, but have been included in the CCAA to provide some basic conservation measures (e.g., management to minimize potential for human-snake interaction in areas with high recreational use, etc.) in the event an EMR may occur on those lands. Further, only a small portion of the unmanaged lands will have any actions that occur on them in any given year. The amount of land managed by prescribed fire, mowing and hydro-axing, cultivation, forest management and chemical control is less than 1% for each of these major management strategies on unmanaged lands (Table 3).

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As evident from the information provided above, the percentage of potentially occupied habitat subject to treatments which may result in take, is not expected to raise above 2.6% per year for either managed or unmanaged lands with potential EMR habitat. Thus, a significant percentage of the occupied areas will not be subject to actions that may result in take covered by the agreement. Incidental take that does occur will likely occur only occasionally, and is not expected to nullify the conservation benefits anticipated under the CCAA. Completion of specific conservation actions at both the local or landscape scale afforded by this agreement is expected to result in overall net benefits, although may create a temporary risk to individual snakes.

Table 3. Acreage estimates for each of the major management strategies on Unmanaged Lands.

Treatment Type_	Prescribed Fire	Mowing & Hydro-Axing	Cultivation	Forest Management	Chemical Control	Total
Average Annual Unmanaged Land Acres Treated	178	77	158	117	40	571
Percent of Total Unmanaged Land Treated	0.64%	0.28%	0.57%	0.42%	0.15%	2.06%

The estimated anticipated level of incidental take associated with this CCAA for non-state administered lands is directly related to the number of landowners interested in obtaining coverage through a Certification of Inclusion. Accurately estimating the total number of participants is impossible at this time. However, using habitat as a substitute and based upon known locations of conservation lands in Michigan and the locations of potential EMR habitat, it is possible to estimate that these conservation lands occur in 1.13% of the non-state-administered potential EMR habitat. This percentage is likely an over estimate, since not all potential participants will enroll in our CCAA. However, all lands enrolled via a Certificate of Inclusion will follow the conservation measures identified in Section 7.1.

12.2 Assurances Provided

Through this CCAA, the Service provides the Cooperators assurances that no additional conservation measures or additional land, water, or resource use restrictions, beyond those voluntarily agreed to and described in the Conservation Measures section of this CCAA, will

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be required should the EMR become listed as a threatened or endangered species in the future. Unless otherwise stated, these assurances will be authorized by the issuance of an Enhancement of Survival Permit under section 10(a)(1)(A) of the ESA, which will become effective at the time of listing.

The assurances listed below apply to the Cooperators. The assurances apply only where the Enhancement of Survival Permit associated with this CCAA and the CCAA itself are being properly implemented, and only with respect to species adequately covered by this CCAA, the Eastern massasauga rattlesnake.

12.2.1 Changed Circumstances provided for in the CCAA

If additional conservation measures are necessary to respond to changed circumstances, such as wildfire, drought, snake fungal disease or the federal listing of a species with overlap in habitat, and the measures were set forth in the CCAA's operating conservation program, the DNR or CI participant will implement those measures specified in the CCAA. Changed circumstances that may occur include:

1. **Wildfire:** Should wildfire occur, the DNR or CI participant will work with the USFWS to determine and implement mutually agreed upon appropriate remedial measures, if necessary. Adaptive management approaches will be applied to maximize likelihood of success.
2. **Drought:** Annual monitoring and conservation measures in the CCAA are expected to address minor year to year variations in precipitation amounts. Prolonged periods of drought, although uncommon in the areas covered by this CCAA, may create conditions that reduce seasonally available habitat beyond normal annual variation and cause changed circumstances on the landscape. In the event of moderate to extreme drought, as determined by National Oceanic and Atmospheric Administration (NOAA) or if annual monitoring indicates drought conditions, the USFWS will notify the DNR and within 90 days of notification, the parties will meet and evaluate the drought conditions and, if opportunities exist, employ changes to the conservation measures to address local conditions.
3. **Snake fungal disease:** Should instances of snake fungal disease be confirmed within areas covered by this CCAA, the DNR will notify the Service with 30 days of confirmation. The DNR will work with the Service to identify and implement mutually agreed upon response measures, if any.
4. **Federal listing of a species with overlap in habitat:** In the event another species, whose habitat requirements overlap those of the EMR, is listed under the ESA, the Service will notify the DNR within 30 days of listing. Within 90 days of final listing, the parties will meet to evaluate the potential conflicts between implementation of conservation measures provided for in this CCAA and the conservation of the newly listed species.

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12.2.2 Changed Circumstances not provided for in the CCAA

If additional conservation measures not provided for in the CCAA's operating conservation program are necessary to respond to changed circumstances, the Service will not require any conservation measures in addition to those provided for in the CCAA without the consent of the DNR.

12.2.3 Unforeseen Circumstances

If additional conservation measures are necessary to respond to unforeseen circumstances, the Director may require additional measures of the Enrolled Participant, but only if such measures are limited to modifications within the CCAA's conservation strategy for the affected species, and only if those measures maintain the original terms of the CCAA to the maximum extent possible. Additional conservation measures will not involve the commitment of additional land, water, or financial compensation, or additional restrictions on the use of land, water, or other natural resources available for development or use under the original terms of the CCAA without the consent of the Enrolled Participant.

The Service will have the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. These findings must be clearly documented and based upon reliable technical information regarding the status and habitat requirements of the affected species. The Service will consider, but not be limited to, the following factors:

1. Size of the current range of the affected species;
2. Percentage of range adversely affected by the CCAA;
3. Percentage of range conserved by the CCAA;
4. Ecological significance of that portion of the range affected by the CCAA;
5. Level of knowledge about the affected species and the degree of specificity of the species' conservation program under the CCAA; and
6. Whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

12.3 Notification of Take

The DNR and the Service agree that annual reports and other site specific work plans are sufficient notification for permitted take that occurs on an ongoing basis from the implementation of various conservation measures and from otherwise lawful actions described in the CCAA for both Managed and Unmanaged Lands.

By signature of the associated Certificate of Inclusions, CI Participants agree to provide the Service with an opportunity to evaluate any planned action that potentially would result in authorized take in the form of direct mortality or injury of EMR before that action is implemented and the potential for take occurs. Notification that such take may occur must be provided to the Service at least 30 days in advance of the action.

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13) National Historic Preservation Act

Section 106 of the National Historic Preservation Act, as amended, requires Federal agencies to take into account the effects of their *undertakings* on historic properties, and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by ACHP (36 CFR Part 800). An *undertaking* in 36 CFR § 800.16(y) of the NHPA's implementing regulations is defined as "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval." A basic tenet underlying Enhancement of Survival Permits is that the Services do not authorize the applicant's activities that cause the take. Instead, the Services authorize the incidental take that results from the applicant's covered activities.

Compliance with Section 106 of the National Historic Preservation Act (NHPA) shall be addressed on a case- by-case basis by the DNR or other Enrolled Participant, as appropriate, and will be completed prior to implementation of actions with the potential to affect historic properties.

Actions pursuant to the CCAA on managed lands are unlikely to affect NHPA's resources since these actions are designed at maintaining natural landscape features and generally only include ground disturbance in areas that have been previously disturbed (e.g., re-planting former agricultural lands). Actions on managed and unmanaged lands would require additional NHPA compliance if they affect historic properties, archaeological sites and resources, and other cultural resources (e.g., historic districts, historic and prehistoric landscapes, Native American sites, etc.).

The process for NHPA compliance includes a step-wise approach of identifying and evaluating potential impacts to historic properties resulting from the implementation of actions. The DNR or other Enrolled Participant, as appropriate, shall start this process as early as feasible in the planning process so that options for siting to avoid or minimize impacts to cultural resources are not precluded. To comply with the NHPA prior to taking action that may affect historic property, the DNR or other Enrolled Participant, as appropriate, must adhere to the following process:

- A. During early planning, the DNR or Enrolled Participant will determine if the planned action authorized pursuant to the CCAA has the potential to affect historic properties. Generally, implementing actions that maintain existing natural features without additional ground disturbance or have ground disturbance that is limited only to previously disturbed areas do not have the potential to affect historic properties. For these actions, the Service has concurred that the NHPA's compliance process is complete.
- B. If the planned action has potential to affect historic properties, DNR or Enrolled Participant with Service will consult to identify historic properties in accordance with 36 C.F.R. § 800.4.

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MDNR or Service will then conduct records file search in coordination with the State Historic Preservation Officer (SHPO) and/or the Tribal Historic Preservation Officer (THPO).

- C. If a records search does not reveal the presence of historic properties (i.e., no resources identified) and past surveys are considered sufficient, then DNR or Service will request concurrence of No Effect from SHPO/THPO in accordance with 36 C.F.R. § 800.4(d). If DNR or Service receives concurrence from SHPO, the compliance process is complete.
- D. If the records file search determines that historic properties are potentially present, or determines that further investigations are appropriate, then the following factors will be evaluated:
 - a. Whether or not there are historic properties, as defined by the National Register criteria (36 C.F.R. part 63), in the area of potential effect;
 - b. Whether or not the action can avoid effects to historic properties; and
 - c. Whether or not the action would adversely affect historic properties.
- E. For actions other than maintaining existing natural features or that involve ground disturbance of areas previously undisturbed, but where no historic properties are present and/or no adverse effects are anticipated, then DNR in coordination with Service will request a concurrence of No Effect or No Adverse Effect from SHPO and any other consulting parties, in accordance with 36 C.F.R. § 800.4(d) or 36 C.F.R. § 800.5(d), respectively. If DNR or Service receives concurrence from SHPO and other consulting parties, the compliance process is complete.
- F. If the Service, in consultation with the SHPO and other consulting parties, determines that historic properties will be adversely affected, then the Service in coordination with DNR or Enrolled Participant will develop a Memorandum of Agreement in accordance with 36 C.F.R. § 800.6.

14) Terms and Conditions of the Agreement

14.1 Modifications

After approval of the CCAA, the Service may not impose any new requirements or conditions on, or modify any existing requirements or conditions applicable to, an Enrolled Participant or successor in interest to the Enrolled Participant, to compensate for changes in the conditions or circumstances of any species or ecosystem, natural community, or habitat covered by the CCAA except as stipulated in 50 CFR 17.22(d)(5) and 17.32(d)(5).

14.2 Modification of the CCAA

Any party may propose modifications or amendments to this CCAA by providing written notice to, and obtaining the written concurrence of, the other Parties. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. Such notice shall be submitted to the DNR who shall submit it to the Service.

The Parties will respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the written concurrence of the Service. New construction or other activities within managed EMR areas that are not consistent with the CCAA will require a modification.

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14.3 Amendment of the Permit

The permit may be amended to accommodate changed circumstances in accordance with all applicable legal requirements, including but not limited to the ESA, the NEPA, and the Service's permit regulations at 50 CFR 13 and 50 CFR 17. The party proposing the amendment shall provide a statement describing the proposed amendment and the reasons for it.

14.4 Termination of the CCAA

As provided for in Part 8 of the Service's CCAA Policy (64 FR 32726, June 17, 1999), the Enrolled Participant may, for good cause, terminate implementation of the CCAA's voluntary management actions prior to the CCAA's expiration date, even if the expected benefits have not been realized. If the CCAA is terminated without good cause, however, the Enrolled Participant is required to surrender the Enhancement of Survival Permit at termination, thus relinquishing his or her take authority (if the species has become listed) and the assurances granted by the permit. The Enrolled Participant is required to give 30 days written notice of its intent to terminate the CCAA, and must give the Service an opportunity to relocate affected species within 60 days of the notice.

14.5 Permit Suspension or Revocation

The Service may suspend or revoke the permit for cause in accordance with the laws and regulations in force at the time of such suspension or revocation (50 CFR 13.28(a)). The Service may also, as a last resort, revoke the permit if continuation of permitted activities would likely result in jeopardy to covered species (50 CFR 17.22/32(d)(7)). The Service will revoke because of jeopardy concerns only after first implementing all practicable measures to remedy the situation.

14.6 Remedies

Each party shall have all remedies otherwise available to enforce the terms of the CCAA and the permit. In particular, the Service may seek specific performance of appropriate mitigation measures in the event the Enrolled Participant terminates this CCAA or fails to comply with its terms. No party shall be liable in damages for any breach of this CCAA, any performance or failure to perform an obligation under this CCAA, or any other cause of action arising from this CCAA.

14.7 Dispute Resolution

The Cooperators agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all Cooperators.

14.8 Succession and Transfer of the CCAA

This CCAA shall be binding on and shall inure to the benefit of the Parties and their respective successors and transferees, (i.e., new owners) in accordance with applicable regulations (50 CFR 13.24 and 13.25).

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The rights and obligations under this CCAA shall run with the ownership of the enrolled property and are transferable to subsequent non-Federal property owners pursuant to 50 CFR 13.25. If the CCAA is transferred, the new owner(s) will have the same rights and obligations with respect to the enrolled property as the original owner. The new owner(s) also will have the option of receiving CCAA assurances by signing a new CCAA and receiving a new permit. The Enrolled Landowner shall notify the Service in writing of any transfer of ownership, so that the Service can attempt to contact the new owner, explain the baseline responsibilities applicable to the property, and seek to interest the new owner in signing the existing CCAA or a new one to benefit listed species on the property. Assignment or transfer of the permit shall be governed by Service regulations in force at the time.

14.9 Availability of Funds

Implementation of this CCAA is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this CCAA will be construed by the Parties to require the obligation, appropriation, or expenditure of any funds from the U.S. Treasury. The Parties acknowledge that the Service will not be required under this CCAA to expend any Federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.

14.10 No Third-Party Beneficiaries

This CCAA does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this CCAA to maintain a suit for personal injuries or damages pursuant to the provisions of this CCAA. The duties, obligations, and responsibilities of the Parties to this CCAA with respect to third parties shall remain as imposed under existing law.

14.11 Succession and Transfer of the Permit and Certificates of Inclusion

This Agreement shall be binding on and shall inure to the benefit of the parties and their respective successors and assigns in accordance with applicable regulations (50 CFR 13.24 and 13.25). The 10(a)(1)(A) permit issued in association with this Agreement can be transferred in accordance with applicable regulations (50 CFR 13.25). Should any non-Federal property owner who is participating in this Agreement transfer any interest in his/her property, the non-Federal property owner will notify DNR at least 60 days prior to any transfer. The DNR, or at the request of DNR, the Service, will contact the new owner to explain the responsibilities applicable to the property to determine if there is interest in participation in the Agreement.

The DNR will notify the Service of transfer of ownership of enrolled lands and the results of contacts with new property owners.

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The responsibilities of an existing executed site-specific plan and its associated Certificate of Inclusion may be transferred to a new landowner or entity holding an interest in the land (e.g., lessee) if the proposed landowner agrees in writing to implement all the commitments of the site-specific plan or with applicable lease or Land Use permit for oil, gas and mineral development companies and to comply with the terms of the 10(a)(1)(A) permit.

14.12 Relationship to Other Agreements

Should the EMR be listed, take coverage for the implementation of conservation measures or restoration and monitoring activities not specifically described in this Agreement but subsequently implemented by DNR may require an agreement between the Service and the State of Michigan under Section 6 of the ESA.

14.13 Notices and Reports

Any notices and reports, including monitoring and annual reports, required by this CCAA shall be delivered to the persons listed below, as appropriate:

Dan Kennedy, Endangered Species
Coordinator
Wildlife Division
Michigan Department of Natural
Resources
P.O. Box 30180
Lansing, MI 48909

Larry Jacobs
Natural Resources Specialist
Environmental Office Camp Grayling,
MI 49739 (989) 344-6175

Scott Hicks, Supervisor
East Lansing Field Office
U.S. Fish and Wildlife Service
2651 Coolidge Road, Suite 101
East Lansing, MI 48823

Regional Permits Coordinator
U.S. Fish and Wildlife Service
5600 American Blvd. West, Suite 990
Bloomington, MN 55437



Planning Team Site Tour

Appendix E: Planning Team Meeting Summary

Watkins Lake SP&CP General Management Plan



Kick-Off Meeting Minutes

Wednesday, May 3, 2017

Hewitt House, Cambridge Junction Historic State Park

9:30 am – 4:00 pm

Planning Team Members Present

Debbie Jensen, DNR Management Plan Administrator
Sarah Burton, DNR Planning Student Assistant
Matt Lincoln, DNR Lands Liaison
Jim O'Brien, DNR Hayes State Park Unit Manager
Jim Knox, DNR Hayes State Park Lead Ranger
Murdock Jemerson, DNR District Supervisor
Ray Fahlsing, DNR Unit Manager, Stewardship
Nikki VanBloem, DNR Southern Lower Trails Specialist
Jeff Braunscheidel, DNR Fisheries
Mike Hanley, DNR Forester
Brandon Hartleben, DNR Conservation Officer

Kristen Bissell, DNR Wildlife Biologist
Peter Rose, DNR State Geologist
Dean Anderson, MSHDA State Archaeologist
Suzanne Fischer, MI History Center Museum Director
Coy Vaughn, WCP Deputy Director
Peter Sanderson, WCP Park Planner
Kira Macyda, WCP Park Planner
Allison Krueger, WCP Stewardship Manager
Christy Summers, Planning Consultant
Caitlin Jackson, Planning Consultant

1. Welcome and Introductions (Debbie)
 - a. Planning team members introduced themselves.
2. Review General Management Plan Schedule (BRI)
 - a. Beckett & Raeder reviewed the management plan schedule with the team.
3. Overview Management Planning Process (Debbie)
 - a. Debbie gave a presentation outlining the management plan process and management zone descriptions.
 - b. Ray mentioned that a stewardship plan will be completed as part of the process.
4. Park Overview (Jim & Kira)
 - a. Jim gave a presentation about the park property as it stands today, including what has been developed so far as well as park opportunities and challenges.
 - b. Kira gave a presentation on the property owned by Washtenaw County including how it was purchased and the Natural Areas Preservation Program.
5. Park Tour (Jim)
 - a. Jim led the team on a tour of the property, stopping at vistas, Watkins Lake, and other key areas.
6. Lunch and Tour Debrief
 - a. Lunch provided by Watkins Lake SP&CP.
7. Significant Features Exercise (BRI)
 - a. The team participated in a brainstorming exercise to develop a list of significant features of WL. BRI will formulate draft statements of significance from this list for the team to review at the next meeting.

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8. Supporting Analysis & Review Exercise (Debbie)
 - a. The team reviewed the draft supporting analysis document and offered edits. Some planning team members were assigned sections to edit.
 - i. The Community Role section with Park Setting will be re-written.
 - ii. Washtenaw County will provide information about other preserves for the Regional Recreation Resources section.
 - iii. Kristen will provide information for the Michigan State Game Areas section of the Regional Recreation Resources.
 - iv. Nikki will re-write the State Trails section of the Regional Recreation Resources.
 - v. Washtenaw County will edit the County and Local Recreation Facilities section of the Regional Recreation Resources.
 - vi. Suzanne will provide information about the closure of the railroad, the privately owned depot, and more history on the role of the Trolz family for History of WL section.
 - vii. Washtenaw County will provide a paragraph about the purchase of the property for the last paragraph of the History of WL section.
 - viii. Jim O'Brien will provide information about the water rights of Watkins Lake for the Land Ownership section.
 - ix. Washtenaw County will provide the ordinance governing the park for the Legal Mandates section.
 - x. Ray will edit the Natural Resources section and provide information about the natural communities.
 - xi. Kristen will provide information about more common wildlife species for the Natural Resources section.
 - xii. Allison will provide information on invasive species for the Natural Resources section.
 - xiii. Jim and Kira will edit the Recreational Resources section.
 - xiv. Jim and Allison will provide information on programming and events.
9. Base Map Review (BRI)
 - a. The maps were reviewed and suggested edits were offered.
 - i. Peter will provide updated maps which will include labeled roads and the county dividing line, in addition to the following edits:
 - The Boundary and Aerial Imagery maps will have a differentiated easement line, a red boundary, and an updated boundary excluding the land to the north of Austin Road.
 - An additional map showing aerial imagery from 1938 will be added. Ray will provide the aerial imagery to Peter.
 - The Land Cover, 1800s map name will be edited to Land Cover circa 1800 (unless a more specific date can be found) and the dataset will be cited. Sarah will send the typical DNR color scheme to Peter for this map.
 - A Natural Communities map will be added. Sarah will send the MNFI data to Peter for this map. Washtenaw County land cover data can also be included.
 - The data on the Wetlands map will be broken down into the types of wetlands.
 - The Elevation map will be renamed to USGS Topography.
 - Bodies of water will be added to the Elevation map.
 - The soils map will show soil texture.
10. Confirm Team Meeting #2
 - a. The next meeting will be held on June 8th from 10am – 3pm at a TBD location.

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Meeting #2 Minutes
Thursday, June 8, 2017
Sharon Mills County Park
10:00 am – 3:00 pm

Planning Team Members Present

Debbie Jensen, DNR Management Plan Administrator
Sarah Burton, DNR Planning Student Assistant
Matt Lincoln, DNR Lands Liaison
Jim O'Brien, DNR Hayes State Park Unit Manager
Jim Knox, DNR Hayes State Park Lead Ranger
Murdock Jemerson, DNR District Supervisor
Joe Strach, DNR Regional Planner
Ray Fahlsing, DNR Unit Manager, Stewardship
Jeff Braunscheidel, DNR Fisheries Biologist

Brandon Hartleben, DNR Conservation Officer
Peter Rose, DNR State Geologist
Dennis Tison, DNR Wildlife Biologist
Peter Sanderson, WCP Park Planner
Kira Macyda, WCP Park Planner
Allison Krueger, WCP Stewardship Manager
Christy Summers, Planning Consultant
Caitlin Jackson, Planning Consultant
Morgan Haffey, Planning Consultant

1. Review Meeting #1 Summary (BRI)
 - a. Beckett & Raeder reviewed meeting #1 summary with the team.
2. Review Significance Statements (BRI)
 - a. The team reviewed all significance statements that were developed at meeting #1. BRI will edit significance statements based on suggestions made at meeting #2 for the team to review at the next meeting.
3. Review Supporting Analysis and Resource Maps
 - a. The team reviewed the Supporting Analysis and Resource Maps. BRI will edit these sections based on suggestions made in meeting #2 for the team to review in the next meeting.
 - i. Sarah will verify the statistics of Table 2.4 – Highest Level of Education Completed.
 - ii. Kira will add a description of the Washtenaw county parks under the section titled "County and Local Recreation Facilities".
 - iii. Ray will revisit the sections titled "Preserves/ Sanctuaries" and add any additional preserves or sanctuaries that are not already listed, as well as forward any edits to the Natural Resources section.
 - iv. Matt will investigate if mineral rights were excluded in the State Land Oil and Gas Deed or not.
 - v. Sarah will check for any other granted easements or utility corridors.
 - vi. Debbie and Sarah will review and edit the section titled "Water Resources".
 - vii. Ray will edit the section titled "Invasive Species".
 - viii. Jim O'Brien will provide a better map regarding the Watkins Lake State Park Restricted Area.
 - ix. Debbie will help edit section A.9 Historic and Cultural Resources.
 - x. Peter will edit all resource maps based on suggestions made by the team.
4. Develop Draft Stakeholder List
 - a. The team reviewed the Draft Stakeholder List and will continue to edit the list at the next meeting.
 - b. Debbie and Jim will research potential locations for the stakeholder and public meetings.
 - c. Park and preserve neighbors will be invited to the public meeting. Peter and Allison will prepare a list of names and addresses along with the help of other Washtenaw County team members.

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5. Lunch
 - a. Lunch provided by Washtenaw County.

6. Develop Draft Public Input Survey
 - a. The team reviewed the Draft Public Input Survey and discussed appropriate future uses of the park in order to frame the survey questions. The team will continue to edit the survey at the next meeting.

7. Draft Management Zone Exercise (BRI)
 - a. The team participated in a brainstorming exercise to develop a zoning map for WL. Two alternatives were drafted and compared to come up with one solution. Proposed zones ranged from developed recreation along the railroad corridor to ecologically sensitive for the prairie fens.
 - b. Debbie and Sarah will create a zoning map based on both team's suggestions that resulted from the brainstorming exercise.

8. Confirm Team Meeting #3
 - a. The next meeting will be held on July 18th at the Eddy Discovery Center. The time is TBD.

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Meeting #3 Minutes

Tuesday, July 18, 2017

Eddy Discovery Center

Waterloo Recreation Area

10:00 am – 3:00 pm

Planning Team Members Present

Debbie Jensen, DNR Management Plan Administrator

Sarah Burton, DNR Planning Student Assistant

Matt Lincoln, DNR Lands Liaison

Jim O'Brien, Waterloo Recreation Area Park Supervisor

Jim Knox, DNR Hayes State Park Unit Manager

Ray Fahlsing, DNR Unit Manager, Stewardship

Jeff Braunscheidel, DNR Fisheries Biologist

Brandon Hartleben, DNR Conservation Officer

Suzanne Fischer, DNR MHC Museum Director

Kira Macyda, WCP Park Planner

Allison Krueger, WCP Stewardship Manager

Christy Summers, Planning Consultant

Morgan Haffey, Planning Consultant

1. Review Meeting #2 Summary (BRI)
 - a. Beckett & Raeder reviewed meeting #2 summary with the team and added minor details.
2. Review Significance Statements (BRI)
 - a. The team reviewed all significance statements that were revised at meeting #2. The planning team modified the statements during the meeting as the team continued to suggest changes.
 - i. Debbie will provide a purpose statement.
3. Review Draft Management Zone Map
 - a. The team reviewed the draft management zone map, one with an aerial background and one without. The team concluded that the map without the aerial background is easiest to read and should be used for the management plan.
 - i. The team suggested that the islands within Watkins Lake that are not connected to the road should be zoned primitive. The islands that are connected to the road should remain Natural Resource Recreation.
 - ii. The two areas north of Watkins Lake should be zoned primitive.
 - iii. The depot site will be added to the map with a cultural overlay.
 - iv. Sarah will revise the management zone map to accommodate all suggested edits.
 - v. Ray will double check the boundary of Watkins Lake.
 - vi. Kira will provide boundary lines for Washtenaw County.
 - vii. Washtenaw County will provide a map of Brooklyn and Manchester with possible trail connections.
4. Review Project Boundary Map
 - a. The team reviewed the Project Boundary Map and will continue to make edits.
 - i. The team suggested extending the boundary line south to Horning Road and west to Fay Lake Road.
 - ii. The boundary is also going to extend east towards Wildlife Road, which will include Thorn Lake and the surround area.
 - iii. Other boundary extensions include areas between Herman Road and the Rail Corridor along Noggles Road.
 - iv. Sarah will update the Project Boundary Map to include all suggested edits from the team.

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5. Lunch
 - a. Lunch provided by PRD.
6. Develop First Draft of Action Goals
 - a. The team drafted a list of general action items for the park. Action items relating to Rail Corridor rules will be determined after input from the public.
 - i. The team will continue to add and organize the action items by categories.
7. Finalize Online Survey Questions
 - a. The team reviewed the Draft Public Input Survey. During the meeting the team revised the order of the questions and decided on appropriate wording.
 - i. BRI will continue to edit the survey based on suggestions for planning team members, and BRI will finalize the survey in Survey Monkey.
8. Finalize Stakeholder list and Detail of Stakeholder & Public Workshops
 - a. The team added to the stakeholder list and decided it was best for BRI to distribute the list in excel for team members to add to.
 - i. Debbie will look at dates after Labor Day (week of September 12th or 25th) for both the Stakeholder Workshop and the Public Workshop.
 - ii. Jim will work with Debbie on potential meeting information at the Super 8.
 - iii. Debbie and BRI will format an agenda for the Stakeholder and Public meetings.
 - iv. Debbie and BRI will develop a Stakeholder invitation.
9. Review Supporting Analysis and Resource Maps
 - a. The team reviewed the Supporting Analysis, but did not review the resource maps. Team members were asked to review the Resource Maps on their own time and pass along any suggested edits. BRI revised the supporting analysis at the meeting and will continue to revise it based on team member's suggestions.
 - i. Allison will investigate and provide utility easements for Washtenaw County.
 - ii. Matt will investigate and provide any utility easements.
 - iii. Debbie will explore and provide any drain easements.
 - iv. Ray will revise the Flora and Fauna section including the Fauna chart, and the Water Resource section.
 - v. Ray and Allison will revisit the Invasive Species section and finalize it together.
 - vi. Laurie and Suzanne will build on the section "Cattle Grazing Operation" and determine if the feed troughs and cattle pens are considered historically relevant.
 - vii. Kira will check with Peter regarding the Resource Maps to determine if all necessary features are showing.
10. Adjourn
 - a. Debbie will look for dates for the stakeholder and public meetings, as well as the following team meeting. Debbie and BRI will coordinate to send out a doodle poll.

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Meeting #4 Minutes

Monday, October 30, 2017
Eddy Discovery Center
Waterloo Recreation Area
12:30 pm – 4:00 pm

Planning Team Members Present

Debbie Jensen, DNR Management Plan Administrator
Sarah Burton, DNR Planning Student Assistant
Jim Knox, DNR Hayes State Park Acting Unit Manager
Murdock Jemerson, DNR District Supervisor
Nikki Van Bloem, DNR Southern Michigan Trails Specialist
Jeff Braunscheidel, DNR Fisheries Biologist
Kristen Bissell, DNR Wildlife Biologist

Dennis Tison, DNR Acting Wildlife Biologist
Coy Vaughn, WCP Interim Director
Peter Sanderson, WCP Park Planner
Kira Macyda, WCP Park Planner
Allison Krueger, WCP Stewardship Manager
Christy Summers, Planning Consultant
Morgan Haffey, Planning Consultant

1. Review Meeting #3 Summary
 - a. Beckett & Raeder reviewed the summary of Meeting #3 with the team and discussed any outstanding tasks. No changes were made to the meeting minutes.
2. Review Purpose Statement and Significance Statements
 - a. The team reviewed the park purpose statement and significance statements. Discussion surrounding the Peaceful Recreation statement took place and whether “peaceful” was the preferred word. This topic remains open for consideration.
3. Review Draft Management Zone Map
 - a. Debbie reviewed the updated draft Management Zone Map with the team identifying changes since Meeting #3.
 - b. The team reviewed the draft Management Zone Map and minor edits were suggested.
 - i. Debbie will check to ensure that the Natural Resource Recreation area to the far west is large enough to accommodate a trailhead.
 - ii. Washtenaw County suggested that the zone and overlay of the east tip of Watkins Lake should follow the county line boundary. The team agreed that the scenic overlay should be removed from this small portion of the lake.
 - iii. Sarah will revise the draft Management Zone Map to accommodate all suggested edits.
4. Review Project Boundary Map
 - a. The team reviewed the Project Boundary Map and will continue to make edits.
 - i. Both Washtenaw County and Debbie will analyze the original proposed property boundary (prior to acquisition) and other land adjacent to the park to determine the extent of the proposed project boundary.
 - ii. The team agreed that the rail corridor should include arrows from both the east and west ends to suggest future expansion of the park along the former rail corridor.
 - iii. The explanation of what a project boundary entails should be revised to include Washtenaw County.
 - iv. Sarah will update the Project Boundary Map to include all suggested edits from the team.

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5. Review Stakeholder Input Workshop Results
 - a. The team reviewed the input received at the stakeholder input workshop and minor edits were made to the summary. This input will be considered by the planning team when creating a 10-year action plan.
 - i. BRI will revisit exercise 4 to double check the number of times that non-motorized lake access was mentioned.
 - ii. The team will review the stakeholder input workshop summary and suggest edits as necessary to BRI.
 - iii. BRI will post the summary to the project website after making final edits suggested by the team.
6. Review Public Input Workshop and Survey Results
 - a. The team reviewed the public input workshop and survey results. Minor edits were suggested.
 - i. The team will review the public input workshop and survey summaries and suggest edits as necessary to BRI.
 - ii. BRI will post the summary to the project website after making final edits suggested by the team.
7. Review and further develop Action Goals
 - a. The team reviewed the action goals list and added and deleted action goals, based on information received from public and stakeholder input. The team also identified target completion windows for each action goal.
 - b. Debbie and BRI will work together to review the action goals list, identify categories as appropriate, and identify the responsible program positions. The list of action items will be included in the draft plan and will be reviewed by the team at the next meeting.
 - c. Action goals that were added include:
 - i. Secure non-motorized trail connectivity through the park. This item was listed as an ongoing project for the target completion date.
 - ii. Designate the former rail corridor as foot and bike traffic east of Arnold Road and only foot traffic west of Arnold Road. This item has a completion date of 1 year.
 - iii. Establish open hunting north of the former rail corridor west of Noggles Road. It was suggested that small game be open to firearms, but large game (deer and turkey) should be archery only. Washtenaw County will determine the hunting feasibility with its commission and MDNR will discuss with its internal staff to finalize this action goal.
 - iv. Develop directional signage to the park. 1 Year
 - v. Explore potential for establishing WLP as a Dark Sky viewing location. This item was given a completion date of 3-5 years.
 - d. Action Items that were considered unnecessary and removed include:
 - i. Survey fish population of Watkins Lake in order to determine and establish appropriate fishing regulations.
 - ii. Prepare study that evaluates Arnold Road at Watkins Lake to better accommodate slow-moving / stopped vehicles for wildlife viewing.
 - e. The team also evaluated the park to determine appropriate trail use types. After a careful evaluation, the team concluded that the park land suitable for bicycle or equestrian trail use does not provide a large enough area to sustain visitors for any length of time. The team determined that the park land will remain as foot-trails only at this time, except for the rail-trail.
8. Review Supporting Analysis and Resource Maps
 - a. The team used the last 10 minutes of the meeting to briefly review the supporting analysis and minor edits were made.
 - i. It was suggested that a separate heading called "Natural Communities" should be added under section A.7 to better describe the existing fen.
9. Next Steps

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- a. The team identified Monday, December 18th as the date for meeting #5. The draft plan will be reviewed at this meeting after distribution approximately one week prior to the meeting.
10. Adjourn
 - a. The meeting adjourned at 4pm.

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Meeting #5 Minutes

Monday, January 8, 2018

Web Conference

1:00 pm – 4:00 pm

Planning Team Members Present

Debbie Jensen, DNR Management Plan Administrator

Sarah Burton, DNR Planning Student Assistant

Matt Lincoln, DNR Lands Liaison

Jim Knox, DNR Hayes State Park Acting Unit Manager

Joe Strach, DNR Regional Planner

Ray Fahlsing, DNR Stewardship Unit Manager

Lisa Gamero, DNR Cultural Resources Analyst

Katie McGlashen, DNR Park Interpreter

Nikki Van Bloem, DNR Southern Michigan Trails Specialist

Jeff Braunscheidel, DNR Fisheries Biologist

Brandon Hartleben, DNR Conservation Officer

Peter Rose, DNR State Geologist

Kristen Bissell, DNR Wildlife Biologist

Dennis Tison, DNR Acting Wildlife Biologist

Suzanne Fischer, MI History Center Museum Director

Coy Vaughn, WCPARC Director

Kira Macyda, WCPARC Park Planner

Christy Summers, Planning Consultant

Morgan Haffey, Planning Consultant

1. Review Meeting #4 Summary
 - a. BRI reviewed the summary of meeting #4 with the team and minor changes were made.
2. Review Draft Management Zone and Project Boundary Maps
 - a. The team reviewed the Management Zone Map and minor edits were suggested. No edits were made to the Project Boundary Map.
 - i. The team suggested that all of the overlay hatches are difficult to see and should be revised to be a different color and scale to improve legibility.
 - ii. The team proposed that although negotiations are in progress to acquire land adjacent to Arnold Road, it should not be zoned until it has been officially acquired and documented. Matt will provide text for the draft management plan regarding the inclusion of this piece of land.
 - iii. Sarah will revise the draft Management Zone Map to accommodate all proposed edits.
3. Finalize Action Goals
 - a. The team reviewed the action goals in the draft management plan and made minor edits regarding target completion dates and responsible program positions.
 - b. Ray suggested the addition of an action goal that pertains to enrolling the park in the Candidate Conservation Agreement with Assurances (CCAA) for eastern massasauga rattlesnake, but to exclude all developed areas. This is to be discussed further.
 - c. Ray will send the CCAA agreement to BRI to be included into the appendix.
 - d. Washtenaw County will determine if they have enrolled in the CCAA.
 - e. Action goals that were added include:

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- i. Finalize park Emergency Plan including Safety Plan and Wildfire Plan in coordination with WCPARC. This item is listed under Management Focus within the General Action Goals.
 - ii. "Complete property boundary marking" was also added under Management Focus within the General Action Goals.
 - iii. "Complete a phase one archaeological study" was added to the Cultural Resources section of the General Action Goals.
 - iv. Debbie will create a general action goal pertaining to the cultural resources on site.
 - v. "Partner with Ducks Unlimited to improve waterfowl habitat" was added to the Backcountry Zone action goals for WCPARC
 - f. Action items that were considered unnecessary and removed include:
 - i. "Coordinate cooperative land management program" was removed from the General Action Goals due to being repetitive. This goal is addressed within the Natural Resources section of the General Action Goals.
 - g. Debbie and BRI will work to re-phrase the Developed Recreation Zone action goals pertaining to trail use.
- 4. Review Draft Management Plan and Approval Process
 - a. The team reviewed the Draft Management Plan and will send all edits to Debbie and BRI to be incorporated into the final plan.
- 5. Discuss Public Meeting
 - a. Debbie and BRI discussed the proposed public meeting dates and format with the team.
 - b. BRI suggested and discussed, in more detail, a meeting format similar to other general management plans. BRI will develop an agenda.
 - c. The proposed public meeting dates are March 6th or 7th at the Super 8 in Brooklyn, Michigan. BRI will send a doodle poll to the team to determine which date is most preferred.
- 6. Next Steps and Proposed Schedule
 - a. The team reviewed the proposed schedule and eliminated March 8th as an option for the public meeting.
 - b. BRI will incorporate the necessary edits, format the draft plan, review with Debbie, and send it to the team by January 22nd.
- 7. Adjourn
 - a. The meeting adjourned at 3:30pm.

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Meeting #6 Minutes

Monday, April 16, 2018

Web Conference

1:00 pm – 4:00 pm

Planning Team Members Present

Debbie Jensen, DNR Management Plan Administrator
Matt Lincoln, DNR Lands Liaison
Jim Knox, DNR Hayes State Park Acting Unit Manager
Joe Strach, DNR Regional Planner
Jeff Braunscheidel, DNR Fisheries Biologist
Brandon Hartleben, DNR Conservation Officer
Glenn Palmgren, DNR Stewardship Ecologist (part of the meeting)

Dennis Tison, DNR Acting Wildlife Biologist
Suzanne Fischer, MI History Center Museum Director
Coy Vaughn, WCPARC Director
Kira Macyda, WCPARC Park Planner
Christy Summers, Planning Consultant
Morgan Haffey, Planning Consultant

1. Review Meeting #5 Summary
 - a. BRI reviewed the summary of meeting #5 with the team and minor changes were made.
2. Review Public Input Meeting Summary
 - a. The public input meeting summary was reviewed by the team and minor changes were made to make the document easier to understand.
 - b. Comments from the public were reviewed and discussed.
 - i. A suggestion from the public to not allow dogs at WLP was discussed. On state land dogs are allowed on a six-foot leash unless otherwise signed. Kira will review intentions on Washtenaw County land.
 - ii. The team agreed with public comments stating that the intersection of Austin Road and Buss Road is not well suited for a parking area/driveway due to minimal site distances.
 - iii. The public's concern of hunting in areas zoned as ecologically sensitive was discussed. The discussion lead to the revision of an action goal to only allow hunting north of Arnold Road, in Jackson County, due to enforcement and simplification purposes.
 - iv. The suggestion of a friends group resulted in the addition of a new action goal to encourage volunteerism.
3. Plan Revisions in Response to Comments
 - a. Significance Statements
 - i. The team had very few comments regarding the significance statements and no changes were made.
 - b. Management Zones
 - i. Debbie will provide acreage of the land proposed to be open to hunting north of Arnold Road.
 - ii. Debbie will revisit the Ecologically Sensitive Zone descriptions and work with BRI to establish appropriate verbiage.
 - c. Action Goals

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- i. The team agreed that all action items in each section should be organized by priority level rather than target completion date. The team worked together to establish appropriate priority levels for each action goal.
 - ii. The team reworded the General Action Goal under Education/Interpretation Opportunities to say, "Explore opportunities for natural/environmental and historical interpretive programming through internal and external partners".
 - iii. A new goal will be added to Management Focus of the General Action Goals to "Encourage establishment of formally recognized friends group".
 - iv. The General Action Goal under Management Focus stating, "Establish Wildlife Conservation Order to open a portion of the land to hunting (with appropriate restrictions) north of the former rail corridor in Jackson County", will be revised to only allow hunting north of Arnold Road and the former rail corridor. Debbie will provide the appropriate wording.
 - v. The action goal relating to the Scenic Overlay zone will be split into two separate action goals. They will state, "Continue to recognize, protect, and promote the scenic viewsheds over-looking Watkins Lake" and "Provide access through the development of signed foot trails".
4. Other Draft Plan Comments and Corrections
 - a. Debbie and BRI will work to establish an appropriate order for the Guiding References.
 - b. The Proposed Project Boundary map legend will be revised to say "Current Park Ownership" in place of "Park Boundary".
 - c. Debbie and BRI will determine an appropriate location to include the summary of the CCAA document in the main body of the draft plan.
 - d. Kira will provide the necessary page numbers of the WCPARC Stewardship Plan that should be included in Appendix C.
5. Plan Review and Approval Process
 - a. Debbie discussed the approval process with the team and established an anticipated approval schedule to coordinate with WCPARC and their approval process.
6. Adjourn
 - a. The meeting adjourned at 3:00pm.