



MICHIGAN DEPARTMENT OF NATURAL RESOURCES



Aerial look over Silver Lake State Park from above Lake Michigan.
Photo Credit: Wes Kitten, DNR Photo Ambassador

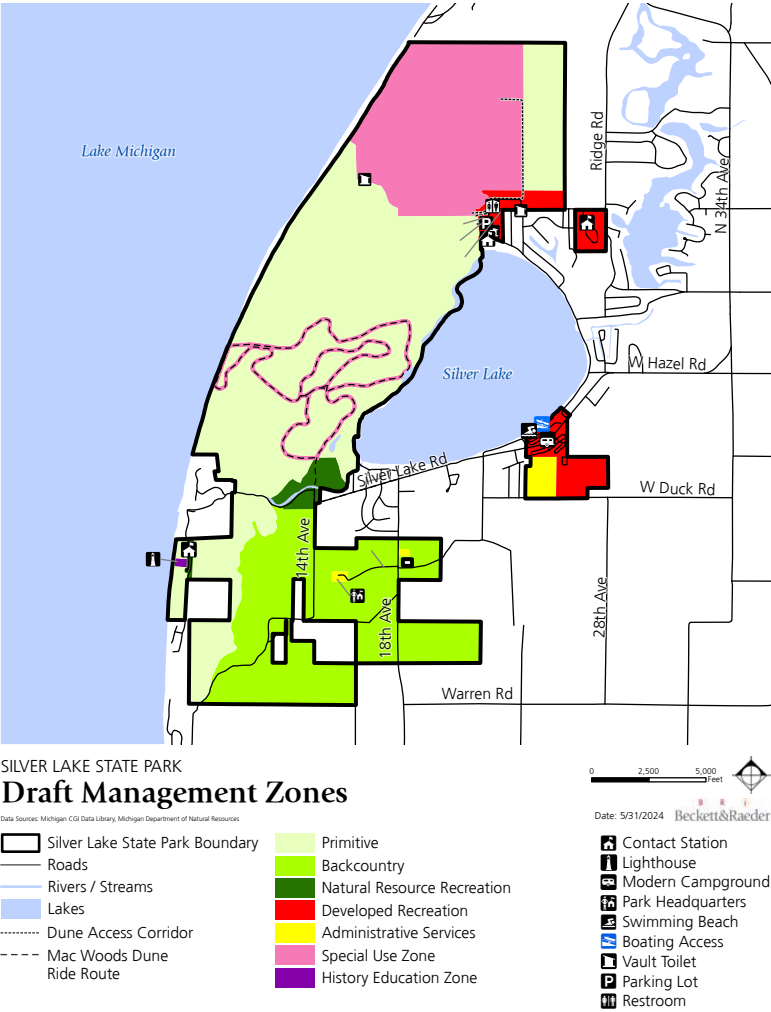
Silver Lake State Park

GENERAL MANAGEMENT PLAN

DRAFT AUGUST 2024

Prepared with the assistance of Beckett & Raeder, Inc

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

PLAN APPROVALS:

DNR Chief, Parks & Recreation Division

Date

DNR Natural Resources Deputy

Date

DNR Director, Department of Natural Resources

Date

PLAN APPROVALS

PLAN APPROVAL RECOMMENDATIONS

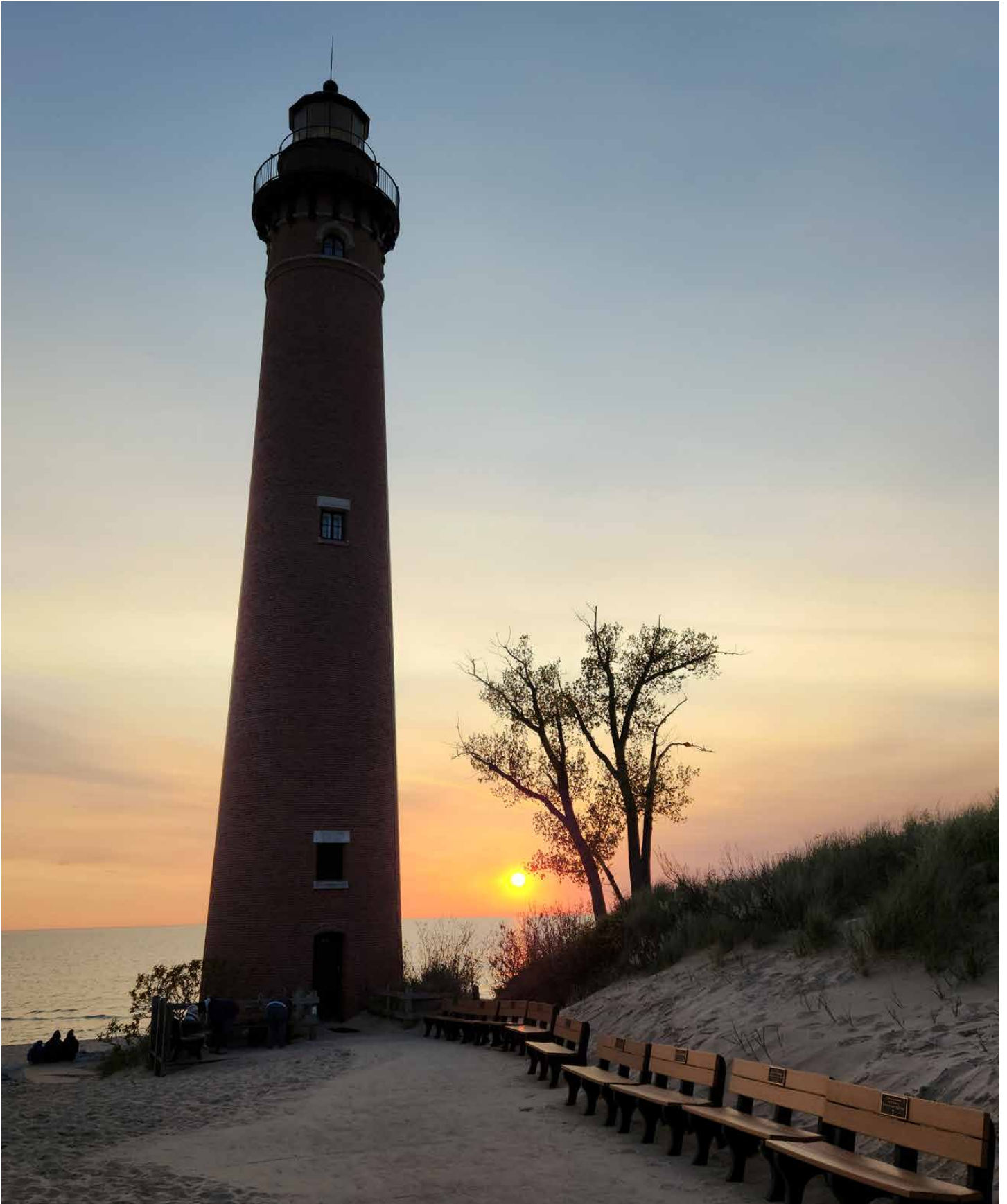
The following dates reference when the plans were presented for recommendation. In some instances, additional time was allotted for plan review following the presentation with subsequent approval received by email.

PRD- Section Chiefs	<div>Date</div>
DNR- Resource Management Bureau	<div>Date</div>
MSPAC- Stewardship Subcommittee	<div>Date</div>
NRC- Michigan State Parks Advisory Committee	<div>Date</div>

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Sun setting over Lake Michigan behind the Little Sable Point Lighthouse.



Great Lakes Barrens at Silver Lake State Park. Photo Credit: Joshua Cohen, Michigan Natural Features Inventory

General Management Plan Executive Summary

Silver Lake State Park encompasses over 3,000 acres, with more than three miles of Lake Michigan shoreline. The park is home to nearly 2,000 acres of sand dunes, a modern campground, a day-use area and boat launch on inland Silver Lake, the Little Sable Point Lighthouse and a popular 500-acre off-road vehicle (ORV) scramble area. The park also offers seasonal opportunities for shoreline horseback riding and fat-tire biking in designated areas of the park. The dunes feature areas of open dunes with sparse vegetation, interdunal wetlands and areas of high-quality Great Lakes barrens. This popular park hosts over one million visitors per year and has provided enjoyment for generations of dune-riding enthusiasts.

The purpose of this general management plan (GMP) is to guide the future long-term management and development of Silver Lake State Park. Overall, this plan seeks to uphold

the Michigan Department of Natural Resources (DNR) 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." The management plan brings together DNR staff, stakeholders, and the public into a process that defines the following for the state park:

- Purpose and significance that captures the unique identity of Silver Lake State Park.
- Twenty-year management zone plan reflecting the resource protection goals and level of development appropriate for different areas of the state park.
- Ten-year action plan that addresses the desired future condition within the state park as a whole and within each of the designated management zones.

The supporting analysis, included as Appendix A of this plan, provides important background information on Silver Lake State Park that informs this planning initiative. It includes a comprehensive review of the state park setting, area demographics, history, land ownership, legal mandates, and cultural, natural, and recreation resources. Furthermore, several existing planning documents, including the DNR Evergreen Goals and the Michigan Statewide Comprehensive Outdoor Recreation Plan, were used as guiding references (see Chapter One).

This GMP updates and replaces the Silver Lake State Park Phase 1 GMP approved in 2012. The planning team felt that there had been enough changes in the park since that time, and new information available like the forest inventory data, that a new plan was warranted incorporating new community engagement efforts and the phase 2 plan components (action plan).

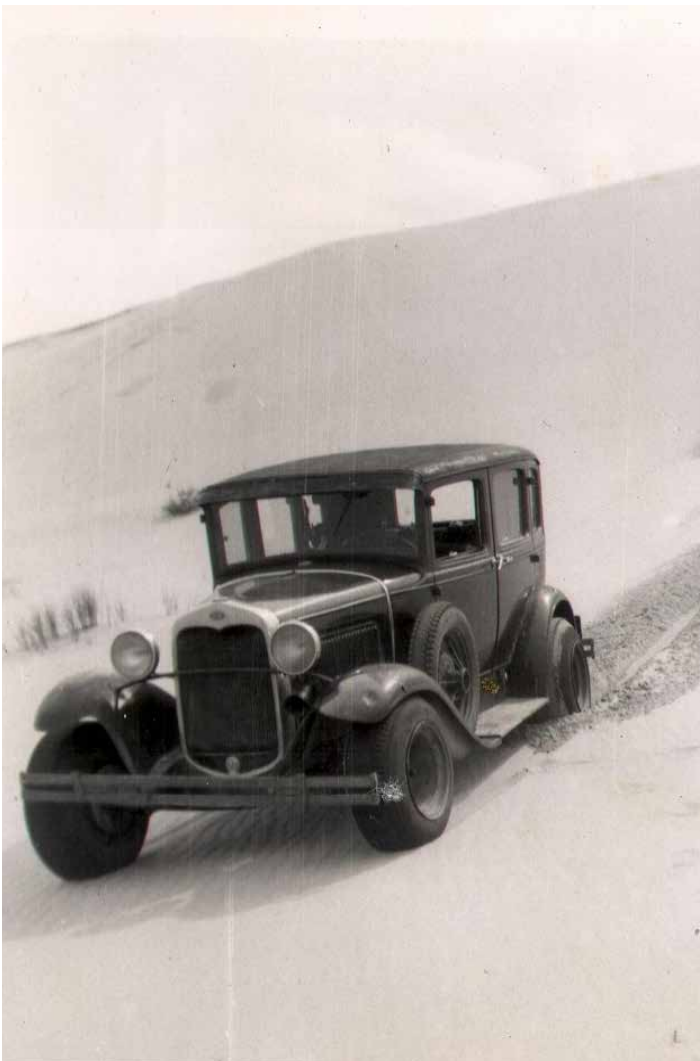


Two visitors taking their dog for a walk along the shoreline.

Significance of Silver Lake State Park

This general management plan was developed in consideration of the property's significant features that make it distinct from other parks in the state park system. Silver Lake State Park was determined significant due to the aspects that are summarized below. The full statements of significance can be found in Chapter Three.

- Silver Lake State Park contains the only off-road vehicle (ORV) dune-riding area east of the Mississippi River. The ORV scramble area is a major draw to visitors.
- In addition to ORV use, the dunes provide opportunities for interpretive tours on a multi-passenger dune scooter, seasonal horseback riding on the Lake Michigan shoreline, and seasonal fat-tire biking in the scramble area during the winter.
- Silver Lake State Park has an expansive area designated as Critical Dunes, which are part of a bigger system stretching along the shores of Lake Michigan: the largest freshwater dune system east of the Mississippi River.
- A day use area and boat launch on Silver Lake affords opportunities for picnicking, play, fishing, watersports, and a designated swim area. Three miles of Lake Michigan shoreline can be accessed from multiple areas including the ORV scramble area, pedestrian dune area, and Little Sable Point Lighthouse.
- Little Sable Point Lighthouse at Silver Lake State Park has one of the tallest light towers in Michigan, which is open seasonally for tours hosted by the Sable Points Lighthouse Keepers Association.
- In addition to riding the dunes, opportunities for outdoor recreation are abundant within Silver Lake State Park's beaches and woods, including wildlife observation, hunting, fishing, and exploring scenic and undeveloped land.
- Silver Lake State Park has rich natural features that provide habitat for rare flora and fauna. The intact open dunes, interdunal wetlands, Great Lakes barrens, and mesic northern forest are home to rare species. The high-quality forest features a 400-year-old tree—one of the few to survive the logging era in Michigan.



Historic photo of an early model car driving the dune.



A group of four wheeler riders perched atop a dune with Lake Michigan in the background.

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. The management zone map and a thorough review of each management zone are found in Chapter Four of this plan. A condensed description of each of the applied management zones is as follows:

Primitive Zone

The primary purpose of the Primitive Zone is the protection of natural resources and natural processes. The zone is managed for low-impact recreational experiences in a primitive, natural landscape. Only dispersed, self-reliant, and low-frequency use

is allowed. Attaining and maintaining a high-quality natural resource condition dictates the extent to which recreational improvements or uses are allowed. This zone covers about 48% of the park and includes the area of the park designated as Critical Dunes that is not already developed.

Backcountry Zone

The character of this 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 slightly increased use, including bicycle and equestrian use if appropriate, and modifications of the landscape (e.g. trail development) to accommodate that use. This zone covers 22% of the park and includes the areas in the southern portion of the park that are not designated as critical dunes and is primarily undeveloped land.

Natural Resource Recreation Zone

The Natural Resource Recreation zone supports active recreation conducted in a natural setting with medium to high-density use. There is an emphasis on resource quality over recreation, but moderate to high levels of use may be accommodated. This zone covers 2% of the park and includes the parking area at the Little Sable Point Lighthouse day use area and the Ruckle's Bridge day use area.

Developed Recreation Zone

The Developed Recreation Zone supports 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 approximately 5% of the park and includes the campground, overflow parking area at the campground, Silver Lake day use area, ORV welcome center and parking lots.

Administrative Services Zone

This zone encompasses the developed areas required for program administration and operations. Typically, it will include offices, contact stations, maintenance facilities and all related land base required to conduct the business of running a state park or park. This zone covers about 65 acres (1%) of the park and includes the park headquarters, the house used by keepers of the lighthouse, the sewage lagoon, and maintenance areas.

Special Use Zone

This zone is intended to allow for special recreation uses within the Critical Dunes. This area would typically be zoned as Primitive, but in order to allow for recreation access to the unique natural feature, special uses that were existing prior to the designation of the Critical Dune Area in 1989 may continue within this zone. The Special Use Zone makes up 22% of the park and includes the ORV scramble area and the Mac Woods dune scooter route.

History Education Zone

The emphasis of this zone is education. Historic resources are restored and interpreted for visitor understanding. A high level of development is allowed in this zone for the management/control of people and traffic, protection of the resources, and historical interpretation. The History Education Zone makes up just 4.2 acres (0.08%) of the park and includes the Little Sable Point Lighthouse.



The sandy Lake Michigan beach under a cloudy streaky sunset.



Two Jeeps set up to watch the fireworks at sunset.



Ridge of a sandy dune near sunset at Silver Lake State Park.

Ten-Year Action Plan

Once the planning team has established management zones to guide Silver Lake State Park for the next 20 years, actions are identified that are desired to be implemented within the next ten years. The actions are broken down into categories pertaining either to an area of management and operations, infrastructure/development projects that require capital outlay, small infrastructure and development projects, or partner projects. Future improvements will be considered in the context of efficiency, environmental sustainability, and resiliency. Below is a summary of the action plan for the park. The full ten-year action plan can be found in Chapter Five.

Management and Operations

Projects related to the management and operations of the park include continuing to explore land acquisition of properties within the Project Boundary, invasive species detection and removal efforts, and completing a natural resource stewardship plan. The park staff will study several aspects of the park operations and look for improvements, including studying the management, access, capacity and use of the lighthouse day use area; evaluating the potential for a trailhead and hiking trails in the southern area of the park; and performing a Visitor Use Management study of the ORV area to achieve desired visitor experiences and resource conditions. The park will also evaluate and improve information available to visitors about the pedestrian dune area, create additional avenues for education about the importance of preserving

critical dunes, conduct a phase 1 archaeological survey at select locations within the park, and edit the metal detecting area map to close the west shoreline of Silver Lake to metal detecting.

Infrastructure and Development: Capital Outlay

Projects within the next ten years that require capital outlay funds to complete include studies and construction projects. Studies will include developing a conceptual plan for campground improvements and evaluating and making recommendations for day use access and parking improvements in the Silver Creek area, including Ruckle's Bridge and Termite Bridge. Construction projects include repaving the campground roads, implementing additional improvements to the pedestrian dune area, implementing parking area improvements at the lighthouse, and implementing soft shore erosion control techniques to stabilize and improve the Silver Lake shoreline near the campground and day use area.

Partner Projects

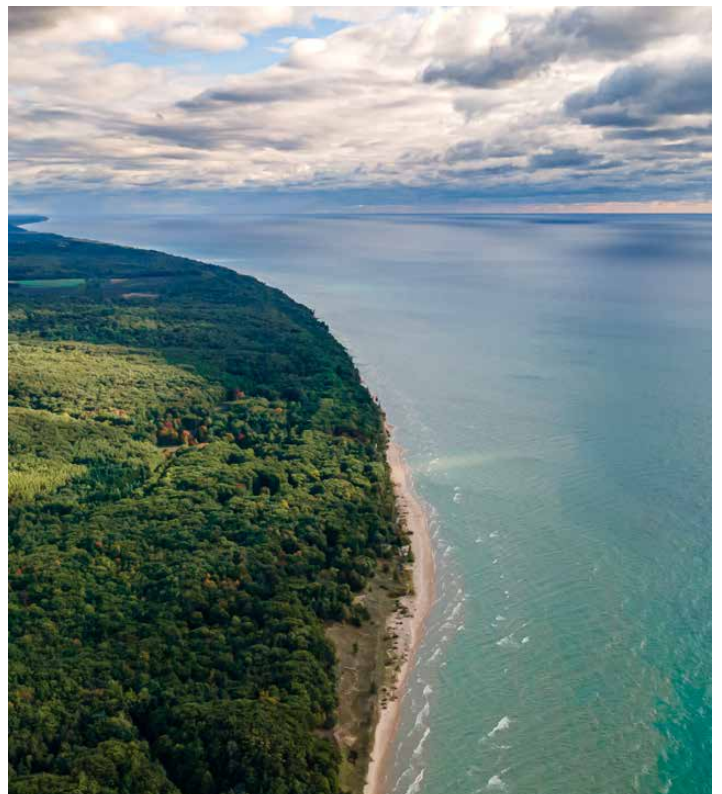
Some potential park projects involve working with community partners. The park management staff will participate in local planning efforts for improved vehicular and pedestrian access and connectivity to community assets, including the lighthouse beach, campground, area businesses, and regional trails.



The Milky Way Galaxy can be seen on a clear night at Silver Lake State Park. Photo Credit: Joel Marotti, DNR Photo Ambassador



A group of visitors kayaking offshore.
Photo Credit: Joel Marotti, DNR Photo Ambassador



Aerial photo of the shoreline.
Photo Credit: Joel Marotti, DNR Photo Ambassador



Hundreds of visitors and their vehicles are gathered to take on the ORV scramble.

Chapter One: Core Values & Guiding Resources

1.1 Mission Statements

Throughout the planning process, the core values of the Department of Natural Resources (DNR) were the foundation of the planning team's decisions. These include the mission statement of the DNR, the DNR Evergreen Goals, and the DNR Parks & Recreation Division (PRD) Mission Statement. 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.

DNR Evergreen Goals

- Protect natural and cultural resources
- Ensure sustainable recreation use and enjoyment
- Enable strong natural resource-based economies
- Foster effective business practices and good governance
- Improve and build strong relationships and partnerships, internally and externally

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.

1.2 Guiding References

The following plans guide recreation and management decisions statewide and department wide and were used as a reference when developing this general management plan to ensure alignment of priorities.

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

The Blue Ribbon Panel's report on state parks and outdoor recreation 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 parks and outdoor recreation management in Michigan.

Michigan Statewide Comprehensive Outdoor Recreation Plan (2023-2027)

SCORP is a five-year strategic plan that shapes investment by the state and local communities in priority outdoor recreation infrastructure and programming. The SCORP's overarching goal is to "Ensure that Michigan's outdoor recreation assets are equitably distributed, developed and managed to provide convenient and welcoming access to the outdoors for healthful, outdoor physical activity; drive broad-based economic and quality-of-life benefits to people and communities; while sustaining our lands, waters and wildlife for current and future generations."

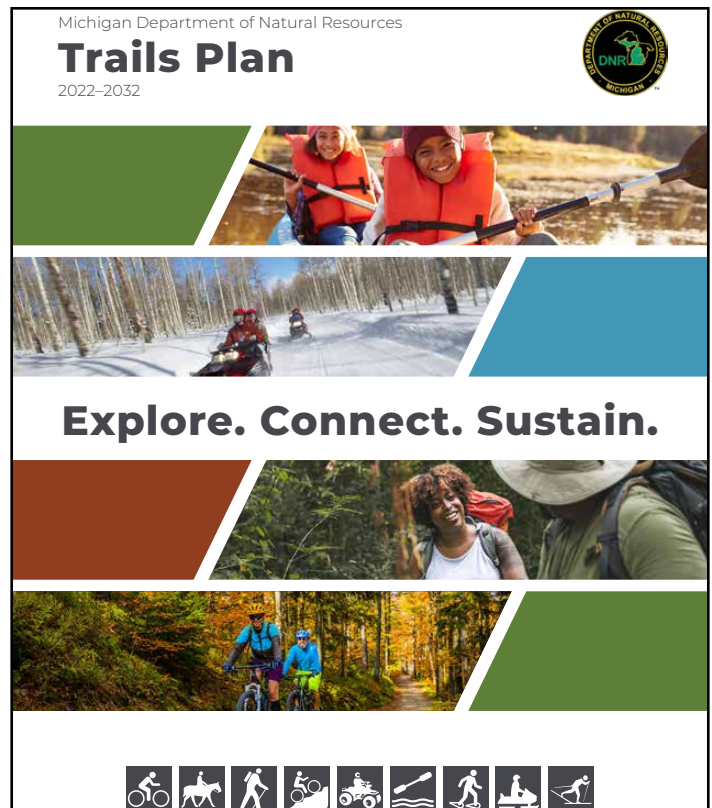
DNR Public Land Strategy (2021-2026)

The DNR Public Land Strategy guides the department in its stewardship of the 4.6 million acres of public lands owned by the people of Michigan. The strategy's three main purposes are demonstrating how responsible management of the state's large public land base is important to the protection of our natural and cultural resources, setting priorities and guiding actions, and complying with Public Act 240 of 2018. The strategy identifies broad goals, with tactics for public land ownership, implementation and measurable objectives to track progress.

In addition, PRD has adopted other plans that deal with specific programs or initiatives that help to guide park general management plans.

Michigan DNR Trails Plan (2022-2032)

The DNR Trails Plan guides the direction of more than 13,400 miles of Michigan's diverse trail opportunities and lays out key goals to ensure these valuable assets are sustained and remain relevant into the future. The plan's four goals include: sustainable trail maintenance and development; funding; planning and collaboration; and marketing, promotion



Michigan DNR Trails Plan Cover

and education. Outcomes of the plan include quality trail experiences, public stewardship, and community and economic prosperity.

PRD Diversity, Equity, Inclusion and Justice Plan

A new DEI plan for the division is currently being drafted, to align with the DNR's DEI mission and recommendations. The department's DEI mission states that "The Michigan Department of Natural Resources will foster and promote an environment focused on inclusion and equity to expand and broaden the diversity of our beneficiaries and workforce."

PRD Environmental Sustainability Plan (2023-2027)

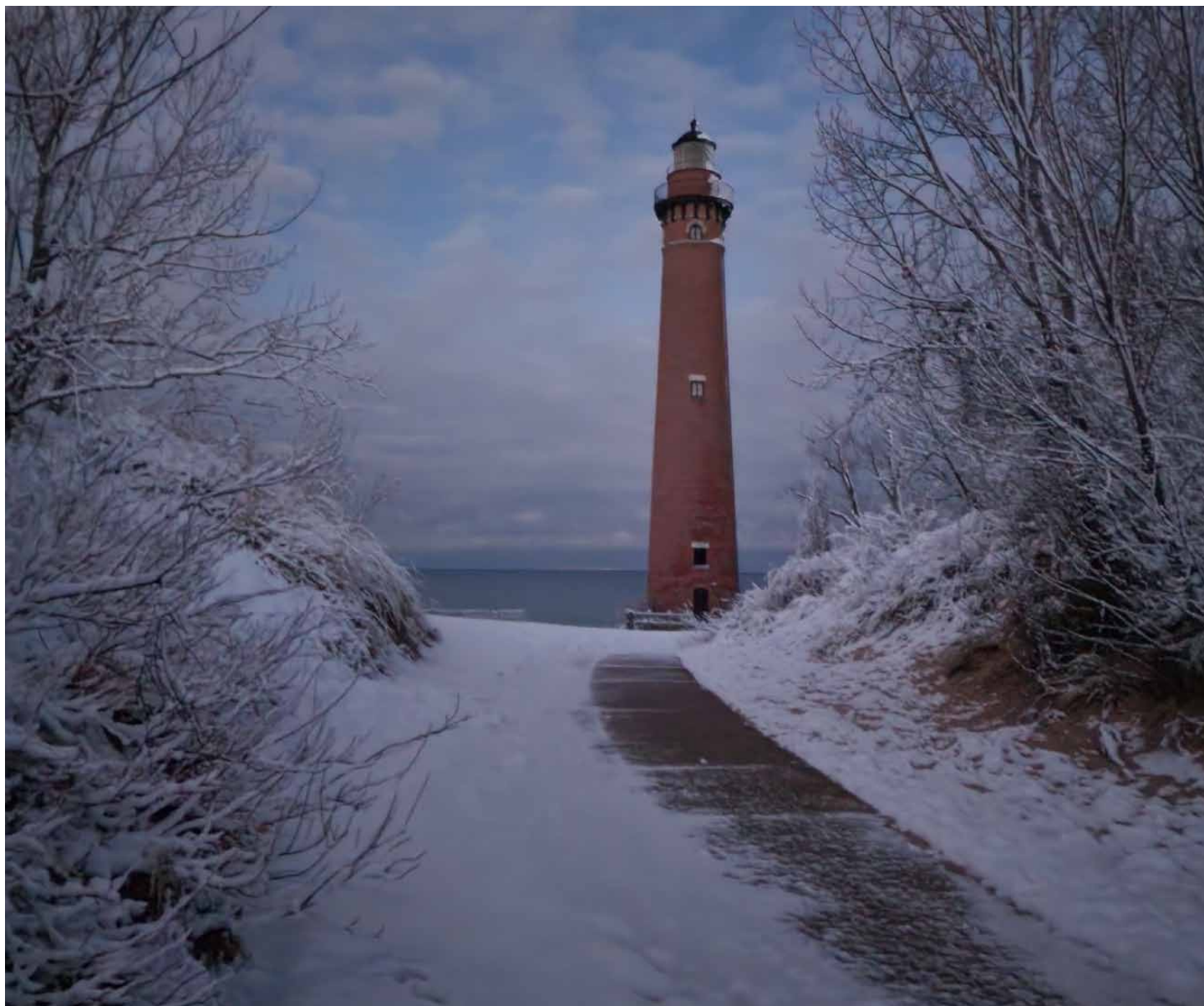
The Parks and Recreation Division (PRD) is committed to working to integrate sustainability principles, actions, and initiatives into park management and operations to mitigate the effects of climate change. PRD's Environmental Sustainability plan is intended to help PRD preserve resources for the enjoyment of current and future generations by reducing environmental impact through sustainable operations, design, decisions, and management. The plan outlines required and recommended actions related to energy and water conservation, recycling and waste reduction, sustainable building practices, reduction of carbon footprint, living systems and sustainable environments and communication and education.

1.3 Summary of Legal Mandates

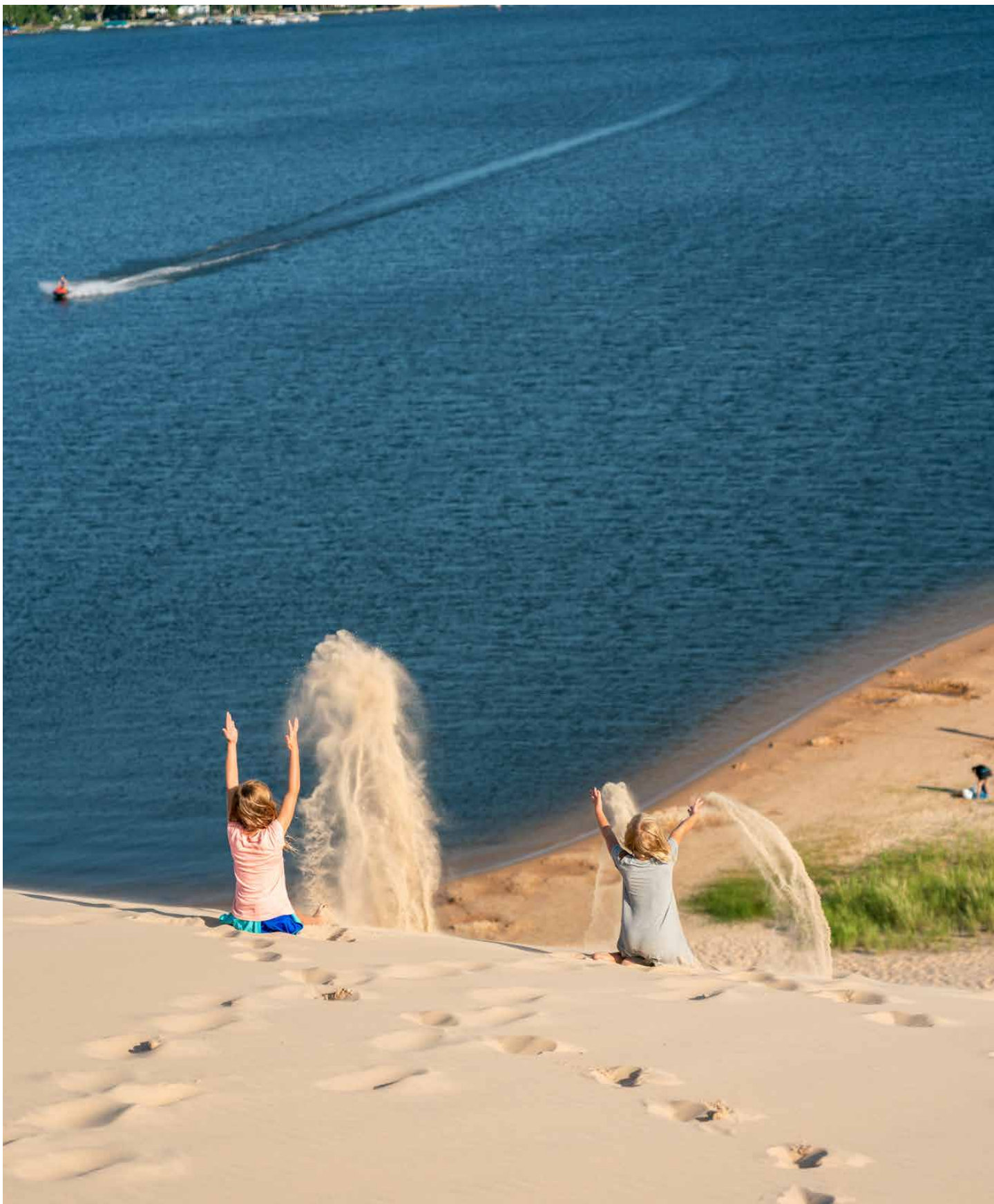
For all park general management plans, legal mandates are identified that serve to further guide the development of the plan, park management, and park operations. For the DNR's planning purposes, the term "Legal Mandates" refers to not only state law, but also the administrative tools of "Policy" and "Directive" of the Natural Resources Commission, the Department of Natural Resources, and the Parks & Recreation Division. The general and site-specific legal mandates applicable to Silver Lake State Park are listed in Appendix A: Supporting Analysis.

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

- Federal mandates to provide accessible facilities
- Federal protection of endangered species
- Preservation of natural and cultural resources
- Water resources and wetlands protection
- Protection of high-risk erosion areas
- Protection of Great Lakes submerged bottomlands
- Protection of critical dune areas
- Hunting area regulations
- Regulation of campgrounds and swimming areas
- Requirement for a Recreation Passport for entry into the park
- Protection of piping plover nesting sites
- Off-road vehicle area regulations



Snow covered trail leading up to the Little Sable Point Lighthouse.



Two young children playing in the sand at the top of a dune. Photo Credit: Tyler Leipprandt



A horseback rider traveling through the shallows of Lake Michigan.

Photo Credit: Wes Kitten, DNR Photo Ambassador

Chapter Two:

Plan Process Overview

2.1 Planning Objectives

Following the lumbering era, tourism took off around Silver Lake in the 1920s. Visitors traveled by rail to the area to enjoy the summer near the lake. As access to the area increased, so did the number of tourists, residential developments, and seasonal population. The park was established in 1920 through a gift by Carrie E. Mears, the daughter of Charles Mears, who founded the nearby town. Over time, additional land was purchased and developed, including the popular off-road area. As the park's popularity has grown, improvements have continued to be made to improve the safety and efficiency of operations as well as visitor enjoyment. However, the popularity of the park in an environmentally sensitive area presents challenges that require careful planning, study, and long-term thinking.

This general management planning process sets out a framework for protecting the park's resources while providing for meaningful visitor experiences. The long-range vision and management objectives for Silver Lake State Park are derived from the missions of the DNR and the Parks & Recreation Division (PRD), 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 PRD staff, staff from other resource divisions, stakeholders, and the public into a planning process that defines and clarifies the unique purpose and significance of Silver Lake State Park. Collectively, those attributes will be reinforced in the planning and management decisions that impact the park. Through this process, the team creates a 20-year management zone plan to guide park planning decisions as well as a 10-year action plan to establish specific action strategies for the park. Each GMP is reviewed every five years to ensure there have been no major changes that would warrant a revision to the approved plan.

2.2 Planning Team

This plan was developed with the direct assistance, input, and expertise provided by all members of the planning team. The planning process and document development was facilitated by Beckett & Raeder, Inc.

2.3 Planning Process

The planning team met periodically over a _____ month period to develop the GMP, beginning in September 2023 and ending in ____ 2024. Throughout the process, the team sought the input of the public and stakeholders to guide the decisions made in the plan. A stakeholder workshop was held in May 2024 to gather insight from organizations tied to the park. 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 ten-year action plan and developed the draft plan.

2.4 Summary of Input Opportunities

Public input is a critical part of the planning for Silver Lake State Park. Below is a summary of the public and stakeholder input methods that were used to inform the development of the GMP. 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

Information about the general management planning process was hosted on a webpage for the project. This was updated with results of the public input survey, the draft of the GMP, and notifications about the public meeting. The website contained contact information so that the public could contact the planning team at any time with questions, concerns, and input.

Stakeholder Input Workshop

To gather targeted input from governmental, non-profit, and business/tourism entities, the planning team invited over 50 stakeholders, both individuals and community groups, to participate in a facilitated input workshop held on May 2nd, 2024, from 10:00 a.m. to 12:00 p.m. at Golden Township Hall in Mears, Michigan. Representatives of the Michigan Department of Natural Resources (DNR) provided the stakeholders with a brief overview of Silver Lake State Park, including its natural features, cultural resources, and recreational offerings. The stakeholders listened to a presentation about the general management plan process, timeline, and an explanation of the plan elements that their input would inform: the statements of significance, the twenty-year management zone map, and actions intended to be accomplished over the next ten years.

Planning Team

DIVISION	TITLE	NAME
PRD	Management Plan Administrator	Debbie Jensen
PRD	Park Manager	Jody Johnston
PRD	District Supervisor	Kasey Cline
PRD	Park Supervisor	Joshua Smith
PRD	Regional Planner	Annamarie Bauer
PRD	Ecologist	Greg Norwood
MHC	Archaeologist	Stacy Tchorzynski
PRD	Lands Liaison	Matt Lincoln
PRD	N.L.P. Trails Coordinator	Greg Kinser
PRD	Motorized Program Specialist	Jessica Holley-Roehrs
PRD	Trails Specialist	Scott Slavin
PRD	Historic Architect	Robb McKay
FD (Fisheries)	Unit Manager	Scott Heintzelman
FD (Fisheries)	Fisheries Biologist	Mark Tonello
FRD (Forestry)	Forest Fire Officer	Ray Cole
LED (Law)	Conservation Officer	Ben Shively
MMS (Minerals)	Geologist	Peter Rose
WLD (Wildlife)	Wildlife Biologist	Pete Kailing
MOD (Marketing)	Interpreter	Elizabeth Brockwell-Tillman
PRD	Commercial Services & Land Use Program Admin	Elissa Buck

The stakeholders were divided into small discussion groups around a numbered table. They worked together to complete a series of exercises discussing the park's current status, opportunities for partnerships, the park's potential benefit to the larger community, and the stakeholders' vision for the park's future. Each table then reported out to the larger group. The complete results of the table exercises can be found in Appendix B.

Out of the ideas generated, those with the highest collective priority amongst the group were to pursue an alternative road to the lighthouse, to keep the ORV area open, to improve the existing road to the lighthouse, to invest in the park infrastructure, and expand the ORV area. Adding trails in the backcountry and increasing staffing were also high priorities.

Online Public Input Survey

One of the methods the planning team used to gather input from park users was an online survey. This approach provides a convenient way for those who have access to the internet to provide feedback, though it is not designed to be statistically representative of Silver Lake State Park users or uses, as respondents self-select. The online survey provides valuable information about what certain individuals or groups (those who are likely to receive DNR communication about the survey and are motivated to comment about the state park) hope to see in the park's future management.

The survey was advertised to a diverse range of people through various means. The survey press release was sent to subscribers of Michigan's Trails or Statewide DNR News (press releases) who answered "Region 7: Mason/Lake/Oceana/Newaygo" or "Region 11: Muskegon/Ottawa/Kent/Allegan/Barry" to "Which areas of the state would you like to receive regional information from?" (29,563 recipients). In addition, the survey invitation was sent to 108,998 subscribers of ORV Riding and 5,736 individuals who had registered to camp at the park over the last three years. It was also sent to stakeholders identified by the planning team. Responses were collected from February 7, 2024 through March 3, 2024. During the collection period, 5,376 submitted responses to the survey.

Common concerns in the public input survey included a desire for the ORV scramble area to be larger, in part to give more room for vehicles to spread out and increase safety without having to place limits on the number of vehicles in the dunes, as well as concerns about accessing the lighthouse day use area down the narrow existing road.

Tribal Communication

The department's tribal coordinator reached out to representatives of the Grand Traverse Band of Ottawa and Chippewa Indians, Little River Band of Ottawa Indians, Nottawaseppi Huron Band of the Potawatomi, Little Traverse Bay Bands of Odawa Indians, and the Gun Lake Tribe with a letter notifying them of the GMP process and timeline and inviting input. They were invited to attend the stakeholder meeting on May 2nd. No input has been received.

Public Meeting

[Placeholder for public meeting description]



Aerial photo of the 1976 hill climb, where people are gathered at the bottom of the dune to watch the challengers.

2.5 Adaptation Planning

The following describes how select anticipated climate change scenarios and environmental vulnerabilities could impact infrastructure and recreation at Silver Lake State Park.

The following anticipated climate change impacts are drawn from ecosystem-based vulnerability assessments lead by the Northern Institute of Applied Climate Science. Impacts related solely to vegetation cover are not included here. Source: Northern Institute of Applied Climate Science summary of vulnerability assessments – www.adaptationworkbook.org/explore-impacts.

- Northern Michigan temperatures will increase between 4°F and 10°F by the end of the century, with more warming during winter.
- Northern Michigan's winter snowpack will be reduced from 30-80% by the end of the century.
- Northern Michigan will have 30-50 fewer days of frozen ground during the winter by the end of the century.
- Intense precipitation events will continue to become more frequent in northern Michigan.
- Climate conditions will increase fire risk in northern Michigan by the end of the century
- Many invasive species, insect pests, and pathogens in northern Michigan forests will increase or become more damaging by the end of the century.
- Surface water temperatures are expected to rise due to warming air temperatures.

Some of the potential impacts of the changes to park use and management include:

- Extended use season, which could have both benefits in terms of revenue and challenges in terms of staffing
- Less snow and a shorter period of frozen ground could result in a shortened use season for winter activities
- Shoreline/trail erosion
- Flooding due to increased precipitation
- More insect pests impacting visitors and vegetation
- Increased frequency and intensity of storms
- Higher temperatures affecting visitor comfort and safety, desire to be close to and access to the water and higher demands on electricity for camper cooling systems.

In addition to climate change impacts, the following vulnerability needs to be considered: Lake Michigan and Huron water levels fluctuate considerably over time (6.2 feet between 2013 and 2020).

A variety of adaptation strategies, approaches and tactics will be considered to address these impacts in both the short- and long-term park management and development decisions.

Approaches include:

- Resistance: Improving defenses against change and disturbance to retain a relatively unchanged condition
- Resilience: Accommodating some degree of change to allow return to prior condition following disturbance
- Transition: Intentionally facilitating change to align a system to new conditions.



Children climbing up a sandy incline through the trees.
Photo Credit: Tyler Leipprandt and Michigan Sky Media LLC.



Driftwood stumps half buried in a sandy dune.



Fiery sunset at the beach in Silver Lake State Park, silhouetting the landscape surrounding the lake.

Chapter Three:

Purpose and Significance

3.1 Purpose of Silver Lake State Park

Park purpose statements are based on park legislation, legislative history, special designations and Department of Natural Resources (DNR) policies. These statements reaffirm the reasons for which Silver Lake State Park was included as part of the state park system.

- To be used as a public park, for the purposes of public recreation or the preservation of natural beauty or historic association in accordance with Act 218, Public Acts of 1919, which created the Michigan State Park Commission.
- To preserve and protect Silver Lake State Park's unique natural and cultural resources for current and future generations.
- To provide access to land and water based public recreational opportunities.
- To provide educational and interpretive opportunities for the public that reflect the DNR mission and the unique qualities of Silver Lake State Park

3.2 Statements of Significance

Each general management plan (GMP) developed by the Michigan DNR Parks and Recreation Division (PRD) is built upon the foundation of the park's significant features that make it distinct from other parks in the state's system.

ORV Dune Scramble Area

Silver Lake State Park contains the only off-road vehicle (ORV) dune-riding area east of the Mississippi River. The ORV scramble area is a major draw to visitors, who use their own ORV or rent vehicles from permitted local vendors for an exciting day on the dunes. The scramble area is a popular location for ORV events. Many commercial use permits are issued for this unique environment, such as video production, advertising, and vehicle testing.

Unique Recreation Experiences

An alternative dune-riding experience is available outside the ORV scramble area through a concessionaire, which offers an interpretive tour of the dunes on a multi-passenger dune scooter. In recent years, access to the dunes and lakeshore has been extended to provide other unique seasonal experiences. A November horseback riding season provides equestrians access to 2.8 miles of Lake Michigan shoreline, and fat-tire bikers can enjoy the open sand dunes in winter when they are closed to ORV use.

Expansive Critical Dunes

Silver Lake State Park has an expansive area designated as Critical Dunes, which are recognized as unique, irreplaceable, and fragile resources having scenic, geological, and ecological value. This dynamic landscape, estimated at 1,500 to 1,700 acres in size, is constantly shifting with the winds and is advancing into Silver Lake and surrounding lands. The dune system within the park is part of a bigger system stretching along the shores of Lake Michigan: the largest freshwater dune system east of the Mississippi River.

Silver Lake and Lake Michigan

Visitors can enjoy two lake experiences at Silver Lake State Park: inland Silver Lake and the Lake Michigan shoreline. The day use area and boat launch on Silver Lake affords opportunities for picnicking, play, fishing, watersports, and a designated swim area. Three miles of Lake Michigan shoreline can be accessed from multiple areas including the ORV scramble area, pedestrian dune area, and Little Sable Point Lighthouse.

Little Sable Point Lighthouse

Little Sable Point Lighthouse at Silver Lake State Park has one of the tallest light towers in Michigan and has an original third-order Fresnel lens. The nearby parking lot and paved walkway provide pedestrian access to the lighthouse and sandy shoreline. The lighthouse is open seasonally for tours hosted by the Sable Points Lighthouse Keepers Association, who co-manage it with the DNR. Visitors can climb to the watch room of the tower and appreciate scenic views of Lake Michigan.

Natural Resource Recreation

In addition to riding the dunes, opportunities for outdoor recreation are abundant within Silver Lake State Park's beaches and woods. Visitors can enjoy birding and wildlife viewing, as well as opportunities to hunt waterfowl, deer, and small game. The park features a large expanse of undeveloped land, with opportunities such as dune hiking, exploring, and scenic viewing. Silver Lake supports a walleye fishery maintained through stocking and a bow fishery for common carp.

Natural Features

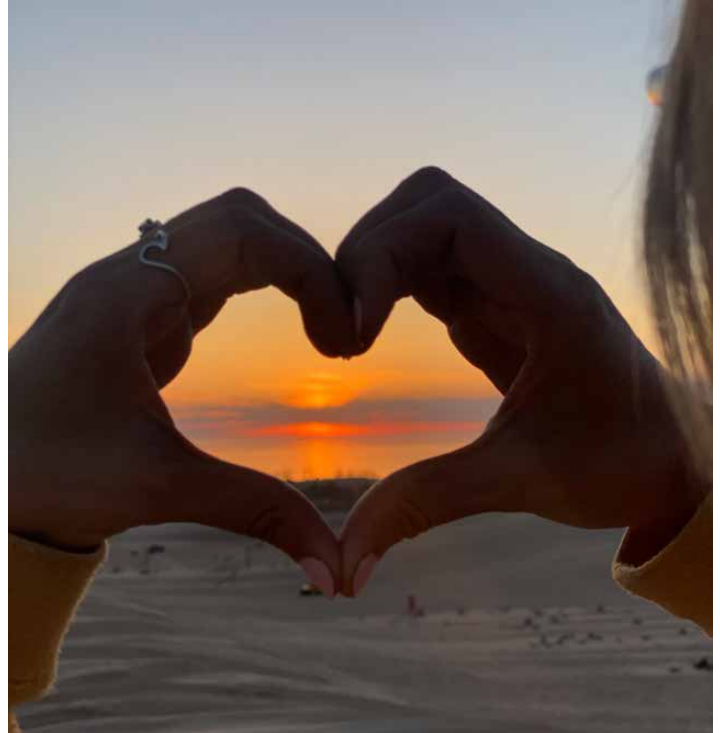
Silver Lake State Park has rich natural features that provide habitat for rare flora and fauna. Environments such as intact open dunes, interdunal wetlands, Great Lakes barrens, and mesic northern forest are home to rare species including the dune dart, the dune cutworm, piping plover, hooded warblers, and Pitcher's thistle. The forest within the park is of high quality and features a 400-year-old red pine tree—one of the few trees to survive the logging era in Michigan.



Historic photo of two visitors cruising down the dune in their vehicle.



Park visitors traversing the shoreline of the park on horseback.



Visitor forming their hands in the shape of a heart with the sunset in the center.

3.3 Public Affirmation of Significance

Stakeholder and public input assisted the planning team with affirming the significant features and opportunities at Silver Lake State Park. The feedback from the online survey confirmed that the expansive sand dunes, exciting ORV area, scenic beaches, and plentiful recreation opportunities are significant aspects of the park. Comments from survey respondents relating to those significant features are provided below.

"A beautiful place to spend with friends and family! We love silver lake and hope to continue to enjoy it for many years to come!"

"Have been visiting the area since 1976, have watched it grow and change, our family is on our 3rd / permanent cottage; I only wish I hadn't shared the secret with so many over the years, but couldn't keep this hidden gem from everyone forever."

"I think the view across Silver Lake is the best view in Michigan. Being able to boat to the dunes, use ORV area, have Mac Woods dune rides available and beaches in both Lake Michigan & Silver Lake."

"We love the park and the lighthouse! We got engaged at the Little Sable Lighthouse. Our other family members were married on the beach and it is a family tradition to visit each year."

"I appreciate that we have a season for equestrians to be able to ride the dunes. It is a rare and wonderful experience."

"I think the horse back riding and fat tire season are great additions to the use of the park for what is typically the off season."

"We camp, kayak, paddleboard, sail, swim, pick blueberries, hike the dunes, share stories, catch minnows at the channel, look for fulgurites, build sand castles, play cards, eat ice cream, laugh, and savor our multi-generational family time together. Great-Grandma still comes at 92!"

"It is a tradition in our family. We have purpose-built vehicles specifically designed for the dunes. It is a source of joy and contentment for our family to spend our summers enjoying the Silver Lake area."

"LOVE Silver Lake campground and the dunes. This will be our 15th straight year camping at Silver Lake State Park. And we hope to continue coming for years to come."

3.4 Community Connection

Silver Lake State Park has been closely tied with the local community since its establishment over 100 years ago. The surrounding area was developed in tandem with the tourism industry and attracts many seasonal residents that come to enjoy the natural splendor and recreation opportunities that are abundant in the park. Many of the local businesses specifically supply visitors with vehicles, equipment, food, lodging, and off-dune entertainment, creating an intertwined relationship between the park and the local economy. Local businesses also partner directly with the park through concessionaire agreements to provide services within the ORV scramble area.

Several local community organizations help to support the park. The Silver Lake Recreation Association was formed in 2015 with the goal of working together with the community and the DNR to enhance users' experience at Silver Lake sand dunes. The group has assisted with improvement projects and maintenance activities such as grooming the entrance and exit ramps and dune clean up events.

The inland Silver Lake borders both state park land and private land. The Friends of Silver Lake are a non-profit association made up of property owners and other stakeholders with the purpose to “discuss, promote and act upon ideas that contribute to keeping the greater Silver Lake community more beautiful, enjoyable, secure, and valuable. We promote the improvement of waters, roads, walks, beaches, and other area environments, advocate for various improvements, and assist in raising funds for such purposes.” Recently, the group has contributed to improving the water quality of Silver Lake by removing phosphorus with BioChar filters and has a fishing contest for carp to help remove them from the lake.

Another community group partners with the park through a lease agreement in the upkeep of the Little Sable Point Lighthouse. The Sable Points Lighthouse Keepers Association (SPLKA), which was established in 1987, has a mission to “preserve, promote, educate the public, and make our lighthouses accessible to all.” Volunteers from the organization give tours of the light tower to visitors looking to take in the expansive views of Lake Michigan.



A group of swimmers on the shore of Silver Lake.

Management Zone Progression Table

MANAGEMENT ZONE	NATURAL RESOURCE IMPACTS	VISITOR USE	DEVELOPMENT LEVEL
ECOLOGICALLY SENSITIVE	None	Restricted	None
PRIMITIVE	Very low	Low (dispersed)	Very low
BACKCOUNTRY	Low	Low to moderate	Low
CULTURAL LANDSCAPE	Low to moderate	Moderate	Moderate
NATURAL RESOURCE RECREATION	Moderate	Moderate to high	Moderate
SCENIC	Moderate	Moderate to high	Moderate
HISTORY EDUCATION	Moderate to high	High	Moderate to high
DEVELOPED RECREATION	High	High	High
ADMINISTRATIVE SERVICES	High	High (primarily staff)	High

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 and education opportunities. From a palette of nine management zones, the planning team studied the park and applied zones that best fit distinct areas of the park based on existing and desired future conditions. 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

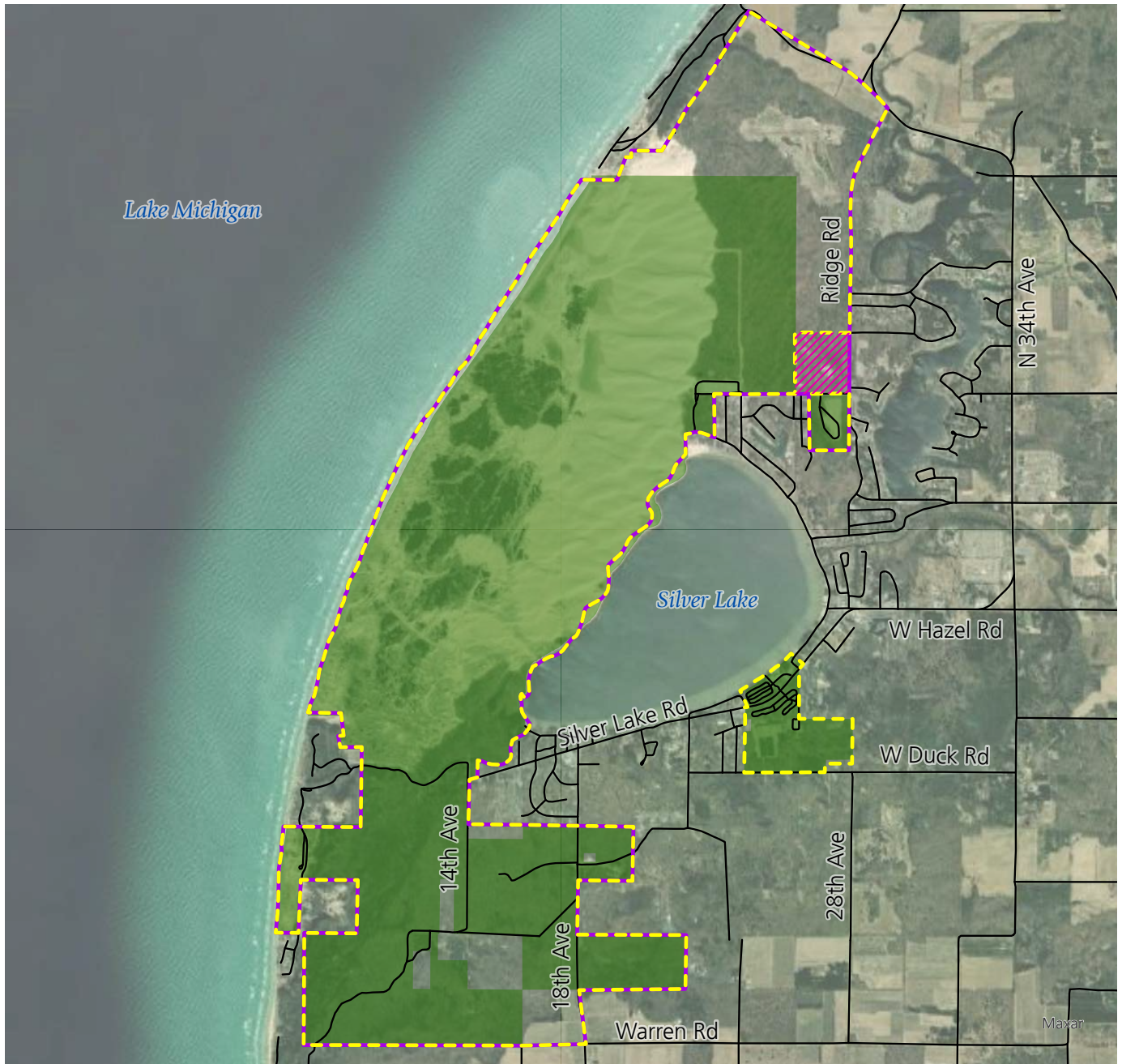
The resource condition, visitor experience, and level of development vary in each of the nine standard zones, as indicated in the figure above. Silver Lake State Park was divided into the following six standard zones and one custom zone:

- Primitive Zone
- Backcountry Zone
- Natural Resource Recreation Zone
- Developed Recreation Zone
- Administrative Services Zone
- Special Use Zone
- History Education Zone

Sections 4.2 through 4.8 are descriptions for zones applied to Silver Lake State Park. Examples of recreation activities and development that may be allowed in each zone are general and may not necessarily be appropriate or allowed at this location.



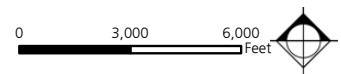
Pastel sunset over the dunes and Lake Michigan.



SILVER LAKE STATE PARK

Proposed Project Boundary

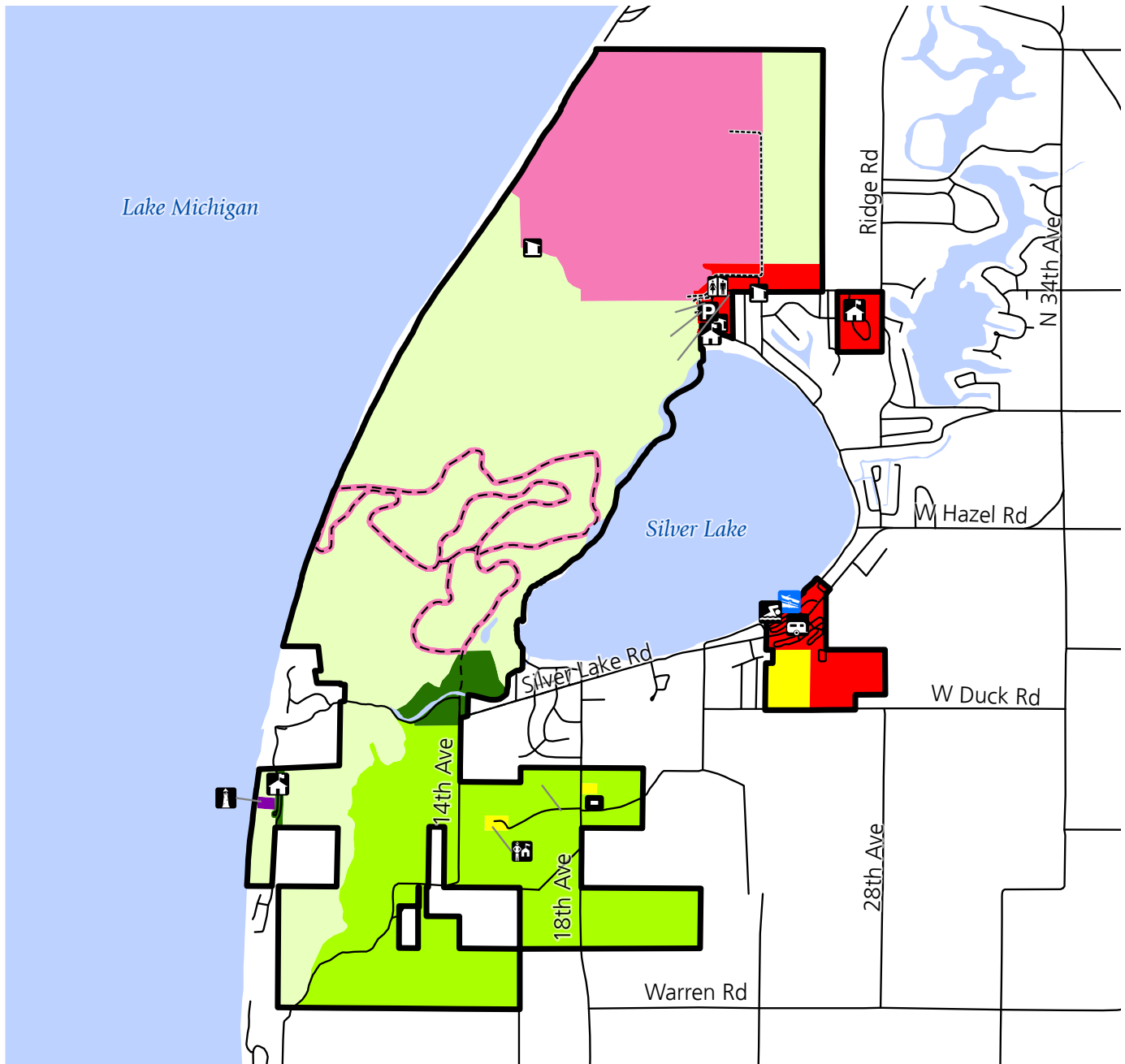
Data Sources: Michigan CGI Data Library, Michigan Department of Natural Resources



Date: 2/16/2024 Beckett&Raeder

- Silver Lake State Park Boundary
- Roads
- Rivers / Streams
- Lakes
- 2020 NRC Approved Project Boundary*
- GMP Proposed Project Boundary
- Recommended to be Added to the Project Boundary

**A project boundary is a geographic area in which the DNR is seeking to acquire property that supports the mission of the DNR on a willing buyer / willing seller basis, approved by the Natural Resources Commission in 2020*



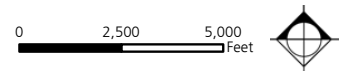
SILVER LAKE STATE PARK

Draft Management Zones

Data Sources: Michigan CGI Data Library, Michigan Department of Natural Resources

- Silver Lake State Park Boundary
- Roads
- Rivers / Streams
- Lakes
- Dune Access Corridor
- Mac Woods Dune Ride Route

- Primitive
- Backcountry
- Natural Resource Recreation
- Developed Recreation
- Administrative Services
- Special Use Zone
- History Education Zone



Date: 5/31/2024 **Beckett&Raeder**

- Contact Station
- Lighthouse
- Modern Campground
- Park Headquarters
- Swimming Beach
- Boating Access
- Vault Toilet
- Parking Lot
- Restroom

4.1 Project Boundary

Project boundaries are geographic lines that help define the state's public lands acquisition and disposal strategy (land strategy). These boundaries contain primarily state ownership, as well as privately owned lands that, should they ever become available for sale, would be a priority for the DNR to pursue acquiring.

The DNR undertook a comprehensive statewide project boundary review in 2020. The GMP planning team reviewed the project boundary for Silver Lake State Park and supports the 2020 Project Boundary approved by the Natural Resources Commission and the Director of the DNR, with the following proposed revisions:

- Add a parcel near the ORV area entrance that would be desirable for ORV area operations support.

If the land within the project boundary were purchased, it would add approximately 1,027 acres to the park. The project boundary includes undeveloped land and critical dunes worthy of protection, inholdings within the park boundary, and land that would be desirable for road access and operations support.



Aerial photo of the dunes at dusk where visitors are still traversing the dunes in their vehicles.

4.2 Primitive Zone

The primary purpose of the Primitive Zone is the protection of natural resources and natural processes. The zone is managed for low-impact recreational experiences in a primitive, natural landscape. Only dispersed, self-reliant, and low-frequency use is allowed. Attaining and maintaining a high-quality natural resource condition dictates the extent to which recreational improvements or uses are allowed. This zone covers about 48% of the park and includes the area of the park designated as Critical Dunes that is not already developed.

Natural Resources

- Native species and natural processes take precedence over visitor accommodation.
- Native Michigan natural communities/ecosystem components and processes are maintained, restored and protected.
- Human-caused habitat fragmentation is eliminated.
- Non-native species are controlled or eliminated.
- Natural hydrology is maintained or restored.
- Vegetative management is only allowed to restore and maintain natural ecological structure and processes (such as removal of invasive species), and to manage pests and disease.
- Where agricultural fields currently exist, a strategy should be developed to bring these areas into compliance with the intent (nature/character) of the zone.
- New agricultural fields may be allowed but only as a specific and limited phase of an Ecological Restoration Plan or as a critical component of a plan for managing species of greatest conservation need.
- Haying may be used as a short-term vegetation management treatment.
- Prescribed fire may be used to mimic natural disturbance or control invasive species.

Cultural Resources

- Archaeological resources are preserved.
- Ethnographic resources are protected.
- Extant historic structures may be preserved, but more often are removed or allowed to molder in place.

Recreation Opportunities

- Recreation is dispersed.
- Self-reliant, non-mechanized (no bicycle, horse, or motorized use) outdoor activities (e.g., hiking, backpacking, primitive camping, cross-country skiing, hunting/trapping/fishing, nature observation).
- Trail density is low. Trail routes are point to point and not sinuous in design. Trails are single track and natural surface (except as needed to protect the resource), although existing two-tracks may be allowed to remain.

Education Opportunities

- Primarily off-site.
- Interpretive signage is allowed at trail heads and at overlooks.

Visitor Experience

- Low visitor to visitor encounters.
- Visitors are engaged in high solitude, off-trail or trailed, self-reliant outdoor activities.
- High time commitment.
- High challenge and adventure.
- Discovery area with minimal on-site interpretation.
- Low noise tolerance.
- Low interaction with DNR staff.

Management Focus

- Maintain low-impact character of the zone, with emphasis on natural resource quality.

Development

- Very low level for visitor accommodation (e.g., foot trails).
- Site hardening only allowed to protect sensitive resources (e.g., boardwalk).
- Little evidence of human activity



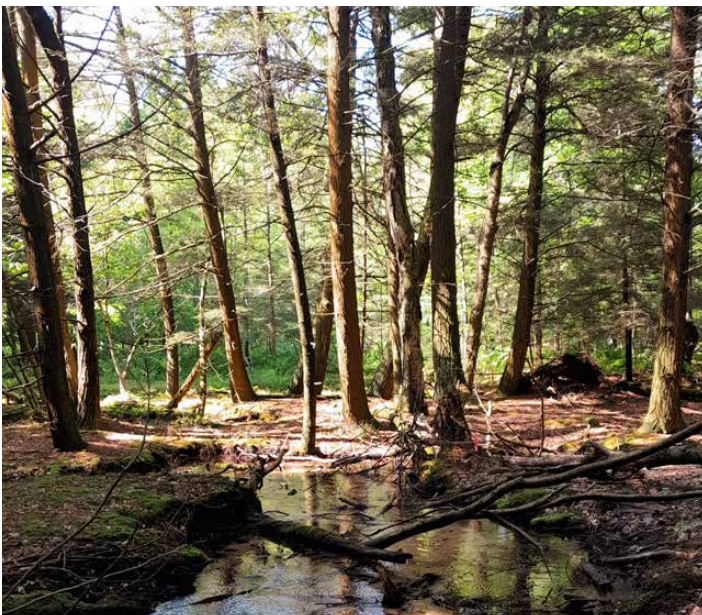
Kalm's St. John's-wort is found within interdunal wetlands at Silver Lake State Park. Photo Credit: Aaron Kortenhoven, Michigan Natural Features Inventory

4.3 Backcountry Zone

The character of this 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 slightly increased use, including bicycle and equestrian use if appropriate, and modifications of the landscape (e.g. trail development) to accommodate that use. This zone covers 22% of the park and includes the areas in the southern portion of the park that are not designated as critical dunes and is primarily undeveloped land.

Natural Resources

- Natural resources may be modified slightly to support visitor use, but tolerance for natural resource impacts for visitor accommodations is low.
- Native Michigan natural communities/ ecosystem components and processes are maintained, restored and protected.
- Human-caused habitat fragmentation is minimized.
- Non-native species are controlled or eliminated.
- Natural hydrology is maintained or restored.
- Vegetative management is only allowed to restore and maintain natural ecological structure and processes (such as removal of invasive species), and to manage pests and disease.
- Where agricultural fields currently exist, a strategy should be developed to bring these areas into compliance with the intent (nature/character) of the zone.
- New agricultural fields may be allowed but only as a specific and limited phase of an Ecological Restoration Plan or as a critical component of a plan for managing species of greatest conservation need.



A stream flows through the forest.

- Haying may be used as a short- or long-term vegetation management treatment but the goal is native ecosystems.
- Prescribed fire may be used to mimic natural disturbance or control invasive species.

Cultural Resources

- Archaeological resources are preserved.
- Ethnographic resources protected.
- Extant historic resources are preserved, rehabilitated, removed, or allowed to molder in place.

Recreation Opportunities

- Moderate levels of recreation compatible with the natural character of the zone.
- Visitors engaged in non-motorized outdoor activities in diverse land and water natural settings (e.g. hiking, backpacking, backcountry camping, bicycling, horseback riding, canoeing, kayaking, fishing, hunting/ trapping, nature observation, cross-country skiing, and snowshoeing).
- Trails are more point to point than sinuous in design. Trail purpose is viewing and access more than challenge.

Education Opportunities

- Interpretive signage at trail heads, on the trail, and at overlooks is allowed.
- Moderate off-site interpretation.

Visitor Experience

- Moderate visitor to visitor encounters.
- Visitors engaged in non-motorized outdoor activities in diverse land and water natural settings.
- High time commitment.
- Moderate challenge and adventure.
- Discovery area with minimal on-site interpretation.
- Low noise tolerance.
- Low interaction with DNR staff.

Management Focus

- Maintain low-impact character of the zone, with emphasis on natural resource quality.

Development

- Low level of development to support visitor access to outdoor activities (e.g. trails, trailhead parking, marked routes, designated backcountry campsites, vault toilets, water pumps) and educational opportunities.
- Development shall be unobtrusive and blend with natural environment.
- Site hardening (e.g. boardwalks, fencing, pedestrian paths) may be necessary to protect sensitive resources.

4.4 Natural Resource Recreation Zone

The Natural Resource Recreation zone supports active recreation conducted in a natural setting with medium to high-density use. There is an emphasis on resource quality over recreation, but moderate to high levels of use may be accommodated. This zone covers 2% of the park and includes the parking area at the Little Sable Point Light Station day use area and the Ruckle's Bridge day use area.

Natural Resources

- Natural resources support visitor activities with only moderate impacts.
- Natural resources are managed or modified to support visitor activities but protected to the degree possible and appear natural.
- Human-caused habitat fragmentation is minimized.
- Non-native species are controlled or eliminated.
- Natural hydrology is maintained or restored.
- This zone will reflect native Michigan natural communities/ecosystems and 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.
- Where agricultural fields currently exist, a strategy should be developed to bring these areas into compliance with the intent (nature/character) of the zone.
- New agricultural fields may be allowed in the zone but only as a specific and limited phase of an 'Ecological Restoration Plan' or as a critical component of a plan for managing species of greatest conservation need.
- Agricultural haying may be used as a long-term vegetation management treatment.

Historic/Cultural Resources

- Archaeological resources are preserved.
- Ethnographic resources are protected.
- Extant historic resources may be preserved, restored, allowed to molder in place, or adaptively used for operational or educational purposes.

Recreation Opportunities

- Moderate to high levels of recreation compatible with the natural character of the zone.
- Visitors engaged in outdoor activities in diverse land and water natural settings (e.g. hiking, backpacking, backcountry and rustic camping, bicycling, horseback riding, boating, canoeing, kayaking, fishing, hunting/trapping, nature observation, cross-country skiing, snowshoeing and snowmobiling).
- Except in areas with Exemplary Natural Communities,

trails may be sinuous to provide for recreational challenge. Multi-use linear trails may be permitted in this zone.

Education Opportunities

- Interpretive signage may be provided at trail heads, on the trail, at overlooks and in campgrounds.

Visitor Experience

- Moderate to high visitor to visitor encounters accommodated.
- Visitors engaged in outdoor activities in diverse land and water natural settings for recreation and education.
- Variable time commitment.
- Variable challenge and adventure.
- Moderate noise tolerance.
- Moderate interaction with DNR staff.
- Moderate accessibility.

Management Focus

- Maintain use of zone in accordance with PRD's mission.
- Public safety.
- Protection of resources.

Development:

- Moderate level of development of facilities for support of visitor activities (e.g. vault toilets, concrete/asphalt/gravel walkways and parking, trails, benches, picnic tables, rustic campsites, rustic cabins and shelters) for recreation and educational opportunities.
- Site hardening (e.g. boardwalks, fencing, surfaced pedestrian paths) as necessary to protect sensitive resources and provide accessibility.



Picnic tables in the woods at Ruckle's Bridge day use area.

4.5 Developed Recreation Zone

The Developed Recreation Zone supports 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 approximately 5% of the park and includes the campground, overflow parking area at the campground, ORV welcome center and parking lots.

Natural Resources

- Natural resources may be actively managed and modified to support visitor activities.
- Water quality is maintained or restored.
- Vegetative management will address hazard trees, invasive species, and pests and disease, and will also be allowed to facilitate development, recreational use, and to maintain an aesthetically appealing landscape. Native vegetation is still emphasized. PRD's tree planting standards should be followed in this zone.

Cultural Resources

- Archaeological resources are preserved.
- Ethnographic resources are protected.
- Extant historic resources may be preserved, restored, or adaptively used to support visitor activities, operational or educational purposes.



Child climbing on the playground structure at the Silver Lake day use area.

Photo Credit: Tyler Leipprandt and Michigan Sky Media LLC.

Recreation Opportunities

- High levels of recreation activity in a highly structured environment.
- Visitors engaged in activities in diverse natural and modified land and water settings (e.g., hiking, modern and semi-modern camping, bicycling, horseback riding, boating, canoeing, kayaking, fishing, hunting/trapping, cross-country skiing, snowshoeing, snowmobiling, day use beach, swimming, picnicking, disc golf, and other day use activities where people congregate).
- Except in areas with Exemplary Natural Communities, trails may be sinuous to provide for recreational challenge. Multi-use linear trails are allowed in this zone.

Education Opportunities

- Interpretive signage may be provided at campgrounds, day use facilities, boating facilities, registration buildings, trail heads, on the trail, and at overlooks.
- Active programming at campgrounds and other areas where people congregate.

Visitor Experience

- High visitor to visitor encounters accommodated.
- Visitors engaged in activities in diverse land and water settings for recreation and education.
- Variable time commitment.
- Variable challenge and adventure.
- Variable level of exertion.
- High noise tolerance.
- High interaction with DNR staff.
- High accessibility.

Management Focus

- Maintain use of zone in accordance with PRD's mission.
- Management of people.
- Public safety.
- Protection of resources.
- Public accessibility.

Development

- High level of development of facilities for support of visitor activities (e.g., modern restrooms, walkways and parking, trails, benches, picnic tables, picnic shelters, modern and semi-modern campgrounds, modern cabins and shelters) for recreation and educational opportunities.
- Site hardening (e.g., boardwalks, fencing, surfaced pedestrian paths) as necessary to protect sensitive resources and provide accessibility.
- Strive for universal access in all new developments.

4.6 Administrative Services Zone

This zone encompasses the developed areas required for program administration and operations. Typically, it will include offices, contact stations, maintenance facilities and all related land base required to conduct the business of running a state park or park. This zone covers about 65 acres (1%) of the park and includes the park headquarters, the house used by keepers of the light station, the sewage lagoon, and maintenance areas.

Natural Resources

- Natural resources may be actively managed and modified to support administrative and support activities.
- Vegetative management (primarily tree removal for safety) is allowed.

Cultural Resources

- Cultural resources and structures are preserved, adapted, or rehabilitated to support administrative activities.
- Historic structures should be re-purposed before new construction where possible.
- Non-utilized or non-stabilized structures may be removed.

Recreation Opportunities

- None

Education Opportunities

- Person-to-person contact at park headquarters for general information, both verbally and written (brochures, maps, etc.).
- Informational kiosk.

Visitor Experience

- Business and information only.
- High noise tolerance.
- High accessibility.

Management Focus

- The business of running a park.
- Appropriate facilities for staff, equipment and materials.
- Employee safety.
- Public access to office.

Development

- High level of development of facilities for support of administrative activities (e.g., office space, meeting rooms, employee locker room, employee eating area, shop space, storage space and related)
- Provide maximum level of accessibility for public.



The Silver Lake State Park headquarters and shop area.

4.7 Special Use Zone

This non-standard zone is intended to focus on management of special recreation uses within specific areas of the Critical Dune Area. Recreation uses which existed prior to the 1989 Critical Dune Area designation will continue to be supported. The Special Use Zone makes up 22% of the park and includes the ORV scramble area and the Mac Woods dune scooter route.

Natural Resources

- Natural resources may be actively managed and modified to support visitor activities.
- Water quality is maintained or restored.
- Vegetative management will address hazard trees, invasive species, and pests and disease, and will also be allowed to facilitate development, recreational use, and to maintain an aesthetically appealing landscape. Native vegetation is still emphasized.

Historic/Cultural Resources:

- Archaeological resources are preserved.
- Ethnographic resources are protected.
- Extant historic resources may be preserved, restored, allowed to molder in place, or adaptively used for operational or educational purposes.

Recreation Opportunities

- High levels of recreation activity in a diverse natural and modified environment.
- Visitors engaged in specific outdoor activities allowed within the zone as determined by park staff. Seasonal signage is placed by park staff each year to designate areas allowed for each special use. This includes off-road vehicle use within a defined area, dune scooter tours, seasonal horseback riding and seasonal fat tire biking.

Education Opportunities

- Interpretive signage may be provided in targeted areas to provide education on the dune environment.
- Educational dune scooter tours may be available in specified areas.

Visitor Experience

- High visitor to visitor encounters accommodated.
- Visitors engaged in outdoor activities in diverse land and water settings for recreation and education.
- Variable time commitment.
- Variable challenge and adventure.
- High noise tolerance.
- High interaction with DNR staff.
- Moderate accessibility.

Management Focus

- Maintain use of zone in accordance with PRD's mission and existing Land Use Orders and Policies.
- Quality visitor experience
- Public safety.
- Protection of resources.
- Public accessibility
- Efficient management of operations.

Development

- Moderate level of development of facilities for support of visitor activities (e.g. vault toilets, concrete/asphalt/gravel walkways and parking, trails,) for specific recreation and educational opportunities.
- Site hardening (e.g. boardwalks, fencing, surfaced pedestrian paths) as necessary to protect sensitive resources and provide accessibility.



Visitors enjoying a Mac Wood's Dune Ride

4.8 History Education Zone

The emphasis of this zone is education. Historic resources are restored and interpreted for visitor understanding. A high level of development is allowed in this zone for the management/control of people and traffic, protection of the resources, and historical interpretation. The History Education Zone makes up just 4.2 acres of the park (0.08%) and includes the Little Sable Point Lighthouse.

Natural Resources

- Natural resources that have been identified as important to the historic landscape are managed to perpetuate those qualities. This can include non-native (non-invasive) species specific to the era and/or location and maintaining an aesthetically appealing landscape compatible with the historical resource and interpretation of the zone.
- Other areas of this zone will reflect natural processes, with vegetative management focused to restore and maintain natural ecological structure and processes (such as removal of invasive species), to address hazard trees, and to manage pests and disease.

Cultural Resources

- Cultural and natural resources (including historic buildings, structures, and landscapes) may be restored to specific time period(s) if essential for the visitor understanding or rehabilitated to support visitor and staff activities for in-depth interpretation.
- Some historic resources may be allowed to molder in place.

Recreation Opportunities

- Visitors engaged in sightseeing and educational activities in a cultural setting.

Education Opportunities

- Structured interpretive/educational activities related to the historic resources (e.g. guided, brochure or audio tape tours, in-depth history exhibits, media, and programs).
- Interpretive signage at trail heads, on the trail, overlooks and other points of interest.
- Low off-site interpretation.

Visitor Experience

- High visitor to visitor encounters accommodated.
- Visitors engaged in structured interpretive/educational activities related to the historic resources.
- Moderate time commitment.
- Low exertion.
- Moderate noise tolerance.
- High interaction with DNR staff.
- High level of accessibility where feasible given the historic resource.



Historic photo of the Little Sable Point Light Station.

Management Focus

- Maintain historic/cultural integrity of the zone, and if a sub-set of a resource zone, maintain emphasis on natural resource quality.
- Keep development consistent with the zone.
- Strive for quality visitor experience of historic interests.

Development

- Developments necessary for visitor understanding and/or staff support are compatible with the historic period(s) or are accommodated off-site.
- Restored or rehabilitated area includes necessary protection, security and HVAC (heating and cooling) systems, and visitor/staff support uses, such as restrooms and offices.
- Development, including interpretive media, consistent with historic period(s).



A Jeep parked and set up to watch the sunset on a clear day over Lake Michigan.



Sunset over Lake Michigan, the grassy dunes and the Little Sable Point Lighthouse.

Chapter Five: Ten-Year Action Plan

The planning team has developed a 10-year action plan that it believes includes actions necessary to guide management and development within Silver Lake State Park to achieve the desired resource protection and user experience. Action plan items are recommended that address natural resources, cultural resources, recreation opportunities, education/interpretation opportunities, and development. These actions apply either to the whole park or to specific locations within the park, as appropriate, and according to the management zone. Refer to the zone descriptions in Chapter Four for appropriate activities in each zone.

Management plans do not guarantee future funding to achieve the actions identified but are based on funding realities and sound investment policies. PRD 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.

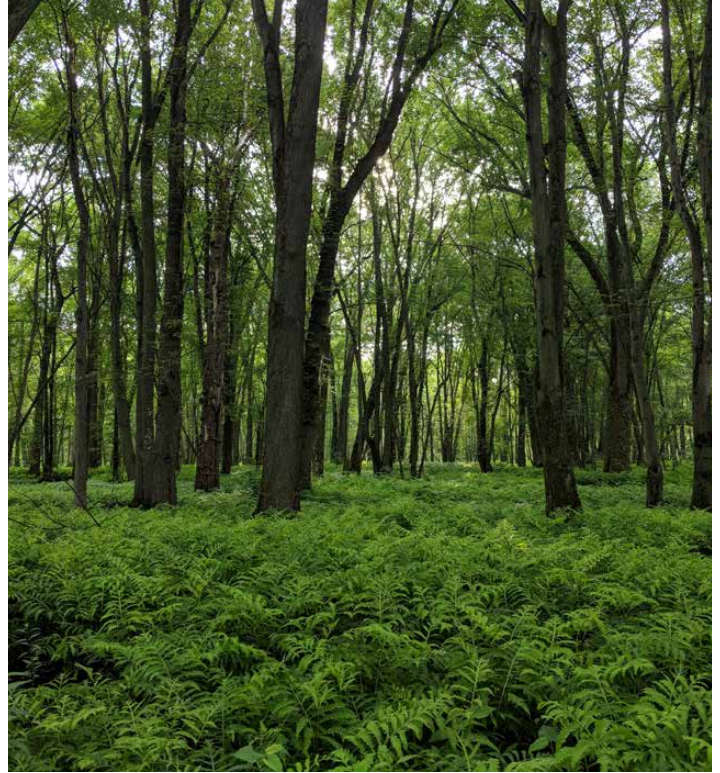
Action items are prioritized based on health, safety, and welfare, as well as ease of implementation (cost, ability to implement with own staff, partnerships, etc.). Priority Level 1 projects indicate those that should be addressed within the next 2 years. Priority Level 2 projects include those that should be addressed within 3-5 years. Priority Level 3 projects are desired but can be tackled in the next 6-10 years once funding has been identified. Some goals are intended to continue throughout the plan time frame and are an "ongoing" priority. Opinion of probable costs have been developed for each capital outlay action goal identified (see Appendix C), and these projects will be included in the statewide master project list.

5.1 Current Issues Overview

Silver Lake State Park currently faces several key issues that contribute to the need for long-range planning and action. These include:

- The ORV scramble area is very popular, with demand to use the area exceeding the parking lot capacity during the peak season. In addition, the ORV scramble area opens prior to the summer DNR staff start date, straining staff resources.
- North Lighthouse Drive, owned by Golden Township, is the only access route to Little Sable Point Lighthouse and the Lake Michigan Beach. The road is narrow and can be congested. Visitors may travel to the lighthouse parking lot only to find that it is full.
- The boat launch parking lot fills up, and by policy boaters may not “launch and leave,” meaning that once the parking lot is full, no more boats may launch. Silver Lake is a very busy lake, and to expand the boat launch capacity could be detrimental to public safety.

Any future improvements will be considered in the context of efficiency, environmental sustainability and resiliency, for example, electric vehicle (EV) charging stations and solar energy infrastructure.



Northern hardwood swamp with a dense ground layer of sensitive fern. Photo Credit: Aaron Kortenhoven, Michigan Natural Features Inventory



View of the dunes at Silver Lake State Park from the water.

5.2 Silver Lake State Park Ten-Year Action Plan

The following tables outline the actions planned for the next ten years. In the program input column, the bolded party is the program lead.

Management & Operations

The following action items relate to the management and operations of the park.

ACTION	PRIORITY	MANAGEMENT ZONE	PROGRAM INPUT FROM
Continue to explore land acquisition within the GMP Proposed Project Boundary.	Ongoing	All	Park Manager Lands Liaison
Continue to work proactively to develop and implement measures to prevent, detect and control invasive species.	Ongoing	All	Stewardship Park Manager CISMA*
Complete a Natural Resources Stewardship Plan for the park, identifying targets for conservation and related natural resource management strategies, including invasive species management.	1	All	Stewardship Park Manager
Study use patterns and potential improvements to the lighthouse day use area, including access, parking efficiency, and circulation.	1	Natural Resource Recreation History Education Zone	Regional Planner Park Manager
Evaluate and improve information available to visitors about the pedestrian dune area.	1	Primitive	Park Manager Marketing and Outreach
Edit the metal detecting area map to close the west shoreline of Silver Lake to metal detecting.	1	Primitive	DNR Archaeologist Park Manager
Evaluate the potential for a trailhead and hiking trails and determine appropriate potential routes in the southern area of the park, including evaluating unofficial user-created trails, with the goal of developing an interpretive trail.	2	Primitive Backcountry	Regional Planner Park Manager Stewardship
Create additional avenues for education about the importance of critical dunes. Highlight the unique exception of the ORV scramble area as a special recreation opportunity.	2	All	Park Manager Stewardship Marketing and Outreach
Perform a visitor use management study of the ORV area to achieve desired visitor experiences, efficient operations and safety, and to protect the resources.	2	All	Management Plan Administrator Regional Planner Park Manager
Conduct a phase 1 archaeological survey at select locations within the park.	2	All	DNR Archaeologist Park Manager

* Cooperative Invasive Species Management Area

Partner Projects

The following action items will be completed in partnership with other entities.

ACTION	PRIORITY	MANAGEMENT ZONE	PROGRAM INPUT FROM
Participate in local planning efforts for improved vehicular and pedestrian access and connectivity to community assets, including the lighthouse beach, campground, area businesses, and regional trails.	Ongoing	All	Park Manager Regional Planner District Supervisor Trails Specialist Community Partners

Infrastructure & Development: Capital Outlay

The following actions are larger projects that require the use of capital outlay funds.

ACTION	PRIORITY	MANAGEMENT ZONE	PROGRAM INPUT FROM
Implement soft shore erosion control techniques to stabilize and improve the Silver Lake shoreline near the campground and day use area.	2	Developed Recreation	Regional Planner Park Manager Stewardship
Evaluate and make recommendations for day use access and parking improvements in the Silver Creek area, including Ruckle's Bridge and Termite Bridge.	2	Natural Resource Recreation	Regional Planner Park Manager
Develop a conceptual plan for campground improvements considering full hook-up, pull-through and/or accessible campsites, upgraded electrical service, sanitary and water system improvements, and an additional dump station.	3	Developed Recreation	Regional Planner Park Manager
Repave campground roads.	3	Developed Recreation	Regional Planner Park Manager
Implement improvements to the pedestrian dune parking area to expand parking and improve circulation in accordance with the 2018 Silver Lake ORV Area Master Plan.	3	Developed Recreation	Regional Planner Park Manager
Implement parking area improvements at the lighthouse, dependent on the outcome of the lighthouse day use area study.	3	History Education Zone Natural Resource Recreation Zone	Regional Planner Park Manager



Two fat-tire bikers taking a break at the top of a dune on a windy day before continuing on their ride.

Chapter Six: Implementation Strategy

This chapter of the general management plan (GMP) provides guidance for implementation of the action plan and maintaining the plan so it remains relevant in the long term. These guidelines will also help the park align the action plan with park, district and statewide annual funding processes and annual tasks outlined in the Parks and Recreation Division's Strategic Plan or other planning documents. Although the implementation of the GMP will require commitment from staff at every level, it will be the primary responsibility of the Unit Supervisor/Manager to oversee plan implementation.

A long-range plan such as this must maintain a degree of flexibility in order to be responsive to changing circumstances or unforeseen opportunities. It is recognized that some actions may be accomplished in a short time frame, while others may carry over through multiple years. It will be important to track progress so that the plan remains a relevant park management tool. The GMP will be reviewed every five years to ensure it remains viable.

All proposed changes in the park should be reviewed to ensure they are in compliance with the approved Management Zones.

6.1 Implementation Toolbox

The following is a list of items to consider when reviewing and prioritizing the implementation of action items identified in the GMP.

Coordination/ Communication

- Meet regularly with the Regional Field Planner and District Supervisor to coordinate and prioritize large capital projects for capital outlay requests.
- Maintain an open dialogue with local partners and stakeholders to coordinate community-related projects as identified in the action plan.
- Follow-up regularly on progress for action items that are not the primary responsibility of the Unit Supervisor with the responsible program position.

Funding

- Estimated costs for capital outlay projects are included in the Opinion of Probable costs section. These costs should be refined and adjusted by the Regional Field Planner as designs and studies are completed.
- Identify potential funding sources for each project/task. Liaise with PRD grants coordinator as appropriate.
- Align potential funding sources with the annual capital outlay funding requests.
- Request District Small Project funding through the District Supervisor for small projects identified in the 10-year Action Plan.

Scheduling

- Further prioritize projects based on need, funding, staffing and other constraints and opportunities.
- Incorporate project/task assignments into annual staff performance objectives

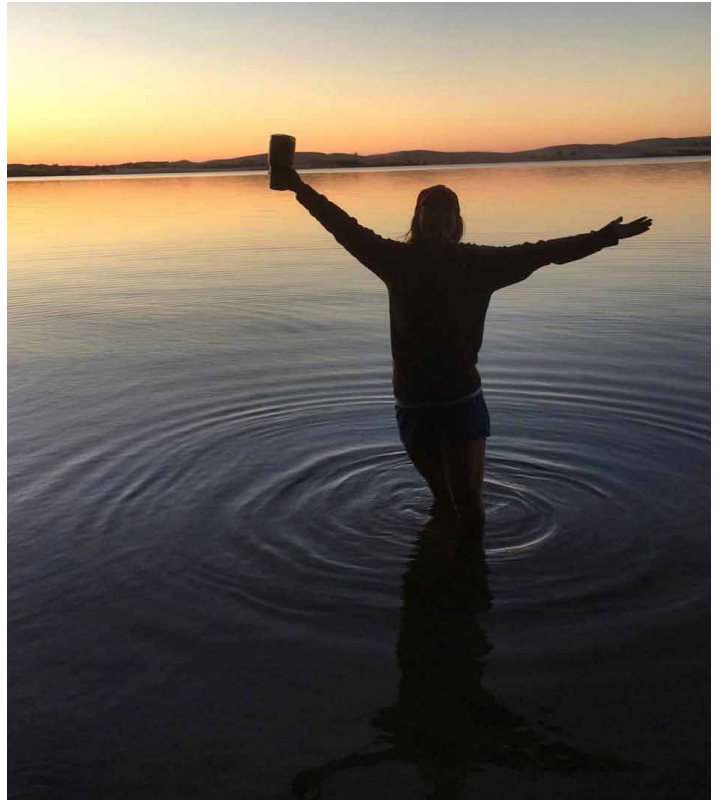
6.2 Documentation of Changes

The Unit Supervisor should keep a record of any major changes to the park since approval of the GMP and note potential updates that may be required in the future. Documenting these changes will assist in the five-year plan review or when the GMP is updated. Changes may include:

- New user requests or conflicts
- Emerging recreation, funding or partnership opportunities
- Changes in land management
- Land transactions or changes to the Approved Project Boundary
- Major infrastructure projects or removal of structures

Changes may be documented by marking up the park's copy of the GMP or maintaining a log that is kept with it. In reviewing the action plan for changes, documentation should be provided for actions that may become irrelevant or are no longer viable, as well as proposed new action items, including justification.

The management zoning map should also be reviewed regularly. Any proposed changes to the map related to land acquisition or disposal, errors in the original zoning, or land management changes should be documented. Note that the park zoning is intended to be a long-term document: changes will only be considered with adequate justification and are subject to a formal review and approval process.



Visitor enjoying the water's edge at sunset.

6.3 Documentation of Accomplishments

As action items are completed, the Unit Supervisor should mark them as such in the park's copy of the GMP, including the completion date. This will also help to maintain a log of accomplishments for district and division-wide reporting purposes, including PRD's strategic plan.

6.4 Five-Year Review Process

General management plans are reviewed every five years from the date of approval of either the Phase 2 plan or the complete GMP. The planning team for the five-year review is made up of the Park Management Plan Administrator, Unit Supervisor, Regional Field Planner and District Supervisor, with other team members included as may be necessary. A Five-Year Review Form will be used to record all changes to the plan within the past five years. Upon reviewing the GMP and the documented changes, the planning team will determine whether the changes warrant a complete update of the plan.

If there are no major changes required in either the zoning or the action plan, the planning team will complete the Five-Year Review Form and attach it as a supplement to the existing GMP. If zoning changes are needed, the GMP will be revised or updated following the complete GMP planning process led by the Park Management Plan Administrator. If changes to the action plan only are required, the Phase 2 GMP planning process will be implemented.



Visitor enjoying a horseback ride along the shore.

PARK PROFILE

AREA (ACRES)	3,085
COUNTY	Oceana County
TOWNSHIP	Golden and Benona
LATITUDE	43.341600
LONGITUDE	-86.408360
ADDRESS	9679 W State Park Rd, Mears, MI 49436
PHONE #	(231) 744-3480



Appendix A:

Supporting Analysis

A.1 Park Overview

Silver Lake State Park encompasses just over 3,000 acres along the Lake Michigan shoreline in Oceana County. More than one-third of the park consists of open coastal sand dunes, part of the largest active, freshwater sand dune complex east of the Mississippi River. Recreation opportunities include a modern campground, a day-use area on Silver Lake, and a popular ORV scramble area within a section of the open dunes. An additional area of open dunes offers seven miles of trail utilized by concessionaire, 'Mac Wood's Scenic Dune Rides', providing another means of experiencing and appreciating this dune system. In the fall and winter months, when the scramble area is closed to ORV use, shoreline horseback riding and fat tire biking on the dunes provide additional recreation opportunities. Much of the park is open to hunting in accordance with state regulations.

The Little Sable Point Lighthouse, a historic structure, is located within the park at the southern end of the over three miles of publicly owned Lake Michigan shoreline. The park offers close to an additional two miles of shoreline on the inland Silver Lake.

Silver Lake State Park supports several exemplary natural communities, including Great Lakes barren, northern hardwoods, open dunes, and interdunal wetland, and provides habitat for at least three threatened or endangered species.

Location & Community

Silver Lake State Park is located in Oceana County, in both Golden Township to the north and Benona Township to the south. The county seat of Hart is approximately 10 miles to the east, with the community of Shelby 11 miles to the southeast. The Silver Lake dunes area, which includes Hart, Mears (an unincorporated community in the center of Golden Township) and Silver Lake is a scenic, largely rural area which hosts a large tourist population during the summer months, attracted by the natural features and recreation opportunities. In addition to tourism, the area supports a strong agricultural economy.

The park is accessed by US-31 (exit 144 at Shelby to the south or exit 149 at Mears to the north) which follows the lakeshore from Holland north to Carp Lake, where it joins I-75 continuing to Mackinaw City. Silver Lake State Park is 31 miles south of Ludington and 36 miles north of Muskegon.

A.2 Demographics

In 2020, the U.S. Census Bureau reported that Oceana County had a population of 26,659 people, a small increase from 2010. The county is largely rural, with a population density of 49.5 compared to the state average of 178 persons per square mile. There are slightly more persons over the age of 65 than the state average. The population is predominantly white (95% compared to 78.8% in Michigan as a whole) but with a significant Hispanic or Latino population, three times the state average. The median and per capita income are slightly lower than the state average, with a significantly lower percentage of persons with a bachelor's degree.

Population Quick facts (US Census Bureau)

FACT	OCEANA COUNTY	STATE OF MICHIGAN
Population, Census, April 1, 2020	26,659	10,077,331
Population, Census, April 1, 2010	26,570	9,883,640

FACT	OCEANA COUNTY	STATE OF MICHIGAN
Persons under 5 years, percent	4.90%	5.30%
Persons under 18 years, percent	21.20%	21.00%
Persons 65 years and over, percent	22.30%	18.70%
Female persons, percent	48.80%	50.30%
White alone, percent	95.00%	78.80%
Black or African American alone, percent	1.30%	14.10%
American Indian and Alaska Native alone, percent	1.50%	0.70%
Asian alone, percent	0.40%	3.50%
Native Hawaiian and Other Pacific Islander alone, percent	N/A	N/A
Two or More Races, percent	1.80%	2.80%
Hispanic or Latino, percent	15.60%	5.70%
White alone, not Hispanic or Latino, percent	80.80%	74.00%
Owner-occupied housing unit rate, 2017-2021	86.10%	72.20%
Median value of owner-occupied housing units, 2017-2021	\$131,800	\$172,100
Persons per household, 2017-2021	2.64	2.48
Language other than English spoken at home, percent of persons age 5 years+, 2017-2021	11.50%	9.90%
High school graduate or higher, percent of persons age 25 years+, 2017-2021	88.40%	91.60%
Bachelor's degree or higher, percent of persons age 25 years+, 2017-2021	20.30%	30.60%
With a disability, under age 65 years, percent, 2017-2021	11.70%	10.10%
Median household income (in 2021 dollars), 2017-2021	\$56,454	\$63,202
Per capita income in past 12 months (in 2021 dollars), 2017-2021	\$26,289	\$34,768
Persons in poverty, percent	14.40%	13.10%

Geography Quick Facts (US Census Bureau)

FACT	OCEANA COUNTY	STATE OF MICHIGAN
Population per square mile, 2020	49.5	178
Land area in square miles, 2020	538.11	56,608.22

A.3 Regional Recreation Resources

The Silver Lake area is rich in outdoor recreation opportunities. The following is a list of the primary recreation resources located within approximately 30 miles of Silver Lake State Park that may be relevant to Silver Lake State Park visitors.

Federal Recreation Resources

Huron-Manistee National Forests

- **The Huron-Manistee National Forests** comprise almost one million acres of public land extending across the northern Lower Peninsula of Michigan. The Manistee National Forest covers approximately 12,500 acres in northeast Muskegon County and provides recreation opportunities for visitors, habitat for fish and wildlife, and resources for local industry.
- **North Country National Scenic Trail** The NCT, a 4,800-mile scenic trail that crosses eight states from North Dakota to Vermont, passes through the Manistee National Forest 30 miles east of Silver Lake State Park.

State Recreation Resources

State Parks and Recreation Areas

- **Charles Mears State Park:** Located on the shores of Lake Michigan at Pentwater, 12 miles north of Silver Lake State Park, the park provides paved campsite lots surrounded by sand and a swimming beach adjacent to the harbor pier.
- **William Field Memorial Hart-Montague Trail State Park:** 22 miles of paved trail through the hills and forests from Hart to Montague. The trail was created by converting an old railroad grade in the 1980s by William Field. The Montague trail head is located west of the US-31 Montague exit. The paved path can be used for hiking, biking, cross-country skiing, and snowmobiling.
- **Ludington State Park:** 35 miles north of Silver Lake, Ludington State Park is home to three modern campgrounds, sandy beaches, scenic sand dunes, 21 miles of hiking trails and Big Sable Point Lighthouse
- **Duck Lake State Park:** Located on both Lake Michigan and Duck Lake, with a shallow channel connecting the two, this popular day-use park is located 31 miles south of Silver Lake. The park features a boat launch, kayak rentals, a picnic area and shelter, and opportunities for paddling, fishing, hiking, hunting and cross-country skiing on the park's 7 miles of natural surface trails.

State Wildlife/Game Areas

- **Pentwater State Game Area:** Located just south of the village of Pentwater, the state game area provides 2,540 acres of land managed for wildlife conservation. The Pentwater River Marsh is a prominent feature of the area, as well as upland forest. The game area provides a host of recreational opportunities including hunting (specifically waterfowl, white-tailed deer, ruffed grouse and wild

turkey), fishing, trapping, bird watching and wildlife viewing.

- **Pere Marquette State Game Area:** Located just south of Ludington, the state game area provides 170 acres of land managed for wildlife conservation.

State Trails

- The hiking route of the Iron Belle Trail, stretching from Belle Isle in Detroit to Ironwood in the western Upper Peninsula, follows the route of the NCT through the Manistee National Forest.

Regional Trails

- U.S. Bicycle Route 35 is a 500-mile route that runs from Indiana through Michigan to Sault Ste. Marie, Canada, generally following the Lake Michigan shoreline in the Lower Peninsula. It passes through Pentwater and Hart, where it joins the Hart-Montague Trail.

Municipal Recreational Land

- Oceana County provides a variety of smaller parks and recreation sites.
 - **Black Lake County Park:** 100 acres in northeastern Oceana County featuring 14 campsites and fishing, swimming, boating and hiking opportunities.
 - **Cedar Point County Park:** Small wooded park between Silver Lake and Pentwater with Lake Michigan beach access.
 - **Marshallville Dam County Park:** located in Benona Township along Stony Creek, this park is currently undeveloped, providing an area to fish, picnic or view wildlife.
 - **Stony Lake County Park:** opportunities for fishing, kayaking and boating on the south shore of Stony Lake.
- Benona and Golden townships have several small parks, some of which provide access to Lake Michigan. Golden Township Park at Silver Lake dunes is a recreation space just east of the state park campground. A second Golden Township park offers access to Lake Michigan north of the Little Sable Point Light Station.
- John Gurney Park, in the City of Hart, provides a campground, sports fields, water access, and a boat launch.
- The allowance of ORVs on township and county roads varies within the area and are subject to change. There may be specific conditions that apply, and ORV users should check with local municipalities for applicable regulations. Local ordinances have been compiled by the Oceana County Sheriff's office and are available at their website. Visit <https://oceana.mi.us/courts-sheriff/orv-ordinances/> for more information.

Water Recreation

- The following table lists public boating access sites in Oceana County.

SITE NAME	WATER BODY	DESCRIPTION	MANAGING UNIT
Crystal Lake	Crystal Lake	Gravel-surfaced ramp suitable for medium to small boats. Skid pier, vault toilet and 8 parking spaces.	Silver Lake SP
Lake Street	Pentwater Lake	A hard-surfaced ramp with limited water depth. Access fee and restrooms. 10 parking spaces.	Village of Pentwater
Longbridge Road	Pentwater Lake	A hard-surfaced ramp with limited water depth, small parking area and no amenities	Pentwater Township
McLaren Lake	McLaren Lake	Hard surfaced ramp, 15 parking spaces, skid pier and vault toilet.	Newaygo SP
Sengs	White River	Timber ramp of limited width and depth, 5 parking spaces	Newaygo SP
Sischo Bayou	White River	Carry-down launch with parking	USFS
Podunk River Access	S. Branch White River	Launch ramp and parking	USFS
Pentwater Lake Launch	Pentwater River	Shallow water paved launch into Pentwater Marsh. Seasonal porta potty, limited parking.	Weare Township
Benona Township Park	Stony Creek	Launch ramp with limited depth and car parking (no trailer spaces)	Benona Township
John Gurney Park	Hart Lake	A hard-surfaced ramp with limited water depth, pier and 4 parking spaces	City of Hart

In addition, there are a number of access sites at campgrounds within the Huron Manistee National Forest administered by the USFS providing additional access to the White River and area lakes.

- Marinas
 - The Village of Pentwater has a municipal marina on Pentwater Lake with access to Lake Michigan. The marina has 17 seasonal and 22 transient slips and modern amenities.
 - Ludington Municipal Marina provides both seasonal and transient slips and modern amenities.
 - Whitehall Municipal Marina is located on a channel connecting Lake Michigan to the northeast end of White Lake where there are 50 slips. The surrounding area is a park setting which includes many amenities.
 - There are also several private marinas in Pentwater, Ludington and Whitehall.
- Water trails: There are no state- or federally-designated water trails in the vicinity. The Lake Michigan Water Trail website (michiganwatertrails.org) maps a paddling route (non-designated) along the Lake Michigan shoreline in west Michigan. The Sable Points Water Trail is 35 miles between Big Sable Point Lighthouse in Ludington State Park and Little Sable Point Light Station in Silver Lake State Park.

Private Recreation Opportunities

The Silver Lake area has a variety of private recreation facilities and services. Rental services support the state park and surrounding area with ORV and motorized and nonmotorized watercraft rentals. A variety of overnight accommodations are provided by area hotels, resorts, cabins and campgrounds, including the Sandy Shores Campground immediately adjacent to the state park campground. Other recreation facilities include the Silverback OffRoad Speedway, Craigs Cruisers, golf courses and the like. Vineyards, wineries, farms, markets and orchards, along with unique shops and galleries, provide additional attractions.

Nature Preserves

- Otto Nature Preserve:** an 80-acre parcel of land in Benona Township owned and managed by Oceana Conservation District. A gravel parking lot is accessible from Scenic Drive and the preserve is open for recreational, educational and scientific use only.
- Stony Creek Nature Preserve:** a 40-acre parcel of land in Benona Township owned and managed by Oceana Conservation District. The property was donated to the district in 2022 and is slated to be opened to the public in 2024.
- Genevieve Casey Nature Sanctuary:** 53.49 acres owned by the Michigan Nature Association. One and one-half miles of trails through a variety of habitats.

- **Lake Breeze Nature Preserve:** 35 acres owned by the Land Conservancy of West Michigan. There is no designated trail at Lake Breeze, but adventurous nature enthusiasts enjoy wandering through the forest of birch, pine, hemlock, maple, and oak.
- **Flower Creek Dunes Nature Preserve:** 74 acres owned by the Land Conservancy of West Michigan. Located in northern Muskegon County, the preserve offers 1.2 miles of trails and protects unspoiled dune habitat along the lakeshore. A boardwalk leading to an overlook provides panoramic views of Lake Michigan and the surrounding dunes.
- **Cedar Springs Nature Preserve:** A 100-acre nature preserve owned and managed by Montague Township for hiking, dog walking, trail running, canoeing in small ponds, and/or picnicking with families. The unique terrain offers beautiful scenic views and small hills for hiking.

Historic Places

The Silver Lake, Hart and greater Oceana County area is steeped in history and culture, with several museums and landmarks open to visitors.

- **Pentwater Historical Society Museum** – open to the public seasonally and available for private rentals, the museum features both permanent and rotating exhibits.
- **Navigation Structures at Pentwater Harbor** – listed on the National Register of Historic Places, the north and south piers are an example of typical Federal navigational structures completed between 1868 and 1887.
- **White River Light Station and Museum** – lighthouse built in 1875 on the channel between White Lake and Lake Michigan and home to maritime museum
- **Caboose Museum** – offers a look into the railroading history of Montague and Whitehall.
- **Oceana Historical Park Museum Complex** – located in Mears, this complex includes a collection of buildings and museums open to the public in the summer months
- **Hart Historic District and Museum** – open June through September, a collection of historic buildings in downtown Hart, including the site of Centennial Northern Market Chesapeake/Ohio Railroad deadhead

A.4 History of Silver Lake State Park

History of the Surrounding Area

Native Americans have lived in this area for millennia. The Ottawa are among the Great Lakes Anishinaabek who still call what is now known as Oceana County home. The Ottawa were renowned traders, using rivers and lakes to connect peoples and goods. There are many important heritage areas and sites along Lake Michigan representing the lifeways of Ottawa and other tribal ancestors. Today, the Little River Band of Ottawa Indians based in nearby Manistee continues to protect and share local Ottawa history.

Oceana County was officially organized in 1855 and received its name because of its long Lake Michigan shoreline.

The area of Mears was founded in 1873 by lumber baron Charles Mears (1814-1896) along with Samuel W. Odell. It was once a prosperous logging region with much of the wood (white pine and hemlock) being used to help rebuild the city of Chicago after the Great Chicago Fire in 1871. By 1877, Mears had three sawmills, a shingle mill, three-story hotel, post office, railroad station, three general stores, other businesses and churches. During that time, Mears was a focal point of Oceana County with trains stopping several times a day. It is said that Charles Mears gave Silver Lake its name. Known as Au Sable Lake when the first government survey crew came through the area in 1837, Mears reportedly threw a silver dollar in the lake and said “I christen thee Silver Lake.”

Hart was founded in 1856 by early pioneers and named after one such early settler, Wellington Hart. Hart became the county seat in 1864, which led to the town’s growth and further development. In 1882, a depot was built in Hart and a spur of the existing railroad was extended from the Mears community. By 1885, Hart was incorporated as a village and became a city in 1946.

Oceana County grew during the lumber era and when that came to an end, farmers found the land to be a great location for orchards with the production of cherries, peaches, plums, pears, and apples. The cultivation of asparagus also has become a leading local product.

Tourism started on Silver Lake around the early 1920’s. Cottages were built and people began routinely vacationing in the area. People, many from the state of Illinois, travelled to the area by train and would stay throughout the summer. Tourism continued to grow as outside access to the county became more readily available. Since then, numerous residential developments have occurred, expanding on the seasonal population.

Many individuals have influenced the growth and development of Oceana County and in particular Golden Township and the Silver Lake area. Malcolm “Mac” Wood (1894-1984), is credited with creating the area’s first “dune scooter” in 1927. He offered a seven-mile dune scooter ride designed from a Model A Ford which carried four passengers. These rides started as a way for Mac to entertain his family, but neighbors and persons passing by encouraged Mac into founding a “dune scootering” business. As a promoter of tourism and the owner/operator of a seasonal resort on Silver Lake, Mac is recognized as a major force in the seasonal recreation business that has boomed over the years. Mac Wood’s became Silver Lake State Park’s dune ride concession operator in 1952 as Mac Wood’s Scenic Dune Rides, Inc. and continues to this day.

History of the Park

The area of Silver Lake State Park was surveyed in 1838 by Jas H. Mullet, who found no value within the dunes because agriculture and lumber production were not available.

In April 1873, construction began on the Little Sable Point Light Station. The 107-foot-tall conical tower was completed in 1874 along with a 1.5-story dwelling for the lighthouse keeper and a lean-to for firewood.

Silver Lake State Park was established in 1920 when 25 acres were gifted by Carrie E. Mears (daughter of Charles Mears) for state park purposes. Originally named Dunes State Park, it remained undeveloped for several years due to lack of access and funds. This area is now developed with the modern campground and day use area on Silver Lake.

Between 1926 and 1928 a temporary three-room park headquarters was built, along with toilet buildings, a well and additional site clearing and grading to accommodate camping and picnic space.

In 1926, the State of Michigan purchased 191.85 acres of land from the federal government. This land on the shores of Lake Michigan, north of Silver Creek, was originally set aside for lighthouse purposes in 1872, but was determined not to be useful to the Lighthouse Service. Certain rights were retained. (Note that this is not the location of the existing light station). On February 16, 1928, President Calvin Coolidge, under the Act of Congress, dated May 21, 1926, entitled "An Act to Provide for Conveyance of Certain Lands in the State of Michigan for State Park Purposes", conveyed to the State of Michigan an additional 992.96 acres of dune land. This land was officially made a part of Silver Lake State Park on July 25, 1949. Prior to that time, it was known as the "Oceana Site" and/or "Sand Dunes State Park"



Historical photo of the Little Sable Point Light Station



Early "Dune Scooter"

In 1936, Parks Director, P.J. Hoffmaster, signed a "Release of Right-of-Way" to allow a new county road to be constructed, essentially cutting the campground portion of the park in half. This new road replaced a narrow road that ran along the shores of Silver Lake through the park.

The first master plan for the park was in 1940 and work began to implement the plan after the war. Improvements continued through the 1950s and '60s and as the popularity of the campground increased, camping was expanded to the south side of the road. Electrical distribution, central sewage disposal, and water systems were added, along with further campground expansion.

In 1959 a gift of approximately 27 acres was received from the estate of Carrie Mears, who in her last will and testament directed that in the memory of her parents, Charles and Carrie Adelis Mears, land in Golden Township should be conveyed to the State of Michigan for public park purposes.

A master plan approved in October 1964 identified improvements including a fishing site on Silver Creek above the dam and several additional campsites at the south end of the park which did not come to fruition.

The decision was made in 1957 to allow privately owned dune buggy driving on 242 acres north of the current pedestrian area, although the practice had been occurring regularly since at least 1955. An area south of the pedestrian area was set aside for commercial dune rides, with Mac Wood's as the lessee. In 1966, property was acquired to provide access to the sand dunes and a 60-car parking lot was developed. A larger parking lot was built for dune access and dune buggies in 1974 with more property being added to the ORV area in 1977, increasing the facility to 450 acres of open dune.

An Environmental Impact Assessment completed in 1977 outlined a program for continued acquisition of private lands within the park boundary, encompassing an area of 3,531



Camping at Silver Lake State Park, late 1940's

acres (2,684 of which was then in state ownership). This EIA identified three zones: the ORV Zone in the north, a Pedestrian Zone along the central lakeshore portion of the park and a General Use Zone to the south which would allow for most of the park's developed facilities. A 400-foot buffer was proposed to be fenced on the north, east and southeast sides of the ORV area to prevent noise disturbance and potential trespass issues. In the general use zone, approximately 15 miles of trails were planned to connect all facilities.

The lighthouse property (38.12 acres) was conveyed from the US Government as part of a land exchange in 1974. This was the 107th in a series of land exchanges between state and federal ownership to provide mutual consolidation of land.

Some other developments of note include the park headquarters building constructed in its current location in 1972, both north and south campground toilet shower buildings replaced in 1993, and improvements to the ORV Area made in 2002, with construction of a new welcome center and checkpoint booths.

Substantial renovations were made to the Silver Lake day use area and boat launch in 2016. Several ORV entrance improvements were completed in 2018 and operational changes happened in additional parking lot and unloading zone were built at the Welcome Center. A large air compressor air station with 14 lines, widening of the ORV entrance ramp, and installation of several vault toilets in the dunes, and moving the selling of permits to the Welcome Center all add to the quality of experience to the ORV area.



A master plan for the Silver Lake State Park ORV Area, developed in March of 2018.

A.5 Land Ownership

Funding Sources

The state acquired the lands encompassed by Silver Lake State Park through a variety of funding sources. Often, conditions attached to the original funding source or other details of the property transaction encumber the future use or disposition of the land. The funding source map at the end of Appendix A identifies the sources used in acquiring land within Silver Lake State Park. The following outlines in more detail each funding source associated with the park.

Exchange

The state acquired 36.72 acres on the north side of Silver Lake in 1960 from the Sargent Sand Company as part of an exchange for lands at Ludington State Park. Approximately 15.35 acres of park land was acquired from being exchanged from a local property owner near the campground.

State Game Fund

Act 17, P.A. 1921 established a funding source for land purchased with revenue from a \$1.50 tax on hunting licenses. The primary purpose of this land is for hunting and fishing purposes and the development of other recreation facilities is restricted. Approximately 1,119.3 acres of park land has been acquired with this source with the majority of this property located between Lake Michigan and Silver Lake. This land was acquired in 1926 and 1928 from the Federal government to be used for state park purposes.

Federal Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) is a federal program administered in Michigan by the Department of Natural Resources on behalf of the National Park Service (NPS). Land purchased using LWCF funding must be used for public outdoor recreation purposes. Approximately 659 acres of park land was acquired from this fund source which was established by Congress in 1965. The required 50% match was provided primarily by Special Legislation (approximately 462 acres) or Recreation Bond Fund (approximately 197 acres).

Recreation Bond Fund

Approximately 227 acres of park land was acquired with proceeds of sales of general obligation bonds issued pursuant to part 713 and any premium and accrued interest received on the delivery of bonds for general park purposes.

Approximately 197 acres of Recreation Bond Fund land was used as match for LWCF purchased land.

Special Legislation

Approximately 752 Acres was purchased using Special Legislation. Of this, approximately 462 acres was used to match LWCF purchased land.

Michigan Land Trust Fund

The Michigan Natural Resources Trust Fund was created by a state constitutional amendment in 1984, which 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). Four parcels totaling 76.08 acres of park land has been acquired with this source between 1989 and 2011. The Michigan Land Trust Fund is a precursor to the Michigan Natural Resources Trust Fund. Approximately 114.74 acres were acquired through this funding source.

Game and Fish Fund

The State Game and Fish Fund was established under Part 435, Act 451, P.A. 1994. The fund is derived from hunting and fishing license revenue and mineral revenue deposited into the Game and Fish Protection Trust Fund for the purposes of wildlife and fisheries management. This category includes approximately 40 acres of parkland.

Acquisitions for park purposes through this source are tied to specific funding established by the legislature established under Act 27, P.A. 1944, and Act 50, P.A. 1944. Approximately 260 acres of park land has been acquired with this source for general program purposes. In addition to this acreage, approximately 578.47 acres is matched with Land and Water Conservation Fund.

Gift

Approximately 52.06 acres of park land or rights of land was donated to the State of Michigan and is utilized for general park purposes.

Federal Land Exchange

The U.S. Government granted 38.12 acres of land including the Little Sable Point Light Station to the State of Michigan in exchange for lands in the Manistee National Forest.

Tax Reversion

The state acquired the balance of the land through tax reversion due to non-payment of taxes. These lands are identified as unshaded areas on the Funding Source map. Approximately 665.77 acres of park land was acquisitioned through tax reversion procedures.

State Waterways Fund

A small 0.41 parcel of land was acquired in 2010 to facilitate boating access site improvements on Silver Lake.

Deed and Land Restrictions

Little Sable Point Lighthouse Station

The U.S. Government reserved the following rights on the Little Sable Point Lighthouse Station:

- An easement for continued operation, servicing and maintenance of the existing Little Sable Light by the U.S. Coast Guard
- An unobstructed arc of visibility
- An easement for ingress, egress and continued utility service from the public road to the light
- Right to relocate the light tower to another suitable site together with access rights to operate, service and maintain in the event shoreline erosion makes such changes necessary

Land north of Silver Creek

Conditions of the purchase include "Provided that the State of Michigan shall provide and maintain, for the vehicles and personnel of the United States Government, free and convenient access to the light station, and shall make and maintain such road or roads of access and such changes, repairs, or improvements thereto, as the Secretary of Commerce may hereafter deem necessary, and shall maintain easements for the beams of light for any lights that may be maintained by the United States."

Patent for land transfer from U.S. Government (1928)

Conditions include that the land is to be "held and made available permanently by said State as a state park under such rules and regulations as may be necessary and proper for use thereof by the public; Provided; That should the State Of Michigan fail to keep and hold the said land for park purposes or shall devote it to any use inconsistent with said purposes, then title to said land shall revert to and be reinvested in the United States Patent for land transfer from the U.S. Government."

Deed for Carrie Mears land gift (1959)

Conditions of the Deed of transfer included that the premises should be used for public park purposes only and that the State will not permit any person to use the park "for the manufacture, sale, giving away or serving of any intoxicating or alcoholic wine, beer or liquor."

Easements

An easement across park property was granted in 1987 to the Michigan Transportation Commission to provide road access to the lighthouse. Several easements were also granted to Great Lakes Energy to provide electrical service to the park facilities including the campground, administrative buildings and the lighthouse. In addition, easements were granted to the Oceana County Road Commission for the purposes of developing platted subdivisions which were never realized. The platted lots have since been acquired and are now part of the park.

Leases

The DNR Parks and Recreation Division has a lease agreement with the Sable Points Lighthouse Keepers Association (SPLKA) for operations at the Little Sable Point Light Station and the parcel that Residence #2 sits on. Under the agreement, SPLKA maintains and operates the leased premises, under the understanding that no work other than routine maintenance will be done on any of the Leased Premises without prior written approval of the DNR and the SHPO as required. The lease is in effect from November 1, 2005 until October 31, 2030. The following purposes are allowed under the lease:

- Maintain and preserve the light station in accordance with Secretary of the Interior's Standards
- Operate a gift shop/museum and provide for public access.
- Provide access to the premises by groups or organizations for the purpose of researching methods of shore protection and erosion control
- Use the Leased Premises for educational and scientific seminars and conferences.
- Provide lodging for volunteers.

See Appendix D for SPLKA Operation, Restoration and Maintenance Plan for Little Sable Point Light Station.

Contracts and Agreements

Concession contracts:

The following concession contracts are currently in place at Silver Lake State Park. These contracts are competitively bid every 7 years.

- Vehicle and ORV rentals Services (2-3 vendors)
- Mobile Food Concession (1 vendor located in ORV area)
- Educational Guided Dune Tours (1 vendor- historically been awarded to Dune Scooters Inc. aka Mac Woods)

Commercial Operating agreements

- Oceana County Road Commission- Fox Road
- Oceana County Sheriff's Department – Additional law enforcement in the summer in and around the park

Grants

Land and Water Conservation Fund(LWCF) and Michigan Natural Resource Trust Fund(MNRTF) grants impacting the property include the following.

LWCF and MNRTF Grants

GRANT NUMBER	YEAR	NAME	AMOUNT	DESCRIPTION
26-1748	2014	Silver Lake BAS	\$100,000.00	Develop a BAS including entrance drive, vault toilets, boat ramp, parking, walkways
26-00488	1973	Silver Lake S. P. Acquisition	\$5,806.24	Acquire 4.64 acres of land located in Oceana Co. 8 miles southwest of Hart and 11 miles northwest of Shelby off us31
26-00048	1965	Silver Lake State Park	\$69,108.00	To acquire 32 tracts of land totaling approximately 389 acres, as additions to Silver Lake State Park. (dune complex)
26-00408	1973	Silver Lake State Park	\$217,040.76	To acquire 385.52 acres of land located in Silver Lake State Park, Oceana County, for outdoor recreation (where lighthouse is)
26-01078	1979	Silver Lake State Park Access	\$35,241.50	Acquisition 78 acres of land for outdoor recreation (Developed)
TF91-018	1991	Silver Lake ORV Park Expansion	\$635,000.00	Acquire 300 additional acres to expand 378-acre ORV park.
26-00478	1973	Silver Lake State Park Acquisition	\$97,203.51	Acquire 141 acres of land for out door recreation at Silver Lake State Park

- Grace Adventures- summer camp outings
- Kalon Arts and Yoga- beach yoga at lighthouse
- My Barefoot Wedding – Wedding planning services
- McGraw YMCA Camp Echo – Camping/guiding services
- Dune Land Off Road Center Inc.- commercial filming in ORV area
- Sahara Sands Association- Shoreline Protection Materials
- Silver Lake Recreation Association (SLARA) – Web Camera
- Tameling- Shoreline Protection Materials (North end of ORV area)
- Numerous camper rental companies

Cooperative Agreements and Memorandums of Agreement:

- Silver Lake Recreation Association (SLRA)- Grading of the drag strip

A.6 Legal Mandates

For all park general management plans, 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 not only to federal and state law, but also the administrative tools of “Policy” and “Directive” of the Natural Resource Commission, the Department, and 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.

Specific to Silver Lake State Park the following legal mandates have been identified.

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.
BALD AND GOLDEN EAGLE PROTECTION ACT, 1940 AND AMENDMENTS
This Act prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." "Disturb" includes actions that may result in injury to the eagle, a decrease in its productivity or nest abandonment.
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. Projects that receive federal support in any form may be subject to compliance with Section 106 of the NHPA to ensure that impacts on historic properties are considered and that any adverse effects are avoided, minimized or mitigated.
AMERICANS WITH DISABILITIES ACT OF 1990, AS AMENDED
This federal civil rights legislation prohibits discrimination and guarantees that people with disabilities have the same opportunities to participate in the mainstream of American life. It includes standards for accessible design that sets the minimum requirements for newly designed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

State Statute

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 31 WATER RESOURCES PROTECTION	Provides authority to EGLE 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 (EGLE) 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 (EGLE) to undertake certain activities in regulated wetlands, such as, dredging, fill, construction or drainage.
PA 451 OF 1994, PART 323 SHORELANDS PROTECTION AND MANAGEMENT	This act enables the EGLE to designate and control use through permitting of “Environmental Areas” (an area of the shoreland determined to be necessary for the preservation and maintenance of fish and wildlife) and “High Risk Erosion Areas” (an area of the shoreland that is determined to be subject to erosion).
PA 451 OF 1994, PART 325 GREAT LAKES SUBMERGED BOTTOMLANDS	A permit is required for all filling, dredging, and placement of permanent structures (i.e., docks, piers, pilings, etc.) below the "ordinary high water mark" and on all upland channels extending landward of the "ordinary high water mark" of the Great Lakes.
PA 451 OF 1994, PART 353 SAND DUNE PROTECTION AND MANAGEMENT	The law defines a “critical dune area” as a geographic area designated in the "atlas of critical dune areas" dated February 1989 that was prepared by the department of natural resources. Sec. 35304. (1) states that: A person shall not initiate a use within a critical dune area unless the person obtains a permit from the local unit of government in which the critical dune area is located or the department (EGLE).

PA 451 OF 1994, PART 419 HUNTING AREA CONTROL	Section 324.41901 establishes the powers of the Department to establish safety zones for hunting.
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.

PUBLIC HEALTH CODE

PA 368 OF 1978, PART 125, CAMPGROUNDS, SWIMMING AREAS AND SWIMMERS' ITCH	Established to protect and promote the public health by establishing health code requirements and regulations that all public (including DNR) and private campgrounds must meet. Includes permitting, licensing, inspections and rules regarding sanitation, safety standards and public health. Also covers testing and evaluating quality of water at bathing beaches, safety and rescue equipment.
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High-Risk Erosion Area

Areas of the north and south Lake Michigan shoreline within the park are designated as a High-Risk Erosion Area. These areas are legally defined by the Shorelands Protection and Management Act as being shoreland areas documented to recede an average of one or more foot per year. The shoreland recession rate within the park has varied between 85 to 170 feet in the 30-year period.

Critical Dune Area

Much of the park is a state-designated Critical Dune Area, with associated regulations for development, silviculture and recreational activities.

ORDERS

The following Orders apply to Silver Lake State Park.

Land Use Orders of the Director

5.7 Certain environmentally sensitive and piping plover nesting areas, prohibited conduct, exceptions.

Order 5.7 (1) A person shall not do any of the following:

- (b) Enter, use, or occupy any of the following described state-owned lands, as posted, from April 15 through August 31 except with proper written permission:
- (xiv) Silver lake SP – state-owned lands in sections 13, 24, 25, 26, 35, and 36, T15N, R19W, and sections 18, 19, and 30, T15N, R18W, Oceana county.

5.9 Silver lake state park ORV area, conditions for use, prohibited conduct.

Order 5.9 State lands of Silver lake SP posted as the ORV area:

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

- (a) Possess or consume an alcoholic beverage at any time in the ORV area, ORV welcome center area, pedestrian area, or any area extending one-quarter of a mile from the boundary of the ORV area.
- (b) Leave a vehicle, trailer, or other equipment or contrivance unattended in the ORV welcome center area at any time without first obtaining written permission from the department.
- (c) Operate a remote-controlled device within the ORV area.
- (d) Utilize any color of flashing lights on or attached to a vehicle, except for manufactured installed hazard lights.
- (e) Utilize a rental vehicle in the ORV area, except for those permitted for use pursuant to Administrative Rule 299.922(dd). This prohibition does not apply to owned, financed or leased personal vehicles.
- (2) A person may do the following, at their own risk, from a half hour before sunrise and until a half hour after sunset:
 - (a) From November 1st until November 30th each year access the ORV area for the use of equestrian riding after securing the required permit from the Department. Normal use of the pedestrian parking lot by motorized vehicles and trailers for parking shall be allowed.
 - (b) From December 15th until March 15th each year access the ORV area for the use of fat tire bikes. Normal use of the pedestrian parking lot by motorized vehicles for parking shall be allowed.
 - (i) The uses identified above do not allow for any of the following:
 - (a) Disturbance of the land beyond normal use of equestrians or tire tread by peddling.
 - (b) Disturbance of any vegetation.
 - (c) Access through or beyond the roped or signed protected areas.
 - (d) Use of a motorized vehicle in the ORV area, except for

use by the department or vehicles used by volunteers authorized by the department.

History: Iss. Sept. 17, 1993; Am. 6. 1994, Post May 15, 1994; Am. 4, 1995, Post Apr. 1, 1995; Am. 4, 2000, Post Apr. 1, 2000; Am. 2, Post Apr. 13, 2002; Am. 5, 2005, Post Mar. 11, 2005; Am 2, 2013, Post Feb. 11, 2013; Am. 7, 2018, Post Dec. 20, 2018; Am. 7, 2022, Post Oct. 14, 2022

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 SPs and Ras:

- (9) Silver lake SP, prohibited conduct. A person shall not do any of the following within Silver lake SP without first obtaining proper written permission from the department:
 - (a) Store, leave, park or otherwise place any boat, fish shanty, vehicle, bicycle, equipment, tool, device or other property which is at any time during its presence in the park made available for rent, lease, or sale.
 - (b) Use or occupy any land or water within the park to solicit, conduct, operate, engage in, or maintain a business of any nature or use such areas as a base of commercial operations. For purposes of this order, "base of operations" means a use of lands or waters which is a principal or significant aspect of any commercial activity.

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.
- (73) Silver lake SP, Oceana county.

9.19 Off-road vehicles, Silver lake state park ORV area, conditions for use, prohibited conduct.

Order 9.19 A person shall not do any of the following on all state lands of Silver lake SP posted as the ORV area, Oceana county:

- (1) Operate an ORV from November 1 through March 31.
- (2) Operate an ORV from April 1 through April 30 between the hours of 8:00 p.m. and 9:00 a.m.
- (3) Operate an ORV from May 1 through September 15 between the hours of 10:00 p.m. and 9:00 a.m.
- (4) Operate an ORV from September 16 through October 31 between the hours of 8:00 p.m. and 9:00 a.m.
- (5) Operate any motor vehicle with four or more wheels that does not contain a seat and individual seat belt for each occupant of that vehicle. Those vehicles with automotive-type seating and fewer than four wheels shall be equipped with a seat belt for each occupant. Vehicle operators shall comply with the provisions of the Michigan child passenger safety law, MCL 257.710d, and all of the following provisions:
 - (a) Seat belts shall be in use by all occupants while the vehicle

is in operation.

- (b) An approved automotive manufactured restraining device, such as a lap belt or three- or four-point harness, is an acceptable seat belt.
- (c) Seat belts and restraining devices, other than factory installed, shall be secured by bolting to the vehicle floor, frame, or roll bar.
- (d) Any vehicle on which the operator straddles the seat, such as a motorcycle or an all-terrain vehicle (ATV), will be limited to the operator only as the sole occupant and no seat belt will be required.
- (6) Operate a vehicle requiring seat belts where an occupant in the rear seat is not protected by a roll bar located immediately behind the occupant's seat as described in subsection (8) unless the rear seat occupants are wearing a safety approved for automotive use (A.N.S.I. or equal) helmet. The operator or occupant of a vehicle not required to meet seat belt specifications shall wear a safety helmet approved for automotive use (A.N.S.I. or equal) and protective eyewear.
- (7) Operate a vehicle requiring seat belts without a warning flag mounted and extending over the frontmost portion of the vehicle. Vehicles not requiring seat belts shall mount the warning flag on the rear of the vehicle. Vehicle operators shall comply with all of the following requirements:
 - (a) The warning flag shall be mounted on a staff that is securely bolted, welded, or secured to the vehicle. The warning flag shall maintain a minimum 10-foot height at standstill and a minimum 8-foot height under motion.
 - (b) The warning flag shall be mounted on the top-most end of the staff. The flag shall be rectangular, international orange in color, solid material, with a minimum length on the supporting side of five inches and a minimum length on the base side of 10 inches.
- (8) Operate a vehicle requiring seat belts that is not equipped with an integral steel roof, or roll bar located immediately behind the operator, or roll cage, capable of supporting the weight of the vehicle. The operator and occupants of a vehicle without a full front windshield shall wear protective eyewear. The operator of a vehicle equipped with a roll bar shall comply with all the following requirements:
 - (a) The roll bar shall be welded or bolted to the floor or frame of the vehicle.
 - (b) The roll bar shall be braced in such a manner as to prevent collapse.
 - (c) The roll bar shall have clearance above, behind, and outside each seated occupant in the vehicle.
- (9) Fail to submit to any of the following tests, or operate any vehicle that does not comply with all of the following:
 - (a) Vehicles shall be equipped with a muffler and spark arrester containing baffles, shall meet the muffler and spark arrester requirements specified in subsection (g) of section 81133 of Part 811, OffRoad Recreational Vehicles, Natural Resources and Environmental

Protection Act, 1994 PA 451, MCL 324.81133(g), and shall successfully pass a muffler and spark arrester baffle test.

- (b) A maximum noise level of 94 dB(A), or the current EPA emissions limit, shall be met. The testing provisions of current SAE J 1287, June 93 standard for ATV and motorcycle vehicles and SAE J 1169, March 93 for all other vehicles shall be followed and all vehicles shall pass a stationary sound level test. The stationary sound level test shall be administered from a 0.5-meter (19.69 inches) distance at one-half the engine's maximum rated RPM and as further described by current testing provisions for the particular vehicle.
- (10) Operate any vehicle at any time without possessing a valid unrestricted operator's or chauffeur's license, except as follows:
 - (a) A person at least 12 years of age with an ORV safety certificate issued by this state or another state or a province of Canada may operate either an ATV or motorcycle with direct visual supervision by an adult. The direct supervision shall not be impaired by distance and must allow the adult the ability to direct the youth's actions by verbal communications. Electronic amplification of verbal communications shall not be used.
 - (b) An adult shall not allow an unlicensed youth to operate an ORV.
 - (c) An ORV operator licensed under a level two graduated driver's license shall only operate under the provisions of that license.
- (11) Operate any type of vehicle and fail to present an operator's or chauffeur's license or ORV safety training certificate upon the demand of any law enforcement officer or state park personnel.
- (12) Enter or use the ORV area without complying with all posted regulatory, zoning, or directional signs, or operate a vehicle except in the directional pattern established and marked within the ORV area.
- (13) Enter or use the ORV Area without obtaining and displaying a valid ORV area parking lot voucher or dune ready voucher at any time when such requirement is posted.
- (14) Operate any vehicle while towing a contrivance other than a disabled vehicle or trailer or tow a vehicle or trailer on other than the designated parking lot or paved entrance road without first obtaining proper written permission from the department. Passengers shall not occupy any trailer or disabled vehicle while it is being towed.
- (15) Drive or operate any motor driven vehicle at speeds exceeding posted speed limits or perform exhibition-type driving within the parking area or entrance road/ramp to the ORV area, or the defined speed zone along the Lake Michigan shoreline. Exhibition-type driving means performing wheelies, spinning tires, cutting circles, jump starts, or other erratic or irresponsible or careless driving.

- (16) Operate an ORV that is not titled.

Wildlife Conservation Orders

Wildlife is owned by all the people of the state of Michigan, and protection is administered and managed by the Michigan DNR. Hunting and trapping regulations including methods of take, bag limits, license quotas, and season dates are established by the Natural Resources Commission (NRC) and are described in the Wildlife Conservation Orders.

7.24 Silver Lake state park; hunting and trapping allowed; exceptions; posting required.

Sec. 7.24 (1) Hunting and trapping shall be allowed during the established seasons on all state-owned lands within the dedicated park boundary in sections 17 to 20 and 29 to 32, T15N R18W, and sections 24, 25 and 36, T15N R19W, and section 6, T14N R18W, and section 1, T14N R19W, except for the following:

- (a) All state-owned lands in the SW 1/4 of the SW 1/4 of section 29, T15N R18W shall be closed.
- (b) The off-road vehicle area, Silver lake beach and modern camping area, park residences, lighthouse area, and headquarters area, as posted, shall be closed to the taking of waterfowl from the day after Labor day through September 15.
- (2) The entire state park shall be closed to the taking of waterfowl from September 1 through Labor day.
- (3) Signs containing the hunting closure shall be posted in such a manner and at such locations as will provide reasonable notice of the closure to the public.

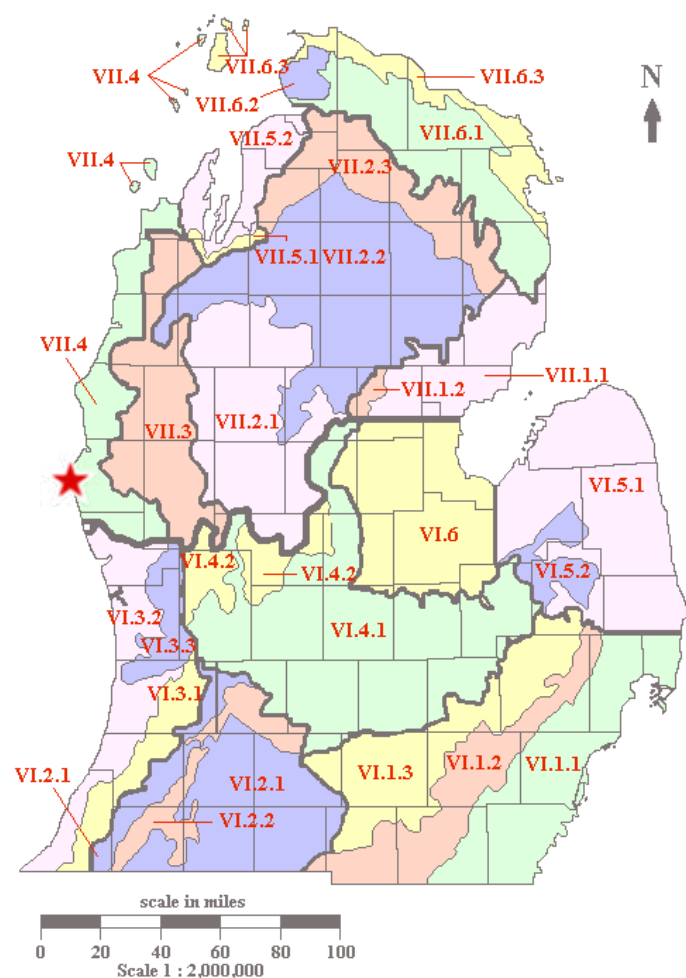
History: Eff. Mar 31, 1989; Am. 2, 2016, Eff. April 15, 2016; Am. 2, 2021, Eff. Mar. 12, 2021

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.

A.7 Landscape Context and Natural Resources

A regional landscape ecosystem classification has been developed for Michigan which distinguishes major landscapes based on macroclimate, physiography, soil and vegetation (Albert, 1995). Silver Lake State Park is located in the Manistee sub-section VII.4 of the Northern Lacustrine-Influenced Lower Michigan Section VII. The region is characterized by a maritime climate with unique landforms, most notably extensive sand dunes, morainal bluffs, and end-moraine ridges. Air masses entering the section first cross Lake Michigan. Since water has a much higher effective heat capacity than land, the resulting air along the western Michigan coastline is generally warmer in winter and cooler in summer than it otherwise would be at this latitude. The air masses are subjected to much greater evaporation rates over the water yielding relatively humid summers and heavy precipitation on the adjacent land, especially lake-effect snow. The ecoregion has relatively slow spring warming and very droughty soils. All these factors create the unique Great Lakes maritime ecosystems of Silver Lake State Park.



Regional Ecosystems of Michigan, Minnesota and Wisconsin, Dennis A. Albert, 1995.

Pre-Euro-American Settlement Vegetation

Vegetation just prior to Euro-American settlement included many of the same species and plant communities as it does today due to the continued presence of the same landforms, soils, and general climate patterns. Evidence for open dunes around Silver Lake date to over 12,500 years ago. The plant communities comprise species adapted to dynamic conditions as the dune environment went through periods of both stability and minor and major instability over the centuries. Overall, the dunes have remained relatively stable in the last 3,000 years, punctuated by more activity in the last few hundred years as more area became a shifting mosaic of “active” and vegetated dunes.

Open dunes had interdunal wetlands as they do today which consisted of wetland-dependent flora. Silver Lake had sub-mergent and emergent wetlands, but they were more extensive than today due to shoreline development and the stabilizing effect of the dam which reduces habitat, seed and animal dispersal.

Farther inland the dunes supported dry and dry-mesic northern forest dominated by white- red pine, red-white oak, and red pine-jack pine. Mesic northern forests were largely hemlock, hemlock-white pine, and hemlock-beech. The forests surrounding the dunes presumably would have been more un-even aged compared to today’s forest which has been impacted by logging.

Present Vegetation and Natural Communities

Silver Lake State Park still contains extensive dunes comprising high parabolic dunes, extensive dune fields, and low foredunes. The landscape continues to be dynamic as it has been for centuries with many processes and patterns dictated by cycles of Great Lakes water levels. For example, long-term decreases in lake levels result in increasing beach and dune areas. The sands eventually stabilize as vegetation takes hold with a gradual accumulation of organic soils which can lead to a transition to forest over time. When lake levels rise, blowouts expand into the forest and return the areas to open dunes.

Dune vegetation is adapted to constant sand burial and abrasion. As plants are buried, they continue to form new growth above the surface while their roots and rhizomes continue to grow and stabilize the sand. There are some open dunes with relatively sparse vegetation even outside the heavily used ORV area — presumably a natural condition where sands are too exposed to allow vegetation to establish. Characteristic plants that stabilize dunes are marram grass, sand reed grass, little bluestem, switchgrass, and june grass. Common shrubs include sand cherry, dogwoods, junipers, willows, bearberry, and beach-heath. Cottonwood is the

dominant tree in vegetated areas of the open dunes. Sea-rocket, wormwood, beach-pea, sand cress, silverweed, and starry false Solomon seal are common forbs. The federally listed Pitcher's thistle (*Cirsium pitcheri*), and state-threatened, broomrape (*Orobanche fasciculata*), both occur in the open dunes.

The 41-acres of interdunal wetlands were formed when water levels of the Great Lakes dropped, creating swales and linear depressions between the inland foredunes and the newly formed foredunes along the water's edge. During high Great Lakes water levels rise or during storm events, these wetlands can be flooded and subjected to an influx of sand. Summer heating and evaporation can result in warm, shallow water or even complete drying within the interdunal wetland. Twig-rush and Baltic rush are typically dominant and associated species include three-square, blue-joint, tussock sedge, spike-rushes, and cat-tails. Additional ground cover species include royal and sensitive fern, shrubby cinquefoil, bone-set, water smartweed, and northern bugle weed. Characteristic woody species within the shrub margin of these wetlands include Kalm's St. John's-wort, steeplesbush, willows, and blackberries.

The dune field supports five areas of high-quality Great Lakes barrens totaling 222 acres where jack pine is most abundant. Associates include white pine, white birch, cherries, oak, and cottonwood. These barrens developed in depressions between the dunes which offer protection from wind, allowing more stable sand and promoting the establishment and survival of trees. The prevalence of jack pine may be the result of extreme growing-season frosts within the low depressions which kill most other woody species. Jack pine within this complex was noted to have semi-serotinous cones allowing reproduction in the absence of fire. The canopy jack pine was estimated to be about 60 years old although a major die-off is occurring due to prolonged flooding in recent years from high lake levels.

In the surrounding forests, white pine and red pine were extensively cut, including multiple times in many areas, resulting in more even-aged conditions and differences in abundance of some species compared with pre-Euro-American conditions. The forests in the park appear between about 90 and 150 years old, although some very old trees still exist, including a 439 year-old red pine and some oaks which have reached well over 200 years. Red and white oak largely dominate the canopies with white pine and hemlock often in low abundance to sometimes co-dominate. Aspen is significant in some of the stands under about 100 years old. Understories have a strong pulse of white pine, red maple, white ash, beech, and black cherry. Today's even-aged oak canopy with abundant white pine in the understory is likely a result of the most recent clear-cut logging. These understory species are expected to re-emerge into the canopy over time

barring any major disturbances, especially as forest changes occur due to pests and diseases specifically to hemlock (woolly adelgid), beech (beech bark disease complex), and oak (oak wilt).

Climate

Oceana County has a moderate climate influenced by Lake Michigan. A long growing season and delayed spring warming makes the climate suitable for commercial fruit production. Average temperatures range from highs of 79°F in July to lows of 19°F in January. The area receives an average of 36 inches of rain and 76 inches of snow each year. There is plenty of sunshine during the spring and summer months with an annual average of over 200 days of sunshine every year. During the winter months snowfall can be moderate to heavy with lake-effect snow falls impacting the area. A high annual snowfall of over 200 inches was recorded in 2008.

Soils

Throughout Silver Lake State Park, the dominant soils are sands and sandy loams. Organic materials are generally associated with lakes and drainage courses.

Topography

The topography of the Silver Lake area varies from relatively flat to very rugged dunes ridges. The land just south of Silver Lake is flat to gently sloping but rises sharply farther south of the lake to higher plateau areas which are 200 to 250 feet above the lake. The high point is approximately 375 feet above Silver Lake and 380 feet above Lake Michigan. A series of sand dune ridges run parallel to the Lake Michigan shoreline between Silver Lake and Lake Michigan.

Fauna

Rare species in the open dunes include the federally-endangered piping plover which nested in 2009, 2011, 2014, 2015, and 2019. Other species found in the dunes include the Michigan dune dart (a moth) and the Fowler's toad (just to the north of the park). Prairie warblers may occur in the vegetated dunes, especially where both grasses and short shrubs are found. Hooded warblers nest in the forest and merlins are likely common. Some state-listed insects have not been formally documented in decades including tiger spiketail, American bumblebee, black and gold bumblebee, and yellow-banded bumblebee. Anywhere along the Great Lakes is significant for migratory animals including hundreds of species of birds, bats, and insects.

The sandy shoreline is good habitat for migratory shorebirds outside the ORV area or during non-busy times. Many of these shorebirds are of high conservation concern. Common

mammals include whitetail deer, raccoon, squirrels, chipmunk, opossum, red fox, coyote and rabbit. Additional species inventory and monitoring would add more species to those already documented at Silver Lake State Park.

Geology

Silver Lake State Park occurs near the western margin of the Michigan Basin, a Paleozoic Era structure. Bedrock directly beneath the glacial and post-glacial sediments consists of the Coldwater Shale, which was deposited in nearshore marine environments during the Mississippian Period (approximately 340 million years ago), when what is now Michigan was near the equator and covered by a shallow sea.

Surface sediments within Silver Lake State Park consist predominantly of dune sand deposited along the eastern shore of Lake Michigan (the western shore of Michigan's Lower Peninsula) and much of the park has been designated a Critical Dune Area. In the relatively recent geologic past (~13,000 years ago), near the end of the last glacial period, what is now Silver Lake was an embayment of the Great Lake (Lake Nipissing) along Michigan's western shore, a pro-glacial lake that was deeper (higher) than modern-day Lake Michigan. Evidence of ancient shorelines from this period in the form of perched terraces can be seen east of Silver Lake. As the Laurentide Ice Sheet retreated to the north, new outlets emerged allowing drainage of the glacial meltwater from the Great Lake basins. The combination of this drainage and rebound of the land from the weight of the ice caused lake levels to drop relative to the land surface. This, along with sediment transport and deposition along the shore of Lake Michigan, resulted in formation of a bay-mouth bar that isolated the bay and created Silver Lake. Subsequent aeolian (wind-blown) deposition of sand developed prominent dunes across this strip of land early in its history.

In 2000, Dr. Timothy G. Fisher of Toledo University and Dr. Walter Loope of the United States Geological Survey began in-depth studies of Silver Lake and the adjacent sand dunes. In part, their research found "...a lake or wetland with some configuration of sand dunes to its west has existed in approximately the same area as modern Silver Lake and its dunes since 13,500 [years before present]". Water levels of Lake Nipissing peaked around 5,500 years before present, and although Silver Lake was separated from Lake Nipissing at that time, the water level in Silver Lake rose above modern level and is marked by a scarp visible on either side of Silver Lake Road along the eastern shore of Silver Lake. It is particularly well developed between the upper and lower campgrounds on the park property. For roughly the past 4,000 years, Silver Lake has remained at modern-day levels, fluctuating by a meter or so depending upon climate conditions and episodes of dunes damming Silver Creek.

Variations in sand content in sediment cores collected from the bottom of Silver Lake provide a record of past sand dune activity (absence or varying amounts of vegetative cover). The amount of sand and the timing of the intervals indicate that sand deposition in Silver Lake coincided with high water levels in Lake Michigan, most likely a result of greater storms and wind during those times. The sediment records suggest that there were always some dunes without vegetative cover. Most of the dune formations seen along the coast today to the north and south of Silver Lake are stabilized by vegetation; the open dunes of Silver Lake are an exception.

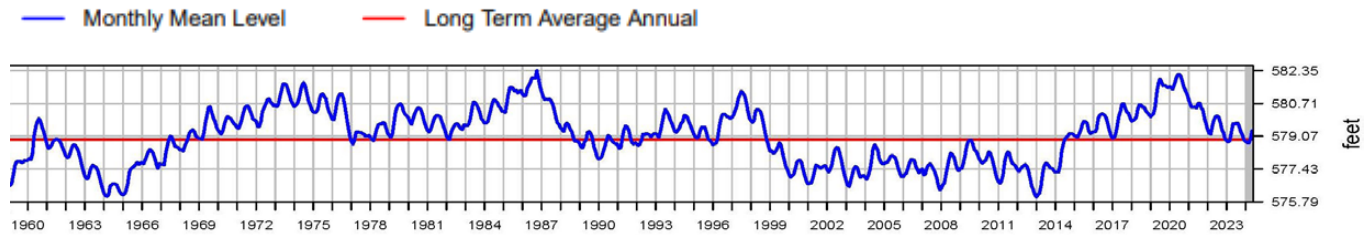
When these sand dunes began their migration into Silver Lake [as much as 150 m (490 feet)], and their continued rate of migration, is of great interest for future management of park facilities. Fragments of wood and ancient soils buried in the dunes can be dated and indicate that the dunes are thousands of years old and may have been mostly stable for the past 3,000 years. According to Fisher and Loope, one wood sample from a buried soil returned a radiocarbon date of about 450 years old, indicating that the present configuration of active dunes is most likely no more than 450 years old. A few dates only 100 years old from the same soil suggest that the dunes did not all become active at once, but that there may have been a mosaic of active and stable (vegetated) dunes. It has been suggested that, along the Lake Michigan coastline, there was widespread dune reactivation beginning about 300 years ago.

Mineral Resources

The properties of the dune sands along the Lake Michigan shoreline make them desirable for multiple industrial uses. Sand dunes are mined in other parts of the state, and a former sand pit is just north of the park. However, the State no longer issues new mining permits for Critical Dune areas, and the DNR does not lease State-owned property in these zones for mineral exploration and development involving use of the surface. The Coldwater Shale has no known economic value. Deeper formations have been productive for oil and gas east of the park, but potential for hydrocarbons beneath the park is considered low. Park lands outside the Designated Critical Dune Area are open to mineral leasing but are classified as non-development, which means no surface disturbance related to mineral development activities is allowed.

Water Resources

Silver Lake State Park includes over three miles of frontage on Lake Michigan and nearly two miles of frontage on Silver Lake. Silver Lake is approximately 690 acres in size with a maximum depth of 21 feet and average depth of 16.2 feet. Most of the public land is on the western shores of Silver Lake which is characterized by steep sand dunes rising more than



Monthly mean lakewide average water levels, Great Lakes Water Levels 1918-2023, Lake Michigan Water Levels from 1960, United States Army Corps of Engineers (USACE), Detroit District 2023

100 feet above the lake level and migrating into Silver Lake. The bottom is sandy in nature. The lake is fed by an inlet at Hunter Creek with an outlet at Silver Creek which empties into Lake Michigan within the park. A dam, with about a 2-foot head, was constructed in 1950 with stop logs 0.8 miles below the lake to control the lake level. It is controlled by the Oceana County Drain Commission. The court-ordered levels for Silver Lake are 586.4 feet in the summer and 585.9 feet in the winter. Legal lake levels were first established in 1962 but were reset by the Oceana County Circuit Court at the current levels in 1995 (Fusilier 2001). The Silver Creek watershed (including Silver Lake) covers 13,703 acres, all of which lies in Oceana County.

The long-term average annual water level of Lake Michigan is 578.90 feet above mean sea level, with fluctuations of over 5.5 feet observed in monthly mean level over time.

Fisheries

A 2020 Status of the Fishery Report for Silver Lake by DNR Fisheries Biologist Mark A. Tonello documents the history of the Silver Lake fishery and provides the details of a 2019 fisheries survey.

The 2019 MDNR fisheries survey of Silver Lake reflected some significant changes from historical assessments of the fish community. Top predators such as Largemouth Bass, Smallmouth Bass, and Northern Pike were at very low population levels. Panfish species such as Bluegill and Pumpkinseed Sunfish were nearly or completely extirpated from Silver Lake. However, Black Crappie and Walleye were well represented in the survey. Many of the Black Crappie exceeded the minimum acceptable size limit of 7 inches. The Walleye ranged from 10 to 24 inches in length, with most between 15 and 20 inches. It is also important to note that in the 2019 survey nearly 70% of the fish biomass was comprised of species that are typically less desirable to anglers, including Common Carp and White Sucker.

The bowfishing potential of Silver Lake should be promoted. Bowfishing is a growing sport in Michigan, and the large populations of Common Carp and White Sucker in Silver Lake provide an excellent opportunity for bowfishers. Common

Carp have long been considered a nuisance species in Silver Lake and bowfishing could be one way to reduce their overall numbers and potentially their negative impacts on the lake.

The Walleye fishery in Silver Lake is extremely popular with anglers. Prior to the installation of the dam on Silver Creek, Walleye were known to migrate back and forth from Lake Michigan and were likely native to Silver Lake. There is also evidence to suggest that Walleye have been sustaining themselves through natural reproduction in years when stocking did not occur. Walleye has been the primary managed species in the lake since 1975 with regular stockings. The stocking rate is currently 50/acre, or 34,500 spring fingerlings on an every-other-year basis.

Silver Lake has a history of water quality issues, including fish kills and algae blooms. Because of its shallow nature, Silver Lake also has had an abundance of aquatic vegetation at times, including invasive Eurasian milfoil. The Silver Lake Improvement Board (SLIB) has been in existence for many years and oversees the aquatic nuisance weed treatments on Silver Lake. Excessive chemical treatments in the past have been associated with a negative impact on plants and fish populations. The DNR recommends small scale treatments of Eurasian milfoil, but only when absolutely necessary. The maintenance of a healthy plant community in the lake is critical to healthy fish communities and will sequester excess nutrients in Silver Lake, thereby helping to reduce nuisance algal blooms.

A water quality study of Silver Lake and its watershed was completed in 2015 by a team of researchers from Grand Valley State University and the US Geological Survey. The study found that Silver Lake was in a eutrophic state and was being enriched by nutrients from several human-caused sources (Brennan et al. 2015). The highest percentage of nutrients entering the lake was coming from riparian septic systems leaching nutrients into groundwater. The study ultimately recommended the installation of sanitary sewers to mitigate the septic pollution (Brennan et al. 2015). However, due to the high cost of sewer installation (estimated at more than \$23 million), Golden Township has not moved forward with the proposed sewer project.

A.8 Recreational Resources

Silver Lake State Park offers modern camping and a day-use beach area with supporting amenities as described below. It also provides an ORV Area – the only sand dune riding opportunity east of the Mississippi River.

Modern Camping:

200 total campsites divided into a north and south loop divided by North Scenic Drive. All have 20/30 amp electrical service. Thirteen sites have frontage on Silver Lake. The campground is open from April 15 through October 14.

ORV Area

The park is home to the approximately 450-acre Silver Lake ORV scramble area, the only sand dune riding opportunity east of the Mississippi River. The area is very popular, especially on the weekends and is subject to special rules and regulations and a voucher system for access. Visitors may bring their own ORV or rent one with permitted local businesses.

Mac Woods Dune Rides operates a 40-minute interpretive dune tour within the park.

Designated Beach

A designated swim area is in the park's day use area on Silver Lake, within walking distance of the campground. Two beach wheelchairs are available to borrow.

Beach House

An accessible beach house, located in the day-use area on Silver Lake, includes changing rooms and family restrooms.

Water Access

Three miles of sandy shoreline stretch along Lake Michigan. Day use beach access to Lake Michigan is available adjacent to the Little Sable Point Light Station at the south end of the park.

Boat launch/Boating

A boat launch is in the day-use area on Silver Lake. The lake does not provide boat access to Lake Michigan. Several local businesses rent watercraft and paddling equipment.

Fish

Silver Lake is stocked with walleye; however, fishing is more popular during the non-summer months due to heavy boat traffic.

Picnic Area/Picnic Shelter

There are three picnic shelters located in the day-use area on Silver Lake that include picnic tables, charcoal grills, electrical

service and a modern bathroom that are available first come, first served.

Playground

An accessible playground is in the day-use area on Silver Lake.

Trails

There are no designated trails in the park, but two-thirds of the dunes are for pedestrians only. Many visitors climb and walk the dunes. Parking is available at the pedestrian dune access parking lot, at the end of North Shore Drive.

Pet-Friendly Area

Pets are allowed along the entire length of the Lake Michigan shoreline (3 miles) and the park's inland lake, Silver Lake, in all areas other than the designated swim beach. Pets must always be on a 6-foot leash and under an owner's immediate control. All pet waste must be properly disposed of in trash receptacles.

Lighthouse

The Little Sable Point Light Station is in the southern portion of the park. It is open for tours mid-May through October and is maintained by the Sable Points Lighthouse Keepers Association. There is a gift shop and an entrance fee to climb the tower, which includes a 130-step climb.

Hunting

Hunting is allowed in most areas of the park during certain seasons and in accordance with state regulations.

Horseback Riding

The park offers a shoreline horseback riding season Nov. 1-30 via a pre-determined route. Registration is required.

Fat-tire Biking

A fat-tire bike season at the designated Silver Lake ORV Area is offered Dec. 15-March 15 from 8am until dusk.

Metal Detecting

Metal detecting is recognized as a legitimate recreation activity when it is conducted in ways that do not damage natural and cultural resources in Michigan state parks nor violate applicable state statutes. A map of areas open to metal detecting can be found online. Visit <https://www.Michigan.gov/dnr/places/state-parks/metal-detecting> for more information. Areas located within the campground are limited to registered campers only.

A.9 Historic and Cultural Resources

Two historic structures are located within Silver Lake State Park, as documented in the park and recreation Division's Historic Structures Report, July 2021

STRUCTURES	DTMB TAG #	DATE BUILT
Little Sable Point Light Tower	84277	1873
Old Managers Residence	82166	1969

The Little Sable Point Light Station was listed on the National Register of Historic Places on July 7, 1984 (reference number is 84001827). The original light station property is listed as a historic district, even though the tower is all that remains on site.

Originally known as Petite Pointe au Sable Light Station, it was renamed in 1906 as a general "Americanization" of place names occurred. Construction of the tower and house began on a 39-acre parcel of land in April of 1873 and was completed in 1874. The light tower, which is all that remains, is 107 feet tall and is made from red brick. It is an active light station with a black cast-iron parapet with curved supports. There are 139 cast iron steps that lead into a cast iron lantern room which holds the light station's original Third Order Fresnel lens. Visible for approximately 19 miles, it is a protector to ships that pass by the Silver Lake Sand Dunes. The Big Sable Lighthouse in Ludington State Park is known as its twin sister with both lighthouses and towers being built to similar specifications. With a focal height of 108 feet, Little Sable Point Light Station is among the tallest light towers on Lake Michigan.

The modular park residence, constructed in 1969, represents a design that was once popular and used for park staff housing when park managers were required to live in their parks. A few of these structures still exist scattered amongst a few parks. The Silver Lake State Park residence is the best example of this type of modular style for a park residence in our system and is considered eligible for listing on the NRHP.

To date there are six reported archaeological sites in the park representing the lakeshore lives of Ottawa and other tribal ancestors, 19th century mariners, and 20th century farmers and cottagers. More archaeological sites may be present that have yet to be discovered. The shoreline may be additionally sensitive for the appearance of historic ship wreckage. If archaeological artifacts are discovered, it is important that they be protected in place and immediately reported to the park supervisor and DNR archaeologists. It is illegal to remove artifacts from state-owned lands and bottomlands without a permit.

A.10 Programming and Events

Events are held at Silver Lake State Park that are organized by external entities and allowed by permit. These include:

- The Sable Point Lighthouse Keepers Association hosts events such as beach cleanup days.
- Wedding events are popular at the ORV area as well as the light station.
- Several events within the ORV area, including events for veterans, Fourth of July fireworks, and vehicle-specific enthusiasts. The Silver Lake Recreation Association hosts a dune clean-up.
- National Wild Turkey Federation hosts a BB gun shoot and educational programming on turkey hunting event called Jakes Take Aim.

A.11 Park Use Statistics

In fiscal year 2023, Silver Lake State Park hosted 21,469 camp nights (a reported 60,580 guests) and over 1.4M estimated day visits, including the ORV area. While recorded day use numbers fluctuate, camping occupancy has generally been increasing steadily over the last five years. Camping numbers are derived from reservations in CAMIS where numbers per party are self-reported. Day use visitors are estimated based on car counts multiplied by 3.7 for the number of persons per vehicle.

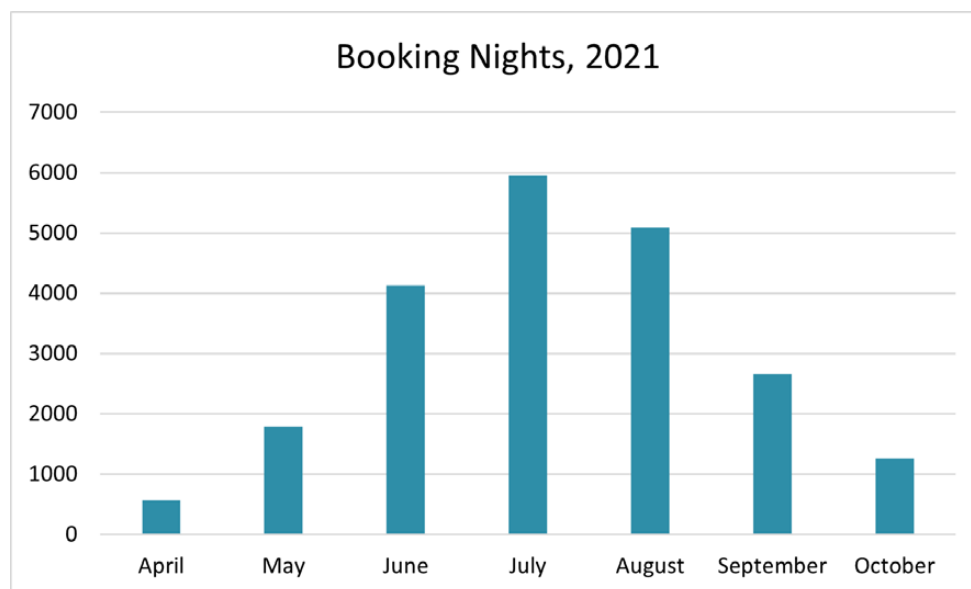
	2019	2020	2021	2022	2023
CAMP NIGHTS (OCCUPANCY)	18,089	16,536*	21,487	19,576	21,469
CAMPERS	63,001	57,071*	67,851	60,282	60,580

*Numbers impacted by COVID-19 closures

The most popular months for both campers and day-users are June through August, peaking in July. Although weekends are booked more frequently, the campsites are also often occupied during the weekdays in the peak summer months.

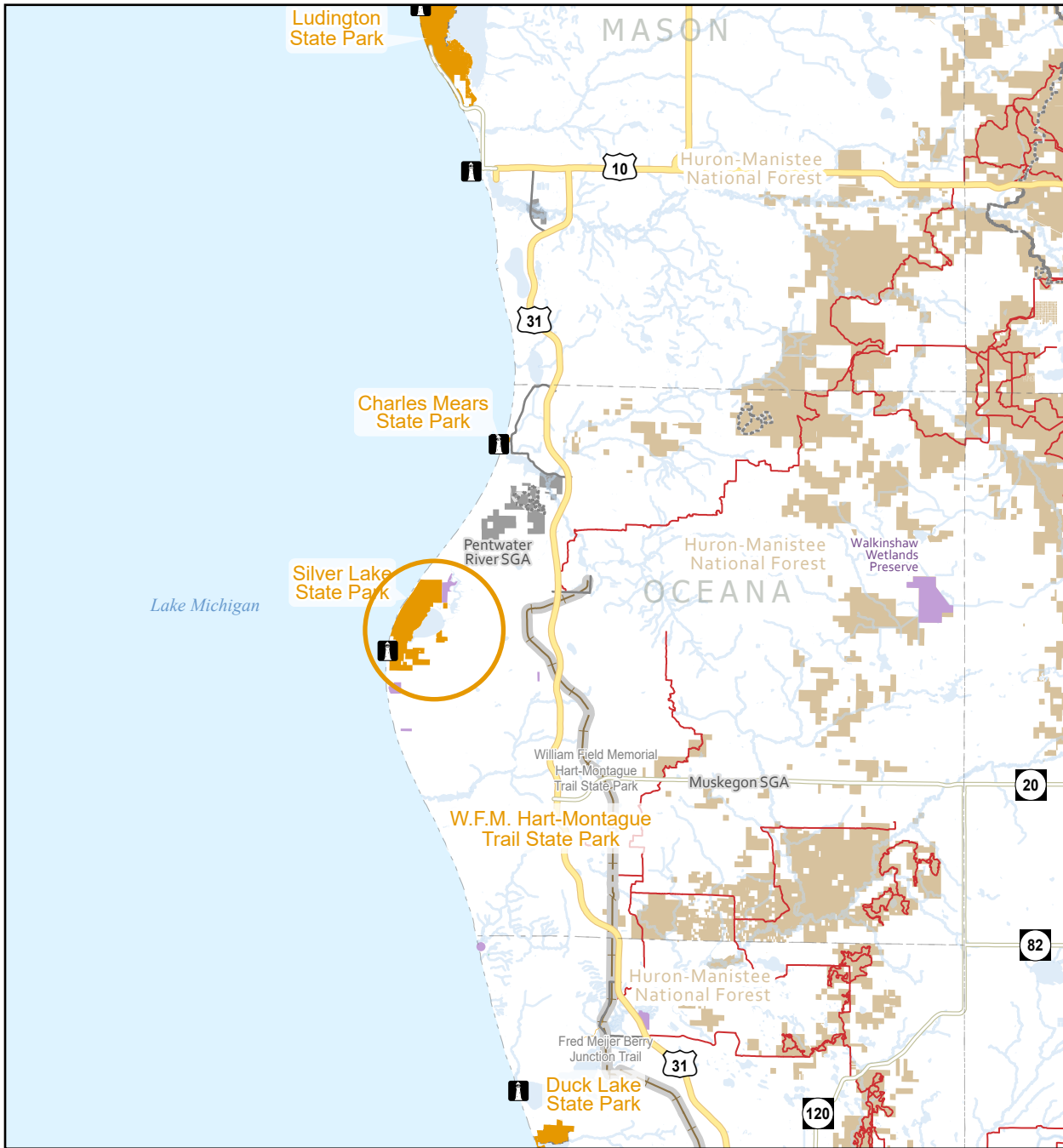
The top cities for camping reservations for Silver Lake State Park (2023) are illustrated in the following table, indicating the park draws primarily from the West Michigan area.

CITY	STATE	RESERVATION COUNT
Grand Rapids	Michigan	1100
Kalamazoo	Michigan	510
Holland	Michigan	429
Muskegon	Michigan	424
Hudsonville	Michigan	303
Rockford	Michigan	296
Howell	Michigan	259
Lansing	Michigan	242
Zeeland	Michigan	223
Grand Haven	Michigan	220



A.11 Park Resource Maps

Regional Recreation Resources Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Regional Recreational Resources



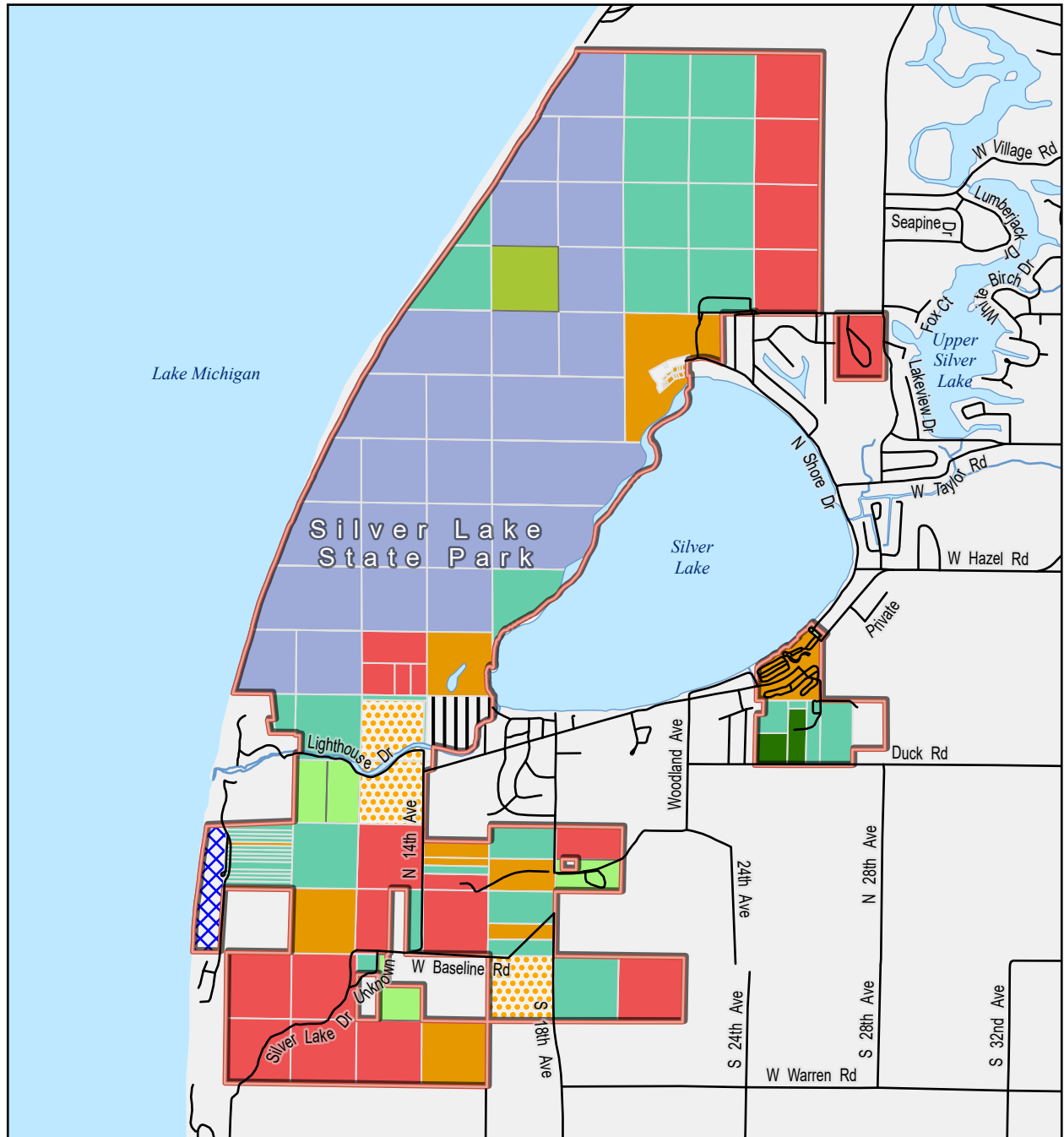
Updated: 11/21/2023

- County Boundary
- State Park/Recreation Area/Historic Park
- State Game/Wildlife Management Area
- Huron-Manistee National Forest

- Municipal/County Park
- Other Conservation Lands
- ⓘ Lighthouse
- Non-motorized Trail
- Motorized Trail
- Railtrail



Funding Sources Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES



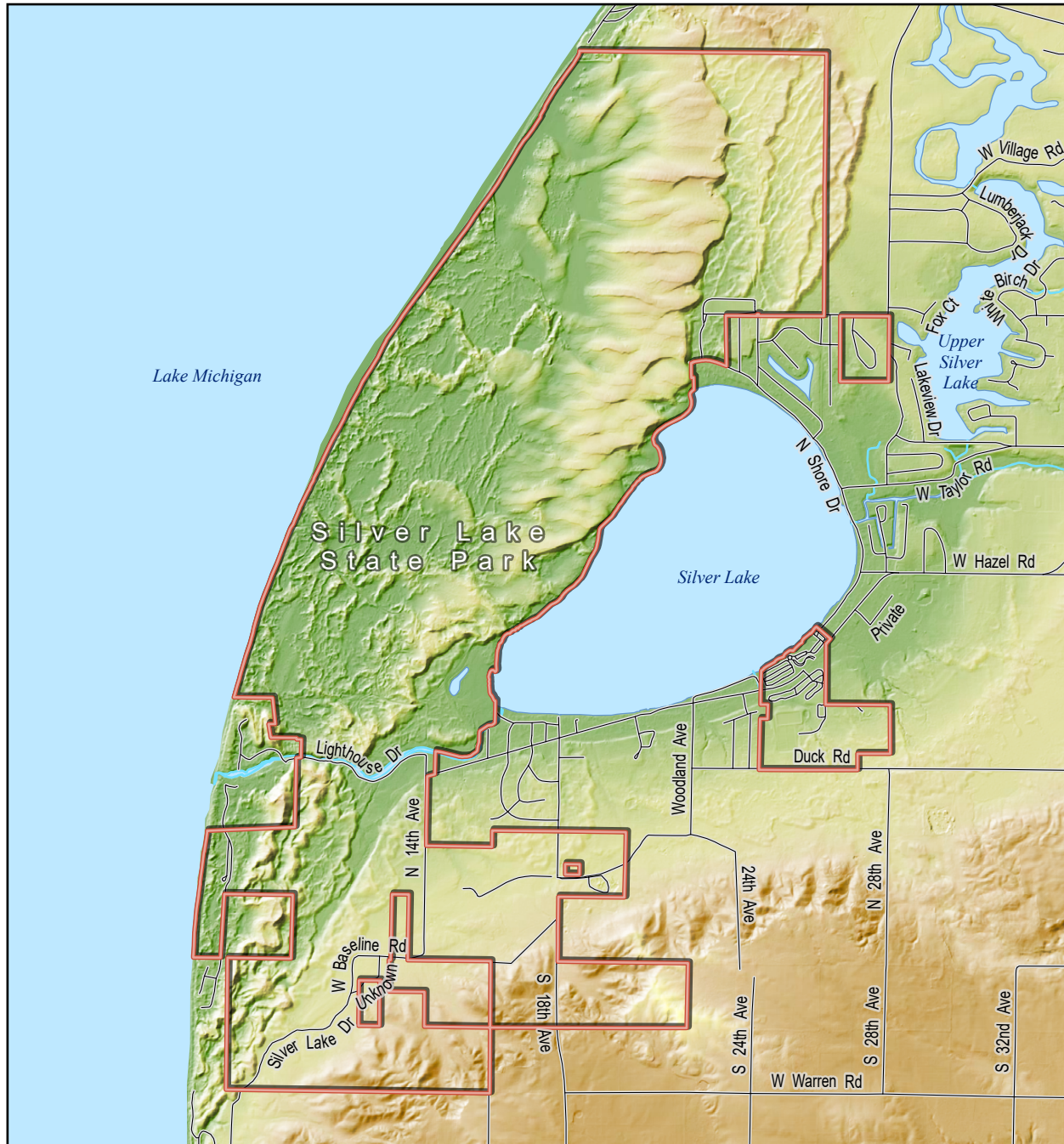
Silver Lake State Park - Funding Sources

- | | | |
|--|------------------------|---------------------------------------|
| State Park Boundary | Game & Fish Fund | Waterways Fund |
| Road | Gift | Michigan Natural Resources Trust Fund |
| River/Stream | Pittman/Robertson Fund | Tax Reverted Land |
| Lake/Pond | Recreation Bond Fund | Federal Land Transfer |
| Funding Source | Special Legislation | |
| Federal Land and Water Conservation Fund | State Game Fund | |



Updated: 12/14/2023

Topography Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

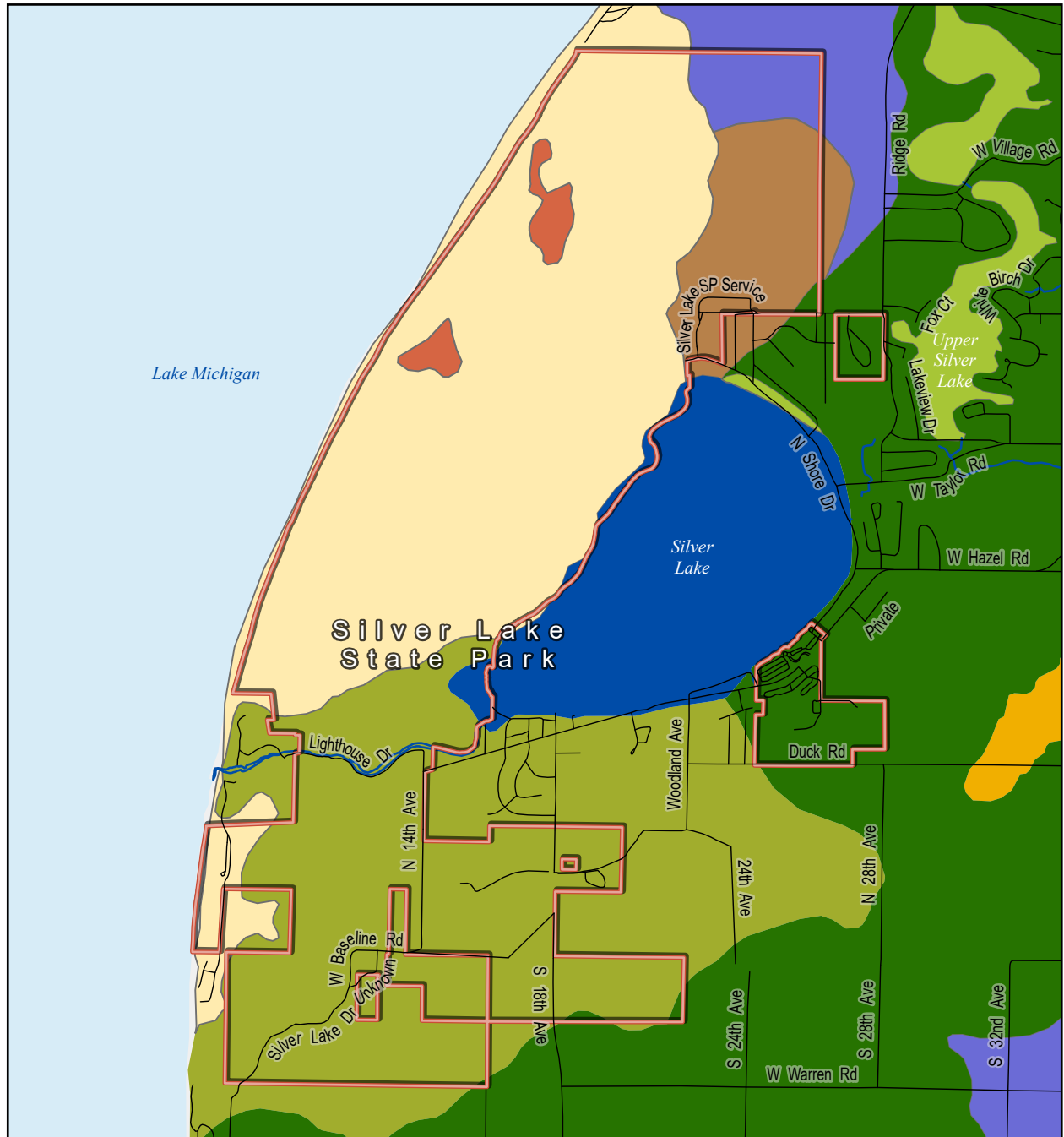
Silver Lake State Park - Topography



Updated: 11/22/2023












*Elevation calculated from USGS National Map 3D Elevation Program (3DEP). May 16, 2023.

Land Cover, 1800s Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Silver Lake State Park - Land Cover, 1800s

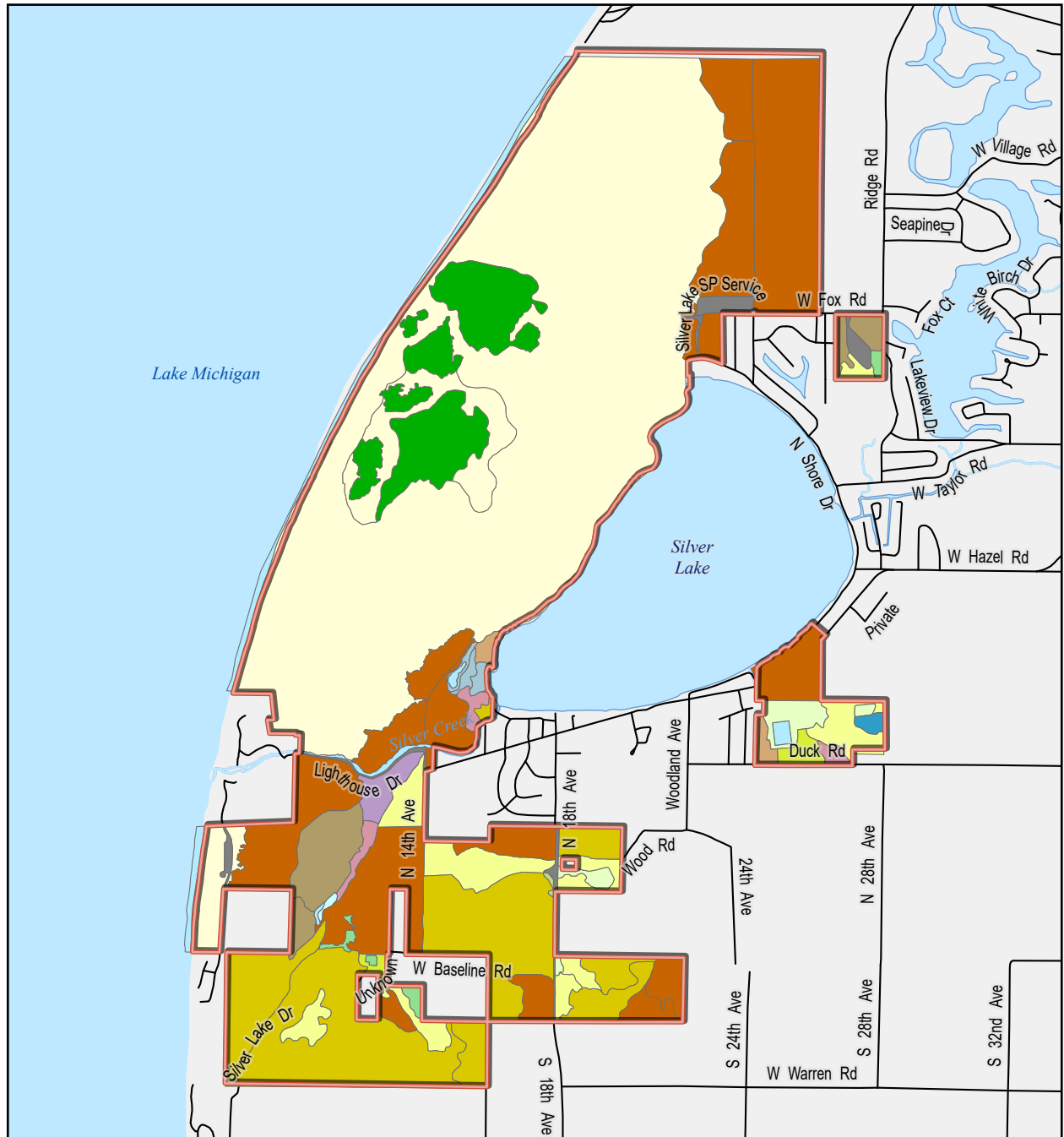
-  State Park Boundary
 Road
 River/Stream
Land Cover*
 Beech/S Maple
 Cedar Swamp
 Lake
 Open Sand Dune
 R Pine/W Pine
 Red Pine
 Tamarack Swamp
 White Pine/White Oak
 White Pine



Updated: 11/20/2023

**Mapping derived from original notes of the State of Michigan General Land Office Survey conducted in the early to mid-1800s*

Land Cover Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Silver Lake State Park - Land Cover

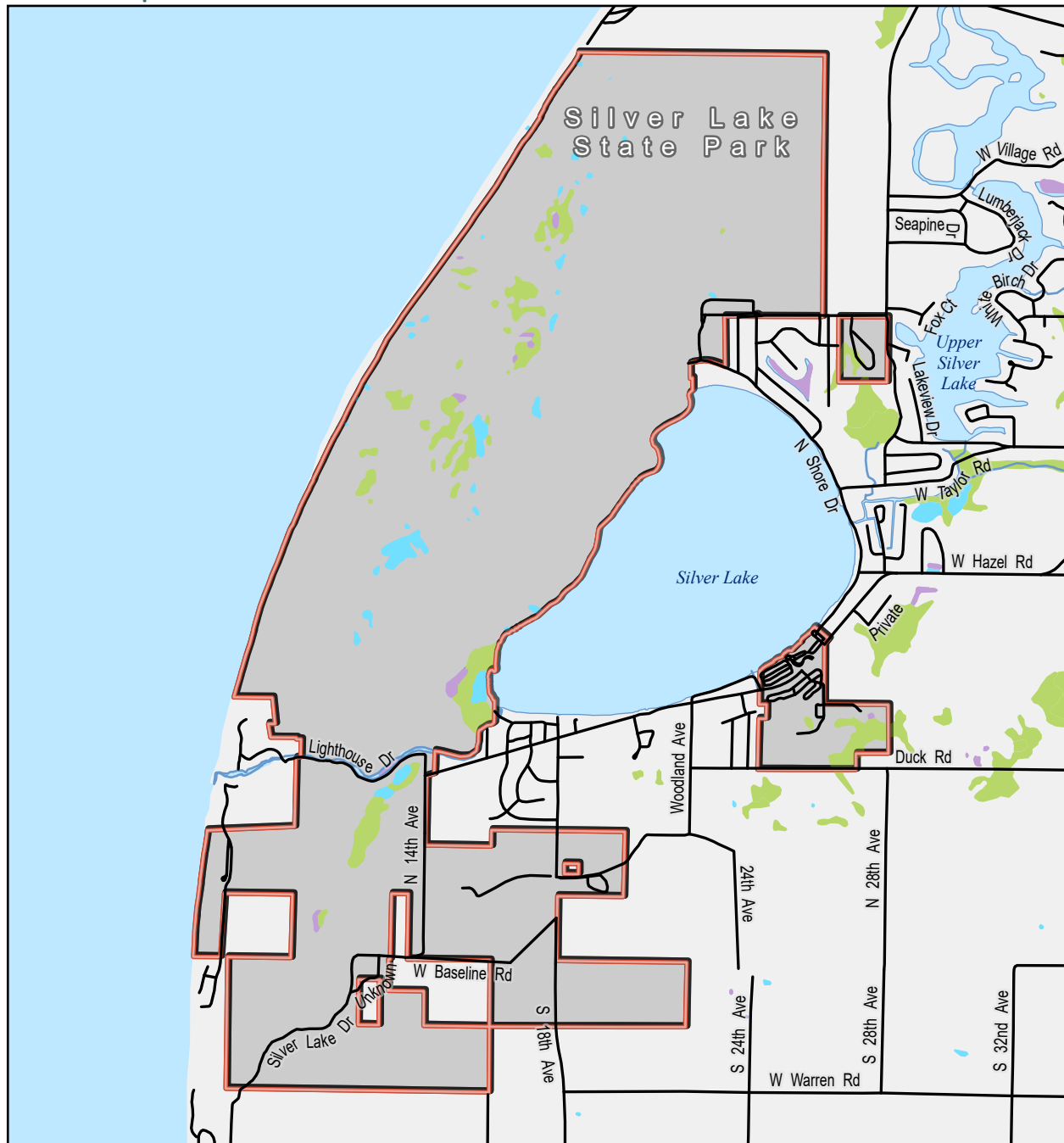
- | | | |
|-------------------------|---------------------------------|----------------------------------|
| State Park Boundary | 419 - Mixed Upland Deciduous | 310 - Herbaceous Openland |
| Road | 421 - Planted Pines | 320 - Upland Shrub |
| River/Stream | 422 - Natural Pines | 330 - Low Density Trees |
| Lake/Pond | 430 - Upland Mixed Forest | 622 - Lowland Shrub |
| Stands* | 500 - Water | 623 - Emergent Wetland |
| 411 - Northern Hardwood | 611 - Lowland Deciduous Forest | 629 - Mixed non-forested Wetland |
| 412 - Oak Types | 612 - Lowland Coniferous Forest | 710 - Sand, Soil |
| 413 - Aspen | 122 - Road/Parking Lot | |

Updated: 12/21/2023

*Michigan Forest Inventory, Michigan DNR



Wetlands Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Silver Lake State Park - Wetlands

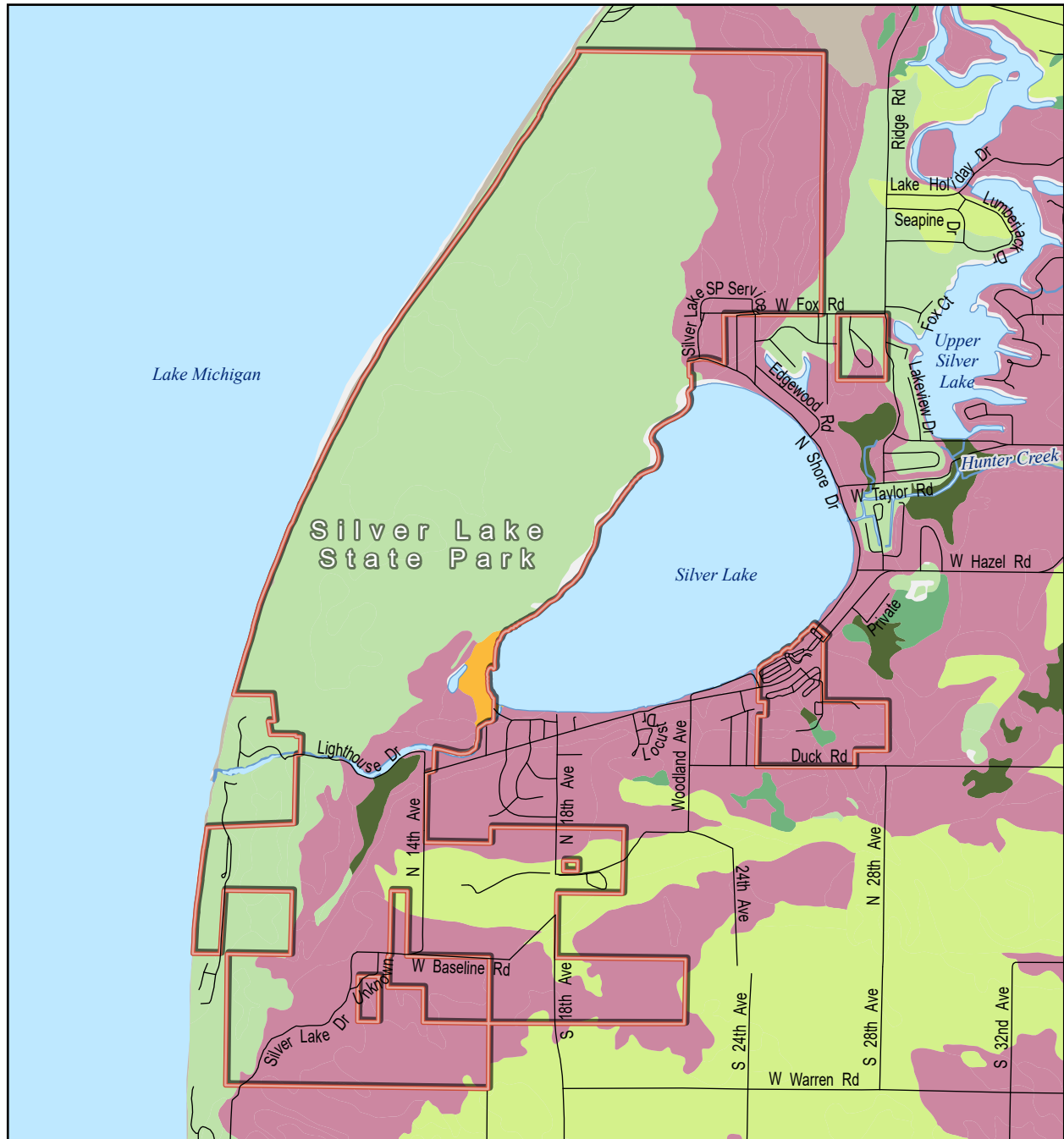
- | | |
|---------------------|-----------------------------------|
| State Park Boundary | Wetlands* |
| Road | Freshwater Emergent Wetland |
| River/Stream | Freshwater Forested/Shrub Wetland |
| Lake/Pond | Freshwater Pond |

Updated: 11/22/2023

*The National Wetlands Inventory (NWI) dataset (2012)



Soils Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Silver Lake State Park - Soils

- State Park Boundary
- Road
- River/Stream
- Lake/Pond

USDA Soil Class*

- Alfisols
- Entisols
- Histosols

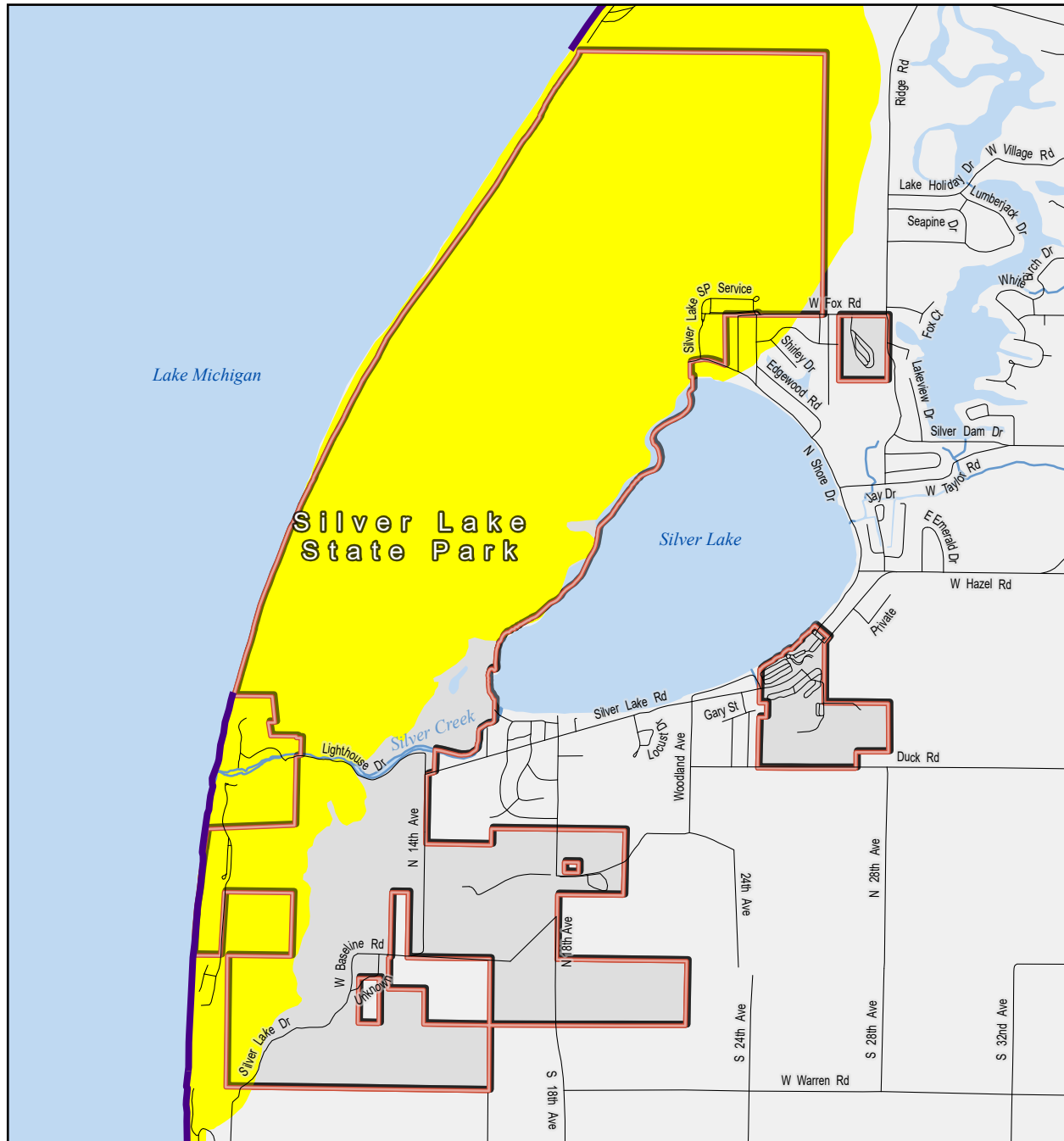
- Inceptisols
- Mollisols
- Spodosols
- No Soil



Updated: 11/27/2023

*USDA Natural Resources Conservation Service (NRCS), esri Living Atlas

Coastal Conservation Areas Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES



Silver Lake State Park - Coastal Conservation Areas

State Park Boundary

Road

Critical Dunes***

Barrier Dune Formations Designated Pursuant to 1976 P.A. 222

High Risk Erosion Areas

State Park Boundary

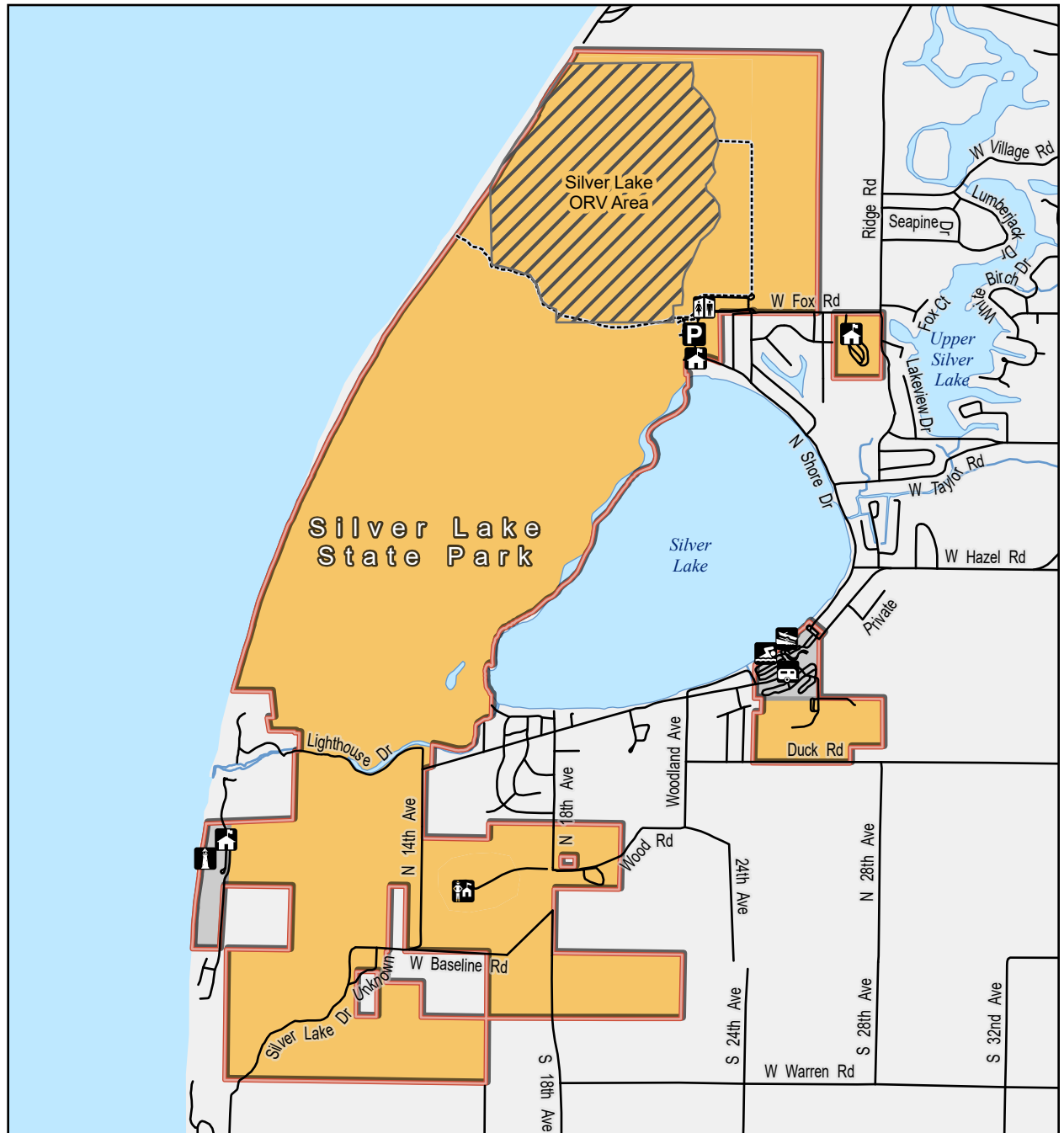
River/Stream

Lake/Pond



Updated: 12/14/2023

Park Amenities Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES



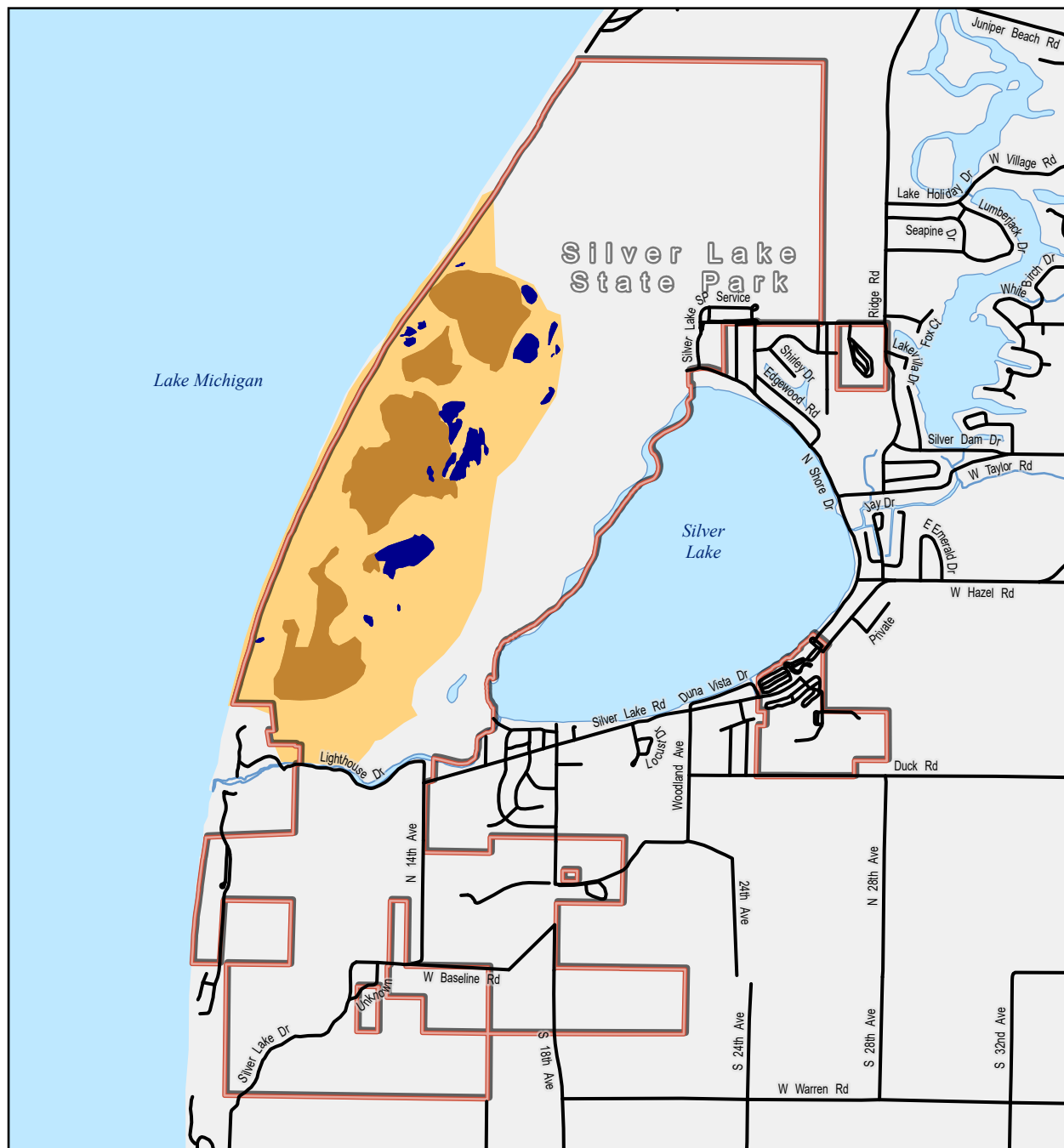
Silver Lake State Park - Park Amenities

- | | | |
|---------------------|---------------------|-------------------|
| State Park Boundary | ORV Area | Beach |
| Road | Open to Hunting | Contact Station |
| River/Stream | Closed to Hunting | Park Headquarters |
| Lake/Pond | Boating Access Site | Light House |
| Trail | Modern Campground | Toilet/Shower |
| | | Parking Lot |

Updated: 11/14/2023



Element Occurrence Natural Communiites



MICHIGAN DEPARTMENT OF NATURAL RESOURCES



Silver Lake State Park - Element Occurrence Natural Communities

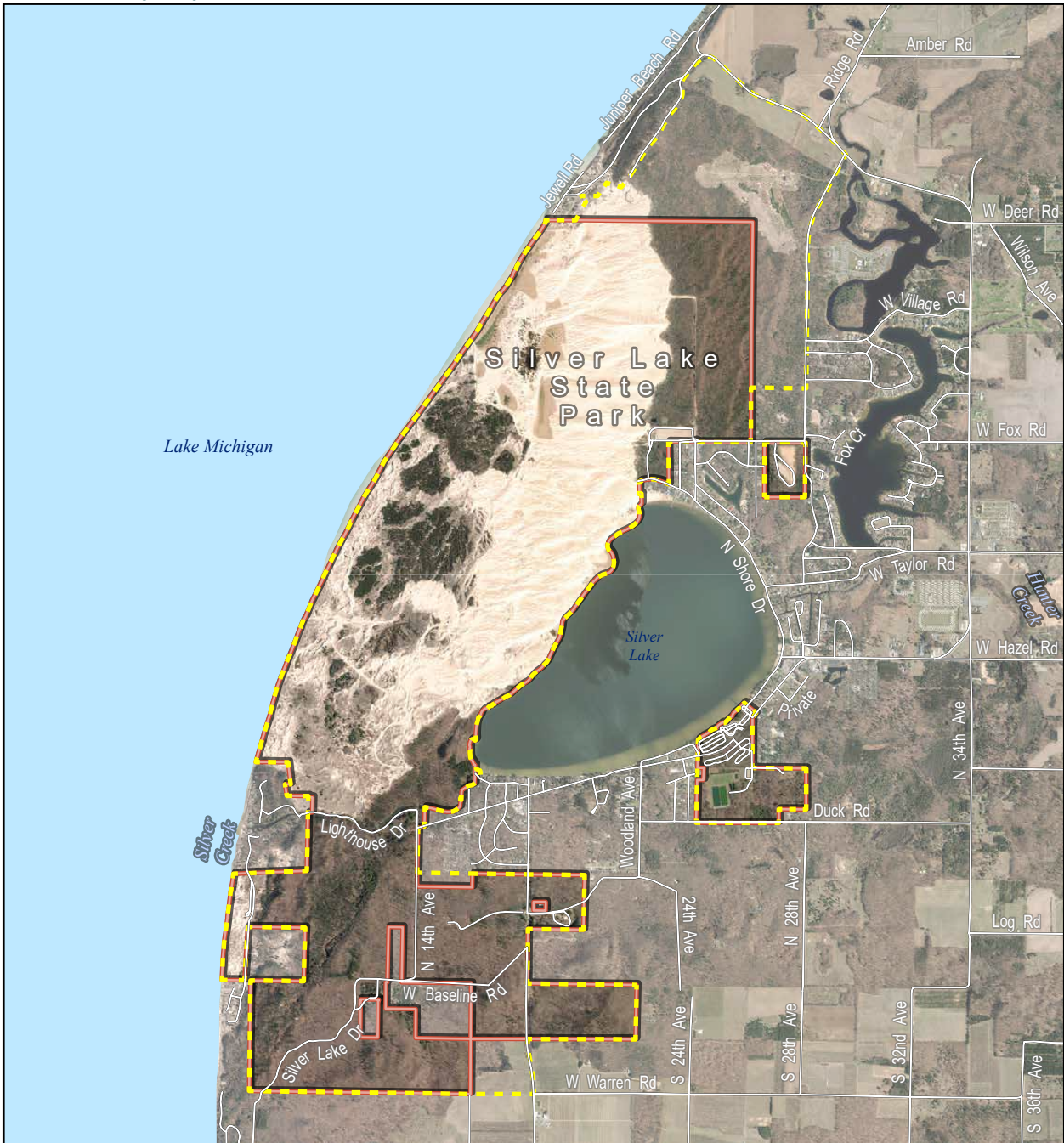
- | | |
|----------------|---|
| — Road | Element Occurrence Natural Communities* |
| — River/Stream | Great Lakes Barrens |
| — Lake/Pond | Interdunal Wetland |
| | Open Dunes |



Updated: 01/29/2024

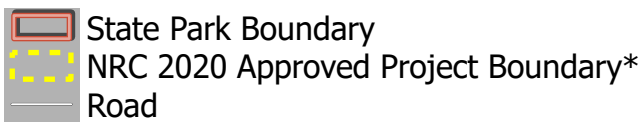
*Natural Communities of Michigan (Michigan Natural Features Inventory)

Park Boundary Map



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Silver Lake State Park - Park Boundary

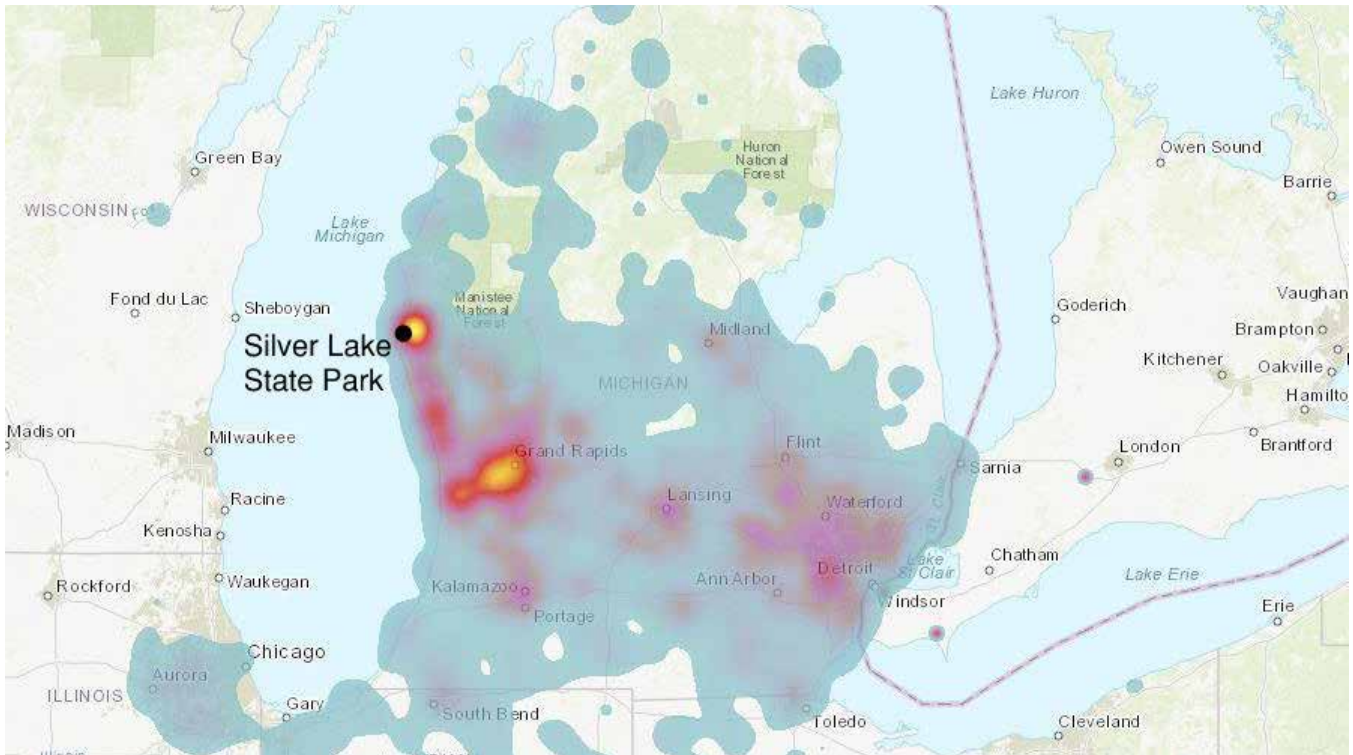


Updated: 11/16/2023

*A project boundary is a geographic area in which the DNR is seeking to acquire property that supports the mission of the DNR on a willing buyer / willing seller basis, approved by the Natural Resources Commission in 2020



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Map depicting the zip code of survey respondents' primary residence. Brighter colors represent a greater concentration of respondents. A small number of respondents are located beyond the map extents. The majority of respondents were in southwest Michigan.

Appendix B:

Public and Stakeholder Input

B.1 Summary of Public Input Survey

One of the methods the planning team used to gather input from park users was an online survey. This approach provides a convenient way for those who have access to the internet to provide feedback, though it is not designed to be statistically representative of Silver Lake State Park users or uses, as respondents self-select. The online survey provides valuable information about what certain individuals or groups (those who are likely to receive DNR communication about the survey and are motivated to comment about the state park) hope to see in the park's future management.

The survey was advertised to a diverse range of people through various means. The survey press release was sent to subscribers of Michigan's Trails or Statewide DNR News (press releases) who answered "Region 7: Mason/Lake/Oceana/Newaygo" or "Region 11: Muskegon/Ottawa/Kent/Allegan/Barry" to "Which areas of the state would you like to receive regional information from?" (29,563 recipients). In addition, the survey invitation was sent to 108,998 subscribers of ORV Riding and 5,736 individuals who had registered to

camp at the park over the last three years. It was also sent to stakeholders identified by the planning team.

Responses were collected from February 7, 2024 through March 3, 2024. During the collection period, 5,376 people submitted responses to the survey. Of those respondents, 5,111 (95%) have visited the park in the last ten years and went on to answer the remainder of the questions in the survey. Of those that did not visit the park in the last ten years, the top reasons for not visiting more recently were that they intend to but have just not visited yet for various reasons, or the park is too far away from their home. They were also asked what improvements or changes to the park would make them want to visit more often. Responses included additional facilities or policies for expanded horseback riding, allowing ORVs to drive on the roads, greater crowd control, improvements to the camping facilities, and others. There were some respondents wanting expanded ORV facilities and others wanting to limit the use of ORVs in the park.

In most online surveys for DNR general management plans, the two age groups with the highest response rates are between

55 and 60 and 65 and older. Respondents for Silver Lake State Park skewed slightly younger than that average, with the greatest number of respondents in the 55-60 age group (29%), and the second most responses coming from the 40-49 age group (22%). Most responses reported their race/ethnicity as white/Caucasian (90%), and 7% responded “prefer not to answer”. The majority of respondents came from residents of the southwestern region of Michigan’s Lower Peninsula, but also across Southern Michigan.

Your Visit

Silver Lake State Park’s unusual offering of an off-road vehicle area on Lake Michigan dunes means that visitors often travel great distances for this experience. It is also greatly enjoyed by local residents of the area. Thirty-seven percent (37%) of survey respondents reported they visit the park six or more times per year, and 31% visit one to two times per year. Survey respondents were most likely to visit in the summer season (93%), with fall and spring nearly equally visited by 61% and 53% of respondents, respectively. Only six percent (6%) of respondents visit year-round. Respondents most frequently visited the park with a spouse/partner (74%) or with friends (63%).

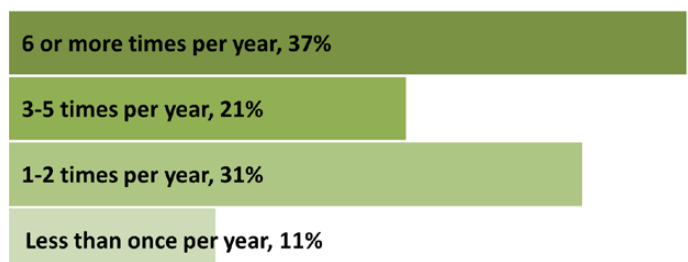
Respondents were asked what three words they would use to describe the park to someone who had never visited. The top ten most common words were fun, beautiful, unique, exciting, sand, awesome, dunes, amazing, busy, and sandy. The word cloud below shows the top 60 most frequently mentioned words, with the increasing size of the word indicating a more frequent response.

When asked to note all the activities participated in at Silver Lake State Park, most survey respondents reported using the ORV scramble area (82%) or the ORV area beach (70%) during their visit(s). Other popular activities are visiting the lighthouse, visiting the Silver Lake beach, and camping. When asked which of those was the primary reason for the visit, visiting the ORV scramble area was the primary activity of 67% of respondents, followed by camping (7%).

In what seasons do you typically visit the park? (Select all that apply)

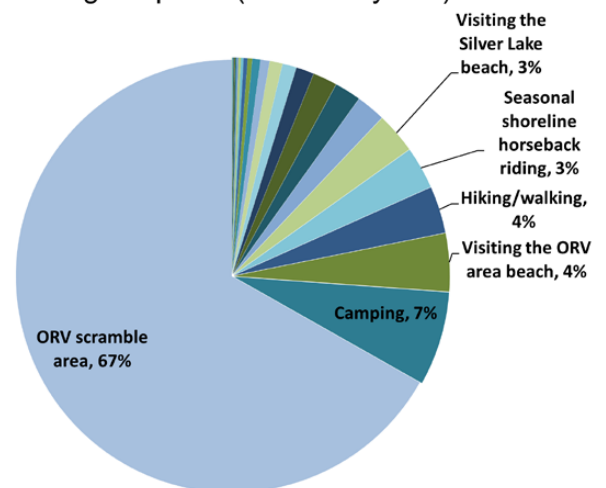


How often do you visit the park?

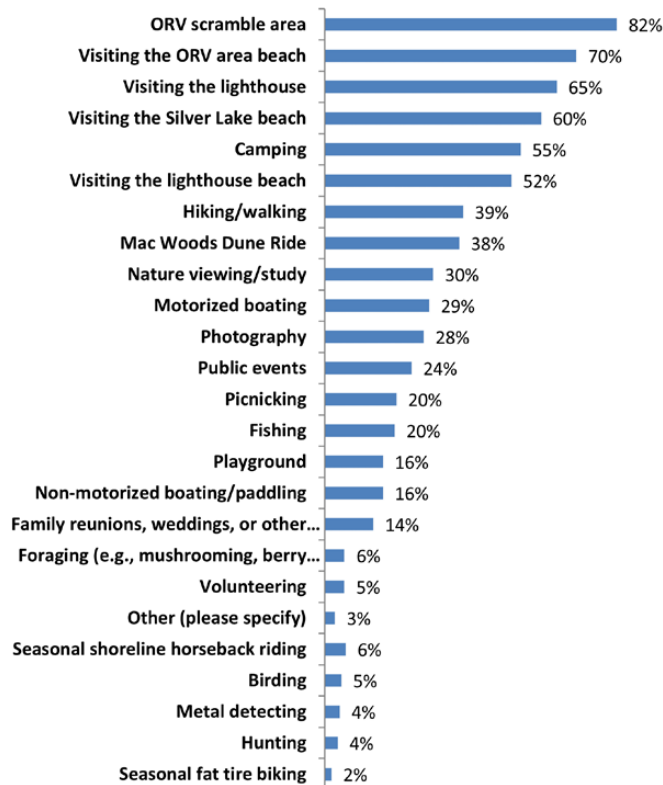


A map showing survey respondents across the United States. Each dot represents one survey respondent. A few responses were collected from as far away as Washington, New Mexico, Texas, Florida, and Maine with others scattered across the US.

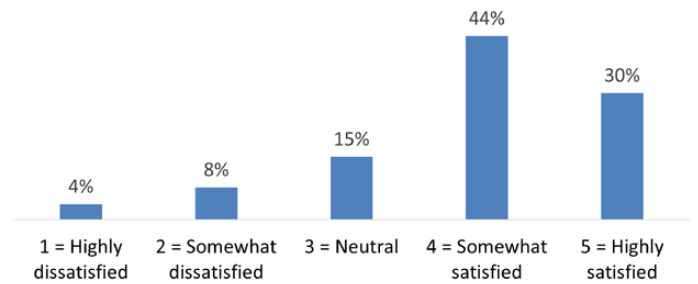
What activity is your PRIMARY reason for visiting the park? (Select only one)



Please select ALL the activities in which you participate at Silver Lake State Park. (Select all that apply)



What is your overall level of satisfaction with the ORV scramble area?



ORV Scramble Area

Most survey respondents (88%) have ridden in the ORV scramble area. Satisfaction with the ORV scramble area is generally high, with most respondents somewhat satisfied or highly satisfied (74% combined). The weighted average across all answers was 3.89 out of five.

When asked what they liked most about the scramble area, respondents frequently mentioned the ability to ride out on the dunes and described the experience as fun, exciting, and bringing a sense of freedom and community. The beach was also frequently mentioned, as was the availability of bathrooms in the ORV scramble area. Respondents enjoyed the Test Hill / Challenge Hill and other hill climbs as well as the one-way directional riding area. They enjoyed the drag strip area, racing their vehicles and watching others race. Respondents felt the dune-ready access lane was a great improvement to operations.



Word cloud depicting the words respondents would use to describe the park. The larger word size indicates a greater number of respondents suggesting that word. The largest words are fun, beautiful, unique, exciting, sand, awesome, dunes, amazing, busy, and sandy.

Five randomly selected answers follow:

What do you like most about the ORV scramble area?

- The wild, excitement it gives you driving and watching other cars.
- The great views of the lake and riding
- The beach
- Lots of room to ride and explore
- The tight turning in the trees

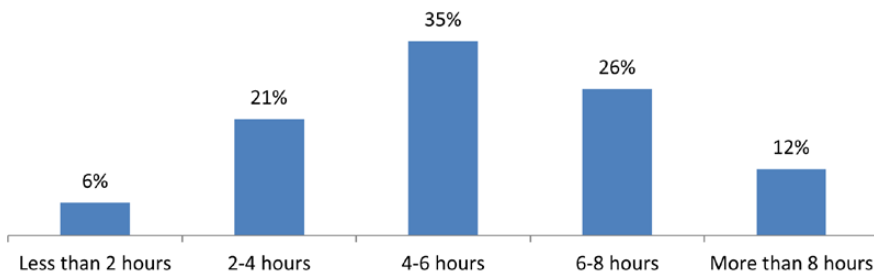
When asked what could be done to improve their satisfaction with the ORV scramble area, 26% of respondents stated that no changes were necessary to increase satisfaction while 74% did suggest improvements. The most frequently suggested improvement was to enlarge the ORV scramble area to help with overcrowding, safety, and to give more room to explore. Over 70% of those who left comments mentioned enlarging the ORV area in some way. There were also requests to allow ORVs closer to the lake. Other frequently mentioned comments related to regulations, operations, and amenities. Many respondents commented that they would like to drive on the roads with their ORVs or have a designated route from the campground to the scramble area. Others had differing ideas about operations and regulations – some wanted fewer restrictions on decibel limits, drag racing, and jumping; while others wanted more enforcement of rules, speed limits, alcohol restrictions, and unsafe behavior. There were calls for better signage of direction areas, better education of new visitors, more parking, and more directional driving areas or having the entire scramble area be one-way. Five randomly selected responses follow:

Is there anything that could improve your experience at the ORV scramble area?

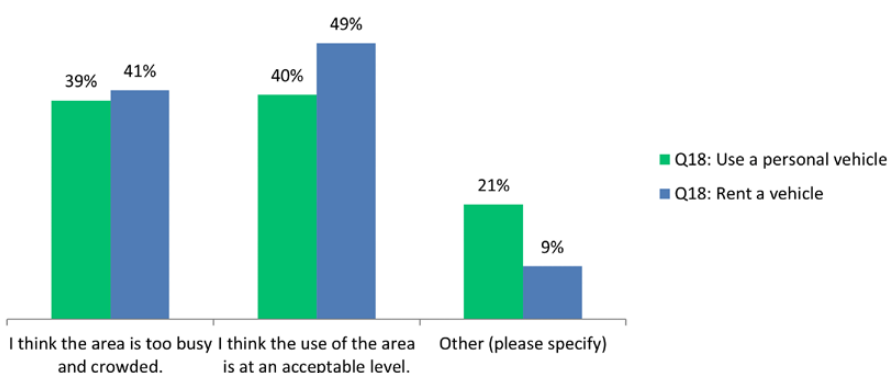
- More bathrooms. More trash cans to discourage folks from littering.
- Way too crowded
- Larger parking lot, more home base amenities, with easy access to both camping for tents and RVs
- Making it easier to travel in an ORV to the park from a campground
- Expand the off road area

Visitation to the ORV scramble area is least common Monday

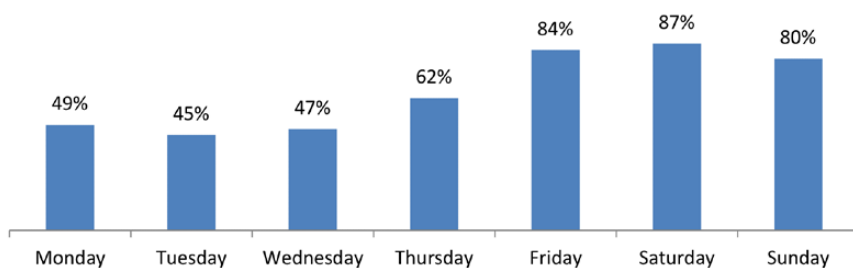
How long do you typically stay in the ORV area on a given day?



What is your perception of the ORV area use?



What days of the week do you visit the ORV scramble area? (Select all that apply)



through Wednesday, starts to rise on Thursday, and peaks over the weekend, with 87% of respondents indicating they visit on a Saturday. The greatest number of survey respondents (35%) reported they stay in the ORV area for 4-6 hours on a typical day. When asked what general time of day they use the ORV area, the majority said all day (56%), with 31% in the afternoon hours, and only 7% before noon and 6% after 5 pm.

The perception of the crowd level at the ORV area is split: 40% thought that the use of the area is at an acceptable level, while 39% thought it was too crowded. Twenty percent (20%) of respondents replied "other" to this question, many of whom reported that there are times when the park is too crowded and times where the level of use is acceptable. Five

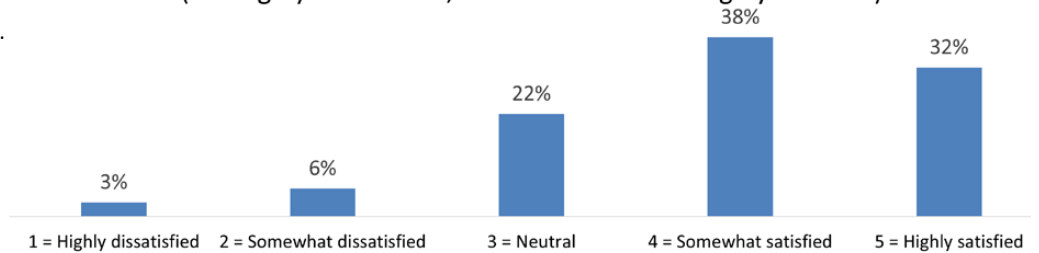
randomly selected responses follow:

What is your perception of the ORV area use? (Other responses)

- It depends if a holiday weekend. Otherwise it is an acceptable level
- Need more area opened up for ORV use.
- No parking on top of hills
- Wouldn't change a thing. Maybe open up another 100 acres
- Weekends busy/crowded; weekdays it is at an acceptable level

Most respondents (97%) use a personal vehicle in the ORV area. Of those, 56% arrive with an ORV that is street-legal and dune-ready, 36% percent use a parking space to unload, and 9% fit themselves into an "other" category, many of whom say they use both vehicles that are already street-legal and dune-ready as well as those that need to park and unload. When the two groups (those who use a personal vehicle and those who rent an ORV) were compared, satisfaction with the ORV scramble area was very similar, with a weighted average of 3.9 out of 5 for those that use a personal vehicle compared to 3.86 for those who rent. The two groups also were relatively aligned in their perception of the use of the ORV area, with slightly more respondents who rent a vehicle reporting the area is at an acceptable use level.

Please rate your level of satisfaction with your camping experience.
(1 = Highly dissatisfied, 3 = Neutral and 5 = Highly satisfied)



Camping

Just over half of respondents (54%) have camped at the Silver Lake State Park campground. Most were satisfied with the experience, with a weighted average satisfaction of 3.8 out of five. The greatest number of respondents (38%) were somewhat satisfied and 32% were highly satisfied.

When asked what they liked most about the camping experience, respondents typically mentioned that they liked the location close to Silver Lake, the beach, and the dunes; that the campground was clean, well-maintained, and quiet; and they enjoyed the fun atmosphere and camping with friends. Five randomly selected responses follow.

What did you like most about the experience?

- Being able to be right on the lake and see the sunset over the dunes.



Word cloud depicting the destinations visited outside the park. The larger word size indicates a greater number of respondents suggesting that word.

- Location to ORV scramble area
- Service and people
- Time with family
- Great location

The survey asked if any changes could be made to improve the camping experience, and 41% of respondents made a suggestion. Common themes included the ability to ride ORVs from the campground to the dunes, bathroom upgrades or additional bathrooms, improved electrical service or full hook-up sites, larger campsites or less congestion, and an additional dump station. Five randomly selected responses follow.

Is there anything that could be done to improve your camping experience?

- Allowing ORV traffic to drive to park entrance
- Update bathrooms and another dump station, remove selected trees to facilitate easier access to lots
- Upgrade the electrical boxes
- Restrooms and bathhouse need to be upgraded
- Slow down traffic in campground, cleaner facilities, and it's very loud lots of parties going on.

Of those respondents that indicated they used the ORV scramble area, 56% have stayed at the campground at Silver Lake State Park (2,215 respondents). Of those respondents that have stayed at the campground, 91% have used the ORV scramble area.

Respondents were also asked if they frequent other destinations during their stay at Silver Lake State Park.

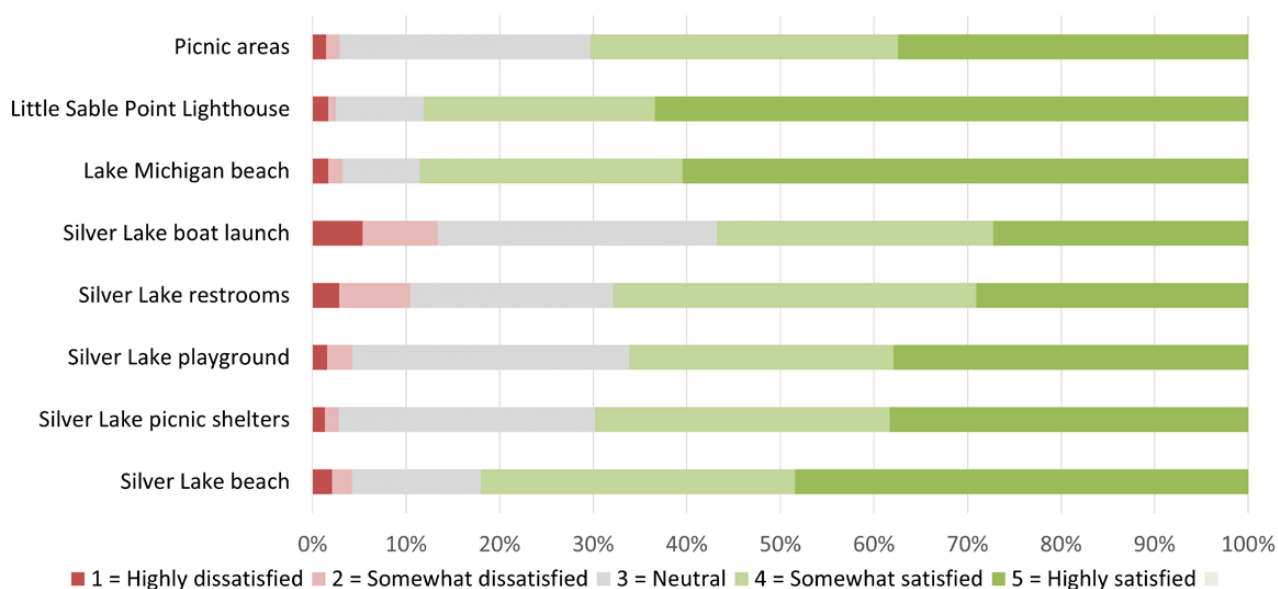
Frequent answers included many nearby towns, attractions and establishments such as Pentwater, the lighthouse, Ludington, local restaurants, Hart, the Chicken Shack, Whippy Dip, local shops, Mears, Lewis Farms, and Craig's Cruisers. The word cloud represents the most common responses, with the word size increasing with an increased number of mentions.

Day Use Facilities

Day use facilities at Silver Lake State Park include the beach, playground, picnic shelters, and boat launch on Silver Lake; the lighthouse and beach area on Lake Michigan; and picnic areas within the park. Eighty percent (80%) of survey respondents reported having used at least some of these facilities. When asked to rate their satisfaction with each facility they have used, respondents were most satisfied with the Little Sable Point Lighthouse, Lake Michigan beach, and Silver Lake beach. They were least satisfied with the Silver Lake boat launch and Silver Lake restrooms. However, all day use areas still scored relatively high in terms of user satisfaction.

When asked what they liked the most about the day use facilities, respondents frequently mentioned the fact that the day use facilities are available and easily accessible, that they are clean and maintained, and that they were fun and family-friendly. Some of the specific facilities that were mentioned frequently were the beaches, lighthouse, playground, picnic shelters, and the boat launch. Respondents valued the location and ease of use of the facilities and enjoyed the natural setting and beautiful views. Five randomly selected

**Please rate your level of satisfaction with the facilities you have used.
(1 = Highly dissatisfied, 3 = Neutral and 5 = Highly satisfied):**



responses are below.

What did you like most about the day use facilities?

- Appreciate the beauty and that they are open to the public.
- Clean and views
- I love visiting the light house every time we visit the area.
- Proximity to the ORV area and the boat launch.
- They give you somewhere to park and hangout with people & other activities to do instead of spending all your time in the dunes, especially on busy weekends.

When asked if there was anything that could be done to improve the experience with the day use facilities, 32% suggested changes. In the comments, the most frequently mentioned facility was the boat launch, which also received the lowest satisfaction rating. Common feedback included a desire to allow boats to launch even when the launch parking is full, that the lake bottom near the boat launch needs to be dredged, that the launch needs repairs, and that there is not adequate parking. There were also numerous comments related to the bathrooms, either asking for more restroom facilities, better upkeep of the restrooms, a desire for restrooms at the pedestrian dune area, and restrooms closer to the Lake Michigan beach by the lighthouse. There were calls for increased parking, such as at the boat launch and at the lighthouse. There were also comments asking for more picnic facilities and playground equipment. Five randomly selected responses are below.

Is there anything that could be done to improve your experience with the day use facilities?

- Boat docks or moorings, EV chargers, showers, water dispenser
- Cleaner bathrooms
- Limited/restricted use of boat launch when trailer parking is full. We camp at the state park and can store our trailer on site there.
- The beach area at the Silver Lake State Park needs a lot of work. It needs new sand and cleaned up. We don't use it because it seems dirty and unkempt.
- Sometimes there's a long wait to get in certain beaches. Possibly more parking or helpers

Fishing

Eleven percent (11%) of respondents reported that they used the park for fishing access to Silver Lake. Those that fish on Silver Lake typically access

the water on a motorized boat (71%). Forty-four percent (44%) fish from the shoreline, 21% fish from a nonmotorized boat, and 12% have gone ice fishing on Silver Lake. The majority are not targeting a particular species (54%), but others commonly fish for walleye and bluegill.

Comments left by anglers vary; some reported that it is a fun place to fish, but others discuss that the fish population has decreased and they are concerned about the water quality and ecosystem. Some comments repeated requests to dredge the boat ramp, add more docks, for the launch to be wider, and to allow boats to launch when the parking lot is full.

Randomly selected comments are below:

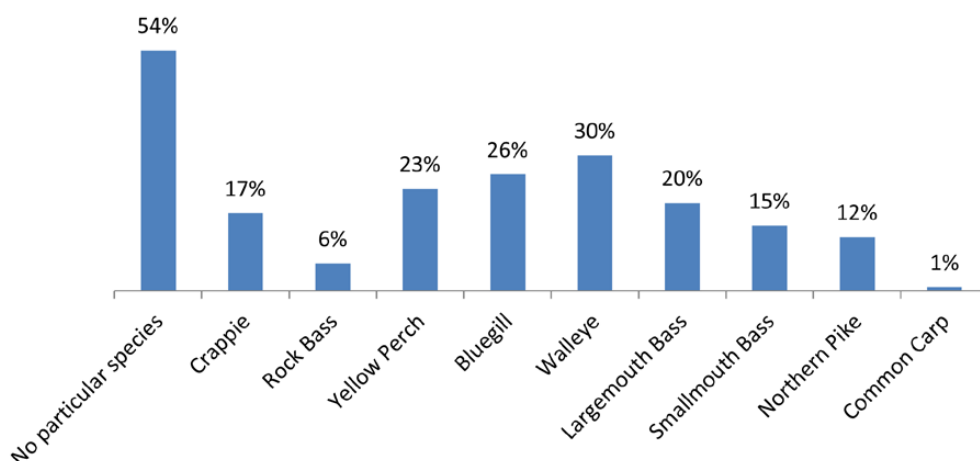
Please enter any comments you may have about fishing at the park.

- Allow to launch and park elsewhere when lot is full!
- It used to be better years ago, just seems like there aren't as many fish as there used to be. Also, water quality seems to differ from year to year
- Need to limit cottage's and homes around the lake with their sewage issues and contaminating the lake. Its getting worse and worse every year.
- Poor water quality makes eating fish from Silver Lake questionable. Silver Lake can also be very busy at times, need to be selective when fishing to have an enjoyable experience.
- The fishing seems to be improving and that is amazing to see. My family enjoys the large variety of outdoor activities this specific area has to offer.

Hunting and Trapping

Just two percent (2%) of survey responses, totaling 75 participants, reported hunting at the park. Of those, the overwhelming majority (85%) hunt white-tailed deer, while

What is your target species of fish? (Select all that apply)



24% hunt small game, 15% hunt turkey, and 17% hunt waterfowl. A few respondents hunt coyote. When asked to leave any comments about their hunting or trapping experience, hunters mentioned how they enjoy hunting at the park and that it is a unique and enjoyable place to hunt. Some hunters desired more access to the ORV area or other hunting access, or for designated parking areas to be better marked. A few hunters thought the area was too crowded. Five randomly selected comments are below:

Please enter any comments you may have about hunting at Silver Lake State Park.

- Been hunting Silver lake since 1977 my first deer camp. Lots of beautiful land to hunt.
- Hunting is essential to balance the ecosystem
- It's great
- Mark designated parking areas better, mark all of the available hunting area better and make a map and display it. I have to go to the county GIS system to actually figure out boundaries
- Need less duck hunters. Not enough ducks here to warrant what sounds like machine gun fire when they start shooting just before legal hours

Seasonal Recreation Uses

Some recreational uses at Silver Lake State Park include seasonal fat tire biking in the ORV area and seasonal horseback riding on a portion of the Lake Michigan shoreline. Two percent (2%) of respondents had used a fat tire bike in the ORV area during the winter – a total of 71 respondents. Satisfaction with this use was high, with 40% of respondents somewhat satisfied and 39% highly satisfied. Comments regarding the winter fat tire biking included several respondents very happy to be able to enjoy this unique recreational use. Some suggested improvements included increased signage, allowing access through the ORV entrance, and having a designated trail.

Five randomly selected comments follow:

Please enter any other comments you may have about seasonal fat tire biking at Silver Lake State Park.

- Wish we had fat tire biking open all year
- Not sure why the entire dunes are not open to fat tire bikes
- Whoever made the signage did an excellent job!
- So glad this is open and use is taking off. Adds something extra to do on my ice fishing trips.
- Needs additional signage stating fat tire bikes not allowed south of said line

Six percent (6%) of survey respondents, or 253 people, have

participated in seasonal horseback riding on the shore of Lake Michigan at Silver Lake State Park. Satisfaction with this use was quite high, with 67% of respondents highly satisfied and 23% somewhat satisfied. Many respondent's comments related to an immense enjoyment of this recreational opportunity and a desire to have the use season extended or have the experience be open in a warmer season. Five randomly selected comments follow:

Please enter any other comments you may have about seasonal horseback riding at Silver Lake State Park.

- A longer season, preferably when the weather is a bit more predictable... like mid-October thru the end of the November and another opportunity in April
- It is a beautiful opportunity. I wish we could have a late spring or summer weekend.
- November is a great time but the weather is more unpredictably cold than other months. Please consider allowing more than just one month. We love the area, would camp in the area as frequently as possible if the opportunity were available.
- This is an awesome opportunity to ride on the dunes to Lake Michigan in a safe manner.
- Would be nice to be able to do it more than once a year when the weather begins to turn wet and cold.

Other Thoughts

Finally, respondents could share any other comments they had about the park, and optionally submit a photograph of their experience. Over two thousand comments were submitted, many of which echoed statements made earlier in the survey, such as suggesting improvements to the operations, maintenance, and regulations of the ORV area; calling for a larger ORV area; requesting a way to drive ORVs from the campground or private residence to the scramble area; expanded horseback riding in the park; and allowing launching of boats when the boat trailer parking area is full. There were also many comments related to how much the respondents enjoy the park, how fun and iconic the experience is, and about the spectacular scenery of the dunes.

Five randomly selected comments follow:

Please share any other thoughts you may have on the park.

- Expand the parking area, it's always a cluster no matter what time you get there on the weekends and is the only drawback to going there.
- I mostly go to Silver Lake for the ORV use. Over the last few years me and my family and friends have found ourselves driving 10 hours more to little Sahara in Oklahoma because it's a bigger park compared to silver lake. We love silver lake but just wish it was a bigger riding area. It would obviously improve the riding experience since it won't be so crowded and there will be more land to ride.

- Keep doing a great job keeping people safe and happy doing what we love!
- Needs more area!!
- The Silver Lake State Park is a very important natural resource for the State of Michigan. The over one million visitors that make the trip from across the country to experience its unique blend of nature and excitement isn't found anywhere else east of the Mississippi. Continuing to provide and develop this experience for future generations is important to the local community and the state.

Survey participants could leave a photo of their experience at Silver Lake State Park, and over 1,000 images were submitted! These photographs will be used to bring the General Management Plan to life! The DNR appreciates everyone who took the time to participate in the survey.

B.2 Summary of Stakeholder Input Workshop

To gather targeted input from governmental, non-profit, and business/tourism entities, the planning team invited over 50 stakeholders, both individuals and community groups, to participate in a facilitated input workshop held on May 2nd, 2024, from 10:00 a.m. to 12:00 p.m. at Golden Township Hall in Mears, Michigan. Representatives of the Michigan Department of Natural Resources (DNR) provided the stakeholders with a brief overview of Silver Lake State Park, including its natural features, cultural resources, and recreational offerings.

The stakeholders listened to a presentation about the general management plan process, timeline, and an explanation of the plan elements that their input would inform: the statements of significance, the twenty-year management zone map, and actions intended to be accomplished over the next ten years.



Stakeholders present their table's discussion about Silver Lake State Park

Stakeholder Workshop Attendees

NAME	REPRESENTING
Ken Frieling	S. Juniper Beach Association
Justin Ilbrink	Oceana County Sheriffs Office
Nathan Ray	Lighthouse Grill & Concessions
Brett Penyer	Silver Back Off Road
Lynda Hughey	MHTA Horseback Riding
Julie Thomas	Sahara Sands Association
Michael Cook	SLRA Silver Lake Recreation Association
Doug Dykstra	Golden Township
Larry Byl	Friends of Silver Lake
Suzie Knoll	Oceana Conservation District
Dan Kolosci	Lighthouse Grill & Concessions
Randy Smith	OCRC
Mike Baker	Silver Back
Kelly Niepokuj	Silver Lake Buggy Rentals
Gale Carlson Smith	Duneland
Lloyd Miller	SLRA.org
William Kolenda	Golden Township
Tim Beggs	Oceana Co. Board
Craig Mast	Oceana Sheriff
Sean Henry	Sierra Sands Family Lodge
Steve Prudhomme	Grace Adventures
Jack Greve	SPLKA
Troy Maloney	Oceana County Emergency Management & Hart Fire Department
Jillian Farkas	USFWS
Brad Hastings	Disability Network West Michigan
Chris Bush	DNR
Scott Beal	SLSO Visitors Bureau
Dave Elrod	Friends of Silver Lake
David Maclean	Shoreline Cycling Club
Brian Pennings	Sahara Sands Association
Mark Timmer	Oceana County Road Commission
Amy Scharman Burgdolf	Equestrians
Scott Carlson	Duneland
Mark Rippee	SLBR

The stakeholders were divided into small discussion groups around a numbered table (either 1, 2, 3, 4, 5, or 6). They worked together to complete a series of exercises discussing the park's current status, and the stakeholders' vision for the park's future, and opportunities for partnerships. Each table then reported out to the larger group. The results of the table exercises are outlined in the following summary.

Icebreaker Question

When the stakeholders introduced themselves, they were asked to describe what matters most to them about Silver Lake State Park. Their recorded responses follow in the table below.

What matters most to me about Silver Lake State Park is...

STATEMENT
Giving safe access to guests/residents
A good relationship between SJBA & DNR
Horseback shoreline riding season
Balancing recreational & ecological value of the park
A beautiful scenic area where I can experience the flowing of the dunes
Silver Lake water quality
It's a park that manages the natural resources while providing an environment for public enjoyment
Helping the ORV area open and continuing to increase guest enjoyment
Keeping my family involved in the Dune community as long as I possibly can
Accessibility
To maintain the ability for fat tire bicycles to be able to enjoy the use of the sand dunes during the winter months
Freedom to do as you please in the sand, ORVS, etc...
Everyone enjoys it
Keep ORV area
Continued access to park and Lake Michigan for adjacent property owners
Safety Lighthouse Drive
Local economic health
Maintain ORV area to stay open, no voucher system, more community involvement
The ability/freedom to enjoy the dunes with my friends & family
The opportunities provided for ORV recreation, natural beauty, and jobs brought to the area. Provides me with a job I Love. Brings joy to others.

Exercise 1: Say one word or phrase that describes the state park right now.

Commonly mentioned words or phrases that stakeholders used to describe the park related to how unique the park and sand dunes feel and how beautiful the diversity of the natural environment is. They spoke of the large amounts of varying recreational opportunities, open to all ages in a family-friendly manner. Several respondents did note that the park can become quite busy and congested in the peak season, with antiquated facilities and outdated infrastructure.

WORD OR PHRASE	MENTIONED AT TABLE #
Unique	1, 4, 6
Destination	3, 4
Diversity	4, 5
Dunes	1, 4
Family friendly	2, 4
Fireworks	1, 2
Lighthouse	1, 2
Access to Lake Michigan	3
Antiquated facilities	6
Beautiful	4
Big pile of sand	5
Biking	2
Bustling	4
Busy	1
Camping/lodging	2
Cash cow for state	3
Closed access	1
Dangerous	1
Economy	2
Entertaining	2
Equestrian (horses)	2
Fishing	3
Fun	4
Gathering	2
Generation transitions	3
Grief & aggravation	6
Hiking	2
Instagram driven	5
Jewel	4
Lack of trails (bicycle, hiking)	3
Lack of Upgrades	3
Lake Michigan & beach	4
Off roading	3
Organized chaos	5
ORVs	2
ORVs, horses, bikes	1
Over influenced	5
Permits	6
Plovers	1
Recreation	2
Restaurant	2
Sand dunes	3
Shoreline	1
Summer congestion (lighthouse esp.)	3
Tourism	1
Under budgeted	5
Under valued/appreciated	4

WORD OR PHRASE	MENTIONED AT TABLE #
Understaffed	5
Vacation	1
Well-known	1
Well-used	3
Working toward fun w/family	6

Exercise 2: Say one word or phrase that you want to describe the state park in the future.

When stakeholders thought about how they would like to describe the park in the future, there was a wide variety of answers. They desired a park that was safe, accessible, and well-maintained all year round. They spoke of increased recreational opportunities such as expanded trails and educational programming. Furthermore, several people noted that they wanted the park to invest in maintenance and facilities upgrades, such as new bathrooms and widened entry roads.

WORD OR PHRASE	MENTIONED AT TABLE #
Increased safety	2, 3, 4, 5
Accessible	1, 2, 3
Hiking trails	3, 4, 5
Educational opportunities	4, 6
Year-round utilization	3, 4
Bathrooms	1
Beautiful/remote	1
Better access to lighthouse	4
Better parking (capacity & options)	5
Better regulation of ORV renters	5
Better staffing	5
Capacity of ORVS	5
Cleaner lakes	3
Critical dunes	6
Historical preservation	4
Hot tourist destination	3
Keep park unique	6
Keep working towards family fun	6
Maintain assets	4
Maintain wildlife habitat	1
Maintenance	2
More access to Lake Michigan	3
More biking trails	3
More organized	5
More scramble area	6
No additional regulations or restrictions	2
Open for ORV Use	2
Remember where the money is coming from	6

WORD OR PHRASE	MENTIONED AT TABLE #
Road accessibility	1
Sept. 15 to Nov. 14 equestrian access	1
Thoughtful development (infrastructure)	2
User friendly	4
Well managed – all encompassing, active communication	1

Exercise 3: What improvements or changes would you like to see at the state park? What things would stay the same?

Stakeholders discussed a broad array of possible improvements to the park, as well as elements of the park they would like to see remain the same in the future. Each idea was suggested, discussed, and voted on within each table group. Themes that the stakeholders currently liked about the park and thought should stay the same included keeping the ORV area open and maintaining the current season and open hours. Maintaining seasonal access for bikes and horse, preserving the dunes, and respecting closed wildlife areas were also noted as key aspects of the park that should remain unchanged.

The stakeholders also suggested several ideas for potential improvements to Silver Lake State Park. The major theme was improving transportation, connectivity, and safety, both for motorized and non-motorized uses. Attendees wanted to invest in vehicular infrastructure throughout the park, including developing new roads and access points to the lighthouse and expanding existing roads and parking. Attendees also wanted to develop new biking and hiking trails and explore connecting the park to the Hart Montague Trail.



A stakeholder presents the results from their group

Stay the Same

ITEMS	TABLE #	TOTAL VOTES
Keep ORV area	2, 3, 4, 6	18
Season & hours; dune open and close date	2, 5	9
Bike & horse access – non-motorized	1, 2	6
Fox Road access to parking	5	5
Preserve dunes	3	4
Respect for closed wildlife areas	1	3
Tourism support	1	3
Maintaining natural resources for all	1	3
Campground	3	3
Bathrooms stay but moved to pedestrian area	6	3
Maintain dune ready status	2	2
Mac Woods	3	2
Scenic views of dune & water	4	1
Allowing other activities during off season	5	1

Improvements or Changes

ITEMS	TABLE #	TOTAL VOTES
Developing new roads to lighthouse (safety)	3, 4	11
Expand parking at lighthouse	3, 4, 5	9
More biking & hiking trails (SW area towards lighthouse)	3	6
Invest in infrastructure by state	3	6
More ORV area	6	6
Widened/improved roadways	1	5
Marked trails in backcountry	4	5
Emergency parking	5	5
Improved road to lighthouse	5	5
Electronic reservations	5	5
Only State concessions holders renting on dunes	6	5
Additional staffing/more full-time vs seasonal	2	4
Address sewage issue	4	4
Emergency access markings	5	4
More pedestrian parking	5	4
Non-motorized camping opportunities	1	3
Increased trail access	1	3
Increased/improved cellular service	1	3
No vouchers online	2	3
Bike path from town to lighthouse Hart-Montague Trail	2	3
Year-round utilization	4	3

ITEMS	TABLE #	TOTAL VOTES
Overflow boat ramp parking	6	3
Bathrooms in pedestrian area (safety & health)	6	3
South end equestrian route	1	2
Increased safety education	1	2
Pedestrian area access	2	2
Wayfinding signage in park & community	2	2
Additional boat launch	2	2
Bathrooms at dune side of Silver Lake & lighthouse	3	2
More garbage cans	5	2
Faster enforcement vehicles	5	2
Attitude about rules of road on dunes	6	2
Portion of parking vouchers online	2	1
Playground for young kids	4	1
Protect rare plants & animals	4	1
Improve fishing	4	1
Additional swim beaches	1	0
Heated restroom facilities for Nov.	1	0
Additional access to lighthouse	2	0
Food trucks in pedestrian area	6	0

Exercise 4: What are some collaboration and partnership opportunities that the state park presents for local communities and stakeholders?

Stakeholders mentioned many organizations with potential opportunities to collaborate with Silver Lake State Park. Many local businesses were named as opportunities to expand existing and develop new recreational opportunities, such as concessions and ways to use the scramble area. Volunteering and educational opportunities were readily mentioned, with partnership opportunities including the local school systems and conservation organizations.

GROUP OR STAKEHOLDER NAME	COLLABORATION OR PARTNERSHIP IDEA	TABLE #
All	Include DNR in event as educational opportunity	1
All	Generate volunteerism / understanding of others work	1
All	Open communications line / point of contact	1
All	Advertising parameters	1
All	Offer opportunities to share viewpoints	4

PUBLIC AND STAKEHOLDER INPUT

GROUP OR STAKEHOLDER NAME	COLLABORATION OR PARTNERSHIP IDEA	TABLE #
All	Show how ecotourism could generate revenue	4
All	Develop trust between stakeholders	4
All	Economics recreation fun	4
All	Public education re: ORV	6
All	Logic based rules	6
All	Not a highway	6
All	Pictures & video	6
All	Keep sand in the dunes	6
Biking Group	Provide support for new programming (bathrooms/ warming shelters)	2
Community	Including community in clean up days / volunteerism	1
Conservation Organizations	Provide educational opportunities	4
Disability Network	Provide input for accessibility & fund raising	3
Duneland	Coordinate/host new opportunities to play in sand	6
Emergency Services	Improve access roads to lighthouse for safety	4
Equestrian Group	Signage	2
Friends of Silver Lake	Health of Silver Lake	2
Golden Township	Local input & support to health & safety	3
Golden Township	Alternative access to lighthouse	3
Golden Township	Bike access trails from Hart-Montague trail	3
Government Entities	Financially share burden	4
HAFD	Emergency access with DNR, access markers with SLRA & Friends of Silver Lake	5
Hart Public Schools	Volunteer opportunity	2
Lighthouse Grill	Continue to allow concessions & encourage people to dispose of trash correctly	5
Local Businesses	Extend "open" season – add year round activities	3

GROUP OR STAKEHOLDER NAME	COLLABORATION OR PARTNERSHIP IDEA	TABLE #
OCRC	Fox road – annual meetings regarding traffic/maintenance, traffic counters	5
OCSO	State park for general operations, township & roads commission continue to give support for ORV enforcement with SXS or other special vehicles	5
Recreation Users	Community needs / desires of stakeholders	1
Recreation users	Invite DNR to enjoy stakeholder activities	1
Road Commission	Balance road maintenance with tourism	2
Sheriff Department	Improved staffing & presence	2
Silver Back Off Road	Offer dune rides in scramble area	6
Silver Lake Buggy Rental	Honor established agreements, provide rental companies w/ state protection	6
SLARA	Interested in collaboration with more than ORV community	2
SPLKA (Lighthouse)	Improved infrastructure, new structure for lighthouse	2
St. Juniper Beach	Maintain food working relationship, continued communication	2
Tourists, Business Owners, Residents	Offer specialty weekends	4
Visitors Bureau	Info of safety, help with wayfinding signage	2

Final Exercise: Collective Priorities

The top items from exercise three were transferred to a collective priorities exercise, allowing everyone in the session to vote on their favorite three ideas. Out of the ideas generated, two ideas with high vote totals were to pursue an alternative road to the lighthouse, and to improve the existing road to the lighthouse. Keeping the ORV area open and expanding its size was also listed as an important priority.

PRIORITY	VOTES
Pursue alternative road to lighthouse	15
Keep ORV area open	12
Improved road to lighthouse	11
Invest in infrastructure	10
Expand ORV area	7
Add marked trails in backcountry	7
Additional staffing	7
Limit to state concession on dunes	5
Maintain bike & horse trails	4
Electronic reservations	3
Maintain Fox Rd. access to parking	3
Address sewage issue	2
Maintain season & hours	2
Create emergency parking	1
Widen/improve roadways in general	1

B.3 Tribal Engagement

The following letter was sent via email on April 19, 2024 to:

- Grand Traverse Band of Ottawa and Chippewa Indians
- Little River Band of Ottawa Indians
- Nottawaseppi Huron Band of the Potawatomi
- Little Traverse Bay Bands of Odawa Indians
- Match-E-Be-Nash-She-Wish Band of Pottawatomi (Gun Lake Tribe)

Honorable Tribal Leaders:

The Parks and Recreation Division (PRD) of the Department of Natural Resources (DNR) is in the process of developing a new general management plan for Silver Lake State Park in Oceana County.

Silver Lake State Park encompasses over 3,000 acres, with more than 3 miles of Lake Michigan shoreline. The park is home to nearly 2,000 acres of sand dunes, a modern campground, a day-use area and boat launch on inland Silver Lake, the Little Sable Pont Lighthouse and a popular 500-acre ORV scramble area. The park also offers seasonal opportunities for shoreline horseback riding season and fat-tire biking in designated areas of the park. The dunes feature areas of open dunes with sparse vegetation, interdunal wetlands and areas of high-quality Great Lakes barrens. Rare species in the open dunes include the federally endangered piping plover, federally listed Pitcher's thistle, and state-threatened broomrape.

The DNR uses general management plans (GMPs) to define a long-range planning and management strategy that will protect the natural and cultural 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 online survey has garnered over 5,000 responses from park visitors and a stakeholder workshop is scheduled for May 2, from 10am to 12pm at Golden Township Hall, 5527 W. Fox Road, Mears, to solicit input from organizations with an interest in the park. In addition, the draft plan will be available for review and comment prior to adoption in the fall of 2024.

We would like to offer you the opportunity to meet with us to discuss the management plan process and any thoughts you may have in relation to this property. Please contact Ms. Debbie Jensen, PRD Management Plan Administrator, at Jensend1@michigan.gov, if you have any questions or if you would like to arrange a meeting. You are also welcome to send a representative to the May 2 stakeholder meeting.

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

If you have any additional questions, please do not hesitate to contact Debbie Jensen or myself.

Respectfully shared,

Craig A Brunet
 Director, Legislative and Legal Affairs Office & Tribal Liaison
 Executive Division, Michigan Department of Natural Resources
 Constitution Hall, 525 West Allegan Street
 P.O. Box 30028
 Lansing, MI 48933
 (517) 331-5350
brunetc@michigan.gov

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Appendix C:

Opinion of Probable Costs

C.1 State Park Funding

The primary funding sources for state park improvement and development projects are Recreation Passport sales (motor vehicle registration fee), the Park Endowment Fund (generated from royalties from oil, gas and mineral extraction on public land) and the Park Improvement Fund (from camping and other state park user fees). The annual capital outlay budget for state parks varies significantly from year to year, averaging approximately \$14 million per year over the past five years. Although this funding will have a big impact, the amount of need is still estimated to be in the hundreds of millions due to the aging infrastructure in the state park system.

With such a large gap between financial need and budget, all projects are carefully analyzed to look at innovative solutions to increase efficiencies or downsize assets.

C.2 Estimated Cost of Proposed Developments

The following table provides an estimate of probable cost for each capital outlay development project proposed at Silver Lake State Park over the next ten years. Management and operations actions, small projects, which are funded out of district or park funds, and those lead by partners, are not included in this list but may have additional financial

implications. The costs are based on information available at the time and will be refined as conceptual and detailed designs are completed. Where noted, the costs may only include studies or project planning, which will provide direction for development costs if determined appropriate. The costs are based on 2022 prices and should be adjusted according to the consumer price index and the market at the time of implementation.

The following action items are ranked in terms of priority based on health, safety, and welfare, as well identified need and 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.

PRD will seek future internal funding, alternative funding sources, partnerships and other potential mechanisms for implementing the desired future conditions defined in this plan. Costs listed below do not guarantee funding. 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.

Infrastructure and Development: Capital Outlay Opinion of Probable Cost

ACTION ITEMS	PRIORITY	OPINION OF PROBABLE COST
Implement soft shore erosion control techniques to stabilize and improve the Silver Lake shoreline near the campground and day use area.	2	\$175,000
Evaluate and make recommendations for day use access and parking improvements in the Silver Creek area, including Ruckle's Bridge and Termite Bridge.	2	\$300,000
Repave campground roads.	3	\$1,300,000
Develop a conceptual plan for campground improvements considering full hook-up, pull-through and/or accessible campsites, upgraded electrical service, sanitary and water system improvements, and an additional dump station.	3	\$75,000 Design Only
Implement improvements to the pedestrian dune parking area to expand parking and improve circulation in accordance with the master plan.	3	\$3,125,000
Implement parking area improvements at the lighthouse, dependent on the outcome of the lighthouse day use area study.	3	\$450,000
	TOTAL*	\$5,425,000
*EXCLUDES COSTS YET TO BE IDENTIFIED BY STUDIES TO DETERMINE BEST WAY TO PROCEED AND COSTS ASSOCIATED WITH PROJECTS THAT ARE ALREADY FUNDED.		

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Appendix D:

Agreements

Big Sable Point Lighthouse Keepers Association

P.O. Box 673 • Ludington, Michigan 49431
(231) 845-7343

Big Sable Point Lighthouse Keepers Association Operation, Restoration, and Maintenance Plan for Little Sable Point Light Station Silver Lake State Park

For approximately 18 years, Big Sable Point Lighthouse Keepers Association has maintained and operated Big Sable Point Lighthouse as an historic site open to the public. To further its mission of supporting and educating the public in maritime history, the Association is interested in obtaining a lease from the State of Michigan, Department of Natural Resources, for Little Sable Point Light Station. Following is a list of the Big Sable Point Lighthouse Keepers Association's intended goals for the future operation and maintenance of Little Sable Point Light Station.

Operation

- * Open the Little Sable Point Light Station to the public
- * Staff the light station with volunteers and/or employees
- * Offer educational programs and exhibits
- * Research and document the history of the site

Restoration

- * Clean and paint the interior
- * Install handrails
- * Upgrade electrical system, and other areas, as needed
- * Install handicap accessible walkways with input and approval of the DNR
- * Install Michigan Historical Marker

Maintenance

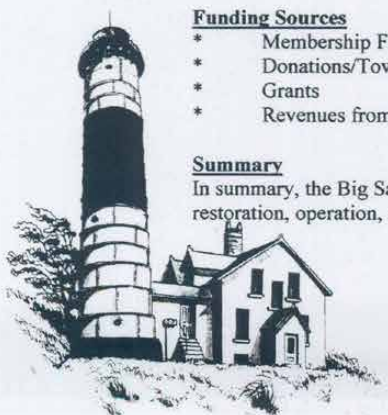
The Big Sable Point Lighthouse Keepers Association intends to maintain the structure in a manner dictated by the U.S. Coast Guard and the History, Arts & Libraries (HAL) Department and in compliance with the National Historic Preservation Act. The Association assumes full responsibility for all restoration and maintenance projects. All routine maintenance will be performed without the involvement of the lessor.

Funding Sources

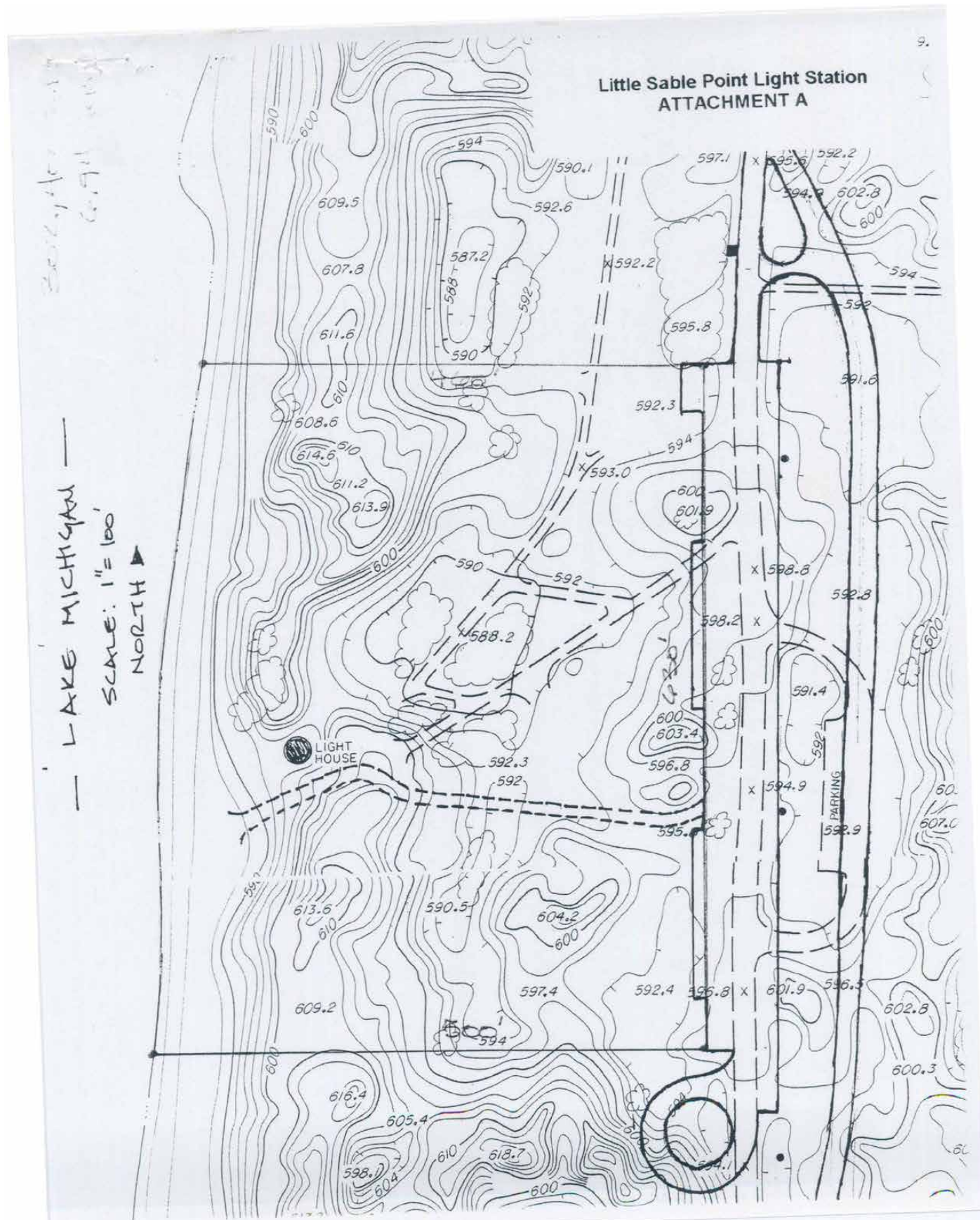
- * Membership Fees
- * Donations/Tower Tours
- * Grants
- * Revenues from Gift Shop Sales

Summary

In summary, the Big Sable Point Lighthouse Keepers Association is poised to provide the restoration, operation, and maintenance of the historic Little Sable Point Light Station.



Little Sable Point Light Station
ATTACHMENT B



DNR Michigan Department of Natural Resources - Human Resources

PUBLIC INCIDENT REPORT

(See DNR Administrative Procedure 6.8-1).

If this accident required the use of an Automated External Defibrillators (AED), the R 7223, Reporting the MDNR Use of Automated External Defibrillators (AED), must also be completed

☐ Personal Injury ☐ Property Damage ☐ Complaint ☐ Other

BUREAU/DIVISION/OFFICE	FACILITY (i.e. park, access site, hatchery name)	DATE OF INCIDENT	TIME	REPORT NO.
------------------------	--	------------------	------	------------

FACILITY ADDRESS	EXACT LOCATION OF INCIDENT WITHIN FACILITY
------------------	--

NAME, ADDRESS, AGE OF PERSON(S) INVOLVED	TELEPHONE NUMBER(S)
	() -
	() -
	() -

DETAILS OF INCIDENT (Include number of persons involved, weather information, license numbers, type of vehicle or equipment, etc.)

Little Sable Point Light Station ATTACHMENT C

WHAT CONDITION(S) OR HAZARD(S) CAUSED INCIDENT

ACTION TAKEN (Use reverse side, if needed)

WITNESS(ES)	Name(s)	Address(es)	And	Telephone Number(S)	Statements
				() -	<input type="checkbox"/> Statement attached
				() -	<input type="checkbox"/> Statement attached
				() -	<input type="checkbox"/> Statement attached
				() -	<input type="checkbox"/> Statement attached
				() -	<input type="checkbox"/> Statement attached
				() -	<input type="checkbox"/> Statement attached

FIRST AID RENDERED (Explain how) BY WHOM (include telephone number)

DOCTOR OR HOSPITAL REFERRED	TELEPHONE NO.	LAW ENFORCEMENT AGENCIES RESPONDING TO CALL
	() -	

ESTIMATED MATERIALS	LABOR	TOTAL COST	TOTAL STAFF TIME INVOLVED
DAMAGE REPAIR COSTS \$	\$	\$ 0.00	

DNR EMPLOYEES INVOLVED Name(s),	Telephone Number(S)	DNR EMPLOYEES INVOLVED Name(s),	Telephone Number(S)
	() -		() -
	() -		() -
	() -		() -

REPORTING EMPLOYEE'S SIGNATURE	DATE	FACILITY MANAGER'S SIGNATURE	DATE
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DISTRIBUTION: ORIG - Bureau/Division/Office; COPY - Office of Legal Services; COPY: Incident location

R1004E (Rev. 04/26/2004)