

Horseshoe Lake State Game Area Master Plan  
Michigan Department of Natural Resources



**MICHIGAN DEPARTMENT OF NATURAL RESOURCES**

**WILDLIFE DIVISION**

**JULIE OAKES**

**OCTOBER 2016**

## **Intended Purpose and General Management Direction**

The Horseshoe Lake State Game Area (SGA) was dedicated on January 14, 1977. The Natural Resources Commission dedication memo indicated that “the area exhibits important wildlife cover and diverse physical features that will insure expanded hunting, fishing and other recreational activities in an area close to metropolitan population centers.” The SGA is located in the Southeast Region (SER) of the Lower Peninsula of Michigan. The Horseshoe Lake State Game Area is in Section 10, T5N, R10E (Oxford Township) in northeastern Oakland County. This area provides hunting and outdoor oriented recreational opportunities for residents of Oakland, Macomb, Wayne, Genesee, and Lapeer County areas.

The Horseshoe Lake SGA consists of approximately 422 acres. The Horseshoe Lake Property originally came into State ownership on December 30, 1922 as a gift from Howard B. Bloomer. Several other Oakland County parcels were donated to the State by Mr. Bloomer at the same time. Mr. Bloomer was the attorney for the Dodge Brothers, automotive industry millionaires. During the early 1920's, the Dodge Brothers and Mr. Bloomer donated many parcels of land to the State for public recreational use (Figure 6).

The original deed required that the area be managed for public recreation and it directed that disposal of the land, if necessary, would be to local units of government or such agencies that could retain the land for its original park purpose. The Parks and Recreation Division of the Michigan Department of Conservation were given administrative control of the Horseshoe Lake parcel and the Conservation Commission dedicated it as the Dodge Brothers State Park #7 in 1923.

On October 16, 1947, Parks Division declared the property unsuitable for State Park purposes. The Game Division then accepted administrative responsibility for the parcel.

The Wildlife Division again initiated action to have Dodge Park #7 rededicated as a State Wildlife Area. A Commission memo regarding this action was prepared in December 1976 and was approved by the Natural Resources Commission at their January 14, 1977 meeting. The area was officially dedicated as the Horseshoe Lake State Wildlife Area. The area was later changed to a State Game Area. The Initial 237 acres of land were acquired by donation and between 1985 and 1991 four additional parcels were purchased with Natural Resources Trust Fund dollars.

The featured wildlife species for the SGA are: eastern wild turkey, white-tailed deer, and the eastern massasauga rattlesnake (EMR). There have been little active habitat management activities on the area due to its location, accessibility and small size. Maintenance of the parking area is the main infrastructure work completed annually on the game area.

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## Background

At a local level, this plan helps fulfill goals and objectives of other higher level Michigan Department of Natural Resources and Wildlife Division plans and initiatives. The Department goals (protect natural resources, sustainable recreation, strong natural resource-based economies, and strong relationships and partnerships), the Wildlife Division's Guiding Principles and Strategies (GPS) goals for securing the future of Michigan's Wildlife : More Bang For Your Buck concepts (outstanding grouse, woodcock and turkey hunting, challenge of small game hunting, and great diversity of high quality waterfowl hunting), the Division's Southeast Regional Operational Plan, the Governor's Evergreen Goals and it also supports the goals and objectives in the Michigan Wildlife Action Plan (WAP).

## Wildlife Species

True to the intended purpose of the SGA when it was dedicated in 1977, we continue to focus our efforts on species and habitats that help meet our goals to provide quality hunting opportunities and access for fishing.

**Table 1.** A list of species projects to be worked on during this planning period, reflecting opportunities for habitat or recreational management.

<b><i>Common Name</i></b>	<b><i>Featured Species</i></b>	<b><i>T&amp;E, SC Species</i></b>	<b><i>Climate Change Vulnerable</i></b>	<b><i>Remarks</i></b>
Eastern Massasauga Rattlesnake	<b>Yes</b>	<b>Yes</b>	<b>No</b>	Maintain hydrology
White-tailed deer	<b>Yes</b>	<b>No</b>	<b>No</b>	Grassy openings and Mast trees.
Wild Turkey	<b>Yes</b>	<b>No</b>	<b>No</b>	Grassy openings and Mast trees

## EMR CCAA

The Horseshoe Lake SGA is enrolled in the Candidate Conservation Agreement with Assurances for the Eastern Massasauga Rattlesnake (EMR). This agreement is between the Michigan Department of Natural Resources (MDNR), Michigan Department of Military and Veterans Affairs (DMVA), and U.S. Fish and Wildlife Services (USFWS). The concept behind the CCAA is to capitalize on the opportunity to conserve the

candidate species while reducing the uncertainty that landowners face when managing lands with candidate species. By enrolling the SGA in this agreement, the DNR agrees to follow a strategy that addresses EMR conservation at a landscape perspective for this area. The CCAA provides management guidelines that provide a framework to protect EMR population. Any management done on the SGA will follow these habitat guidelines outlined in the CCAA. The complete document can be found online <https://www.fws.gov/midwest/endangered/permits/enhancement/ccaa/eamaMI/index.html>

On September 30, 2016, the USFWS determined the status of the EMR be changed to “threatened.” More information and the complete document can be found at the following: <https://www.fws.gov/Midwest/endangered/reptiles/eama/index.html>

Eastern Massasauga	
<b>Status:</b>	Proposed as Threatened; 2015
<b>Habitat:</b>	Open to forested wetlands and adjacent upland areas
<b>Lead Region:</b>	3
<b>Region 3 Lead Office:</b>	<a href="#">Chicago, Illinois Field Office</a>
<b>Range:</b>	Illinois, Indiana, Iowa, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, and Ontario

## Existing Conditions

Much of Horseshoe lake SGA is low and marshy with small permanent and intermittent streams draining the area. Horseshoe lake, the body of water for which the project was named, is located in the eastern edge of Section 10, T5N, R10E. The eastern boundary of the SGA includes a small stretch of marshy frontage on the lake. Horseshoe Lake is a 15.4-acre lake with a steeply sloping shoreline and a maximum depth of 47 feet. There is also a deep, 3-acre pond located in the northwest corner of the section.

This area has not been surveyed by Michigan Natural Features Inventory and it has not had a Stage 1 cover-type inventory completed to date. The SGA is fairly level lowland site with little variation in elevation. The northern 2/3 of the area is a mixture of upland and lowland hardwoods (including maple, oak, and aspen) without any substantial openings. The eastern part of the SGA is cattail-marsh and the southern part of the

SGA is an emergent wetland. Dominant vegetation includes reed canary grass (*phalaris arundinacea*), Cattail (*Typha* spp.), and invasive phragmites (*Phragmites australis*). The soils consist of poorly drained Houghton and Adrian Muck in lower elevations to loamy sands in the upland areas.

Enbridge Energy maintains a pipeline that crosses the southern boundary of the area. The pipeline has a granted easement and use permits are issued for maintenance of the pipeline. Easy access to monitor the pipeline is often granted by the landowner to the south. A trail and gate from the gravel pit, gives access to the pipeline. The portion of the pipeline that crosses through the SGA was replaced in 2013.

## **Recreational Use**

The primary recreational use on the area is deer hunting. This portion of Northern Oakland County is often referred to as a hot spot for deer. Most private landowners in this area have large tracts of land and lots of deer habitat. This makes this SGA a popular spot on opening day of firearm deer season. Turkeys were reintroduced to Horseshoe Lake SGA in 1989. A total of 15 hens and 5 Toms from Iowa were released here in 1989. Turkeys are now common in the area. This area also supports small game such as cottontail rabbits, fox squirrels, grouse and woodcock. Waterfowl use is limited since the SGA doesn't own any part of the lake for which it is named after (Horseshoe lake). The SGA property does touch the edge of the lake at one point about ½ mile south east of the parking lot, but because of the distance, terrain, and the rapid drop off on the shoreline, it is unlikely that any improvement to this access point will be developed, and therefore little potential to increase fishing opportunity. There is some occasional shoreline fishing that occurs here to those that find their way.

## **Impacts on the Local Economy**

Contributions to the local economy resulting from activities on the SGA are limited since there is no sharecropping. Currently no timber harvests are planned. In the future, firewood harvest could be possible but anything that would allow timber to be harvested could open the area to ORV and other illegal use. This property is used by hunters especially during firearm deer season which provide a direct boost to local restaurants, sporting goods stores, convenience stores and gas stations.

## **Management Direction**

The desired future condition for the Horseshoe Lake SGA is outlined in the table below.

**Table 2. Future desired condition for Tamarack Lake SGA.**

Cover Type	Desired Future Condition	Action Needed
Lowland forest	Maintain	Monitor for invasive species
Upland forest	Maintain	Complete Stage 1 Inventory.  Determine forest management goals based upon inventory.
Lowland brush	Maintain	Monitor for Invasive species
Marsh	Maintain	Monitor for invasive especially Phragmites and develop plan to address
Grassland/Opening	Increase	Consider purchase additional land that can be converted to grasslands and wildlife openings
Open water	Increase	Consider purchase of adjacent land that has open water for waterfowl and fishing recreation

## Goals, Objectives, and Management Actions

### Goal I – Sustainable populations of white-tailed deer and eastern wild turkey on Horseshoe Lake State Game Area

#### Objective A – Maintain lowland forest, shrub and wetland cover

**Action** – Monitor for invasive species and develop treatments for control

**Action** – Monitor for any changes that negatively affect hydrology

**Action** - Restrict activities that would have negative impacts (illegal use)

#### Objective B – Maintain forested areas for hard and soft mast production.

**Action** – Obtain stage 1 inventory at Horseshoe Lake SGA using MNFI contract to determine cover type composition.

**Action** – Evaluate stage 1 inventory (once completed), with future SER forester, to determine if forest conditions warrant habitat improvement for featured species.

**Action-** Evaluate stage 1 inventory (once completed) to determine if forested management treatments are needed to improve future mast production.

**Action** – Evaluate feasibility of future habitat improvements and accessibility to area to conduct them.

**Objective C-** Prevent spread of invasive species

**Action** – annually monitor for invasive species.

**Action** – Treat invasive species where possible.

**Objective D** – Maintain hunter satisfaction

**Action** – Continue to do opening day firearm deer season hunter surveys

## **Goal II – Sustainable populations of Eastern Massasauga Rattlesnakes**

**Objective A** – Verify presence of EMR at the SGA

**Action** – Recommend contract MNFI to survey area for rare species including EMR

**Objective B** – Maintain hydrology

**Action** – Follow CCAA guidelines and avoid management that would affect hydrology

**Objective C** – Prevent spread of invasive species

**Action** – Annually monitor and evaluate for invasive species

**Action** - Follow CCAA guidelines for treatment of invasive species

## **Goal III – Provide access to the SGA to enhance wildlife-based recreation.**

**Objective A** – Maintain current parking area.

**Action** – Monthly monitor the condition of the parking area and take corrective action as needed.

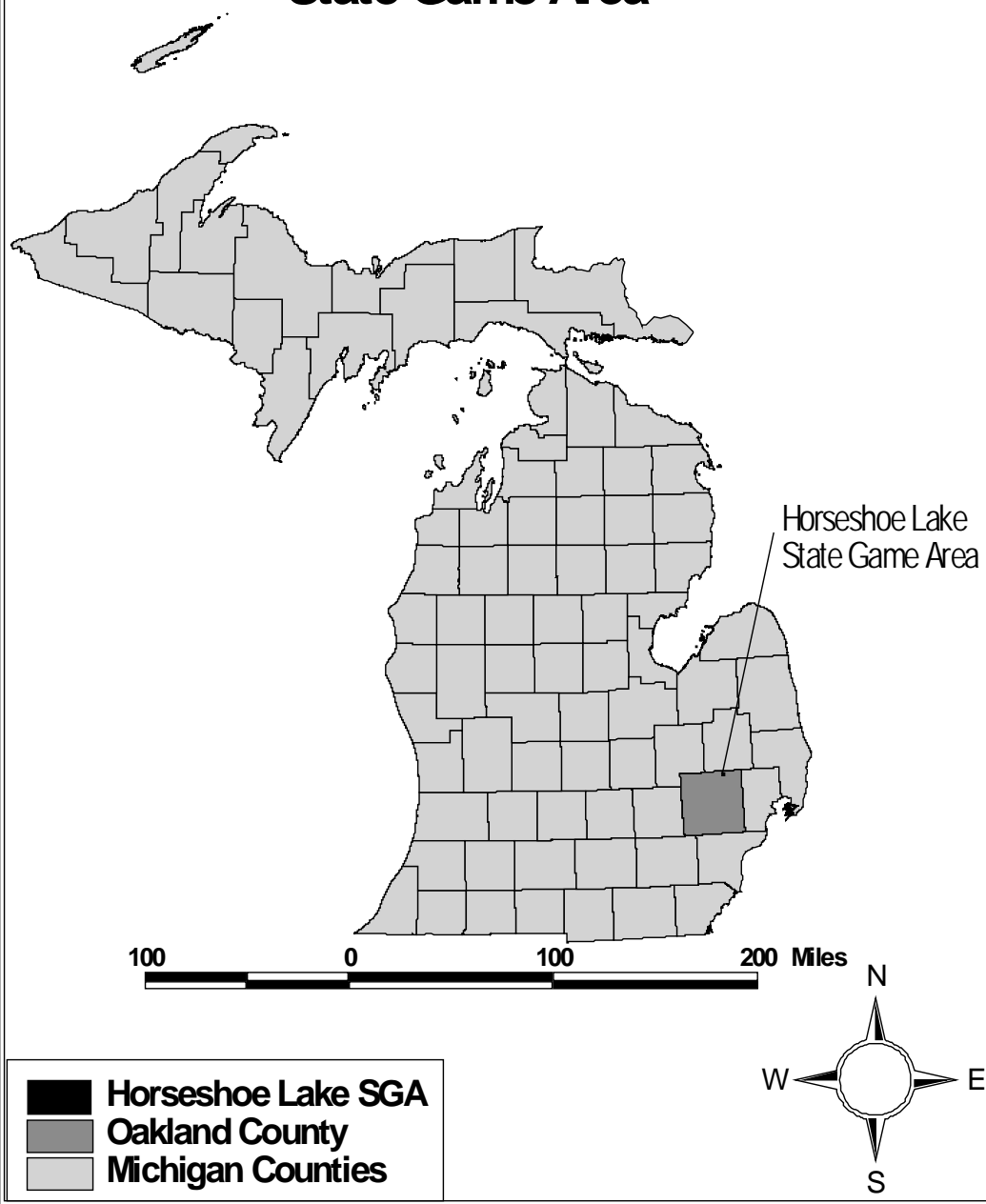
**Action** – Maintain boundary signs

**Action-** Monitor for trespass.

## **Acquisition and Disposal of Land**

This is an important SGA that provides recreational opportunities to the local residents and visitors. The goal is to continue to provide recreational opportunity especially in southeast Michigan where most residents live. It would be desirable to obtain additional land to increase the number of acres and to provide some open grassland areas as well as open water if available to provide more wildlife recreation (including fishing opportunity) and benefit featured species. The land acquisition strategy is to block in state ownership boundaries and expand the area when possible within the acquisition boundary. This SGA is bordered by two large gravel pits (approximately 500 acres each) to the west and south of the SGA. Acquisition of these parcels would increase the land base and make the SGA more desirable for wildlife recreation. Parcels will be evaluated as they become available for potential purchase.

**Figure 1. Location of Horseshoe Lake State Game Area**





**Figure 2. Location of Horseshoe Lake State Game Area in Relation to Detroit Metropolitan Area and the Tri-county Area (Oakland, Monroe, and Wayne Counties)**

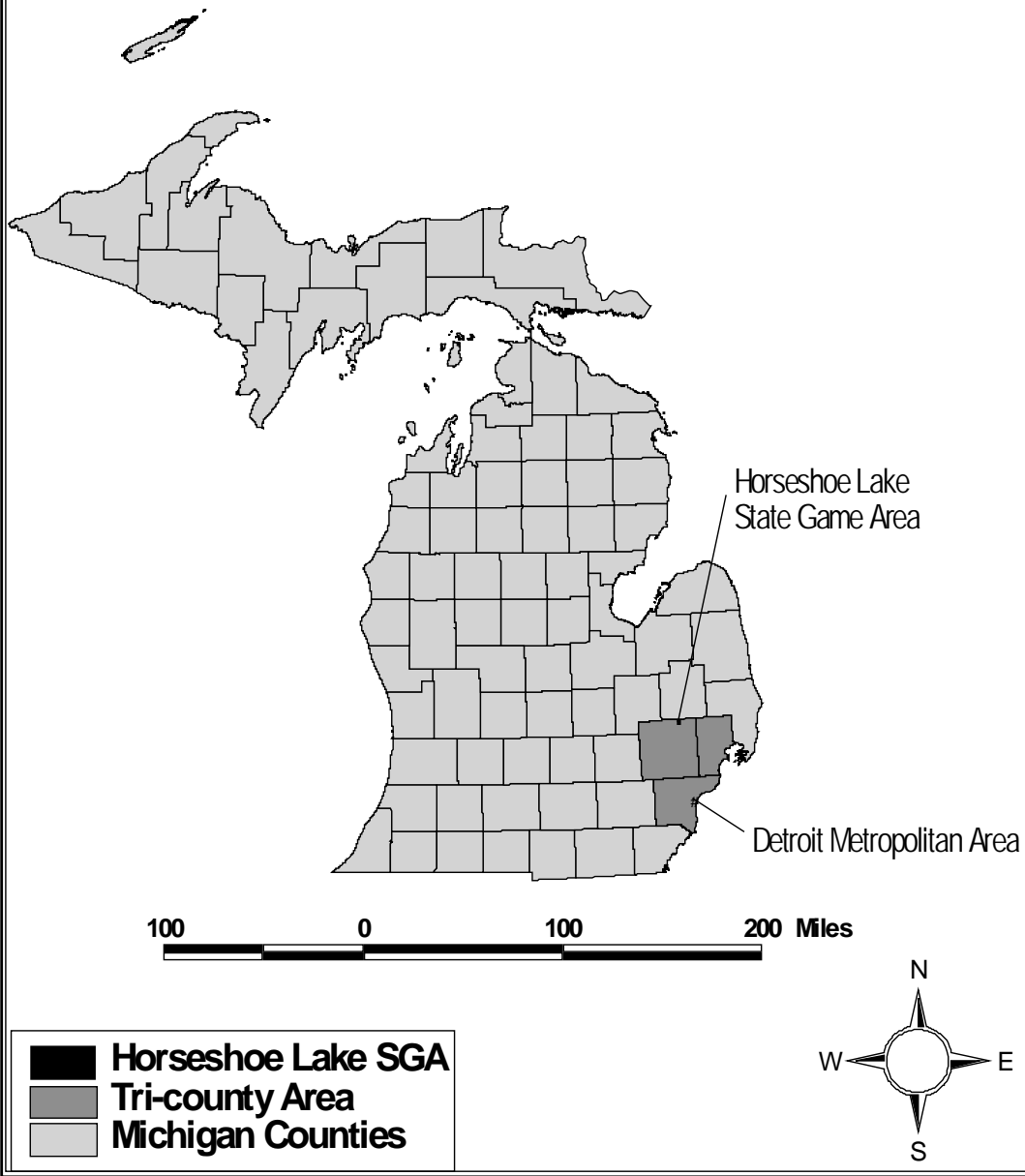


Figure 3. Road Atlas for Horseshoe Lake State Game Area

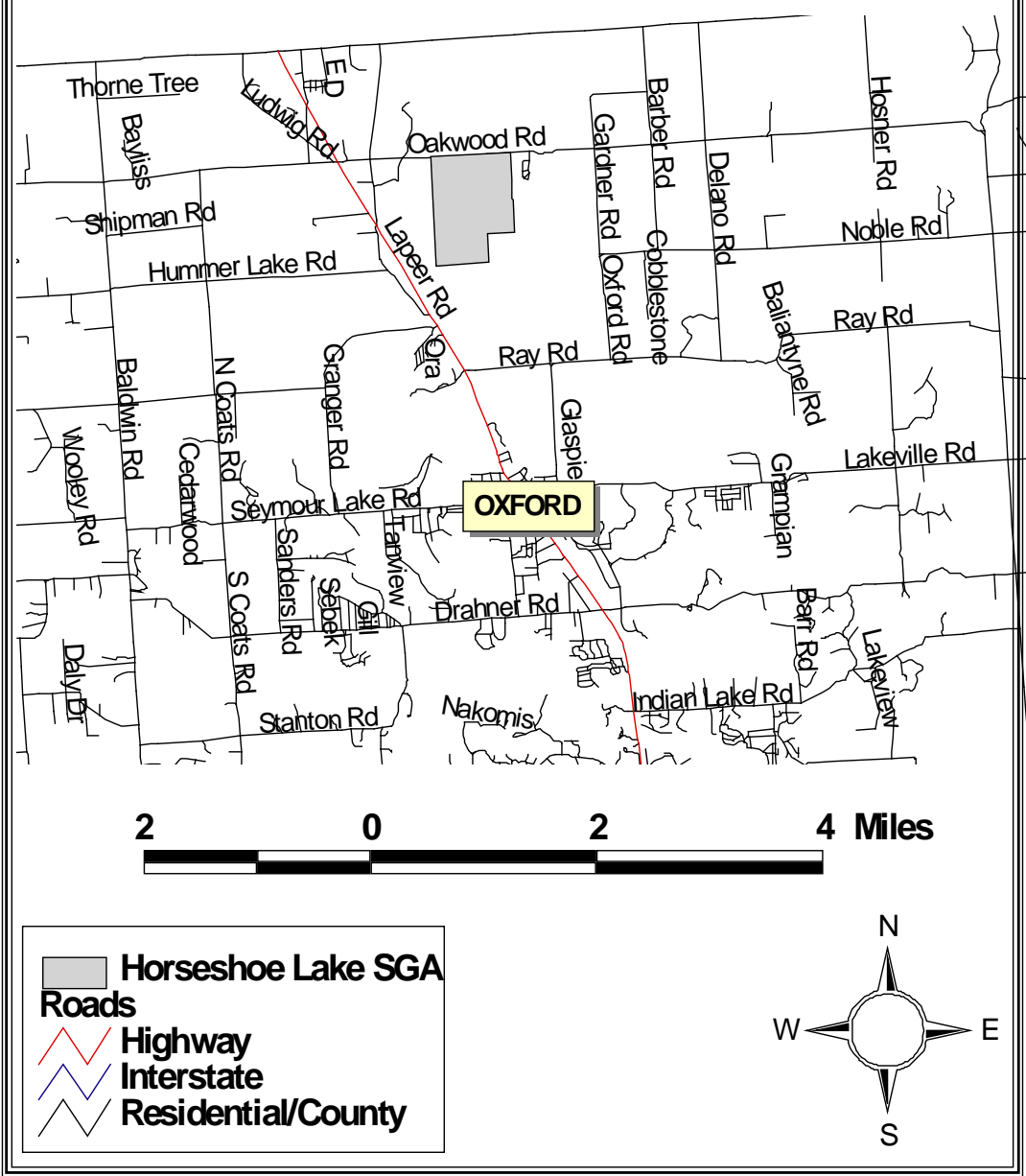


Figure 4 Horseshoe Lake SGA boundaries

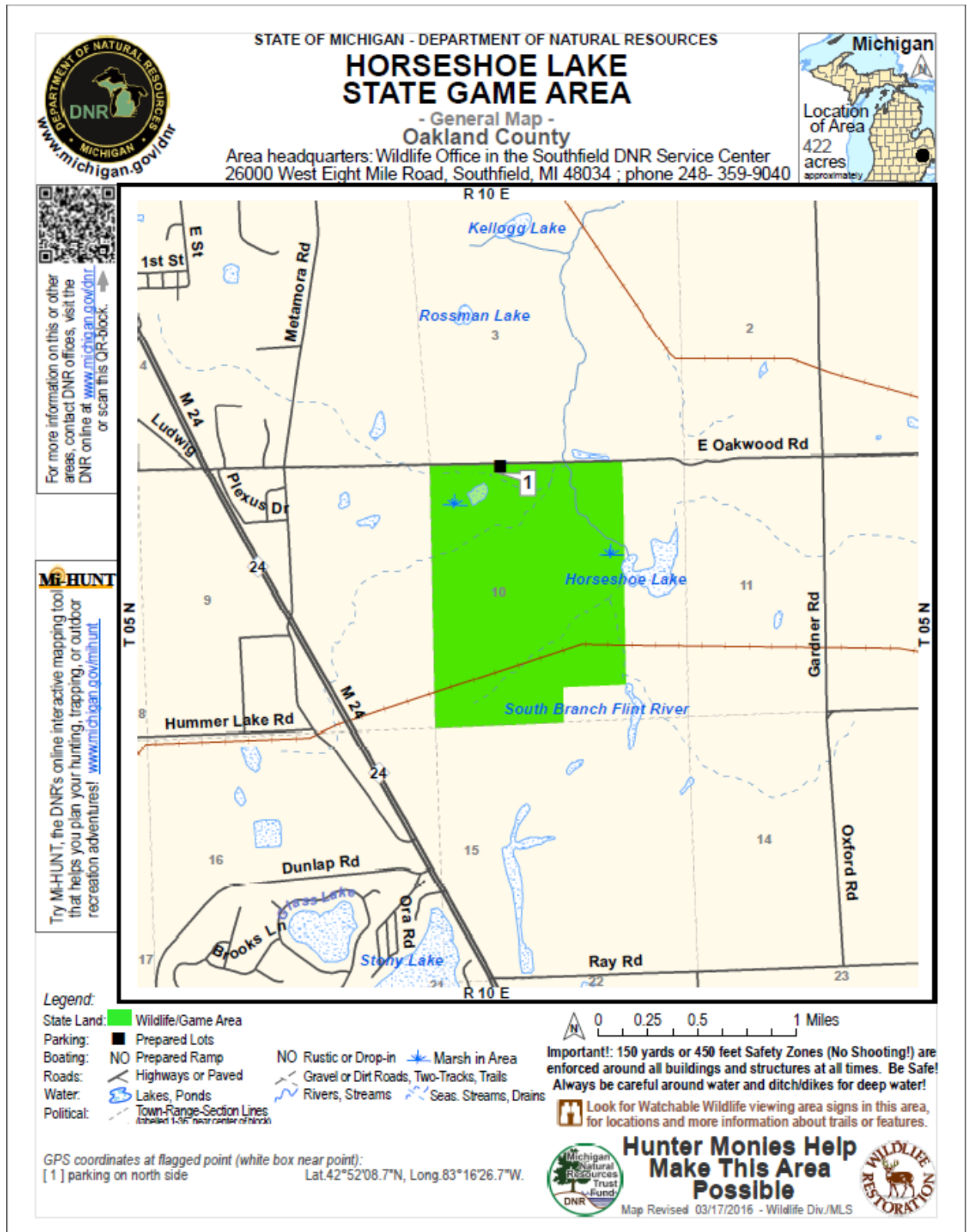


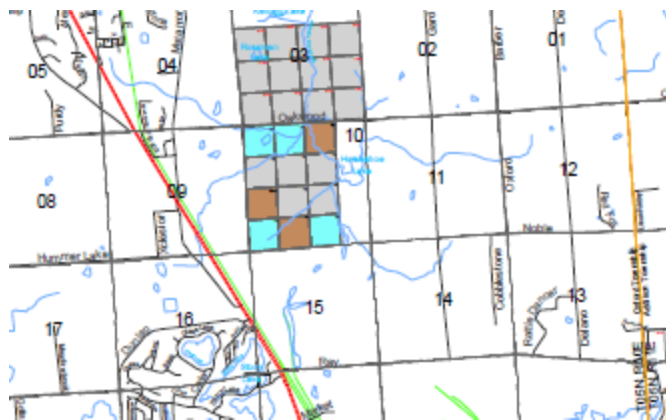
Figure 5. Horseshoe Lake SGA Funding source

## FUND SOURCE

OAKLAND COUNTY



### LEGEND



#### Transportation

Highway

Paved

Gravel

Poor Dirt

#### Hydrology

Drains or Intermittent Streams

Lakes and Ponds

Railroads

#### Political

County Line

Sections

#### Funding Category

Dingell Johnson

Game And Fish

Gift

MNRTF

Pittman Robertson

Special Legislation

State Game Fund

Other Funds

Multiple Funds

#### DNR Ownership

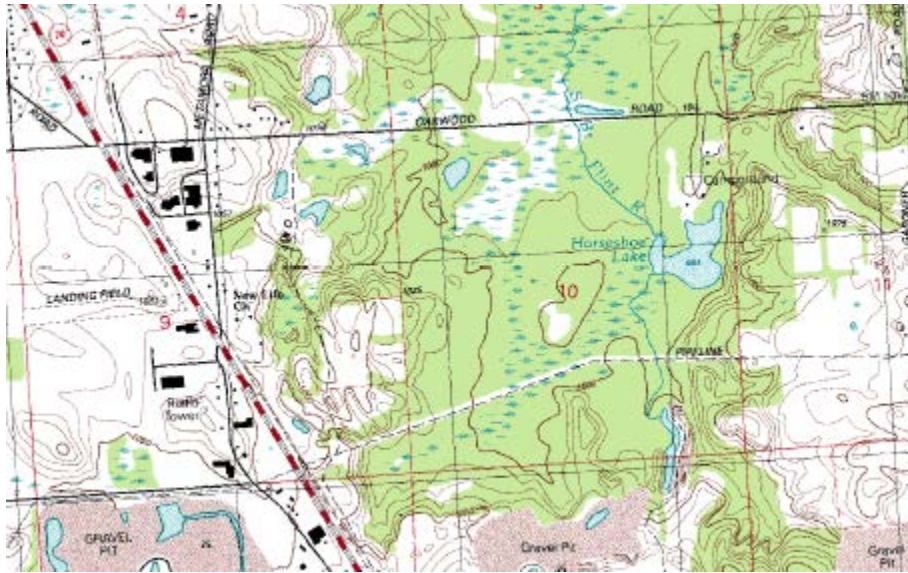
Quarter-Quarter Sections with DNR Ownership, but land not acquired through purchase.

40.00 Acres of Surface Ownership

40.00 Acres of Mineral and Surface Ownership

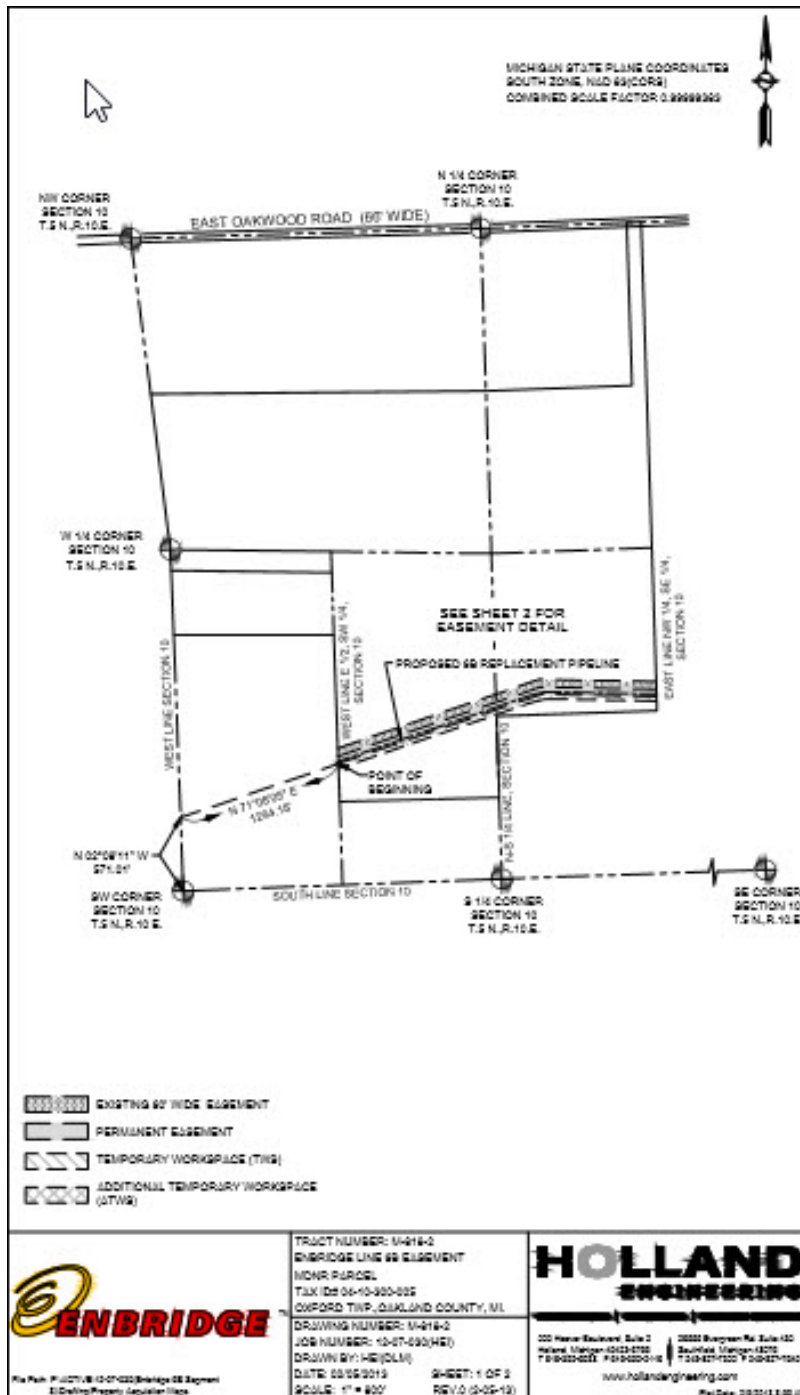
40.00 Acres of Mineral Ownership

Figure 6. Topography of the Horseshoe Lake SGA.



55' Wide Pipeline Easement Description: Part of the Southwest  $\frac{1}{4}$  of Section 10, Town 5 North, Range 10 East, Oxford Township, Oakland County, Michigan being described as: Commencing at the Southwest corner of said Section 10 to the Point of Beginning; thence continuing along the West line of said Section 10 North 02 degrees 08 minutes 11 seconds West 57.43 feet to the South line of an existing 60 foot wide pipeline right of way and easement grant as recorded in Liber 5387, Page 738, Oakland County Records; thence along said South line North 71 degrees 08 minutes 05 seconds East 1294.30 feet to the East line of the West  $\frac{1}{2}$  of the Southwest  $\frac{1}{4}$  of said Section 10; thence South 02 degrees 00 minutes, 54 seconds East 57.47 feet along said East line; thence South 71 degrees 08 minutes 05 seconds West 1294.18 feet to the Point of Beginning.

Figure 8. Enbridge Energy Pipeline location



## Horseshoe Lake SGA Review and Approval

This plan will be available for public review and comment on the DNR website between March 13, 2017 and April 10, 2017. Changes will be made, as necessary, based on public feedback. Once the plan is approved, it will be placed on the DNR website and will be reviewed again within 10 years of the approved date. Send comments to Julie Oakes [OAKESJ@michigan.gov](mailto:OAKESJ@michigan.gov)

### Approvals

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(Joe Robison), Field Operations Manager

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(Timothy Payne), Regional Supervisor