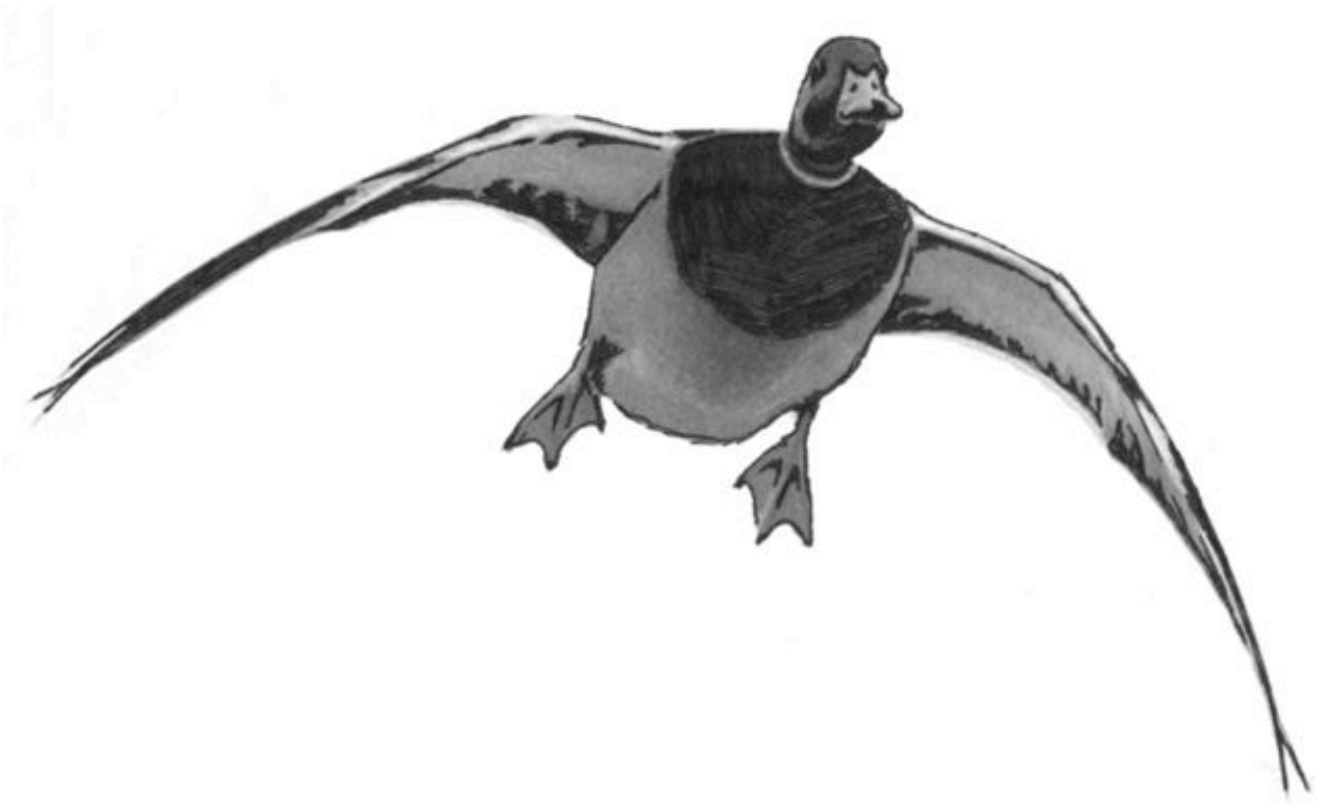
Grand Haven State Game Area Master Plan
Michigan Department of Natural Resources



Wildlife Division
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Contents

Intended Purpose and General Management Direction

Recognizing the importance of wetland habitat, the need to preserve wetlands, and potential for waterfowl management, the Natural Resources Commission initiated the dedication of the Grand Haven State Game Area (GHSGA) on December 28, 1949. Land acquisition efforts were initiated in 1950, with waterfowl management as the primary goal. Since then, the GHSGA was has been managed for waterfowl as well as other wildlife species including wading birds, white-tailed deer, and squirrels. Riparian wetland preservation, refuge creation, limited planting of food plots, invasive species control, and shrub plantings have been the primary habitat management techniques on the game area.

The majority of land on the game area was purchased with federal Pittman-Robertson Funds, but also acquired through State Fish and Game funds, special legislative funds, and recreation bond monies. The GHSGA is located in the Southwest Region (SWR) of the Lower Peninsula in northern Ottawa County (Figure 1). Over time, the GHSGA has been expanded to include 1,139 acres (Figure 2) and is managed to provide quality habitat for mallards, wood ducks, marsh birds such as the American bittern, and for recreational opportunities associated with these species.

In the future (50-100 years from now) we expect the area to continue to contribute to sustainable populations of important wildlife species, provide valuable hunting recreation, and preserve wetland habitat.

Background

At a local level, this plan helps fulfill goals and objectives of other higher level Department 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 (Goal 2-Manage habitat for sustainable wildlife populations, Goal 4-Sustain and expand public participation in hunting, trapping, and wildlife-based recreation), More Bang For Your Buck concepts (provide and expand small game hunting opportunities, and great diversity of high quality waterfowl hunting), the Division's Southwest Regional Operational Plan, Southwest Region Habitat Guidance documents, and the Southwest Region Land Management Plan are all reflected in this master plan.

Wildlife Species

True to the intended purpose of the game area, we will continue to focus our efforts on species and habitats that help meet our goals to provide quality hunting opportunities and our other public trust responsibilities.

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

Common Name	***Featured Species***	***T&E, SC Species***	***Climate Change Vulnerable***	***Remarks***
Mallard	***X***			***Maintain nesting cover, refuge area (Poel Island), and control invasive plant species***
Wood duck	***X***			***Wooded marsh edges, refuge area (Poel Island), and nest box maintenance***
American bittern	***X***		***X***	***Preserve emergent marshes and wildlife refuge (Poel Island)***
White-tailed Deer				***Mast trees, shrub plantings, and food plots***
Fox squirrel				***Mast trees and denning habitat***

Existing Conditions

Wetlands on the western side of Michigan are distinctively different from the coastal plain marshes on the east side of the state. The riverine marshes and the sunken river mouth bayous of the lower Grand River and the Grand Haven State Game Area are key elements of these wetlands. The GHSGA is relatively small in size (1139 acres), but together with the state owned Bass River Recreation Area (approximately 1800 acres, four miles east) and various township, county, and privately owned properties, is part of a larger wetland habitat complex important to the wildlife resources and natural communities of the area. The heart of the GHSGA consists of two large islands in the Grand River. Dermo Island (approximately 226 acres) has mainly emergent wetland vegetation types, with some small open water wetlands and lowland brush and floodplain forest types along the higher banks of the island. Poel Island (approximately

349 acres) is just upstream from Dermo Island and is established as a wildlife refuge or sanctuary, with no general entry without permit. The northern half of Poel Island is emergent vegetation types, while the southern end is a mixture of floodplain forest, lowland brush, and wet meadow. Another key feature of the GHSGA is the mature white and black oak stand on the south side of the Grand River. This area is one of the larger intact stands (103 acres) of mature oak in this portion of the lower Grand River valley. Table 1 provides an estimate of current cover types based on aerial photo interpretation. Cover types will be updated in the future when vegetation inventories are completed in the MIFI database.

In the late 1990s, Grand Valley State University, in conjunction with Michigan State University, began a purple loosestrife control program using non-native loosestrife eating beetles (*Galerucella calmariensis and G. pusilla).* This program has been very successful in reducing the incidence and spread of purple loosestrife in the area. However, non-native phragmites (Phragmites australis) grass or cane has become very widespread in the lower Grand River valley. In the 2013 to 2015 time period, as part of a cooperative program with the Ottawa County Invasive Phragmites Control Group, approximately 96 acres of non-native phragmites were treated with a combination of herbicides and prescribed burning on the GHSGA. Monitoring for and treating new infestations will remain an important part of habitat management on the area.

Table 1. Current cover type estimates on the Grand Haven SGA

Cover type	***Acres***	***Percent of Game Area***
Marsh	405	36
Lowland Shrub	235	21
Water	200	17
Lowland Deciduous Forest	115	10
Oak	103	9
Herbaceous Openland	56	5
Mixed Upland Deciduous	12	1
Upland Shrub	5	<1
Cropland	4	<1
Red Pine	4	<1
Total	**1,139**	

Table 2. Current Natural Communities and Desired Future Condition on the Muskegon SGA

Natural Community	*Number in SGA*	*Number Known in State*	*Number Known in Region*	*Rarity*	*Desired Future Condition*
Great Lakes Marsh	3	78	13	G2/S3	Improve/ Maintain

Recreational Use

The GHSGA provides a host of recreational opportunities for local residents and visitors alike, including hunting, trapping, fishing, bird watching and wildlife viewing. The MDNR Parks and Recreation Division maintains three boat access sites on the north side of the Grand River. The Indian Channel site is on the north bank of the river at the end of 144th Avenue and two access sites are located on Bruce's Bayou. The western access is at the end of Cypress Street and the eastern access is at the end of 132nd Avenue. The Department will continue to monitor any existing commercial and recreational uses for interference with the intended purposes of the area as described in this plan.

Impacts on the Local Economy

Contributions to the local economy resulting from activities on the game area include hunter, trapper, and fisher use and provide a direct boost to local restaurants, sporting goods stores and convenience stores and gas stations.

Management Direction

The desired future condition for the Grand Haven State Game Area is outlined in the following table.

Table 3. Desired Future Condition of Cover Types and Habitat Issue Direction on the Grand Haven SGA

Cover type and Habitat Issues	*Desired Future Condition*
Emergent Wetland	Maintain
Lowland Shrub	Maintain
Lowland Deciduous Forest	Maintain
Oak	Maintain
Herbaceous Openland	Decrease

Mixed Upland Deciduous	Maintain
Upland Shrub	Maintain
Cropland	Increase
Red Pine	Maintain
Riparian Corridor	Maintain

Goals, Objectives, and Management Actions

What follows is the strategic direction for the Grand Haven SGA, to be implemented during this planning cycle. This plan describes the goals or desired future condition for the area, the objectives under each goal, and the actions associated with each objective. Goals come mostly from the featured species, key game species, and habitat issues relevant to MSGA.

Goal I: sustainable populations of wood ducks on the Grand Haven SGA

Rationale: wood ducks are highly desirable game species and protecting and maintaining their preferred habitat will provide waterfowl hunting opportunities. In addition, the riparian corridor along the Grand River protects water quality and maintain habitat for a variety of wildlife species.

Metrics: staff observation and hunter surveys; assessment of habitat types within IFMAP.

Objective A. Maintain the current extent (~ 453 acres) of lowland forest, oak, and shrub cover on the SGA.

Action 1. Do not implement timber management activities in lowland forest, oak, and shrub stands adjacent to the Grand River or bayous.

Action 2. Restrict timber management in upland stands within 150 ft. of the stream corridor.

Objective B. Manage emergent wetlands along the Grand River to provide wetland vegetation and open water areas for wood duck habitat.

Action1. Use prescribed burns, herbicide treatments, and mechanical push-outs to manage wetland vegetation and increase plant diversity.

Action 2. Monitor (and treat as necessary) emergent wetlands for the presence of invasive plant species, especially phragmites.

Goal II: sustainable populations of mallards on the Grand Haven SGA.

Rationale: mallards are highly desirable game species and protecting and improving their wetland habitats will provide waterfowl hunting opportunities. These wetland areas also protect water quality and provide habitat for a large variety of wildlife species.

Metrics: staff observation and hunter surveys; assessment of wetland types within IFMAP.

Objective A. Maintain and improve the current extent (~ 605 acres) of hemi-marsh (emergent) wetland types on the SGA.

Action 1. Use prescribed burns, herbicide treatments, and mechanical push-outs to manage wetland vegetation and increase plant diversity.

Action 2. Monitor (and treat as necessary) emergent wetlands for the presence of invasive plant species, especially phragmites.

Objective B. Provide additional mallard nesting sites on the GHSGA.

Action 1. Provide additional artificial nesting platforms to supplement nesting opportunities. Partner with local MDHA chapters and other conservation organizations to place and maintain (yearly) these structures.

Goal III: sustainable populations of American bittern at the Grand Haven SGA.

Rationale: American bittern is a species of Special Concern in Michigan and closely associated with emergent marsh habitat in its range. Habitat loss, especially in southern Michigan, is the key issue in the decline of this marsh dwelling species.

Metrics: staff observations, feedback from local birders, and assessment of wetland types within IFMAP.

Objective A: Maintain, and enhance where possible, the current extent (~ 605 acres) of hemi-marsh (emergent) wetland types on the SGA.

Action 1. Use prescribed burns, herbicide treatments, and mechanical habitat work to manage wetland vegetation and improve plant diversity.

Action 2. Monitor and treat as necessary emergent wetlands for the presence of invasive species, especially phragmites.

Goal IV: sustainable populations of white-tailed deer on the Grand Haven SGA

Rationale: Deer are highly desirable big game species, and managing their habitat, especially the oak component of the game area, benefits numerous other wildlife species. Wild turkey also benefit from actions taken under this goal.

Metrics: staff observations, hunter surveys; and assessment of oak forest types within IFMAP

Objective A. Maintain the current extent (~ 103 acres) of accessible oak stands on the SGA

Action 1. Develop and begin implementation of an adaptive oak management strategy by 2020.

Action 2. Harvest or treat approximately 20 acres of oak forest during the next decade.

Objective B: Plant supplementary food plots on the Grand Haven SGA

Action 1. Plant 3-5 acres of small grains or grazing opportunity per year, starting in 2017.

Goal V: Sustainable populations of fox squirrel on the Grand Haven SGA.

Rationale: Squirrels are highly desirable small game species and managing their habitat benefits numerous other wildlife species on the Grand Haven SGA. Wild turkey also benefit from the actions listed under this Goal.

Metrics: staff observations, surveys, and feedback from hunters; assessment of oak types within IFMAP.

Objective A: Maintain the current extent (~ 103 acres) of accessible oak cover types on the SGA.

Action 1. Develop and begin implementation of an adaptive oak management strategy by 2020.

Action 2. Maintain an adequate amount of den trees in selective oak harvest areas.(approximately 1 per 5 acres).

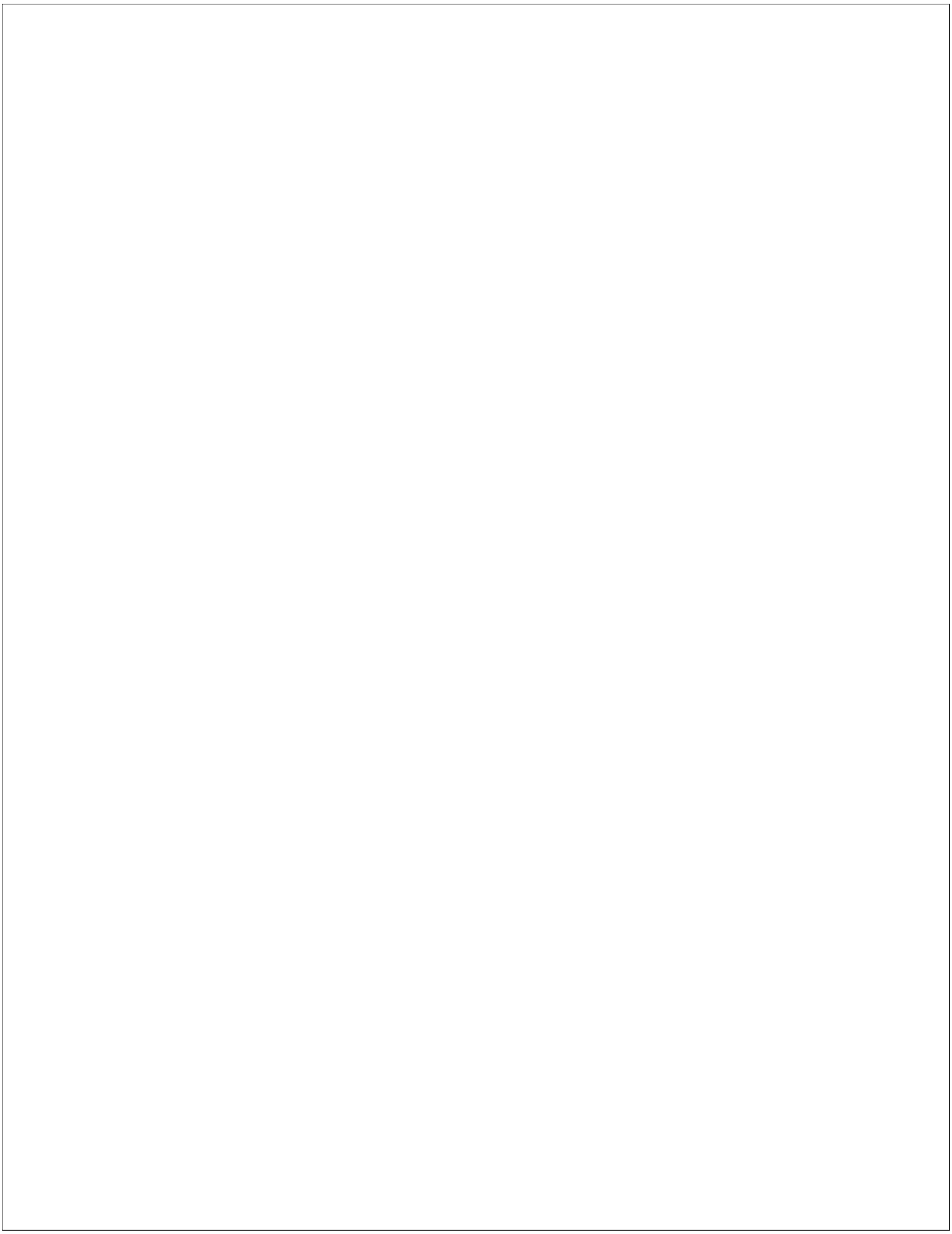

Figure 1. Location of the Grand Haven SGA.

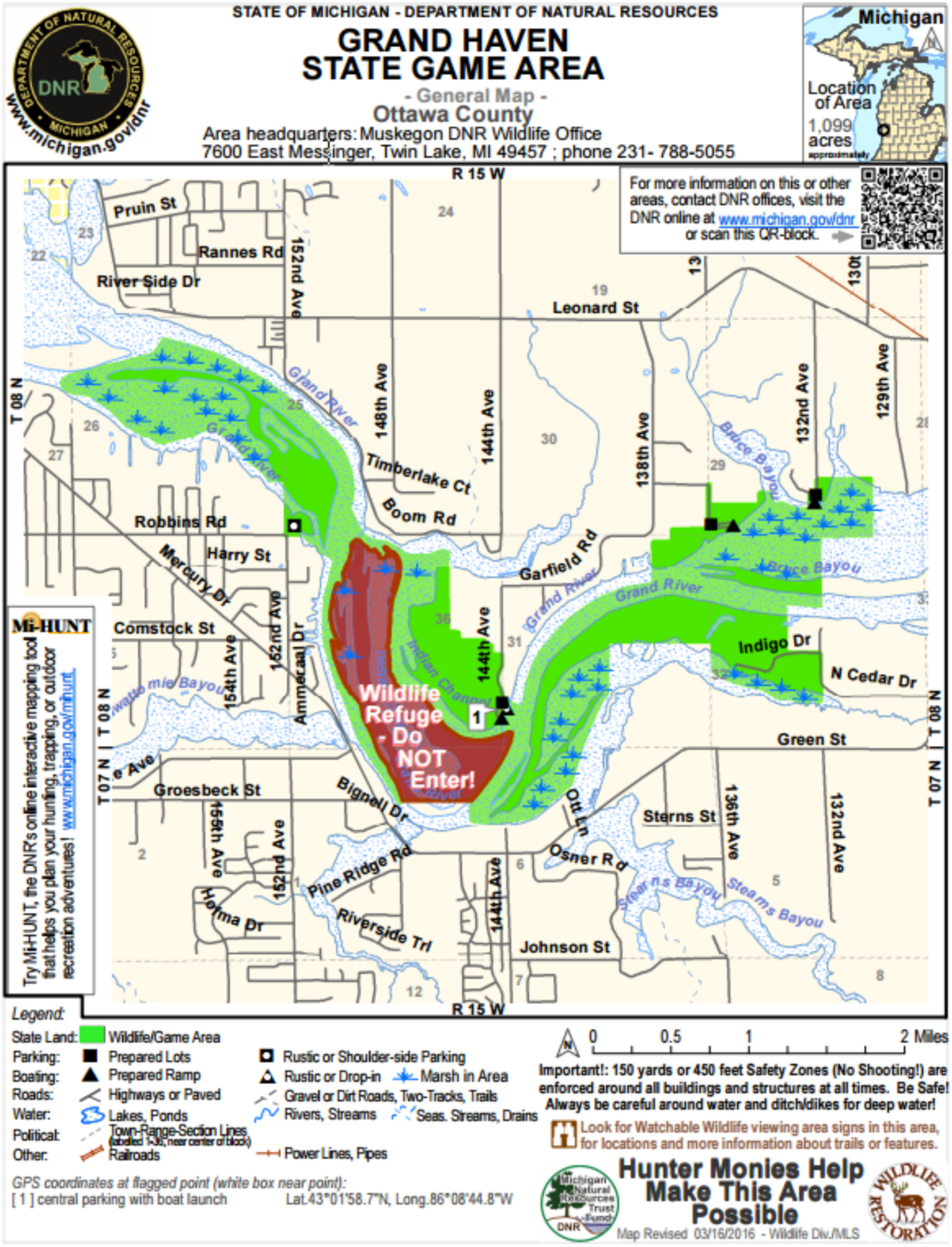

Figure 2. Grand Haven SGA Boundaries

Acquisition and Disposal of Land

This is an important game area that provides a host of recreational opportunities for local resident and visitors. Our overall goal is to continue to provide these opportunities. Since the Grand Haven SGA is located in southern Michigan and within close distance of Grand Haven, Muskegon, Holland, and Grand Rapids, the land acquisition strategy for the GHSGA is to both fill in state ownership by acquiring available blocks located within and among current state ownership and to expand the area by obtaining appropriate parcels that are outside the current ownership but within the acquisition boundary. Parcels will be evaluated as they become available and will be acquired on a willing seller basis only.

Review and Approval

This plan will be available for public review and comment on the DNR website between February 1, 2017 and February 28, 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 Nik Kalejs KALEJSG@michigan.gov

Approvals

(John Niewoonder), Field Operations Manager	Date
(Mark Sargent), Regional Supervisor	Date