

**Martiny Lakes State Game Area** 

# **Master Plan**



# MICHIGAN DEPARTMENT OF NATURAL RESOURCES

WILDLIFE DIVISION (PETER J. KAILING) FEBRUARY 17, 2016

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

The Martiny Lakes State Game Area (MLSGA) is comprised of 7,896 acres and is located in the east –central portion of Mecosta County. It occupies portions of five townships (T16N, R8W, T15N, R8W, T14N, R8W, T14N, R9W and T15N, R7W). (Figures 1, 2 and 3). Martiny Lakes was originally several smaller lakes that were enlarged by either beaver dams or privately constructed dams being built at the natural northern outlet to the Chippewa River System in the late 1800s. The Chippewa River drains eventually to Lake Huron. Today, the state owned Winchester Dam controls this northern outlet. The water elevation of the Martiny Lakes complex is fixed at a court ordered elevation.

The southern portion of the MLSGA consists of the headwater area of the East Brach of the Little Muskegon River, which flows southwest to Lake Michigan. Therefore, the MLSGA occupies two different watersheds in West Michigan.

The Department of Conservation became involved with the locally popular idea of flooding the Martiny Lakes system in the 1930s. The project was given Department of Conservation Commission approval September 11, 1936. It was recommended as a state game area in 1941. The Martiny Lakes State Game Area boundary was dedicated March 16, 1949. The game area was approved for federal participation acquisition under the provision of the Federal Aid in Wildlife Restoration Act on May 16, 1949. There were four sources of funding used in the purchase of the MLSGA. The majority of these lands were purchased with Game and Fish Protection Fund monies. Federal Aid in Wildlife Restoration (Pittman-Robertson (PR) Funds were also used, along with a limited amount of tax-reversion acres and Natural Resource Trust Fund acres. A portion of the Pere Marquette State Forest in Austin Township (T14N, R9W) was added to the MLSGA in 2002.

Waterfowl production was a priority when the game area was first created. But through the decades the game area has expanded by acquisition of forested uplands and forested wetland habitats not immediately adjacent the existing open water areas. Private development of the lake edge, including small subdivisions and private marinas has resulted in extensive use of the surface water by recreational boaters, and court ordered water elevations precludes any manipulation of water levels to benefit waterfowl. It is still a popular waterfowl hunting destination, but other hunting uses are also important in the MLSGA.

Current uses of the game area are primarily hunting of early successional upland species such as white tailed deer, grouse, woodcock and cotton-tailed rabbit. The wetland and open water areas are used for waterfowl hunting, fishing, recreational boating and trapping. Waterfowl hunting and hunting the aforementioned early successional species are the targeted species for the future (50- 100 years) management of the game area.

There are two rustic seasonal campgrounds on state land within the MLSGA. These include the Tubbs Lake and Tubbs Island Campgrounds. Combined, they offer 33 campsites for use spring through fall. These campsites are popular with hunters and fishers. These campgrounds have been leased and administered by the Mecosta County Parks Commission for many years. Wildlife Division retains the right to conduct wildlife habitat management in and around the campgrounds.

# Background

At a local level, this plan helps fulfill goals and objectives of other higher level Department and Wildlife Division plans and initiatives. These include 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-Increase public participation in hunting and trapping), 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 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 when it was dedicated in 1949, 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. Wildlife species that will be specifically addressed to meet our planning goals are listed in Table 1.

Common Name	Featured Species	T&E, SC Species	Climate Change Vulnerable	Remarks
White-tailed deer	X			Young forests, openings, food plots
Cotton tailed rabbit	X			Openings and early successional habitat creation and

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

				maintenance
Red-shouldered hawk	X	X		Consider presence in timber sales and maintenance of forested floodplain
Ruffed Grouse	X		X	Young forests, maintain riparian vegetation
Wood duck	X			Wooded Floodings, Mature mast trees adjacent forest ponds
Woodcock	X			Young forests, maintain riparian vegetation Openings

Ruffed grouse and aspen are both predicted to be climate change vulnerable which may impact our ability to effectively meet our desired future conditions outlined in Goal 1 (see below). We will monitor aspen regeneration as part of routine forest inventory and consider alternatives to aspen, as necessary. In general, younger forests are better able to withstand climate shocks and lowering the average age of forested area is likely a good adaptation strategy.

# **Existing Conditions**

Currently, the habitat on the MLSGA is quite varied. Open water consisting of interconnected lakes and wetland habitats of emergent (including stands of wild rice), and scrub shrub communities dominate the northern portion of the game area. Adjacent forested uplands include aspen dominant stands, other mixed hardwood stands, mixed oak, and smaller areas of old field and brush. One 12 acre crop field is under a crop share agreement. Extensive forested floodplain of lowland deciduous and lowland conifers is located on the southern portion of the game area, while another distant portion of the game area (formerly Pere Marquette State Forest in Austin Township) is predominantly aspen and oak stands on sandy hills. Sporadic timber harvests have occurred in the game area in recent years. Due to a predominance of older aged aspen stands, rotational aspen cuts are proposed to provide a balanced mix of young, middle aged and older aspen across the entire game area.

Compared to other southern Michigan game areas, the MLSGA is rather diverse and provides a variety of cover types (Table 2) that provide valuable habitat for the species we are managing for. The size of the area and the different cover types available provide the opportunity to manage for more than one set of goals and objectives and

the game area is divided into three Management Areas (Figure 4), including the Martiny Chain of Lakes Area, the Little Muskegon River Area, and the Austin Township Area.

The **Martiny Chain of Lakes Area** is about half of the game area where management goals are to provide quality habitat for white-tailed deer, ruffed grouse, American woodcock, cottontail rabbit, and wood duck. The **Little Muskegon River Area** is about one third of the game area and consists largely of bottomlands of the East Branch of the Little Muskegon River and adjacent upland habitats. Good habitat for white-tail deer, winter habitat for grouse, and nesting habitat for red-shouldered hawk is present here. The **Austin Township Area** is nearly all upland habitats of second growth hardwoods or aspen on sand dominated rolling hills. This area is also good habitat for white-tail deer, grouse and woodcock. Current Natural Community ecological surveys have not been completed at this time for the MLSGA

**Table 2.** Current cover types on the Martiny Lakes State Game Area based on MiFi surveys from 2014.

Cover type	Acres	Percent of Game Area	
Aspen	1,864	23.6	
Emergent	1,066	13.5	
Lowland Conifer	567	7.2	
Lowland Deciduous	941	11.9	
Lowland Shrub	890	11.3	
Mixed Upland Deciduous	943	12.0	
Oak	654	8.3	
Other	148	1.9	
Red Pine	136	1.7	
Water	684	8.7	
Total	7,896	100	

# **Recreational Use**

The MLSGA provides a host of recreational opportunities for local residents and visitors alike, including hunting, fishing, trapping, bird watching and wildlife viewing. State game areas in southern Michigan are under continual pressure for other uses, however under Federal and State regulations, recreational and commercial uses on the area that are not incidental to our management for the purposes described above are generally not allowed. Some of these uses can be allowed, under the following circumstances:

- 1. The uses do not interfere or conflict with the wildlife conservation purposes of the area described above.
- 2. The Department has no obligations to determine if requested uses would conflict or interfere; the burden of determining must remain with those requesting the uses.
- The requested uses cannot be exclusive of other allowable uses and must not result in the Department losing management control of any portion of the area.
- 4. A lack of a specific prohibition in rules and regulations for the area does not constitute approval of the activity.
- 5. The Department always reserves the ability to disallow activities previously allowed as wildlife conservation needs dictate.

Additionally, 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 sharecropping on 12 acres through an agreement with a local farmer, approximately 50 acres of timber management activities per year through a contract with a local logger, plus thousands of hunter, fisher and other recreational user days per year that provide a direct boost to local restaurants, sporting goods stores, convenience stores and gas stations.

# **Management Direction**

The desired future condition for the SGA for the Martiny Lakes State Game Area is outlined in Table 3.

Table 3.	Desired future condition of cover types and habitat issue direction on the
MLSGA	

Cover type and Habitat Issues	<b>Desired Future Condition</b>	
Oak	Maintain	
Northern Hardwoods	Maintain	
Mixed Upland Deciduous	Maintain	
Herbaceous Open land	Maintain	
Natural Pines	Maintain	
Planted Pines	Decrease	
Mixed Upland Conifers	Maintain	
Lowland Deciduous Forest	Maintain	
Lowland Coniferous Forest	Maintain	
Lowland Mixed Forest	Maintain	
Lowland Shrub	Maintain	
Emergent Wetland	Maintain	
Acres of Agriculture	Maintain	
Acres of Aspen	Maintain	
Acres of Warm Season Grass	Maintain	
Acres of Herbaceous Open lands	Maintain	
Acres of Cool Season Grass	Maintain	
# of Forest Openings	Increase	
Grassland Patches > 150 Acres	NA	
Grassland Patches >250 Acres	NA	
Mature Forest	Decrease	
Unfragmented Forest	Maintain	
Riparian Corridor	Maintain	
Managed Wetlands	Maintain	
Unmanaged Wetlands	Maintain	

#### **Goals, Objectives, and Management Actions**

What follows is the strategic direction for the MLSGA, 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 and habitat issues relevant to MLSGA.

**Goal I** sustainable populations of white-tailed deer, ruffed grouse, American woodcock, cottontail rabbit in the Martiny Lakes, Little Muskegon River and Austin Township Management Areas.

**Rationale:** deer, grouse, woodcock and rabbit are highly desirable game species and managing for their habitat benefits numerous other wildlife species. White-tailed deer also benefit from Actions taken under this Goal.

**Metrics:** staff observation and hunter surveys; assessment of aspen trends through time based on forest inventory data, number of suitable forest openings

**Objective A.** Redistribute aspen cover type on all aforementioned Management Areas, providing a balance of age classes on a 60 year rotation (14% at age 0-10, 14% at age 11-20, 14% at age 21-30, 14% at age 31-40, 14% at age 41-50 and 14% at age 51-60) in a manner that optimizes the spatial arrangement for the benefit of deer, grouse and woodcock by 2075.

**Action 1.** Establish an aspen harvest regime (50 acres every year) that will improve the aspen type and optimize the age classes and juxtaposition of aspen stands on all upland aspen stands within the aforementioned three management areas that comprise the entire MLSGA.

**Objective B.** To provide suitable forest openings (0.5 - 2 acres in size), comprising up to 5% of all upland aspen stands in the three management areas of the MLSGA. Forested Management Area for breeding and roosting habitat for woodcock within aspen complexes by 2023

Action 1. Maintain and create small herbaceous openings at appropriate locations throughout the managed upland forests, including the conversion of most timber sale landings to herbaceous openings.

**Goal II** sustainable populations of wood duck on the lakes and wetlands of MLSGA

**Rationale:** wood ducks are highly desirable game species. Wood duck habitat on the MLSGA includes a variety of wetland types and wooded riparian corridors adjacent wooded uplands for feeding, brood rearing and nesting opportunities; for both local reproducing wood duck and migratory wood duck populations. These habitats also benefit numerous other wildlife species such as white-tailed deer, wild turkey and also protect water quality.

**Metrics:** staff observation and hunter surveys; assessment of oak types within IFMAP, number of suitable forest openings

**Objective A.** Maintain the current extent (2,398 acres) of lowland forest and shrub cover type on the entire MLSGA.

**Action 1.** Do not implement forest management activities in lowland forest and shrub stands adjacent to the Little Muskegon River or its tributaries.

**Objective B:** Manage emergent wetlands (~300 acres) to provide wetland vegetation and open water areas preferred by wood ducks

Action 1. Maintain wetland vegetation/open water conditions through water level maintenance of the Winchester Dam.
 Action 2. Monitor (and treat as necessary) unmanaged emergent wetlands for presence of invasive plant species including phragmites and purple loosestrife.

**Objective C.** Maintain the current extent (650 acres) of oak cover type on the SGA and balance the age class distribution

**Action 1.** Maintain mature oak and other mature cavity trees adjacent aquatic wood duck habitats by establishing riparian and wetland buffers no less than 100 feet wide.

Action 2. Maintain healthy mixed age class of oak in all timber harvests by selecting out degraded, injured or crowded oak to maintain stand vigor. Select harvest approximately 100 acres of oak forest during the next decade.

**Objective B.** Maintain or increase the oak component in non-oak stands **Action 1.** When managing other forested cover types, including natural white pine stands and red pine plantations, identify opportunities for maintaining or increasing the oak component

**Goal III** sustainable populations of cottontail rabbit in the Martiny Chain of Lakes Management Area of the MLSGA.

**Rationale:** rabbits are popular game species and managing for their habitat benefits numerous other early successional wildlife species.

**Metrics:** staff observation and discussion with hunters; number of brush piles created

**Objective A.** Provide suitable escape cover by creating 50 brush piles each year

**Action 1.** Establish a timber harvest regime (associated with Goals I and II) that will require loggers to create 1 brush pile for every acre harvested resulting in 50 brush piles per year (on average).

**Objective B.** Provide suitable forest openings (0.5 - 2 acres in size), comprising 2% of the Martiny Chain of Lakes Management Area for nesting and feeding habitat for rabbits by 2023

**Action1.** Maintain and create small herbaceous openings at appropriate locations throughout the Forested Management Area, primarily by converting timber harvest landing areas (associated with Goal I) by 2023

**Goal IV** detectable population of red-shouldered hawk in the Little Muskegon River Management Area.

**Rationale:** red shoulder hawk are a statewide species of concern, documented presence in Mecosta County is minimal, but good habitat exists for them in the mature forested floodplain and adjacent uplands of the East Branch Little Muskegon River. Other wildlife such as bobcat and black bear benefit from extensive closed canopy floodplain habitat.

Metrics: staff observation and spring surveys to detect nesting locations.

**Objective A.** Maintain suitable breeding and foraging cover by ensuring no commercial logging in the floodplain of the Little Muskegon River Floodplain.

**Action 1.** Maintenance of existing forested floodplain, identification and eradication of invasive plant species.

**Action 2.** Identify any existing nesting sites in upland forested areas adjacent the floodplain, implement BMP setbacks to maintain integrity of nest site within all proposed timber harvests in Little Muskegon Management Area.

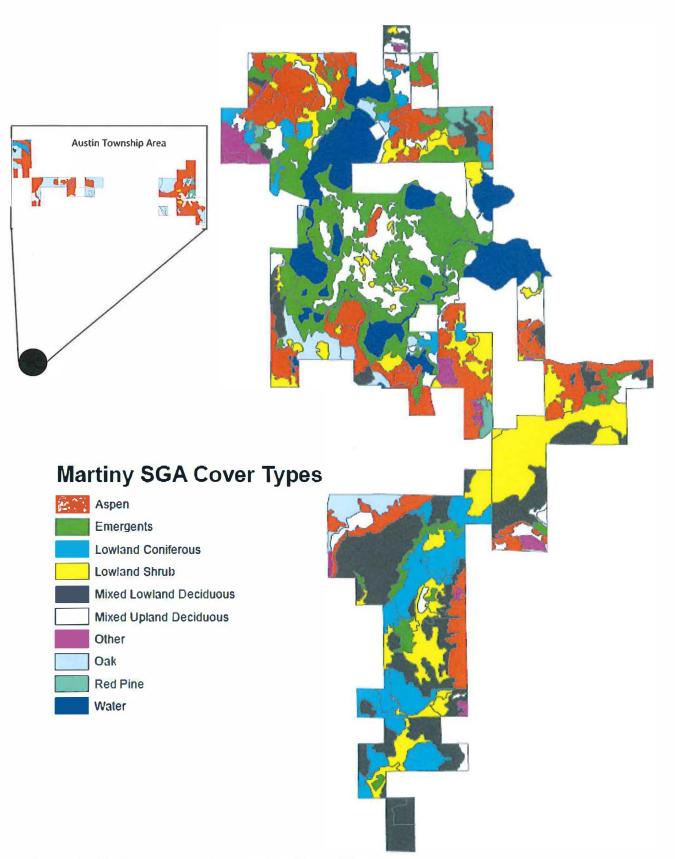
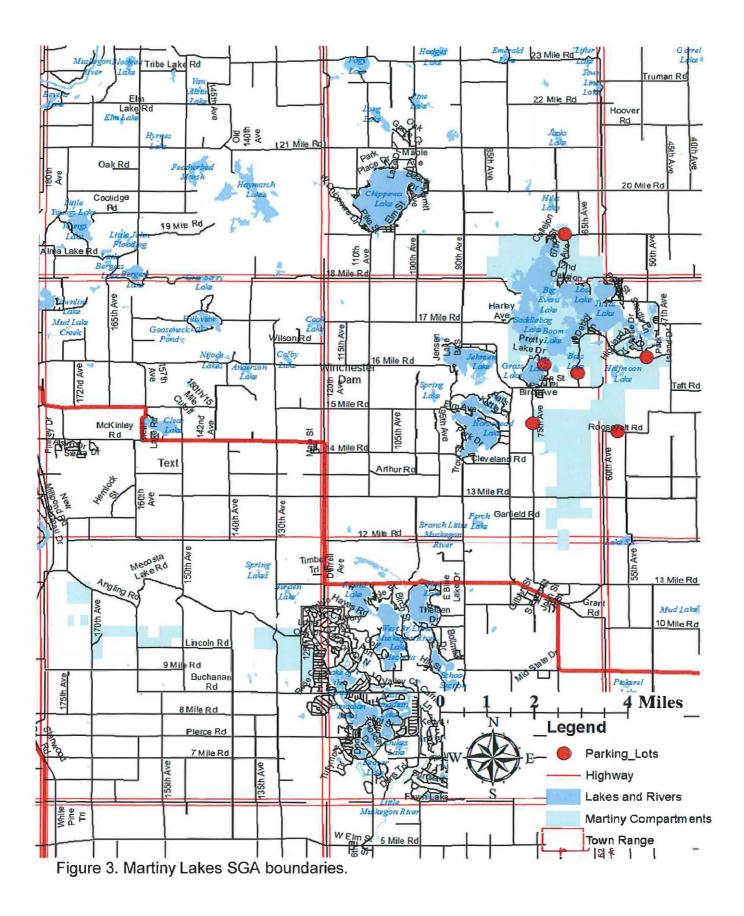


Figure 1. Martiny Lakes SGA Habitat Cover Map.



Figure 2. Location of the Martiny Lakes SGA.



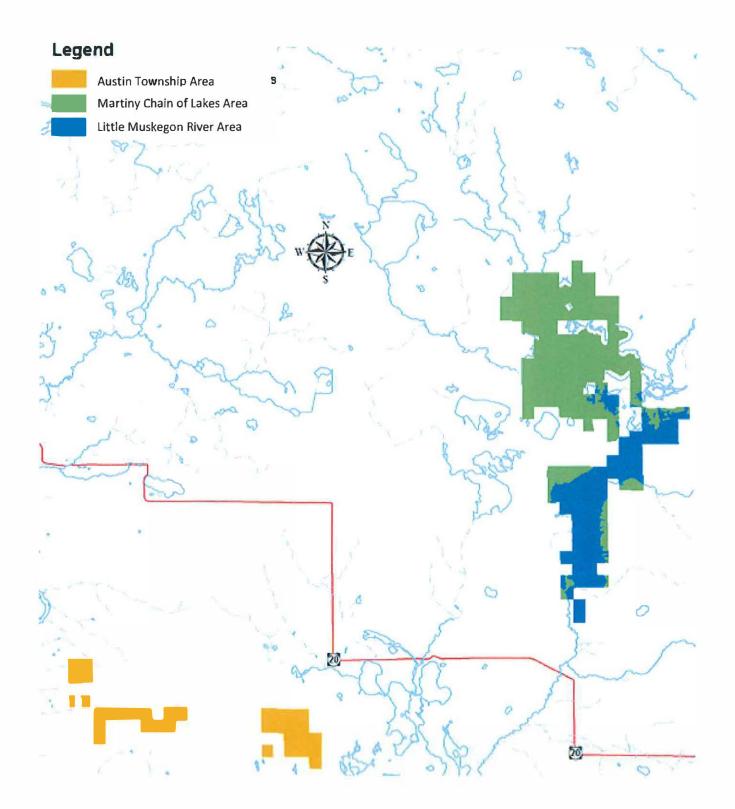


Figure 4. Martiny Lakes SGA Management Areas.

#### 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 Martiny Lakes State Game Area is located in west central Michigan and within relatively close distance of the city of Grand Rapids, the land acquisition strategy for the Martiny Lakes State Game Area 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.

#### **Public Input**

This plan was available for public review and comment on the DNR website between January 6, 2016 and February 9, 2016. During this period 12 comments were received and considered before finalizing this plan. The final plan was approved on February 18, 2016 and will be reviewed within 10 years of the approved date.

#### **Approvals**

h Niewoonder), Field Operations Manager

(John Niewoonder), Acting Regional Supervisor

 $\frac{2/26/16}{\text{Date}}$