

Cannonsburg State Game Area Master Plan  
Michigan Department of Natural Resources



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

The woodlands and wetlands of central Kent County have always provided valuable wildlife habitat. In the post-World War II era, state planners recognized these values and devoted time and resources to acquire some of these lands for wildlife habitat and the benefit of the people of Michigan. The Natural Resources Commission formally dedicated the lands of the Cannonsburg State Game Area (CSGA) on May 2, 1950 as a game or wildlife area and for public conservation uses. Most of the land parcels in the CSGA were acquired between 1949 and 1954. Over 95% of the funding came from Federal Aid in Wildlife Restoration or Pittman-Robertson (PR) funds. PR funds are generated from taxes paid by hunters and shooters. Because of this funding source, the major portion of the game area was purchased for wildlife restoration and management. Therefore, wildlife, wildlife habitat, and public use of the wildlife resources continue to be the primary management goals.

The CSGA is located in the Southwest Region (SWR) of the Lower Peninsula in east-central Kent County (Figure 1). Over time, the CSGA has been expanded to include 1,360 acres (Figure 2) and is managed to provide quality habitat for a variety of wildlife species, including wild turkeys, white-tailed deer, non-game species such as the pileated woodpecker, 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 wildlife 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 creating turkey hunting opportunities), 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.

<b>Common Name</b>	<b>Featured Species</b>	<b>T&amp;E, SC Species</b>	<b>Climate Change Vulnerable</b>	<b>Remarks</b>
Wild Turkey	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>Forest openings, shrub plantings, and mast trees (oak management)</b>
Pileated woodpecker	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Maintain mature timber stands, corridor along Egypt Creek, and snag trees</b>
White-tailed Deer	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>Mast trees, timber sales, and forest openings</b>
Fox squirrel	<b>No</b>	<b>No</b>	<b>No</b>	<b>Mast trees and denning habitat</b>

## Existing Conditions

The CSGA is relatively small in size (1360 acres), but is extensively used. The game area is approximately 7 miles north-east of the second largest city in Michigan, Grand Rapids, and is located in a part of Kent County that is experiencing significant residential development. The topography is characterized by rolling hills with some steep slopes, and small southern hardwood swamp and shrub-carr wetlands interspersed among the upland areas. Red pine and mixed-planted pine plantations are widely scattered across the game area, along with small clones of pole size and larger aspen. However, the dominant vegetation types are mature oak forest and mixed deciduous forest. The age classes for the oak and mixed deciduous forest species typically range from the 50 to 150 year classes, and would generally be classified as dry southern forest types. Some oak barren remnants can be found in the southern half of the game area lands, but are highly degraded. The major water components of the CSGA are Egypt Creek and associated tributaries in the southern half of the game area and Hyser Lake, a shallow water, emergent wetland at the north end of the area. The forested wetlands along Egypt Creek are a critical part of protecting the water quality of

the creek. Table 2 and Figure 3 provide current cover types based on the 2016 vegetation inventories conducted by staff from the Michigan Natural Features Inventory for the MIFI database.

Invasive species are a major challenge across many state game area lands, and Cannonsburg SGA is no exception. The major concerns are planted and volunteer honeysuckle, autumn olive, and non-native grasses. Monitoring and cutting along with herbicide treatment will be required to control the spread of these invasives.

**Table 2.** Current cover type estimates on the Cannonsburg SGA

<b>Cover type</b>	<b>Acres</b>	<b>Percent of Game Area</b>
Oak	592	44
Mixed Upland Deciduous	414	30
Red Pine	124	9
Lowland Deciduous Forest	62	5
Planted Mixed Pines	58	4
Aspen	47	3
Upland Mixed Forest	11	1
Herbaceous Openland	11	1
Lowland Shrub	10	1
Other Cover Types	31	2
<b>Total</b>	<b>1,360</b>	

## Recreational Use

The CSGA provides a wide variety of recreational opportunities for local residents and visitors alike, including hunting, trapping, bird watching and wildlife viewing. However, the lands of the CSGA are closed to all forms of target shooting. In addition, some of the most popular activities include cross-country skiing and mountain biking. Cross country skiing is allowed during winter months from the first Sunday after January 1 until the end of winter snow conditions. Biking is legally open from February 1 to September 14, although bike use outside this time period has been a problem. Approximately seven miles of trail are open for both of these activities, and are maintained through an agreement with the West Michigan Chapter of the Michigan Mountain Biking Association. 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 mountain biker 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 Cannonsburg State Game Area is outlined in the following table.

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

<b><i>Cover type and Habitat Issues</i></b>	<b><i>Desired Future Condition</i></b>
Oak	Maintain
Mixed Upland Deciduous	Maintain
Red Pine	Decrease
Lowland Deciduous	Maintain
Mixed Planted Pine	Decrease
Aspen	Increase
Herbaceous Openland	Maintain
Upland Mixed Forest	Maintain
Lowland Shrub	Maintain
Other Cover Types	Maintain

## Goals, Objectives, and Management Actions

What follows is the strategic direction for the Cannonsburg 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 CSGA.

**Goal I:** Sustainable populations of wild turkey on the Cannonsburg SGA

**Rationale:** Wild turkeys are highly desirable game species and managing their preferred habitat, especially the oak component of the forest, benefits numerous other wildlife species.

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

**Objective A.** Maintain the current extent (~ 450 acres) of accessible oak cover type on the CSGA, and begin balancing the age class distribution.

**Action 1.** Develop and begin implementation of an adaptive oak management strategy by 2021.

**Action 2.** Harvest approximately 75 acres of oak forest during the next decade.

**Objective B.** Maintain or increase the oak component of non-oak stands.

**Action 1.** When managing other forest cover types, including red pine or mixed planted pine plantations, identify opportunities for maintaining or converting these types to oak-dominated stands.

**Objective C.** Provide suitable forest openings (1-10 acres in size) on 100 acres of the CSGA for foraging and breeding habitat.

**Action 1.** Maintain or expand herbaceous openings at appropriate locations through the use of prescribed fire, herbicides, and mechanical vegetative control.

**Action 2.** Selective planting of native fruit-bearing shrubs along some opening edges for fall/winter food and cover.

**Goal II:** Sustainable populations of pileated woodpeckers on the Cannonsburg SGA.

**Rationale:** pileated woodpeckers are uncommon birds across the general landscape and require extensive tracts of deciduous forest. Wildlife viewing is a popular activity on the Cannonsburg SGA. The forested riparian corridor along Egypt Creek is used by pileated woodpeckers and provides habitat for a variety of wildlife species, and also protects water quality.

**Metrics:** staff observation and feedback from birders; assessment of lowland and upland deciduous forest types within IFMAP.

**Objective A.** Maintain the mature stands of deciduous forest types on the SGA, especially the lowland deciduous forest.

**Action 1.** Do not implement forest management activities in the forest stands adjacent to Egypt Creek.

**Action 2.** Restrict forest management activities in upland stands within 150 ft. of stream corridors.

**Objective B.** Maintain an adequate amount of snag trees for feeding sites.

**Action 1.** Preserve snag trees in timber harvest sites, leaving an average of two to three snag trees per acre.

**Goal III:** Sustainable populations of white-tailed deer on the Cannonsburg 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.

**Metrics:** staff observations, hunter surveys; feedback from local landowners; assessment of oak forest types within IFMAP

**Objective A.** Maintain the current extent (~ 450 acres) of accessible oak stands on the SGA

**Action 1.** Develop and begin implementation of an adaptive oak management strategy by 2021.

**Action 2.** Harvest or treat approximately 75 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 forest cover types, including red pine and mixed planted pine plantations, identify opportunities for maintaining oak or converting these types to oak-dominated stands.

**Objective C:** Increase the aspen cover type on the CSGA to 80 acres, and balance the age classes on a 40-year rotation (25% age 0-10, 25% age 11-20, 25% age 21-30, 25% age 31-40) by 2025.

**Action 1.** Establish an aspen harvest regime (~ 25 acres every decade) that will expand and improve the aspen type.

**Action 2.** When managing other forest types with remnant aspen types, including red pine and mixed planted pine plantations, identify opportunities to expand aspen clones.

**Objective D:** Selective planting of native fruit bearing shrubs for escape cover and browsing opportunity.

**Action 1.** Look for opportunities to replace non-native shrubs with native species.

**Goal IV:** Sustainable populations of fox squirrel on the Cannonsburg SGA.

**Rationale:** Squirrels are highly desirable small game species and managing their habitat benefits numerous other wildlife species on the CSGA. Wild turkey and white-tailed deer also benefit from the actions listed under this Goal.

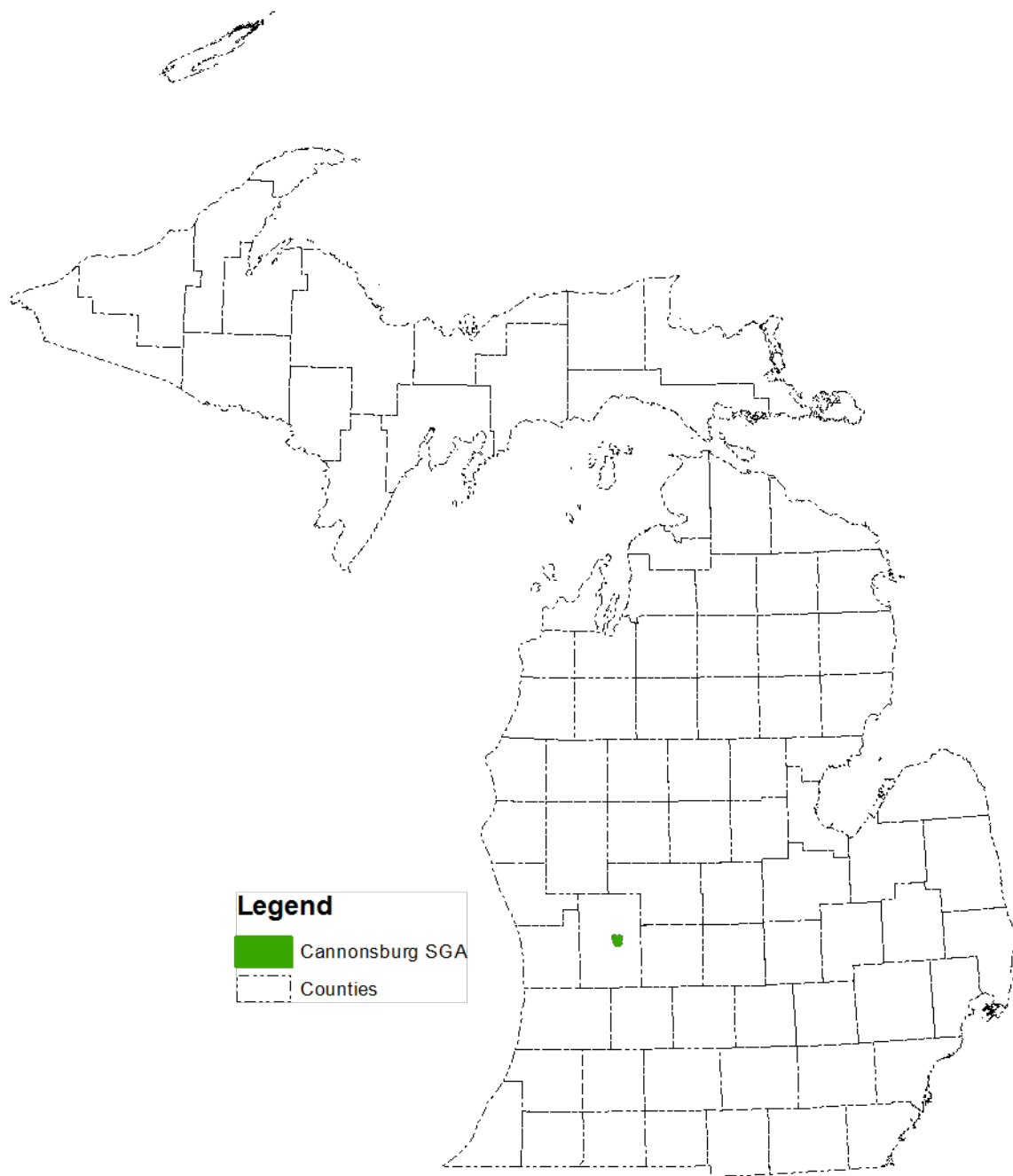
**Metrics:** staff observations, surveys, and feedback from hunters; assessment of oak types within IFMAP.

**Objective A:** Maintain the current extent (~ 450 acres) of accessible oak cover types on the SGA.

**Action 1.** Develop and begin implementation of an adaptive oak management strategy by 2021.

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





**Figure 1.** Location of the Cannonsburg SGA.

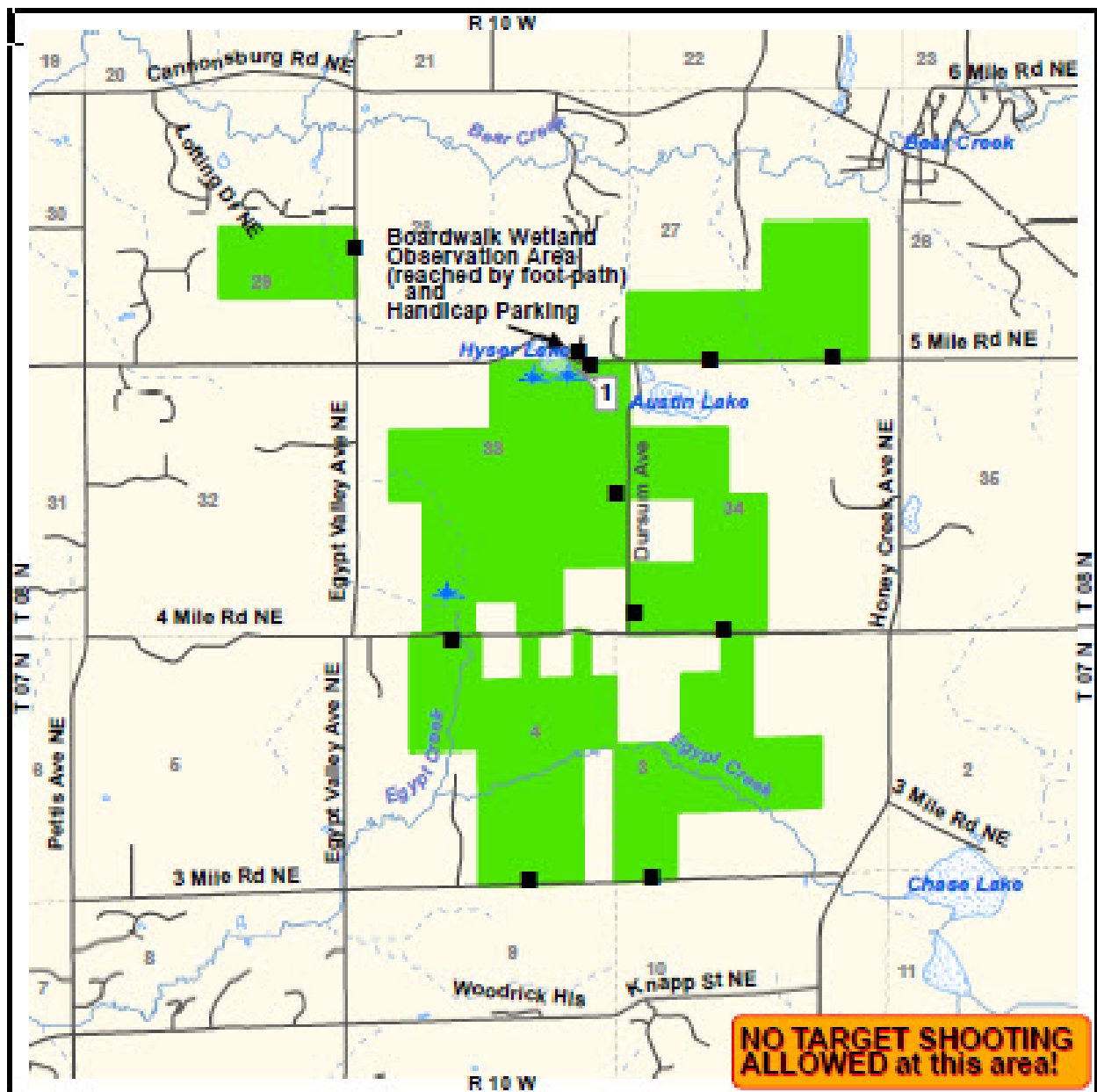
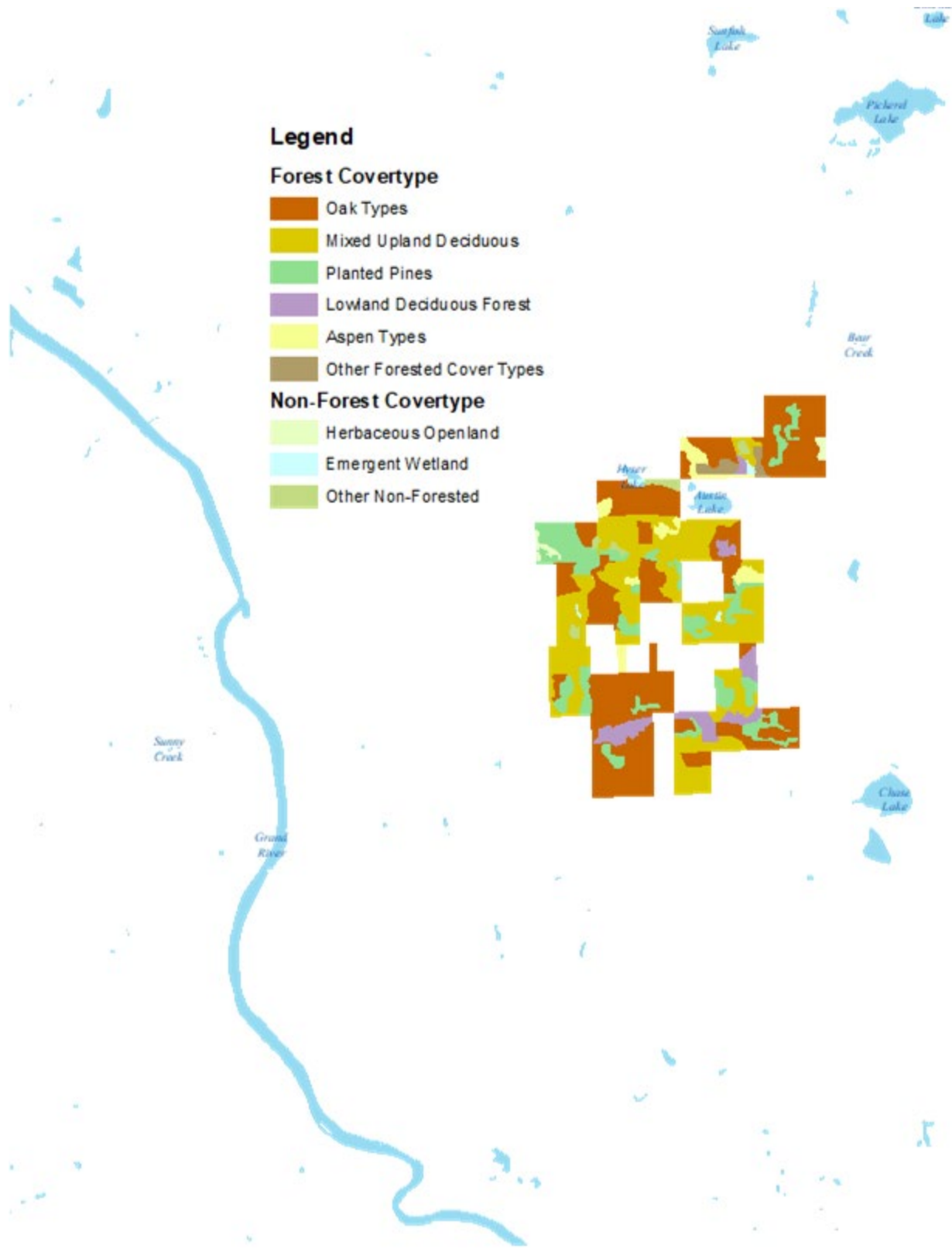


Figure 2. Cannonsburg SGA Boundaries



**Figure 3.** Major Habitat Cover types in the CSGA

## 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 Cannonsburg SGA is located in southern Michigan and within close distance of Grand Rapids, the land acquisition strategy for the CSGA 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 via press release and on the DNR website between

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(John Niewoonder), Field Operations Manager

Date

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(Mark Sargent), Regional Supervisor

Date