

2024 State Forest Management Plan

Executive Summary

Introduction

A century ago, after the unregulated logging of Michigan's lumber baron era, there was basically one focus for Michigan's state forests: get trees into the ground.

That effort worked. Through concentrated planting efforts and natural regeneration, a sea of stumps regrew into thriving forests for the people of Michigan to use and enjoy.

Today, Michigan's nearly 4 million acres of state forest are sustainably managed to balance a host of activities. These include timber management, wildlife viewing and hunting, improving water quality for great fishing and clean drinking water, extracting minerals, camping, hiking, biking, off-road vehicle and horseback riding and other types of outdoor fun. State forest management also includes helping rare plant and animal species thrive as well as conserving and protecting unique places that have ecological, cultural and historical significance.

Managing for multiple values

Forests are important to people in Michigan. A Department of Natural Resources survey conducted in 2017 shows an overwhelming majority of Michiganders feel Michigan's forests are integral to the state and its people – even if they never visit the forests themselves. But balancing the needs and desires of the forest's many different users can be difficult and requires considerable coordination of efforts. This responsibility falls largely across five divisions in the DNR:



- Forest Resources Division is the land administrator and takes the lead in making management recommendations for silvicultural treatments – a scientific term that includes various harvesting techniques to help steer the forest in different directions. Other treatments include activities like tree planting and prescribed burning to improve forest health and vitality.
- Wildlife Division works closely with Forest Resources Division on developing those treatments, ensuring they help to create and sustain a variety of wildlife habitat. These two divisions also work together to help rare species thrive and maintain the integrity of special places.
- Parks and Recreation Division takes the lead on almost all recreation opportunities offered throughout the state forest.
- Fisheries Division ensures the protection of habitat for fish and other aquatic species where forest management activities are planned to occur.
- Law Enforcement Division makes sure forest visitors follow policies and laws designed to keep people and the environment safe.

Plan purpose and scope

Taking into account the varied ways Michiganders use and value state forest land, the State Forest Management Plan sets specific goals and objectives for the composition of the forest and how wildlife will be managed over the next decade (2025 - 2034). Although this plan will not provide specific objectives for uses such as recreation, it will consider these values in the context of forest management activities. The plan also considers goals and objectives from other DNR planning efforts, to better integrate and guide management of state forest land for many uses and values. The plan will help the DNR accomplish its timber and wildlife habitat management goals while taking other forest values into consideration over this 10-year planning period.

Efforts include:

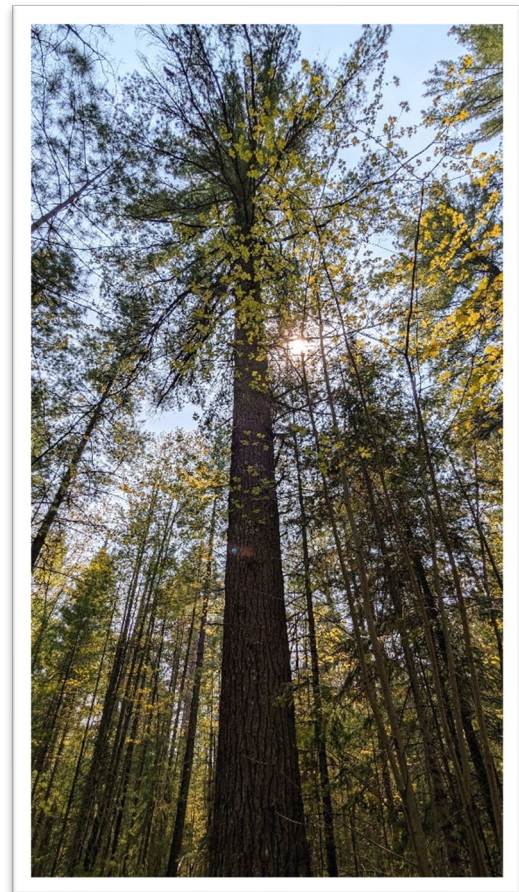
- Using a sophisticated new modeling tool to evaluate long-term management outcomes and to set 10-year timber harvest schedules.
- Ensuring all relevant values people place on the forest receive due consideration and consistent treatment.
- Identifying current and future issues, such as climate change, as well as gaps in this plan.
- Identifying relevant management goals and objectives.
- Ensuring that forest management is transparent to all forest stakeholders.

DNR staff will implement this plan for each management area through the compartment review planning process. This begins with the 2027 year of entry.

Legal obligations and authorities

The plan satisfies the planning requirements of Part 525 of the Natural Resources and Environmental Protection Act (1994 Public Act 451, as amended) and the Forest Stewardship Council® and Sustainable Forestry Initiative® forest certification standards.

The act gives DNR management authority over the state forest, in accordance with the principles of sustainable forestry, with the following stipulations:



- Ensuring wildlife areas and campgrounds on state forest lands are managed for their primary purpose.
- Developing a plan to address all the forestry, conservation and wildlife considerations to be updated when necessary or appropriate, including:
 - A stable, long-term, sustainable timber supply.
 - Local and stakeholder interests.
 - Promoting use of state forest for timber and outdoor recreation.
 - A landscape plan that considers and integrates biodiversity.
 - Identification of sensitive areas, or areas that need to be treated for the needs of wildlife or rare species.
- Establishing regional yearly harvest objectives for all state forest land for a 10-year period, to be reviewed every five years, and updated at least once, and posted on the DNR website.
- Beginning Oct. 1, 2018, the DNR will prepare for sale a minimum of 90% of the yearly statewide harvest objective.

The DNR sought forest management certification under two standards:

1. The Regional Forest Stewardship Standard for the Lake States–Central Hardwoods Region (USA), as approved by the Forest Stewardship Council®-US Board on Feb. 7, 2002, and accredited by Forest Stewardship Council International® on Aug. 5, 2002. Initial certification was granted on Dec. 31, 2005. It has since been updated to the current standard, Forest Stewardship Council® 2010 Forest Management Standard.
2. The Sustainable Forestry Initiative® 2005-2009 Standard as adopted by the Sustainable Forestry Board®, Inc. on Jan. 10, 2005. Initial certification was granted on Dec. 14, 2005. The DNR is now certified under Sustainable Forestry Initiative® 2022 Forest Management Standard.

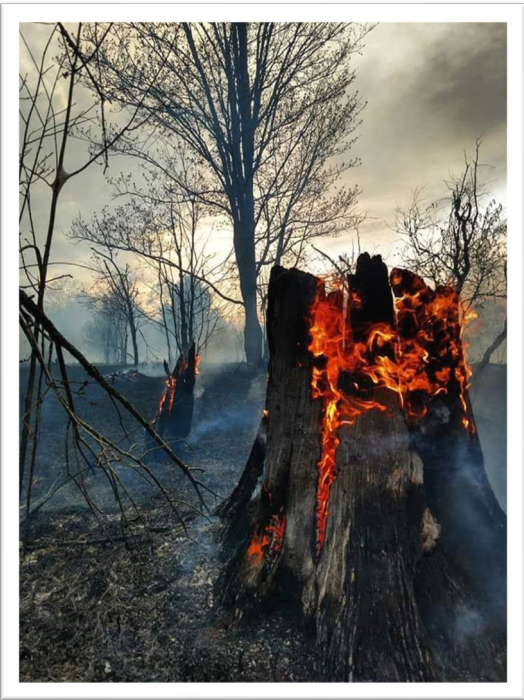
To keep certification, regular internal and external audits are conducted. Some areas are excluded from forest certification: all state parks, state wildlife areas in the lower third of Michigan and Camp Grayling. Additionally, a few small exclusions exist within the state forest.



Origins of Michigan's state forest

During the early 1900s, after Michigan was stripped of timber, many landowners stopped paying taxes and let their land revert to the state. During the 1930s, the state decided to keep tax-reverted land, and it became the foundation for the state forest system. Much of the state forest exists on this tax-reverted land, but other parts were intentionally included and acquired. Methods of acquisition include transfer of land from the federal government, special legislation enacted by state government, gifts of land from private individuals, land exchanges and land purchases. The DNR uses a variety of funding sources to acquire priority lands for an array of uses. The funding sources vary including federal, state, DNR-generated and private donations. Some funding sources, like the state game fund, Pittman-Roberston fund, and the Dingell-Johnson fund, may include special requirements regarding how the land acquired with those funds can be used.

This variety of acquisition methods and funding sources enables the DNR to ensure ownership and management of the appropriate footprint for the state forest.



Management approach

Co-management of the state forest

Historically, predecessors of today's Forest Resources and Wildlife divisions separately owned and managed lands. In 1946, co-management between the divisions was initiated through merging lands into a new state forest system. The agreement was for the then-Forestry Division to be the primary land administrator conducting management activities, but both divisions would have equal management authority, and neither could conduct work without approval from the other.

Recognition of this equal partnership is just as relevant today. This State Forest Management Plan attempts to facilitate better collaboration between two divisions by integrating wildlife habitat needs and goals into strategic and operational direction. All acknowledge that teamwork is important to meet the plan's goals over the next 10 years.

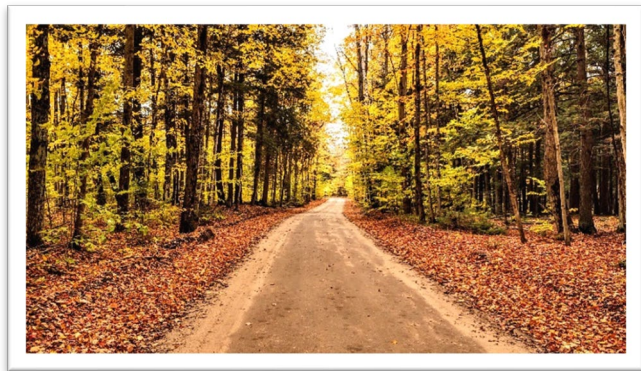
Planning framework and process

A planning framework was developed to balance the ecological, social and economic considerations that are called for under sustainable forest management in Part 525, and that are embodied by all of the multiple-use values described above. The Montreal Process (2015), a set of criteria and indicators established to measure progress toward forest sustainability, was used as a basis to develop seven state forest management principles that help ensure sustainable management of the state forest:

- Principle 1. The state forest is managed to conserve or enhance biological diversity.
- Principle 2. The state forest is managed for net positive growth.
- Principle 3. The state forest is managed to promote ecosystem health and vitality.
- Principle 4. The state forest is managed to conserve and protect soil and aquatic resources.
- Principle 5. The state forest is managed to provide opportunities for social and economic benefits.
- Principle 6. The state forest is managed to respond to a changing climate.
- Principle 7. The state forest is managed to steward significant cultural resources.

These indicators were used to develop a set of **goals** and **strategies** associated with each principle that, taken together, achieve the guiding principles. **Management priorities** for each strategy that identify individual aspects of the state forest that benefit from management were then developed. The **current condition and trend** of each of these aspects of the state forest were assessed, then a **desired future condition** was

established. Realistic, achievable **metrics** that measure progress toward that desired condition were identified for each management priority. Then, a set of **objectives** for each was established to set interim, short-term goals toward the desired future condition. Finally, management **actions** were identified to meet those objectives.



Plan organization and structure

The sustainable forest planning framework established a planning hierarchy that ensured the guiding state forest principles developed were stepped down through goals and strategies into operational management priorities.

Section 1: Introduction. Covers the purpose of, need for and scope of the plan. Describes state forest administration and associated legal mandates. Describes the approach used to develop the plan and how it is organized.

Section 2: State forest history. Provides context for establishment of current forest communities and DNR ownership of the state forest through a description of events from the last major glacial episode through the 20th century.

Section 3: State forestwide and regional planning. Management priorities, grouped by relevant theme, describe the current condition, the future direction and strategic guidance required to achieve the regional and state forestwide scales. These priorities require careful consideration and guide how the state forest is managed collaboratively with other DNR divisions, stakeholders and Michigan residents.

Section 4: Management areas. Plans for each management area, including descriptions of geographically specific current conditions and desired future conditions for featured species, landscape habitat conditions, the forest diversity matrix and cover types. Summations of current and projected acres for major cover types are provided from the model, and 10-year timber harvest goals are established.

Section 5: Special analysis units. Establishes unique, 10-year management goals, model outputs and management activities specific to a defined geographic area. These special analysis units have a corresponding planning/guidance document supporting the information presented in the State Forest Management Plan.

Sections 6: Implementation. Annual cover type and featured species habitat goals are stepped down from the 10-year model goals. Guidelines are established for when to revisit the model based on unforeseen events or new or updated information.

Section 7: Monitoring. Explains how the metrics identified at the state forestwide and regional scales will be monitored over the planning period; can be used as an assessment of state forest sustainability. Cover type and featured species habitat goals from the management area and special analysis units will be assessed in relation to 10-year model goals.

Featured species and landscape habitat conditions

Featured species are target species identified by the DNR Wildlife Division as a focus for landscape-level habitat planning and management. Most of the forest-related featured species chosen for the update in the northern Lower and Upper peninsulas are those that may be negatively affected by normal forest management practices, and species whose habitat requirements have an impact on normal forest operations at a large scale. They were also primarily species that would be relatively straightforward to monitor. This is pivotal, because for the first time, land treated for wildlife habitat will be integrated into planned forest harvest acres.



Management summary

Long-term harvest sustainability

The number of acres for harvest is projected to continue at about 50,000 acres annually over the next decade (Figure 1). It is projected that harvested volume will stabilize in about 40 years (Period 4 in Figure 1) at about 1 million cords per year following recovery from trees killed by the emerald ash borer and beech bark disease.

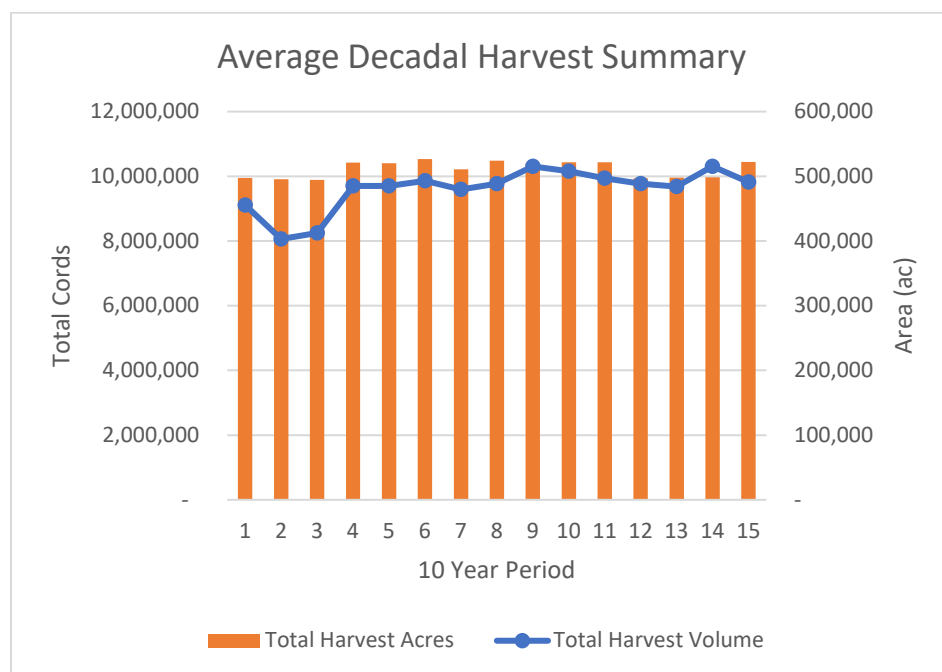


Figure 1. 150-year state forest harvest projection (acres and cords).

Annual harvest projections and implementation

A significant part of implementation work is focused on commercial timber harvest to shape wildlife habitat and a healthy future forest. The State Forest Management Plan model was created to help ensure that management of state forest land in Michigan creates a long-term, sustainable supply of forest products and wildlife habitat while providing recreation opportunities and protecting natural and cultural resources for the people of Michigan.

Table 1. Annual harvest projections by silvicultural regime.

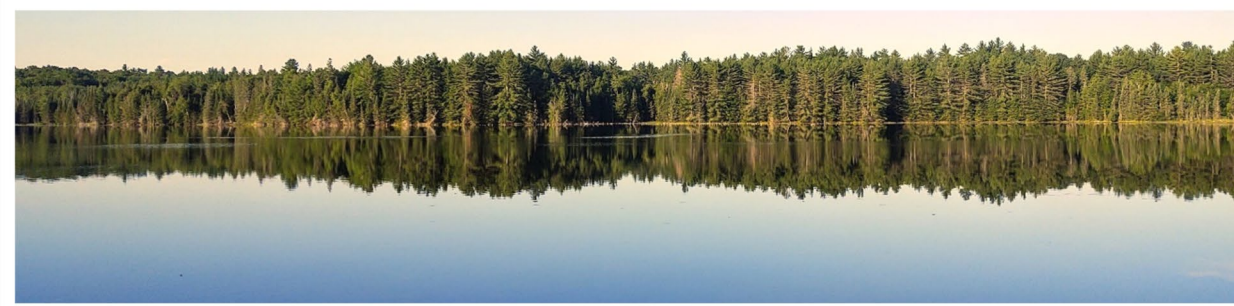
Year of Entry	Clear-cut	Selection	Thinning	Shelterwood	Group Selection	Total
2027	26,550	16,236	9,910	1,305	508	54,508
2028	24,543	18,207	7,371	1,398	1,122	52,640
2029	23,743	14,438	6,595	1,325	746	46,847
2030	23,183	13,294	7,081	1,435	743	45,736
2031	26,268	10,906	4,641	1,449	774	44,038
2032	21,371	15,071	6,177	1,526	1,204	45,348

Year of Entry	Clear-cut	Selection	Thinning	Shelterwood	Group Selection	Total
2033	24,513	10,714	7,846	996	1,302	45,371
2034	32,990	18,580	7,714	2,007	1,297	62,587
2035	28,984	14,419	6,732	1,896	1,185	53,215
2036	30,010	14,720	6,409	800	715	52,653
Total	262,154	146,586	70,475	14,135	9,594	502,944

Planning for a sustainable future

The Michigan DNR strives to be a nationally recognized leader in protecting natural and cultural resources, ensuring sustainable recreation use and enjoyment, enabling strong natural resource-based economies, improving and building strong relationships and partnerships, and fostering effective business practices and good governance.

Managing nearly 4 million acres of state forest land for a variety of forest types and conditions, monitoring forest health and vitality, and fighting invasive insects and diseases are all important tasks that will have a big impact on Michigan's future. Our state's wildlife is a remarkable resource that belongs to all of us, and the habitat it depends on must be carefully managed for a variety of species, from iconic game species including deer, turkey and elk to nongame species such as osprey, moose and Kirtland's warbler.



Michigan's diverse forests provide not only wildlife habitat but also cleaner air, cleaner water and a multitude of recreation opportunities that help boost people's physical, psychological and social well-being.

This plan provides essential guidance for the DNR to sustainably manage the state forest on behalf of the people of Michigan, ensuring the conservation, protection, management, use and enjoyment of the state forest for current and future generations.