



1. Introduction

The state of Michigan is blessed with undisputed forest majesty – more than 4 million acres of state-managed forest lands that provide critical habitat for a variety of wildlife; valuable resources for a bustling timber products industry; and beautiful spaces for plenty of outdoor recreation activities that feed body, soul and mind for millions of residents and visitors.

The Michigan Department of Natural Resources (DNR) works hard to administer state-managed forest resources for the many economic, recreational and environmental values that are part of those forest lands.

Consistent with a mandate to sustainably manage public natural resources for current and future generations, the DNR has adopted an ecosystem-minded approach to managing state forest lands. This ecosystem approach is meant to achieve multiple-use management of the state forest by integrating the need of people and environmental values to produce and maintain diverse, healthy and productive ecosystems that will meet our current needs and not compromise future generations in similarly meeting their own forest needs. Sustainability is based on a framework of criteria and indicators commonly referred to as the Montreal Process. The 2009 version of the framework consists of seven criteria and 54 indicators. An evaluation of the current forest conditions described by the criteria and indicator of this framework in comparison to the desired future conditions of the forest can produce a determination of sustainability. In order to meet the intent of sustainability, it is assumed that the desired conditions, once reached, can be maintained over a time frame of roughly 100 years, in order to not compromise future generations from meeting their needs. Another way to state these two assumptions are that desired future conditions can and have been defined or described, and that climate is stable. Although the regional state forest management plans contain defined future forest cover type descriptions, this desired condition is defined by the current cover types and current human values, and a similar definition has not been attempted for other values. Additionally, there is no question that a stable climate cannot be assumed. Given these realities, the DNR can assess and report on the condition of the state forest, assess observed trends and evaluate the effectiveness of management. However, an assessment of sustainability is not possible at the present time. This issue is not unique to Michigan and is in fact common to every other jurisdiction in North America. In the interim, a monitoring plan will be developed to complement this plan (see Section 5 for a more detailed discussion).

The DNR's responsibility in this area has legal foundation in Part 525, Sustainable Forestry on State Forestlands, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Section 52503 of the statute requires comprehensive management planning of state-managed lands.

Despite these shortcomings, DNR's commitment to sustainable state forest management has been recognized by the Forest Stewardship Council and the Sustainable Forestry Initiative. Both of these independent agencies have reviewed the DNR's on-the-ground forest practices against biological, social and economic standards and certified those practices as sound and comprehensive. Relevant excerpts from the standards are found in Appendix A.

1.1 Purpose

Michigan's state forest is co-managed by the DNR Forest Resources and Wildlife divisions for the purposes of providing forest related products and wildlife habitat. The primary purpose of this regional state forest management plan is to provide landscape-level operation direction for management of state forest resources, by building on the direction provided in the state-level plan (2008 Michigan State Forest Management Plan) and providing goals and objectives for cover type and wildlife habitat management for the 2016-2026 planning period. Although this plan will not address planning objectives for other values of the state forest (e.g., camping and trail use), it will consider these values and attempt to minimize any impacts from forest management activities. The plan is also intended to address the planning requirements of Part 525 of the Natural Resources and Environmental Protection Act (1994 PA 451, as amended) and the Forest Stewardship Council and Sustainable Forestry Initiative forest certification standards.



The Northern Lower Peninsula Regional State Forest Management 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 by:

- Ensuring consistent application of the State Forest Management Plan's strategic direction;
- Using “management areas” to provide operational-level assessments and direction;
- Using special resource areas to address management direction for unique resources and values;
- Ensuring all relevant values (and their respective planning direction) receive due consideration and consistent treatment across the ecoregion and state;
- Ensuring consistency in management direction where values cross management area/forest management unit boundaries;
- Identifying current and future issues, like climate change, as well as gaps in the current plan;
- Identifying relevant goals and objectives;
- Identifying and resolving issues between opposing objectives;
- Providing specific direction through development of targets; and
- Ensuring that forest management is transparent to all forest stakeholders.

Management areas are groupings of state forest land compartments having similar socio-economic and ecological attributes and other attributes related the ownership context within the landscape (a description of the process for determining the management area boundaries is in Appendix B). The rigorous analysis, public review and DNR approval of these boundaries were previously accomplished during this planning process. The northern Lower Peninsula management areas are shown in Figure 1.1.

Implementation of the direction from this plan will be at the forest management unit-level for individual management areas through the compartment review planning process, beginning with the 2016 year-of-entry.

Regional state forest management plans will help bridge a gap between strategic planning at the state-level and tactical planning at the forest compartment-level. The three regional state forest management plans take strategic direction in the form of goals and objectives from other separate and key DNR planning efforts, so as to better integrate and guide management of state forest land for many uses and values. In addition to the State Forest Management Plan, these other planning documents include, but are not limited to:

- Michigan Forest Resource Assessment and Strategy (aka Forest Action Plan)
- Strategy for Kirtland's Warbler Habitat Management
- Michigan's Deer Management Plan
- Michigan State Comprehensive Outdoor Recreation Plan
- Michigan Comprehensive Trail Plan
- Michigan Off-Road Vehicle Plan.

A summary of these and other planning processes (with links to the plans themselves) is available on the DNR forest planning website and is titled “[A Comprehensive Summary of the Department of Natural Resources Planning Processes for Natural Resource Management in Michigan.](#)” A more current version of the relationship among the various components of the forest management planning process in Michigan is shown in Figure 1.2.

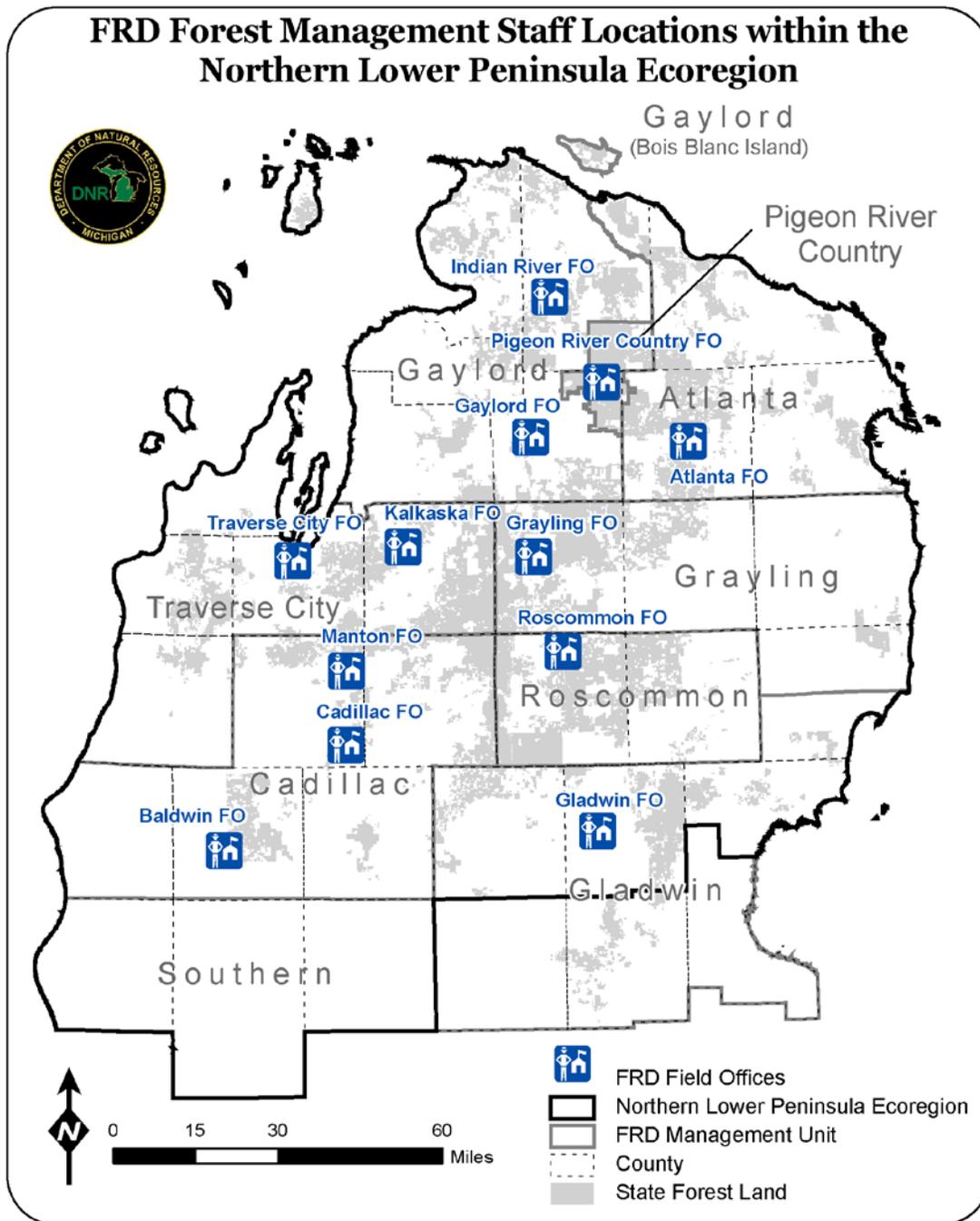


Figure 1.1. A map of the northern Lower Peninsula ecoregion, showing the forest management unit boundaries and associated offices.

Regional state forest management plans apply strategic concepts from these other plans at a landscape-scale to provide operational direction for management decisions that are made during the compartment review planning process. This is practically accomplished during the compartment review process by applying the operational objectives contained in each regional state forest management plan along with updated field inventory data, specific management guidelines for a host of resource values (a list of which are provided in the Introduction to Section 4 of each plan) and professional staff expertise to derive specific commercial and non-commercial treatments for both forest and non-forest state forest



resources. This process constitutes an integrated management approach that in sum provides a comprehensive program for sound management of state forest resources. This whole process is implemented with an integrated approach that includes consultation and input from Parks and Recreation, Fisheries and Law Enforcement divisions.

Michigan Forests

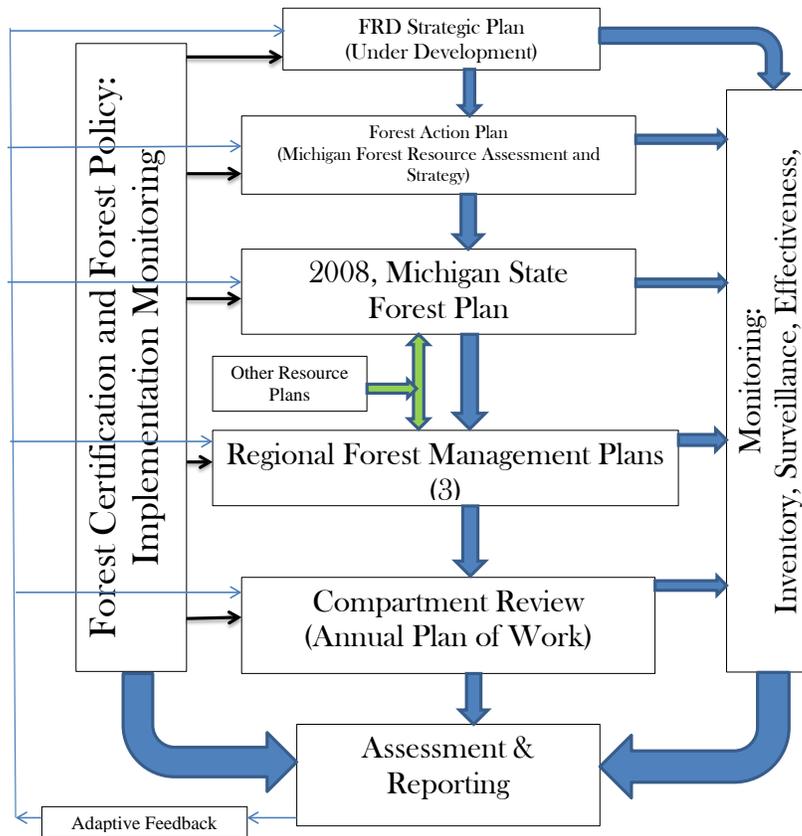


Figure 1.2. The relationship among strategic plan, forest plans, other plans, forest policy, forest certification, monitoring, assessment and reporting and adaptive feedback in the management of Michigan forests.

1.2 Planning Process and Plan Organization

The regional state forest management plans were developed by a team of professional foresters and wildlife ecologists using the concept of distinct management areas. The management areas were developed with public input and review based on an assessment of the ownership matrix in which state forest land was located, social and economic attributes of the general area and a suite of ecological attributes.



Based on the management area concept, the planning team prepared a draft plan addressing the following eight components:

- Section 1 provides an introduction to and context for the plan;
- Section 2 briefly describes the northern Lower Peninsula's regional forest history;
- Section 3 covers the current northern Lower Peninsula's regional forest conditions and trends;
- Section 4 provides management direction (goals, objectives and targets) cover type, wildlife habitat and special resource areas in each of the for 33 management areas in the northern Lower Peninsula;
- Section 5 describes the process for plan monitoring, review and revision that is common to all three regional plans;
- Section 6 contains the appendices; and
- Section 7 provides a glossary of terms.

Once the draft plans were prepared, they were placed on a DNR website for public access and a five-month public review and comment period began. An announcement of their availability for review was sent out by press release, direct e-mail, Facebook and twitter. A webinar was also produced, given, and provided for public access on the website. Presentations on the plan were also provided to several stakeholders and user groups.

The public comment period was followed by a series of public meetings around the state where DNR planning staff presented a summary of what comments were received. This was followed by a comment analysis and assessment period that resulted in revisions to the plans and the development of the final versions.

1.3 Geographical Context

The northern Lower Peninsula ecoregion is located in the northern half of Michigan's Lower Peninsula. The ecoregion is 10.7 million acres in extent, of which approximately two million acres (19 percent) is state forest land. Of that land, 1.78 million acres (87 percent) is forested and is the focus of this regional forest management plan.

The northern Lower Peninsula is divided into eight forest management units, which are responsible for implementing this plan in their respective areas through the compartment review process (Figure 1.1). The management direction in this plan is developed and described on the basis of management areas. There are 32 management areas in the northern Lower Peninsula (Figure 1.3). It should be noted that the regional state forest management plan for the northern Lower Peninsula ecoregion includes the very small amount of state forest land in the southern Lower Peninsula ecoregion, which covers only 45,258 acres and has been represented in one management area (Figure 1.3). Therefore, the DNR believes that there is no need for a separate regional state forest management plan for the southern Lower Peninsula ecoregion.

The management areas are further subdivided into compartments where the tactical management plans are developed and implemented on an annual basis.

Other forest ownerships on the landscape of the northern Lower Peninsula ecoregion include federal agencies, conservancy lands, county and municipal forest lands, corporate, timber investment management organizations, real estate investment trusts and non-industrial private forest land (Figure 1.4).

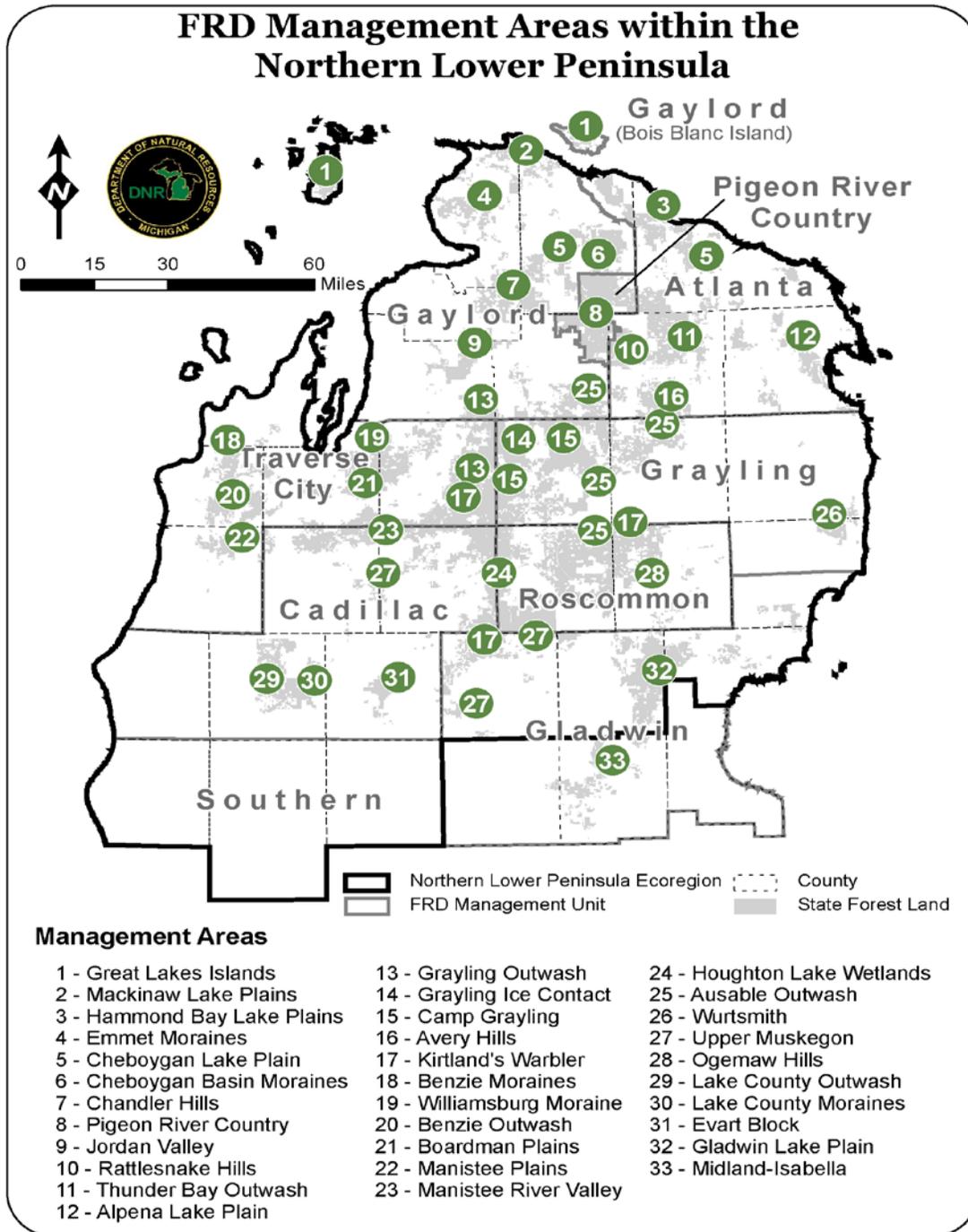


Figure 1.3. A map of the northern Lower Peninsula ecoregion, showing the management areas.



1.4 Implementation

The northern Lower Peninsula Regional State Forest Management Plan will be implemented after approval by the DNR director. The final plan will be made available to the public via the DNR website (www.michigan.gov/regionalforestplans) or upon request.

Management direction in the plan will be first implemented in state forest prescriptions two years following plan approval, due to the lead time required to prepare the tactical plans through the compartment review process.

1.5 Knowledge Gaps and Future Issues

Known gaps in the regional state forest management plans that will need to be addressed in the immediate future include:

- Completion of a landscape level analysis of forested land in Michigan for use in determining the contributions being made by non-state forest land and helping to inform the definition of the desired future conditions and related management objective on state forest lands;
- Identification and incorporation of ecological reference areas that fully meet the Forest Stewardship Council and Sustainable Forestry Initiative certification standard requirements of the conservation of biodiversity and rare natural community types;
- Incorporation of obligate and conditional deer winter ranges into the plan based on the newly approved management guidelines – approval came too late to incorporate into this version of the plan;
- Greater emphasis and resources dedicated to forest management unit-level planning for high conservation value areas and ecological reference areas;
- Completion of the conversion to the Integrated Forest Monitoring Assessment and Prescription inventory system and integration of subsequent assessments into the management area prescriptions;
- Analysis of complete inventory data on “manageable acres” to permit better estimations of allowable harvest and to evaluate opportunities to increase harvest prescriptions in including application to lowland forest and conifer cover types;
- Development and integration of wildlife habitat objectives into management area direction;
- Development of robust, effective, and practical protocols for surveillance, compliance monitoring, effectiveness monitoring, validation monitoring, assessment and reporting;
- A scientifically-based, deliberate, and quantifiable vision of the forest type composition of the future state forest (next 30 years), incorporating data and accounting for probable trends and impacts related to climate change over the next century; and
- While the regional state forest management plans include some consideration of the management implications to Michigan’s state forest system due to observed and predicted changes in climate, further development of more specific strategies to reduce the impacts of, adapt to and mitigate the effects of climate change is needed, with recognition that the implications of climate change will vary by ecosystem, ownership, and management objective; and, how we can revise our management and monitoring systems to better account for anticipated changes including cover type specific adaptive management strategies and approaches.

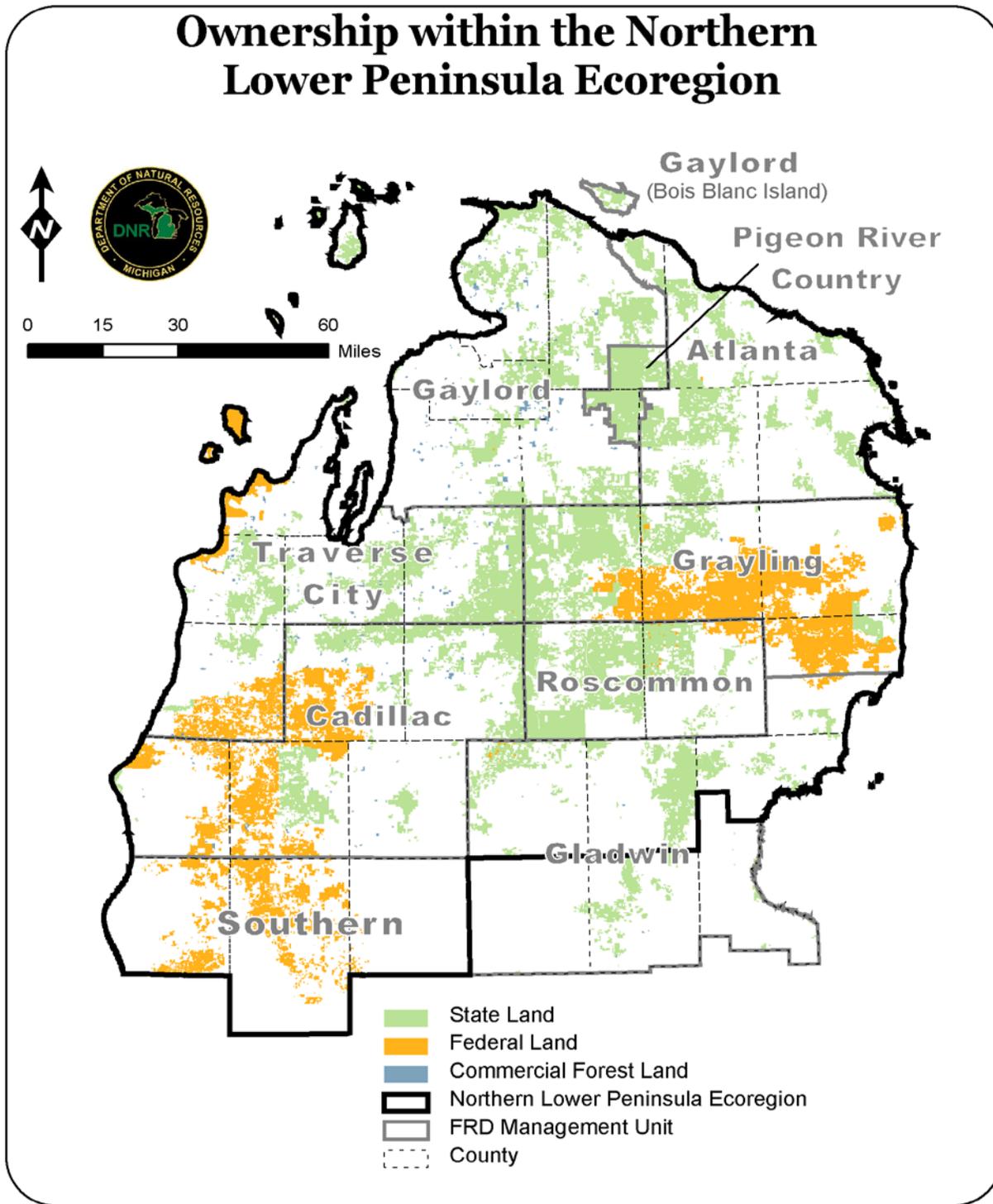


Figure 1.4. A map of the northern Lower Peninsula ecoregion, showing the ownership pattern of forested land.