



DNR Forest Management

Overall, we concluded that the Forestry Division operates within a framework that supports the division's responsibility to manage state forest land sustainably and for multiple uses.

Key Facts and Findings:

- The Forestry Division in the Department of Natural Resources (DNR) administers 4.2 million acres of land for economic, recreational, and environmental benefits.
- State law directs the division to manage state forest resources according to principles of multiple use and sustained yield.
- Interdisciplinary forest resource management planning by the DNR divisions of Forestry, Fish and Wildlife, and Ecological and Water Resources contributes to management that satisfies multiple uses sustainably.
- Independent, third-party forest management certification and use of best-practice guidelines also support management for multiple uses over the long term.
- Some recent forest management policy statements and their implementation have emphasized the economic uses of forest resources.
- According to Forestry Division staff, most loggers who harvest state timber perform well, but there are insufficient options to penalize those who do not.

- The Forestry Division's forest management database is inadequate to support some on-the-ground activities and fully monitor progress toward achieving forest management goals.
- Direct appropriations to the Forestry Division, excluding those for land and easement acquisition, dropped between 2008 and 2012 and remain below their 2008 level.

Key Recommendations:

- DNR should accelerate implementation of changes to forest management policies only when it is essential.
- DNR should prioritize resources to improve monitoring of forest resource management plans.
- The Forestry Division should determine criteria for identifying underperforming loggers and expand options to penalize them.
- DNR should provide guidance to department staff on prioritizing goals that affect long-term economic returns when school trust land is involved.
- DNR should continue to improve its interdisciplinary forest management efforts.

Report Summary

Minnesota contains over 17 million acres of forest land. Almost one-quarter of the forest land is owned and administered by the state. The Forestry Division in the Department of Natural Resources (DNR) manages 4.2 million acres of land.

Forest management includes activities undertaken to affect the health and growth of forests to achieve a desired outcome. These activities can contribute to the economy, create habitat for wildlife, support diverse plant and animal life, lessen fire risk, and promote forest health. For example, an aspen timber harvest may provide employment for a logger, raw material for a paper mill, and make room for young forest that provides habitat for ruffed grouse and golden-winged warblers. Forest management can be controversial because activities that meet one objective can adversely affect others.

State statutes direct DNR to manage forest resources according to the principles of multiple use and sustained yield. These principles require DNR to manage forest resources to meet current economic, environmental, and recreational needs, without risking the ability of future generations to do the same. State law defines forest resources to include timber, wildlife habitat, air, and aesthetic values, among others.

DNR's subsection forest resource management plans support sustainable management of forest resources for multiple uses, but plan monitoring and some aspects of interdisciplinary work need improvement.

Subsection forest resource management plans support the Forestry Division's work by requiring interdisciplinary planning, opportunities for public input, and long-term goals for state-administered forest land.

In each subsection, a team of staff from the DNR divisions of Forestry, Fish and Wildlife, and Ecological and Water

Resources guide development of the subsection plan. (Subsections are physical areas sharing features such as climate and distribution of tree species.) These ten-year plans bring the divisions' expertise and perspectives "to the table," helping address the multiple-use principal of forest management. The plans also include long-term forest management goals, providing a focus that supports management for a sustained yield of forest resources. The forest resource plans contribute directly to the Forestry Division's annual work plans and influence harvest and regeneration plans for stands of trees.

However, DNR has not adequately monitored the extent to which it is making progress toward plan goals. In addition, DNR staff have identified opportunities to improve interdisciplinary planning.

Independent, third-party forest certification validates that DNR's forest management considers multiple uses and sustainability.

Independent, third-party certification requires DNR to meet standards established and audited by others. Almost 5 million acres of DNR-administered land is certified by the Forest Stewardship Council® and the Sustainable Forestry Initiative.

The organizations that certify DNR forest land have standards that include management for multiple uses and sustainability. To maintain certification, DNR must meet these standards, as verified by independent auditors. Although some Forestry staff thought certification has not changed the division's forest management practices, others in DNR commented on positive effects of certification, such as improved interdisciplinary work.

DNR's commitment to follow best-practice guidelines developed by the Minnesota Forest Resources Council further supports its sustainable forest management.

As directed by state law, the Minnesota Forest Resources Council oversaw development of site-level timber harvesting guidelines that consider the economic, social, and ecological values of forest resources and support sustainability.

DNR has committed to following these guidelines. The guidelines include, for example, the amount of live trees to leave in a harvest area to provide habitat and food for wildlife and a seed source for reforestation. Guidelines also address minimizing the impact of harvests on resources such as soil and water quality.

Some recent statements of forest management policy and their implementation have emphasized economic uses of forest resources.

In 2012, DNR reiterated its responsibility to manage school trust land to maximize economic returns over time. School trust land is land granted by the federal government to the state for the benefit of schools. As trustee, the state must manage the land in the interests of current and future trust beneficiaries.

Depending on how DNR implements changes to school trust land management, other forest land could be affected. However, maximizing economic return is not necessarily the primary goal for these other lands.

DNR has also reconsidered some of its policies related to harvest age, with the consequence that forests may be available for harvest earlier than they otherwise would have been. For example, the department rescinded its policy on extended-rotation forests—forests for which the time between harvests has been prolonged. DNR also has decided to harvest planted red pine on school trust land when it is 60 to 70 years old—its “economic rotation age”—rather than the average normal rotation age of 112 years reflected in forest management plans.

DNR implemented the change to the extended-rotation forest policy with an

emphasis on offering timber for sale quickly. DNR is considering whether to apply the economic rotation age policy to planted red pine on non-school-trust land.

The Forestry Division relies on timber harvest as its main forest management tool.

The Forestry Division has 17 area offices throughout northern and southeastern Minnesota. Area foresters begin the timber sale process with a list of stands derived from subsection forest resource management plans. The division directs foresters to consider the plans’ goals and Minnesota Forest Resource Council guidelines when designing sales. Staff from the Fish and Wildlife Division and the Ecological and Water Resources Division may review the harvest and regeneration plans designed by foresters.

For the majority of timber sales, foresters appraise the timber and offer it for sale in oral or sealed-bid auctions. Foresters issue permits to successful bidders. Regular permits typically last three years.

According to some Forestry staff, underperforming loggers create inefficiency, and penalty options are insufficient.

Forestry Division staff indicated that the vast majority of loggers who operate on state forest land comply with guidelines and timber sale specifications and leave the harvest site in good condition. However, several staff indicated that the small number of loggers who do not operate to these standards require significantly more supervision and guidance than others.

Currently, the division may charge loggers for liquidated damages if they breach permit terms. For example, the division may bill a logger who damages trees that were reserved from harvest. However, the division cannot prevent the logger from bidding or operating on future sales, no matter how regularly the logger commits violations of this kind. Representatives from the Forestry Division and a contract-loggers

association indicated willingness to work together to establish criteria for identifying and penalizing loggers who habitually violate permit terms.

According to staff, portions of the Forestry Division’s forest management database do not support efficient operations or provide needed monitoring data.

The Forestry Division’s database has modules for (1) recording timber sales, (2) maintaining an inventory of state forest land, and (3) planning and documenting timber stand and forest road activities. Forestry staff were fairly positive in their assessment of the timber sales module.

However, some Forestry staff indicated that incorrect and outdated inventory data can contribute to planning difficulties and timber sales inefficiencies. For example, a plan may identify a stand to harvest to help achieve plan goals. But an on-site visit by a forester to design a timber sale may reveal that the stand is not ready for harvest.

The module for planning and documenting timber stand activities requires duplicative data entry, according

to some staff, and does not generate reports needed to monitor progress toward plan goals.

The Forestry Division is working on updating inventory records and has developed an approach to minimize duplicative data entry and improve monitoring capabilities.

Fiscal year 2014 direct appropriations to the Forestry Division were lower than 2008 appropriations.

Fiscal year 2008 appropriations to the Forestry Division totaled \$43.2 million. Appropriations, excluding those for land and easement acquisitions, declined steadily between 2008 and 2012, to \$34.4 million. Appropriations for fiscal year 2014 increased to \$36.8 million, but remain below the 2008 level.

The Forest Management Investment Account, which includes timber sales and related revenues, is a primary source of division funding, but its balance has been declining. The account’s ending balance in fiscal year 2007 was over \$9 million, compared with \$1.4 million in 2013.

Summary of Agency Response

In a letter dated August 15, 2014, Department of Natural Resources (DNR) Commissioner Tom Landwehr said the report is “a good summary of our forest management activities, how effective they are, and how they can be improved to help us meet both the opportunities and challenges we face today and in the years ahead.” The commissioner noted that bonding dollars for reforestation “have generally been insufficient to meet our needs in recent years.” He also highlighted the report’s observation that technology used to support on-the-ground management activities is aging and reduces staff efficiency.

The commissioner emphasized that DNR’s interdisciplinary planning processes “are key to sustainably managing our forests for multiple benefits” and that “forest management activities, including timber harvesting, are used in tandem to achieve positive results, including increased economic value, improved wildlife habitat, greater diversity in plant and animal life, and reduced fire risk.” The commissioner indicated that “the department supports all the report’s recommendations and will work with our stakeholders and partner organizations to identify how best they can be incorporated into our planning and management activities.”

The full evaluation report, *DNR Forest Management*, is available at 651-296-4708 or:
www.auditor.leg.state.mn.us/ped/2014/forestmgmt.htm