

Father Hennepin State Park

Management Plan Amendment

Resource Management Timber Harvesting



Division of Parks and Trails
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(insert Division Director approval letter)

Introduction

Minnesota Statute 85.011 describes the legislative intent at the foundation of creating state parks, state recreation areas, and state waysides:

The legislature of this state has provided for the creation and establishment of state parks, designated state recreation areas, and waysides of the purpose of conserving the scenery, natural and historic objects and wildlife and to provide for the enjoyment of the same in a manner that will leave them unimpaired for the enjoyment of future generations.

The Minnesota Department of Natural Resources Division of Parks and Trails undertakes many different efforts to meet this statutory obligation to conserve the natural resources within these units. The types of projects and techniques used vary depending on the type and quality of plant or animal community. Different efforts are needed, for example, to manage largely intact native communities such as remnant prairies or old growth forests than to conduct restorations on properties that have been disturbed by logging, agriculture or other impacts. Different types of communities – prairies, pinelands, savannas, wetlands, hardwood forests – also require different approaches to successfully preserve and perpetuate the plant and animal resources they contain.

The Division of Parks and Trails employs a variety of tools as part of its resource management activities, such as: prescribed burning, control of invasive species, seed collection, planting of trees and other vegetation, mowing and timber harvest. These tools are often used in combination as part of multistep, often multi-year, efforts to improve the extent and quality of the unit's native plant and animal communities.

Purpose

The purpose of this plan amendment is to amend the *Father Hennepin State Park Management Plan* (August 1978) to clarify the use of timber harvesting as a resource management tool in the state park. Master plans (management plans) are required for units of Minnesota's outdoor recreation system, including state parks and state recreation areas, under *Minnesota Statutes*, Section 86A.09, Subdivision 1.

The DNR Division of Parks and Trails uses timber harvesting as a tool to meet its resource management goals, and to facilitate interpretive and recreation activities. Timber harvests take place in state parks and state recreation areas primarily to restore or manage native plant communities. In some cases, a harvest is necessary to restore visitor usage and reduce fuel loads following a storm event.

Timber harvests are conducted in state parks and state recreation areas to achieve various results, including:

- Stands of trees or other woody species not native to the state park or SRA may be removed.
- Trees are harvested as part of restoring native plant communities such as oak savannas and prairies or to integrate planted stands into surrounding forest communities.
- Trees are sometimes harvested to prepare a site for regular resource management through prescribed fire – the timber harvest is used first to reduce the fuel load.
- Trees may be harvested to address an insect or disease issue, or to thin the stand for better growth.
- On occasion, trees are harvested to restore visitor access by clearing trails and other facilities, and to reduce fuel loads following a storm event.

The Division of Parks and Trails may contract with a commercial operator to conduct timber harvest activities. It is often more efficient and effective for a commercial operator to use their specialized equipment for this purpose.

Description

At Father Hennepin State Park, initial timber harvest activities will be conducted to thin a red pine plantation near the park shop and sewage pond area. Thinning the pine stand will promote better growth and health of the stand, create a more natural look, reduce fuel loads, and reduce the risk of disease and blowdown. The thinning project may also involve removing undesirable trees and brush, including non-native vegetation such as European buckthorn. The thinning will encourage development of a plant community that is more diverse in structure, age and species.

Red pine are native to the broader area, but likely were not the dominant species in this location. The immediate landcover of the project area is currently classified as “non-natural, planted coniferous.” The larger surrounding forested landcover is classified as central mesic hardwood forest (MHc36a), with the broader area of the state park indicated as “Big Woods” on the Marschner pre-settlement vegetation map.

The goal for the thinning project is to improve the health and appearance of the pine plantation. In the future, the division may decide to convert the plantation to a hardwood forest to closer represent the pre-settlement plant community. Maintaining a healthy stand in the meantime would make the conversion easier if that is pursued in the future.

Timber harvest in the state park may also be conducted to address other resource management situations that arise in the future, including removal of trees impacted by emerald ash borer or other insect or plant disease.

Natural and Cultural Resources Impact

The intent of conducting a timber harvest is to aid in the restoration and preservation of natural communities within the state park. Timber harvest is one tool among a set of resource management activities the division will use to pursue its statutory obligations for resource protection and restoration.

Father Hennepin State Park contains several forested native plant communities - Mesic Hardwood Forest System (MH), Red Oak-Basswood Forest (MHc36a), Northern Poor Conifer Swamp (APn81), Low Shrub Poor Fen (APn91a), and Poor Tamarack-Black Spruce Swamp (APn81b). Timber harvest activities are not anticipated as part of the near-term management for these forested native plant communities within the park.

There are no known rare plant or plant communities in the pine plantation area targeted for thinning. One species of special concern - Cerulean warbler (*Setophaga cerulea*) – breeds within the state park. Their preferred habitat is hardwood stands, so any impact to the population is expected to be minimal.

Cultural resources with the park include multiple known pre-historic and historic archaeological sites, including habitation and mound sites. There are several historic resources within the pine thinning area related to early agricultural use. These sites have been identified and will be marked to prevent damage during the thinning operation.

There is a high probability of other yet-unidentified archaeological resources within the park. Prior to a timber harvest, the division will conduct a resource assessment to identify any potential impacts to natural or cultural resources in the timber harvest project area. Thinning activities are anticipated to be conducted during frozen ground conditions which will reduce impacts to breeding birds, bats, wetlands and cultural features in the state park.

Interpretive Services Impact

Timber harvest activity, like other resource management activities, presents an opportunity to educate park visitors about Minnesota's native plant communities, the impacts of invasive/non-native plants, and the division's resource management responsibilities and efforts.

There are no existing interpretive resources – signs, kiosks, trails, or similar resources – in the initial timber harvest project area. Interpretive signs, naturalist-led programs, or other methods may be used to describe the project's purpose and intended benefits for the state park's natural resources.

Recreational Use and Visitor Services Impact

There may be short term impacts on visitors during timber harvest activities – trails and other nearby facilities may be closed during the harvest or parking areas being used for staging equipment may not be available for public use.

Long term impacts for visitors of timber harvests will be positive – timber removed following blowdowns will improve access and safety for visitors along trails and other facilities, and restored native communities will enhance visitor experiences.

One section of trail crosses through the pine plantation and would be impacted during the initial thinning project. The trail is used for hiking in the summer, and is not groomed but open to skiing, hiking, and snowshoeing in the winter. This section of trail will be temporarily closed during the timber harvest activity. The trail is not maintained in the winter and receives low use during the winter season. Since the pine thinning will occur in winter, minimal impact to visitors is anticipated.

Management Plan Text Revisions

The plan amendment text supplements portions of the *Resource Management* section in the current management plan - *Vegetation Management* (p. 44) and the actions described in the *Father Hennepin State Park Vegetation Management Plan* (p. 49 – 51) - to authorize the use of timber harvest as a resource management tool within the state park.

To address the initial pine thinning project, the amendment revises the management practice and specific management actions in the *Vegetation Management Plan* for the Conifer Plantation ecological community (OrPc - map codes 9a and 9b). For both the 9a and 9b areas, the management practice will be “Encourage native forest regeneration” with the specific management action to “Thin plantation stands periodically to improve stand health and naturalize the appearance of the plantation area with the goal of transitioning pine plantations to hardwood forests as consistent with surrounding landcover.” (p. 50, map p. 53).

Public Review

In accordance with Minnesota Statutes 86A.09 Subd. 3., the plan amendment was released for a 30 day public review period beginning on March 9, 2020 with an open house held at Mille Lacs Kathio State Park on March 23, 2020.

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