

43-S06-2023



FOREST STEWARDSHIP PLAN

Landowner(s) as Shown on Deed:

SURING SCHOOL DISTRICT

Name and Address of Contact Person:

SURING SCHOOL DISTRICT

411 ALGOMA ST
SURING, WI 54174-9565

Plan Period: 30 years

Starting January 1, 2023 **Ending** December 31, 2052

Municipality(s): Town of Bagley (Oconto County)

Total Acres: 160.000

Attached map(s) show the location of the lands included in this Forest Stewardship Plan.

Purpose of the Forest Stewardship Program

The purpose of the Forest Stewardship Program is to encourage the long-term stewardship of nonindustrial private forest lands, by assisting these owners to plan for and more actively manage their forest and related resources. The Forest Stewardship Program provides assistance to owners of forest lands and other lands where good stewardship will enhance and sustain the long-term productivity of multiple forest resources. The program provides landowners with the professional planning and technical assistance they need to keep their land in a productive and healthy condition.

The Forest Stewardship Program is a federal program that is authorized by the Cooperative Forestry Assistance Act of 1978, as amended, 16 U.S.C. 210sA. In Wisconsin the program is administered by the Wisconsin Department of Natural Resources Division of Forestry.

Management Plan

Your Forest Stewardship management plan incorporates "sound forestry practices" for Wisconsin. "*Sound forestry practices*" includes timber cutting, transporting, pruning, planting, and other activities recommended or approved by the WDNR for the effective propagation and improvement of the various timber types common to Wisconsin. It includes management of forest resources other than trees including wildlife habitat, watersheds, aesthetic and endangered and threatened plant and animal species. Forest management guidelines for Wisconsin can be found in the Department of Natural Resources [Silviculture Handbook](#) and the [Forest Management Guidelines](#). To read these publications go to <http://dnr.wi.gov> and search 'Forest Management'.

An approved Forest Stewardship Plan may provide access to cost-share assistance through USDA conservation programs like the Natural Resources Conservation Service (NRCS) Environmental Quality Incentive Program and the WDNR Wisconsin Forest Landowner Grant program.

Your plan identifies important management practices prescribed for your property. The plan writer determines management practices based on the types and conditions of your forests, the capability of the land, and the objectives or goals you have expressed for your forest land. The plan writer prescribes a completion year for each practice. You should review your plan periodically so you can prepare for the work that is needed. Consult your WDNR forester when you have questions on what is included in your plan.

43-S06-2023

Your management plan is just one component of Wisconsin’s strategy to promote and support sustainable forestry practices on privately owned lands. Other resources are available to provide you with the most current information available on natural resources management. You can access those resources on the WDNR public website using the addresses referenced in this plan. You are encouraged to consult this information regularly.

Management Plan Updates

You and your forester should monitor your management plan throughout the period covered by the plan to address concerns that are newly present or newly identified since the date your plan was written. Updates might include changes in tree species, tree stocking, damage from weather (wind, ice, snow), insects and disease, forest fire, flooding, land management goals, new management information (silvicultural science), invasive species, fire management, riparian management zones, or presence of endangered, threatened or high conservation value species or communities. An update will usually change the type of practice recommended or the year it should be completed.

Landowner Goals

Your management plan blends your goals with site capabilities and Forest Stewardship program standards to guide your land management. You identified the following as your goals:

- Provide exceptional outdoor learning opportunities.
- Long-term sustainable forest management.
- Provide timber sale revenue for the school district.
- Provide a diversity of forest types & wildlife habitat.

Management Practices

The management practices in this plan include practices that will enhance the growth rate and species composition of your forest; provide for the establishment of a new stand of trees; improve wildlife habitat and recreational activities; increase carbon sequestration; reduce fire hazards on your property; improve access; and help you meet your other goals. The table below is a summary of the recommended management practices that are specific to the individual timber stands described later in this plan. If a year is provided the practice should be completed or in progress by the end of that year to keep your forest in a productive and healthy condition. If there is no year provided you can complete the practice at any time.

You are encouraged to work with a cooperating forester to establish and administer timber sales. Use the [Forestry Assistance Locator](#) to find a cooperating forester; go to <http://dnr.wi.gov> and search ‘Forest Landowner’.

Practices that are not considered commercial may be eligible for cost-share assistance under the Wisconsin Forest Landowner Grant Program (WFLGP) or USDA conservation programs like the Natural Resources Conservation Services (NRCS) Environmental Quality Incentive Program (EQIP).

Listed here are practices common to all timber stands:

- Seeding and mowing of trails and openings – Please contact your local WDNR Wildlife Biologist for information about seed mixtures
- Maintaining snags, den trees, and “wolf” trees – Retain trees during timber harvests and improvement cuts
- Controlling invasive species
- To learn more wildlife friendly ideas, go to <http://dnr.wi.gov> and search ‘Wildlife’.

Management Practices Summary (by Individual Stand)				
YEAR	STAND(S)	ACRES	TIMBER TYPE	PRACTICE
2025	9	4	White Pine	THINNING
2035	1	16	Red Pine	CLEARCUT REGENERATION HARVEST
2035	2	3	Red Pine	THINNING
2035	3	20	White Pine	THINNING
2035	3	20	White Pine	THINNING
2035	4	7	White Pine	THINNING

43-S06-2023

2035	5	34	Red Pine	THINNING
2035	6	29	White Pine	COPPICE REGENERATION HARVEST
2035	8	30	White Pine	COPPICE REGENERATION HARVEST
2035	9	4	White Pine	THINNING
2050	2	3	Red Pine	THINNING
2050	5	34	Red Pine	THINNING
2050	6	29	White Pine	THINNING
2050	9	4	White Pine	THINNING
2050	10	4	Red Maple	COPPICE REGENERATION HARVEST
ANY	11	2	True Grasses	MOWING

County Cutting Notice

At least 14 days prior to harvesting timber a notice of your intent to harvest (cut) must be filed with the county clerk. Property taxes must be current prior to receiving approval to cut timber.

General Description of Areas Identified on Your Property

Foresters combine areas of land with similar vegetative and non-vegetative characteristics for management purposes and call these areas “stands”. The plan describes these stands and you can view the stands on the Forest Stewardship map(s). Listed below are the descriptions of forest and non-forest areas on your property.

True Grass Lands

True Grasslands occur on upland sites and are predominately brome-grass, quackgrass, bluegrass, timothy, big and little bluestem, Indiangrass and other types of grasses. Many upland grasslands are former agricultural fields left fallow for a number of years that are unable to grow trees because of frost pockets or other environmental conditions. True grasses grow on a variety of soils.

Alder Swamp

Alder Swamps are wet and contain more than 50% alder. Alder swamps usually occur in peat and muck soils.

Red Maple Forest

Red Maple Forests are composed of over 50% red maple. Ash, elm, aspen, white birch, white pine, balsam fir, white cedar, oak and other native trees commonly grow with red maple. Over the last century, red maple has dramatically increased in abundance throughout the state. Red maple can produce abundant seed and stumps readily sprout. It tolerates shade, and grows on a wide range of soils from sands to loams, and in conditions from dry to wet. It grows best on well-drained loamy soils.

Red Pine Forest

Red Pine Forests are composed of more than 50% red pine. White and jack pine, aspen, oak and other native trees commonly grow with red pine. Red pine has been a common tree in plantations.

Red pine grows best in well-drained loamy sands and sandy loams within its range in northern and central Wisconsin. It can grow well on a wide range of other soil conditions if introduced by planting.

White Pine Forest

White Pine Forests consist of more than 50% white pine. Red and jack pine, aspen, paper birch, red maple, oak, balsam fir, white spruce, eastern hemlock and other native trees commonly grow with white pine. White pine is a long-lived tree species that was common in Wisconsin’s historic forests. Heavy logging during the cutover made white pine scarce for a time. As trees are becoming old enough to be good seed producers, its numbers are increasing.

White pine grows in almost all soil conditions in Wisconsin but does best on loamy sands, sandy loams, and loam soils.

43-S06-2023

Resource Protection and Management

Special records and inventories identify important natural, historical or archeological resources on or near your property. The plan writer designed your management practices to protect these resources from disturbance.

You can go to the WDNR website to find information used to evaluate stand conditions and determine management practices for your property. Go to <http://dnr.wi.gov> and search using the keywords shown.

- To learn about [Ecological Landscapes](#) of Wisconsin, search for 'Landscapes'.
- To learn about [Wildlife Management, Habitat](#) and [Natural Communities](#), search for 'Wildlife' and 'Biodiversity'.
- To see the Wisconsin [Wildlife Action Plan](#), and from there [Explore Species Profiles](#), search for 'ER' or 'Wildlife'.

Your lands lie within a landscape known as Northeast Sands. You can find an overview of the landscape, species of greatest conservation need, management opportunities and much more. Go to: <http://dnr.wi.gov> and search 'Landscapes'.

Endangered, Threatened and Special Concern Species and Plant Communities

Natural Heritage Inventory (NHI) searches determine if your plan may affect endangered, threatened, or special concern animals, plants or plant communities. To learn about rare plants, animals and natural plant communities in Wisconsin visit <http://dnr.wi.gov> and search for 'NHI'.

The Natural Heritage Inventory (NHI) review lists the following resources on or in the area surrounding your property and suitable habitat for them is found on your property:

- 1 Federally Protected Turtle(s)

When implementing management practices, mitigation might be necessary, such as:

- Best management practices that protect water quality and habitat for rare or aquatic species
- Harvest limits or restrictions to avoid impacts to nesting birds or NHI Working List species
- Surveys for rare species prior to timber sale establishment

Archeological and Historical Resources

State Historical Society records searches determine if your plan may affect archeological and historical sites. These sites require protection from disturbance, including road building, grading or gravelling. Contact your local WDNR Forester for additional information on archeological and historical sites.

The Archeological Resources Inventory lists no archeological resources within this property.

The Historical Resources Inventory lists no historical resources within this property.

Invasive Plant Species

Invasive plants may decrease the productivity, regeneration, wildlife habitat, and recreational value of your property. It is essential to identify and control small populations of invasive plants to minimize their spread. The individual stand descriptions list any invasive plant species identified on your property. For more information on invasive plant control, consult the Wisconsin Council on Forestry's website on [Invasive Species Best Management Practices for Forestry](#).

Best Management Practices for Water Quality (BMPs)

To protect the water quality in Wisconsin's lakes, streams and wetlands and to prevent soil erosion, implement *Wisconsin's Forestry Best Management Practices for Water Quality* during all forest management activities, such as road building or timber harvesting. Specific BMPs will be included in detailed practice or harvest plans. Water regulations permits may be required to cross wetlands and streams. Please go to <http://dnr.wi.gov> and search 'Forest Management' to review all [BMPs for water quality](#).

43-S06-2023

Forest Health

Over time, your forest may suffer from insects, disease, windstorm, fire, flooding or drought, etc. These problems may alter your management prescriptions. If you are concerned about forest health, please contact your local WDNR Forester or go to <http://dnr.wi.gov> and search 'Forest Health'.

STAND NUMBER 1		16 Acres
Primary Type:	Red Pine Forest -- Large Sawtimber	
Secondary Type:	Red Pine Forest -- Small Sawtimber	

Stand Information

The most abundant tree species in this stand include Red Pine (81%), White Pine (11%), Red Oak (4%) and White Spruce (2%).

These trees make up an even aged stand that originated about 1946. Tree ages in even-aged stands may vary slightly, but the trees began growing in relatively the same period.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

Large diameter red pine plantation thinned previously in 1962, 1975, 1992, 2003, 2016. Management objective is to maximize value from the current stand and either convert to other species through natural regeneration to oak, red maple, & white pine or plant back to red pine. There is currently a moderate understory of red maple, red oak, & white pine. Recommend either thinning this stand in 2035 to 130 sqft basal area or clearcutting this stand as the next harvest depending upon the school districts goals. Red pine become less marketable as they approach 18-20" diameter. Biological maturity for this stand won't be reached until 2070 but economic maturity is much earlier.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

NATURAL CONVERSION -- This stand will convert to oak naturally after harvesting or completing your prescribed management treatments. Expect natural conversion because these tree species are already present as younger trees or will be able to seed in and become established once the proper seedbed, light and crown canopy conditions exist. Periodically thin the stand throughout the life of the stand to improve quality and vigor. Regeneration cutting will remove the old stand to provide the necessary open conditions and sunlight to convert your stand naturally.

43-S06-2023

Year Scheduled	Management Practice
2035	<p>CLEARCUT REGENERATION HARVEST. Regenerate this stand by cutting all trees except designated reserved trees. This clearcut regeneration method allows trees to regenerate naturally from seed produced by adjacent timber stands or trees cut in the harvest operation. To improve the regeneration results, time your regeneration and site preparation practices to take advantage of good seed years. Variations of clearcut regeneration include uniform, alternate strip or patch, progressive strip or patch, and without reserve trees.</p> <p>For most Wisconsin forest types, adequate tree reproduction will be established in 3 to 5 years following the regeneration practice or additional management practices may be necessary to ensure successful tree reproduction. Some forest stands may need a longer regeneration period, but these situations should be documented and closely monitored to ensure success.</p>

STAND NUMBER 2		3 Acres
Primary Type:	Red Pine Forest -- Small Sawtimber	
Secondary Type:		

Stand Information

The most abundant tree species in this stand is Red Pine (100%).

These trees make up an even aged stand that originated about 1953. Tree ages in even-aged stands may vary slightly, but the trees began growing in relatively the same period.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

This is a good quality small sawtimber sized red pine plantation. Stand was previously thinned in 1976, 1992, 2003, & 2016. White pine regeneration is present in the understory.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

FORCED REGENERATION OF TIMBER TYPE -- Manage and regenerate the tree species in your forest after harvesting or completing your prescribed management treatments through a combination of seeding, planting, site preparation, prescribed burning, etc. Natural conversion is not expected because desired tree seedlings are not present or will not become established without developing the proper seedbed, light and crown canopy conditions, or by planting trees.

Your management plan prescribes the best method to regenerate new trees. Forced maintenance of your timber type may take time or extra expense. The success of your practice will take diligence and monitoring on your part.

43-S06-2023

Year Scheduled	Management Practice
2035	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.
2050	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.

STAND NUMBER 3		20 Acres
Primary Type:	White Pine Forest -- Small Sawtimber	
Secondary Type:	White Pine Forest -- Large Sawtimber	

Stand Information

The most abundant tree species in this stand is Black Cherry (2%). In addition to the poletimber and/or sawlog-sized trees, there is an understory of seedlings and/or saplings in the stand, including White Pine and Northern Pin Oak.

These trees make up a two-aged stand with two distinct age classes. The oldest age class of trees originated about 1954. Management practices must take into account that some trees will become mature earlier than other trees.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

Natural stand of white pine containing some very large, scattered white pine along with a larger component of small sawtimber sized and pole sized white pine. Red pine, jack pine, & aspen are also present. Some white pine, northern pin oak, bur oak, & beech in the understory. Low quality white pine timber. No past thinnings have occurred yet.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

NATURAL EVEN-AGED REGENERATION OF TIMBER TYPE WITH FUTURE THINNING -- Manage the stand through its rotation (the period between initial regeneration and the stand's final cutting) as a single aged forest. Periodically thin the stand throughout the life of the stand to improve quality and vigor. Regeneration cutting will remove the old stand to provide the necessary open conditions and sunlight to regenerate the stand naturally.

43-S06-2023

Year Scheduled	Management Practice
2035	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.
2035	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.

STAND NUMBER 4		7 Acres
Primary Type:	White Pine Forest -- Large Sawtimber	
Secondary Type:		

Stand Information

The most abundant tree species in this stand include White Pine (82%), Red Pine (8%), Red Maple (6%) and Northern Pin Oak (4%).

These trees make up an even aged stand that originated about 1880. Tree ages in even-aged stands may vary slightly, but the trees began growing in relatively the same period.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

Objective is to manage this forest for aesthetics and educational opportunities. This stand will be managed through intermediate thinning to create old growth characteristics. Thinning frequency will be much less than the surrounding stands. This stand was thinned previously in 1952, 1985, & 2016. The large, super canopy white pine are providing excellent seed sources for surrounding stands and are turkeys use these trees for night time roosting. This stand should be evaluated for a thinning in 2035; however, this stand may not be ready at this time. Many of the large white pines in this stand are between 25-40" diameter.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

NATURAL EVEN-AGED REGENERATION OF TIMBER TYPE WITH FUTURE THINNING -- Manage the stand through its rotation (the period between initial regeneration and the stand's final cutting) as a single aged forest. Periodically thin the stand throughout the life of the stand to improve quality and vigor. Regeneration cutting will remove the old stand to provide the necessary open conditions and sunlight to regenerate the stand naturally.

43-S06-2023

Year Scheduled	Management Practice
2035	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.

STAND NUMBER 5		34 Acres
Primary Type:	Red Pine Forest -- Small Sawtimber	
Secondary Type:	Red Pine Forest -- Large Sawtimber	

Stand Information

The most abundant tree species in this stand is Red Pine (100%).

These trees make up an even aged stand that originated about 1955. Tree ages in even-aged stands may vary slightly, but the trees began growing in relatively the same period.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

High quality red pine plantation. Thinned previously in 1975, 1992, 2003, & 2016. There is a pavilion located on the edge of this stand. School District needs to decide at year 2050 if this stand will continue to be thinned again or if they want to clear-cut & replant at that time. Stand will be 95 years old at rotation age in 2050.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

NATURAL EVEN-AGED REGENERATION OF TIMBER TYPE WITH FUTURE THINNING -- Manage the stand through its rotation (the period between initial regeneration and the stand's final cutting) as a single aged forest. Periodically thin the stand throughout the life of the stand to improve quality and vigor. Regeneration cutting will remove the old stand to provide the necessary open conditions and sunlight to regenerate the stand naturally.

43-S06-2023

Year Scheduled	Management Practice
2035	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.
2050	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.

STAND NUMBER 6		29 Acres
Primary Type:	White Pine Forest -- Large Sawtimber	
Secondary Type:	White Pine Forest -- Small Sawtimber	

Stand Information

The most abundant tree species in this stand include Red Maple (2%) and Red Oak (2%). In addition to the poletimber and/or sawlog-sized trees, there is an understory of seedlings and/or saplings in the stand, including White Pine and Aspen.

These trees make up a two-aged stand with two distinct age classes. The oldest age class of trees originated about 1946. Management practices must take into account that some trees will become mature earlier than other trees.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

This stand is comprised of several age classes of white pine & is converting to almost all white pine over time due to past management. To diversify the forest types on the property, I recommend choosing a portion of this stand to manage as big-toothed aspen. Select the areas with the most aspen & clear-cut all trees except widely scattered oak & some of the super canopy white pine. This would result in mostly big-toothed aspen regeneration. There is more aspen in the western portion of this stand. I recommend leaving an aesthetic strip along the road. This property lacks early successional forests as all past management practices have focused on red pine or white pine management. The rest of the stand not being managed for aspen should continue to be managed for white pine through intermediate thinnings until rotation is desired. The 2035 scheduled coppice is for areas with the most aspen and the 2050 thinning is for the areas that are not cut in 2035 as part of the coppice harvest.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

43-S06-2023

NATURAL EVEN-AGED REGENERATION OF TIMBER TYPE WITH FUTURE THINNING -- Manage the stand through its rotation (the period between initial regeneration and the stand's final cutting) as a single aged forest. Periodically thin the stand throughout the life of the stand to improve quality and vigor. Regeneration cutting will remove the old stand to provide the necessary open conditions and sunlight to regenerate the stand naturally.

Year Scheduled	Management Practice
2035	<p>COPPICE REGENERATION HARVEST. Regenerate this stand by cutting all trees except designated reserved trees. This coppice regeneration method naturally allows trees to regenerate vigorously from root and/or stump sprouts after harvest. Variations of coppice regeneration include simple and compound. The plan preparer adjusted the harvest schedule or boundary to meet your aesthetic goals. The plan preparer changed the date of this harvest to create different age classes of the trees for ruffed grouse and other wildlife in accordance with your stated goals. The plan preparer modified the shape of this timber stand to meet your goals of creating or maintaining wildlife habitat.</p> <p>For most Wisconsin forest types, adequate tree reproduction will be established in 3 to 5 years following the regeneration practice or additional management practices may be necessary to ensure successful tree reproduction. Some forest stands may need a longer regeneration period, but these situations should be documented and closely monitored to ensure success.</p>
2050	<p>THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.</p>

STAND NUMBER 7		11 Acres
Primary Type:	Alder Swamp	
Secondary Type:	Bottomland Hardwood Forest -- Poletimber	

Stand Information

The most abundant tree species in this stand include Ash (20%), White Birch (8%) and Aspen (4%). In addition to the poletimber and/or sawlog-sized trees, there is an understory of seedlings and/or saplings in the stand, including Red Maple.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy loam soil. Sandy loam soils are 50% to 70% sand particles with up to 50% silt and 20% clay. Sandy loam soils typically have good internal drainage and soil nutrients sufficient to support excellent growth for many tree species. Trees that are adapted to grow on sandy loam soils generally have a high rate of growth.

Stand Conditions, Special Features or Characteristics

This bottomland hardwoods is wet most of the year and would likely require frozen ground harvesting. This stand had a thinning completed in 1991. Species present in include tag alder & willow shrubs and as far as trees there are red maple, silver maple, ash, elm, aspen, basswood, swamp white oak, & white pine. The trees in this stand originated from a past coppice harvest (stump sprouts after being cut). The Peshtigo Brook flows through this stand along with some old river channels from the brook. No management is required in this stand due to the difficult logging conditions as the soils are generally saturated. If any management is completed in this stand, a 100' RMZ will be used. Within the 100' RMZ, only harvest during well frozen ground and retain a basal area of >60'. No operating within 50' of the river.

43-S06-2023

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

NO SILVICULTURAL SYSTEM APPLICABLE -- This stand has been designated as non-productive. If you choose to passively manage this stand, it will be subject to natural processes like forest succession, wildlife and insect activity, tree aging and decay, windstorms, fire, etc. If you choose to actively manage this stand, in the future a new silvicultural system and management practices should be prescribed.

STAND NUMBER 8		30 Acres
Primary Type:	White Pine Forest -- Large Sawtimber	
Secondary Type:	Aspen Forest -- Poletimber	

Stand Information

The most abundant tree species in this stand are poletimber and/or sawlog-sized trees. In addition to the poletimber and/or sawlog-sized trees, there is an understory of seedlings and/or saplings in the stand, including White Pine, Aspen, Northern Pin Oak and Red Pine.

These trees make up a two-aged stand with two distinct age classes. The oldest age class of trees originated about 1984. Management practices must take into account that some trees will become mature earlier than other trees.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

This is a white pine stand that was planned to be managed for aspen but so much white pine was retained in the last harvest, much of the aspen was shaded out. White pine, including super canopy white pine, dominate this stand but there are a variety of other species present including aspen, red pine, northern pine oak, bur oak, northern red oak, red maple, black cherry, & jack pine. This stand can be managed for white pine or aspen. I recommend selecting the portions of this stand with the most aspen and complete a coppice harvest to regenerate aspen & oak. Since there is so much shade from the white pine, much of the aspen, oak, & red maple are barely merchantable. When completing the coppice harvest, cut all trees >1" in diameter except widely scattered super canopy white pine and well crowned oak. So much of the 160 acre is being managed for white pine & red pine, creating young forest habitat within this stand will add to the wildlife habitat & educational value of this stand.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

43-S06-2023

NATURAL CONVERSION -- This stand will convert to aspen naturally after harvesting or completing your prescribed management treatments. Expect natural conversion because these tree species are already present as younger trees or will be able to seed in and become established once the proper seedbed, light and crown canopy conditions exist. Periodically thin the stand throughout the life of the stand to improve quality and vigor. Regeneration cutting will remove the old stand to provide the necessary open conditions and sunlight to convert your stand naturally.

Year Scheduled	Management Practice
2035	<p>COPPICE REGENERATION HARVEST. Regenerate this stand by cutting all trees except designated reserved trees. This coppice regeneration method naturally allows trees to regenerate vigorously from root and/or stump sprouts after harvest. Variations of coppice regeneration include simple and compound. The plan preparer changed the date of this harvest to create different age classes of the trees for ruffed grouse and other wildlife in accordance with your stated goals. The plan preparer modified the shape of this timber stand to meet your goals of creating or maintaining wildlife habitat.</p> <p>For most Wisconsin forest types, adequate tree reproduction will be established in 3 to 5 years following the regeneration practice or additional management practices may be necessary to ensure successful tree reproduction. Some forest stands may need a longer regeneration period, but these situations should be documented and closely monitored to ensure success.</p>

STAND NUMBER 9		4 Acres
Primary Type:	White Pine Forest -- Small Sawtimber	
Secondary Type:	White Pine Forest -- Large Sawtimber	

Stand Information

The most abundant tree species in this stand include White Pine (96%) and Red Oak (4%).

These trees make up an even aged stand that originated about 1950. Tree ages in even-aged stands may vary slightly, but the trees began growing in relatively the same period.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

This is a good quality white pine stand. This stand was formerly part of stand 6 but was separated out due to the higher density, better quality, & lack of aspen component. This stand averages a basal area of 130sqft but should be thinned now as the canopies are quite crowded. Reduce basal area to approximately 100 sqft/acre to increase health & vigor in this stand. Favor well crowned and better quality white pine.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

43-S06-2023

NATURAL EVEN-AGED REGENERATION OF TIMBER TYPE WITH FUTURE THINNING -- Manage the stand through its rotation (the period between initial regeneration and the stand's final cutting) as a single aged forest. Periodically thin the stand throughout the life of the stand to improve quality and vigor. Regeneration cutting will remove the old stand to provide the necessary open conditions and sunlight to regenerate the stand naturally.

Year Scheduled	Management Practice
2025	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.
2035	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.
2050	THINNING. Remove trees to reduce stand density thereby improving tree growth and enhancing forest health, or to utilize trees that are at risk of mortality. Thin the stand to reduce stocking and concentrate growth on trees that are more desirable by following the order of removal and tree retention guidelines.

STAND NUMBER 10		4 Acres
Primary Type:	Red Maple Forest -- Poletimber	
Secondary Type:	Oak Forest -- Poletimber	

Stand Information

The most abundant tree species in this stand include Red Maple (33%), Red Oak (33%), Aspen (17%) and White Pine (11%).

These trees make up an even aged stand that originated about 1984. Tree ages in even-aged stands may vary slightly, but the trees began growing in relatively the same period.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

This is a area of pole sized trees of red maple, red oak, aspen, white birch, bur oak & white spruce. Some large white pines are also present. Old sloughs from the Peshtigo Brook navigate through & around this stand. The soils are sandy and were deposited from the river. Trees are mostly pole timber sized and some are the result of a past coppice harvest. Stand age is estimated.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

43-S06-2023

NATURAL EVEN-AGED REGENERATION OF TIMBER TYPE WITHOUT FUTURE THINNING --

Manage the stand through its rotation (the period between initial regeneration and the stand's final cutting) as a single aged forest. Regeneration cutting will remove the old stand to provide the necessary open conditions and sunlight to regenerate the stand naturally.

Year Scheduled	Management Practice
2050	<p>COPPICE REGENERATION HARVEST. Regenerate this stand by cutting all trees except designated reserved trees. This coppice regeneration method naturally allows trees to regenerate vigorously from root and/or stump sprouts after harvest. Variations of coppice regeneration include simple and compound.</p> <p>For most Wisconsin forest types, adequate tree reproduction will be established in 3 to 5 years following the regeneration practice or additional management practices may be necessary to ensure successful tree reproduction. Some forest stands may need a longer regeneration period, but these situations should be documented and closely monitored to ensure success.</p>

STAND NUMBER 11		2 Acres
Primary Type:	True Grass Lands	
Secondary Type:		

Stand Information

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a sandy soil. Sand-sized particles make up 85% or more of this soil, along with up to 15% silt plus clay. Sand particles are larger than silt or clay particles, making these soils drain rapidly. Sandy soils tend to be droughty and nutrient-poor. Trees that are adapted to grow on sandy soils can be either short- or long-lived, and must be able to tolerate extended periods of drought. These soils may be unsuitable for whole-tree harvesting and the harvest of fine woody material because of their potential for nutrient depletion.

Stand Conditions, Special Features or Characteristics

3 separate areas of grassy openings. 1 opening has a pavilion located in it and most have some type of play equipment. There are additional areas of play equipment scattered along trails within the forest. It is recommended to maintain these areas as open areas for education use, wildlife habitat, and log truck turn-arounds/landing areas.

Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

NO SILVICULTURAL SYSTEM APPLICABLE -- This stand has been designated as non-productive. If you choose to passively manage this stand, it will be subject to natural processes like forest succession, wildlife and insect activity, tree aging and decay, windstorms, fire, etc. If you choose to actively manage this stand, in the future a new silvicultural system and management practices should be prescribed.

43-S06-2023

Year Scheduled	Management Practice
ANY	MOWING. Mow these areas as needed to maintain them as open areas.

ADDITIONAL INFORMATION FOR MANAGEMENT OF YOUR PROPERTY

Cost Share on Forest Management or Tree Planting

State and Federal programs are available to help share the cost of implementing certain forest management or tree planting projects. You can find more information about [financial help and cost share programs](#); go to <http://dnr.wi.gov> and search 'Forest Landowner'.

You can purchase seedlings through the state nursery program. To learn more about tree availability or to create your own tree planting plan visit: <http://dnr.wi.gov> and search 'Tree Planting'.

Timber Harvest Contracts

It is very important that you and your logging contractor have a written and signed contract to guide the harvesting process before starting any harvesting. For more information on [writing contracts](#) for timber sales please visit <http://dnr.wi.gov> and search 'Forest Landowner'.

Non-Timber Forest Products

If you harvest non-timber products, including but not limited to mushrooms, berries, ferns, evergreen boughs, cones, nuts, seeds, maple sap, bark, twigs, moss, and edible and/or medicinal plants be sure to follow all applicable laws. Wisconsin statutes may regulate some of these non-timber products, such as ginseng. Others might be threatened or endangered species, and protected by law. Also take care to prevent over-harvesting and reducing biological diversity and ecosystem functions. For additional information on how harvesting of non-timber forest products will affect management of your forestland please contact your local WDNR Forester using the [Forestry Assistance Locator](#); go to <http://dnr.wi.gov> and search 'Forest Landowner'.

Forest Certification

Forest certification systems are market-based, non-regulatory means to assure end users that the wood products they purchase have been grown, managed, and harvested in socially acceptable and environmentally responsible ways. More and more wood-using industries and consumers demand proof they are buying wood from sustainably managed woodlands.

Third party certification is beneficial in many ways, some of which are the ability to sell to the certified marketplace; future ability to participate in carbon markets; and an opportunity to educate the public about the importance of well-managed private forests.

Landowners who have a Forest Stewardship Plan for their property and have implemented practices according to the plan may be eligible to participate in the American Tree Farm System (ATFS) forest certification program through the Wisconsin (State) Tree Farm Committee (WTFC) group. Applications and information on the ATFS Forest Certification program can be found online at [American Tree Farm System Certification](https://www.treefarmssystem.org/certification-american-tree-farm-system) (<https://www.treefarmssystem.org/certification-american-tree-farm-system>) and the [Wisconsin Tree Farm Committee](http://witreefarm.org/) (<http://witreefarm.org/>).

For more information about forest certification, please contact your DNR Forester or visit <http://dnr.wi.gov> and search for 'Forest Certification'.

43-S06-2023

Wildfire Prevention and Planning

Every year in Wisconsin, thousands of wildfires occur, destroying dozens of structures and threatening to burn hundreds more. An increasing number of people living and recreating in Wisconsin's wildland-urban interface is creating a growing need for fire prevention and planning for fires that will inevitably occur.

Because of their proximity to forested lands, there is the potential for homes and property to be at significant risk of damage or destruction in the event of a wildfire. As part of the landscape planning process, it is important to determine the level of danger to properties and learn how to mitigate those dangers.

You can take action to reduce the exposure of your home or property to fire. Use fire resistant building materials, incorporate fuel breaks into the landscape, and know the local burning restrictions.

For more information on [fire danger and burning permit restrictions](http://dnr.wi.gov), go to <http://dnr.wi.gov> and search 'Fire'. For more information on [making your home and property more survivable](http://dnr.wi.gov) in the event of a wildfire, go to <http://dnr.wi.gov> and search 'Firewise'.

Forest Carbon

Forests are a significant piece of the global carbon cycle because of their ability to absorb and sequester carbon dioxide. Learn how your forest adds to the global carbon balance and be aware of the rules affecting your participation in forest carbon markets. For information, visit the US Forest Service website: <http://www.na.fs.fed.us/ecosystemservices/carbon/>.

Lands included in the Forest Stewardship Plan

In conjunction with your maps and air photos, this land information helps you to identify your lands covered by this plan.

Town/Range/Section	Legal Description	Tax Parcel ID No.	Certified Survey Map Information	Enrolled Acreage	
				Open to Public Access	Closed to Public Access
County: Oconto		Municipality: Town of Bagley			
30N-18E-31	SWNE	006293100313		0.000	40.000
30N-18E-31	SENE	006293100824		0.000	40.000
30N-18E-31	NESW	006293100931		0.000	40.000
30N-18E-31	NWSE	006293101442		0.000	40.000
			Total Acreage:	0.000	160.000

43-S06-2023

Forester Contact Information

Contact your local DNR Forester for information about:

- activities addressed in your plan
- implementing your plan
- planning for a timber harvest and sample timber sale contracts
- State and Federal cost-sharing available for some practices
- the Managed Forest Law (MFL) a Wisconsin property tax incentive program

Plan Preparer Contact Information

KAUFMAN, STEPHEN
WISCONSIN DNR
300 HANK MARKS DRIVE
OCONTO FALLS, WI 54154-1091
(920) 360-1290
STEPHEN.KAUFMAN@WISCONSIN.GOV

DNR Forester Contact Information

KAUFMAN, STEPHEN
DEPARTMENT OF NATURAL RESOURCES
300 HANK MARKS DRIVE
OCONTO FALLS, WI 54154-1091
(920) 360-1290
STEPHEN.KAUFMAN@WISCONSIN.GOV