
GOVERNOR KNOWLES STATE FOREST

ENVIRONMENTAL ANALYSIS, ANALYSIS OF MANAGEMENT ALTERNATIVES AND SUMMARY OF PUBLIC INVOLVEMENT



Wisconsin Department of Natural Resources

Division of Forestry

August, 2012

GOVERNOR KNOWLES STATE FOREST

ENVIRONMENTAL ANALYSIS |

2012

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ACKNOWLEDGEMENTS

Many individuals from the Department of Natural Resources have developed these alternatives through an integrated planning process. Through their hard work and expertise, these people have developed preferred alternatives and options for public consideration.

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Introduction and Plan Overview

PURPOSE OF THE ENVIRONMENTAL ANALYSIS

The Environmental Analysis (EA) assesses the potential environmental impacts of actions recommended in the proposed revised Governor Knowles State Forest (GKSF) Master Plan. A detailed description of the elements of the proposed action is contained in Chapter Two of the Governor Knowles State Forest Master Plan. Chapter Three of the master plan provides a description of the affected environment related to this environmental analysis in the form of background information.

The intent of the EA is to disclose the environmental Impacts of the proposed revised master plan to decision makers and the public. The EA has been prepared to meet the requirements of the Wisconsin Environmental Policy Act (WEPA) and Chapter NR 150 of Wisconsin Administrative Code. Further, as required under section NR 150.22(2), Wisconsin Administrative Code, this analysis also includes an examination of the management alternatives considered and the public review process used during the development of the master plan.

CONTENT AND ORGANIZATION

This Environmental Analysis is a companion document to the Governor Knowles State Forest Master Plan and is comprised of three chapters:

- Chapter One** Analysis of Impacts of the Plan
- Chapter Two** Overview of Alternatives Considered
- Chapter Three** Summary of Public Involvement for the Master Plan

Chapter One explains the potential environmental effects of the proposed revised Governor Knowles State Forest Master Plan. Chapter Two describes and evaluates the various alternatives that were considered. Elements of several alternatives were incorporated into the final preferred alternative. Chapter Three summarizes the public involvement process, including methods of public involvement and documentation of the public participation that occurred during the planning process.

PROPERTY OVERVIEW

The Governor Knowles State Forest (GKSF) is located in north western Wisconsin in Burnett and Polk Counties. It lies along the St. Croix National Scenic Riverway and encompasses approximately 34,000 acres, of which about 20,500 acres are state owned. The property's headquarters is located in the Village of Grantsburg.

The forest is perhaps most well-known for its vicinity to the St. Croix River. Most of the 55 mile length of the long and narrow property lies along the St. Croix which is designated a National Scenic Riverway. The National Park Service manages the majority of the recreational facilities directly along the river.

The area surrounding the GKSF is dominated by forests, agriculture, and some notably large wetlands to the east. Although it is one of the largest state owned properties in a region with an abundance of privately owned lands, the GKSF is a relatively small publicly owned property in comparison to other public ownerships in the area. More than 100,000 acres of Burnett and Polk County Forests and five state wildlife areas totaling over 52,000 acres and including the Crex Meadow, Fish Lake, and Danbury State Wildlife Areas, border the forest. The location of the GKSF in such close proximity to county forests, state wildlife areas, and the National Scenic Riverway, creates a large block of publicly owned forest land.

The GKSF supports a diversity of cover and community types, including forested and non-forested and upland and lowland assemblages. The property's ecological characteristics are largely defined by the two Ecological Landscapes which meet along the escarpment that runs the length of the property: the Northwest Sands and Northwest Lowlands. East of the escarpment, fire-adapted communities are present and consist of varied structural permutations of the Pine Barrens community and extensive dry forests composed mostly of pines and oaks. West of the escarpment, there are clusters of seeps, forested wetlands, wet meadows and marshes, and numerous streams that feed into the St. Croix River. The habitat found within forests and water resources on the property support many rare species, including threatened, endangered, and special concern plant and animal species.

Over 17,000 acres of varied forest cover types provide the opportunity for the production of high quality forest products, while also maintaining and enhancing the ecological integrity of the state forest. Land management on the forest utilizes a range of

sustainable practices, from sustainable forest management to ecological restoration. Currently, the GKSF harvests approximately 383 acres annually, yielding an average of 10,000 cd. eq./year.

The forest's original designation and development was strongly oriented to serving recreational needs, due largely to a history of recreational activity in the area and on the St. Croix River. Today, opportunities exist for horseback riding, camping, hunting and trapping, wildlife viewing, hiking, skiing and snowmobiling. The primary draws to the property are the St. Croix River and the equestrian trails and campground. While the GKSF does not offer any recreational opportunities related to the St. Croix River itself, it does serve as a recreational backdrop to the St. Croix offering additional recreational opportunities and protecting the scenic qualities that make the St. Croix popular. The use of the equestrian trails and campground are extremely popular on the forest and a primary reason why people come to the GKSF. Traditional camping and other recreational trails are lightly used, with the exception of the snowmobile trail which is heavily used during good snow seasons and part of a regional trail network.

The GKSF lies within the ceded territory of the Ojibwe Tribes and is located within proximity to tribes of the St. Croix Band of the Lake Superior Ojibwe as well as the Mille Lac Band of Ojibwe in Minnesota.

PURPOSE OF THE MASTER PLAN

The revised Governor Knowles State Forest Master Plan outlines how the property will be managed, used and developed, and the benefits it will provide over the next 15 years and beyond. It defines the forest management practices, recreational uses, other land management activities, and additional aspects of the property's future use and development. The revised plan reflects changing ecological, economic, and social conditions, and current management principles for resource and recreation management in the context of the larger landscape in which the forest is located, as required by Wisconsin State Statute 28.04. The master plan will receive a formal review approximately every 15 years and will be updated by plan amendments and variances as necessary through a formal process that includes public involvement.

Benefits of the Governor Knowles State Forest Draft Master Plan:

- Provides a vision and framework for the use, development, management and acquisition of the forest well into the future with an emphasis on the next 15 years.
- Identifies land management areas and plans for their future management.
- Describes general management objectives and specific management prescriptions for each management area.
- Makes recommendations for forest production, recreation, and habitat conservation to meet current and future needs.
- Provides for continuing public involvement during plan implementation.

OVERVIEW OF THE PLANNING PROCESS

There are several major phases in the master planning process as well as opportunity for public input and participation. These phases include completing the Regional and Property Analysis, establishing the property vision and goals, considering management alternatives, and finally creating a plan and an environmental analysis. The Department also worked actively with local towns, tribes, non-governmental organizations, citizens, and businesses to develop this master plan.

The planning process is guided by State Statute 28.04, Wisconsin Administrative Code NR 44, the previous property plan and extensive ecological, economic, and social assessments provided.

Chapter One: Analysis of Impacts of the Proposed Master Plan

PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of this chapter is to explain the potential environmental effects of the Governor Knowles State Forest Master Plan. An analysis of the environmental effects or impacts is an important element of the Environmental Analysis. A detailed description of the elements of the proposed action is contained in the Governor Knowles State Forest Master Plan. A listing of anticipated impacts from both proposed land management and proposed facility development activities follows, indexed by affected resources.

STATE OR FEDERAL APPROVALS REQUIRED

Any wetland construction activities requiring state or federal approval would be obtained prior to construction. Cooperation with the United States Army Corps of Engineers and WDNR Water Division would be required to obtain permit and mitigation approvals.

IMPACTS TO NATURAL RESOURCES

Soil Impacts from Forest and Recreation Management

The soils in the Governor Knowles area are generally sandy, infertile, and prone to drought. Restrictive soil features for recreation development are ranked as "severe" (on a scale of slight, moderate, or severe) for a number of soil types on the forest due to the sandy nature of the soils. Because new developments on the Governor Knowles State Forest will be minimal, soil impacts from forest and recreation management are also expected to be minimal. When activities are conducted, a detailed site plan is prepared, best management practices incorporated and mitigation measures included.

The proposed forest management activities would not generate significant long-term, cumulative impacts to the soils on the Governor Knowles State Forest due to the relatively low percentage of forest lands that are disturbed by management activities at any given time. However, erosion control practices are incorporated into timber sale contracts.

Overall, the largest cause of soil erosion and water pollution from forest management activities is poorly located and constructed forest roads. Most roads used for forest management on the GKSF are existing roads and maintenance of those roads would be required; construction of new forest roads is not planned at this time. If any new forest roads are needed and constructed, impacts would be minimal due to the required use of Best Management Practices (BMPs) for water quality. BMPs also provide guidance for water crossings, skid trails, and log landings.

Soil Impacts from Construction

Some soil loss would likely occur when facility developments occur; however, planned developments are small and few in number. Any soil loss will be minimized through the use of required erosion controls. Further, these structures will primarily replace existing structures, causing impacts to be minimal due to the existing footprint. Any soil impacts from construction that would occur would likely be small, of short duration, and localized.

Impacts on Geological Resources and Landforms

Minor rock excavation may be necessary for development of parking lots, and facility foundations. Surface mining of rock is not anticipated.

Impacts to Air Quality

Only minor construction activities are proposed and they would be conducted over an extended period of time and at various locations; therefore, relatively low levels of soil would be disturbed at any one time and location. During construction activities, small levels of dust may be present in the air surrounding project areas. Application of water from tank trucks is a common dust suppression practice that is used during road construction. This technique may be appropriate for some projects within the forest. Impacts on air quality from fugitive dust particles and engine exhaust emissions from construction equipment would be minor, finite and transitory in nature. When construction is complete no residual impacts to air quality would be detectable.

Vehicle emissions generated as a result of logging activities are likewise, expected to be low. Further, much of the logging used to implement forest management goals will occur during off-peak recreational seasons (winter).

Impacts to air quality from motor vehicles attracted to the forest by additional electric camping sites, and improved recreational facilities are expected to be minimal. The current indirect source air permit thresholds pertain to sources with 1,500 or more parking spaces, or highway projects with peak vehicle traffic volume greater than 1,800 vehicles per hour. The traffic due to projected management and development in this plan is well below these levels.

Prescribed burns will have temporary air quality impacts. The unavoidable risk of wildfire and associated air impacts will be offset by current wildfire suppression policies.

Impacts on Water Resources

The proposed forest management activities would not have a significant adverse effect on lakes and streams or associated aquatic habitats. There are very few natural lakes on the Governor Knowles State Forest. Management activities such as road building and scarification of planting sites may result in localized, limited, short-term impacts to water quality due to increased runoff during unusual storm events. However, because of the use of the extensive water quality protection measures required for all forest management activities under the BMPs for water quality and because of the GKSF's highly sandy soils, the potential for a significant impact on waters surrounding the property is small.

Impacts on Wetlands

The Governor Knowles State Forest contains an extensive network of forested and non-forested wetlands. These areas support important rare, endangered, and threatened plant and animal species, and provide habitat for a wide range of waterfowl species.

Forested wetlands with productive stands capable of producing merchantable timber may be harvested within their accepted rotation age following the guidelines outlined in the DNR Silviculture and Forest Aesthetics Handbook. Timber harvests will only be conducted during very dry or frozen ground conditions, using techniques and equipment that prevent rutting. Following these guidelines will prevent any significant impact on water quality around wetlands where harvesting is taking place.

Non-forested wetlands will primarily be managed using passive management techniques, along with control of exotic and invasive species. This management would have little adverse impact, and a large positive impact on decreasing the level of exotic and invasive species on the property. In a small number of cases, non-forested wetlands may be crossed during frozen ground conditions by timber harvesting equipment. In these cases, there may be minor, localized impacts to wetland vegetation. Any such forest management would not have a significant impact on wetlands, due to safeguards built in to the BMP requirements that are followed when conducting timber harvests near wetlands.

Overall, forest and habitat management on the Governor Knowles State Forest would have the effect of providing long-term aesthetic and biological protection of wetlands on the property. Wherever forest management activities or construction activities would potentially affect wetlands, BMPs would be implemented to protect wetland resources.

Impacts on Rivers

The Governor Knowles State Forest contains several important streams, rivers, and flowages, including the Trade, Wood, and Clam Rivers. These areas all support a high diversity of threatened, endangered, and Species of Special Concern. Management activities in these areas are generally intended to let natural processes dominate. Management would have the positive effect of protecting the scenic and aesthetic qualities.

Impacts on Springs and Seeps

Land management activities conducted on the Governor Knowles State Forest would have the effect of protecting water quality and biological diversity on and around the property. Management activities would protect and maintain riparian habitats, springs, and seeps. Land management classifications have been chosen for these areas that would have the effect of preventing degradation of these resources by development or conflicting use. Wherever management activities occur, BMPs would be implemented to protect the water resource.

Impacts on Surface Water Resources

Runoff from roadways and other impervious surfaces would be directed away from nearby streams and lakes, thus minimizing any risks of water pollution from spilled materials or sediment from runoff and erosion.

The impacts of stormwater runoff during timber harvesting would be mitigated by implementing BMPs for water quality. These practices are described in the Timber Sale Handbook and are a part of every timber sale contract on the forest.

Land acquired within the proposed boundary expansion and managed under the state forest master plan would protect important headwater streams, which will have a long-term beneficial effect on the surface water resources of the site and those receiving waters downstream.

Impacts to Upland Vegetation and Habitats

The forests of the Governor Knowles State Forest are a mosaic of many forest community types, age classes, and structures due to varied soil, topography, and previous use and management.

Each forest stand is classified and labeled according to its dominant cover type. Most stands, however, are a mixture of various tree species, but the overall composition of various stands having the same cover type label may greatly differ.

Currently, oak species and swamp hardwoods dominate the Governor Knowles State Forest, the primary species being northern pin oak and black ash. Aspen, jack pine, and red pine are also important forest types present. Other species present include red maple, northern hardwoods and those conifer species adapted to the lowland and swamp conditions on the forest, such as cedar, tamarack and black spruce. As the proposed master plan is implemented, aspen levels are predicted to stay relatively stable. Jack pine and white pine are expected to increase slightly, with a corresponding decrease in oak. A noticeable increase in red maple and northern hardwoods is also expected (Table 1.1).

In the forest production areas, management objectives would impact forest composition by maintaining a strong component of aspen and oak in some areas, promoting longer-lived species such as red and white pine in other areas, and promoting conversion to jack pine where appropriate. These changes would impact the relative abundance of cover types and their age distributions, but not species composition.

Within the two habitat management areas, current forest composition would not change dramatically. Age structure is expected to change dramatically in parts of these management areas. In the Sterling Barrens Habitat Management Area, the existing open landscape would be maintained through prescribed burning, the oak cover types will be managed toward oak savanna through timber harvesting and prescribed burning, and the jack pine cover types will be managed for jack pine forest while providing temporary barrens habitat through timber harvesting and prescribed burning. Within the Kohler-Peet Barrens Habitat Management Area, the existing open barrens burn units will continue to be maintained through prescribed burning. In the existing forested areas, timber harvesting and a variety of other treatments will, not only ensure forest regeneration, but also maintain and increase the shifting barrens habitat and associated rare species.

Native community management areas have the greatest potential for change in forest composition. One of the objectives for these areas is to maintain and develop older, more diverse, closed canopy forests. This includes promoting later successional species and encouraging characteristics of old growth forests. Over time as late successional species become more dominant in parts of these areas, they would develop more, longer-lived tree species and more coarse woody debris. Another objective of these areas is to maintain disturbance dependent forest types, where appropriate, primarily through timber harvesting and prescribed burning. These management activities would develop and maintain a patchwork of both early and late successional forest types in the native community management areas.

Table 1.1. Projected change in cover type in 50 years.

Cover Type	Current Acreage	% Total	Predicted Acreage in 50 Years	% Total
Forested Types				
Scrub Oak	4,591	22%	3,050	15%
Swamp Hardwoods	3,187	16%	3,187	16%
Jack Pine	2,478	12%	2,894	14%
Aspen	2,326	11%	2,360	11%
Red Pine	1,788	9%	1,960	10%
Northern Hardwoods	958	5%	1,250	6%
White Pine	832	4%	1,350	7%
Black Spruce	707	3%	707	3%
Red Oak	283	1%	210	1%
Cedar	215	1%	215	1%
Red Maple	177	1%	450	2%
Bottomland Hardwoods	127	1%	127	1%
Tamarack	106	<1%	106	<1%
Spruce	65	<1%	65	<1%
Sub-Totals	17,840	87%	17,931	87%
Non-forested Types				
Lowland Brush/Grass	1,609	8%	1,609	8%
Grass	977	5%	900	4%
Water	108	<1%	108	<1%
Upland Brush	24	<1%	10	<1%
Sub-Totals	2,718	13%	2,627	13%
TOTALS	20,558	100%	20,558	100%

Impacts to Wildlife and Aquatic Life

The forest’s future composition, discussed above, has a direct relationship on wildlife because the habitat determines which species will thrive and which will not. Overall, the proposed plan would maintain existing habitats. Only minor to small changes in the extent of cover types would occur, but over time there would be a notable increase in the age class and structural components as certain forest components are allowed to age produce older forest conditions.

Habitat for deer, Ruffed Grouse and other wildlife species that favor aspen, pine and oak would remain abundant on the GKSF because these forest types remain strong cover types on the forest. However, oak habitat would slightly decline over the next 50 years as the forest is managed toward increased levels of jack and white pine.

Area sensitive open barrens wildlife species, which require primarily large open habitat s, would benefit from large openings in the forest. A common management tool to benefit species is to create large temporary open barrens to harvest timber. Although primarily done to regenerate trees, the clearcuts create temporary open barrens and forest edge.

Several species find old-forest and old growth conditions favorable and would benefit from an increase in mature pine, ash and oak forests. Bird species that rely on old forests, (of which some are rare) including the Cerulean and Kentucky Warbler, Acadian Flycatcher, and the Red-shouldered Hawk, would have a stable and slowly increasing habitat over the long-term. Additionally, salamanders may benefit from decaying logs associated with old forests.

As the land management plan would continue to protect the quality of the GKSF’s waters and riparian habitats, the wildlife species that rely on seeps, streams, and wetlands (such as eagles, Water thrushes, fish, aquatic invertebrates, and aquatic/wetland plants) would benefit positively.

The plan's recreation management proposals would not cause a significant impact to wildlife or habitat because of the relatively small area affected by campgrounds and trail maintenance. Upgrades and re-routes on the motorized trail system may have a slight impact on wildlife; however, because of the existing footprint, those impacts should be insignificant. More importantly, trail closures should positively impact wildlife by removing recreational motorized use from portions of the forest.

The wildlife management program on the Governor Knowles State Forest focuses on maintaining and enhancing habitat and assessing the population status of important game, non-game, and listed species. The abundant wildlife on the state forest requires diverse forest habitats in various successional stages from young to old growth. Diverse and healthy wildlife populations will be maintained by managing the composition and structure of forest habitats integrated with the management objectives and activities outlined for each land management area in the Land Management Section of the Master Plan.

Impacts to Endangered, Threatened, and Rare Species, Native Communities, and Scarce Ecological Resources

Within the Governor Knowles State Forest, the following species were identified through inventories conducted by the Endangered Resources Program:

- 14 state endangered or threatened animals
- 32 rare animal species
- 1 state endangered plant species
- 3 state threatened plant species
- 14 state rare plants
- 2 federally endangered or threatened animals

The inventory indicated a diverse mix of conifer and hardwood forests which provide habitat for one of North America's richest diversity of breeding songbirds. Birds associated with sand habitats are also well represented on the property. Wetland species are also abundant on the property, and are supported by the large network of wetlands and flowages associated with Lagoon Creek, Trade River, and St. Croix River.

All management prescriptions in the master plan consider the needs of endangered, threatened, and rare species and the potential impacts to the species and their habitat. Management actions being planned on the state forest are checked against an up-to-date database of listed species to assure that no department actions result in the direct taking of any known endangered or threatened resource. Please refer to Appendix B for a complete listing of the endangered, threatened, and Species of Special Concern. The Natural Heritage Inventory (NHI) will be checked prior to all timber sales, ground breaking projects, and recreational and trail developments to ensure that no critical habitat is disturbed.

With these preventative management actions, it is expected that there would be no significant negative impacts to endangered, threatened and rare species. Implementation of the proposed master plan would ensure continued safeguarding of these species and over time, perhaps increase their foothold in the forest environment.

IMPACTS TO RECREATIONAL FACILITIES, ACTIVITIES, AND OPPORTUNITIES

Forest Management Impacts

General forest management activities would have little negative impact on developed recreational facilities and recreational activities, including boating, swimming, and camping. On average, three percent or less of the forest would see any forest management activities during any year. Only a portion of the forest management would be timber harvests. All forest management near developed recreational trails, campgrounds, lakes, and other facilities are routinely adjusted to retain the aesthetic quality of these sites and to avoid conflicts with primary recreational uses whenever possible. Periodic thinning of timber in intensive use areas would provide positive benefits by maintaining the vigor and health of trees, reducing hazardous conditions, promoting larger trees, and creating open canopy conditions which allow a well-developed shrub layer for screening between campsites.

Scenic Resources and Changes to the Property's Overall Visual Character

The master plan for the Governor Knowles State Forest property calls for providing opportunities for non-motorized and motorized recreation, hunting, fishing, trapping and wildlife viewing. Management goals specify that recreational activities are compatible, and can be sustained, without harm to trails or forest ecosystems.

The goal of the master plan is to provide a range of rustic to moderately developed camp and trail options in a scenic, forested setting. Proposed developments of facilities and trails are intended to provide limited, improved amenities for campers, hikers, paddlers, and trail users. Facilities development and land management objectives are designed to promote nature-based recreation, reinforcing the department's mission to provide environmentally sensitive outdoor experiences. Campsites, trails and specialized amenities, such as information or equestrian facilities, will be designed to current standards of administrative code to suit land management classifications and recreational use settings.

Overall, the property will maintain its rural character. Some changes in the visual and aesthetic look of the forest will be noticeable over time as management objectives are implemented. Visual and audible affects will be apparent locally in some locations during construction or restoration of trails or facilities, and as a result of active forest management. These changes include upgrades in recreational amenities, new group campgrounds, and extensions or connections to several recreation trails. Development will strive to enhance local surroundings through careful siting, and by introducing facilities and amenities that blend with the natural environment.

Scenic resource areas and sensitive natural communities receive a level of environmental protection through specific land management classifications and guidelines prescribed by master plan management prescriptions.

State-owned shorelines on lakes and streams are designated as Class A Scenic Management Zones. All management activities along state-owned lake and stream shorelines follow guidelines of the DNR Silviculture and Forest Aesthetics Handbook and Best Management Practices (BMPs) for water quality. Forest policies, administrative codes and management guidelines provide environmental protection for the numerous wetlands and seeps found in the forest.

The St. Croix National Scenic Riverway is situated along the GKSF western boundary. This unique water resource is managed by the National Park Service. Some facilities located at adjoining public lands, such as boat landings or roads, are a cooperative management effort between GKSF and DNR Wildlife Management, NPS, county forests or local townships. The proposed management of state forest lands adjacent to the Riverway will complement the NPS's aesthetic management objectives.

Impacts of Proposed Wilderness Area Re-Designation

Currently the state forest has a wilderness designation covering roughly the west half of the state forest, or 9,460 acres. All of the current State Natural Areas (SNAs) lie within the wilderness area except for 60 acres of the Brandt Brook Pines SNA and 350 acres of the Kohler-Peet Barrens and Cedar Swamp SNA. Therefore, the total wilderness/SNA acreage under the current plan is roughly 9,870 acres. Of these 9,870 acres, roughly 9,395 acres are passively managed with an objective of developing older forests with old growth characteristics. Within the former 9,460 acre wilderness area, approximately 2,385 acres are proposed Forest Production, 6,430 acres are proposed Native Communities, and 645 acres are proposed Habitat Management Areas.

In addition, roughly 1,325 acres of native community management is being proposed outside of the current wilderness and tends to include areas that are wet, have steep topography and are generally inaccessible for management. In the end there will be a net gain, when compared to the current master plan, of roughly 1,060 acres of forest land on Governor Knowles State Forest that, pending plan approval, will be open to gathering. Further, an additional 600 acres may be available for gathering in Habitat Management Areas upon consultation.

In the proposed plan the wilderness designation has been re-designated into one of three designations: Native Community, Habitat Management, or Forest Production Areas.

Native Communities – 7,835 acres proposed of which 6,430 acres are within the wilderness area.

The native community management areas have objectives for developing older forests with old growth characteristics. In addition, some of the native communities are also proposed State Natural Areas.

Habitat Management – 2,370 acres proposed of which 645 acres are within the wilderness area.

Two habitat management areas are being proposed: the Sterling Barrens and the Kohler-Peet Barrens. The management objectives within these areas include oak/pine barrens, oak savanna, and oak/aspens/pine forest types where active management prescriptions will be employed to maintain the desired conditions.

The Sterling Barrens lies completely within the current wilderness area and is a proposed State Natural Area. The Kohler-Peet Barrens contains land that is currently both within (roughly 315 acres) and outside (roughly 1,725 acres) the current wilderness area. Roughly one-half, or 1,000 acres of this management area is a proposed State Natural Area. A majority of the remaining 1,000+ acres, which is outside the current wilderness area, will have a continued to focus on sustainable forest management.

Both proposed State Natural Areas in this management area are likely candidates for gathering upon consultation.

Forest Production – 23,535 acres proposed of which 2,385 acres are within the wilderness area.

Management within the forest production areas focuses on sustainably managing the forest resource for timber products. Management prescriptions are guided by Silvicultural recommendations and DNR policies and guidelines. 2,385 acres is currently in the wilderness area and are proposed to be re-designated as forest production areas.

Non-Motorized Recreational Trails

Overall, the proposed plan will have a positive impact on non-motorized recreation. The plan proposed to expand opportunities for many different recreational trail pursuits ranging from hiking to equestrian trail uses while improving the long-term sustainability, functionality and accessibility of existing and new trails and support facilities.

Equestrian

The master plan calls for extending and connecting horse trails in several locations. Existing trails will be improved or receive upgrades as needed to ensure sustainability. Approximately 23 total miles of primitive to lightly developed trail would be added to the GKSF equestrian trail system. About 16 miles of existing primitive to lightly developed trail would be designated or improved to accommodate buggies and wagons. Trail design and layout would focus on locations with appropriate grade and soils to minimize erosion and maximize sustainability. Approximately 6 miles of existing trail will be designated, signed and enhanced to provide an equestrian interpretive experience for trail riders.

Where upgrades of existing trails are needed, or where difficult terrain is unavoidable, appropriate surfacing material or bridges will be used to harden tread surfaces or to provide crossing of sensitive locations. Where possible and sustainable, new trail segments will follow existing woods roads or corridors to minimize overall impacts of development. Washing stations may be provided at some trailheads if necessary to curb the spread of invasive species.

The primary effect of trail expansion will be to spread use over a wider area, and to provide more diverse opportunities for horseback riding. Some visual changes would occur at trail heads where parking, information facilities or amenities are installed or upgraded. New signage would be noticeable along trails and at intersections. GKSF will work in cooperation with partners to support and maintain equestrian trails and amenities.

Hiking

An additional 18 miles will be added to complete the GKSF hiking trail, extending the linear trail system the length of the forest. These trails will be minimally developed, primitive trails similar to Ice-age Scenic National Trail standards of width, tread, slope and clearing. Existing woods roads or corridors may be used as part of the trail system. Tread surface will be mostly native soil materials. Bridge, boardwalk or primitive trail surface materials would be added where needed to maintain trail sustainability. The hiking trail will connect to access points, points of interest and amenities where feasible. GKSF will work with other public lands managers and partners to connect other public hiking trails and properties as opportunity allows. Impacts will be minimal as trails will be located and developed with consideration for long-term, year-round sustainable use. Additional mileage and trail connections will enhance the recreational experience for trail users by increasing hiking opportunities.

Up to 10 miles of non-motorized looped trails will be constructed to provide additional options for hikers in locations to be determined. Trail construction will be a low impact, primitive level of development, using native or primitive tread surface, and following existing corridors where possible.

Up to 9 additional miles of interpretive nature trails are proposed. Trail development would have little impact as routes would be chosen to follow existing paths or corridors, or established trails. Themes would be chosen to enhance visitors experience with educational information facilities.

Cross Country Skiing

An additional 6-8 miles of primitive to lightly developed ski trail loops will be added to the 8 existing miles of trail, to enable skate skiing. Additional amenities, toilets and information facilities and parking will be installed. Primary impacts would be noticeable during trail or parking lot construction. To lessen impacts of development portions of trail may follow existing corridors as available and adaptable to ski trail use. Added amenities, and loops for skate skiing, would diversity recreational opportunities and enhance trail use throughout the year.

Snowshoeing

Up to 10 miles of primitive to lightly developed snowshoe trails will be designated at several locations throughout the forest. Forest impacts would be minimal as trail use would be sited upon existing trails and corridors. Information facilities, trail confidence markers will be installed and winter parking areas maintained to accommodate trail users. Environmental impact would be minimal as it is simply an alternate seasonal use of existing trails.

Winter Walking

Up to 3 miles of woods roads or trails will be designated as winter walking routes foot travel and people with pets. Impacts will be negligible as siting would mainly use existing parking areas and corridors. Appropriate signage would be installed. Designating marked and pet-friendly winter walking trails, along with locations for parking, would fill a desired recreational niche in the forest. Winter walking trails also serve to separate trail uses, providing safety and avoiding conflict between walkers and faster moving forms of recreation, skiing or snowmobiling. Environmental impact would be minimal as it is simply an alternate seasonal use of existing trails.

Bicycling

There are currently no designated or formally developed bike trails available in the forest. From 4 to 8 miles of trail will be constructed at a primitive to lightly developed level of development for off-road bicycles and mountain bikes. Future trails will accommodate a range of skill levels, and be designed as one-way, single-track trail for safety. Primary impacts would involve grading and constructing a parking area / trailhead, and leveling a narrow trail tread that follows topographic contours to design standards to limit soil impacts and to maintain trail sustainability. Visual impacts would be mainly noticeable at the trail head where parking and signage will be developed. During development GKSF will work with partners to consider trail techniques from the International Mountain Bike Association or other design recommendations.

Accessible Barrier-free Trail

Up to 3 miles of moderate to fully developed, wheel chair accessible trail will be designated and constructed to ADA standards to accommodate people with disabilities. Trail locations may follow a portion or portions of several existing trails as opportunity and feasibility allows. Primary impacts would occur during trail construction or renovation. Information facilities and accessible parking will be developed in association with the trail.

Motorized Recreation

Snowmobile / ATV

The GKSF will continue to maintain 32 miles of sustainable, primitive to lightly developed, multi-use, winter snowmobile / ATV travel routes on designated forest trails. Winter frozen ground conditions enable travel over sensitive soils to use trail segments that would not sustainably support motorized recreation in other seasons. Timing of trail use (open/closed dates) is adjusted to seasonal trail conditions. Motorized recreation in winter permits alternate use of existing linear trails and less conflict with established warm season uses – horseback riding, hiking and sight-seeing.

A primitive to lightly developed, 3-mile portion of the multi-use trail will be rerouted for safety, and due to ownership changes. Construction will follow guidelines for sustainable trail development. Directional and informational signs would be a minor visual change.

At a future date, based on user needs, land use and safety issues, the GKSF may consider two short trail links for ATV Travel. The purpose of these trails would be to provide brief passage through the state forest to maintain trail connections for ATV travel between county forest properties (See Recreation Management Alternatives).

Nature Observation

GKSF will continue to provide an array of public nature observation opportunities throughout the forest. Over the course of the master plan opportunities for birding and wildlife watching, and nature study will be enhanced by way of informational facilities, publications, and education and interpretation efforts. Existing trail head /parking areas often serve as popular observation areas. Scenic locations would be upgraded with additional amenities, improved access and parking as opportunity and resources allow. Visual resources would be enhanced as amenities are upgraded. The effect of these efforts would serve to fill a key recreational niche, and to increase visitors' experience and appreciation of the forest. An added benefit would be to reinforce the forest's identity where private ownerships sometimes divide the long, narrow forest property.

Camping

The proposed plan expands and improves the quality of opportunities for family and equestrian camping, group camping as well as remote backpack camping.

Family Campgrounds & Equestrian Family Campgrounds

The St. Croix and Trade River Equestrian family campgrounds will be upgraded to include some reservable sites and modern amenities. Up to a third of the campsites in the Trade River Equestrian Campground will be placed on the camper reservation system, and hook-ups for electric service installed at up to 75% of the existing campsites. Half of the sites in the St. Croix Family Campground will be placed on the reservation system with hook-ups for electric service installed at up to 50% of the existing campsites. A small open "free play area" or green space (up to 6,000 sq. ft.) will be constructed for youth and family recreation near the St. Croix Family Campground. These changes will enable the forest to accommodate changes in camper preferences to serve a wider range of camping styles. Diversifying amenities may increase campground occupancy and extend camping use into the shoulder seasons.

If use and demand for equestrian camping continues to increase, up to 20 new sites and associated amenities would be constructed at the Trade River Equestrian Campground. Construction would follow NR44 design standards for sustainability and to minimize overall impacts.

Improvements at existing campsites at both family campgrounds would not greatly alter the natural and remote characteristics of the Governor Knowles State Forest. While modern campground upgrades are an exception to the rustic theme, the general appearance of the campgrounds will not be greatly affected. Primary impacts associated with providing electricity are the change in user-experience, changes in the type of user, and the potential to increase campground use.

Equestrian Group Camps

Camping for riding clubs and other organized equestrian groups is a common request at GKSF, and groups traveling together can overwhelm the capacity of the family equestrian campground. An equestrian group camp will be developed near the Trade River to serve up to 30 camp units. Amenities would include drinking water, vault toilets, manure bunkers and tie systems, restricted access, parking and information facilities, and a central gathering area with tables, a picnic shelter and group fire ring. The estimated area affected by development at each location is approximately from two to five acres. Providing group camping facilities will enable the forest to accommodate equestrian groups, lessen crowding at the family equestrian campground, and free up occupancy during peak times.

The Sioux Portage Outdoor Group Camp will be converted into an equestrian day use area. It will be further developed into an equestrian group camp at a later date, if demand increases and trail opportunities continue to expand on adjacent public lands. The equestrian group camp would be designed to accommodate groups of up to 20 camp units with amenities renovated for reservable, overnight equestrian camping.

The primary environmental impact of development at the campground locations will occur during construction as areas are cleared for access and construction of campsites and parking. Specific amenities, such as manure pits, tie-lines and connecting trails would be installed to manage equestrian use and to provide a safe and sanitary user experience. Environmental affects would be minimized as some development would occur in previously utilized and impacted locations. Work will follow best management practices while modifying the forest clearing and access drive, and installing campsites and amenities (See Recreation Management Alternatives).

Equestrian Trail Camping

Development of three to five ride-in single-unit primitive campsites are proposed along equestrian trails to accommodate equestrian trail camping. Campsites will be dispersed with locations selected and developed for adequate trail access and sustainable use. Sites would be minimally developed. A box latrine and manure composter will be installed to manage sanitation.

Outdoor Group Camps

Outdoor group camps provide an important opportunity for large organized, groups, such as boy/girl scouts and church groups, to experience rustic tent camping. Group camps are developed in semi-remote locations where an open space, rest rooms and parking is provided to accommodate large groups.

A new reservable, rustic outdoor group camp will be developed on the banks of the Clam Flowage to accommodate up to 60 campers on a reservable, fee basis. The purpose of the group camp is to provide a high quality, rustic outdoor camping experience for organized groups in a secluded setting without conflict or disturbance of other campers or recreational activities.

The new location for the Clam Flowage Outdoor Group Camp will better serve groups than was previously offered at Sioux Portage by providing upgraded amenities. It will provide recreational access to hiking trails and to a water source, the Clam Flowage. Approximately 10,000 sq. ft. would be affected by development which would involve clearing and /or grading open space for tent set-up, group gathering and parking. Amenities would include gated vehicle access and parking, a turf covered open area for tent camping, a group fire ring, picnic tables, two vault toilets, a well for drinking water, and a picnic shelter.

A second, small-group outdoor camp will be constructed at a site near the St. Croix Family campground to accommodate up to 30 campers on a reservable, fee basis. Approximately 5,000 sq. ft. would be affected by development which would involve clearing and /or grading open space for tent set-up, group gathering and parking. Amenities would include gated vehicle access and parking, a turf covered open area for tent camping, a group fire ring, picnic tables, two vault toilets, a well for drinking water, and a picnic shelter.

Impacts to resources would primarily occur during construction of the two camps. Work will follow best management practices while creating a forest clearing and access drive, and installing amenities. The outdoor group campgrounds would be sited to make the most of visual surroundings. They will be designed to maintain the natural character of the location, with the least amount of impact necessary. Amenities would meet NR 44 standards (See Recreation Management Alternatives).

Backpack camping

Backpack camping occurs at four locations along forest trails and additional primitive campsites are proposed. Up to 6 additional primitive campsites will be developed as additional trails segments and connections are completed. Campsites would be located at convenient, well-spaced intervals, e.g. a day's travel, from other sites along the hiking trail. Environmental impacts would be limited as sites are widely dispersed and minimally cleared or developed. Camping is authorized by the forest superintendent by special permit. Impacts would be minimal as campers must follow forest policies and leave-no-trace etiquette. Providing additional campsites would give hikers more travel options as the GKSF linear hiking trail is further connected and completed.

Remote Camping

Remote camping is allowed for activities such as the annual deer gun hunting season. Remote camping is authorized by the forest superintendent. Camp locations, rules and length of stay are controlled by special permit and no facilities are provided.

Canoe Camping

Canoe campsites fall within the corridor of the St. Croix National Scenic Riverway. GKSF will continue to work in cooperation with the National Park Service which has authority for managing these lands and facilities.

Day Use Facilities

Day Use Areas

Day use areas serve to accentuate GKSF's identity and provide a key recreational niche. Throughout the forest, public-access parking areas and trail heads often serve as day-use areas. Upgrading amenities at these locations and at more formally developed day-use areas would meet several needs. Improved signage and information facilities would strengthen a sense of place, and reinforce GKSF identity where property ownership is often disrupted by other in-holdings. Providing additional amenities at popular access points and day-use areas would enhance user experience for a key recreation niche – nature

observation, scenic and wildlife viewing.

Improvements at day use facilities will occur at key trail heads and popular locations. Day use locations will receive upgrades as appropriate to management needs and the current level of use. Amenities may include information facilities, toilets, picnic facilities, and barrier free access.

The popularity of a particular day use location, or access to unique scenic or recreational values, will determine the level of development. Improvements would be designed to provide appropriate public access and necessary amenities, such as parking, restrooms or interpretive information. The effect of the proposed actions would be to enhance visitor experience and appreciation for the site while further protecting scenic values and forest resources.

Trade River Day Use Area

The Trade River Day Use area, formerly the Trade River Campground, primarily serves equestrian users. Equestrian day use facilities are designed with specialized amenities, such as manure bunkers, mounting blocks and tie lines to provide for safe and sanitary operation of the facilities.

Highway 70 Wayside

The Highway 70 Wayside is located on the south side of the highway near the St. Croix River. Facilities include parking, vault toilets, running water, a canoe landing, and picnic area maintained by the state forest. The NPS administers nearby canoe campsites, and a picnic area on the bank of the St. Croix River. The south lot and approaches to the toilet buildings will be paved to improve public access and accessibility. GKSF will work with NPS to construct accessible paths to the picnic area.

Hunting, Trapping, and Wildlife Viewing

The Flambeau River State Forest will continue to offer abundant opportunities for small and big game hunting and trapping. The diversity of forest types, lakes, and wetlands found on the property will continue to provide important habitat for many game species including deer, bear, small game, wild turkey, ruffed grouse, and waterfowl species. An extensive system of logging roads will continue to be open for hunting access by foot or motor vehicle. Non-motorized areas for remote hunting and wildlife viewing experiences will remain approximately at current levels. Proposed actions are to work in cooperation with wildlife management to maintain and enhance wildlife habitat and public access.

Fishing

Water access to anglers is primarily provided at boat landings and public access points throughout the forest. Some landings are on adjacent public lands. Improvements to fishing areas at Governor Knowles State Forest would be minor and would not pose significant environmental impacts. The forest will continue to support fisheries management and provide opportunities for fishing and reasonable public access to water resources throughout the forest.

Water Recreation

The St. Croix National Wild and Scenic River is the main draw for water-based recreation at Governor Knowles State Forest. The river corridor is managed by the National Park Service which also provides amenities such as campsites along the river. Some facilities such as boat landings are cooperatively managed or managed by other public agencies. No significant changes are proposed for water recreation on the forest. GKSF will continue to support and provide public access for traditional water based recreational activities throughout the forest.

Education and Interpretation Opportunities

The master plan increases education and interpretation opportunities throughout the property. An interpretive education plan will be developed to coordinate future educational efforts on the forest. Information facilities, including kiosks, maps and signage, will be installed at key trailheads, camping and parking areas to enhance visitors' safety and experience. Installing improvements or amenities, such as toilets, information facilities and improved parking will cause little visual disturbance, and should enhance visitors' outdoor experience at the site.

Existing interpretive trails will be upgraded, and approximately 6 miles of primitive to lightly developed interpretive trails will be added. Trail development is not expected to alter the scenic, forested character of the forest, but will serve to enhance visitors' educational and recreational experience.

As staffing and budget for educational activity is limited, GKSF will continue to work in partnership with local agencies, providers and volunteers to offer educational opportunities for forest visitors. Expansion of educational services, facilities and amenities will be determined by demand and available resources.

Public Access

An objective of the master plan is to provide opportunities on primary corridors through the forest to access forest resources for management purposes, and to provide public access to hunters, tribal gatherers and recreation enthusiasts. The forest provides 62 miles of existing roads and access trails and 22 parking areas. GKSF will continue to maintain facilities at current levels according to prescribed road or trail classifications. Any future improvements in access would occur at key locations, likely in conjunction with other projects, and would depend on levels of use and demand.

Barrier-free facilities

Where practicable the forest will provide barrier-free recreational access and facilities for disabled persons. Development or modification of trails or amenities for disabled people would not pose a significant impact on resources. These facilities would serve to extend and enhance the outdoor recreation experience to more individuals.

Parking Areas

There are 22 parking areas provided throughout the forest to provide public access to forest and water resources. About half of the locations will be renovated with surface improvements, new amenities and information facilities to enhance visitor experience and to reinforce GKSF identity. Three new lots will be constructed in conjunction with group camps and trail projects. Development will be at a level appropriate to land management classifications and recreational use settings according to NR44 standards.

IMPACTS TO CULTURAL RESOURCES

Archaeological

To date, approximately 40 prehistoric and historic archaeological sites have been recorded within Governor Knowles State Forest, and many more are as yet unidentified. A number of these sites are burial sites, including burial mounds, and historic Indian and Euro-American cemeteries. Other archaeological sites would be expected to occur along the elevated margins of the river's waterways, especially at the confluence of rivers, and at the inlets and outlets of rivers on lakes.

Additionally, a number of historic structures (e.g., buildings, dam remnants, etc.) have been recorded within the forest. The protection and preservation of areas, objects, and records of cultural importance will be coordinated with the Department Archaeologist in consultation with interested tribal communities, institutions, and/or other interested parties. Protection of cultural resources will be coordinated with the Wisconsin Historical Society (WHS) as required by applicable state and federal historic preservation laws and regulations. All sites and structures are protected against unauthorized disturbance by various state (e.g., Wis. Stats. 44.40 and 157.70) and/or federal legislation (e.g., Section 106). Protection of burial sites will follow Section 157.70 of Wisconsin Statutes, and the Department's "Burials, Earthworks, and Mounds Preservation Policy & Plan" (WDNR 2008).

There are likely additional archaeological sites and historic structures within the forest that remain undiscovered and unreported. Inadvertent disturbance of unknown sites could occur during facility development and forest management activities. This risk will be minimized by following Manual Code 1810.1, which prescribes a process for screening for potential sites prior to initiating a wide range of management and development activities. Additional investigations and precautions are taken in areas of known sites. All accommodations necessary will be made to avoid adverse impacts on cultural sites that may be affected by management activities.

IMPACTS TO RESOURCES OF TRIBAL INTEREST

The GKSF lies within the ceded territory of the Ojibwe Tribes and is located within proximity to Tribes of the St. Croix Band of the Lake Superior Ojibwe as well as the Mille Lac Band of Ojibwe in Minnesota. The Ojibwe Tribes ceded some lands in the northern one-third of Wisconsin to the United States Government in the Treaties of 1837 and 1842. In those treaties, they reserved their rights to hunt, trap, fish, and gather within various publicly-owned lands.

A number of resources on the GKSF are of special interest for the St. Croix Band and other Ojibwe Bands, who have treaty rights within the ceded territory. Tribal interests would be protected and maintained through the master plan. Throughout the planning process, members of the planning team met periodically with Tribal and Great Lakes Indian Fish and Wildlife

Commission (GLIFWC) representatives. These consultations were conducted on a government-to-government basis. It is through this process that the needs and concerns of tribal members exercising their off-reservation treaty rights were identified and discussed. The master plan would not adversely impact tribal interests. Tribal interests and impacts to those interests are described below.

Access for Hunting and Gathering

The level of access across the forest would generally remain unchanged. The draft plan's road management and access plan provide significant opportunities to access the forest for hunting and gathering.

Gathering of miscellaneous forest products

The draft plan proposed areas with specific management objectives and will impact areas for gathering. Specifically, draft Master Plan designations, including State Natural Areas, Native Community Management Areas and wilderness areas will impact locations for gathering certain miscellaneous forest products.

a. State Natural Area (SNA)

SNA designations will impact gathering by requiring all miscellaneous forest products permits be issued by the tribal conservation department in consultation with property manager.

The GKSF currently has six SNA designations, totaling 1,710 acres, including Sterling Barrens, St. Croix Ash Swamp, Brandt Brook Pines and Hardwood Forest, Ekdall Wetlands, Norway Point Bottomlands, and Kohler Peet Barrens and Cedar Swamp. The proposed master plan designates a total of 7,100 acres of SNAs, including one additional SNA (Trade River Forest and Wetlands), along with boundary modifications to the existing six SNAs for

- #### **b. Native Community Management Areas**
- designations will impact gathering of firewood in areas with the objective of increasing coarse woody debris as part of old growth and old forest characteristics. Firewood gathering would be restricted from self-regulated gathering but is still authorized after consultation with the property manager in Native Community Management Areas with old growth and coarse woody passive management.

Nearly 8,000 acres (39%) are proposed for native community management. Approximately 6,500 acres (86% of the total) are proposed for passive management, both upland and lowland sites. The majority of the above mentioned SNAs are located within Native Community Areas.

c. Wild Resource Areas

The proposed master plan re-designates the current 9460 acres of wild resource management area. This area is currently designated as a Tribal Wild Resource Management Area. In the miscellaneous forest products stipulation, there is a restriction on the use of motorized vehicles, motorized equipment, and mechanical transport for gathering. The proposed master plan re-designates the entire wild resource management area to other management classification, many being Native Community and State Natural Areas.

Historical and Cultural Sites

All accommodations necessary will be made to avoid adverse impacts on cultural sites that may be affected by management activities. Management activities will be checked with the Department's cultural resource database and any additional information obtained from Tribal representatives. As needed, approved future facility development sites will be inspected prior to construction to locate and evaluate any evidence of significant archaeological or historic material.

General Habitat Management

The forest habitat and associated cover types are expected to change slightly over the next 15 years. Impacts of the proposed management would occur over the long-term as the forest matures and its composition shifts.

SOCIO-ECONOMIC IMPACTS

Timber Products

Of the upland acres, a slight increase in acres available for management is expected from the current plan. There would be a minor and gradual change in the type of forest products produced. For the near-term, the forest would continue to produce pulp and sawtimber in similar proportions it does today. As the forest matures over the next 50 to 100 years, there would be a

reduction in scrub oak and a slight increase in pine cover types and shade tolerant cover types.

If the proposed plan were fully implemented harvest levels would increase slightly. Currently approximately 370 acres have been harvested in the last 7 years and when proposed plan constraints are applied approximately 400 to 450 acres will be harvested. Assuming current product values, the annual revenue is expected to be \$160,000 per year and a total of 2.5 million over the next 15 years.

Timber products from the Governor Knowles State Forest help support primary and secondary wood using industries throughout the region. A small number of local area loggers also derive economic benefit from harvesting timber on the forest. Increases in forest production would not significantly impact the regional forest products industry. This is due to the relatively small contribution by the GKSF to the overall large regional supply of raw product and the broad, elastic nature of the product stream.

Non-timber Products

This plan would have no impact on non-timber resource gathering. Currently, boughs, firewood, and berries are gathered.

Recreation and Tourism

Overall, the management actions proposed in the master plan would not pose significant negative social impacts, as proposed actions generally maintain or improve the existing recreation conditions on the GKSF. The plan would continue to enhance the Governor Knowles State Forest's role in supporting the area's tourism economy. Management proposed in the master plan would support the short and long-term enhancement of the scenic resources and natural habitats.

Updates to the GKSF snowmobile trail will maintain connections to the regional trail system. These connections will continue to contribute to the flow of tourism dollars related to motorized trail use in the region. Non-motorized trails will be upgraded or enhanced. Objectives include extending trail lengths and creating trail connections to other trails, public lands and amenities. Existing trails will be renovated and some new trails will be developed or dedicated for such recreational uses as winter walking, off road bicycling, and snowshoeing. These developments, though generally low in environmental impact, would contribute to the local and regional social and economic climate by diversifying recreational opportunities for the public and accommodating user demand.

Proposed developments are consistent with the established recreational uses of the property, and the traditional trail-based / nature-based recreational niche at Governor Knowles State Forest.

Land Use

Land use in the region is a combination of forestry and agriculture, both on private and public lands. Approximately 44% of the region is in forest cover and 27% is in agriculture. The region of the Governor Knowles State Forest is highly rural with only 1% of the land area in residential, commercial, or industrial uses.

Although it is one of the largest state owned properties in a region, the GKSF is a relatively small publicly owned property in comparison to other public ownerships in the area. More than 100,000 acres of Burnett and Polk County Forests and five state wildlife areas totaling over 52,000 acres and including the Crex Meadow, Fish Lake, and Danbury State Wildlife Areas, border the forest. Forest management on the Burnett and Polk County Forests, and the Sterling Township forest, is similar in style with the GKSF.

The proposed future management of the GKSF continues the long-standing management of the past. Land use on the forest would remain unchanged, and actions proposed in the plan are not of a type or magnitude likely to generate any changes in land use on adjacent private or public lands.

Impacts on Infrastructure and Transportation

A small increase in recreation users may result from the relatively minor recreational improvements on the GKSF; however, the amount of visitors is not expected to increase enough to necessitate increased local road maintenance.

Heavy truck traffic will occur while timber sale contracts are being executed, but at levels at or slightly greater than currently occur. There would not be significant additional impacts.

The GKSF will continue to be a generator of solid waste but at levels at or slightly above current levels. All of Wisconsin's State Forests promote and participate in recycling programs to mitigate generation of material that must be disposed of in sanitary

landfills.

Noise Impacts

Noise resulting from capital improvements such as facility construction could have a slight impact on the forest's neighbors and wildlife. Noise impacts would be of relatively short duration and temporary.

There is not anticipated to be a significant increase in forest visitors or campers; therefore, only a potential slight increase in noise from recreators is expected. Impacts to neighbors or other forest visitors should be negligible.

Forest management activities are also anticipated to generate characteristic but transient noise impacts. Primary sources would be from chainsaws, skidders, other harvesting machinery, and from logging trucks. Levels would not be significantly above past and current levels.

Fiscal Effects on Local Governments

Local Tax Revenues

If additional lands are acquired from the boundary expansion outlined in this plan, local governments receive revenue in the form of aids-in-lieu-of-taxes (discussed below). The local governments' future demand for expanded services (schools, law enforcement, etc.) would be expected to be less than if those parcels were to be subdivided and developed.

Payments in Lieu of Taxes

Local governments and communities are often concerned about the perceived reduction of the tax base when private lands come under public ownership. Under current law (Wis. Stats. 70), land acquired by the DNR is not subject to property taxes. Instead, DNR makes annual payments in lieu of taxes (PILT) to municipalities for the parcels that the DNR owns within those municipalities. More detailed information on how the Department pays property taxes may be found by visiting dnr.wi.gov and searching "PILT".

Demand on Local Government Services

The plan's recreation management would not generate a significant change in the demand on local law enforcement or emergency services. Most Governor Knowles State Forest law enforcement issues are handled by rangers on the property, rather than local police or sheriffs. Demand on local emergency medical services may rise slightly in response to increased recreation use on the property.

The plan's proposed land management would not generate any significant new demand for local or county law enforcement or emergency services. There are few needs for local services related to forest management and other land management activities. The level of impacts to highways and traffic patterns by logging trucks would not change as logging activity under the plan will remain similar to present levels.

Fiscal Effects on the State

Land Acquisition Costs

Lands purchased for addition to the forest would likely be acquired using State Stewardship funds or a similar bonding fund. Similarly, bonding programs fund the development of much of Wisconsin's State Forest System.

Not all lands within the expansion area would be considered for purchase but for those lands under consideration have ranged in value from \$2,500 to \$3,500 per acre. It is expected that approximately 100 to 200 acres will be acquired per year based on past acquisitions and available funding.

Purchases of land within the boundary expansion areas would be only from willing sellers and it would extend over many decades. The cost per acre will vary significantly on the parcel in question.

Development Cost Estimates

The Department budgets for its capital development needs on a biennial basis, as do all state agencies. The plan calls for the developments to be phased-in over an extended period of time, probably several state budget cycles. The extent that these costs would fall into any particular biennial budget is unknown. The following development cost estimates are given in 2011 dollars:

Trail Development and Renovation	\$534,600
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Camping Developments and Upgrades	\$1,272,200
Day Use Areas	\$102,200
Facilities and Improvements	\$1,653,200
<hr/> Total Estimated Development Costs	<hr/> \$3,562,200

Operational Costs - Recreation

If the proposed plan were fully implemented, the estimated annual operating costs for the recreation program would increase slightly. The current supplies budget for Governor Knowles is approximately \$60,000. Most of the recreation developments are replacements or enhancements of existing developments. Many proposed developments are either located in close proximity to existing recreation developments or are “remote and low intensity uses (e.g. hiking trails) not requiring significant resources to maintain) In some instances, operating costs would be reduced given maintenance of improved facilities are more efficient than older facilities. At the time of implementation, development and operating costs are a significant factor when developing capital budgets.

Revenue from Recreation

A slight increase in recreation revenue is anticipated. As improvements are implemented the forest will see additional use of recreational facilities and camping occupancy as visitor needs and interests are accommodated. While recreational use and income from associated camping or trail fees is expected to increase the future increase in revenue is difficult to calculate.

Operational Costs -Land Management

There would be a minimal and slight increase in land management costs as the acreage managed for timber would increase slightly.

Revenue from Timber Products

Timber sales between 2004 and 2010 averaged 370 acres per year. If the land management plan is fully implemented the acres managed per year over the life of the plan are estimated to increase only slightly from current levels, less than 50 additional acres per year. Assuming current product values, the annual revenue from forest product sales would be approximately \$160,000 annually and approximately 2.5 million the next 15 years, not accounting for inflation or price adjustments. However, estimates of future timber sale revenue are difficult to predict because of variable market forces.

IMPACTS OF BOUNDARY EXPANSION

Costs

Ten boundary expansion areas totaling 7,989 acres are under consideration for the Governor Knowles State Forest. If all lands within the areas were acquired, total acreage for the GKSF would increase to 46,000 acres. State funds would be expended, as they are available, to purchase these additional lands unless alternate funding sources are available, or donations or partial donations of land occur. Not all lands within the expansion area would be considered for purchase but for those lands under consideration have ranged in value from \$2,500 to \$3,500 per acre. It is expected that approximately 100 to 200 acres will be acquired per year based on past acquisitions and available funding with an estimated fiscal cost of \$250,000 to \$700,000 per year.

Changes in Land Use

Newly acquired properties within the boundary would be managed to meet the underlying land management objectives in the proposed master plan. Existing improvements, when not needed for forestry purposes, would be auctioned or sold for reuse elsewhere or salvaged for materials. Priority acquisition parcels would be forested parcels and would remain forested under the plan.

Long-term Resource Protection, Ecological, and Recreation Benefits

The proposed boundary expansions identify areas to increase management efficiencies and protect ecological, economic, and social attributes. These areas would contribute to the diversity of ecosystems found within the Governor Knowles State Forest, as well as enhance wildlife habitat, provide additional access and connect blocks of land for more efficient management. These landscapes include significant blocks of forested land which will be managed using sustainable forestry practices and will provide associated recreation, habitat, and ecological benefits.

The boundary expansion areas under consideration would protect lightly developed sections of the St. Croix National Scenic Riverway and its tributaries, safeguarding ecologically important habitat, water quality and scenic values of the St. Croix River watershed. In addition, they would create larger, better connected blocks of public lands thereby providing opportunities to improve and diversify recreational use and access, including connecting and lengthening recreational trails, protecting important natural communities, improving transitional habitats and migration corridors, and expanding habitats for rare, threatened and endangered species. Lastly, these areas would minimize fragmentation and preserve blocks of publicly owned land.

Property Management Benefits

The boundary expansion will provide more manageable, contiguous blocks of forest and improve management efficiencies by adjoining lands that are similarly managed both in terms of land management and recreation. Acquired lands will also enhance the connectivity of public lands within the region of the Governor Knowles State Forest.

Payment to Landowners

Payment to landowners for land acquired by DNR may provide a profit to the seller. Or, it may enable sellers to invest in other real estate in the region, thus creating an economic benefit in the real estate market.

All property purchases are on a willing seller basis. As required by state and federal laws, the Department pays “just compensation” for property, which is the estimated market value based on an appraisal by a certified licensed appraiser. At times, it is in the interest of the Department and the landowner for the Department to acquire only part of the rights to a property, or an easement. The Department has a number of easement alternatives available to address these situations.

IMPACTS ON ENERGY CONSUMPTION

Because of the limited amount of facility development that will occur on the Governor Knowles State Forest, no significant long-term impacts to energy consumption are expected.

ENVIRONMENTAL EFFECTS AND THEIR SIGNIFICANCE

Impacts on Geographically Scarce Resources

There will be no detrimental impacts to geographically scarce resources on the property. Management areas have been designated in a way which protects these features, and management activities will be conducted in a way that protects any scarce resources.

Reversing the Impacts

While none of the impacts are entirely reversible, any unfavorable impacts will be minor and short-lived. Using appropriate management techniques, including proper planning, BMPs, erosion control practices, etc., will keep impacts to a minimum and allow any impacted sites to recover quickly.

CUMULATIVE EFFECTS, RISK, AND PRECEDENT

Significance of Cumulative Effects

The implementation of the master plan goals for resource management and recreation development for Governor Knowles State Forest will provide positive ecological, social, and recreation benefits to the region by providing a state forest that provides public access to a variety of outdoor recreational activities and contributes to the local and regional economies through timber production. The plan's proposed land management would maintain and expand protection of critical ecological habitats, in the process protecting important threatened and endangered species. Overall, the proposed management plan would have a positive impact on the local tourism economy by updating recreational facilities and maintaining and enhancing the visual characteristics that draw visitors to the region.

The acquisition of additional lands as a result of the proposed boundary expansion would, over time, contribute substantial positive cumulative ecological, recreational, and economic benefits. These benefits would be derived from the land and water frontage that would remain permanently undeveloped and open to public use, the protection of valuable habitats and ecosystems (including important habitats supporting rare, threatened, and endangered species), and the continued production

of timber products as a result of long-term sustainable forest management.

Significance of Risk

Management and development of the Governor Knowles State Forest pose a low overall potential risk to the environment. Most actions are low-risk and would be a continuation or slight modification of existing management and uses. No new, high-risk actions are proposed, nor are any actions which involve an irretrievable commitment of resources, or actions that could not be reversed in the future.

The presence of motor vehicles and other equipment during construction or forest management may pose a slightly increased risk from spills and erosion. These risks would be mitigated by BMP requirements put in place in the bid documents and at the pre-construction meeting with contractors.

The use of fire as a management tool may also pose a slight risk on the property. While the use of fire increases the risk of a prescribed fire turning into a wildfire, the risk would be mitigated by using experienced staff to conduct all burns, burning only under low risk conditions, having appropriate firebreaks established, and having fire-fighting equipment and personnel present on-site.

Risk to resources of the forest resulting from human activity during normal operation is mitigated by emergency action plans and procedures put in place by forest staff. These plans are reviewed annually and updated as needed or whenever circumstances change.

Risk of introduction of invasive exotic species may increase due to public entry and use of the property. Plans and strategies, as described in the Governor Knowles State Forest Master Plan, are in place to prevent and control outbreaks and infestations.

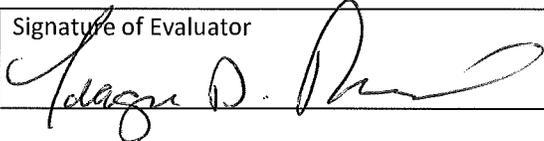
Significance of Precedent

Approval of this management plan would not directly influence future decisions on other Department property master plans. However, this plan or portions of it may serve as reference or guidance material to aid in the preparation of master plans for similar properties elsewhere. Implementation of the objectives contained in the plan would not be precedent-setting, primarily because all proposed actions are management and development activities that regularly occur on state forests and parks in Wisconsin. Further, this property has a long history of both public recreation and forest management activities.

PRELIMINARY DECISION

In accordance with s. 1.11, Wis. Stats., and Ch. NR 150, Wis. Adm. Code, the Department is authorized and required to determine whether it has complied with s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code.

The Department has made a preliminary determination that the Environmental Impact Statement process will not be required for this action/project. This recommendation does not represent approval from other DNR sections which may also require a review of the action/project.

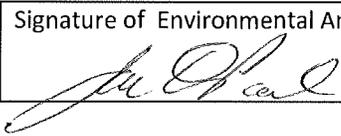
Signature of Evaluator 	Date Signed 8/3/2012
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FINAL DECISION

The public review process has been completed. The Department received and fully considered 72 responses to the news release or other notice.

Pursuant to s. NR 150.22(2)a., Wis. Adm. Code, the attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action, and therefore the environmental impact statement process is not required prior to final action by the Department.

The Department has determined that it has complied with s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code. This decision does not represent approval from other DNR sections which may also require a review of the action/project.

Signature of Environmental Analysis Program Staff 	Date Signed 8/3/2012
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NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

Chapter Two: Alternatives and Their Environmental Impacts

This section describes the anticipated impacts of alternatives that were *not selected* for inclusion in the final master plan.

LAND MANAGEMENT ALTERNATIVES

Wilderness Area

The current master plan designates one wilderness area running the entire length of the state forest and buffering the land administered by the National Park Service (NPS). The boundary of the wilderness area generally encompasses the part of the state forest lying between the St Croix River escarpment and the NPS land plus 200 feet inland. When the escarpment is within the NPS ownership, the wilderness boundary is defined as 200 feet inland from the NPS boundary. The current plan also designates larger blocks of wilderness area, contiguous with the main wilderness area, but further inland from the escarpment.

In the proposed plan the wilderness area has been re-classified into one of three designations: native community, habitat management, or forest production areas. Alternatives were discussed for the current wilderness area and included a scenic overlay or maintaining the wilderness area designation as is. Neither of the alternatives was chosen because the proposed designations would accomplish the objectives of maintaining the integrity of the St. Croix River watershed, maintaining water quality and unique habitats, and sustainably managing early successional forest types. In the proposed plan, 68% of the wilderness area would be designated as native communities, 25% as forest production, and 7% as habitat management. The designations were assigned after consideration for the ecological features and opportunities they provide both from an active and passive management viewpoint.

Forest Production Alternatives

The soils, topography, and existing cover types played a major role in discussions regarding management options on the state forest. Because sand is the primary soil type, the ecological capability and land management alternatives were limited, however, some notable alternatives were discussed throughout the planning process.

The draft plan designates two forest production management areas: Bluff Lake and Sand Plain. The Bluff Lake area is dominated by aspen with objectives of maintaining age diversity for a predictable flow of forest products while improving habitat for ruffed grouse and other game and non-game species dependent on that habitat. The Sand Plain area has similar objectives to the Bluff Lake area except that aspen is a component but not necessarily a focus. Instead, maintaining a shifting mosaic of age classes of early successional forest types would be an objective. Other designations were not selected for these areas because the forest production designation is the best fit for meeting the objectives.

Habitat Management Alternatives

Parts of these management areas were considered for forest production management areas. Some of the objectives for these areas are in alignment with forest production. However, the objectives relating to wildlife habitat, the proposed modifications to management prescriptions, and the proximity of these areas to existing open barrens habitat made these areas suitable fits as habitat management areas.

Native Community Management Alternatives

Much of the native community acreage falls in the former wilderness area. These areas are generally associated with steep topography and/or the wetter soils associated with seeps, streams, and lowlands making active habitat management or forest production challenging if not impractical. Site specific forest management prescriptions within the native community management areas were tailored to meet community management objectives where appropriate. With the proposed site specific prescriptions in the draft plan, those objectives would be met regardless of the designation.

Many of the alternatives considered focused on the number and size of native community management areas. Sixteen primary sites were identified in the biotic inventory as being ecologically significant, with each site containing documented, significant occurrences of rare and/or representative high quality natural features. All 16 sites were considered as alternatives and five were entirely designated as Native Community Management Areas. Four biotic inventory sites were eliminated from consideration as native community management for a variety of factors. One of the sites was included in a recreation management area and will be passively managed thereby maintaining the unique character of the site. Two of the four sites were smaller in size and either had management activities that occurred through consultation with BER or were being actively

managed after the biotic inventory but prior to the deferral/consultation process was initiated. The fourth site is located in close proximity to the St. Croix River and will be subject to the St. Croix River viewshed prescription. The remaining primary sites were modified to better match definable boundaries and designated as native community management areas.

The most notable boundary change occurred in the Clam River Woods North primary site. One alternative for this site was to designate roughly the northern one-half of the site as a native community management area with an objective on maintaining mature oak-dominated forest. This alternative was not chosen because of the July 1, 2011 wind storm that significantly impacted that part of the site causing the objectives to better match up with forest production.

Location of Management Area Boundaries

In the current plan the land management boundaries included the St. Croix National and Scenic Riverway which is managed by the National Park Service (NPS). One alternative explored was to continue to keep the NPS ownership within the state forest boundary and either create a stand-alone management area, or establish an appropriate overlay that coincided with the NPS ownership. Since the Department has no administrative authority over or ownership within the National Park, the draft plan removes the NPS ownership from the state forest project boundary.

RECREATION MANAGEMENT ALTERNATIVES

Motorized Trails

All-Terrain Vehicles (ATVs)

Master plan discussion explored the possibility of establishing two short primitive to lightly developed ATV trail connections through portions of GKSF. The purpose for these trails would be to further facilitate both snowmobile and ATV travel, and to provide connective trail links for a county snowmobile /ATV trail system.

The first master plan alternative proposed several miles of ATV travel on two routes that are currently designated Burnett County snowmobile trail through a Trail Use Agreement with the GKSF.

One route called for further developing one mile of existing trail corridor as an ATV trail connection through a portion of state forest near the Clam Flowage. This would provide “pass through trail use” linking two extensive segments of Burnett County Forest lands, open to ATVs from mid-September through mid-November, as well as in the winter months.

Another proposal was to replace a ½ -mile segment of North River Road ATV route. The town road is currently designated to provide an ATV travel corridor to link two segments of Burnett County Forest lands. If use of North River Road were to be closed to ATV’s in the future, the State Forest link could become essential to connect the two segments of the Burnett County Forest lands. Constructing a ½ -mile, ATV trail connection through a portion of state forest east of the group camp would enable a safe and sustainable trail alternative. This trail connector would be open to ATVs from mid-September through mid-November, and to snowmobiles and ATVs in the winter months.

A key issue was how to manage the trail during warm months, especially if county trails were later opened on a year-round basis. The number of visitors and summer residents increases considerably during the spring, summer and fall. The rustic setting at GKSF is a key attraction to visitors and the traditional niche, particularly in warm seasons, is nature-based recreation – horse-back riding, hiking, birding, camping, hunting, and scenic viewing. ATV travel during warm season months poses potential conflict with other trail users and neighboring landowners.

A second alternative was to keep the trail designations as they are currently managed, allowing only winter snowmobile use in the proposed locations. Maintaining the status quo would be in keeping with the forest’s recreation niche and would avoid future conflicts with warm season uses. Present demand for expanded motorized trail use is not considered great at this time.

The preferred alternative recommended in the master plan is to not develop either of the trail connectors at the present time. It is recognized however, that demand for motorized recreation on adjoining county lands may increase, and pass-through trail links through portions of GKSF may become critical in the future. This is particularly true for the ½-mile route near Clam Flowage, where safety could become an issue with ATV road travel, or where use of the road could be lost.

Development of the 1-mile and ½-mile trail links as previously described for “pass-through use” may be reconsidered in the future. Any future trail development would be in cooperation with Burnett County, and as a last resort alternative. Routes

would follow existing Snowmobile/winter ATV trail, and conform to specifications regarding trail opening and closing dates in conjunction with the County.

Any new trail construction would follow Wisconsin Department of Natural Resources Guidance for All-Terrain Vehicle Use on Department Lands (WDNR 2005). Seasonal restrictions will be in place to protect trails by limiting use to best travel conditions.

Development of trail connectors would use existing snowmobile trails or woods roads wherever possible to minimize impacts and reduce alteration of the visual character of management areas that the trails traverse. Development would have minimal effect on forest features, and visual characteristics would remain similar to the surrounding region.

Expanding seasonal use would require making them environmentally sustainable during all seasons of operation. Future trail development would be sensitive to wetlands, waters, and other natural resources. Upgrading existing trail corridors would involve hardening the surface and improving drainage to ensure sustainable use. Trail signage and road crossings would be improved to ensure safe travel for ATVs, hunters, hikers and other trail users.

Group Camping

Equestrian Group Camps

Public comments indicated a need for equestrian group camp facilities. Equestrians often look for social camping experiences as they travel together and rendezvous at horse trail locations as organized groups, riding clubs or family gatherings. The Trade River equestrian campground is often booked to capacity by organized equestrian groups. The campground serves individual campers, single families or small groups very well, but its design limits large social gatherings desired by organized groups.

Several proposals were offered during planning discussion, including development of up to three equestrian group camps at several different locations. After considering the alternatives it was decided to limit construction to an initial facility capable of serving large groups, and to monitor use and demand prior to additional development.

The preferred alternative for equestrian group camping is to construct one equestrian group camp in the vicinity of the Trade River Campground to serve up to 30 camper units. The facility will be reservable on a fee basis and will offer some modern amenities. The new camp would be developed at a distance far enough from the Trade River Equestrian Campground to avoid disturbance or conflict between the two camping facilities. Offering reservable equestrian group camping options would decrease competition with the equestrian campground and provide the desired social setting for group campers. Developing the camp in the vicinity of the existing campground would increase efficiency of operation and maintenance.

The existing Sioux Portage Outdoor Group camp will be converted to an equestrian day use facility, with the option to develop it into a second equestrian camp if demand increases in the future. Utilizing existing group camp amenities would save costs and reduce impacts of new construction. The location would provide horse riding opportunities in the northern end of the forest and potential access to trails on adjacent public property.

Outdoor (non-equestrian) Group Camps

The existing Sioux Portage Outdoor Group Camp (non-equestrian) at GKSF is underutilized. Group campers want diverse outdoor experiences, often involving water-based recreation, and this location is not located on or near a water source. Occasionally small groups arrive at GKSF seeking facilities suitable for small youth groups or family gatherings. Several outdoor group camp alternatives were considered during the planning process. Issues explored included: how to better serve the recreational needs of outdoor groups; suitable alternate locations for developing an outdoor group camp; alternative uses for the existing group camp facilities if a new camp were constructed; ways to serve small group requests.

The preferred alternative is to convert the Sioux Portage Outdoor Group Camp for equestrian day use and replace it with a new outdoor group camp to be constructed at the Clam Flowage. This location would include water access, a canoe launch and a fishing pier on the Clam Flowage. The facility would be reservable on a fee basis for organized groups of up to 60 campers. The outdoor group camp will provide a high quality, rustic outdoor camping experience in a secluded setting without conflict or disturbance of other campers or recreational activities. Developing the group camp in a desirable location, convenient to recreation trails and near a water resource, would increase camping occupancy.

A second, small-group outdoor group camp will be constructed at a site near the St. Croix Family campground. The camp would accommodate small organized groups and family gatherings of up to 30 campers on a reservable, fee basis. The new camp

would be developed at a distance far enough from the St. Croix Family Campground to avoid disturbance or conflict between the two camping facilities. Developing the group camp in the vicinity of the existing campground would increase efficiency of operation and maintenance.

PROJECT BOUNDARY EXPANSION ALTERNATIVES

The draft plan proposed 10 areas for boundary expansion consideration. Each area can be viewed as an alternative, either individually or any combination. Additional areas for consideration were identified and discussed but not forwarded for consideration in the draft plan. A significant alternative discussed was reducing the size of the current boundary. The alternative focused around land use changes over the past decade that would no longer provide benefits for state ownership, for example significant residential development. In all cases, even with some minor land use changes, the current boundary blocks well for management purposes and management efficiencies. Another considerable alternative for reducing the boundary was removing lands currently owned by the County and designated as County Forest and/ or Town own lands. This alternative was not chosen and lands in County and Town ownership remain in the current as well as many of the boundary expansion areas under consideration. Including lands in both boundaries will provide flexibility to both the County and State in terms of acquisition consideration. Depending on the blocking situation (eg adjacency), landowner interests and opportunities lands could be pursued by either the County or State working cooperatively to determine best fit. In addition including these areas will allow the Department to trade lands to consolidate holdings and make management even more efficient as well as County Forest efficiencies.

Chapter Three: Summary of the Public Involvement Process

In accordance with Wisconsin Administrative Code, NR 44 - Master Planning for Department Properties, the Governor Knowles State Forest embarked on a plan to involve the public in the process of developing the master plan. From its beginning, steps were taken to ensure opportunities for public involvement throughout the planning process.

The Department developed a Public Involvement Plan which was available for public review on the internet and in print. The plan outlines the public participation strategy for soliciting public review and input into the development, evaluation, and adoption of the revised Governor Knowles State Forest Master Plan. It describes legislative standards that guide the planning process, methods of communication between the DNR and public, and how decisions are made.

PRIMARY STAKEHOLDERS

To develop an effective master plan, the Department listens to many voices. People of varied interests and backgrounds participated in Governor Knowles State Forest master planning activities. Some of these “stakeholders” in the future of the Governor Knowles State Forest include neighboring landowners, conservation organizations, recreation users, civic groups, state and federal agencies, local governments, and members of the local business community.

Government-to-government contact was maintained with local towns and county governments. Elected officials were informed of planning activities and proposals by mail and personal contact. Tribal representatives were informed and invited to comment on all phases of the developing master plan.

METHODS OF PUBLIC CONTACT AND INVOLVEMENT

Various means were used to inform the public of the planning process and to promote public involvement throughout the development of the master plan. This involved periodically contacting public stakeholders to gather information and provide ways for people to participate.

Communication Methods

- Statewide news releases, Department of Natural Resources meetings and notices calendar and internet web pages
- Direct mailings of public involvement notices, draft documents, and public comment forms
- Public meetings
- Informational presentations to interested groups and organizations
- Personal contacts with visiting clientele, and by telephone or written correspondence
- E-mail correspondence
- Government-to-government consultations
- The Governor Knowles State Forest internet website was a comprehensive resource used to facilitate the public involvement plan. Nearly all documentation produced on the plan was made available at the forest's website: http://dnr.wi.gov/master_planning/govknowles/
- Comment forms were posted online for people to electronically submit their contributions, ideas and suggestions during each public review period.

Topics Posted on the Website

- General Information about the state forest
- Links to join the mailing list, or to contact the Forest Superintendent
- Overview of the Department's overall approach to forest master planning
- Previous Master Plan

- Public Involvement Plan
- Vision Statement and Property Goals
- Regional and Property Analysis
- Property Planning Maps
- Draft Master Plan
- Environmental Analysis

PUBLIC COMMENT

Public comments were submitted by interested or affected parties throughout the master planning process. The public's input was received in a variety of formats: written comment forms, online surveys, mail, e-mail, fax, or face-to-face public meetings and verbal correspondence. Department staff analyzed and recorded comments for public record. A qualitative summary of comments was prepared following each phase of the master planning process. Each comment summary reviewed key issues, described what was heard collectively, and reported that information back to the public.

ISSUE IDENTIFICATION AND CONSIDERATION

At each major step in the process, the public's input served as a planning tool to help identify planning issues and suggestions. The public's comments, the Regional and Property Analysis, DNR staff technical input, and other considerations guided the master planning team. During this process decisions were made based on:

- The land's resource capability
- The role of the property in its local and regional context
- Applicable federal and state laws, administrative DNR Codes, and DNR design standards
- Policies and missions of the state forest and its programs
- Consideration of public input
- The professional expertise of DNR resource managers

A broad range of interests were heard and considered in the development of the master plan. Final decision making responsibility and authority rests with the DNR's policy-making Natural Resources Board (NRB). The NRB reviews the draft Master Plan and Environmental Analysis and makes an approval decision on the plan. The public has a final opportunity to comment at the NRB meeting before the Board renders their decision.

MASTER PLANNING PUBLICATIONS

Information on a variety of topics was compiled to support the planning process and was made available to the public. These documents are available in paper copy by order request from the Bureau of Parks and Recreation and the Division of Forestry. The website is a long term repository for master planning documents and the final master plan which can then be readily accessed in the future at: http://dnr.wi.gov/master_planning/govknowles/

Planning Documents

Working documents were developed with involvement from the public as the master plan's focus narrowed toward completion. Completed documents were made available to the public by request, during public meetings, and were posted on the internet. They were also distributed at regional public offices and public and depository libraries.

For the Governor Knowles State Forest this literature included a Public Involvement Plan, Vision and Goal Statements, and the Regional and Property Analysis, all of which contributed to the development of a final Master Plan and Environmental Analysis. Maps depicting management areas and proposals were produced as a tool for planners and to inform participants during public meetings. They were included with published documents and were posted on the Governor Knowles State Forest master planning website.

COMMUNITY INVOLVEMENT AND PUBLIC PARTICIPATION

The Wisconsin Department of Natural Resources, recognizing that the Governor Knowles State Forest must reflect the people it serves, encouraged citizen input throughout the planning process. Public meetings were announced via the media, direct mail, a website and postings to the statewide meetings calendar. Opportunity to sign up for mail or e-mail contact lists was incorporated as part of an online internet page and in literature that was distributed during the planning process.

Table 3.1 Business, government, and citizen groups on mailing lists (May 2012)		
Alpha Forest Products	Library, Grantsburg Public	T & T Logging
Assoc. of Wis. Snowmobile Clubs	Library, Lac Courte Oreilles Ojibwa College	Town of Anderson
Bell Timber Inc.	Library, Luck	Town of Eureka
Biewer Wis. Sawmill	Library, Milltown	Town of Grantsburg
Blomberg Logging Inc.	Library, UW Barron County	Town of Luck
Burnett Co. Conservationist	Library, Wis. Indianhead Tech. College	Town of Sterling
Burnett Co. Forestry & Parks Dept.	Mayflower Congregational Church	Town of Swiss
Burnett Co. Government Center	Milltown, City Hall	Town of Union
Burnett Co. Highway Dept.	Minneapolis Central Library	Town of West Marshland
Burnett Co. Historical Society	Minn. Dept. of Natural Resources	Turf & Tundra Trails Assoc.
Burnett Co. Land Information	National Park Service	United Methodist Church Wolf Creek
Burnett Co. Nat. Resources Committee	National Wild Turkey Fed.	Upper St. Croix Watershed Alliance
Burnett Co. Sentinel	Natural Resources Board	US & State Senators & Representatives
Burnett Co. Zoning & Land Use	North Branch Area Library	USFS
Burnett County Tourism Office	North Branch Chamber of Commerce	USFWS, St. Croix Wetlands Mgt. Dist.
Cambridge Chamber of Commerce	North Central Logging	USGS Northwest Field Office
Cambridge Public Library	Northwest Timber Corp.	UWEX Burnett Co.
Carlson Timber Products	Northwood Product	UWEX Polk Co.
Chequamegon Audubon Society	NRCS Service Center	Village of Centuria
Chilakoot Bow Hunters	NW Regional Planning Commission	Village of Frederic
Chisago Co.	Pardun's Canoe Rental & Shuttle	Village of Grantsburg
Chisago Co. Press-news	Pine City Public Library	Village of Luck
Chisago Lakes Chamber of Commerce	Pine County Forestry	Village of Siren
Chisago Lakes Library	Polk Co.	Village of Webster
Corner Stone Construction	Polk Co. Conservation Congress	WCMP Radio
Crex Meadows Wildlife Educ. Ctr.	Polk Co. Forestry Dept.	WCMP Radio-news
D & S Timber	Polk Co. Historical Society	WDNR Interstate State Park
Danbury Chamber of Commerce	Polk Co. Land Information Office	Webster Chamber of Commerce
Domtar Industries	Polk Co. Parks & Recreation Dept.	West Marshland Hunting Club
Ducks Unlimited, Crex Meadows	Polk Co. Zoning	WGMO Radio
Equestrian Friends of Gov. Knowles SF	Polk County Information Center	Whitetails Unlimited
Falls Chamber of Commerce	Polk County Ledger	Whitetails Unlimited, Burnett Co.
Flambeau Hydro LLC	Richard Good Logging	WI Sharp-tailed Grouse Society
Frederic Area Chamber of Commerce	River Alliance of Wisconsin	Wild River Outfitters
Frederic Public Library	Rm. 18 S., State Capitol	Wild River State Park
Friends of Crex	RNR Ranch & Tack	Wis. Board of Comm. of Public Lands
Future Forests	Root Logging	Wis. Conservation Congress
Gov. Council on Forestry	Ruffed Grouse Society	Wis. Counties Assoc.
Grantsburg Archery Club	Rush City Chamber of Commerce	Wis. County Forests Assoc.
Grantsburg Area Historical Society	Rush City Public Library	Wis. Dept. of Natural Resources
Grantsburg Chamber of Commerce	Sandstone Public Library	Wis. Paper Council
Grantsburg Rod & Gun Club	SAPPI Fine Paper	Wis. Sharp-tailed Grouse Society
Great Lakes Timber Professionals	SCD Trading LLC	Wis. State Trails Council
Grindstone Logging	Siren Chamber of Commerce	Wis. Towns Assoc.
H & W Logging	SJE of Grantsburg Corp.	Wis. Wetlands Association
Hinckley Public Library	St. Croix Falls	Wis. Wildlife Federation
Inter County Leader	St. Croix Nat'l Scenic Riverway Visitor Ctr.	Wisconsin All-Terrain Vehicle Assoc.
Interstate State Park-MN	St. Croix River Association	Wisconsin State Horse Council

Johnson Timber Co.	St. Croix State Park / Forest	Wolf Creek Cemetery Assoc.
Library, Balsam Lake Public Library	St. Croix Valley Girl Scout Council	Wyoming Area Library
Library, Burnett Community	St. Paul Public Library	

Table 3.2 Public Participation and Contacts Represented on Governor Knowles State Forest Mailing Lists (May, 2012)	
	Totals
Individuals and business contacts on mailing list	417
Non-government organizations (conservation, civic, sportsman, and recreation groups)	41
Local media	8
Public libraries	21
Government	93
Email distribution	73
Total public contacts	653
Zip code locations represented in public contacts database	135
Other states represented in database	10

Table 3.3 Chronological Summary of Public Involvement	
2010	CONTACTS
Nov. 19	Letter announcing availability of master plan Regional and Property Analysis and Vision and Goals documents mailed to 560 stakeholder contacts, emails sent to 46 additional contacts.
Nov. 19	News release announcing public meeting sent to media and posted to DNR public meetings calendar.
Nov. 19	Planning documents – Regional & Property Analysis, Vision & Goals Statement, and Issues Questionnaire posted to web site. 65 print copies of documents were published.
Nov. 19-Dec. 19	Public review and comment period for draft Vision and Goals, and Regional and Property Analysis.
Dec. 2	Department meeting with the Voigt Tribal Task Force to provide master plan update.
Dec. 4	Open house meeting in Grantsburg, WI held to present Draft Vision and Goals, and Regional and Property Analysis for public review. A total of 37 participated in the public meeting. 75 public comments were received during the review period.
2012	CONTACTS
June 5	M. Wallis, B. Hartshorn and P. Engman of the DNR meet with A. Wrobel of the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) at the LCO Casino in Danbury, Wisconsin to deliver master plan information to be shared with area tribes at their task force meeting June 6. St. Croix, Bad River, LCO, Lac du Flambeau, and Mille Lacs tribes were invited. Twenty copies of the Draft Master Plan and 40 copies of executive summary were delivered.
June 6	DNR staff present brief master plan update at Voigt Task Force tribal gathering.
June 14	The Draft Master Plan and public comment form posted to the DNR website. Press release to statewide media, DNR meetings web page.
June 14	700 announcements and executive summaries of the Draft Master Plan printed for postal mailing and 75 email announcements sent. 175 complete master plans with maps, 100 Environmental Assessments, and 700 Public Comment Forms are published for public distribution. Public comment forms were made available during the public meeting, on-line or by mail.
June 18	Public review period, scheduled for June 18-July 13, for Draft Master Plan and Environmental Analysis noticed to the public DNR calendar and statewide media
June 25	Public Open House Meeting held at Crex Meadows Wildlife Education and Visitor Center in Grantsburg, Wis., from 3-7 PM.

Appendix A. Governor Knowles State Forest Master Plan Designation Process for State Natural Areas

Generally, natural areas are tracts of land or water harboring natural features that have escaped most human disturbance and that represent the diversity of Wisconsin’s native landscape. They contain outstanding examples of native biotic communities and are often the last refuges in the state for rare and endangered plant and animal species. State Natural Areas (SNAs) may also contain exceptional geological or archaeological features. The finest of the state’s natural areas are formally designated as State Natural Areas.

The Wisconsin State Natural Areas Program oversees the establishment of SNAs and is advised by the Natural Areas Preservation Council. The stated goal of the program is to locate, establish, and preserve a system of SNAs that as nearly as possible represents the wealth and variety of Wisconsin’s native landscape for education, research, and to secure the long-term protection of Wisconsin’s biological diversity for future generations. SNAs are unique in state government’s land protection efforts because they can serve as stand alone properties or they can be designated on other properties, such as a state forest. By designating SNAs within the boundary of the Governor Knowles State Forest, two different, legislatively mandated Department goals are being accomplished. This arrangement makes abundant fiscal sense because the state does not have to seek out willing sellers of private lands to meet the goals of multiple Department programs. This avoids duplicating appraisal and negotiation work and provides dual use of land that is already in public ownership.

The process to establish a SNA begins with the evaluation of a site identified through field inventories conducted by DNR ecologists, including the Biotic Inventory and Regional Analysis. Assessments take into account a site’s overall quality and diversity, extent of past disturbance, long-term viability, context within the greater landscape, and rarity of features on local and global scales. Sites are considered for potential SNA designation in one or more of the following categories:

- Outstanding natural community
- Critical habitat for rare species
- Ecological reference (benchmark) area
- Significant geological or archaeological feature
- Exceptional site for natural area research and education

Designation Process of SNAs		
Step 1: Assessments	Step 2: Preferred Alternative	Step 3: Proposed Master Plan
Biotic Inventory SNA GAP analysis	The highest rated biotic sites and those with potential for filling gaps are proposed for special designation.	Native Community Areas Wild Resources Area

Step 1: Results from both the SNA GAP analysis and the Biotic Inventory, which were conducted on the GKSF within the last few years, were used to decide which areas would be SNA opportunity areas.

The data gathered via the Biotic Inventory identifies and evaluates the natural communities, significant plant and animal populations, and selected aquatic features and their associated biotic communities. This report emphasized important protection, management, and restoration opportunities, focusing on both unique and representative natural features of the GKSF property and surrounding landscape.

The SNA GAP analysis looks at representation for each primary natural community in each Ecological Landscape and determines if an adequate number of ecological reference areas are in place to capture the variation across the landscape.

Step 2: Using both the Biotic Inventory and SNA GAP analysis, the GKSF Preferred Alternative took sites ranked high and proposed them for special designation. Several of these sites were proposed as Native Community Management Areas, and a few were proposed within the Wild Resource Management Area classification, based on their overlap with other complimentary objectives.

Step 3: After public review of the preferred alternative, management classifications were assigned to each of the areas, designating them in either Native Community Management Areas or the Wild Resource Management Area. After the management goals were developed, the team reassessed the boundaries to assure that each forest stand was in the correct management area. Using information from the Biotic Inventory, the SNA GAP Analysis, and an examination of the draft objectives for each area, experts evaluated each site for potential State Natural Area designation.

Once approved by the Natural Resources Board, sites are formally "designated" as SNAs and become part of the Wisconsin State Natural Areas system. Designation confers a significant level of recognition of these sites' natural values through state statutes, administrative rules, and guidelines.

Impact to Master Plan Process

The process for selecting and designating SNAs is determined by cooperative efforts between two programs within the DNR: The Division of Forestry and the Bureau of Endangered Resources. The master planning process for state forests requires that the goals set by the Division of Forestry be considered before the Bureau of Endangered Resources submits candidate sites for SNA designation. This is done so that all sites are evaluated for timber production, which is outlined as a Division of Forestry priority. As a result, SNAs are considered overlays to Land Management Areas. In this way, the same piece of land can achieve the goals of two different Department programs. Management activities for each proposed SNA reflect the general management prescriptions proposed for the area in which the SNA is located. For example, a SNA located within an area managed for white pine will follow the objectives for that land management area, rather than a separate SNA management plan. The exact same timber management would occur with or without SNA designation.

Land Management Impact by Designation of SNAs

State Natural Areas are considered overlays to the Native Community, Wild Resource, and Scenic Areas of the GKSF. The State Natural Area designation does not change the underlying management objectives, prescriptions, or authorized activities outlined in this master plan for each land management area. There are no additional management prescriptions associated with these State Natural Areas.

SNA Management Activities

State Natural Areas are not exclusively passive management. Between 2003 and 2007, over 200 SNAs all over Wisconsin have had some type of active management. Examples of management activities include invasive species removal, burning and fuel reduction, brushing, trail development, ditch filling, and planting. Timber harvesting is not a primary focus of a SNA, but it is often necessary to achieve the desired ecological goals of a specific habitat. During the same five years, 29 commercial timber operations were conducted on SNAs to achieve the ecological goals of the site. Regardless of any designation, wildfires on state forests would be actively suppressed, safety measures would occur in developed areas, and insect and disease outbreaks would be considered for control.

Recreational Impacts

Impacts would be minimal because the recreation opportunities for any given area were determined before consideration as a SNA. State Natural Areas are not appropriate for intensive recreation and such areas were automatically ruled out as potential sites during the development of the preferred alternative. However, SNAs can accommodate low-impact activities such as hiking, bird watching, and nature study. Examples of existing facilities within proposed SNA sites include hiking and cross-country ski trails, and boat landings and ramps.

Benefits for a Partnership between State Forests and the State Natural Areas Program

The SNA program has standardized methods for conducting long-term monitoring of ecosystems and also has a network with a broad range of researchers, from aquatic biologists and botanists to zoologists that can be encouraged to conduct research on the state forest to enhance our understanding of the GKSF ecosystem. The experts in the Division of Forestry have experience in monitoring the trees and other plants, while SNA ecologists have expertise in monitoring terrestrial invertebrates, fungi and lichens, ground layer plants, mammals, reptiles and amphibians, and birds. Together an exceptional collaborative monitoring program could be developed.

Appendix B. Endangered or Threatened Species and Species of Special Concern

Animals: The table below lists animals on the Governor Knowles State Forest which are endangered, threatened or of special concern, based on the Natural Heritage Inventory (NHI) database. The listing includes both state and federal designations. The aim of a "Special Concern" designation is to focus attention on certain species before they become threatened or endangered. Species of Greatest Conservation Need (SGCN) are also indicated.

Scientific Name	Common Name	State Status	Federal Status	SGCN
<i>Cicindelapatruelapatruela</i>	A Tiger Beetle	SC/N		X
<i>Buteolineatus</i>	Red-shouldered Hawk	THR		X
<i>Coccyzusamericanus</i>	Yellow-billed Cuckoo	SC/M		X
<i>Haliaeetusleucocephalus</i>	Bald Eagle	SC/P		X
<i>Picoidesarcticus</i>	Black-backed Woodpecker	SC/M		X
<i>Podicepsgrisegena</i>	Red-necked Grebe	END		X
<i>Protonotariacitrea</i>	Prothonotary Warbler	SC/M		X
<i>Seiurusmotacilla</i>	Louisiana Waterthrush	SC/M		X
<i>Wilsoniacanadensis</i>	Canada Warbler	SC/M		X
<i>Wilsoniacitrina</i>	Hooded Warbler	THR		X
<i>Atrytonopsishianna</i>	Dusted Skipper	SC/N		
<i>Callophryshenrici</i>	Henry's Elfin	SC/N		
<i>Hesperia metea</i>	Cobweb Skipper	SC/N		X
<i>Lycaeidesmelissasamuelis</i>	Karner Blue	SC/FL	LE	X
<i>Ophiogomphusanomalus</i>	Extra-striped Snaketail	END		X
<i>Ophiogomphushowei</i>	Pygmy Snaketail	THR		X
<i>Ophiogomphussusbehcha</i>	Saint Croix Snaketail	END		X
<i>Acipenserfulvescens</i>	Lake Sturgeon	SC/H		X
<i>Cycleptuselongatus</i>	Blue Sucker	THR		X
<i>Fundulusdiaphanus</i>	Banded Killifish	SC/N		X
<i>Moxostomacarinatum</i>	River Redhorse	THR		X
<i>Moxostomavalenciennesi</i>	Greater Redhorse	THR		X
<i>Percinaevides</i>	Gilt Darter	THR		X
<i>Canis lupus</i>	Gray Wolf	SC/FL	LE	X
<i>Catocalawhitneyi</i>	Whitney's Underwing Moth	SC/N		X
<i>Papaipemabeeriana</i>	Liatris Borer Moth	SC/N		X
<i>Alasmidontamarginata</i>	Elktoe	SC/P		
<i>Cumberlandiamonodonta</i>	Spectacle Case	END	C	X
<i>Cyclonaiastuberculata</i>	Purple Wartyback	END		X
<i>Pleurobemasintoxia</i>	Round Pigtoe	SC/P		
<i>Emydoideablandingii</i>	Blanding's Turtle	THR		X
<i>Glyptemysinsculpta</i>	Wood Turtle	THR		X

Key:

State Status

END	endangered
THR	threatened
SC	special concern
SC/P	fully protected
SC/N	no laws regulating use, possession, or harvesting

SC/H	take regulated by establishment of open closed seasons
SC/FL	federally protected as endangered or threatened, but not so designated by WDNR
SC/M	fully protected by federal and state laws under the Migratory Bird Act.

Federal Status

LE	listed endangered
C	candidate for future listing

Plants: The table below lists plants on the Governor Knowles State Forest which are endangered, threatened or of special concern, based on the Natural Heritage Inventory (NHI) database.

Scientific Name	Common Name	State Status
<i>Arethusa bulbosa</i>	Swamp-pink	SC
<i>Asclepias ovalifolia</i>	Dwarf Milkweed	THR
<i>Carex assiniboinensis</i>	Assiniboine Sedge	SC
<i>Carex prasina</i>	Drooping Sedge	THR
<i>Cypripedium parviflorum</i> var. <i>makasin</i>	Northern Yellow Lady's-slipper	SC
<i>Cypripedium reginae</i>	Showy Lady's-slipper	SC
<i>Dalea villosa</i> var. <i>villosa</i>	Silky Prairie-clover	SC
<i>Deschampsia cespitosa</i>	Tufted Hairgrass	SC
<i>Epilobium palustre</i>	Marsh Willow-herb	SC
<i>Liatris punctata</i> var. <i>nebraskana</i>	Dotted Blazing Star	END
<i>Myriophyllum farwellii</i>	Farwell's Water-milfoil	SC
<i>Ophioglossum pusillum</i>	Adder's-tongue	SC
<i>Poa paludigena</i>	Bog Bluegrass	THR
<i>Talinum rugospermum</i>	Prairie Fame-flower	SC

Key:

State Status

- END endangered
- THR threatened
- SC special concern

Federal Status

- LE listed endangered
- C candidate for future listing

Appendix C. Wildlife Species of Greatest Conservation Need

The tables below list priority vertebrate Species of Greatest Conservation Need (SGCN) and their natural community associations within the Northwest Sands and Northwest Lowlands Ecological Landscapes. Only SGCN with a high or moderate probability of occurring are shown. Numbers indicate the degree to which each species is associated with a particular habitat type (3=significant association, 2=moderate association, and 1=low association). Combinations of natural communities labeled as "Important" or "Major" that are also assigned as either "3" or "2" are also Ecological Priorities, as defined by the Wisconsin Wildlife Action Plan. Highlighted species were found in WI, and bolded species have been documented in MN (within one mile of the St. Croix River).

Northwest Sands

	Major												Important					Present							
	Coldwater streams	Coolwater streams	Emergent Marsh	Emergent Marsh - Wild Rice	Inland lakes	Northern Dry Forest	Northern Dry-mesic Forest	Northern Sedge Meadow	Northern Wet Forest	Oak Barrens	Open Bog	Pine Barrens	Submergent Marsh	Surrogate Grasslands	Warmwater rivers	Alder Thicket	Impoundments/Reservoirs	Northern Hardwood Swamp	Northern Wet-mesic Forest	Warmwater streams	Ephemeral Pond	Floodplain Forest	Northern Mesic Forest	Shrub Carr	Submergent Marsh - Oligotrophic
Species that are Significantly Associated with the Northwest Sands Landscape																									
American Bittern			3	1			3			3			1		1									1	
American Woodcock						1	1	1	1	1	1		1		3		2	1			1	1	2	3	
Bald Eagle				1	3							2		3		3						1			
Banded Killifish					2															1					
Black Tern			3	2	2			2				2				2									
Black-backed Woodpecker						2	1		3		1	1							1				1		
Black-billed Cuckoo						1	1	1	1	2		2			3		1					2	2	3	
Blanding's Turtle	2	2	3	3	3			2		3		3	3		2	2	3			2	3	2		2	3
Blue-winged Teal			3	2	2			2				2	2	1		2					1	2			
Bobolink								3			2			3											
Boreal Chorus Frog			3		3			3		3	3	3				3					3				
Brown Thrasher						1				3		3		2											
Bullsnake										3		3													
Connecticut Warbler						3	1		2		2	2													
Field Sparrow										2		2		2											
Franklin's Ground Squirrel										3		3		2											
Golden-winged Warbler						2	2		2		2	1				3		2	1				2	3	

Gray Wolf					2	3	1	3	2	2	2				3		2	3			2	3	2	
Greater Redhorse				2										2	2			3						
Le Conte's Sparrow							3			2			3											
Least Darter				2									2					2						
Least Flycatcher					2	2											2	1			2	3	1	
Lesser Scaup		1	2	2								3	2		2									
Nelson's Sharp-tailed Sparrow							3																	
Northern Flying Squirrel					2	3		3			1						2	3			2	3		
Northern Harrier		1	1				3		2	2	2		3		1								1	
Northern Prairie Skink					2	2			3		3													
Osprey			1	3								1	3		3									
Pugnose Shiner				2														2						
Red Crossbill					3	3		1			2												1	
Red-headed Woodpecker					1	1			2		1										2			
River Redhorse														2										
Sharp-tailed Grouse							2		3	1	3		2										1	
Short-billed Dowitcher		3										1				2								
Trumpeter Swan		3	3	2			1		1		3		1		2									
Upland Sandpiper							1		2		2		3											
Veery					1	2		2							3		3	1			2	2	3	
Vesper Sparrow								3		3		1												
Water Shrew	3	3			2		1	3		1			1	2	1	3	3	2		2	2	1		
Whip-poor-will					2	2			2		2										1	1		
Wood Turtle	3	3					2	2	3		3	3		3	3		2	2	3	2	3	3	3	
Yellow Rail							3			3														
Species that are Moderately Associated with the Northwest Sands Landscape																								
American Golden Plover			2				1						2			2								
Blue-winged Warbler					1				1												2		2	
Canada Warbler					1	2		2							2		3	3				2	1	
Canvasback			1	2	2							3		3		2								
Dunlin			2											2		2								
Eastern Meadowlark													3											
Four-toed Salamander	2	2	3				2	2		3					3		2	3		3	3	3	3	
Gilt Darter														3					3					
Grasshopper Sparrow								2		1		3												
Hudsonian Godwit			3									1				1								

Northwest Lowlands

The GKSF contains only a small portion of the Northwest Lowlands Ecological Landscape, and there are significant concentrations of several species in that portion of the property that do not show up in the table - see the rare animals section for more information (e.g. Red-shouldered Hawk).

	Major				Important								Present									
	Northern Sedge Meadow	Northern Wet Forest	Open Bog	Warmwater rivers	Alder Thicket	Boreal Forest	Coolwater streams	Emergent Marsh	Northern Dry-mesic Forest	Northern Mesic Forest	Northern Wet-mesic Forest	Submergent Marsh	Warmwater streams	Coldwater streams	Ephemeral Pond	Impoundments/Reservoirs	Inland lakes	Moist Cliff	Northern Dry Forest	Northern Hardwood Swamp	Shrub Carr	Surrogate Grasslands
Species that are Significantly Associated with the Northwest Lowlands Landscape																						
American Bittern	3		3		1			3													1	1
American Woodcock	1	1	1		3	1			1	2	1				1				1	2	3	1
Black-backed Woodpecker		3	1			2			1	1	1								2			
Black-billed Cuckoo	1	1			3	1			1	2									1	1	3	
Boreal Chorus Frog	3		3					3							3	3	3					
Brown Thrasher																			1			2
Canada Warbler		2			2	3			2	2	3								1	3	1	
Connecticut Warbler		2	2			1			1										3			
Four-toed Salamander	2	2	3		3	2	2	3		3	3			2	3			1		2	3	
Gilt Darter				3									3									
Golden-winged Warbler		2	2		3	1			2	2	1								2	2	3	
Gray Wolf	1	3	2		3	3			3	3	3								2	2	2	
Greater Redhorse				2									3			2	2					
Lake Sturgeon				3												3	3					
Le Conte's Sparrow	3		2																			3
Least Flycatcher						2			2	3	1								2	2	1	
Louisiana Waterthrush							3							3								
Mink Frog	3	1	3	3	2	1	3	3		1	1	3	3	2	2	3	3			1	2	
Northern Flying Squirrel		3				3			3	3	3								2	2		
Northern Harrier	3		2		1			1													1	3

Olive-sided Flycatcher		3	2		1	2			1	2							1		1		
River Redhorse				2																	
Veery		2			3	3			2	2	1						1	3	3		
Water Shrew	1	3	1	1	2	3	3			2	3		2	3		1	2		3	1	
Wood Turtle	2	2		3	3		3			3	2	3	3	3	2				2	3	
Woodland Jumping Mouse	1	2	1		1	2				1	3	2							1	2	1
Species that are Moderately Associated with the Northwest Lowlands Landscape																					
American Marten		1				3			3	3	1							1	1		
Black Tern	2							3				2				2	2				
Blue-winged Teal	2			1				3				2			1	2	2			2	
Bobolink	3		2																	3	
Boreal Chickadee		3				2					1										
Eastern Red Bat	2	2	2	2	2	2	3	2	2	2	2	2	2	3	3	1	2		2	2	2
Hoary Bat	2	2	2	2	2	2	3	2	2	2	2	2	2	3	3	1	2		2	2	2
Longear Sunfish				2									2				2				
Moose	2	2	2	2	3	3	1	3	1	2	3	3	2	1		2	3		1	3	3
Mudpuppy				3			1							2		3	3				
Northern Goshawk						2			2	3	1							1	1		
Northern Long-eared Bat	2	1	2	2	2	1	3	2	2	2	1	2	2	3	3	1	2		2	2	2
Osprey				3								1				3	3				
Pickrel Frog	3	2	2	3	2		3	3		2	2	3	3	3	3	3	2			2	
Red Crossbill		1				1			3	1									3		
Rusty Blackbird			2		2			2							2					2	
Silver-haired Bat	2	2	2	2	2	2	3	2	2	2	2	2	2	3	3	1	2		2	2	2
Solitary Sandpiper	1		2		1		2	3					2	2	3						1
Wood Thrush		1								1	2	1								1	

Key:

1 = Species is (and/or historically was) only minimally associated with the Ecological Landscape, restoration of this Ecological Landscape would only minimally improve conditions for the species.

2 = Species is (and/or historically was) moderately associated with the Ecological Landscape, restoration of this Ecological Landscape would moderately improve conditions for the species.

3 = Species is (and/or historically was) significantly associated with the Ecological Landscape, restoration of this Ecological Landscape would significantly improve conditions for the species.

Appendix D. Cultural Resources used by Local Native American Tribes

The Ojibwe¹ had long lived in the Lake Superior region (portions of modern-day Minnesota, Wisconsin, Michigan, and Canada) by the time European explorers first entered the area. At that time, the Ojibwe lived a semi-nomadic lifestyle, moving seasonally from camp to camp, harvesting from the earth (aki²) vital foods, medicines, utility supplies, and ceremonial items.

As more Europeans moved into the Lake Superior region in search of timber and minerals, the United States government obtained vast parcels of land from the Ojibwe through cession treaties. In many of these treaties, the Ojibwe retained the rights to hunt, fish, and gather in the ceded territories to meet economic, cultural, spiritual, and medicinal needs — in essence, to sustain their lifeway. Tribal negotiations for these rights were fastidious and purposeful, and only through the guarantee of these rights, did the tribes agree to sign the treaties. Today, these reserved usufructory rights are often referred to as treaty rights.

Treaties that reserved these rights include the Treaty of 1836, ceding land in Michigan's Upper and Lower Peninsulas and parts of the Upper Great Lakes; the Treaty of 1837, ceding land in north central Wisconsin and east central Minnesota; the Treaty of 1842 ceding land in northern Michigan and Wisconsin and the western part of Lake Superior; and the Treaty of 1854, ceding land in northeastern Minnesota and creating reservations for many Ojibwe tribes.

For many years following the ratification of these treaties, the Ojibwe continued to hunt, fish, and gather as always. However, over the years, as states passed various conservation laws, state game wardens enforced these laws against tribal members. Members exercising their treaty rights off reservation within the ceded territories were frequently cited and convicted in state courts. Many members paid fines, endured the confiscation of their rifles and fishing gear, and suffered incarceration.

Though the Ojibwe have always believed in the continued existence of their treaty rights, it was not until the 1970's, as part of a general resurgence of tribal self-determination, that Ojibwe governments and their members more aggressively and more formally challenged state conservation laws and enforcement activities. These challenges gave rise to many federal and state court decisions which reaffirmed Ojibwe off reservation treaty rights on public lands in the ceded territories³.

The courts confirmed the Ojibwe's understanding of their treaty rights: The treaties provide a "permanent" guarantee "to make a moderate living off the land and from the waters ... by engaging in hunting, fishing and gathering as they had in the past."⁴ In essence, the courts found the Ojibwe treaties to be legally binding agreements to be respected within the framework of the United States Constitution, which defines treaties as the "supreme law of the land."

In addition, the courts recognized that by reserving the rights to engage in hunting, fishing, and gathering, the Ojibwe also retained their sovereignty to regulate tribal members exercising these treaty rights. Sovereignty refers to the right of inherent self-government and self-determination. Thus, tribal self-regulation is a requisite of treaty rights implementation.

As the courts reaffirmed the Ojibwe's ceded territory treaty rights, a number of tribes⁵ in Michigan, Minnesota and Wisconsin chose to enhance their self-regulatory infrastructures through the formation of the Great Lakes Indian Fish and Wildlife Commission (GLIFWC). GLIFWC assists its member tribes with issues such as the application of tribal self-regulation within the off-reservation ceded territories, identification and condition assessment of treaty resources, negotiations and consultation with state and federal government agencies regarding the management of treaty resources within the ceded territories, and litigation pertaining to the treaties of member tribes.

Excerpted from Danielsen and Gilbert 2002 Nontimber Forest Products in the United States.

¹ There are several terms used in reference to the Ojibwe people. The Ojibwe people often call themselves Anishinaabe which in their language means Indian person or original people. The anglicized word for Ojibwe is Chippewa.

² Ojibwe language

³ See *People v. Jondreau*, 384 Mich 539, 185 N.W. 2d 375 (1971); *State of Wisconsin v. Gurnoe*, 53 Wis. 2d 390 (1972); *U.S. v. Michigan*, 471 F.Supp. 192 (W.D. Mich. 1979); *Lac Courte Oreilles v. Voigt (LCO I)*, 700 F. 2d 341 (7th Cir. 1983), cert. denied 464 U.S. 805 (1983); *Lac Courte Oreilles v. State of Wisconsin (LCO III)*, 653 F.Supp. 1420 (W.D. Wis. 1987); *Lac Courte Oreilles v. State of Wisconsin (LCO IV)*, 668 F.Supp.1233 (W.D. Wis.1987); *Lac Courte Oreilles v. State of Wisconsin (LCO V)*, 686 F.Supp.226 (W.D. Wis. 1988); *Lac Courte Oreilles v. State of Wisconsin (LCO VI)*, 707 F.Supp.1034 (W.D. Wis. 1989); *Lac Courte Oreilles v State of Wisconsin (LCO VII)*, 740 F.Supp.1400 (W.D. Wis. 1990); *Lac Courte Oreilles v. State of Wisconsin (LCO VIII)*, 749 F.Supp.913 (W.D. Wis. 1990); *Lac Courte Oreilles v. State of Wisconsin (IX)*, 758 F.Supp.1262 (W.D. Wis. 1991); *Lac Courte Oreilles v. State of Wisconsin (X)*, 775 F.Supp.321 (W.D. Wis. 1991); *U.S. v. Brette*, 761 F.Supp.658 (D. Minn. 1991); *Mille Lacs Band v. State of Minnesota*, 861 F.Supp.784 (D. Minn. 1994); *Mille Lacs Band v. State of Minnesota*, 952 F.Supp.1362 (D. Minn. 1997); *Mille Lacs Band v. State of Minnesota*, 124 F.3d904 (8th Cir. 1997); *State of Minnesota v. Mille Lacs Band*, 119 S.Ct. 1187 (1999).

⁴ LCO III, 653 F.Supp. 1420, 1426 (W.D. Wis. 1987).

Appendix E. Glossary of Terms

Active Management: These areas apply primarily in the forest production areas and use general forest management prescriptions. Activities are achieved through clearcutting, selective cutting, thinning, timber stand improvement, natural or forced regeneration, herbicide treatments, and/or prescribed burning. These activities would be consistent with standard silvicultural practices associated with the forest timber types found in the area and are generally scheduled in the property's reconnaissance (inventory). Each management area will have a goal and objective consistent with site capabilities and forest cover types. While species composition would remain relatively consistent during the life of the *master plan*, the age class distribution would change due to timber harvesting. Forest users should expect to see ongoing annual vegetation manipulation.

Adaptive Management: A dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used, along with research results, to modify management on a continuing basis to ensure that objectives are being met.

Basal Area: The basal area of a tree is usually defined as the cross-sectional area at breast height in square feet.

Biological Diversity: The variety and abundance of species, their genetic composition, and the communities, ecosystems and landscapes in which they occur. Biological diversity also refers to the variety of ecological structures, functions, and processes at any of these levels.

Community Restoration: The practice of community restoration recognizes that communities, species, structural features, microhabitats, and natural processes that are now diminished or absent from the present landscape have a valuable role to place in maintaining native ecosystems. Under some definitions, community restoration means moving the current composition and structure of a plant community to a composition and structure that more closely resembles that of the pre-settlement vegetation.

DNR Silviculture and Forest Aesthetics Handbook: Silviculture is the practice of controlling forest composition, structure, and growth to maintain and enhance the forest using a unified, systematic approach. The management recommendations are basic guidelines intended to encourage vigor within all developmental stages of a forest, whether managed in an even-age or uneven-age system. The practice of silviculture is an art and a science which recognizes the specific ecological capabilities and characteristics of the site for both short-term and long-term impacts. Integrated resource management objectives, such as aesthetics, wildlife, endangered resources, biological diversity, timber production, and the protection of soil and water quality are part of this system.

DNR Old Growth and Old Forests Handbook: These management recommendations provide basic, adaptive guidelines based on research and general scientific and silvicultural knowledge of the species being managed. The recommendations are subject to purposeful, on-the-ground modification by the land manager. Old growth forests are rare in Wisconsin and are valued for many ecological, social, and economic purposes. Current forests will change with time, and can provide an opportunity to restore old growth forests at the stand level, and in some places at a landscape scale. The Department of Natural Resources formally recognized and encouraged the management of old growth forests in *Wisconsin's Biodiversity as a Management Issue*. Wisconsin's state land master planning process, formalized in Chapter NR 44, Wis. Adm. Code, includes old growth forest as a critical consideration.

Driftless Area: The unglaciated area of southwestern Wisconsin, southeastern Minnesota, and northeastern Iowa generally characteristic of a steep "ridge and coulee" topography.

Extended Rotation Stands: Stands that can be either even or uneven aged. They are managed well beyond the economic rotation to capture ecological benefits associated with mature forests. These stands are carried beyond their normal economic rotation age and are harvested before reaching pathological decline.

Forest Cover Type: A category of forest usually defined by its vegetation, particularly its dominant vegetation as based on percentage cover of trees.

Forest Structure: A category of forest usually defined by its vegetation, particularly its dominant vegetation as based on percentage cover of trees.

Invasive Species: These species have the ability to invade natural systems and proliferate, often dominating a community to the detriment and sometimes the exclusion of native species. Invasive species can alter natural ecological processes by reducing the interactions of many species to the interaction of only a few species.

Managed Old Forest: Designated forests (relict, old growth, or old forests) where future active management is limited, and the primary management goal is the long-term development and maintenance of some old growth or old forest ecological attributes within environments where limited management practices and product extraction are allowed.

Managed Old Growth: The primary management goal is the long-term development and maintenance of old growth characteristics within environments where limited but active land management, including logging is allowed. Practices which could be considered include insect control, salvage logging, prescribed fire, and prescribed logging.

Passive Management: A management technique that means the goals of the native community management area are achieved primarily without any direct action. Nature is allowed to determine the composition and structure of the area. For example, patches of large woody debris and the accompanying root boles (tip-up mounds) that are characteristic of old growth structure are best achieved through natural processes. Passive management, however, does not mean a totally hands off approach. Some actions are required by law, such as wildfire suppression, consideration of actions when severe insect and disease outbreaks affect trees, and hazard management of trees along trails and roads. Other actions, such as removal of invasive exotic species, are necessary to maintain the ecological integrity of the site.

State Natural Areas: Tracts of land or water harboring natural features that have escaped most human disturbance and that represent the diversity of Wisconsin's native landscape. They contain outstanding examples of native biotic communities and are often the last refuges in the state for rare and endangered plant and animal species. They may also contain exceptional geological or archaeological features. The finest of the state's natural areas are formally designated as State Natural Areas.

Sustainable Forestry: The practice of managing dynamic forest ecosystems to provide ecological, economic, social, and cultural benefits for present and future generations.

Type 1 Recreational Use Setting: Objective of this setting is to provide a remote, wild area where the recreational user has opportunities to experience solitude, challenge, independence and self-reliance.

Type 2 Recreational Use Setting: Objective of this setting is to provide a remote or somewhat remote area with little development and a predominantly natural-appearing environment offering opportunities for solitude and primitive, non-motorized recreation.

Type 3 Recreational Use Setting: Objective of this setting is to provide readily accessible areas with modest recreational facilities offering opportunities at different times and places for a variety of dispersed recreational uses and experiences.

Type 4 Recreational Use Setting: Objective of this setting is to provide areas offering opportunities for intensive recreational use activities and expectations. Facilities, when present, may provide a relatively high level of user comfort, convenience and environmental protection.

Appendix F. Cost Summary of Proposed Development and Improvements

Implementation of Facility Development and Improvements: The property Improvement projects in the following table will be generally implemented in a series of phases extending over the next 10 to 15 years. The rate of development will depend on the availability of funding and the approval of the Improvement projects as part of the Department of Natural Resources' capital development process. Projected costs have been rounded to the nearest \$1,000.

Summary of Proposed Development and Improvements	
Trail or Facility	Estimate
Trade River Horse Trails	
18 miles new and connector – Barrens, Sunrise, Wolf Creek, and River Trails	\$65,000.
2 3-5 mile trail loops – Harris, Sterling/320 th St.	18,000.
Wagon trail – 16 mile route on existing trails	11,000.
Interpretive equestrian trail – 6 miles on existing trail	15,000.
GKSF Linear Hiking Trail	
18 miles new and connector – North and South trails	27,000.
Loop Hiking Trails	
10 miles – new	15,000.
Interpretive Nature Trails	
1.25 miles, Cedar and Wood River trails – renovate	18,000
2.5 mile Brandt Brook Pines – develop “forestry theme”	9,000.
Natural Area trails – up to 6 miles primitive trails	9,000.
Cross Country Skiing	
6-8 miles skate-ski trail – new	39,000.
Snowshoeing	
10 miles snowshoeing – on existing trails or corridors	5,000.
Winter Walking	
3 miles pet-friendly winter walking - on existing trails	1,500.
Bicycling	
4-8 miles off-road biking and mountain bike on new single-track trail	80,000.
Marked route for road bikes on suitable existing roads	12,500.
Accessible Barrier-free (ADA) trails	
3 miles – upgrade existing trail(s) with packed gravel surface	65,000.
Snowmobiling	
3 miles – trail reroute	32,400
All-Terrain Vehicles	
1 mile – winter-use pass-through trail link	10,800.
½ mile – winter-use pass-through trail link	5,400.
Self-guided Auto Tour	
Up to a 50 mile – loop through the forest with a dozen interpretive stops	18,000.
Camping	
Trade River Equestrian Campground	
Electric campsites – upgrade 26 sites	156,000.

St. Croix Family Campground	
Electric campsites – upgrade 12 sites	72,000.
Walk-in campsites – develop 6	90,000.
Free-play Area – construct open green space for youth / family recreation	2,000.
Outdoor Group Camps	
St. Croix Outdoor Small-group Camp – new, 30 camper capacity	120,000.
Clam Flowage Outdoor Group Camp – new, 60 camper capacity	240,000.
Clam Flowage Water Access – canoe launch & fishing pier	5,000.
St. Croix Outdoor Small-group Camp – picnic shelter	32,400.
Clam Flowage Outdoor Group Camp – picnic shelter	32,400.
Equestrian Group Camps	
Trade River Equestrian Group Camp – new, 30 camp unit capacity	130,000.
Sioux Portage Equestrian Group – keep day use, add camping in future, 20 unit	80,000.
Trade River Equestrian Group Camp – picnic shelter	32,400.
Primitive Trail Campsites	
Equestrian Trail – 5 primitive campsites, Trade River Trails	15,000.
Backpack Primitive – 6 primitive campsites, GKSF Linear Hiking Trail	15,000.
Barrier-free Accessible Cabin	
Accessible cabin – fully furnished to ADA standards	250,000.
Day Use Areas	
Sioux Portage Equestrian Day Use – convert from former group camp	5,000.
Trade River Day Use Area – picnic shelter	32,400.
Highway 70 Wayside Day – a picnic shelter	32,400.
Sioux Portage Equestrian Day Use – picnic shelter	32,400.
Vault Toilets	
<i>Single-unit, Unisex, Pre-constructed</i>	
Brandt Pines Ski trail – two locations	59,800.
GKSF Off-road Bicycle trail head	29,900.
Trade River Horse Trails – two locations	59,800.
<i>Two-unit Facility, Pre-constructed</i>	
St. Croix Outdoor Small-group Camp	47,800.
Sioux Portage Equestrian Day Use – replace existing toilet, add another	47,800.
Trade River Equestrian Group Campground	47,800.
Clam Flowage Outdoor Group Camp	47,800.
Shower Facilities	
St. Croix Family Campground – pre-constructed shower building	267,000.
Trade River Equestrian Campground – pre-constructed shower building	267,000.
Trade River Equestrian Group Camp – pre-constructed shower building	267,000.
Sioux Portage Equestrian Group Camp – pre-constructed shower building	267,000.
Bridges	
Benson Brook Hiking Trail bridge	50,000.
Education and Interpretive Facilities	
Interpretive Plan – forest-wide education and interpretive plan	10,000.

Trail and property signage – renovate & update throughout forest	15,000.
<i>Parking Areas</i>	
Parking Lot – gravel re-surface 6 existing lots	12,000.
Parking Lots – 3 new	22,500.
Highway 70 Wayside – pave accessible paths, south parking to toilets	50,000
Parking /trail head information stations – update existing, install new locations	10,000.
<i>Nature Observation</i>	
Wildlife observation areas – 6 sites	30,000.
Vistas, scenic viewing – 3 sites	15,000.
<i>Other Building Structures</i>	
Equipment and Supply Storage – unheated	30,000.
<i>Trail renovation and upgrades</i>	
Water Wells – 3 hand-pump horse watering stations along trails	18,000.
All Trails – renovate /repair tread surface where needed	45,000.
Trail and property signage – update throughout forest	15,000.
TOTAL ESTIMATED COSTS	\$3,562,200

Governor Knowles State Forest
Draft Master Plan and Environmental Analysis
Summary and Response to Public Comments
August 2012

The Public Review Process for the Draft Plan

The Wisconsin Department of Natural Resources released the Draft Master Plan and Environmental Analysis for the Governor Knowles State Forest for public review on June 18, 2012. The 26-day comment period ended on July 13, 2012. One hundred and seventy-five copies of the Draft Master Plan were published, with 50 direct-mailed to interested stakeholders along with a comment form. An additional 550 households received a cover letter announcement, executive summary of the Draft Master Plan, and a comment form. Email announcements with an electronic link to the forest's Master Plan web page were distributed to 75 individuals. Additional copies of the draft plan were made available at public meetings, public offices, libraries, and by request. The Master Plan documents were accessible electronically on the Department's web site.

On June 25, 2012 an open house public meeting was held in Grantsburg, Wisconsin to seek public review and comment on the Draft Master Plan. Prior to the public meeting, one-to-one contacts were made with several partners and stakeholders. At the meeting, 14 people attended, including interested citizens, local residents and landowners, business representatives, recreation organizations, and government representatives. A total of 72 comments were received during the public comment period. In addition, Tribes were consulted on a Government to Government basis given the property is located in the ceded territory, with significant consultation occurring with the St. Croix Tribes.

Summary of Comments on the Draft Plan

The public expressed overall satisfaction with the Governor Knowles State Forest Draft Master Plan. In general, the future use and management outlined in the Draft Master Plan was supported by the public. The majority of comments received focused on the recreation proposals which were generally supportive and in some cases asking for additional clarification or modification. The land management aspects of the plan received a fair number of comments, primarily in regard to the re-designation of the Wilderness Area along the St. Croix River. The property boundary expansion was a generally supported Master Plan issue with a few notable elements including the value of future land acquisition and described associated ecological, social and economic benefits.

While there was general support for the majority of the draft plan elements, there were a few proposals the public expressed a higher level of interest in. These comments are summarized below. Most comments did not suggest a change be made but rather sought clarification or more details on the rationale for recommendation. One comment prompted the Department to change the plan to reflect the comment. Both clarifications and plan changes are described below.

Summary of Proposed Recreation Use and Development Comments

Recreation proposals received the majority of public comments. There was strong support for expanding the recreational opportunities within the forest. Proposals for increased equestrian camping and connecting loops, from primitive to developed facilities, were well supported. The public also supported

proposals to increase mountain biking opportunities within the forest.

Equestrian Recreation

In general, respondents supported expanding the equestrian opportunities throughout Governor Knowles State Forest. Proposed facilities and trail innovations were well received. Direct input from equestrians further defined popular and desirable needs and activities. Additional suggestions and alternatives for future development and use patterns, included a suggestion to locate the proposed equestrian group camp in near 340th and 290th Avenues and create loop trails within that area. This location would more fully utilize and diversify the Trade River Equestrian Trail system and retain use in a broad general area but separate group use from individual use.

Department's Response – Minor Plan Change

The Department recommends the following modifications to previous equestrian alternatives. A single option will be offered when siting the new group equestrian campground located near 340th and 290th Avenues. Future development would also include a three to five-mile trail loop, and/or trail distances to accommodate average trail rides of two to three hours.

Mountain Biking

A number of respondents expressed interest in the further development of mountain biking trails within GKSF. Currently, mountain biking within the forest is limited to some existing multiple-use forest trails. In addition, many non-designated riding opportunities exist, including a wide network of forest roads.

Department's Response – Clarification

There are locations in the forest that can provide for mountain biking activities in the future. Accommodations for mountain biking will be considered as new trails and recreation areas are developed or designated. The "Non-Motorized Trails" Recreation section of Chapter 2, on page 83, gives a detailed description of mountain biking proposals, including the development of trails separate from equestrian use that also include parking, information and toilet facilities. Working with local partners and the International Mountain Biking Association is also prescribed. Refer to the heading for "Bicycling".

Summary of Land Management Comments

Forest management goals and objectives were well supported, including proposed land management classifications and prescriptions. The public expressed appreciation for the inclusion of sustainable forestry, best management practices, and attention to critical issues such as invasive species.

Wilderness Area Re-Designation

Comments were submitted concerning the rationale behind the re-designation of the wilderness area and the management that will occur under the new designation. Concern was expressed over maintaining the aesthetic quality of the St. Croix River viewshed year-round in forest production areas. Currently the State Forest has a wilderness area designation along the St Croix River covering roughly the west half of the state forest, or 9,460 acres, including both state and National Park Service (NPS) ownership. The 1988 designation was to provide additional aesthetic management along the St Croix River with no management authorized. There is an existing 400+ foot zone owned by NPS directly along the river through the majority of GKSF, as well as some additional larger parcels alongside the river. The current wilderness area was above and beyond this existing zone.

Department's Response – Clarification

The wilderness designation is proposed to be changed, however, an underlying objective in the proposed management areas will be aesthetic management in areas that can be viewed from the river. In the proposed plan, the wilderness area has been re-designated into one of three designations: Forest Production (2,385 acres), Native Community Management (6,430 acres), and Habitat Management (645 acres) areas.

Much of the former wilderness area will be maintained under passive management, including 6,656 acres designated as State Natural Areas. Under the proposed designations, objectives for native community management and habitat management have been determined in order to further benefit the ecology of and wildlife within the forest. Under the wilderness designation, these same benefits could not be achieved because timber harvesting or other manipulations of vegetation were not permitted.

Within the forest production areas (and throughout the majority of GKSF), NPS ownership extends at least 400 feet from the St. Croix River, and in some cases, even larger parcels along the river are under Federal ownership or easement. With input from the NPS, it was determined that the viewshed will be preserved by tailoring management activities such that no management (harvesting) will be visible from the river during leaf on conditions. Areas not visible from the river include the forest production areas that require management to meet area objectives. Protection of the St. Croix Riverway will be maintained within the forest production areas by modified management prescriptions that take into consideration the viewshed. Additionally, aesthetic considerations for recreation within the forest production areas are included in the master plan within the "Area 1: Bluff Lake" and "Area 2: Sand Plain" sections of Chapter 2 of "Forest Production Management Areas". Refer to the headings "Long Term Management Objectives", "Short Term Management Objectives", and "Management Prescriptions" on pages 18-19 and 22-23.

Forest Management

Comments generally favored the slight increase in forest management acreage, specifically mentioning support for jack pine management, protection of forested seeps, increased acreage white pine, and the social and economic benefits that forest management provides locally and statewide. A clarification was requested regarding the percentage change of scrub oak.

Department's Response – Clarification

Overall, there will be a decrease in the scrub oak cover type over time and an associated increase in pine cover types and shade tolerant types. This decrease in scrub oak amounts to 8% of the total land cover types within state ownership. Currently, there are 4,591 acres of scrub oak. Over 50 years, this is predicted to decrease to approximately 3,050 acres of scrub oak resulting in a 34% change in scrub oak cover.

Summary of Proposed Boundary Expansion Comments

The public provided support for the proposed project boundary expansion with a few suggested considerations. In addition to the support for the proposed boundary expansion, notable comments were received expressing support for increasing the connectivity between blocks of public land, even

with different ownerships and agencies. Comments did express concern regarding the cost of additional land acquisition. It was also suggested that surveying and marking of property lines between public and private lands would reduce the impact of encroachments onto public lands. In addition, blocking within the existing boundary was recommended in the comments.

Department's Response

The Department recognizes and generally agrees with the comments relating to the proposed boundary expansion. Each area has a unique opportunity for its ability to protect and enhance important ecological, social, and economic values of the property and region. Similar to the current project boundary, the proposed expansion areas include publicly owned lands and share expansion boundaries with Polk and Burnett County Forests. The proposed expansion areas include 652 acres that are owned by Polk and Burnett County and 114 acres are owned by local towns. Total acreage for owned public lands with the proposed expansion areas equals 4,529 acres. These lands are not being considered for acquisition but included to help "block" project boundaries and can be traded with Counties for consolidation purposes if appropriate.

The department also has a ranking system for individual parcels considering management efficiencies, ecological, recreational, and fiscal elements. On average, 150-200 acres (1-2 parcels) per year are expected to be purchased.

Comments Received on Issues outside the Scope of the Master Plan

Deer Density

Deer management was mentioned several times within the public comments. Suggestions included the reducing deer herd numbers to allow for regeneration of jack pine.

Department's Response - Clarification

Hunting and trapping regulations and population goals are not set through the master planning process. Game populations are managed through regulations and goals set by the Natural Resources Board. The public is involved in all stages of this review and implementation.