

COUNTY FOREST COMPREHENSIVE LAND USE PLAN

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**CHAPTER 600**

**PROTECTION**

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**600 PROTECTION**

**OBJECTIVE**

To protect and manage the resources of the forest from preventable losses resulting from fire, insects, diseases, and other destructive elements including those caused by people. Protective methods shall include proper silvicultural methods.

**605 FIRE CONTROL**

Damage to the forest caused by uncontrolled fire can create an important challenge in the management of the forest. Loss of resource values caused by fire will be minimized through organized prevention, detection and suppression methods. Maintaining a healthy forest is key to fire management. The DNR is responsible for all matters relating to the prevention, detection and suppression of forest fires outside the limits of incorporated villages and cities. (s.26.11(1), Wis.Stats). The DNR works cooperatively with local fire departments in all fire control efforts. The Burnett County Forest is part of the intensive forest fire protection area. The Fire Prevention Handbook No. 4310.5, Fire Presuppression Handbook No. 4320.5, the Fire Suppression Handbook No. 4342.05 and the Area Fire Plan shall serve as the guidelines for fire control activities.

**605.1 COOPERATION WITH THE DEPARTMENT OF NATURAL RESOURCES**

Pursuant to s. 26.11(4) and s. 28.11(4)(f), Wis. Stats., and of the Burnett County Forest Ordinance, the County is authorized to cooperate with the DNR in the interest of fire prevention, detection and suppression on the County Forest. This is accomplished through agreements authorizing the DNR to use County Forest Land or to utilize county personnel and equipment for fire protection activities in Burnett County or adjoining counties. An annual meeting will be held between the County Forestry staff and WDNR Area Fire Control personnel to plan wildfire suppression, prevention, and other cooperative activities on the Forest.

#### 605.1.1 Personnel

County Forest personnel, upon request from the DNR, shall be made available for forest fire control efforts within the County in accordance with an established Memorandum of Understanding (MOU) Chapter 900 Exhibit 17. The DNR is responsible for training and directing the activities of county personnel in accordance with the rules identified in the Area Fire Action Plan.

#### 605.1.2 Equipment

County Forest equipment, upon request and as identified in the MOU, shall be available for forest fire control suppression. During periods of high fire hazard, all County Forest vehicles and/or crews should be equipped with one or more backpack cans, axes or shovels, appropriate personal protective equipment, mobile communication, and any other equipment deemed essential by the MOU. All hand tools shall be maintained and provided by the DNR. The County may use WDNR radio frequencies to assist in communication during fire suppression activities.

#### 605.1.3 Fire Detection

Fire detection is the responsibility of the Department of Natural Resources. A network of fire towers, aerial patrols, countywide 911, citizen reporting, and agency patrolling will be used to detect wildfires on the Forest. The level of detection will be determined by WDNR.

#### 605.1.4 Forest Fire Prevention

DNR fire control personnel are authorized by the County to place fire prevention signs at recreational areas and other strategic locations within the forest. The County conducts and controls all operations, (including harvesting), on the forest in a manner designed to prevent forest fires. The use of the County Forest during high fire danger periods may be restricted. These restrictions will include, but not be limited to, recreation and logging.

#### 605.2 SLASH DISPOSAL

Timber sale contracts will be designed to meet or exceed the requirements of the Slash Disposal Law, s. 26.12, Wis. Stats. Additional requirements may be imposed as necessary.

#### 605.3 DEBRIS BURNING

Unauthorized burning of debris will not be permitted on County Forest Lands pursuant to s. 26.12(5), Wis. Stats.

#### 605.4 CAMPFIRES

In the interest of preventing accidental ignition of wildfire during periods of high fire danger, Burnett County has approved the following regulations on camping, campfires, and recreational trail use:

1. No open fires will be permitted on the Forest during April or May except in the Scenic Riverway Zone, at a designated fire ring. Other times of the year, unless otherwise posted, a 3' mineral soil fuel break must surround all open fires when the ground is not snow covered.
2. Operation of ATV, UTV, ORV, motorcycles, or other motorized recreational vehicles is prohibited from April 1<sup>st</sup> until the Friday of Memorial Day weekend.
3. The County may close the Forest to camping, trail use, timber harvest and other activities when a Red Flag Alert is activated or when State or County Emergency Fire Regulations are implemented during periods of high fire danger. On Red Flag Alert days, the Forest will be closed to all human activity from 10:00 a.m. to 6:00 p.m. Camping permits will not be issued or valid during these periods.

#### 605.5 PRESCRIBED BURNING

All prescribed burning on County Forest Lands will follow the DNR recommendations. See Manual Code 4361.1 and Prescribed Burn Handbook No. 4320.5 for details. Prescribed fire may be an effective management tool on the County Forest.

#### 605.6 COUNTY FOREST FIRE HAZARD AREAS

Primary emphasis will be placed on fire control efforts in pine areas. Maps of these areas are available on file at the local DNR field office (Fire Management Hbk. #4321.5, Section 3030). Firebreaks or access ways will be established in new plantations in accordance with Manual Code 2421. Existing access roads, firebreaks, and water access points will be maintained as deemed necessary. Secondary emphasis will be placed on hardwood areas with no firebreaks developed or maintained. However, access roads will be maintained as defined in Chapter 700 of this plan.

A system of 1/4 mile wide fuel breaks will be maintained on the Forest in the Town of West Marshland and the Town of Swiss. A developed perimeter road and periodic prescribed fire will be used to maintain these fuel breaks in non-forest vegetation. Meadman Meadows, in the Town of Anderson, will also be periodically prescribed burned to provide a natural fuel break. These breaks are a tactical landscape feature that offers the potential in some cases for controlling the advance of wildfires. The County and WDNR will cooperate in preparing the burn proposals and conducting the prescribed burning on these fuel breaks.

#### 605.7 UNCONTROLLED FIRE

Any uncontrolled or non-prescribed fires on the County Forest will be suppressed as soon as possible.

### **610 CONTROL OF FOREST PEST & PATHOGEN**

#### 610.1 DETECTION

Damage to the forest caused by insects, other pests and diseases can adversely affect management of the forest resources. Losses to resource values impacted by forest pests will be minimized through integrated pest management methods, with emphasis on silvicultural prescriptions, (timber sales). The detection and control of pest problems will be accomplished by County and DNR personnel in cooperation with other agencies.

## 610.2 PEST SURVEYS

Pest surveys are conducted under the direction of the DNR's regional entomologist. The DNR works in cooperation with the Wisconsin Department of Agriculture Trade and Consumer Protection (DATCP) in monitoring the spread of gypsy moths. The County may cooperate by providing personnel and equipment to assist in these operations.

## 610.3 INTEGRATED PEST MANAGEMENT

Integrated pest management for the purpose of this Plan, is defined as follows:

*“The maintenance of destructive agents, including insects, at tolerable levels, by the planned use of a variety of preventive, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable.”*

The integrated pest management control and methodology shall be determined jointly by the County Forest Administrator and DNR Liaison Forester, in consultation with the DNR Regional Entomologist and Regional Forester. Suppression of forest pests may include the following:

- 1) Silvicultural prescriptions, including timber sales.
- 2) Biological control.
- 3) Chemical control.

The Committee may review and approve the use of certified pesticides to control unnaturally high populations of insects and other pest agents on the Forest.

### 610.3.1 Specific Pests and Pathogens of Interest:

Gypsy Moth

Jack Pine Budworm

Oak Wilt

Forest Tent Caterpillar

Two-lined Chestnut Borer

Emerald Ash Borer

Annosum Root Rot (HRD)

#### 610.3.1.1 Gypsy Moth Strategy

This introduced pest has progressed westward from the northeastern United States since the early 1900's. It reached eastern Wisconsin and has been widespread in some counties since 1988. Despite efforts to slow-the-spread and suppress outbreaks, it is progressing westerly through Wisconsin. The Burnett County Forest's strategy to combat this defoliating insect will focus on using silvicultural techniques to maintain and improve forest vigor, so as to decrease the likelihood and severity of defoliation. In addition, suppression spraying with approved insecticides may be considered in high use recreation areas and stands containing a high percentage of susceptible, high valued timber. Biological controls may also be available for introduction to help reduce outbreak frequency. These areas are identified on a map located in Chapter 900 Exhibit 17.

The presence or discovery of threatened or endangered species in these areas may impact both the type of treatment and the decision to apply suppression tactics. Current insecticides for gypsy moth control include a bacterial insecticide (Btk), and a commercial formulation of a naturally occurring virus (Gypchek). The Gypchek virus, specific to gypsy moth larvae, is only available through the federal suppression program administered by the DNR. The intent in combating this insect is not to eradicate, but rather to reduce populations so that tree mortality is maintained at tolerable levels. The DNR's local gypsy moth coordinator and entomologist will be available for consultation on control tactics and possible quarantine procedures. DATCP is the agency responsible for quarantine procedures for wood products from infested counties. Burnett County Forest's threshold levels for suppression will be as follows:

- 20 acres in size and of a compact and regular shape, (minimum eligible size for aerial spraying through the state suppression program), OR high use, developed recreation areas
- 500 egg masses per acre based on 1/40<sup>th</sup> acre, (18.6 ft. radius), plots
- Located in one of the susceptible areas identified on the Burnett County Forest gypsy moth suppression map found in Chapter 900 Exhibit 17.

#### 610.3.1.2 Jack Pine Budworm

Jack pine budworm, *Choristoneura pinus Freeman*, is a native needle-feeding caterpillar that is generally considered the most significant pest of jack pine. Vigorous young jack pine stands are rarely damaged during outbreaks. The most vigorous stands are well stocked, evenly spaced, fairly uniform in height, and less than 45 years old. Stands older than 45 years that are growing on very sandy sites and suffering from drought or other stresses are very vulnerable to damage. Tree mortality and top-kill are more likely to occur in these stands. This mortality and top-kill create fuel for intense wildfires. It will be Burnett County's strategy to harvest at the appropriate rotation age, maintain high stand densities, (without overcrowding), and use good site selection for jack pine. This will be an effort to help avoid budworm-caused tree mortality and reduce the threat of damaging wildfires while still providing suitable conditions for jack pine regeneration. Prompt salvage following an outbreak will also help reduce the possibility of wildfire. Use of insecticides is not warranted in combating this forest pest on the County Forest.

#### 610.3.1.3 Oak Wilt

Oak wilt, *Ceratocystis fagacearum (Bretz) Hunt*, is a destructive disease of oak trees. It is responsible for the death of thousands of oak trees in forests, woodlots and home landscapes each year. Oak wilt is caused by a fungus that invades and impairs the trees water conducting system, resulting in branch wilting and tree death. Trees in both the red oak group

and white oak group are affected. There is no known cure once a tree has oak wilt. Prevention of new oak wilt infection centers is the best

management option and involves avoiding injury to healthy trees and removing dead or diseased trees.

Timber harvests within the red oak timber type will be altered when it is known that Oak Wilt is present or adjacent to the stands that are being managed. Burnett County will implement Oak Wilt Guidelines consistent with the Burnett County Forest Oak Wilt Guidelines found in Chapter 900 Exhibit 22.

#### 610.3.1.4 Forest Tent Caterpillar

Forest tent caterpillar, *Malacosoma disstria* Hubner, can be found throughout the United States and Canada wherever hardwoods grow. The favored hosts in Wisconsin are aspen and oak. This native insect causes region-wide outbreaks at intervals from 10 to 15 years; outbreaks usually last 2 - 5 years in the Lake States. Severe and repeated defoliation can lead to dieback and/or reduced growth of affected trees, which in some instances may be significant. Populations are often controlled by natural enemies, helping the population crash. Aerial spraying of insecticides can be an option for control as well. It will be Burnett County's strategy to employ sound silvicultural practices to combat this cyclic pest.

#### 610.3.1.5 Two-lined Chestnut Borer

The two-lined chestnut borer, *Agrilus bilineatus* (Weber), is a common secondary pest in trees, which have been severely defoliated several years in a row. Oaks that have been defoliated by insects such as gypsy moth (*Lymantria dispar*), fall cankerworm (*Alsophila pometaria*), and forest tent caterpillar (*Malacosoma disstria*) can be attacked and killed by the two-lined chestnut borer. Prevention of two-lined chestnut borer is the best management option. Burnett County will strive to maintain healthy trees

through sound silvicultural practices to discourage infestation. Infestations will be salvaged promptly.

#### 610.3.1.6 Emerald Ash Borer

The emerald ash borer, *Agrilus planipennis*, was introduced from Asia and has taken hold in lower Michigan and Eastern WI. It has resulted in widespread mortality specific to ash including green, white, black, and several horticultural varieties. Ash comprises a significant component in the northern hardwood timber type and can be found in nearly pure stands in some lowland areas. Adult beetles feed on foliage however, it is the larvae that cause mortality by feeding on the phloem and outer sapwood of the ash trees. Burnett County will cooperate with ongoing trapping and survey efforts. Sound silvicultural practices will continue to be used to maintain forest health. Should an infestation occur, Burnett County will work with DNR Forest Health staff in applying measures to minimize spread, including aggressive salvage trees.

#### 610.3.1.7 Annosum Root Rot (HRD)

Annosum Root Rot, (Heterobasidion Root Disease), is caused by the fungus Heterobasidion Irregular. This fungus will attack all pine; red, white and Jack; but can also be found in hemlock, cedars, balsam, larch, white spruce, and some hardwoods. This disease has been in Wisconsin since the early 1990's, but is yet to be found in Burnett County or neighboring counties. Burnett County will cooperate with ongoing survey efforts and will use sound silvicultural practices to maintain forest health. Should an infestation occur, Burnett County will work with the DNR Forest Health Staff in applying measures to minimize spread.

#### 610.3.2 Funding

Desired control activities on the County Forest will be funded through the County forestry budget if other sources of funding are not available. In the event costs

require additional funding, special appropriations from the County Board Contingency Fund will be sought. In addition, state legislation may provide monetary assistance in direct crisis situations where major control operations are undertaken. In case of gypsy moth outbreaks, the County may seek funding from the State of Wisconsin Gypsy Moth Suppression Program.

#### 610.3.3 Legal Obligations

All control operations will comply with regulations as set forth in existing state and federal legislation. Refer to Wisconsin Administrative Code NR80, AG.29, and the Environmental Pesticide Control Act.

#### 610.3.4 Special Projects

The County may cooperate with other agencies in forest pest research. See Chapter 200.

### **615 TIMBER THEFT**

All cases of alleged timber theft on the County Forest shall be investigated and resolved promptly. An allegation of theft by cutting and /or removing timber from the County Forest does not alleviate the County from payment under s. 28.11 (9) Wis.Stats. The County will collect damages pursuant to s. 26.05 Wis. Stats. and may also pursue criminal charges under s. 943.20 Wis. Stats. and /or seek civil damages.

#### 615.1 TIMBER THEFT INVESTIGATION

The following procedure should be used in all cases of alleged timber theft:

(1) Determination of Theft

(a) Gathering facts - The County, through its Sheriff's Department and along with assistance of the DNR liaison, rangers and wardens, will ascertain the facts pertinent to the alleged theft, including determination of the damages to the County. In these situations, DNR rangers can be used as the primary investigators. Legal counsel representing the County should be involved in all aspects of investigation. Property involved in the alleged theft may be seized pursuant to s. 26.04 Wis. Stats. for use as evidence.

(b) Boundary determination - If property boundaries are involved, the County shall conduct a survey of the boundary in question.

## **620 ENCROACHMENTS**

The County will actively investigate all suspected cases of encroachments on the County Forest. To insure the integrity and continuity of the County Forest Land, all cases will be dealt with promptly and in a consistent manner. The following procedures will be used in all cases of suspected encroachments:

- (1) The County will establish property boundaries; if necessary, a legal survey will be conducted.
- (2) The County will gather all facts.
- (3) The Committee, in consultation with the Forest Administrator, county legal counsel, and the DNR, will make a decision as to the disposition of the case.
  - (a) All above ground encroachments that are movable will be removed from county property.
  - (b) Permanent type facilities, such as homes, garages, and septic systems shall be addressed individually and may be removed or handled by a land use agreement. Sale or transfer of the encroachment should remain an option depending on the circumstances involved and the viability of an adverse possession claim (s. 893.29 Wis. Stats.).
  - (c) Provisions in the land use agreement, if that option is pursued, may include granting the encroacher permission to encroach on the County Forest Lands with the following stipulations: no other encroachments will be allowed; the permit is non-transferable; the County must be notified once encroachment is terminated; County continues full ownership and control of property; permittee agrees to waive any rights to any future declaration of ownership or interest in the encroached county property; County reserves the right to cancel the permit and the permit is to be filed in the office of the \_\_\_\_\_ County Forestry Department and all fees related to the land use permit shall be paid by the permittee.
  - (d) A copy of the actual Land Use Agreement can be found in Chapter

**625 LAW ENFORCEMENT PROTECTION**

Enforcement of all provisions of this plan and ordinances will require the cooperation of the Committee, County Forest staff, and the County Sheriff and deputies. In addition, WDNR wardens and rangers, Chippewa Tribal Wardens, and National Park Service Rangers may assist in the enforcement of regulations and protection of the resources by providing evidence, observation, witness, and testimony to prosecute violation of County ordinances. Prosecution and legal counsel will be provided by the Burnett County Corporation Counsel, the District Attorney, and other legal services available to the County.