

COUNTY FOREST COMPREHENSIVE LAND USE PLAN

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38 **600 PROTECTION**

39 OBJECTIVE

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

43

44 **605 FIRE CONTROL**

45 Damage to the forest caused by uncontrolled fire can create an important challenge in the  
46 management of the forest. Loss of resource values caused by fire will be minimized  
47 through organized prevention, detection and suppression methods. Maintaining a healthy  
48 forest is key to fire management. The DNR is responsible for all matters relating to the  
49 prevention, detection and suppression of forest fires outside the limits of incorporated  
50 villages and cities. (s.26.11(1), Wis.Stats). The DNR works cooperatively with local fire  
51 departments in all fire control efforts. The Iron County Forest is part of the Brule intensive  
52 Forest Fire protection area. The Fire Prevention Handbook No. 4310.5, Fire Presuppression  
53 Handbook No. 4320.5, the Fire Management Handbook No. 4325.1 and the Area Fire  
54 Action Plan shall serve as the guidelines for fire control activities.

55

56 **605.1 COOPERATION WITH THE DEPARTMENT OF NATURAL RESOURCES**

57 Pursuant to s. 26.11(4) and s. 28.11(4)(f), Wis. Stats., and of the Iron County Forest  
58 Ordinance, the county may cooperate with the DNR in the interest of fire prevention,  
59 detection and suppression on the County Forest. This is accomplished through agreements  
60 authorizing the DNR to use County Forest land or to utilize county personnel and  
61 equipment for fire protection activities.

62

63 **605.1.1 Personnel**

64 County Forest personnel, upon request from the DNR, shall be made available for forest fire  
65 control efforts within the county in accordance with an established memorandum of  
66 understanding (MOU). The DNR is responsible for training and directing the activities of  
67 county personnel in accordance with the rules identified in the Area Fire Action Plan. For  
68 the past decade, Iron County Forest personnel have also been utilized for large (project) fire  
69 management assignments in the Brule Area and the Northern Region. Iron County

70 personnel will maintain fire management credentials (ICS, NIMS), update and train with  
71 current GIS and GPS hardware and software, research new fire situations and planning  
72 techniques and continue to be available for large fire duties within the area and region.

#### 73 74 605.1.2 Equipment

75 County Forest equipment, upon request and as identified in the MOU, shall be available for  
76 forest fire control suppression. During periods of high fire hazard, all County Forest  
77 vehicles and/or crews should be equipped with one or more back pack cans, axes or shovels,  
78 appropriate personal protective equipment, mobile communication and any other equipment  
79 deemed essential by the MOU. All hand tools shall be maintained and provided by the  
80 DNR.

#### 81 82 605.1.3 Fire Detection

83 Fire detection is the responsibility of the DNR. County Forestry personnel shall assist and  
84 report any wild fires to the DNR, local Fire Department or Dispatch. Local wildfires within  
85 or adjacent to the county forest observed by Forestry Department personnel shall be  
86 reported to local dispatch in the manner most expedient. Department personnel shall  
87 remain at the scene (at a safe distance and location) to assist DNR personnel in locating the  
88 most efficient route to the scene.

#### 89 90 605.1.4 Forest Fire Prevention

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

#### 96 97 605.2 SLASH DISPOSAL

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

102 **605.3 DEBRIS BURNING**

103           Unauthorized burning of debris will not be permitted on County Forest Lands pursuant to s.  
104           26.12(5), Wis. Stats.

105  
106 **605.4 CAMP FIRES**

107           Adequate fireplaces will be provided at designated recreation sites. During periods of high  
108           fire danger, use of campfires may be restricted.

109  
110 **605.5 PRESCRIBED BURNING**

111           All prescribed burning on County Forest lands will follow the DNR recommendations. See  
112           Manual Code 4361.1 and Prescribed Burn Handbook No. 4360.5 for details. Prescribed fire  
113           may be an effective management tool on the County Forest.

114  
115 **605.6 COUNTY FOREST FIRE HAZARD AREAS**

116           Primary emphasis will be placed on fire control efforts in pine areas. Maps of these areas  
117           are available at the local DNR field office (Fire Management Hbk. #4325.1, Section 3030).  
118           The County will cooperate with DNR Fire Control in providing for firebreaks or access  
119           ways. Existing access roads, firebreaks and water access points will be maintained as  
120           deemed necessary. Secondary emphasis will be placed on hardwood areas with no  
121           firebreaks developed or maintained. However, access roads will be maintained as defined  
122           in Chapter 700 of this plan.

123  
124 **605.7 UNCONTROLLED FIRE**

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

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128 **610 CONTROL OF FOREST PEST & PATHOGEN**

129  
130 **610.1 DETECTION**

131           Damage to the forest caused by insects, other pests and diseases can adversely affect  
132           management of the forest resources. Losses to resource values impacted by forest pests will  
133           be minimized through integrated pest management methods, with emphasis on silvicultural

134 prescriptions (timber sales). The detection and control of pest problems will be  
135 accomplished by county and DNR personnel in cooperation with other agencies.

136  
137 **610.2 PEST SURVEYS**  
138 Pest surveys are conducted under the direction of the DNR’s regional entomologist. The  
139 DNR works in cooperation with the Wisconsin Department of Agriculture Trade and  
140 Consumer Protection (DATCP) in monitoring the spread of gypsy moths. The County may  
141 cooperate by providing personnel and equipment to assist in these operations.

142  
143 **610.3 INTEGRATED PEST MANAGEMENT**

144 Integrated pest management for the purpose of this Plan, is defined as follows:  
145 *“The maintenance of destructive agents, including insects, at tolerable*  
146 *levels, by the planned use of a variety of preventive, suppressive,*  
147 *or regulatory tactics and strategies that are ecologically and*  
148 *economically efficient and socially acceptable.”*

149 The integrated pest management control and methodology shall be determined jointly by the  
150 county forest administrator, and DNR liaison forester in consultation with the DNR regional  
151 entomologist and regional forester. Suppression of forest pests may include the following:

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

155  
156 **610.3.1 Specific Pests and Pathogens of Interest.**

157 Iron County lists the following pests and pathogens as vectors of interest for the next 15  
158 years: Gypsy Moth, Emerald Ash Borer, Pine Saw Fly, Spruce Budworm, Forest Tent  
159 Caterpillar.

160  
161 **610.3.1.1 Gypsy Moth Strategy**

162 This introduced pest has progressed westward from the northeastern United States since  
163 the early 1900’s. It reached eastern Wisconsin and has been widespread in some counties  
164 since 1988. Despite efforts to slow-the-spread and suppress outbreaks, it is progressing  
165 westerly through Wisconsin. The Iron County Forest’s strategy to combat this defoliating

166 insect will focus on using silvicultural techniques to maintain and improve forest vigor,  
167 so as to decrease the likelihood and severity of defoliation. In addition, suppression  
168 spraying with approved insecticides may be considered in high use recreation areas and  
169 stands containing a high percentage of susceptible, high valued timber. Biological  
170 controls may also be available for introduction to help reduce outbreak frequency.  
171 The presence or discovery of threatened or endangered species in these areas may impact  
172 both the type of treatment and the decision to apply suppression tactics. Current  
173 insecticides for gypsy moth control include a bacterial insecticide (Btk) and a commercial  
174 formulation of a naturally-occurring virus (Gypchek). The Gypchek virus, specific to  
175 gypsy moth larvae, is only available through the federal suppression program  
176 administered by the DNR. The intent in combating this insect is not to eradicate, but  
177 rather to reduce populations so that tree mortality is maintained at tolerable levels. The  
178 DNR's local gypsy moth coordinator and entomologist will be available for consultation  
179 on control tactics and possible quarantine procedures. DATCP is the agency responsible  
180 for quarantine procedures for wood products from infested counties.

181 Iron County Forest's threshold levels for suppression will be as follows:

- 182
- 183 • 20 acres in size and of a compact and regular shape (minimum eligible size for aerial  
184 spraying through the state suppression program) OR high use, developed recreation  
185 areas
  - 186 • 500 egg masses per acre based on 1/40<sup>th</sup> acre (18.6 ft. radius) plots
- 187

#### 188 610.3.1.2 Jack Pine Budworm

189 Jack pine budworm, *Choristoneura pinus pinus Freeman*, is a native needle-feeding  
190 caterpillar that is generally considered the most significant pest of jack pine. Vigorous  
191 young jack pine stands are rarely damaged during outbreaks. The most vigorous stands are  
192 well stocked, evenly spaced, fairly uniform in height, and less than 45 years old. Stands  
193 older than 45 years that are growing on very sandy sites and suffering from drought or other  
194 stresses are very vulnerable to damage. Tree mortality and top-kill are more likely to occur  
195 in these stands. This mortality and top-kill create fuel for intense wildfires. It will be Iron  
196 county's strategy to harvest at the appropriate rotation age, maintain high stand densities  
197 (without overcrowding), and use good site selection for jack pine. This will be an effort to

198 help avoid budworm-caused tree mortality and reduce the threat of damaging wildfires  
199 while still providing suitable conditions for jack pine regeneration. Prompt salvage  
200 following an outbreak will also help reduce the possibility of wildfire. Use of insecticides is  
201 not warranted in combating this forest pest on the County Forest.

202

### 203 610.3.1.3 Oak Wilt

204 Oak wilt, *Ceratocystis fagacearum* (Bretz) Hunt, is a destructive disease of oak trees. It  
205 is responsible for the death of thousands of oak trees in forests, woodlots, and home  
206 landscapes each year. Oak wilt is caused by a fungus that invades and impairs the tree's  
207 water conducting system, resulting in branch wilting and tree death. Trees in both the red  
208 oak group and white oak group are affected. There is no known cure once a tree has oak  
209 wilt. Prevention of new oak wilt infection centers is the best management option and  
210 involves avoiding injury to healthy trees and removing dead or diseased trees. Healthy  
211 trees should not be pruned during the growing season as this attracts beetles that may  
212 carry the oak wilt fungus. If pruning is necessary or damage is incurred during the  
213 growing season, e.g. through construction activities or storms, the wounds should be  
214 painted immediately with a wound paint.

215

216 It will be Iron County's policy to remove infected trees and debark or chip them when  
217 located in a high intensive use area. Once chipped or debarked, the materials shall be  
218 covered with plastic for a period of six months to kill the fungus and any insects in the  
219 material. A vibratory plow, or similar implement, will also be used to sever root grafts on  
220 isolated pockets where feasible. Timber harvest of red oak will be restricted between  
221 April 15 and August 1.

222

### 223 610.3.1.4 Forest Tent Caterpillar

224 Forest tent caterpillar, *Malacosoma disstria* Hubner, can be found throughout the United  
225 States and Canada wherever hardwoods grow. The favored hosts in Wisconsin are aspen  
226 and oak. This native insect causes region-wide outbreaks at intervals from 10 to 15 years;  
227 outbreaks usually last 2 - 5 years in the Lake States. Severe and repeated defoliation can  
228 lead to dieback and/or reduced growth of affected trees, which in some instances may be  
229 significant. Populations are often controlled by natural enemies, helping the population



230 crash. Aerial spraying of insecticides can be an option for control as well. It will be Iron  
231 County's strategy to employ sound silvicultural practices to combat this cyclic pest.

232

#### 233 610.3.1.5 Two-lined Chestnut Borer

234 The twolined chestnut borer, *Agrilus bilineatus* (Weber), is a common secondary pest in  
235 trees which have been severely defoliated several years in a row. Oaks that have been  
236 defoliated by insects such as gypsy moth (*Lymantria dispar*), fall cankerworm (*Alsophila*  
237 *pometaria*), and forest tent caterpillar (*Malacosoma disstria*) can be attacked and killed  
238 by the two-lined chestnut borer. Prevention of two-lined chestnut borer is the best  
239 management option. Iron County will strive to maintain healthy trees through sound  
240 silvicultural practices to discourage infestation. Infestations will be salvaged promptly.

241

#### 242 610.3.1.6 Emerald Ash Borer

243 The emerald ash borer, *Agrilus planipennis*, was introduced from Asia and has taken hold  
244 in lower Michigan. In Michigan it has resulted in widespread mortality specific to ash  
245 including green, white, black and several horticultural varieties. Although not currently  
246 present in Wisconsin, it is a severe threat to ash in the State. Ash comprises a significant  
247 component in the northern hardwood timber type and can be found in nearly pure stands  
248 in some lowland areas. Adult beetles feed on foliage however, it is the larvae that cause  
249 mortality by feeding on the phloem and outer sapwood of the ash trees. Iron County will  
250 cooperate with ongoing trapping and survey efforts. Sound silvicultural practices will  
251 continue to be used to maintain forest health. Should an infestation occur Iron County  
252 will work with DNR Forest Health staff in applying measures to minimize spread,  
253 including aggressive salvage trees.

254

#### 255 610.3.2 Funding

256 Desired control activities on the County Forest will be funded through the county forestry  
257 budget if other sources of funding are not available. In the event costs require additional  
258 funding, special appropriations from the General Fund will be sought. In addition, state  
259 legislation may provide monetary assistance in direct crisis situations where major control  
260 operations are undertaken. In case of gypsy moth outbreaks, the county may seek funding  
261 from the State of Wisconsin Gypsy Moth Suppression Program.

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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 County Forester, DNR liaison, rangers and wardens, will ascertain the facts pertinent to the alleged theft, including determination of the damages to the county. 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 disputed property boundaries are involved, the county shall conduct a legal 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

- 294 all cases of suspected encroachments:
- 295 (1) The county will establish property boundaries; if necessary, because of  
296 dispute, a legal survey will be conducted.
- 297 (2) The county will gather all facts.
- 298 (3) The Committee, in consultation with the forest administrator, county legal  
299 counsel, and the DNR, will make a decision as to the disposition of the case.
- 300 (a) All above ground encroachments that are movable will be removed  
301 from county property.
- 302 (b) Permanent type facilities, such as homes, garages, and septic systems  
303 shall be addressed individually and may be removed or handled by a  
304 land use agreement. Sale or transfer of the encroachment should  
305 remain an option depending on the circumstances involved and the  
306 viability of an adverse possession claim (s. 893.29 Wis. Stats.).
- 307 (c) Provisions in the land use agreement, if that option is pursued, may  
308 include granting the encroacher permission to encroach on the  
309 County Forest lands with the following stipulations: no other  
310 encroachments will be allowed; the permit is non-transferable; the  
311 county must be notified once encroachment is terminated; county  
312 continues full ownership and control of property; permittee agrees to  
313 waive any rights to any future declaration of ownership or interest in  
314 the encroached county property; county reserves the right to cancel  
315 the permit and the permit is to be filed in the office of the  
316 County Forestry Department and all fees related to the land use  
317 permit shall be paid by the permittee.
- 318 (d) A copy of the actual Land Use Agreement can be found in Chapter  
319 900.17.