# BAYFIELD COUNTY FOREST COMPREHENSIVE LAND USE PLAN TABLE OF CONTENTS

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## **CHAPTER 100 - BACKGROUND**

## 100 MISSION STATEMENT

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The mission of the Bayfield County Forestry Department is to manage, conserve, and protect the forest resources of the County Forest. Multiple use management of these resources will provide a wide variety of forest products and amenities for current and future generations through the use of sustainable forest management practices.

## 101 FOREST CERTIFICATION

In keeping with the mission statement, the Bayfield County Board of Supervisors passed a resolution on January 18, 2005 adopting the Sustainable Forest Initiative Standards as the third party certification system under which the Bayfield County Forest will be certified. The forest products industry is increasingly requiring their suppliers to verify that the raw materials being supplied have originated from well-managed forest lands. Third party certification of forest lands is becoming the norm for objectively evaluating the sustainable management of forest land. The Bayfield County Forest provides a vital contribution to the State and the world by providing economic, environmental and social benefits important to our quality of life. Bayfield County believes that accomplishing such sustainable forestry requires a commitment and partnership from all the groups and individuals that benefit from these public lands.

## **Bayfield County's Commitment**

Within the scope of the Wisconsin County Forest Law and the County Forest Comprehensive Land Use Plan, Bayfield County will implement forestry practices that promote forest sustainability and multiple use of the forest. In keeping with this responsibility Bayfield County is committed to the following:

- 1. **Sustainable Forestry Principles** To practice sustainable forestry to meet the present needs of society without sacrificing the ability of future generations to meet their anticipated needs. In doing so, Bayfield County will integrate the reforestation, managing, growing and harvesting of trees for forest products with the conservation of air and water quality, soil, ecosystem diversity, wildlife, recreation and aesthetics.
- 2. **Responsible Practices** To employ practices that are economically, environmentally and socially responsible in the management of the Bayfield County Forest and to also encourage other forest owners to do the same.
- 3. **Forest Health & Productivity** To work cooperatively with the DNR and other agencies in protecting our forests from pests, diseases, wildfire and other damaging agents in order to improve long-term productivity and forest health.
- 4. **Unique Sites** To manage areas of special biological, geographical, cultural or historical significance in such a way as to preserve their unique qualities.
- 5. **Legal Compliance** To comply with applicable local, state and federal laws and regulations in the management of the Bayfield County Forest.

- 6. **Monitoring and Continuous Improvement** To continually seek improvement in the management of the Bayfield County Forest and to monitor, assess and report performance towards the objective of sustainable forestry.
- **Research** The County supports research efforts to improve the health, productivity, and management of forestlands both internally and through cooperative efforts.

## 105 GOAL OF THE COUNTY FOREST COMPREHENSIVE LAND USE PLAN (Hereafter referred to as the "Plan")

To administer the County Forest program consistent with the mission statement and the purpose and direction of the County Forest Law as stated in s. 28.11, Wis. Stats., The purpose of the County Forest Law being:

"... to provide the basis for a permanent program of county forests and to enable and encourage the planned development and management of the County Forests for optimum production of forest products together with recreational opportunities, wildlife, watershed protection and stabilization of stream flow, giving full recognition to the concept of multiple use to assure maximum public benefits; to protect the public rights, interests and investments in such lands; and to compensate the counties for the public uses, benefits and privileges these lands provide; all in a manner which will provide a reasonable revenue to the towns in which such lands lie."

## 110 CHAPTER 100 OBJECTIVE

- 1. To recognize the authority of the County and State in the administration and development of operating policies on the Bayfield County Forest.
- 2. To provide the reader of the plan with background information regarding the County Forest.

## 115 STATUTORY AUTHORITY

The County Forest Law (s. 28.10 and 28.11 Wis. Stats.) provides the authority to establish, develop, and manage a permanent County Forest Program. (For the full text of the County Forest Law refer to Chapter 900 (905.1).

## 120 COUNTY AUTHORITY

The Bayfield County Forest Comprehensive Land Use Plan is the official County Forest authority. The Forestry Committee of the County Board (hereafter referred to as the "Committee") enforces the regulations governing the use of the County Forest.

## 120.1 ORDINANCES

The County ordinances that apply to the administration and management of the Bayfield County Forest can be found in Chapter 900 (905.2). These are the County ordinances that were in effect at the time this plan was approved and are included in this plan as an unofficial reference only. The Official County Ordinance book should be referred to for current ordinances.

#### 125 HISTORY

#### 125.1 STATEWIDE HISTORY AND DEVELOPMENT

In 1927, the State Legislature passed the Forest Crop Law, authorizing counties to create county forests. An opinion of the Attorney General with reference to the Forest Crop Law stated that the counties would be exempt from the owner's share of annual tax. The Legislature of 1929 specifically provided that counties were exempt from paying the "acreage share" required of private owners. The legislature of 1931 amended the County Forest Reserve Law of 1929. It provided for the payment of acreage aids to Towns for County Forest land and an additional annual State payment of \$.10 /acre to the Counties for all land within county forests entered under the Forest Crop Law. Counties were required to spend this aid money solely for the development of the county forest. In return for this aid, the state originally collected a seventy-five percent severance tax on the products cut on county forests. This was reduced to fifty percent in 1937 and then to twenty percent of gross sales in 1963.

In 1963, several major revisions were made to the County Forest Law. The most notable change was the creation of a permanent program of forests that would be managed in accordance with a 10 Year Comprehensive Land Use Plan developed by the County, with the assistance of the Department of Natural Resources. The severance tax on harvested forest products still remains at 20% of the stumpage value, although no severance tax is collected if counties do not have a loan balance. A number of grants, loans and shared revenue payments are currently available to counties to help offset any losses in taxes due to public ownership. The acreage share payment to towns is currently \$.30/acre. In addition, towns with county forest land receive a minimum of 10% of the stumpage revenue from their respective County Forest each year. Stumpage revenues statewide on the Wisconsin County Forests currently exceed \$18,000,000 annually. Twenty-nine counties in Wisconsin now manage approximately two and one third million acres entered under the County Forest Law.

## 125.2 COUNTY FOREST PROGRAM HISTORY AND DEVELOPMENT

At one time, much of Wisconsin was covered with magnificent stands of pine, hemlock, and hardwoods on the highlands, and cedar, spruce, and balsam on its lowlands. From 1860 to about 1910, these forests provided raw material for a thriving lumber industry. The need to supply lumber for a growing nation, and the lack of sound forest management, resulted in overharvest of the forests and degradation of the landscape. Immigrants rushed to these newly cleared lands, hungry for a place to farm and build their lives. But in just a few years, the soils gave out, catastrophic fires occurred, and many people were forced to seek their fortunes elsewhere. The land was left exhausted and tax delinquent. The Wisconsin County Forest program originated with the taking of these tax delinquent lands.

## 125.3 BAYFIELD COUNTY FOREST HISTORY & DEVELOPMENT

The Bayfield County Forest originated in the late 1920's, when the County obtained a large acreage through tax delinquency. State law provided that the County take title on tax delinquent land. However, these lands became an increasing burden and the County was reluctant to accept these "unwanted lands". Logged over and ravaged by fires, these lands presented no prospect

for immediate financial returns. The development of the County Forest Law prepared the way and provided the means for the local establishment of a County Forest. The Bayfield County Forest was officially established in 1932 with the entry of 52,832.28 acres under the Forest Crop Law. The following years showed large acreage entries. Growth has slowed in recent years to a stable land base. On September 25, 2000, a new County Forest Ordinance was adopted which repealed all previous ordinances. The Ordinance designated a County Forest boundary that encompassed a gross area of about 187,946 acres. The net area of land entered under the County Forest law, as of 2005, is 166,646 acres.

## 125.4 WISCONSIN COUNTY FORESTS ASSOCIATION

Bayfield County is a member of the Wisconsin County Forests Association, Inc. (WCFA). This Association was incorporated on May 15, 1968 under Chapter 181 of the Wisconsin Statutes, without stock and not for profit. The WCFA Board of Directors is composed of ten delegates elected from the County Forestry Committees who are members of the Association.

This corporation provides a forum for consideration of issues and policy that are common to all of the county committees responsible for their respective County Forest programs, including those programs encompassed under s.28.11 and Chapter 77, Wis. Stats. WCFA also provides leadership and counsel to County Forest administrators and forestry committees through regular meetings and active committees on legislative and recreational issues.

## 130 DESCRIPTION OF FOREST

The Bayfield County Forest contains approximately 166,646 acres and is the fourth largest County Forest in the state. The County Forest is arranged into 6 blocking (boundary) units. These units are further divided into 202 management compartments, ranging in size from 254 acres to nearly 1765 acres, with an average of nearly 825 acres. Approximately 98 percent of Bayfield County Forest land falls within the blocking unit boundaries. The remaining 2 percent (3,124 acres) are outside of the designated blocking boundaries. 1,637 acres of Bayfield County Forest land is situated within the boundaries of the Red Cliff Reservation. Eighty seven percent of the land within the County Forest blocking boundary is Bayfield County Forest Land. The remaining 13 percent consists of small private or industrial holdings. A map of these boundaries and compartments can be found in Chapter 900.

## 130.1 NATURAL FEATURES

## 130.1.1 Geography

Bayfield County is the second largest county in Wisconsin with a land area of approximately 944,861 acres, plus another 23,676 acres of water included in State recognized lakes and streams. Approximately 84 percent of the land in the County is classified as forest land.

## 130.1.2 Topography

The Bayfield County Forest is located in the Northwest part of the state and lies primarily within the Lake Superior Lowland and the Superior Highland physiographic regions of Wisconsin. The topography of the forest and surrounding area has glacial origin. The

glaciers eroded hilltops and filled valleys, thus reducing relief. Elevations range from 602 feet above sea level at Lake Superior to 1,610 feet on the western ridges of the Penokee Range in southeastern Bayfield County. The terrain ranges from flat to gently rolling in the "Pine Barrens or Northwest Sands" of central Bayfield County to rolling in the Bayfield Peninsula in the north, as well as the Barnes and Cable blocks to the south.

## 130.1.3 Geology and Soils

The soils of Bayfield County have been derived largely from the weathering of the glacial drift deposits and show a great variation within relatively short distances. Since the glacial period, the soils have been modified by water action, wind, and the accumulation and incorporation of organic material. Soil types on the County Forest range from Superior red clay and sand over clay in the northern most portions of the Forest to outwash sands in the central portions of the Forest to stony sandy loams and silt loams in the southern most portions of the Forest. A generalized soil map can be found in Chapter 900. Detailed soils information is available in the soil survey for Bayfield County and in Chapter 800 for each integrated management unit.

## 130.1.4 Biological Communities

Wisconsin's County Forests are part of a diverse landscape and are managed not as sole entities but part of a larger ecoregion. The National Hierarchical Framework of Ecological Units (NHFEU) was developed to systematically classify areas that have unique combinations of physical and biological characteristics, as well as, similar capabilities and potentials for management. The Ecological Units were created in a hierarchical framework to provide a systematic method for classifying areas at different geographic scales. One of the broadest scales is the province. Within each province are sections, subsections and landtype associations that further group land into areas with similar geology, soil types, surface water features, wetlands and historic and potential plant communities. There are two provinces in Wisconsin. The Laurentian Mixed Forest (212) forms the northern half of the State and the Eastern Broadleaf Forest (222) forms the southern half. The Bayfield County Forest is encompassed within the Laurentian Mixed Forest province which includes the Superior Coastal Plain, Northwest Sands, and North Central Forest Ecological Landscape Units. Landtype Associations (LTA's) found within the Ecological Landscape Units are as follows:

<u>Superior Coastal Plain:</u> Bayfield Lake Modified Till Plain and Douglas Lake Modified Till Plain.

<u>Northwest Sands</u>: Bayfield Rolling Outwash Barrens, Bayfield Rolling Outwash and Washed Till, Oula Washed Moraine, and Gordon Rolling Barrens.

North Central Forest: Hayward Moraines, Smokey Hill Basalt Ridge, Cable Rolling Outwash, and Telemark Washed End Moraine.

LTA's, having common ecological characteristics, allow land managers to better plan for future vegetative communities, wildlife species to feature, and compatible recreation uses. Refer to Chapter 810.1.4 for more information on the National Hierarchical Framework of Ecological Units. More detailed information about Ecological Units and LTA's can be found in the DNR Wisconsin Ecological Landscapes Handbook 1805.1. A map of the Ecological Units and LTA's located in Bayfield County can be found in Chapter 900.

A biological community is an assemblage of different plant and animal species, living together in a particular area, at a particular time in specific habitats. Communities are named for their dominant plant species. The following biological communities are found on the Bayfield County Forest:

<u>Northern Forest</u>: contains mixed deciduous and coniferous forests found in a distinct climatic zone that occurs north of the tension zone. Commonly found in the Superior Coastal Plains and North Central Forest Ecological Landscapes in the northern and southern portions of the County Forest.

<u>Oak and Pine Barrens</u>: typically occur on sandy soils and are dominated by grasses, low shrubs, small trees, and scattered large trees. Most commonly these are pine barrens in northern and southern Wisconsin and oak barrens in the southern and west central parts of the state. Ecological Landscape Northwest Sands in the central part of the forest contains the barrens communities on the Bayfield County Forest.

<u>Grassland</u>: characterized by the absence of trees and large shrubs and the dominance of grass and forb species. Commonly found throughout the County Forest

<u>Wetlands:</u> characterized by soils or substrates that are periodically saturated or covered by water. This community is common throughout the County Forest

<u>Aquatic Communities</u>: including springs, ponds, lakes, streams and rivers. Common throughout the County Forest.

## 130.1.5 Vegetative Cover Types

Approximately 94 percent of the Bayfield County Forest land base is forested. Forested uplands are comprised of primarily mixed hardwood, aspen, oak, red pine, white pine, and jack pine, while fir-spruce, lowland hardwoods, tamarack, and cedar occupy the forested lowlands. The remainder is classified as non-forested, including types such as open water, wetlands, rights-of-way, grass openings, shrubs and bogs. The different cover types present on the Bayfield County Forest are detailed under "Forested Communities" in Chapter 800 (820.1). Chapter 900.5 contains maps showing the vegetative cover types of the County Forest.

## 130.1.6 Wildlife

The Bayfield County Forest provides habitat for wildlife common to Wisconsin.

Numerous species of songbirds, waterfowl, raptors, shorebirds, reptiles, amphibians, fish and mammals frequent the forest. Each species, or interacting group of species, do best under different conditions, ranging from recently disturbed ground to old growth. A diversity of plant communities is essential to providing a niche for a variety of wildlife species. For example, the aspen forest type is recognized as key habitat for ruffed grouse and white-tailed deer and is important in maintaining biological diversity across North America. Similarly, longer rotation forest communities, such as unevenaged northern hardwood, provide important habitat for other, less well-known species, such as pileated woodpeckers or northern goshawk.

Permanently sodded, grassy openings within the forest, many originating from old log landings, camps, old burns, or frost pockets are also vital components of forest wildlife habitat. An effort is being made to maintain and improve the quality and distribution of these openings. Bayfield County manages the habitat for these diverse wildlife populations, while the DNR manages the wildlife populations through state regulations

The Bayfield County forest provides habitat for numerous species of birds, mammals, reptiles, amphibians, and insects. Each species or group of associated species do best under different conditions related to the forest types and management within one or more of the 4 major biological communities found on the County Forest.

<u>Boreal Forest:</u> Bayfield County lands present one of the few opportunities to promote, manage, and maintain this community in Wisconsin. Due to its low occurrence in Wisconsin, uncommon species are associated with this habitat, such as solitary vireo and blackburian warbler. In addition, snowshoe hare, ruffed grouse, woodcock, bobcat and fisher and pine marten are associated with boreal forests.

Northern Hardwoods: Provide the best opportunity to manage for deer, bear, ruffed grouse, and woodcock. The Lake States aspen forest types are vitally important habitat for as lease 116 species of birds. The aspen forest type also supports numerous amphibians, reptiles, and mammals. A wide variety of non-game birds and mammals are associated with uneven aged hardwoods such as red maple, sugar maple, red oak, yellow birch, and hemlock. Red oak within the hardwoods community is important to many wildlife species. Red oak acorns provide food for many wildlife in fall and winter months when food is generally scarce. Maple, basswood, and birch forests provide the best opportunity to manage for interior forest species. Lowlands consisting of black ash, red maple, spruce, fir and cedar forests provide winter food and cover for many wildlife species, especially deer, snowshoe hare, fisher, and bobcat.

<u>Pine Barrens:</u> Provides habitat for sharp tailed grouse, upland sandpipers, badgers, pocket gophers, and coyotes. Various habitat types within Wisconsin pine barrens community, including pine and oak savannas, support at least 140 species of birds, 39 mammals, 134 plants 32 reptiles and amphibians, and 33 butterflies and moths. Many barrens species are rare since less than 1% of the original barrens of Wisconsin exist today. The open nature of barrens provides abundant forage for deer. The pine stands provide thermal cover during winter.

<u>Grasslands</u>: Grasslands of various types provide essential habitat for some species of songbirds, raptors, amphibians, reptiles, deer, and woodcock. Grasslands larger than 10 acres attract many songbirds and raptors that will only nest in large open areas with grass cover and few trees. Smaller grasslands in forested areas provide feeding areas for deer, forest songbirds, and mammals. Many wildlife species use all sizes of grasslands, including red-tailed hawks, leopard frogs, and woodcock.

## 130.1.7 Rare and Endangered Resources

Wisconsin Natural History Inventory data for animals, plants, and plant communities listed as threatened, endangered, or of special concern found in Bayfield County are listed in Chapter 900.8.3. This list is continually updated. Please check for current status of this list on the DNR website.

#### 130.1.8 Water

Bayfield County has 23,676 acres of total surface water involving 954 lakes, 12 flowages and 531 miles of streams. Of this total, 420 miles are classified as trout streams. Within the County Forest boundaries there is a variety of fishery resources. Approximately 27 named and 104 unnamed lakes have all or portions of their shoreline under County ownership. In addition, the County Forest owns frontage on approximately 30 named streams totaling over 150 miles. A complete inventory of these resources can be found in the DNR Publication, "Surface Water Resources of Bayfield County." The DNR also maintains a list of Outstanding and Exceptional Water Resources for Bayfield County. This can be found in Chapter 900.8.4. The list is periodically revised. The most current list can be found on the DNR website.

## 130.2 CULTURAL FACTORS

## 130.2.1 Recreation

Forest-based recreation has expanded rapidly in recent years in Bayfield County. Recreational opportunities with developed facilities include extensive snowmobile and ATV trails, cross country ski trails, mountain bike trails, walking trails, and dog sled trails. Most of these recreational opportunities are maintained through cooperative relationships between Bayfield County and various user groups. Numerous races and other events are held on the Bayfield County Forest. These include the American Birkebeiner Ski Race, the Chequamegon Fat Tire Festival, the United States Individual Orienteering Championships, and the Apostle Islands Sled Dog Race. The county forest also provides tremendous opportunities for informal recreational pursuits not requiring developments. These include; hunting, fishing, trapping, berry and mushroom picking, bird watching, hiking, mountain biking and sight-seeing. See Chap. 500 & 700 for additional information on recreation opportunities on the county forest.

## 130.2.2 Economy

The Bayfield County Forest is vitally important to the economy in both Bayfield County and the region as a whole. Production of forest products provides raw materials for many regional industries and produces revenue for Bayfield County. In addition, recreational opportunities on the County Forest are important to the tourism-based sectors of the County's economy.

#### 130.2.3 Roads & Access

All Bayfield County Forest lands are open for public use and for foot travel. In addition to the town and county roads that access the forest, the County also maintains an extensive network of County Forest roads. Access management remains a controversial issue on the Forest. Both motorized and non-motorized recreation is provided for within the Forest. See Chapter 700 for a detailed discussion on Forest access.

#### 130.2.4 Education and Research

Education and research continue to be critical components in making decisions that affect our natural resources. As public needs and demands of our forest and its products increase, we must

be prepared to assure that sound decisions result. To this end, Bayfield County encourages and supports research efforts that relate to the forest, and educational opportunities that will promote a better understanding of forest communities and management. See Chap. 210 for additional references

#### 130.2.5 Issues and Trends

The values and uses of the Bayfield County Forest contribute significantly to fulfilling many of society's ecological and socioeconomic needs now and in the future. The County Forest is experiencing increasing and sometimes-conflicting demands. Primary among these are increased demand for forest products and increased demand for recreational opportunities, both motorized and non-motorized. Prior to writing this plan, Bayfield County held three public meetings to identify issues and solicit comments for consideration. The issues raised included:

- The County was encouraged to continue multiple use management of the forest.
- Bayfield County was commended for seeking certification of the County Forest.
- Comments were made that there is not adequate law enforcement on the County Forest. This was especially in reference to use of motorized vehicles.
- Citizens spoke against increased motorized use on the County Forest citing the noise, resource damage, and the impact on others trying to use the forest.
- Citizens spoke for more motorized recreational use opportunities on the Forest referencing a need for access to public land, use by older citizens who would otherwise be unable to access remote parts of the forest, and the economic benefits that recreational motorized use of public lands provide.
- The County was encouraged to continue to acquire land to add to the County Forest.
- The County was encouraged continue management that maintains early successional species and pine barrens.
- The County was encouraged to maintain timber production as a priority on the Forest.
  Comments were also made about the importance of maintaining buffers around water resources and of incorporating aesthetics in harvest plans.