

TOWN OF CABLE

LAND USE PLAN

May 2002

PHYSICAL CHARACTERISTICS

LOCATION

The Town of Cable, Bayfield County, is geographically located in the northern highland province of Wisconsin and lies a short distance south of the continental divide that separates the St. Lawrence and Mississippi River Drainage systems.

The most distinguishing landscape characteristics of the town are the glacial lakes set in hilly conifer and hardwood forests. Picturesque hills, scenic wild rivers and streams, spruce bogs, and scattered farmlands add variations to the landscape. The Namakagon River Valley is a dominant landscape feature. The development of cottages, resorts, and homes have not yet reduced the shoreline scenic qualities on all the lakes; however, several of the larger lakes, first settled over 100 years ago, show signs of aesthetic deterioration.

PHYSIOGRAPHY

Continental glaciation is responsible for the present topography of Bayfield County. Where the ice stopped, it deposited terminal moraines - huge accumulations of rock, gravel, sand, and clay pushed along by or carried on the front of the ice sheet. One of these terminal moraines was deposited between two lobes of the Lake Wisconsin Ice Sheet along the western border of Bayfield County. The resulting topography can only be described as rough and is distinguished in the hills south of the Namakagon River from Telemark Resort to U.S. Highway 63. Lakes and swamps occupy many of the deeper kettle holes and it is noticeable that many of the lakes in Bayfield County are in this morainic area. Ground moraine forms the greater part of the topography east and south of the moraine. This was deposited in a broad sheet by the ice, which melted away beneath it; and the present surface is rolling with low ridges and shallow depressions, occupied by swamps rather than lakes.

CLIMATE

The climate in southern Bayfield County is classified as continental, a climate type characterized by large seasonal and daily ranges in temperatures. Winters are long, cold, and snowy. Summers are relatively short and warm with brief periods of hot, humid weather. Summer days are usually warm and sunny, while nights are cool. Spring and fall are often short with sharp day-to-day temperature changes. All seasons have frequent weather changes as alternate high and low pressure systems move across the continent from west to east. The long-term annual average temperature is 41 degrees Fahrenheit (F.). December through March temperatures generally average below 32 degrees F. The growing season averages about 120 days. Average monthly temperatures range from a low of 9.6 degrees F. in January to 66 degrees F. in July. Annual precipitation, including snowfall, is about 32 inches. Snowfall averages between 60 and 70 inches per year.

Prevailing winds are from westerly directions from late fall through early spring and from southerly directions the remainder of the year. April is the windiest month with an average of about 13 miles per hour, while July and August are the least windy with an average of 9 miles per hour.

Possible sunshine averages 60 percent from late spring through early fall, near 40 percent in late fall, and early winter, and between 50 and 60 percent for the remaining months.

GEOLOGY

Igneous and metamorphic rocks of Precambrian age underlie Bayfield County. The principal surface deposits are glacial drift and alluvial sand and gravel. It varies in thickness throughout the county ranging from a few feet to 250 feet.

SOILS

The soils of Cable are upland and outwash types from glacial drift and are acidic in nature.

The chemical constituents of the surface and ground waters are reflections of the soil type of a particular region. Cable's waters tend to be acid, like its soils, and low in the essential nutrients necessary for organic life. Phosphates, potassium, and magnesium levels are lower than in other soil types of the state, while the less essential iron occurs in excessive and often detrimental amounts. Low nutrient levels or fertility is also accentuated in the landlocked lakes where the water source is principally from precipitation with little ground water inflow. Geologic characteristics that greatly affect water quality in the landlocked lakes are the uneven nature of the underlying granitic bedrock formation and deposits of impervious masses of clay in the glacial till. The lakes which form in these pockets tend to have stabilized water levels, which combined with the acidic nature of the soil contributes to the development of encroaching bogs on lakeshores.

WATER RESOURCES

Surface Waters. The total inland surface water area of Bayfield County is 23,676 acres. Of this, approximately 1,400 acres are found in the Town of Cable. There are 15 named lakes in the Town of Cable along with numerous unnamed lakes. These water resources lie mostly within the Upper Namakagon River and Totagatic River watersheds (see Figure 8, page 32). The total miles of lake shoreline are 25 miles with 6 miles in public ownership. Lakes Rosa, Owen and Tahkodah are only partially in the Town of Cable.

Water Quality. The chemical quality of water in streams and lakes in the county is generally very good. The lakes of Wisconsin and Bayfield County fall into four main types when classified by water source and chemistry; hard water drainage, soft water drainage, hard water seepage, and soft water seepage lakes. The other minor types of lakes include acid bog lakes, alkaline bog

lakes, and spring ponds. In terms of surface acreage, the most common type in the town is the soft water drainage lake, including Totgatic and Cable Lakes.

Groundwater Quality. Large supplies of good quality ground water are available in most of the St. Croix Basin, including the Town of Cable. Area differences in ground water quality are due to the composition, solubility, and surface area of the particles of soil and rock through which the water moves and its speed of movement. Minor water use problems are caused by hardness and locally high iron concentrations. Water from the deeper sandstone aquifers is slightly more mineralized as opposed to the surficial sand and gravel acquirers. The concentration of nitrate in ground water of the town is generally low.

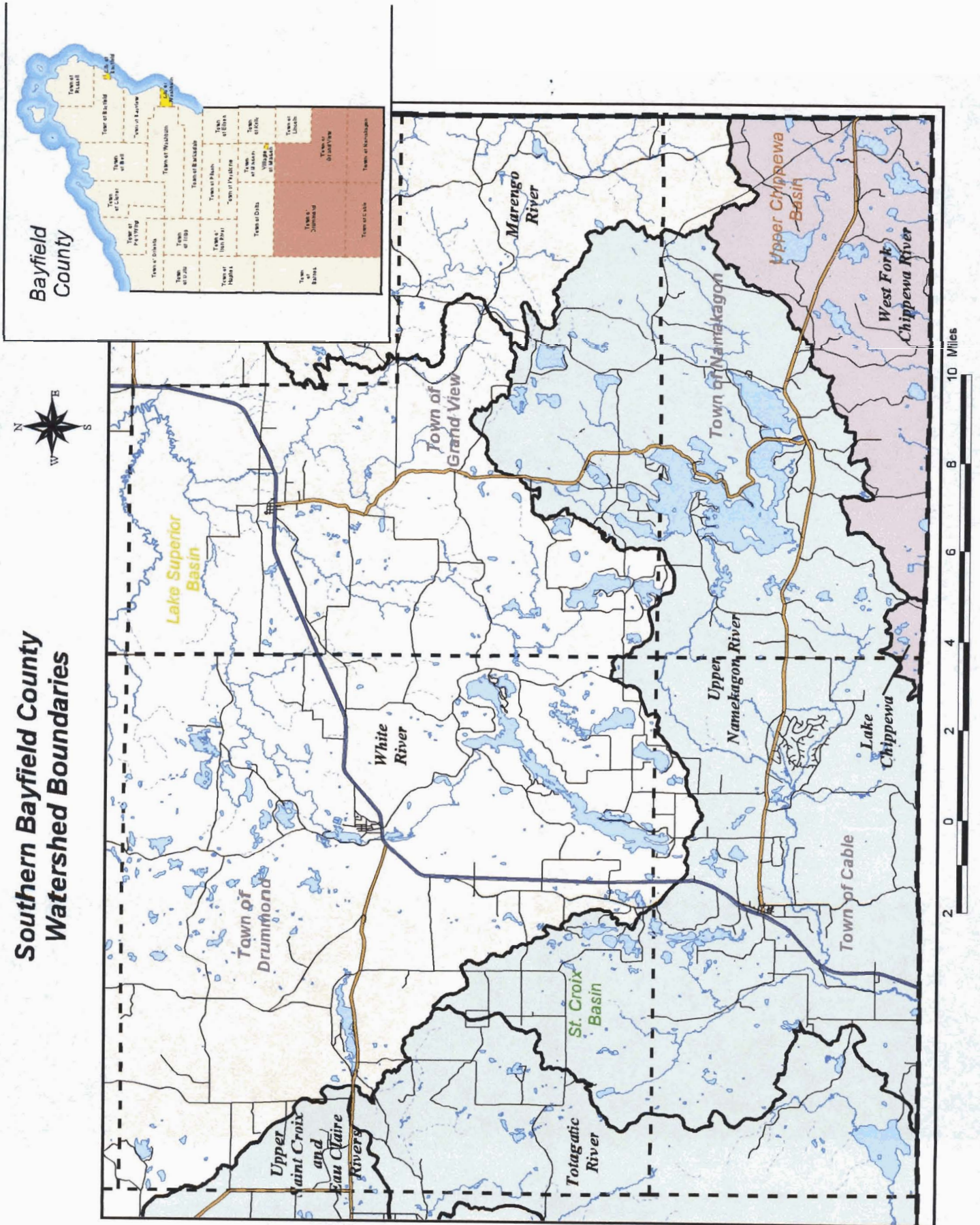
Floodplains. Areas susceptible to flooding are considered unsuitable for development because of risks to lives and property. Effective in 1981, the Flood Hazard Boundary Map (FHBM) for Bayfield County is the most recent source for identifying areas subject to flooding in the Town of Cable; these flood hazard maps are available from the Bayfield County Zoning Office. The FHBM is intended to be general in nature and additional field checking may be required to determine whether or not a given area is in the floodplain before development is authorized or denied.

Wetland Resources. The Wisconsin Wetland Inventory is available for Bayfield County and estimates that about 7,526 acres of all types of wetlands exist in the Town of Cable. This is about 16 percent of the town's area. Wetlands in Bayfield County are mapped at two acres and greater in size.

Wetlands serve several important environmental functions including flood control, water quality improvement, and groundwater recharge as well as providing habitat for fish and wildlife. Figure 9, page 33, delineates wetlands two acres and over mapped by the Wisconsin Department of Natural Resources (DNR) on its digital Wisconsin Wetland Inventory Maps and may not reflect all areas considered wetlands by the United States Department of Agriculture (USDA) or the U.S. Army Corps of Engineers.

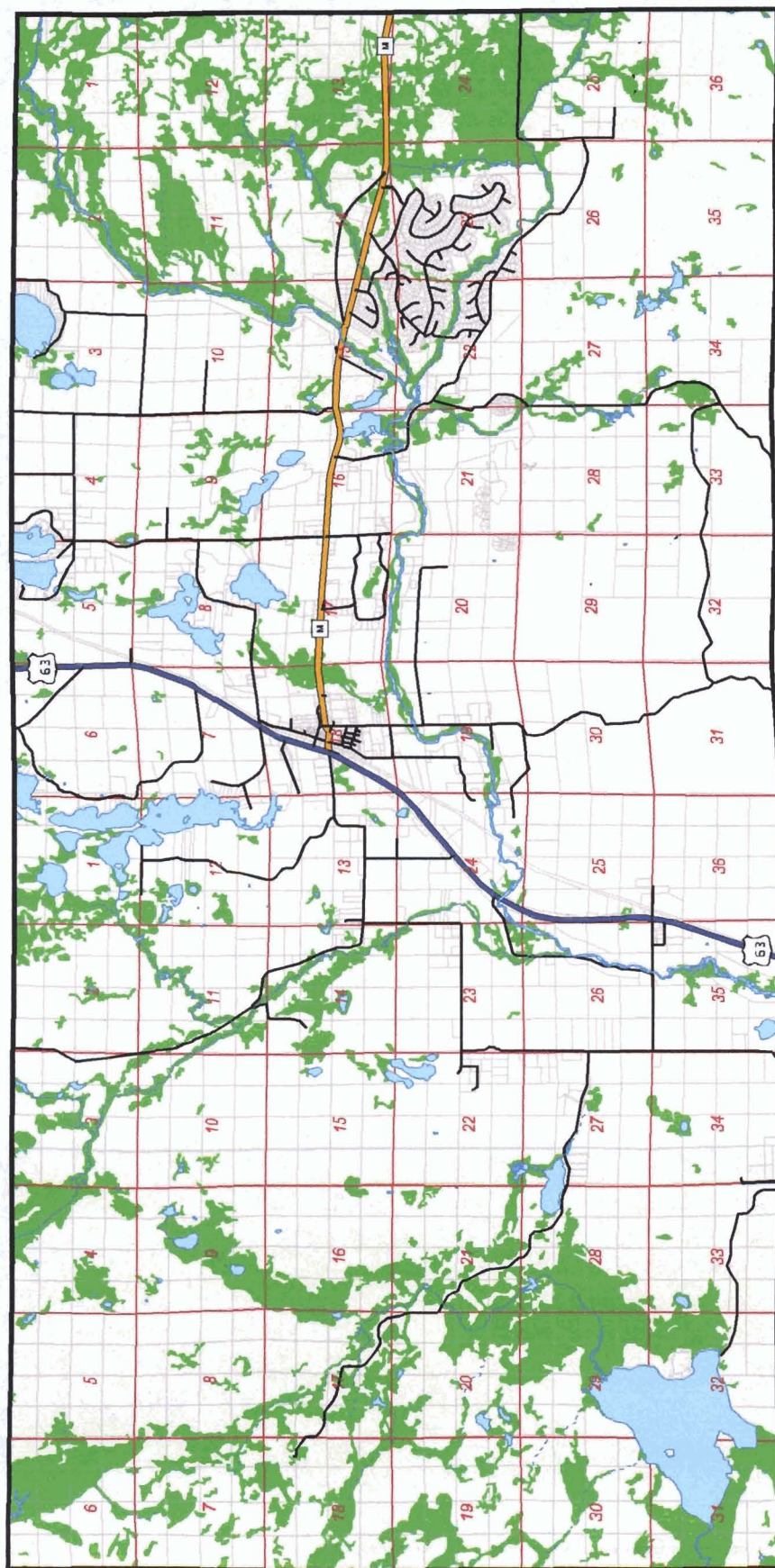
A complex set of local, state, and federal regulations place limitations on the development and use of wetlands. The Shoreland/Wetland Zoning Ordinance adopted by Bayfield County regulates shoreland use and development within 300 feet of navigable streams and 1,000 feet of lakes (Figure 10, page 34). The Department of Natural Resources regulates the placement of structures and other alterations below the ordinary high water mark of navigable streams and lakes. The Corps of Engineers has authority over the placement of fill materials in all shoreland wetlands. And, after the recent enactment of Wisconsin Act 6, the Wisconsin Department of Natural Resources has regulatory authority over non-shoreland wetlands. Prior to placing fill or altering wetland resources, the appropriate agencies should be contacted to receive authorization. Wetlands are scattered throughout the town with some of significant size. These wetlands include a wide diversity of wetland types from emergent/wet meadow to scrub/shrub to deciduous and coniferous forest.

Figure 8



Town of Cable Wetlands

Figure 9



1 0 1 2 3 Miles

1:80000

Legend

- Federal Highway
- State Highway
- County Road
- Town Road
- Parcel Boundaries
- Stream
- Lake
- Wetland

Road data derived from the U.S. Census Bureau TIGER/Line files. Wetland and Hydrography data compiled by the Wisconsin Department of Natural Resources, from 1:24,000 sources. April 4, 2000 parcel data courtesy of the Bayfield County Land Information Office.

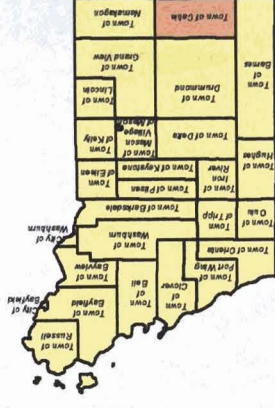


Figure 10



Legend

-



BIOLOGICAL COMMUNITIES

A 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 in the area:

Northern Forest: Contains mixed deciduous and coniferous forests found in a distinct climatic zone that occurs north of the tension zone.

Wetlands: Characterized by soils or substrate, which is periodically saturated or covered by water.

Aquatic Communities: Including springs, ponds, lakes, streams, and rivers.

WILDLIFE

The local area provides habitat for a variety of wildlife species including the following important waterfowl, furbearers, and game animals:

Beaver	Mallard	Ruffed Grouse
Black Bear	Mink	Sharptailed Grouse
Blue-wing Teal	Muskrat	Snowshoe Hare
Bobcat	Otter	Timber Wolf
Common Loon	Raccoon	White tailed Deer
Coyote	Red Fox	Wood Duck
Fisher	Ringnecked Duck	Woodcock

Two important rare and threatened species, the bald eagle and osprey inhabit the area. The osprey is listed as threatened by the WDNR. The two most popular game animals are the whitetail deer and ruffed grouse. These two species are primarily associated with the aspen type in the area.

The most common nesting waterfowl are mallard, wood ducks, and-blue-winged teal. Less common are the hooded and American mergansers and ring-necked ducks.

The most abundant migratory waterfowl during the spring and fall seasons in Bayfield County are scaup, ring-necks, coot, and mallards. Less common are goldeneyes, buffleheads, redheads, canvasbacks, black ducks, and blue-winged teal.

Besides the waterfowl and beaver inhabiting the local wetlands and waters, muskrats, mink, and otter are also important resources.