

## **Agricultural, Natural and Cultural Resources**

### **Introduction**

This element provides a baseline assessment of the Town of Round Lake’s agricultural, natural and cultural resources and covers all the information required under SS66.1001. Information includes productive agricultural areas, a natural resource inventory and a cultural resource inventory. This provides a basis for creating goals, objectives, policies, maps and actions to guide the future development and maintenance of agricultural, natural and cultural resources in the Town of Round Lake.

The Town of Round Lake, like other communities in Sawyer County, has diverse and abundant high-quality natural resources worth protecting for the economic, recreational, aesthetic and ecological needs of current and future residents.

Throughout the planning process, specific resources within the Town of Round Lake will become better understood, and goals will be updated to support their protection and maintenance over time.

### **AGRICULTURAL RESOURCE INVENTORY**

The following section details some of the important agricultural resources in Sawyer County. Most farming and agricultural data are not collected at the Town level. Assumptions about Town resources can be made based on data collected at the county level. The information comes from a variety of resources, including the U.S. Census of Agriculture. Various other relevant plans exist (i.e. – Sawyer County Farmland Preservation Plan, 1982).

### **Agriculture in Sawyer County**

In the mid to late 1880s, with the forest cutover nearly complete, prospective development of farming-cleared land was marketed locally and nationally. Small ready-to-go farms (a home, pigs, chickens, etc.) were available to purchase. In 1920, there were 823 farms and farm operations throughout Sawyer County, covering 86,914 acres. By 1930, a total of 1,006 farms and farm operations were in existence covering 102,278 acres. While the number of farms peaked in 1940 at 1,300 farms, total farm acreage peaked in 1950 at 142,584 acres (Sawyer County Farmland Preservation Plan). Based on 2019 tax assessment data, in the Town of Round Lake a total of 82 parcels are assessed as agricultural, totaling 1,460 acres. By comparison, **Map 8.1**—Existing Land Use Map shows a total of 1,554 acres represented as agriculture on the map. The Town’s total assessed acreage represents 3.4 percent of the county’s total assessed agriculture acreage. Over the period covering 2008 to 2019, total agricultural parcels increased by one, and total acreage increased by 40 acres in the Town of Round Lake.

**Table 5.1** provides information on the number and size of farms in Sawyer County for the years 2002, 2007, and 2012. The total number of farms in Sawyer County decreased by 59 farms between 2007 and 2012.

**Table 5.1: Sawyer County Farms and Lands in Farms 2002-2012**

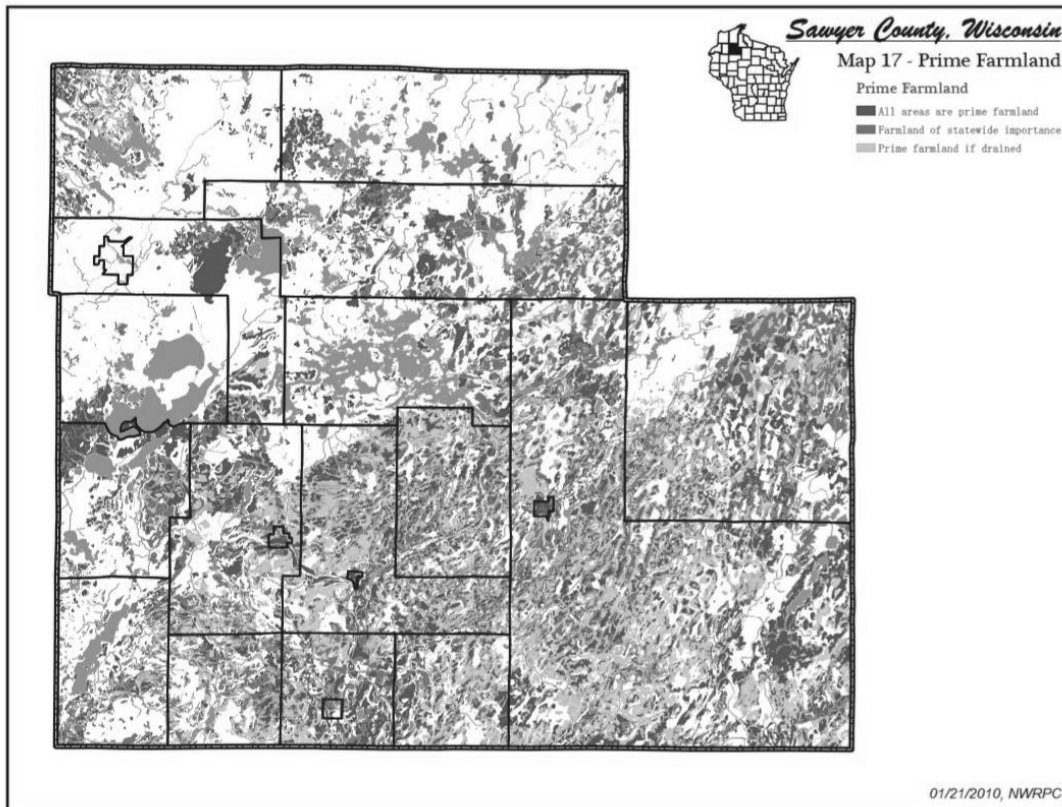
Farms and Land in Farms	2002	2007	2012	Percent Change 2007-2012
Number of Farms	230	231	172	-25.2%
Land in Farms (acres)	54,056	47,093	43,554	-19.4%
Average Size of Farms (acres)	235	204	253	7.6%

Source: U.S. Census of Agriculture, 2002-2012

**Productive Agricultural Areas**

Productive or prime agricultural lands are defined by the Natural Resources Conservation Service (NRCS) as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops. The land must also be available for these uses (cropland, pastureland, forestland, or other land but not water or urban built-up land).”

Prime farmland has the soil quality, growing season and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. The map below denotes prime farmlands. Note that most of the Town’s historically prime farmlands are in forest use.



Other agricultural lands of significance are classified by the USDA as unique farmland, farmland of statewide importance, and farmland of local importance. Unique farmland is classified as land, other than prime farmland, that is used to produce specific high value food and fiber crops (i.e. cranberries). Farmland of statewide importance includes areas that are identified as having value to the state. Whereas farmlands of local importance are areas that are not identified as having national or statewide importance but are identified by local agencies as valuable to produce food, fiber, forage, and oil-seed crops. This may include lands that have been designated for agriculture by local ordinances.

**Existing Agricultural Protection**

The Sawyer County Zoning Ordinance is the primary tool regulating the use of agricultural lands in the rural areas. The Agriculture-1 (A-1) zoning district provides for the continuation of general farming and related activities in those areas best suited for such development, and provides for orderly development of residential, commercial and industrial development. Year-round residences are permitted within this district only when persons engaged in farming activities on the premises occupy these dwellings. The Agriculture-2 (A-2) zoning district provides for light and hobby farming and related activities, and provides for orderly development of residential, agricultural and commercial activities in those areas best suited for development. Year-round residences are similarly restricted to persons engaged in farming activities on the premises. Non-farm residential development is allowed within this district with approval from the Town Board. Both districts require a minimum lot size of five acres for creation of new parcels.

**NATURAL RESOURCE INVENTORY**

The following section details some of the important natural resources in the Town of Round Lake and can be found in the 2009 version of the Town of Round Lake’s Comprehensive Plan. Only information requiring updating has been included in this 2019 Update.

**Floodplains**

Floodplains are important and valuable natural resources. They provide wildlife habitat, storm water retention, and serve as groundwater recharge areas.

Development in these areas may lead to high construction costs, storm damage repairs and environmental degradation.

Additional costs and maintenance can include flood proofing, requirements for flood insurance, and water-related repairs to roads, water mains and sewers.

Due to these limitations, the state requires that cities, villages and Towns develop a floodplain/shoreland-zoning ordinance to address the issues above. This is located at [www.sawycountygov.org/DocumentCenter/View/1983/Floodplain-Ordinance-7-1515](http://www.sawycountygov.org/DocumentCenter/View/1983/Floodplain-Ordinance-7-1515).

Development in these areas is usually allowed, but certain design standards and increased setbacks may be required.

The floodplain is normally defined as those areas that are subject to inundation by the 100-year recurrence interval flood event. This means that in any year there is a one-percent chance that the area will flood. High-density development in floodplain areas should be discouraged and park and open space encouraged. Floodplain areas generally overlap wetland areas and are located along the various water features. Digital floodplain maps are currently available at [www.dnr.wi.gov/topic/floodplains](http://www.dnr.wi.gov/topic/floodplains). The Sawyer County Zoning Department also uses regional flood elevation data to determine whether a building footprint would be near or in a suspected floodplain area. For more information regarding floodplains and where they are located, please refer to the county zoning administrator or FEMA’s official floodplain maps.

**Surface Water Resources**

Surface waters are important in maintaining ecological integrity and diversity. The Town of Round Lake has an abundance of surface waters in lakes, ponds, rivers and streams. In all, the Town has 140 miles of shoreline, covering approximately 5,780 acres, and 70 miles of rivers and streams. The majority of shoreline can be attributed to: Round Lake, Moose Lake and Tiger Cat Flowage. There are 25 named lakes and flowages, as well as numerous unnamed ponds. There also are 12 named rivers and streams and their tributaries. (See **Table 5.4** and **Map 5.7**).

<b>Table 5.4: Town of Round Lake Lake Characteristics</b>			
<b>Lake Name</b>	<b>Surface Acres</b>	<b>Max. Depth</b>	<b>Lake Type</b>
Beaver	47.0	20 ft	Seepage
Black	129.4	15 ft	Drainage
Bulldog Spring	11.1	9 ft	Spring
Burd	14.4	6 ft	Seepage
Burns	36.8	9 ft	Drainage
Callahan/Mud	545.0	16 ft	Drainage
Camp Four, East	17	10 ft	Seepage
Camp Four, West	27.1	6 ft	Seepage
Clear	77.4	32 ft	Seepage
Currier	19.3	29 ft	Seepage
Davies	20.0	6 ft	Seepage
Farnsworth	20.3	25 ft	Seepage
Hay Creek Springs	8.4	18 ft	Spring
Little Round	243.1	38 ft	Drainage
Lovejoy	76.3	20 ft	Seepage
McClaine	48.6	15 ft	Drainage
Mirror	37.6	27 ft	Seepage
Moose	1,601.6	18 ft	Drainage
Mosquito Brook Flowage	290	7 ft	Drainage

Placid	160.0	30 ft	Drainage
Round	2,783.5	70 ft	Drainage
Snipe	21.8	7 ft	Seepage
Spring	20.5	10 ft	Drainage
Teal River Flowage	74.7	9 ft	Drainage
Tiger Cat Flowage	224.3	11 ft	Drainage

Source: Sawyer County Lakes Classification

**Lake Types**

Lakes are generally classified into four ecological types, based on their water source and type of outflow.

- Seepage lakes are natural lakes fed by precipitation, limited runoff and groundwater. These lakes do not have a stream outlet. These lakes are generally acidic, low in nutrients, and susceptible to acid rain. Within the Town, 11 of the named lakes are seepage lakes.
- Groundwater drainage lakes (spring lakes) are natural lakes fed by groundwater, precipitation, and limited runoff. These lakes have a stream outlet. These lakes are usually well buffered against acid rain and contain low to moderate amounts of nutrients. Hay Creek Springs and Bull Dog Springs are classified under this type.
- Drainage lakes are lakes fed by streams, precipitation, groundwater and runoff, and drained by a stream. In these lakes, the nutrient content is usually high, with water exchange happening quite rapidly. Water quality in these lakes is variable, depending on runoff and human activity in the watershed. In the Town, 12 of the named lakes are classified as drainage lakes.
- Impoundments (flowages) are manmade lakes created by damming a stream. A stream also drains these lakes. Watershed management is critical for impoundment lakes as the natural movement of the water causes soil and nutrients to collect in the impoundment. In the Town, Tiger Cat Flowage, Moose Lake Flowage, Callahan Lake and Mosquito Brook Flowage all utilize dams.

The Department of Natural Resources classifies water bodies as outstanding resource waters (ORW) or exceptional resource waters (ERW) under Chapter NR 102 of the Wisconsin Administrative Code. ORWs typically do not have any point sources discharging pollutants directly into the water (for instance, no industrial sources or municipal sewage treatment plants). No increases of pollutant levels are allowed. If a water body has existing point sources at the time of designation, it is more likely to be designated as an ERW. Like ORWs, dischargers to ERW waters are required to maintain background water-quality levels. These waters have outstanding recreational, cultural, aesthetic or scientific resource value, and therefore have special protection from degradation.



In the Town of Round Lake area, Outstanding Water Resources and Exceptional Water Resources include the following waters (**Map 5.7**—Surface Waters & Wetlands).

- Outstanding Resource Waters
  - Round Lake
  - Teal Lake
  - West Fork of the Chippewa River
  - Teal River Flowage
  
- Exceptional Resource Waters
  - Moss Creek

Additionally, there are four creeks that are classified as WDNR trout streams. Wisconsin trout streams are placed into three classes for fish management purposes.

- Class 1 – These are high-quality trout waters that have enough natural reproduction to sustain populations of wild trout at or near capacity. These streams do not require stocking and usually contain small or slow-growing trout, especially at the headwaters.
- Class 2 – These streams may have some natural reproduction but not enough to utilize available food and space; therefore, stocking is required to maintain a sport fishery. These streams have good survival and carryover of adult trout, often producing some fish larger than average size.
- Class 3 – These waters have marginal trout habitat with no natural reproduction occurring. They require annual stocking to maintain a sport fishery, with no carry-over of trout from one year to the next.

Classified trout streams in the Town of Round Lake include the following creeks (**Map 5.9**— Trout Streams).

- Moss Creek is designated as a Class 1 trout stream
- Hay and Dead Creeks as Class 2 trout stream
- Venison Creek is classified as a Class 3 trout stream

The Environmental Protection Agency (EPA) requires all states to list water bodies that do not meet specific water quality standards under the Clean Water Act. This list is updated every two years, and the results can be searched at <https://dnr.wi.gov/water/impairedSearch.aspx>.

### **Sawyer County Shoreland Vegetative Buffer Zone**

Sawyer County Shoreland-Wetland Protection Ordinance designates land that extends from the ordinary high-water mark to a minimum of 35 feet inland as a vegetative buffer zone. The purpose is to protect water quality, fish and wildlife habitat and natural scenic beauty, and to promote preservation and restoration of native vegetation. Removal of vegetation in the vegetative buffer zone is prohibited except for removal of trees and shrubs less than 6” in diameter to create access and viewing corridors. Trees larger than 6” in diameter may be

limbed within the access and viewing corridors. The corridor may be at least 35 feet wide for every 100 feet of shoreline frontage. The viewing corridor may run contiguously for the entire maximum width of shoreline frontage owned. **Table 5.5** shows the dimensional requirements for development on shoreland property by zone district.

**Table 5.5 – Dimensional Requirements for Sawyer County Shoreland**

Zone District	Lot Size (Square Feet)	For each Single Family Dwelling Unit - Lot Width (Feet)	Shoreline Setback (Feet)	Lot Depth (Feet)	Vegetation Removal	Side Yard Setback for all Structures
RR-1 RR-2 R-1	20,000	100 *200	75	200	35% of frontage within 35' of the ordinary high- water mark	10' minimum 40' minimum total
F-1 Ag-1 Ag-2	5 acres	300	75	200	35% of frontage within 35' of the ordinary high- water mark	10' minimum -40' minimum total

Source: Sawyer County zoning ordinance. \*Note: Two family dwelling/duplex.

**Lake Data**

The following section provides a brief overview of the surface water quality in the Town of Round Lake. Many factors effect water quality of an area, including adjacent land uses (agricultural, residential and commercial development), recreational use of the water body, and physical characteristics of the lake and surrounding area (steep slopes, small lake or watershed, or type of lake). This section examines different water-quality characteristics and how they relate to the water quality of the Town.

**Background and Existing Data**

There has been a moderate amount of background data in the past documenting water quality in Sawyer County and the Town of Round Lake. The first statewide effort to collect water-quality data occurred in the 60’s and 70’s when the WDNR tested most of the lakes and streams to complete a statewide inventory. The WDNR published “The Surface Water Resources of Sawyer County” in 1969 as part of this initiative. More recently, however, there have been other reports detailing water quality in the area. In 1996, the WDNR published The Upper Chippewa Basin Water Quality Management Plan to address the concerns facing the basin. This plan broke down the basin into watersheds and developed specific recommendations unique to that area. The plan also lists lake and stream data, as well as maps of each watershed. The WDNR is in the process of updating this plan, which will be called “The State of the Upper Chippewa Basin.” The WDNR manages the self-help lake-monitoring program that allows residents of lake areas to get involved collecting data on their lake. These data have helped the WDNR keep and update valuable information in documenting changes in Wisconsin’s

lakes. Many of the lakes in the Town have been part of this effort. The county has also completed a Land and Water Resource Management Plan covering the years 2017-2026. The previous inventory is by no means an inclusive list of the studies and reports of water quality in the area. Many other regional and state reports are available that list both ground- and surface-water quality.

**Forests**

Forests offer the most defining characteristics of northern Wisconsin and the Town of Round Lake. This resource represents significant cultural, social, environmental and economic assets for citizens and communities. Forests provide a range of benefits, including wildlife habitat, forest products, recreational opportunities, aesthetics and other benefits. According to existing (2019) land use data, approximately 61,440 acres (80%) of land in Round Lake are currently managed by some type of forestry (**Table 5.6** and **Map 5.10**—Forestry Related Land Uses). This is a 3,434 acre decrease from 2009. (Town of Round Lake encompasses 76,800 acres).

<b>Table 5.6: Forest Acres</b>		
	<b>Acres</b>	<b>Percent</b>
Town Forest	214.3	0.3%
County Forest	2748.8	4.2%
State Forest	385.5	0.6%
Federal Forest	34388.9	53.0%
Private Forest	22845.9	35.2%
Managed Private Forest	4290.3	6.6%
<b>Total Forest</b>	<b>64,873.7</b>	<b>100.0%</b>

Source: NWRPC GIS Analysis

Some of the privately-owned forested lands are enrolled in the state’s Forest Crop or Managed Forest programs (**Map 5.11**-Land Ownership), which give tax incentives to the landowners for properly managing their lands in exchange for public access. The Managed Forest Program replaced the Forest Crop Program in 1986. Owners of forest land enrolled in the Forest Crop Program must allow public access for fishing and hunting activities. Under the newer Managed Forest Program, in addition to hunting and fishing, private landowners may allow public access for cross-country skiing, sightseeing and hiking. <http://www.dnr.state.wi.us/forestry/ftax/>

**Timber Harvesting**

The U.S. Forest Service, as a goal in the Chequamegon-Nicolet National Forest Plan, plans to contribute toward satisfying demand for wood products and special forest products through environmentally responsible harvest on National Forest System lands. Their objective is to ensure that harvest levels of special forest products are within sustainable levels.



In the past, local forest harvesters and Forest Service officials have shown frustration over the limited amount of timber harvested within the national forest due to various litigations. The quantity (usually expressed as the average, annual allowable sale quantity) of timber that could be sold from the Chequamegon-Nicolet National Forest is estimated at 102 million board feet for 2019. However, the actual sale in 2018 was 128.7mbf and in 2017 120.5mbf. This represents a substantial increase from a previous high level of 72.5mbf in 1999 with a value of \$7,645,687.

(Source: US Forest Service and Sawyer County)

### **Management Indicator Species**

Several management indicator species such as timber wolves, martens, bald eagles and elk, among others, have been reintroduced or have been targeted for restoration in the national forest and are now establishing populations. Examples and updates of these reintroductions are based on the 2007 Chequamegon-Nicolet National Forest Monitoring and Evaluation Report.

– **Bald Eagle**

“The bald eagle has recovered in the state of Wisconsin far beyond its recovery goals. In 1978, a goal of 360 nesting pairs was set. This goal was achieved in 1991, and bald eagles continue to increase in numbers. The bald eagle has also been removed from the endangered species list as of July 9, 2007.”

– **American Marten**

This species was reintroduced into the area in the recent past (1980’s-1990) and have dispersed little since that time. The Forest Service continues to work on determining what the important habitat features are for maintaining marten viability in the region.

– **Rocky Mountain Elk**

In 1993, the Wisconsin State Legislature authorized the University of Wisconsin-Stevens Point (UW-SP) to evaluate the potential for reintroducing elk to the Great Divide District (GDD) of the Chequamegon National Forest (CNF) near Clam Lake. In the winter of 1994-1995, 25 elk were captured from Michigan’s Lower Peninsula. After an acclimation period and health testing, the elk were brought to Wisconsin in May 1995. The core area of release was in the Chequamegon-Nicolet National Forest near Clam Lake, at the confluence of Ashland, Bayfield and Sawyer counties. The core area lies entirely within the Great Divide Ranger District of the national forest. Management responsibility of the herd was transferred from the University of Wisconsin-Stevens Point to the Wisconsin Department of Natural Resources in May 1999. The long-term goal is to expand the Clam Lake herd to 1400 elk—about one to two elk per square mile of elk habitat. Much of the present elk habitat lies within Sawyer County and elk sightings are possible, particularly in open areas during the fall mating season. (In 2015-2016, 73 elk were released in Jackson County at the Black River State Forest, and in 2017, 31 elk were released in the Flambeau River State Forest near Winter.) According to WDNR, the elk herd in 2008 numbered 146 elk. In March 2018, the Clam Lake herd measured 185 and the Black River herd 55. Many groups and organizations are active in the elk-restoration project, and many different management projects are ongoing. Such groups as the



**Gray wolf**

The gray wolf population throughout northern Wisconsin has been increasing steadily since 1993. A minimum count over winter 2006-2007 consisted of 540 to 577 wolves. As a result of this increase in numbers, the U.S. Fish and Wildlife Service removed the gray wolf from the Federal Endangered Species List on March 12, 2007. On September 29, 2008, a district judge in Washington, D.C ruled that grey wolves in the Western Great Lake Region (including Wisconsin) were to be returned to the List. This means that landowners do not have the right to shoot wolves in the act of attacking pets or livestock on their property. Reimbursement for wolf losses may be possible, and USDA Wildlife Services will still be available to investigate depredations (1- 800-228-1368 in northern Wisconsin and 1-800-433-0663 in southern and central Wisconsin).

Wildlife Services can also give advice and assist in nonlethal means to discourage wolves. This listing status also limits the state of Wisconsin’s ability to manage a wolf harvest season. In the winter of 2015-2016, there were 866-897 animals in 222 packs over the entire state, a 16% increase from the previous year. In northern Wisconsin alone, there were 701 wolves in the winter of 2017-2018. **Map 5.12**—Elk and Wolf Range also illustrates 2008 wolf territories and pack names for Round Lake and surrounding area.

**CULTURAL RESOURCE INVENTORY**

The story of agriculture, resource use and land stewardship are preserved in archaeological sites, buildings, landscapes, written accounts, photographs, governmental records, and in the thoughts and ideas people remember and pass along by word of mouth. Archaeological, culture sites and features are non-renewable resources and once destroyed, either by natural or human-related activities, cannot be reclaimed. Countywide, there are over 100 culturally or historically significant landmarks, buildings or areas. There are countless other cultural and historical resources that remain undocumented.

Greater detail about the area’s cultural resources is available in the Town of Round Lake 2009 Comprehensive Plan.

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