

CHAPTER 2 - AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

INTRODUCTION TO THIS ELEMENT

Farming and farm-related businesses provide important contributions to many local economies. **Agriculture** is also significant because farmland and working farms dominate the rural landscape and help define local community identity and culture. Farmland in Wisconsin has been under increasing pressure in the last decade because a relatively poor agricultural economy prompted farmers to sell land and a robust non-farm economy enabled many urban dwellers to realize their dream of living in the country. From 1996 through 2000, over 313,000 acres of Wisconsin farmland have been removed from agriculture. In addition, the state's most productive soils are located in the southeastern third of the state where most population growth is occurring. The American Farmland Trust has identified southeastern Wisconsin as one of the three most threatened farmland resources in the United States. Together, these issues make planning for agriculture essential.

We depend on **natural resources** in many ways: to provide a clean and abundant supply of groundwater and surface water; assure safe air to breathe; and to provide a natural landscape of terrestrial and aquatic habitats, such as forests, prairies and wetlands that are fundamental to a healthy and diverse biological community. Natural resources include the parks, trails, scenic areas, and other outdoor places we rely on for recreation. Also, natural resources are essential to a vibrant economy—measured in tourism revenues, enhanced property values, sustainable agriculture, low cost raw materials (such as sand, gravel, and stone), available water for manufacturing processes, etc. Since these resources are limited, it is important to care for them, use them wisely, and avoid unplanned or poorly planned development patterns, which unnecessarily increase demand for water, land, and raw materials.

Cultural resources include historic buildings and structures as well as ancient and historic archeological sites. A preservation ethic provides the historical context for future planning and land use policies, because older neighborhoods and historic buildings can determine the style and scale of future development. In addition, preserving the unique history of a community helps build a “sense of place” and brings a long-term perspective that promotes stability and more careful decision making.

66.1001(2)(e)

Agricultural, natural and cultural resources element. A compilation of objectives, policies, goals, maps and programs for the conservation, and promotion of the effective management, of natural resources such as groundwater, forests, productive agricultural areas, environmentally sensitive areas, threatened and endangered species, stream corridors, surface water, floodplains, wetlands, wildlife habitat, metallic and nonmetallic mineral resources consistent with zoning limitations under 295.20(2)s. 295.20 (2), parks, open spaces, historical and cultural resources, community design, recreational resources and other natural resources.

SUMMARY AND IMPLICATIONS OF INVENTORY AND RECOMMENDATIONS

Summary: **Agriculture** is the major land use within the Town of Mitchell and according to 2003 and 2006 citizen input survey results, Town residents would like to keep it that way. The majority of land outside the Kettle Moraine State Forest that is presently being used for agricultural purposes has soils capable of producing quality grains and grazing crops. Several areas exist throughout the Town that are prime for the pursuit of farming as a vocation and lifestyle. Twenty-five of the thirty-six sections within the Town currently have cropland or farm-related production taking place upon them.

Implications: The large amount of agricultural use within the Town is important to the local economy and preserves open space, both which are valued by residents. Agricultural lands with long vistas are part of the Town's identity, but they are also prized by developers of new residential lots. The Town's agricultural areas should be preserved to maintain the agricultural community and open space values of the local residents within the Town of Mitchell.

Summary: **Natural resources** play a major role in the Town of Mitchell primarily due to the prominent landforms and landscape, abundant open space, expansive woodlands of the Kettle Moraine State Forest and wetlands and streams. The State of Wisconsin has recognized this by including a significant portion of the northern and western part of the Town in the Northern unit of the Kettle Moraine State Forest.

Implications: The 2005 Town of Mitchell citizen input survey showed 83.0% of respondents agreed that the Town should direct development away from sensitive environmental areas such as kames and wetlands and 82.4% of respondents agreed that the Town should preserve, where appropriate, agricultural lands and open space. In light of the importance of natural resources and the opinions of residents, specific efforts should be made to protect the Town's natural resources, especially in ways that stress voluntary landowner participation and do not impose burdens on Town taxpayers.



Rolling farmlands and natural areas in the Town of Mitchell.

Summary: **Cultural resources** are relatively limited in the Town of Mitchell due to its small population. While local officials would seldom discourage private investments in cultural resource inventorying or preservation, public investments are unlikely due to limited funds.

Implications: There may be a small number of historically significant sites within the Town that are overlooked or neglected. Without the enhancement of these sites, the Town may lose some of what makes it unique.

INVENTORY

Climate

Sheboygan County typically experiences continental weather with some modification by Lake Michigan. The cool waters of the lake delay spring, while relatively warm water in fall retards early frost. Summers, on average, are mild due to the proximity to water that moderates daily extremes. Weather data for the Town of Mitchell are shown in Figures 2.1 and 2.2.

About two-thirds of the annual precipitation falls during the growing season. It is normally adequate for vegetation, although drought is occasionally reported. The climate is most favorable for dairy farming; the primary crops are corn, small grains, hay, and vegetables.

The growing season averages 126 to 165 days. The average date of the last spring freeze varies from the first week to the last week of May, with a median date of last frost of May 11. The first autumn freezes occur in early to mid-October, with a median date of first frost of October 6. The mean date of first snowfall of consequence, an inch or more, occurs in early November. The snow cover acts as protective insulation for grasses, autumn seeded grains, and other vegetation.

While a detailed site assessment for the Town of Mitchell has never been done, Wisconsin Division of Energy computerized models indicate wind speeds average 10-12 miles per hour at a height of 30 meters, which is a typical height for small private wind generators (in general, winds exceeding 11 mph are required for cost-effective installations). Computerized models indicate wind speeds average 13-14 miles per hour at a height of 60 meters, which is a typical height for large commercial wind turbines (in general, winds exceeding 13 mph are required for financially feasible projects).

Figure 2.1 – Town of Mitchell Weather Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average temp. (°F)	18.4	22.9	32.8	44.1	55.6	65.2	70.7	69.0	61.0	49.8	36.5	24.3
High temperature (°F)	26.2	30.7	40.6	52.8	65.5	75.3	80.2	78.1	70.4	58.5	43.7	31.3
Low temperature (°F)	10.7	15.0	24.9	35.5	45.7	55.1	61.1	60.0	51.6	41.0	29.3	17.3
Precipitation (in)	1.4	1.2	2.2	3.3	3.3	3.8	3.9	4.3	3.7	2.6	2.6	1.8

Based on data from the weather station at Plymouth, Wis., latitude 43°45' N, longitude 87°59' W, elevation 865 ft.

Figure 2.2 – Town of Mitchell Weather Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days with precip.	11	10	12	12	12	11	10	9	9	9	10	11
Wind speed (mph)	12.1	11.8	12.2	12.4	11.1	10.1	9.3	9.1	10.0	11.0	12.0	11.7
Morning humidity (%)	77	78	79	78	78	80	83	87	86	81	80	80
Afternoon humidity (%)	70	68	66	62	61	63	63	66	66	64	69	72
Sunshine (%)	45	48	51	53	60	65	68	65	59	53	39	38

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days clear of clouds	7	6	6	6	7	8	10	10	9	9	5	6
Partly cloudy days	6	6	8	8	10	10	11	11	9	8	6	6
Cloudy days	18	15	17	16	14	12	10	10	12	13	18	19
Snowfall (in)	13.3	9.0	8.4	2.1	0.1	0.0	0.0	0.0	0.0	0.2	3.3	10.6

Based on data from the weather station at Plymouth, Wis., latitude 43°45' N, longitude 87°59' W, elevation 865 ft.

Geology

Two different types of geologic settings, Quaternary geology and bedrock geology, characterize Sheboygan County. Quaternary geology refers primarily to the effects that continental ice sheets have had on the region within the last 10,000 years, and to a lesser extent, the surface effects of more recent erosion and deposition within the last 4,500 years. Bedrock geology refers to the much older, solid rock layers that lie beneath Quaternary sediments.

Bedrock Geology

The bedrock units underlying Sheboygan County range in age from Precambrian at depth, to Silurian at the surface. The oldest are impermeable crystalline rock of Precambrian age at depths that average more than 1,500 feet below the land surface.

Silurian dolomite, often referred to as Niagara, is the uppermost bedrock in Sheboygan County and reaches thicknesses up to 580 feet. Bedrock underlying the Niagara dolomite is not visible in the County. Below the Niagara dolomite is a shale formation known as Maquoketa. It reaches a maximum thickness of 450 feet. The Maquoketa Shale overlies a dolomite formation, termed Platteville-Galena, which is approximately 500 feet in thickness. This rock formation, in turn, overlies Cambrian sandstones, which are 450 feet thick. All of these sedimentary rock formations overlie Precambrian igneous rocks.

Quaternary Geology

The last ice sheet of the Quaternary period of geologic time, known as the Pleistocene, covered a major portion of Wisconsin and all of the Town of Mitchell over 5,000 years ago. This ice sheet, known as the Laurentide, was 700 feet or more in thickness. The ice sheet covered a major portion of Wisconsin including several surrounding states and Canada. Embedded within this ice sheet was a mix of clay, sand, rocks, and boulders as well as organic materials.

These substances started and continued accumulating during a period of global-wide major volcanic activity responsible for starting the Ice Age. The atmosphere was filled with large quantities of moisture, dust and particulate matter that hindered the sun’s warming affect on the surface of the planet. Summer temperatures in both the far north and south latitudes away from the ocean’s warming affects never got above melting points near the centers of the major continents. This allowed ice and snow to accumulate to enormous depths over several hundred years.

When the volcanic period ended and the atmosphere began to clear, the sun warmed the continents above freezing during the summers and again the ice sheets began to melt. It was during periods of rapid melting of the ice sheet that much of the sediment began to move or roll in the running melt

waters both above and below the ice surface, rounding the corners of the stones as they rubbed against one another. This is why virtually all the stones found in these formations are generally rounded. The sediment ranges in size from materials as small as clays and sands to cobbles and boulders.

As a result of the presence of this enormous ice sheet, several predominant landforms can be found within the Town of Mitchell. The most recognized are “moraines” or hills interspersed with valleys or depressions known as “kettles.” This unique topographical area is known as the “Kettle Moraine.”

Eskers are another landform which can be found in the Town of Mitchell. As the ice sheet melted, cracks would form near its terminal end and the embedded sediments would pour through and be carried by the moving waters below the ice surface. As the volume of the water diminished, the sediments would be deposited in the shape of the cracks, usually in winding, snake-like ridges.

When a hole would form in a basically stationary sheet of ice, melt waters at the surface and within the ice would drop materials into the hole. The result was a tear-drop shaped hill known as a “kame.”

As the terminal edge of the massive ice sheet receded, large blocks of ice would break off. The continued flow of sediments and the conveyor belt action of the ice would deposit these materials around and over them. Later, as the ice blocks melted away, depressions or “kettles” resulted.

Two types of Quaternary deposits are recognized within the Town of Mitchell, including till and fluvial sediments. Till or unstratified drift is a mixture of unsorted, angular- to round-shaped sediments ranging in size from clay to boulders. Tills are ice-contact deposits originating directly from the ice sheet. Unlike till, fluvial sediments are sorted by particle size that delineates the stratification. Fluvial sediments were deposited in an environment involving ice meltwater flow. Each individual layer of fluvial sediments are characterized by a given grain size, ranging from pebbles and cobbles to sand or finer.

Ground and end moraines are two types of topographic landforms found in the Town that consist primarily of till. A ground moraine is an irregular surface of till deposited by a receding ice sheet. The steeper slope points in the direction from which the ice sheet advanced. An end moraine is a prominent land form composed of an accumulation of earth, stones, and other debris deposited at an ice sheet’s terminus.

At least one type of topographic landform consisting of fluvial sediments occurs in some portions of the planning area. This type of topographic feature is a pitted outwash plain, which is an apron of well sorted, stratified sand and gravel deposited by ice meltwater. Fluvial deposits, which contained large ice blocks that eventually melted, were pitted with depressions known as kettles. Figure 2.3 shows the Pleistocene Geology of the Town of Mitchell.

Soils

Soil is composed of varying proportions of sand, gravel, silt, clay, and organic material. The composition of a soil affects the specific properties of that soil. These properties must be evaluated prior to any development.

General Soils Description

Soils, in part, determine how much rainfall or snowmelt directly flows into the rivers, lakes, and wetlands, and how much infiltrates the ground. Water that infiltrates the ground replenishes soil moisture and recharges the groundwater system. Soils are grouped into general soil associations that have similar patterns of relief and drainage. These associations typically consist of one or more major soils and some minor soils. The general soil types can be divided into three broad categories: areas dominated by soils formed in glacial till; areas dominated by soils formed in glacial outwash and till; and areas dominated by organic soils.

The soils in Sheboygan County are diverse ranging from sandy loam to loam or shallow silt loam, and from poorly drained to well drained. In some areas, lacustrine sands are found overlying clays or bedrock within only a few feet of the surface. Figure 2.4 shows the general soil types in Town of Mitchell. Important soils in the County include clays, loams, sands, and gravels. The dominant associations found in Sheboygan County include the Boots, Casco, Oakville, Theresa, Kewaunee, and Hochheim soils.

The soils within the Town of Mitchell are part of the Hochheim-Theresa and Casco-Fox-Rodman associations. Soils of the Casco-Fox-Rodman association are predominant in the Town of Mitchell



northwest of an irregular line from the Town boundary line at County Highway U on the east to the Town boundary line at County Highway A on the south. The soils in this association are generally shallow, excessively drained, loamy soils which are mostly not well-suited for agriculture in the Town of Mitchell due to steep slopes.

The soils southeast of the above line are generally of the Hochheim-Theresa association and are deep, well-drained, loamy soils, considered prime for agriculture.

As can be seen from Figure 2.4, soils within the Town are diverse and inconsistent from one area or property to the next.

[Map: Figure 2.3 Pleistocene Geology, Town of Mitchell]

[Map: Figure 2.4 General Soil Types, Town of Mitchell]

Prime Agricultural Lands

The USDA, Natural Resources Conservation Service defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops, with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Prime farmland includes land that is being used currently to produce livestock and timber. It does not include land already committed to urban development or water storage.

In general, prime farmland in Wisconsin:

- Has an adequate and dependable water supply from precipitation or irrigation
- Has a favorable temperature and growing season
- Has acceptable acidity or alkalinity
- Has few or no rocks
- Is permeable to air and water
- Is not excessively erodible
- Is not saturated with water for long periods of time
- Does not flood frequently, or is protected from flooding

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. Figure 2.5 provides a representation of areas designated as prime farmland in the Town of Mitchell, based upon prime agricultural soils.

Suitability for Dwellings with Basements

Within the *Soil Survey of Sheboygan County*, the Natural Resource Conservation Service (NRCS) provides information on the suitability and limitations of soils for a variety of natural resources and engineering uses. In particular, the soil survey provides information on the limitations of each soil for building site development, including the construction of dwellings with basements. Dwellings are considered to be structures built on shallow excavations on undisturbed soil with a load limit the same as for a single-family dwelling no higher than three stories. The ratings are based on soil properties, site features, and observed performance of the soils.

According to the NRCS, *severe limitations* mean soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required. *Moderate limitations* mean soil properties or site features that are not favorable for the indicated use may require special planning, design, or maintenance to overcome or minimize limitations. *Slight limitations* mean soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome. Refer to the *Soil Survey* for additional information regarding soil limitations for building site development. Figure 2.6 shows possible soil suitability for dwellings with basements in the Town of Mitchell. This map is based on generalized data and is not a substitute for on-site soil testing.

[Map: Figure 2.5 Prime Agricultural Soils, Town of Mitchell]

[Map: Figure 2.6 Soil Limitations for Dwellings with Basements, Town of Mitchell]

Suitability for Septic Systems

The Town relies on private sewage systems for the majority of its residents. Without consideration of the traits of soils, private sewage systems may fail and collection systems may require expensive

and frequent maintenance. Factors that are considered when evaluating soils for on-site waste systems are high or fluctuating water table, bedrock, soil permeability, and flooding frequency.

New technologies for private sewage systems are allowed under the revised COMM 83 health and safety code. The code will allow the use of soil absorption systems on sites with at least six inches of suitable native soil. The revised code gives property owners the opportunity and flexibility to meet environmental performance standards with several treatment technologies.

The code will allow for infill development where it was not permitted previously by the former plumbing code as interpreted by the Department of Industry, Labor and Human Relations. Housing and population density will likely increase in some areas due to the revised COMM 83 code. This in turn may increase the need for land use planning and integration of environmental corridors to address the adverse impacts related to development. Planning along with land use controls such as zoning will help achieve more efficient development patterns.

Topography

The Town has a swell and swale topography with many irregular ridges, hills, and potholes or “kettles” that help distinguish the Town from other locales. The northeastern portion of the Town has the most predominant hills, some of which are over 1200 feet above sea level. The landforms and topography found throughout the Town provide a picturesque appearance. These areas are also desirable for developers and valued by local residents for the open space. Figure 2.7 shows areas of steep slope (12 percent slope or greater) based on the soil characteristics in the Town of Mitchell.

Agriculture

Agriculture creates jobs, provides a product for sale, and pays taxes. Farmland can also provide other substantial benefits to the environment, including floodplain protection, groundwater recharge areas, and wildlife habitat.

There are also social benefits, including scenic views and open space.

As of 2002, there were 11,251 acres of land used for farming within the Town of Mitchell, which is about 49% of the Town’s total area of 23,151 acres.



[Map: Figure 2.7 Steep Slope, Town of Mitchell]

General Agricultural Soil Associations

Much of the Town of Mitchell is covered by soils in the Hochheim-Theresa series. These are generally well-drained soils that have a sub-soil of mainly clay loam or silty clay loam and are

underlain by gravely sandy loam glacial till. The predominate Hochheim and Theresa soil classes in the area have 2-6% slopes and are moderately well suited to all crops commonly grown in the County, as well as pasture and woodland.

Land capability subclasses place soils into groups with similar suitability and limitations for agricultural use. The risks of soil damage or limitations in use become progressively greater from class 1 to class 8. Class 1 and 2 soils have the best capability for agricultural production and the capability diminishes as the classes advance. Figure 2.4 shows soil classes in the Town of Mitchell.

Agricultural Preservation

Farmland Preservation Tax Credit: The Wisconsin Farmland Preservation Program was created in 1977 to preserve agricultural resources by supporting local government efforts to manage growth. Eligible farmland owners receive a state income tax credit. To participate in the program, the county must have an agricultural preservation plan that meets the standards of Chapter 91, Wisconsin Statutes, and has been certified by the state Land and Water Conservation Board (LWCB). Sheboygan County is currently in the process of updating its plan, which was adopted in 1985. The County plan has laid the groundwork for the Town of Mitchell to develop an exclusive agriculture zoning district.

Farmers participate by signing an individual, long-term agreement. The farmland preservation program provides state income tax credits to farmers who meet the program's requirements; meet soil and water conservation standards; and use their land for agriculture only. In the past, the Farmland Preservation Credit Program and Farmland Tax Relief Credit Program have provided at least some incentive to farmers to keep their lands in exclusive agricultural use. Today, however, the tax credits the typical farmer receives average about \$1,000 annually, which is tiny compared to the six-figure payouts farmers may be able to get for subdividing their land.

There are also other shortcomings of these programs. Seldom are farmers who develop their land forced to fully pay back the credits they received under the programs. Second, rezonings for residential uses in exclusive agricultural districts have been common in some towns, creating a patchwork of conflicting uses in many areas. Finally, in the end tax credits do not provide long term protection.

Use-Value Assessment: The changes in the structure of Wisconsin's property taxation, implementing a use-value assessment, have been generally favorable to farmland preservation. Agricultural lands are now assessed for their value in agriculture and not other potential uses. However, while this assessment policy may benefit owners of lands being used only for farming, the tax revenues lost through this reduction on farmlands must be made up by other properties within a town. Since there is seldom an extensive tax base of industrial and commercial properties within a town to absorb the shortfall, residential properties—including the homes of farmers—are taxed at a higher rate.

The preservation of farmland is a controversial issue. Many rural, non-farm residents want to preserve farmland while many farmers also want to preserve the land while retaining the option to sell. However, as development increases and agricultural commodity prices decline, the challenges to preserving farmland resources, especially those close to cities and villages, become greater.

The effect of residential development expanding outward from cities and villages into productive agricultural areas creates many issues. New development can make daily farming activities difficult

and sometimes dangerous. New residents in farming areas may not understand basic farming practices, such as manure handling or harvesting. As a result, farmers are forced to contend with conflicts such as; increased traffic and nuisance complaints by new neighbors related to slow moving vehicles on roadways, noise, dust, odors, and late hours of operation. As development pressures increase, so will conflicts with agricultural practices.

Concentrated Animal Feeding Operations (CAFOs)

Every farm, regardless of size, is responsible for proper manure management to protect water quality from discharges. Over the past ten years, Wisconsin has become home to an increasing number of Concentrated Animal Feeding Operations (CAFOs), those operations with 1,000 or more animal units. Due to the increased number and concentration of animals, it is particularly important for these facilities to properly manage manure in order to protect water quality in Wisconsin.

A specific regulatory program for the handling, storage, and utilization of manure was developed by the DNR in 1984 in Chapter NR 243 of the Wisconsin Administrative Code. The rule creates criteria and standards to be used in issuing permits to CAFOs as well as establishing procedures for investigating water quality problems caused by smaller animal feeding operations. Because of the potential water quality impacts from CAFOs, animal feeding operations with 1,000 animal units or more are required to have a Wisconsin Pollutant Discharge Elimination System (WPDES) Concentrated Animal Feeding Operation permit. These permits are designed to ensure that operations choosing to expand to 1,000 animal units or more use proper planning, construction, and manure management to protect water quality from adverse impacts.

On April 13, 2004, Governor Doyle signed a new law that strikes a balance between growing animal agriculture, protecting the environment, and respecting local decision making. The new law, 2003 Wisconsin Act 235, directed the Wisconsin Department of Agriculture, Trade and Consumer Protection to develop a rule to provide a predictable framework for county and municipal decisions to site or expand livestock facilities. The rule eventually developed by the ATCP Board took effect in 2006.

Water Resources

Watersheds

A watershed can be defined as an interconnected area of land draining from surrounding ridge tops to a common point such as a lake or stream confluence with a neighboring watershed. All lands and waterways contribute drainage to one watershed or another. Each watershed is comprised of one main-stem of a river. A river basin is made up of a number of watersheds that drain into one larger river. The majority of Sheboygan County lies within the Sheboygan or Milwaukee River Basins. Much of the Town of Mitchell is within the Milwaukee River Basin. Most of the eastern portions of the Town is drained by creeks and streams feeding into the North Branch of the Milwaukee River, while the western portion of Mitchell are drained by creeks and streams flowing into the East and West Branches of the Milwaukee River. A small portion within the Town's extreme northeast corner is drained by creeks and streams flowing into the Onion River, which in turn is a tributary of the Sheboygan River. Figure 2.8 shows the watersheds in the Town of Mitchell.

One of the major components within a watershed is runoff, which is rainfall and snowmelt that "runs off" hillsides, parking lots, streets, and so forth into drainageways and storm sewers. Eventually, runoff finds its way into streams and lakes. Since runoff is capable of carrying

sediment, toxins, and other materials, it is possible over time to harm a waterbody's ecosystem if steps are not taken to limit or filter runoff. For example, rainfall running off a farm field, residential lawn, construction site, or parking lot may contain fertilizers, pesticides, silt, and automobile oil, respectively—all of which will impact a lake. Expensive dredging may eventually be necessary to remove accumulated sediment from runoff; chemical treatments may be needed to eradicate algae blooms; and so forth. Fortunately, there are many ways to help limit or clean up runoff before it gets to a waterbody. These include erosion control practices; using less pavement or porous pavement; using rainbarrels to catch precipitation off roofs; planting rain gardens to catch runoff and encourage percolation into the ground; and planting open spaces with prairie or natural groundcovers rather than lawn grasses.

Priority Watersheds

Sheboygan County encompasses some of the most scenic and critical watersheds within Wisconsin. All the watersheds in Sheboygan County drain into the Lake Michigan Watershed either through major rivers or direct drainage to the lake. These watersheds have been classified as either Priority or Non-Priority watersheds for water quality purposes by the Wisconsin Department of Natural Resources. The Wisconsin Nonpoint Source Water Pollution Abatement Program (NPS Program) was created in 1978 by the state legislature. This program selected priority watersheds based on numerous factors including, but not limited to: unique species, potential to respond positively to nonpoint source controls and sensitivity to phosphorus loading. The program has provided financial and technical assistance to landowners and local governments to reduce nonpoint source pollution. Four watersheds within Sheboygan County have been designated as Priority Watersheds through this program, including the North Branch Milwaukee River Priority Watershed (designated in 1984). Four watersheds within Sheboygan County have been designated as Priority Watersheds. Two of these are within the Town of Mitchell including the North, East, and West Branches of the Milwaukee River and the Onion River.

[Map: Figure 2.8 Watersheds, Town of Mitchell]

Groundwater

Sheboygan County's groundwater reserves are held in two principal aquifers: the eastern dolomite aquifer, and the sandstone and dolomite aquifer.

The Eastern Dolomite Aquifer occurs from Door County to the Wisconsin Illinois border. It consists of Niagara dolomite underlain by Maquoketa shale. In areas where fractured dolomite

bedrock occurs at or near the land surface, the groundwater in shallow portions of the eastern dolomite aquifer can easily become contaminated.

The Sandstone and Dolomite Aquifer consists of layers of sandstone and dolomite bedrock that vary greatly in their water-yielding properties. In eastern Wisconsin, this aquifer lies below the eastern dolomite aquifer and the Maquoketa shale layer. In eastern Wisconsin, most users of substantial quantities of groundwater tap this deep aquifer to obtain a sufficient amount of water.

An individual well, however, is recharged by local rain and snow seeping into the ground and migrating through the soil to groundwater, which then flows toward the well. This recharge area typically extends no farther than 1,000 to 1,500 feet from the well itself. Since contaminants can also seep into the groundwater in this recharge area, many communities have established wellhead protection programs to manage what occurs in the recharge area. In Wisconsin, the primary sources of groundwater contamination are agricultural activities, municipal landfills, leaky underground storage tanks, abandoned hazardous waste sites, and hazardous/toxic spills. The most common groundwater contaminant is nitrate-nitrogen, which comes from fertilizers, animal waste storage sites and feedlots, municipal and industrial wastewater and sludge disposal, refuse disposal areas, and leaking septic systems.

Wellhead protection also includes striving to limit the amount of paved and impervious surfaces in the recharge area, since rain and snow will run off these surfaces into drainageways and will not soak into the ground as intended.

According to well construction reports filed since 1988, residents in the Town of Mitchell draw their water from wells at depths ranging from 48 feet to 360 feet. Deep wells sometimes indicate contamination, water scarcity, or other problems. In several instances the deeper well depths are simply due to well sites on top of hills and ridges. The overall average depth for new wells drilled since 1988 in the Town has been 178 feet. Drilling depths have been increasing over time. For the period 1990-1995, average depths were 171 feet; for the period 1997-2003, average depths were 188 feet.

According to DNR data, there are several non-municipal high-capacity wells located near the planning area (Sections 10 and 13, Town of Scott). Prior DNR approval is necessary for the construction, reconstruction, or operation of a high capacity well system, school well or wastewater treatment plant well. Prior approval is also necessary before a high capacity well or well system can be operated after a change of ownership. Section NR 812.07(53), Wisconsin Administrative Code, defines a high capacity well system as one or more wells, drillholes or mine shafts used or to be used to withdraw water for any purpose on one property, if the total pumping or flowing capacity of all wells, drillholes or mine shafts on one property is 70 or more gallons per minute based on the pump curve at the lowest system pressure setting, or based on the flow rate.

Lakes and Ponds

Butler Lake and several marshy bodies of water are within the Kettle Moraine State Forest. These mostly undeveloped land locked lakes are relatively small and shallow.

Rivers and Streams

The **North Branch of the Milwaukee River** begins in the Nichols Creek State Wildlife Area in the Town of Mitchell and runs in a southerly direction for 28 miles to its junction with the Milwaukee River in Ozaukee County. The upper four miles of the river were formerly officially known as Nichols Creek. The stretch that runs through the Nichols Creek State Wildlife Area is designated as an Outstanding Resource Water in Wisconsin Administrative Code NR 102. Outstanding resource waters are those that are of such outstanding quality that discharges from municipal and industrial wastewater treatment plants must be of the same or better quality as the receiving water. This designation is based on the quality of the fisheries, protection of recreational uses, water quality and pollution sources. Only about 2% of the surface waters in the state are designated as outstanding or exceptional resource waters.

A dam in the Village of Cascade creates a barrier to fish migration and slows the flow of water, allowing it to warm. As a result, the river reach below the dam cannot support trout. Dams also allow for depositing large amounts of sediment, and collecting nutrients leading to nuisance algae and plant blooms. The remainder of the North Branch Milwaukee River south of the trout stream portion is capable of supporting a diverse warmwater sport fishery. Other fish species found in the North Branch include blacknose dace, hornyhead chub, creek chub, bluntnose minnow, southern redbelly dace, mottled sculpin, white sucker, brown trout, greater redhorse, black bullhead, common shiner, spotfin shiner, northern pike, golden redhorse, rock bass, green sunfish, pumpkinseed, bluegill, johnny darter, yellow perch, spotfin shiner, sand shiner, common carp, and logperch.

Agriculture is the major land use along the North Branch with some urban/residential. Many areas along the North Branch exhibit high quality streamside corridor and aquatic habitat interspersed with agricultural uses up to the streambanks, especially in the mid to lower reaches of the North Branch system. Water quality in the North Branch Milwaukee River is considered fair to good. The Nichols Creek portion exhibits the best habitat and water quality in the North Branch. As the river flows downstream, the effects of nonpoint sources of pollution become more apparent. The Cascade and Gooseville dams also contribute to degraded water quality by slowing the flow of the river. Instead, the water warms, and sediment and nutrients build up, leading to degraded water quality. Carp are abundant in these areas and contribute to turbidity problems in certain stretches by rooting up vegetation, and thereby stirring up the collected sediments. Carp are not a problem in the areas with high quality habitat and stable water temperatures where more sensitive species can successfully compete.

The North Branch Milwaukee River has many areas of high quality terrestrial and aquatic habitat. Protecting these areas, including wetlands, while developing buffers to connect the high quality habitats and reduce the effects of nonpoint source pollution will help the North Branch to be even better than it is today.

The East and West Branches of the Milwaukee River, are fed by several unnamed creeks and Watercress Creek, which originate in the western portion of the Town of Mitchell within the Kettle Moraine State Forest.

Shoreland Corridors

Shorelands are often viewed as valuable recreational and environmental resources both in urbanized and rural areas. As a result, the State of Wisconsin requires that counties adopt shoreline/floodplain-zoning ordinances to address the problems associated with development in floodplain areas. Under the *Sheboygan County Shoreland-Floodplain Ordinance*, development in shoreland areas outside a

75-foot setback is generally permitted, but specific design techniques must be considered. Development in these areas is strictly regulated and in some instances, may not be permitted. For planning and regulatory purposes, the shoreland zone is normally defined as lands within the following distances from the ordinary high water mark of navigable waters: 1,000 feet from a lake, pond, or flowage, or, where approved, to the outer perimeter of contiguous mapped wetlands, whichever distance is greater; and, 300 feet from a river or stream, or to the landward side of the floodplain, or, where approved, to the outer perimeter of contiguous mapped wetlands, whichever distance is greater.

Figure 2.9 shows the County shoreland zoning jurisdiction within the Town of Mitchell.

Floodplains

Floodplains are often viewed as valuable recreational and environmental resources. These areas provide for stormwater retention, groundwater recharge, and habitat for various kinds of wildlife unique to the water. For planning and regulatory purposes, the floodplain is normally defined as those areas, excluding the stream channel, that are subject to inundation by the 100-year recurrence interval flood event. This event has a one percent chance of occurring in any given year. Because of this chance of flooding, residential, commercial and similar development in the floodplain should not be allowed, and instead park and open space in these areas should be encouraged.

Development permitted to take place in flood-prone areas is susceptible to storm damage and can have an adverse effect on water quality and wildlife habitat. In addition, building in a floodplain can also result in increased development and maintenance costs such as providing flood proofing, repairing damage associated with flooding and high water, increased flood insurance premiums, extensive site preparation, and repairing water-related damage to roads, sewers, and water mains. Some communities have special ordinances for remodeling and expanding buildings already within the floodplain. New expansions may have to be compliant to the rules of floodplain construction.

Figure 2.10 shows the floodplain areas as mapped by the Federal Emergency Management Agency (FEMA). The original paper copy maps produced by FEMA were re-created in digital format for mapping purposes. An on-site review of the floodplain elevation is necessary to determine the most accurate location of the floodplain boundary.

[Map: Figure 2.9 Sheboygan County Shoreland Jurisdiction, Town of Mitchell]

[Map: Figure 2.10 Wetlands & Floodplain, Town of Mitchell]

Wetlands

According to the Wisconsin Department of Natural Resources, wetlands are areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophilic vegetation. Other common names for wetlands are swamps, bogs, or marshes. Wetlands serve as a valuable natural resource. They provide scenic open spaces in both urban and rural areas. There are about 3,362 acres of wetlands in the Town of Mitchell (about 15% of the total land area), many of them located in the western part of the Town. Figure 2.10 shows wetlands in the Town of Mitchell

as mapped on the Wisconsin Wetland Inventory.

Wetlands also act as natural pollution filters, making many lakes and streams cleaner and drinking water safer. They act as groundwater discharge areas and retain floodwaters. Filling or draining of wetlands destroys the productive capacity of the ecosystem and can adversely affect surface water quality and drainage. They also provide valuable habitat for many plants and animals.

Because of their importance, there are strict regulations regarding wetlands. Wisconsin Administrative Codes NR 115 and NR 117 fall under the jurisdiction of the Wisconsin Department of Natural Resources, and mandate that shoreland wetlands be protected in both the rural and urban areas of the State. In the unincorporated areas, NR 115 provides the legislation to protect wetlands of five acres or more that are within the jurisdiction of county shoreland zoning ordinances. Wetlands not in the shoreland zone are protected from development by the federal government and the WDNR through Section 404 of the Clean Water Act, and NR 103, respectively. It should be noted that all wetlands, no matter how small, are subject to WDNR and possibly federal regulations, if they meet the State definition.

Woodlands

Woodlands throughout Sheboygan County are comprised primarily of sugar maple, yellow birch, American beech, basswood, red oak and red pine, hemlock, sugar maple, paper birch, aspen and white cedar, and small stands of the northern hardwood species. Also seen in the County are balsam firs, white spruce, black spruce and tamarack. These woodlands provide an aesthetic and natural purpose, providing habitat to many animals. In the Town of Mitchell, about 7,657 acres are woodlands (about 33% of the land area of the Town). Major woodland areas are found in the Northern Unit of the Kettle Moraine State Forest. Figure 2.11 shows areas of woodlands in the Town.

The Managed Forest Law (MFL) program can ease the property tax burden for Wisconsin forestland owners who wish to manage their woodlands. The MFL program is intended to foster timber production on private forests, while recognizing other values. MFL participants pay property taxes at a reduced rate. A portion of the foregone taxes is recouped by the state at the time the timber is harvested. The Wisconsin Department of Revenue estimates MFL program participants can reduce their property tax an average of 80% after paying harvest taxes. The MFL program is open to all private landowners with at least 10 acres of forestland, provided that 80% of the land is productive forestland capable of producing wood products (can grow at least 20 cubic feet of wood per acre per year) and the minimum average width of the enrolled land is no less than 120 feet. Participation in the MFL program requires an approved, written forest management plan and the landowner must allow public access to get the lowest annual property tax rate. Access on these “open” lands is only for hunting, fishing, hiking, sightseeing, and cross-country skiing.

[Map: Figure 2.11 Woodlands, Town of Mitchell]

Metallic and Non-Metallic Mining Resources

Currently there is no metallic mining occurring in the Town of Mitchell or anywhere in Sheboygan County. Mineral resources in the Town are non-metallic in nature and include sand and gravel. Sand and gravel resources are often referred to as “pits.” (The term “quarry” is most appropriate for limestone, because such operations require controlled blasting to remove material.) The most familiar uses for sand and gravel resources are road building and maintenance. The materials are also used in the construction of residential, commercial and public buildings, bridges, sewer and septic systems, and in erosion control measures.

There are extensive potential gravel source areas in the Town of Mitchell, especially in a band running from the northeast portion of the Town to the southwest. The two active mining sites are in Section 13.

Sand, gravel, and crushed stone are nonrenewable resources. As the region undergoes further growth and development, there will be greater demands for these resources. According to the Wisconsin Geological Survey, one new home and its proportional share of the associated schools, libraries, shopping centers, recreational facilities, etc. requires over 325 tons of aggregate. Approximately 20,000 tons are used per lane-mile for an interstate highway. There is a continuous, substantial need for aggregate resources to support the infrastructure that people rely on every day. As a rule of thumb, one acre mined to a depth of one-foot potential produces 2,000 tons of aggregate. Therefore, 100 acres mined to a depth of 100 feet could produce 20 million tons of aggregate, enough for 60,000 homes or 250 miles of four-lane interstate highway. However, it would take many years of mining to extract this 20 million ton yield.

Even though sand, gravel, and crushed stone are common, some deposits are of far better quality than other deposits. Gravel and crushed stone deposits with low chert content are best suited for concrete. Gravel deposits with low percentages of foliated metamorphic rock, gabbro, and basalt fragments are best suited for sub-base material and concrete. Outwash plains, kames, eskers, dunes, point bars, and stream channels are the best sources for better quality sand and gravel.

Sand, gravel, and crushed stone have low “intrinsic value,” but high “place value.” Intrinsic value refers to cash value of a given unit (weight or volume) of the product, while place value refers to the cost of transporting a given unit of the product. Construction costs increase significantly as the distance from the source of sand, gravel, and crushed stone increases, to the point that transportation costs may exceed production costs. Importing this resource from even 50 miles away can triple the cost, therefore it is important to identify potential local resource sites and protect them from residential or commercial development before they can be mined.

The Town of Mitchell currently has a mineral extraction district which is intended to provide for and regulate future gravel and other mineral extraction sites. These areas are completely fenced in and require a conditional use permit. Conditional uses in mineral extraction operations include washing, crushing or other processing.

While mining has economic value to multi-regional areas, it also has the ability to degrade natural resources. Any new mines need to have a permit granted by the WDNR, which includes a reclamation plan. Wisconsin State Administrative Code NR135 gave this authority to the counties.

Sheboygan County has enacted a non-metallic mining program; however, any town or municipality may develop and administer their own non-metallic mining reclamation program within the guidelines of Chapter NR 135. Nevertheless, this program will not improve sites that have discontinued mining operations prior to December 1, 2000.

The reclamation plan is a detailed technical document designed to meet the goals that will lead to successful reclamation and will help reduce the negative effects to the environment once the mine is abandoned. The plan has minimum standards that must be met before acceptance. The WDNR defines successful reclamation as “the restoration of all areas disturbed by mining activities including aspects of the mine itself, waste disposal areas, buildings, roads and utility corridors.”

Restoration is defined as “returning of the site to a condition that minimizes erosion and sedimentation, supports productive and diverse plants and animal communities and allows for the desired post-mining land use.”

Environmental Corridors

Environmental corridors serve many purposes. They protect local water quality and wildlife habitat through identification and preservation of environmentally sensitive areas. They can be used as a means of controlling, moderating, and storing floodwaters while providing nutrient and sediment filtration. Environmental corridors can provide fish and wildlife habitat, recreational opportunities, and serve as buffers between land uses while improving the aesthetics of the community. The environmental corridor process is also used as part of the planning process for making planning and zoning decisions at the local level.

The concept of a corridor is based on the delineation of environmental features adjacent to waterways and water-related resources. The Bay-Lake Regional Planning Commission has defined environmental corridors to include the following set of uniformly available information: Wisconsin Department of Natural Resources wetlands; Federal Emergency Management Agency’s 100-year floodplains; areas with slopes greater than or equal to 12 percent; lakes, rivers, streams and ponds; a 75-foot lake and river setback; and, a 25-foot buffer of wetlands. Many of the Commission’s planning activities require delineation of environmental corridors (comprehensive plans, watershed plans, sewer service area plans, etc.).

Other features that are considered as part of the environmental corridor definition on an area-by-area basis include: designated scientific and natural areas; unique and isolated woodland areas; scenic viewsheds; historic and archaeological sites; unique geology; wetland mitigation sites; isolated wooded areas; unique wildlife habitats; parks and recreation areas; and other locally identified features. The Commission has defined environmental corridors for Sheboygan County to help in identifying areas that have the greatest need for protection. These corridors were delineated using of the Commission’s Geographic Information System (GIS) to overlay a variety of features. Figure 2.12 shows these environmental corridors.

[Map: Figure 2.12 Environmental Corridors, Town of Mitchell]

Air Quality Issues

The U.S. Environment Protection Agency (EPA) uses six “criteria pollutants” as indicators of air quality: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter and lead. For each of these, the EPA has established “primary” standards to protect public health, and “secondary” standards to protect other aspects of public welfare, such as preventing materials damage, preventing crop and vegetation damage, or assuring visibility. These standards are called the National Ambient Air Quality Standards (NAAQS). Areas of the country where air pollution levels persistently exceed these standards may be designated “non-attainment.”

Sheboygan County is considered a non-attainment area for the “8 hour” ozone standard (NAAQS). Sheboygan County was in attainment of the “1 hour” ozone standard, but the new standard has gone

into effect. The Governor of the State of Wisconsin recommended non-attainment designation for Sheboygan County under the 8 hour standard in 2003 and the US Environmental Protection Agency designated Sheboygan County as non-attainment on April 15, 2004, with an effective date of June 15, 2004.

Wildlife Habitat

Wildlife habitat can be defined as areas that provide enough food, cover, and water to sustain a species. Major wildlife species using local habitats, especially the Kettle Moraine State Forest within the Town of Mitchell, may include songbirds, white-tailed deer, squirrels, and small mammals. Several species of geese and ducks inhabit the open water areas in the Town. Some of the old fields, agricultural land, and wetlands provide habitat for turkeys, pheasants, raccoon, skunk, muskrats, red fox, and mink.

Sheboygan County lies within an important migratory corridor for songbirds, shorebirds, waterfowl, and raptors. These birds, possibly including some threatened or endangered species, use wooded and wetland areas for food and shelter during migration.

Threatened and Endangered Resources

Many rare, threatened, and endangered species are found within Sheboygan County. Potential impacts should be discussed before development occurs so as not to disturb potential habitats for these flora and fauna. Page 40 of the *Sheboygan County Natural Areas and Critical Resources Plan (2004)* lists the known rare species and natural communities within the County as recorded in the Wisconsin Natural Heritage Inventory.

Four species of plants identified in the North Branch Milwaukee River Wildlife and Farming Heritage Area are listed as of special concern in Wisconsin. They are the cuckoo flower, small yellow lady's-slipper, American gromwell, and Christmas fern. Six species of fish listed as state-threatened or special concern are found in the waters within the study area. Little is known about the invertebrates in the area, although the aquatic invertebrates are assumed to be diverse and plentiful because the rivers harbor many rare fish, which indicates a diverse aquatic community. Endangered, threatened, and special concern reptile, amphibian, bird, mammal, and fish species known to occur in the study area are listed in Appendices B - E of the *North Branch Milwaukee River Wildlife and Farming Heritage Area* report available from WDNR.

Parks and Open Spaces

Parks are discussed in Chapter 6 - Utilities & Community Facilities. As of 2002, approximately 97 percent of the land (about 22,394 acres) within the current Town borders could be described as undeveloped "open space," characterized primarily by a mixture of farmland, woodlands, and wetlands. The majority of land in towns surrounding Mitchell is also "open," characterized by this same mix. According to data from Bay-Lake Regional Planning Commission in 2002, the Town of Lyndon directly to the east, for example, was approximately 96% "open space." For comparison's sake, in 2004 the Town of Richfield, directly north of Waukesha County, was approximately 64% "open space."

See Figure 2.13 for locations of parks and publicly owned lands within the Town of Mitchell.

Scientific and Natural Areas

As of the date of this planning process, areas within the Town of Mitchell have not been designated as State scientific or natural areas. The Wisconsin State Natural Area program was established to formally designate sites in natural or near natural condition for scientific research, the teaching of conservation biology, and most of all, preservation of their natural values and genetic diversity for the future. These areas are not intended for intensive recreation use, but rather to serve the mission of the Natural Areas Program, to locate and preserve a system of State Natural Areas harboring all types of biotic communities, rare species, and other significant natural features native to Wisconsin.

The North Branch Milwaukee River Wildlife and Farming Heritage Area includes portions of Sheboygan, Ozaukee, and Washington Counties and encompasses a total of 19,487 acres of land. A portion of southeastern Town of Mitchell is included in the Heritage Area. The project area includes river and stream corridors, large wetland complexes, three lakes, and rural/agricultural lands and is one of the largest blocks of open space remaining in southeastern Wisconsin where agriculture is the dominant land use. The purpose of the project is to:

- Maintain the rural character of the area.
- Maintain and enhance existing natural resources.
- Restore plant communities and wetlands to improve wildlife habitat and water quality.
- Provide nature-based outdoor recreation and education opportunities.

In an effort to achieve the goal of agricultural land preservation, the Wisconsin Department of Natural Resources is committed to working with local farmers and landowners to participate in Purchase of Development Rights (PDR) projects within the boundary area. Purchase of Development rights programs pay landowners the difference between the market price and the use price (e.g.- agricultural use value). In return, the landowner relinquishes his/her right to develop their land.

[Map: Figure 2.13 Publicly Owned Recreation Lands, Town of Mitchell]

Historic and Archaeological Resources

When the first European settlers came to the area, there were approximately 1,000 Native Americans living in the county, composed mainly of the Pottawatomie, Chippewa, Ottawa, Winnebago and Menominee tribes. Their villages and camps were clustered on the bank or shore of practically every lake or stream, with the largest villages situated along the shore of Lake Michigan. Figure 2.14 lists historic sites and Figure 2.15 lists archaeological sites in the Town of Mitchell.

Figure 2.14 History and Architecture Inventory	
Historic Name	Location
Silver Springs – Spring Farm Phalanx	Section 12
Spring Farm School	Section 1

Figure 2.14 History and Architecture Inventory	
Historic Name	Location
Hughes Farm – High Wind	Section 1
Springs, Headwaters of the Onion River	Section 1
Rathburn Settlement	Section 5
Rathburn School	Section 4
Johnson Kame	Section 8
Waranius Kame	Section 6 and 7
Rentmeester House and Barn – Naughton	Section 7
Kames – Reddington and Connors Hills	Section 8
Rentmeester – Donohue Farm	Section 8
Parnell Tower	Section 10
Klein House	Section 10
Jeske – Guntow House	Section 11
Payne House	Section 11
Hughes – Schultz House	Section 12
Faas House, Shed	Section 12
Springs, Headwaters of the North Branch Milwaukee River	Section 12
Site of the First Spring Farm School	Section 12
Unmarked Burial Site	Section 12
Stone Fences	Section 13
White Clover Cheese Factory	Section 13
Malloy Stone House	Section 13

Figure 2.14 History and Architecture Inventory	
Historic Name	Location
Payne School	Section 14
Eckhardt Home and Barn	Section 14
Kiernan Home	Section 14
Clark – Gatzke Home	Section 14
School Section	Section 16
Bowen – Burke Cheese Factory Site	Section 17
Dwyer – Calvey Homestead	Section 17
Pius School Site	Section 17
Rentmeester Home	Section 17
Slattery House and Barn – House is circa 1865 and barn is circa 1894	Section 18
McNicholas Hill	Section 18
Brogan House on Deer Road	Section 19
Piper – Slattery – McKinley House on Butler Lake Road circa 1890	Section 19
Butler Lake site with Esker	Section 19
Site of last Indian Camp	Section 19
Indian Ceremonial Stone	Section 19
Leprechaun Hill	Section 20
Dwyer’s Site – All Kames visible except Dundee Hill	Section 20
Dwyer’s Erratics	Section 20
St. Michael’s Catholic Church and Cemetery, 1861 Church, 1850 Cemetery	Section 21
Keuper, Jay Barn	Section 21

Figure 2.14 History and Architecture Inventory	
Historic Name	Location
Dippel House, circa 1890, barn 1892	Section 21
Location of first St. Michael's church – Henkel property	Section 21
Harvey – Mugan Home	Section 21
Parnell School District #13 – circa 1905	Section 22
Parnell Tavern – Remminger Blacksmith Shop – Devine Cheese Factory – O'Reilly Store	Section 23
Slattery Store – circa 1890, addition circa 1910	Section 22
Gahagan House and Barn – Devine	Section 22
Hermansen House and Barn – Devine	Section 22
Falk – Larson Home	Section 22
Giese Home	Section 22
Mugan House	Section 23
Devine Cheese Factory Site	Section 23
Schultz House	Section 23
Selk House	Section 23
Lensmire Cheese Factory	Section 23
Hellmer House and Barn	Section 23
Headwaters of Mink Creek	Section 22 and 23
Mount Pleasant Cemetery	Section 24
Sippel House	Section 24
Patrick Murphy Home	Section 25
Ideal – Morgan School	Section 25

Figure 2.14 History and Architecture Inventory	
Historic Name	Location
Gerlach Home	Section 25
Henry Home	Section 26
Theusch Home	Section 26
Flynn – Skelton House	Section 27
Gahagan – Beckford Home	Section 27
Flunker	Section 27
Keli	Section 27
Gaynor	Section 28
Brooks	Section 28
Bernard Michaels	Section 29
Gerald Michaels	Section 29
Goelzer	Section 29
Hefling – Fixmer Settlement	Section 29
Spring which feed Butler Lake	Section 29
Sunnyhill – King School	Section 29
Trinity Lutheran Cemetery	Section 30
Bowser Home	Section 30
Koepke – Foley Home	Section 30
Gates Home	Section 31
Kelling’s Lakes	Section 31
King Cheese Factory	Section 32

Figure 2.14 History and Architecture Inventory	
Historic Name	Location
Cranberry Bogs	Section 32
Trapp – Garvey Home – Cream City Brick	Section 32
Klein McBride House and Barn	Section 32
McMullen House	Section 33
O'Reilly House on W	Section 34
Geib – O'Reilly House on Mink Creek Road circa 1855	Section 34
Pershing School Original Site	Section 34
Skunk School Original Site	Section 34
O'Reilly – Krahn Home	Section 34
Pershing School	Section 35
Otto House	Section 35
Titel House	Section 35
Klein House	Section 36
Hefter House	Section 36

Source: Town of Mitchell

Figure 2.15- Archaeological Sites			
Site # / Burial Code	Site Name / Type	Cultural Study Unit	Section #
SB-0187	UNNAMED SITE 1. Campsite/village	1. Historic Indian	19 & 20
SB-0066	FUBELKARN 1. Campsite/village	1. Unknown Prehistoric	25
BSB-0010	Unnamed cemetery		12

BSB-0016	MT. PLEASANT CEMETERY		24
BSB-0017	ST. MICHAEL CATHOLIC CEMETERY 1. Cemetery/burial	1. Historic Euro-American	21
BSB-0109	DUNDEE TRINITY LUTHERAN CEMETERY 1. Cemetery/burial	1. Historic Euro-American	30
BSB-0176	SCHMIDT BURIAL SITE 1. Cemetery/burial		30
SB-0357	D. MANLEY 1. Farmstead 2. HCM concentration	1. Historic Euro-American	28
SB-0356	MICHAELS 1. Lithic scatter	1. Early Archaic 2. Late Woodland	29
SB-0355	MURRAY	1. Historic Euro-American	29

Source: Sheboygan County Natural Areas and Critical Resources Plan

Cultural Resources

Community Organizations

- Sportsman’s Club (Smokey Hollow Muzzle Loaders)
- Parnell Pals 4-H Club
- Mitchell Athletic Club

Events

- Mitchell Town Picnic

Community Design

Community design addresses the “look” and “feel” of a community.

A variety of features contribute to community design, and these are identified below.

Signage

This includes signs that identify businesses; billboards and similar advertising signs; municipal signs; and yard signs. The Town of Mitchell currently does not have a comprehensive sign ordinance.

Public Landscaping

Parks, medians, and areas around public buildings often contain landscaping that can set a particular tone for a community. Because the Town is predominately agricultural, wooded and spread out, without any developed town center, there is no public landscaping within the Town of Mitchell.

Districts

Districts encompass easily delineated areas within a community, such as a historic district or a central business district. Special regulations may apply in such districts. The Town of Mitchell does not currently have any special districts.

Landmarks

Landmarks are well-known reference points, prominent features, or meaningful locations within an area. Care should be taken to preserve landmarks, or enhance them, as necessary, if public opinion is supportive and funds are available. Some of the prominent features within the Town of Mitchell are:

- Glacial landforms
- Kettle Moraine State Forest
- The Town Hall
- Parnell Tower
- St. Michaels Church

Highway Entryways

Also known as “front doors” to a community, these are often the first view visitors and residents have of a community upon arrival. Many communities dress up these entryways with special signage, lighting, and landscaping in order to create a favorable impression. CTH A and CTH V are entryways that might warrant discussion in the future.

RESOURCES STRATEGY AND RECOMMENDATIONS

The Town of Mitchell will seek direction for this element from the vision and goals identified through the public participation process:

Vision

“The Town of Mitchell will continue a slow, planned development as a mixed residential/farm community with limited commercial and industrial development. Growth of residential development is expected to be on larger lots, lots not served by municipal sewer or water, and to result in the loss of some farmland. Agricultural uses are expected to move away from the traditional dairy farming towards niche/specialty farming or hobby farms. Commercial development in the Town is

expected to be primarily from home based businesses that while generally unobtrusive can come into conflict with their neighbors. The Town of Mitchell is desirous of establishing the minimum amount of regulations that would balance private property rights with the overall community's health and welfare including a farmer's right to farm. "

Strategy

The Town of Mitchell's strategy for maintaining an agricultural community is not to stop growth but rather to direct growth in such a way as to preserve and protect the most productive croplands for the exclusive use of farming with consideration given to the following;

1. To not bias landowners or potential land owners, but rather focus on criteria such as topography, soil capability, productive agricultural potential, etc.
2. To promote a density of operations, creating a lower operating cost and a sustainable infrastructure.
3. To take into account precipitation saturation and runoff, past, present, and future.
4. To consider where future development may hinder farming potentials and/or create unsafe traffic conditions.
5. To consider how bordering potential agricultural land currently cropped or in the Conservation Reserve Program could be returned to productivity or preserved for cropland, and whether adjoining land in recreational or productive land will be impacted by development of "less than prime" lands or the restrictions thereof.
6. To consider a buffer area of smaller agricultural lots between residential and large agricultural tracts of land. This can prevent problems arising from the unpleasant characteristics of farming.
7. To consider where mineral extraction may be allowed with the restriction of the land being returned to farmland after minerals have been extracted.
8. To attempt to promote farming in ways that eliminate, through state animal unit guidelines, the "massive feed lot" threat, which was a concern identified by Mitchell residents in the input survey.

Regarding cultural resources, the Town's strategy is to promote preservation of historic, archaeological, cultural, and scenic sites, buildings, districts, objects and structures through inventorying those resources to determine what needs to be protected.

Recommendations

1. To be consistent and cooperative with other units of government and agencies, the Town of Mitchell should use the definition of farmland defined in Wisconsin Statue Chapter 91.
2. The "A-1" Agricultural land district should be restricted to such uses. Uses consistent with and in support of, but not following specifically into these permitted uses, may be considered by the Town Board for a conditional use permit.
3. Any building or development on A-1 properties should be restricted to one single family dwelling per resident owner on no less than 35 acres along with necessary out buildings dedicated to farming.
4. Any additional housing for migratory or permanent farm hands on site shall meet all county or state sanitary restrictions and all current building codes within the town. In this case a

conditional use permit may be granted, after proving within reason to the town board, a need for such dwelling.

5. Any new buildings must meet current building guidelines and safety restrictions, and be used in a manner consistent with the primary farming operation.
6. Due to the possibility of farm consolidation, structures in existence before adoption of this may be (with conditional use application) separated from the primary farm operation within the building guidelines of the town, given the division of such lands does not restrict or change dramatically the continued operation of the primary farm.
7. The principle use of lands within the A-1 area must remain consistent with state, county and town guidelines except where lands used previous to the adoption of this ordinance were different. Any sale or transfer of such properties within A-1 will return these lands into strictly A-1 use unless such sale or transfer is between immediate family or a new conditional use permit is filed for by the purchaser previous to occupancy.

Goals, Objectives, Policies, Programs

Goal 1) Farmland and open space/green space are very important in the Town of Mitchell.

Over 90% of the participants in the Town of Mitchell Citizen Input Survey agreed that farmland and open space/green space was important to the Town and should be protected. These lands help create the Town's rural character and also provide outdoor recreation, vegetative buffers, flood and stormwater management, habitat preservation, air and surface water quality improvement, aesthetics and community focal points.

- a) *Policy/program:* Develop and adopt a point system to help analyze land parcels for potential land use changes. Criteria for land analysis could include the County's Land Evaluation and Site Assessment (LESA) score and the recent use of the parcel. (See Appendix E for the Town of Mitchell Point System.)
- b) *Policy/program:* Help landowners become aware of programs such as the voluntary purchase of development rights, as well as the options for conservation easements offered by Glacial Lakes Conservancy.
- c) *Policy/program:* Help landowners become aware of the Managed Forest Law as a tax incentive for keeping land as woodlands.
- d) *Policy/program:* Consider maximum driveway lengths or maximum front yard setbacks for new residential and commercial development in order to limit fragmentation of lands.

Goal 2) Protection of farming activities is necessary within the Town of Mitchell.

The Town of Mitchell benefits from a vibrant agricultural sector and an open farm landscape. Farm products and the processing of farm products can still be a significant local source of income and employment. In addition, residents in the Town of Mitchell view farming as an important occupation that embodies many fundamental American values. When Town residents were asked on the Citizen Input Survey whether a farmer's "right to farm" was important to them—even if they would be bothered by occasional noise, dust, odors, etc.—almost 90% of residents agreed.

- a) *Policy/program:* Develop and distribute, either directly or through area realtors, a "Rural Code of Conduct" that outlines the traditional community norms and expectations for

residents. (See Appendix F for form used by Realtors Association of South Central Wisconsin.)

Goal 3) The Town of Mitchell will not discourage efforts to preserve historic resources in the town.

No significant historical, archeological, or other cultural resources concerns arose during the community issue identification and visioning process. Nevertheless, the Town Plan Commission and Board is not opposed to worthy private efforts to preserve historic and archeological resources or initiate cultural activities.

- a) Policy/program:* Periodically, the Town Plan Commission and Board will evaluate and assess any historic resources in the Town and nominate any of these sites, structures, and artifacts of community significance to appropriate national, state, and local registers.