



## **CHAPTER 10**

# Agricultural, Natural and Cultural Resources



## CHAPTER 10: AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

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## CHAPTER 10: AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

### INTRODUCTION

Agricultural, natural, and cultural resources give definition to a community and strongly affect quality of life. Outside the urban areas of Outagamie County, a tapestry of working farms interwoven with stands of woodlands dot the landscape and shape the area's identity and culture. While agricultural acreage and the number of farms have been on the decline in Outagamie County, it is still an important component of the area economy. Natural features such as topographic relief, lakes, streams, wetlands and soils also have significant bearing on historic and contemporary land use and development patterns. Understanding the relationship between environmental characteristics and their physical suitability to accommodate specific types of activities or development is a key ingredient in planning a community's future land use.

### INVENTORY AND ANALYSIS

Creating an inventory of existing agricultural, natural, and cultural resources is critical in providing the Village of Hortonville with information to base future decisions on. The goals, strategies and recommendations for this element were shaped with these resources, and the constraints and opportunities they provide, in mind. The follow provides an inventory of these resources.

#### **Agricultural Resources Inventory**

Farming and the processing of farm products is still an important source of income and employment in Outagamie County. Since agriculture is a necessary component of the county's economy, the protection of farmland is critical. However, as is occurring elsewhere in rural Wisconsin, new developments are encroaching on productive farmland. This section will assess agricultural lands within the Village and in surrounding towns.

#### ***Farm and Farmland Loss***

Farm and farmland losses are the result of economic pressures within agriculture as well as competition for agricultural lands from residential, commercial, industrial, and other development.

In 1997, there were about 1,621 farms (defined as producing at least \$1,000 worth of agricultural products in that year) in Outagamie County (Table 10-1).<sup>1</sup> This was a net loss of 28 farms or 1.7 percent countywide between 1990 and 1997. Unlike the county as a whole, towns surrounding the Village of Hortonville experienced a net gain of 9 farms (2.3%) during this same time period. However, it is important to understand that even if the number of farms increased slightly, the total acreage of farmland decreased, as some property owners may have incrementally sold off portions of their farms, without shutting down operations altogether (Table 10-2). According to the PATS study, between 1990 and 1997, towns surrounding the Village of Hortonville lost about 3,760 acres of farmland or about 6.7 percent. In the following years, 2000 to 2006, farmland continued to be lost as farmland was converted to other uses. Between this time period, 4,919 acres or 9.9 percent of the farmland was lost. Farmland within the Village of Hortonville is

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<sup>1</sup> Wisconsin Town Land Use Databook for Outagamie County Wisconsin. A project of the Land Use and Agricultural Self-Directed Team, University of Wisconsin-Cooperative Extension. Prepared by the Program on Agricultural Technology Studies (PATS), UW-Madison, September 1999.

included in these numbers for the years 2000 to 2006. Farmland gains within the Village were due to annexations that occurred between 2001 and 2005.

Dairy farms unfortunately did not fare as well as farms in general (Table 10-1). In 1989, a total of 761 dairy farms existed in the county. By 1997, about a third or 482 dairy farms remained (net loss of 279 farms). Similar to the county, towns surrounding the Village of Hortonville also saw the number of dairy farms fall. Between 1989 and 1997, a total of 58 or 36 percent of the dairy farms were lost in the surrounding towns. Greatest losses occurred in the towns of Dale (41.7%), Ellington (40.3%) and Liberty (43.8%).

**Table 10-1: Trends in Farm Numbers, 1990 and 1997**

Jurisdiction	Estimated Farms		Estimated Dairy Farms		Percent Change	
	1990	1997	1989	1997	Farms	Dairy Farms
T. Dale	86	77	36	21	-10.5%	-41.7%
T. Ellington	102	111	62	37	8.8%	-40.3%
T. Greenville	86	88	29	21	2.3%	-27.6%
T. Hortonia	43	51	18	15	18.6%	-16.7%
T. Liberty	69	68	16	9	-1.4%	-43.8%
Outagamie Co.	1,649	1,621	761	482	-1.7%	-36.7%

Source: Wisconsin Town Land Use Data Book, UW-Extension, PATS, 1999.

**Table 10-2: Loss of Farmland Acres**

Jurisdiction	1990	1997	2000	2002	2004	2006	1990-1997	2000-06
<b>V. Hortonville</b>	-	-	<b>383</b>	<b>368</b>	<b>206</b>	<b>470</b>	-	<b>22.7%</b>
T. Dale	11,519	10,750	9,065	8,935	8,868	8,932	-6.7%	-1.5%
T. Ellington	16,315	15,728	15,101	14,742	13,876	13,799	-3.6%	-8.6%
T. Greenville	13,027	11,521	11,180	10,958	10,341	9,121	-11.6%	-18.4%
T. Hortonia	7,495	6,976	6,702	6,510	6,493	6,110	-6.9%	-8.8%
T. Liberty	7,957	7,578	7,181	6,313	6,272	6,261	-4.8%	-12.8%

Source: Wisconsin Town Land Use Data Book, UW-Extension, PATS, 1999. (data from 1990 and 1997)

<http://www.pats.wisc.edu/> (data from 2000 to 2006).

As part of the Statement for Equalized Values, the Wisconsin DOR reports the total valuation for agricultural lands. Between 2007 and 2012, the value of agricultural land increased by 9.7 percent in the Village of Hortonville (Table 10-3). Since annexations did not occur over this time period, the increase in value can be attributed to land appreciation. A review of the Hortonville area indicates that agricultural land values peaked in 2009 for all communities except the Village which rose slightly in 2009 and in 2011. Land values in the Town of Liberty echoed this trend.

**Table 10-3: Agricultural Equalized Values (Land), 2007 - 2012**

Jurisdiction	2007	2008	2009	2010	2011	2012	% Change
<b>V. Hortonville</b>	<b>69,200</b>	<b>69,300</b>	<b>69,800</b>	<b>69,600</b>	<b>78,000</b>	<b>75,900</b>	<b>9.7%</b>
T. Dale	1,657,200	1,681,600	1,700,800	1,667,300	1,682,900	1,637,800	-1.2%
T. Ellington	2,374,000	2,458,700	2,508,800	2,415,300	2,391,800	2,335,100	-1.6%
T. Greenville	1,720,500	1,812,500	1,813,800	1,785,500	1,751,200	1,685,700	-2.0%
T. Hortonia	940,300	972,400	985,100	964,100	973,500	945,300	0.5%
T. Liberty	1,119,000	1,157,800	1,174,000	1,151,100	1,210,800	1,179,100	5.4%
<b>Total</b>	<b>7,880,200</b>	<b>8,152,300</b>	<b>8,252,300</b>	<b>8,052,900</b>	<b>8,088,200</b>	<b>7,858,900</b>	<b>-0.3%</b>

Source: Statement of Equalized Values, Wisconsin Department of Revenue, 2007 - 2012.

### **Farmland Soils**

A classification system rating the suitability of a specific area based on soil type and condition was developed by the U.S. Department of Agriculture.<sup>2</sup> Prime farmland (Class I, II and III soils)<sup>3</sup> as defined by the U.S. Department of Agriculture, “is the land that is best suited for food, feed, forage, fiber and oilseed crops” when managed according to acceptable farming methods. These lands may be cultivated, pasture, woodland or other land; however they cannot be urban, built-up or water areas. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment. Criteria used to determine prime farmland include: adequate and dependable supply of moisture from precipitation or irrigation, few or no rocks, permeable to water and air, not excessively erodible or saturated with water for long periods, is not frequently flooded during the growing season, and has slopes that range from 0 to 6 percent. Soils that have a seasonal high water table may qualify as prime farmland if this limitation is overcome by drainage measures.

**Overall, about two-thirds (1,513 acres, 68.4%) of the land within the Village is considered prime farmland with the majority classified as Class I and II** (Exhibit 10-1, Table 10-4). These soils are concentrated in the older central portion of the Village and extend both west and south from area. They also extend along most of the shore of Black Otter Lake. **In comparison, about three-quarters (12,083 acres, 73.2%) of the land within 1.5 miles of the Village is considered prime farmland.** These soils are scattered throughout the area, but more concentrated west, south and east of the Village.

Within the Village, much of this area has already been developed and converted to other uses. Outside the Village, many of these lands still remain in agriculture.

<sup>2</sup> USDA 1993. *USDA Handbook 18: Soil Survey Manual*.

<sup>3</sup> Class I-III soils are defined as “Prime” in the Outagamie County Farmland Preservation Plan, 1982.

**Table 10-4: Important Farmland Classes**

Village of Hortonville		
Farmland Classes	Acres	Percent
Class I, II	856.0	38.7%
Class III	656.8	29.7%
Class IV, V, VI, VII, VIII	585.8	26.5%
No Rating	67.7	3.1%
Water	46.5	2.1%
<b>Total</b>	<b>2,212.8</b>	<b>100.0%</b>
Village of Hortonville + 1.5 Mile Buffer		
Farmland Classes	Acres	Percent
Class I, II	7,085.3	42.9%
Class III	4,998.6	30.3%
Class IV, V, VI, VII, VIII	4,009.1	24.3%
No Rating	120.0	0.7%
Water	290.5	1.8%
<b>Total</b>	<b>16,503.5</b>	<b>100.0%</b>

*Source: Outagamie County Soils data, 2003. ECWRPC 2013.*

## Natural Resources Inventory

Natural Resources act as the foundation upon which communities are formed. Identifying key natural resources in and within a close proximity of the Village of Hortonville, and learning how to utilize, conserve, and/or preserve them may determine the future environmental health of the Village. This section addresses land, water, wildlife, mineral, and recreational resources in the Village of Hortonville, and aims to provide a baseline upon which the Village can use to make future decisions that may impact these resources.

## Land Resources

### Soils

Soils support the physical base for development and agriculture within the Village. Knowledge of their limitations and potential difficulties is helpful in evaluating crop productions capabilities and other land use alternatives such as residential development, utility installation and other various projects. Three general soil associations, or groupings of individual soil types based on geographic proximity and other characteristics, are present within the Village of Hortonville<sup>4</sup>. These include:

- **Hortonville-Symco association.** These soils are located in the southern portions of the Village. These soils consist of nearly level to steep soils on glacial till plains. Most of this association is used for cultivated crops. The main concerns of management are controlling water erosion, improving drainage, and maintaining tilth and fertility. Minor soils of this association are the Carbondale, Cathro, Kolberg, Manawa, Menominee, and Pella soils and some areas of Rock outcrop. The low-lying drainage ways are occupied by the

<sup>4</sup> Soil Survey of Outagamie County, Wisconsin, 1978; United States Department of Agriculture Soil Conservation Service



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somewhat poorly drained Manawa soils or the poorly drained Pella soils. The Swampy digressional areas are occupied by the organic Carbondale and Cathro soils. Areas of the Menominee soils are intermingled with areas of Hortonville soils where there is a 20 – to – 40-inch sandy overburden.

- **Menominee-Grays-Rousseau association.** These soils are located within the northern portions of the Village and surrounding areas. They are nearly level soils in glacial lake basins or on outwash plains and of gently sloping to steep soils on outwash ridges or glacial till plains. Much of this association borders farmland. The well drained soils are commonly used in rural home development due to the only slight or moderate building limitations. Main concerns for this association are controlling erosion and soil blowing, removing excess water, and conserving soil moisture. Minor soils of this association include the Boyer, Casco, Deford, Shawano, and Wainola series. The well drained to excessively drained Boyer, Casco, and Shawano soils that are underlain by sand and gravel are on upland ridges. The poorly drained Deford soils and the somewhat poorly drained Wainola soils are in depressions and drainage ways.
- **Carbondale-Keowns-Cathro association.** These soils are predominantly located along the Wolf River Corridor with a small portion also found in the southwest corner of the Village. This association consists of nearly level soils in digressional areas and drainage ways. Unless drained most areas of this association remain in swamp woodland and are used for wildlife habitat or are idle. Most soils in this association have severe limitations for development. Minor soils within this association consist of Lobo, Markey, Pella, Poygan, Rondeau, and Suamico soils located in depressions on till plains. The very poorly drained Lobo, Markey, Rondeau, and Suamico soils are in glacial lake basins and depressions. Pella and Poygan soils are in depressions on till plains.

### ***Soil Suitability for On-Site Waste Disposal***

Exhibit 10-2 displays the relative suitability for development of specific locations within the Village of Hortonville based on their underlying soils. The “Soil Limitations Map” identifies suitability for on-site waste disposal options based on an evaluation of soil characteristics, as defined by the Natural Resource Conservation Service (NRCS). This map is not intended to serve as a substitute for on-site soil investigations, but rather as an indicator of reasonable expectations for soils underlying a site.

***Evaluation of the soil data indicates that the majority of the soils in the Village of Hortonville are moderately suitable for conventional on-site individual septic systems and approximately 60 percent of the soils within the Village’s 1.5 mile buffer area is considered moderate.*** (Table 10-5). Generally, soils near streams, rivers, and wetlands are the least suitable for on-site waste disposal. Areas with high groundwater or characterized by poorly drained soils (Carbondale-Keowns-Cathro Soil Association) are also more likely to be unsuitable for on-site systems. Soils with limited suitability or nor rating are primarily found within close proximity of Black Otter Lake, within the northern areas approaching the Wolf River Corridor and within the southwest portions of the Village in areas with high groundwater.

**Table 10-5: Soil Limitations for On-Site Waste Disposal**

Village of Hortonville		
Suitability	Acres	Percent
High	106.4	4.8%
Moderate	1,272.3	57.5%
Limited	751.2	33.9%
No Rating	36.4	1.6%
Water	46.5	2.1%
Total	2,212.8	100.0%
Village of Hortonville + 1.5 Mile Buffer		
Suitability	Acres	Percent
High	503.7	3.1%
Moderate	7,963.5	48.3%
Limited	7,671.5	46.5%
No Rating	74.3	0.5%
Water	290.5	1.8%
Total	16,503.5	100.0%

Source: Outagamie County Soils data, 2003. ECWRPC 2013.

Currently, public sanitary sewer service is available from the Village of Hortonville Municipal Sewer and Water Utility, which serves about 95 percent of the Village (Exhibit 9-1). Areas in the northern and eastern portions of the Village are on private on-site systems. Soils of moderate suitability for on-site waste disposal are general found south of CTH MM, while soils of limited or no rating are found north of CTH MM. In addition, a band of soils of high suitability cuts diagonally through the northern portion of the Village.

In the future, if warranted by development pressures, public sanitary sewer infrastructure could potentially be extended west into the Town of Hortonville or east towards the proposed roundabout in the Town of Greenville.

### **Steep Slopes**

Exhibit 10-3 indicates areas that have slopes greater than 12 percent. **Approximately 3.1 percent (69 acres) of the Village's total acreage and 1.4 percent (229 acres) fall in this category** (Table 10-6). In general, the Village and the surrounding area is relatively flat. Areas of steep slopes are scattered randomly throughout the areas.

**Table 10-6: Steep Slopes**

Village of Hortonville		
Slope	Acres	Percent
Greater than 12%	69.0	3.1%
0 to 12%/No Rating/Water	2,174.0	96.9%
Total	2,243.0	100.0%
Village of Hortonville + 1.5 Mile Buffer		
Slope	Acres	Percent
Greater than 12%	229.2	1.4%
0 to 12%/No Rating/Water	16,274.4	98.6%
Total	16,503.7	100.0%

*Source: Outagamie County Soils data, 2003. ECWRPC 2013.*

### ***Geology, Topography and Scenic Resources***

The structure of the Village's bedrock and historic glacial events is largely responsible for the Village's landscape. After the recession of glaciers about 11,000 years ago, Outagamie County was left with its current topography shaped by mounds of glacial till with flatter areas where limestone and sandstone bedrock often lie not far from the surface. The Village of Hortonville is set in this rolling terrain of Outagamie County.

Elevations rise away from the shores of Black Otter Lake, which is situated in the center of the Village. In the northeast, Hortonville is ringed with hills that wrap around to the south and west. These hilltop elevations range from 850-970 feet. Black Otter Lake lies at approximately 780 feet. Black Otter Creek flows from a dam at Nash Street (in the Village of Hortonville) northwest towards the Wolf River. The Wolf River floodplain is approximately 250 feet lower than the crest of the highest hills in the vicinity.

***The bedrock geology of the Village is made up of two distinct formations that divide the Village<sup>5</sup>.*** These bedrock formations are:

- The **Prairie du Chien Group** is comprised of dolomite with some sandstone and shale. This group is found in the southeast portions of the Village and surrounding areas.
- The **Cambrian Group** is comprised of sandstone with some dolomite and shale. This group is found in the northwest portions of the Village and surrounding areas.

### ***Metallic and Non-Metallic Mining Resources***

The Hortonville area contains deposits of sand and gravel associated with debris left over from the last glacial period. A sand and gravel mining business was located approximately 3 miles to the northwest of Hortonville, close to the intersection of CTH S and CTH M, but that business ceased operating around 1930. The mined material had been used to build some of the area's

<sup>5</sup> Bedrock Geology of Wisconsin, 2005; University of Wisconsin-Extension Geological and natural History Survey

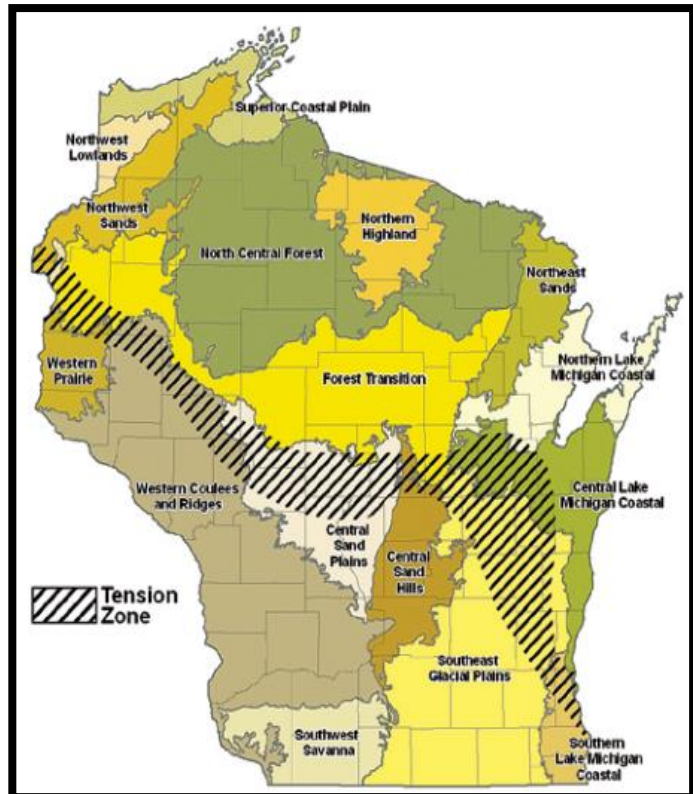
roads. Another closed non-metallic site is located in the northern part of the Village on CTH MM. This site is in the NE ¼ of Section 25, T. 25 N., R. 15 E.

### **Woodlands**

Woodlands covered much of Outagamie County before settlement. At one time, the Village of Hortonville was primarily covered with deciduous hardwood forest. The Fox Valley's reliance on the paper industry attests to the regions' forested history.

The tension zone is a wide corridor running from northwestern to southeastern Wisconsin that marks the pre-settlement dividing line between northern and southern native plant species. The tension zone has characteristics of both northern and southern Wisconsin climates, and therefore, species from both areas. Hortonville lies within this tension zone. The United States Department of Agriculture has also divided the country into plant hardiness zones. Those zones contain characteristic plant species that are hardy in that region. Generally speaking, plants from any particular zone are hardy in that zone and those to the south, but not to the north unless they are protected from the severe climate of that zone. Hortonville is in USDA Zone 4B with average annual minimum temperatures of -20° to -25°F.

As would be expected for areas within the tension zone, the Village of Hortonville lies at the juncture of two different plant communities. They are generally described as the boreal element and the prairie element. Characteristics typical of both the Conifer-Hardwood Forest and the



*Wisconsin Tension Zone and the 16 Ecological Landscapes*

Source: Wisconsin's Forests: A Quick Overview; 2011, WDNR

Southern-Hardwood Forest can be seen locally. Hortonville area woodlands, which are found mostly on hillsides and in low-lying areas, are home to both the beech-sugar maple-hemlock community and the sugar maple-basswood-elm community. There are both peat bogs and mucks supporting swamp conifer forests and wetlands with organic and mineral-laden soils supporting cattail, bulrush and sedge meadows.

Locally, the Commercial Club Park contains an especially magnificent stand of tall white pine trees that should be preserved. They supply great beauty and shade and are something of a "landmark" in the Village.

A majority of the natural vegetation remaining is associated with the Wolf River floodplain. Significant acreages of lowland hardwood forest, shrub swamp and marsh are present, along with smaller amounts of sedge meadow and mesic hardwood forest. The entire floodplain of the Wolf River merits protection, as almost everything around it is now heavily developed.

Care must be taken in the selection of trees for use in the Village, including those used for landscaping, in preserved parks and open spaces, and along the street. Street trees in particular have the hardest time adapting to their particular microclimates. Normally they are subject to stress from soil compaction, heat, drought conditions, lack of root space, salt, road pollutants, and impacts from all sorts of vehicles. The typical street tree usually lives only a fraction of its potential life span. Street trees should be selected from a pallet of trees that adapt well to street conditions and are suitable for the local area. There should also be diversity in the species selected to reduce the spread of tree and shrub diseases.

Forests and woodlands can be classified into one of two categories: general (unplanted) woodlands and planted woodlands. General woodlands are naturally occurring forests and hedgerows. Planted woodlands are tree plantations in which trees are found in rows. These areas include orchards, timber tracts, Christmas tree plantations and other general uses. **There are approximately 76 acres of planted woodlands and 329 acres of general woodlands in the Village of Hortonville** (Table 10-7). In total this makes up approximately 18 percent of the land cover in the Village. Within the Village of Hortonville and the 1.5 mile area buffer, woodlands cover about 29 percent of the area (planted - 235 acres, general 4,761.2 acres).

**Table 10-7: Woodlands**

Village of Hortonville		
Slope	Acres	Percent
Planted Woodlands	75.6	3.4%
General Woodlands	328.6	14.9%
Total Woodlands	404.2	18.3%
Total Acres	2,212.8	100.0%
Village of Hortonville + 1.5 Mile Buffer		
Slope	Acres	Percent
Planted Woodlands	235.0	1.4%
General Woodlands	4,761.2	28.9%
Total Woodlands	4,996.2	30.3%
Total Acres	16,495.7	100.0%
<i>Source: ECWRPC, 2010</i>		

## Water Resources

### **Lakes and Ponds**

Surface water resources are extremely valuable features because of their potential environmental and economic benefits. Water based recreational activities and appropriately designed residential development that capitalizes on surface water amenities can have lasting impact on the local economy. Appropriate location and management of residential activity near surface water features is extremely important because of potential threats to water quality. Residential development's threats to surface water resources include lawn-applied chemicals, siltation and petroleum-based substances and salts from local road runoff.

The Wisconsin DNR maintains the Wisconsin Lakes Directory. The directory provides a list of named and unnamed lakes, springs, and ponds. **One lake is located in the Village of Hortonville** (Exhibit 10-3).



*Black Otter Lake*

Black Otter Lake is a 75-acre impoundment, created in 1848, to form a millpond for the newly founded community of Hortonville. Black Otter's drainage area or watershed is approximately 10,043 acres of predominantly agricultural land. Two intermittent tributaries draining agricultural areas and one storm water drainage inlet feed the lake. Black Otter Creek is the outlet which feeds directly into the Wolf River.

The lake lies within the Village, with the exception of a portion in the southeastern quadrant that is located in the Town of Hortonville. The lake is primarily bordered by residential and conservancy uses. Public access is provided at Alonzo Park, Veterans Memorial Park, Black Otter Park, Black Otter Lake Fishing Pier and Black Otter Shadows Boat Landing. The Village has long recognized this man-made lake as a significant historic and recreational resource. The Black Otter Lake District (BOLD) has taken primary responsibility for the lake's conservation, management, and planning since 1976. Main concerns are sedimentation, aquatic invasive species, and water-quality issues, and the District has the power to levy taxes in order to support efforts to address these matters. BOLD approved the Black Otter Adaptive Management Plan in 2008.<sup>6</sup>

### **Rivers and Streams**

**Two named waterways, Black Otter Creek and the Wolf River, are within or within close proximity of the Village of Hortonville, along with a series of unnamed streams, ditches, and drainageways that support them.** The unnamed streams, ditches, and drainageways primarily drain agricultural areas or undeveloped areas within the Village's 1.5 mile buffer area and beyond (Exhibit 10-3). These streams, as listed by the Wisconsin DNR include:

- **Black Otter Creek.** Black Otter Creek is an intermittent stream for much of its length, becoming a perennial stream at a point approximately one and a half miles upstream of the lake. Nutrients and sediments carried by the creek from nearby crop fields and barnyards contribute to the eutrophication of Black Otter Lake. Wetlands border the creek in many places.
- **Wolf River.** The Wolf River moves sluggishly north of Hortonville in tight oxbow curves set in a broad field of wetlands and flood plains. This regionally significant natural feature offers notable spawning grounds for walleye and provides the area with habitats for a rich diversity of other wildlife. This resource is central to the region's substantial tourism industry, providing plentiful opportunities for fishing, boating and hunting.

<sup>6</sup> See <http://www.blackotterlake.com/Adaptive.html> for more information.

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## ***Watersheds and Drainage***

***The Village of Hortonville is located within the Wolf River – New London and Bear Creek Watershed*** (Exhibit 10-3).<sup>7</sup> The Lower Wolf River and the Arrowhead River and Daggets Creek watersheds encroach on the 1.5 mile planning area boundary. All three watersheds are part of the Wolf River Drainage Basin.

- **The Wolf River - New London and Bear Creek Watershed.** The Village of Hortonville falls entirely within the Wolf River – New London and Bear Creek Watershed. This Watershed is in west central Outagamie County and covers 145 square miles. It includes 25 miles of the mainstream of the Wolf River from the confluence with the Shioc River to the City of New London.

The watershed ranked medium for streams and lakes, and low for groundwater under the Nonpoint Source Priority Watershed selection process.

- **The Lower Wolf River Watershed.** The Lower Wolf River Watershed covers parts of Outagamie, Waupaca and Winnebago counties (includes Section 9, Town of Dale and Sections 4, 5, 32 and 33, Town of Hortonia of the planning area) and includes about 120 square miles. This includes a portion of the mainstream Wolf River from the junction with the Embarrass River to the mouth of the Waupaca River, including the lower portion to the Weyauwega millpond. The mainstream Wolf River flows within the watershed for about 19 miles and contains a diverse warm water sport fishery. Wetlands adjacent to the river provide excellent spawning grounds for these fish.

Those portions of the watershed within Winnebago and Outagamie counties are in the Lower Fox River Designated Planning Area. The watershed was not rated for the Wisconsin Nonpoint Source Water Pollution Abatement Program.

- **Arrowhead River and Daggets Creek Watershed.** The Arrowhead River and Daggets Creek Watershed covers about 135 square mile in Winnebago, Waupaca and Outagamie counties (includes Sections 5, 6,7 and 8, Town of Greenville and Sections 31 and 32 of the Town of Ellington of the planning area).

The watershed ranked high priority for streams and low priority for groundwater under the Wisconsin Nonpoint Source Water Pollution Abatement Program.

The Wolf River Basin drains 3,690 square miles from its headwaters above Pine Lake in Forest County. The Wolf River passes approximately two miles north of downtown Hortonville, on its path south to meet the Upper Fox River just above the Winnebago Pools Lakes System. The Winnebago Pools Lakes System eventually flows through the Lower Fox River discharging into the Bay of the Green Bay and ultimately contributes to the water quality of the Lake Michigan.

## ***Floodplains***

Areas susceptible to flooding are considered unsuitable for development due to potential health risks and property damage. The Outagamie County Flood Insurance Rate Maps (FIRM) was created by the Federal Emergency Management Agency (FEMA) on October 18, 1984, revised

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<sup>7</sup> Gateway to Basins, Watersheds; WDNR <http://dnr.wi.gov/water/basin/>

September 30, 1993 and 2010, for all unincorporated areas in the County, including the Village of Hortonville.

Table 10-8 shows the acres and percent of floodplains in the Village. **Overall, almost 11 percent of the Village’s acres are in floodplains and over one quarter (28.2%) of the 1.5 mile buffer areas are in floodplains.** As can be seen in Exhibit 10-3, the Village’s floodplains are directly associated with the area’s wetlands and stream corridors.

Outagamie County has adopted a shoreland-floodplain-wetland zoning ordinance. This ordinance requires certain land use controls in designated flood hazard areas, thus making residents eligible to participate in the Federal Flood Insurance Administration’s Flood Insurance Program. This program requires all structures located in the designated flood hazard area be insured by a flood insurance policy if they are mortgaged by a federally insured bank.

**Table 10-8: Floodplains**

Village of Hortonville		
	Acres	Percent
Floodplains	240.2	10.9%
Total Acres	2,212.8	100.0%
Village of Hortonville + 1.5 Mile Buffer		
	Acres	Percent
Floodplains	4,645.4	28.2%
Total Acres	16,495.7	100.0%
<i>Source: FEMA, 2010.</i>		

**Wetlands**

Wetlands act as a natural filtering system for nutrients such as phosphorus and nitrates and serve as a natural buffer protecting shorelines and stream banks. Wetlands are also essential in providing wildlife habitat, control, and groundwater recharge. Consequently, local, state, and federal regulations have been enacted that place limitations on the development and use of wetlands and shorelands.

**Hortonville Code of Ordinances, Chapter 21. Shoreland/Wetland Zoning and Outagamie County Code of Ordinances, Chapter 44. Shoreland-Wetland Zoning regulates wetlands within 1,000 feet of the ordinary high water mark of navigable lakes, ponds or flowages and within 300 feet of the ordinary high watermark of navigable rivers or streams.** Hortonville’s ordinance regulates wetlands within the Village of Hortonville, while Outagamie County’s ordinance regulates wetlands in unincorporated areas of the county, including the 1.5 mile buffer area. The Army Corps of Engineers has authority over the placement of fill materials in virtually all wetlands two acres or larger adjacent to navigable waterways. The U.S. Department of Agriculture incorporates wetland preservation criteria into its crop price support programs. Prior to placing fill or altering wetland resources, the appropriate agencies must be contacted for authorization.

The wetlands shown on Exhibit 10-4 are based on the Wisconsin DNR Wetlands Inventory Map. They were identified using aerial photographs to interpret vegetation, visible hydrology, and



geography based on the U.S. Fish and Wildlife Service's "Classification of Wetland and Deepwater Habitats of the United States." **Overall, approximately 10 percent (9.7%) of the Villages' total acreage and over 30 percent (30.2%) of the Village's 1.5 mile buffer area are classified as wetlands** (Table 10-9). The majority of this acreage lies in low-lying areas associated with stream and drainage ditch corridors. The Village should consider the benefits of a "working" wetland and utilize and or create new tools to protect this natural resource.

**Table 10-9: Wetlands**

Village of Hortonville		
	Acres	Percent
Wetlands => 5 Acres	172.3	7.8%
Wetlands < 5 Acres	42.0	1.9%
Total Wetland Acres	214.3	9.7%
Total Acres	2,212.8	100.0%
Village of Hortonville + 1.5 Mile Buffer		
	Acres	Percent
Wetlands => 5 Acres	4,979.8	30.2%
Wetlands < 5 Acres	307.8	1.9%
Total Wetland Acres	5,287.6	32.1%
Total Acres	16,495.7	100.0%

Source: WDNR, 2006.

### Groundwater

Safe, clean, and reliable groundwater plays a crucial role in maintaining the current quality of life and economic growth of the Village of Hortonville. Precipitation in the form of rain and snow is the source of nearly all the Village's groundwater. Recharge is generally greatest in the spring, when water from melting snow and heavy rains saturate the ground and percolate downward to the water table. If discharge (the drawing out and use of groundwater) is greater than recharge, then the elevation where the groundwater is found will fall, causing a depression to occur. Lower water levels cause the pumping lifts to increase and may reduce the yields of some of the wells. According to the Village's 2012 annual report<sup>8</sup>, a total of about 54 million gallons were pumped from groundwater sources in 2012. In addition, an incalculable amount of ground-water is pulled from the private wells that serve residences both inside and outside of the Village limits. (For more information, please refer to the Community Facilities Chapter).

According to a report prepared by the Wisconsin Geological and Natural History Survey<sup>9</sup>, areas surrounding the Village have high (4-8 inches/year) to very high (> 8 inches/year) infiltration rates which are estimated to become stream base flows or continue down and eventually become groundwater recharge. **Practically all areas within the Village fall with either high (73.3%) or Very High (21.9%) water recharge potential.** In comparison, three quarters of the areas in the planning area (Village plus 1.5 mile buffer) are rated high (64.9%) and very high (11.4%).

<sup>8</sup> Source: Public Service Commission of Wisconsin Annual Report. 2012

<sup>9</sup> Groundwater Recharge in Calumet, Outagamie, and Winnebago Counties, Wisconsin, Estimated by a GIS-based Water-balance Model, 2011; University of Wisconsin-Extension Wisconsin Geological and Natural History Survey (Open-File Report 2001-05)

Protecting the infiltration areas from impermeable development will help to safeguard the Village's drinking water supply in the long-term (Table 10-10, Exhibit 10-4). That's not to say that new development should not occur within these areas, but rather new development should be designed to utilize best management practices (BMPs) that encourage or enhance groundwater infiltration.

**Table 10-10: Water Recharge Potential**

Village of Hortonville		
	Acres	Percent
Low Water Recharge Potential (0"- 2"/year)	0.0	0.0%
Medium Water Recharge Potential (2"- 4"/year)	42.2	1.9%
High Water Recharge Potential (4"- 8"/year)	1,622.5	73.3%
Very High Water Recharge Potential (> 8"/year)	483.9	21.9%
No Rating	64.1	2.9%
<b>Total Acres</b>	<b>2,212.8</b>	<b>100.0%</b>
Village of Hortonville + 1.5 Mile Buffer		
	Acres	Percent
Low Water Recharge Potential (0"- 2"/year)	0.0	0.0%
Medium Water Recharge Potential (2"- 4"/year)	799.0	4.8%
High Water Recharge Potential (4"- 8"/year)	10,710.6	64.9%
Very High Water Recharge Potential (> 8"/year)	1,877.2	11.4%
No Rating	3,108.9	18.8%
<b>Total Acres</b>	<b>16,495.7</b>	<b>100.0%</b>
<i>Source: University of WI-Extension, WI Geological Survey, 7/27/2011.</i>		

It is important to recognize that, in addition to any efforts made within the Village to protect groundwater supply; this issue is more regional in scope. A groundwater divide, located in the central part of Wisconsin, determines the flow of groundwater. East of the divide, groundwater moves southeasterly toward the Wolf and Fox Rivers. Thus, efforts to preserve groundwater resources should be coordinated on a regional basis as a way to ensure that the village's groundwater supply is protected.

The depth to groundwater varies throughout the study area (Table 10-11, Exhibit 10-3). ***In approximately 24 percent of the Village and 42% of the Village's 1.5 mile buffer area, the depth to groundwater is less than two feet.*** There is a strong parallel between areas of high groundwater and those areas designated as wetlands.

**Table 10-11: Depth to Groundwater**

Village of Hortonville		
	Acres	Percent
High Groundwater (< 2 feet)	520.2	23.5%
Total Acres	2,213.0	100.0%
Village of Hortonville + 1.5 Mile Buffer		
	Acres	Percent
High Groundwater (< 2 feet)	6,930.3	42.0%
Total Acres	16,503.7	100.0%

*Source: WDNR, 2006.*

**Arsenic Contamination.** Arsenic contamination of the groundwater supply has been an issue in northeastern Wisconsin since the 1980's. The main area of arsenic contamination runs diagonally (southwest to northeast) across Outagamie County, and is closely associated with the St. Peter Sandstone bedrock. The Village of Hortonville lies to the west, just outside of the band of highest concern.

In 2001, the US EPA lowered the arsenic drinking water standard from 50 to 10 parts per billion (PPB), due to convincing data that found a relationship between consumption and deterioration in health. **According to the WDNR's Drinking Water Data and the village's Consumer Confidence Report (CCR), the Village's potable water is 10 ppb, the drinking water standard<sup>10</sup>.** The public drinking water was last tested for arsenic in 2011.

In 2004, the DNR replaced its Arsenic Advisory Area Map with a more stringent set of regulations that apply to the Special Well Casing Depth Area (SWCDA). The regulations require new wells in Outagamie and Winnebago County to meet construction, grouting, and disinfection standards that have proven to lower arsenic levels to safe levels for human consumption. Required well construction specifications are determined by town quarter section. Appendix J provides the SWCDA maps for the towns of Dale and Hortonville, Town of Greenville, towns of Liberty and Hortonville and the Town of Ellington. **Private wells within the Village of Hortonville and within the entire 1.5 mile buffer area are included in the Special Well Casing Depth Area.** For a complete listing by town, please see Appendix L, Arsenic Casing Area – Towns of Dale, Ellington, Greenville and Hortonville.

<sup>10</sup> WDNR, Wisconsin Public Drinking Water Data.

[http://prodoasext.dnr.wi.gov/inter1/pws2\\$ws\\_web\\_dist\\_sys.QueryViewByKey?P RO SEQ NO24=142923&Z CHK=31542](http://prodoasext.dnr.wi.gov/inter1/pws2$ws_web_dist_sys.QueryViewByKey?P RO SEQ NO24=142923&Z CHK=31542). Accessed June 24, 2013.

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## Wildlife Habitat

### *Wildlife Resources*



*Alonzo Park*

Numerous habitat types surrounding the Village have the potential to support varied and abundant wildlife and fish communities. These habitats consist of streams, small ponds, rivers, woods, swamps, open wet meadows, and farmland. The largest areas of undeveloped land are found in the swampy areas immediately surrounding the Wolf River corridor.

Wildlife is threatened by the negative effects of development and storm water runoff (both from urban and rural runoff sources). This has affected water quality and habitat health downstream within the Winnebago Pool Lakes.

### *Rare, Threatened and Endangered Species*

The Wisconsin Department of Natural Resources maintains a database of rare, threatened and endangered species and natural communities in Outagamie County. In order to protect these species and communities, the exact location is not available to the public; however, Outagamie County does have a copy of this database. Whenever a request comes into the County for development, this database is consulted prior to granting approval.

The Wisconsin DNR Natural Heritage Inventory (NHI) maintains an online database which provides statewide inventory of known locations and conditions of rare and endangered species, by Town. A review of the NHI data base revealed a number of species (fish, mussel, community, bird, butterfly, turtle, mammal, beetle) for the towns surrounding the Village of Hortonville. According to the database the towns of Dale and Hortonville have 21 species, the Town of Greenville has one species, the towns of Liberty and Hortonville have 21 species, and the Town of Ellington has 13 species monitored by the NHI. However, this database is incomplete since not all areas within the state have been inventoried. Thus, the absence of a species within this database does not mean that a particular species or community is not present. Nor does the presence of one element imply that other elements were surveyed for but not found. Despite these limitations, the NHI is the state's most comprehensive database on biodiversity and is widely used. For a complete listing by town, see Appendix L, Natural Heritage Inventory.

### *Exotic and Invasive Species*

Non-native aquatic and terrestrial plants and animals, commonly referred to as exotic species, have been recognized in recent years as a major threat to the integrity of native habitats and the species that utilize those habitats. Some of these exotic species include purple loosestrife, buckhorn, garlic mustard, multi-colored Asian lady beetles, Eurasian water milfoil, and gypsy moths. They displace native species, disrupt ecosystems, and affect citizens' livelihoods and quality of life. The WDNR requires that any person seeking to bring any non-native fish or wild animal into the state must first obtain a permit as required under the Wisconsin Statutes 29.736 and 29.745.

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## Parks, Open Space and Recreational Resources

### *WDNR and Public Lands*

***The WDNR does not own any land within the Village of Hortonville.*** However, the Lower Wolf River Bottomlands Natural Resource Area (LWRBNRA) is located north of and within the Planning area boundary<sup>11</sup>. The LWRBNRA encompasses approximately 214,000 acres along and adjacent to the lower Wolf River and its tributaries. It was established in recognition of the area's significant ecological and recreational resources, and the need to connect existing state owned lands in order to preserve and enhance recreational values and protect larger blocks of habitat for wildlife and ecosystem functions. The LWRBNRA planning area contains 14 existing state properties totaling approximately 31,000 acres, including Wildlife Areas, a Fishery Area, and State Natural Areas. The Lemke Native Community Management Area (found within the 1.5 mile buffer around the Village) is located in Section 23, Town of Liberty.

### *Environmental Corridors*

Environmental corridors are continuous systems of open space created by the natural linkages of environmentally sensitive lands such as woodlands, wetlands, and habitat areas. They provide important routes of travel for a variety of wildlife and bird species. Protecting these corridors from development protects habitat and keeps nonpoint source pollution to a minimum, thus ensuring that high quality groundwater and surface water is maintained and habitat is not impaired.

Important environmental corridors within the Village and surrounding area are associated with the Black Otter Creek corridor, the Wolf River floodplain areas, and unnamed streams with natural vegetation scattered throughout the area. These areas should be protected from development by implementing buffer strips where land disturbing activities are limited within the established buffer area.

## Waste and Pollution

### *Solid and Hazardous Waste Sites*

The Solid and Hazardous Waste Information Management System (SHWIMS) provides access to information on sites, and facilities operating at sites, that are regulated by the Wisconsin Department of Natural Resources' (WDNR) Waste and Materials Management (WMM) program. The SHWIS on-line database activity information, including:

- Engineered and licensed solid waste disposal facilities;
- Older unlicensed waste disposal sites (e.g. town dumps);
- Licensed waste transporters;
- Hazardous waste generators; and
- Composting sites, wood-burning sites, waste processing facilities and more.

***According to SHWIMS, Hortonville has six active sites listed within the Village limits, and one within the planning area.*** The directory was also checked for the towns of Dale (0), Ellington (0), Hortonville (1), and Greenville (0) for the planning area. See Appendix L for a complete listing of all sites found on the SHWIMS data base.

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<sup>11</sup> Wisconsin Department of Natural Resources, LOWER WOLF RIVER BOTTOMLANDS NATURAL RESOURCES AREA MASTER PLAN AND ENVIRONMENTAL ASSESSMENT, September 2012.

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### **One abandoned landfill was identified in the Village:**

- Village of Hortonville Landfill, T.22 N., R. 15 E., Section 36, NE¼ of the SE¼.

### **One abandoned landfill was identified in the planning area:**

- Town of Ellington Landfill, T. 22 N., R. 15 E., Section 29, SW ¼ of the NW ¼.

### **Air Quality**

Air quality, especially good air quality, is often taken for granted. Sound local and regional planning can minimize negative impacts to the air. Development patterns can impact automobile use, which in turn impacts air quality. Emissions from certain industries can also impact air quality. As more rural residential development occurs, there are increased conflicts between non-farm residents and certain agricultural operations that emit dust and odors. Noise can also be a factor impacting environmental quality.

Vehicle travel including the number and length of trips has increased significantly in recent decades. This can be attributed to changing development patterns. Development patterns are becoming more spread out, with the location of jobs and housing becoming more segregated and distant from one another. This is apparent in the Fox Cities, and is common in the Village of Hortonville.

Since alternative modes of transportation are, at present day, less viable or unavailable in some instances, people rely more on the automobile to get around. Changing lifestyles are also a major factor. Two income families are causing people to find housing that splits the difference between the two employment locations. Since vehicle travel generates air pollutant emissions, greenhouse gas emissions, and noise, local decisions about what types, where and how new development occurs can have an impact on air quality.

### **Cultural Resources**

Cultural resources, like natural resources are valuable assets which should be preserved. These resources define a community's unique character and heritage. Included in this section is an inventory of historic buildings, sites, structures, objects, archeological sites and districts.

### **State and National Register of Historic Places**

The Wisconsin Historical Society's Division of Historical Preservation (DHP) is a clearing house for information related to the state's cultural resources including buildings and archaeological sites. A primary responsibility of the DHP is to administer the State and National Register of Historic Places programs. The National Register is the official national list of historic properties in the United States that are worthy of preservation. The program is maintained by the National Park Service in the U.S. Department of the Interior. The State Register is Wisconsin's official listing of state properties determined to be significant to Wisconsin's heritage. The inventory is maintained by the DHP. Both listings include sites, buildings, structures, objects, and districts that are



*Hortonville Community Hall*

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significant in national, state, or local history. Sites are based on the architectural, archaeological, cultural, or engineering significance. (For ease of discussion, “National Register” is used to refer to both programs. In Wisconsin, if a property is listed on one then it is typically listed on the other.

***At the present, one property within the Village of Hortonville is listed on the National Register.*** There are no additional properties listed within the 1.5 mile buffer.

The property listed in the National Register includes:

- Hortonville Community Hall, 312 W. Main Street, Hortonville

The National Register is not a static inventory. Properties are constantly being added, and, less frequently, removed. It is, therefore, important to access the most updated version of the National Register properties. This can be found by accessing the DHP website (<http://www.wisconsinhistory.org/hp/register/welcome.asp>) or by contacting the DHP at (608) 264-6500.

### **Architecture and History Inventory (AHI)**

In order to determine those sites that are eligible for inclusion on the National Register, the DHP frequently funds historical, architectural, and archaeological surveys of municipalities and counties within the state. Surveys are also conducted in conjunction with other activities such as highway construction projects.

***A search of the DHP’s online Architecture and History Inventory (AHI) reveals a total of 39 sites listed for the Village of Hortonville*** (Appendix L). Within the remainder of the planning area, an additional 17 sites were found in the towns of Dale (5), Ellington (4), Greenville (1), Hortonville (7) and Liberty (0).

Inclusion in this inventory conveys no special status, rights, restrictions, or benefits to owners of these properties. It simply means that some type of information on these properties exists in the DHP’s collections. AHI is primarily used as a research and planning tool. Like the National Register, this is not a static inventory. Properties are constantly being updated. Information can be found on the DHP web site (<http://www.wisconsinhistory.org/ahi/welcome.asp>).

### **Archaeological Sites Inventory**

An inventory similar to the AHI exists for known archaeological sites across the state: the Archaeological Sites Inventory (ASI). Due to the sensitive nature of archaeological sites, information as to their whereabouts is not currently made available online. This information is distributed only on a need-to-know basis. Archaeological sites are added to ASI as they are discovered; discovery is a continual process. For technical assistance and up-to-date information on sites within the Village of Hortonville and the 1.5 mile planning area, contact DHP at (608) 264-6500.

## Wisconsin Historical Markers

Wisconsin historical markers identify, commemorate and honor important people, places, and events that have contributed to the state's rich heritage. The Wisconsin Historical Markers Program is a vital education tool, informing people about the most significant aspects of Wisconsin's past. The Society's Division of Historic Preservation administers the Wisconsin Historic Markers Program. Applications are required for all official State of Wisconsin historical markers and plaques. ***There is one historical marker, located in Veterans Park in the Village of Hortonville.*** The Alonzo E. Horton Historical marker was erected in 2001 to honor the founder of Hortonville.



*Alonzo E. Horton Historical Marker*

## Museums/Other Historic Resources

Museums protect valuable historic resources for community enjoyment. Residents are welcome to learn from the exhibits and amenities they have to offer. ***There are no museums in the Village of Hortonville.*** However, there are several museums located in close proximity to the Village.

- Heritage Historical Museum, New London (approximately 7 miles)
- History Museum at the Castle, Appleton (approximately 15 miles)
- Hearthstone, Appleton (approximately 14 miles)
- Paper Discovery Center, Appleton (approximately 14 miles)
- The Building for Kids, Appleton (approximately 15 miles)
- The Trout Museum, Appleton (approximately 15 miles)

## Hortonville Historical Society

***The Hortonville Historical Society contains archival collections focusing on the social, economic, agricultural and industrial history of Hortonville, Wisconsin.*** It maintains a collection in the Hortonville Community Hall.

## Local History<sup>12</sup>

The area now occupied by the Village of Hortonville and its surroundings was once glaciated, and later became rich forest land, home to Sac, Fox, and Ho-Chunk peoples. European control of the area was first documented as part of the Northwest Territory in 1789, which was eventually succeeded by the Wisconsin Territory in 1836. European settlement along Lake Michigan was well underway by this time, with Kaukauna and Green Bay already busy trading posts as early as 1638.

Alonzo Horton, born in Connecticut, came to Wisconsin as a land speculator in 1848. After purchasing land warrants issued to veterans of the Mexican War at seventy cents an acre, he arrived in what is now Hortonville to stake his claim. Immediately he hired assistants to clear

<sup>12</sup> Village of Hortonville Comprehensive Plan, August 2003.



land, construct cabins, dam Black Otter Creek and build a mill. Settlers began to arrive, some alone, some with families, and Horton purchased additional land, platting lots to accommodate the growing population.

The new community continued to thrive. The first store opened in 1849, with goods transported from New York. By 1857 Hortonville was a “pleasant little inland hamlet” with “an excellent sawmill, flour and feed mill, two stores, and two hotels.” ***On August 11, 1894, with a population of 813, Hortonville was incorporated as a Village.***

## KEY AGRICULTURAL, NATURAL AND CULTURAL RESOURCES SUMMARY POINTS

- Overall, about two-thirds (1,513 acres, 68.4%) of the land within the Village is considered prime farmland with the majority classified as Class I and II.
- In comparison, about three-quarters (12,083 acres, 73.2%) of the land within 1.5 miles of the Village is considered prime farmland.
- Evaluation of the soil data indicates that the majority of the soils in the Village of Hortonville are moderately suitable for conventional on-site individual septic systems and approximately 60 percent of the soils within the Village’s 1.5 mile buffer area is considered moderate.
- Approximately 3.1 percent (69 acres) of the Village’s total acreage and 1.4 percent (229 acres) fall in this category.
- The bedrock geology of the Village is made up of two distinct formations that divide the Village.
- There are approximately 76 acres of planted woodlands and 329 acres of general woodlands in the Village of Hortonville.
- One lake is located in the Village of Hortonville.
- Two named waterways, Black Otter Creek and the Wolf River, are within or within close proximity of the Village of Hortonville, along with a series of unnamed streams, ditches, and drainageways that support them.
- The Village of Hortonville is located within the Wolf River – New London and Bear Creek Watershed.
- Overall, almost 11 percent of the Village’s acres are in floodplains and over one quarter (28.2%) of the 1.5 mile buffer areas are in floodplains.
- Hortonville Code of Ordinances, Chapter 21. Shoreland/Wetland Zoning and Outagamie County Code of Ordinances, Chapter 44. Shoreland-Wetland Zoning regulates wetlands within 1,000 feet of the ordinary high water mark of navigable lakes, ponds or flowages and within 300 feet of the ordinary high watermark of navigable rivers or streams.
- Overall, approximately 10 percent (9.7%) of the Villages’ total acreage and over 30 percent (30.2%) of the Village’s 1.5 mile buffer area are classified as wetlands.
- Practically all areas within the Village fall with either high (73.3%) or Very High (21.9%) water recharge potential.
- In approximately 24 percent of the Village and 42% of the Village’s 1.5 mile buffer area, the depth to groundwater is less than two feet.
- According to the WDNR’s Drinking Water Data and the village’s Consumer Confidence Report (CCR), the Village’s potable water is 10 ppb, the drinking water standard.
- Private wells within the Village of Hortonville and within the entire 1.5 mile buffer area are included in the Special Well Casing Depth Area.
- The WDNR does not own any land within the Village of Hortonville.

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- According to SHWIMS, Hortonville has six active sites listed within the Village limits, and one within the planning area.
  - One abandoned landfill was identified in the Village.
  - One abandoned landfill was identified in the planning area.
  - At the present, one property within the Village of Hortonville is listed on the National Register.
  - A search of the DHP's online Architecture and History Inventory (AHI) reveals a total of 39 sites listed for the Village of Hortonville.
  - There is one historical marker, located in Veterans Park in the Village of Hortonville.
  - There are no museums in the Village of Hortonville.
  - The Hortonville Historical Society contains archival collections focusing on the social, economic, agricultural and industrial history of Hortonville, Wisconsin.
  - On August 11, 1894, with a population of 813, Hortonville was incorporated as a Village.

## **GOALS, STRATEGIES AND RECOMMENDATIONS**

The goals, strategies and recommendations for the Agricultural, Natural and Cultural Resources element are provided in Chapter 2: Plan Framework.

## **POLICIES AND PROGRAMS**

Policies and programs related to the Agricultural, Natural and Cultural resources element can be found in Appendix E.