

# 5 Agricultural, Natural & Cultural Resources

## 5.1 Agricultural, Natural & Cultural Resources Chapter Purpose and Contents

The purpose of this Agricultural, Natural, and Cultural Resources Element is to offer policies and recommendations to guide the future conservation, promotion, and effective management of natural, cultural, and agricultural resources in Waushara County.

This element includes a brief summary of existing agricultural, natural, and cultural resources conditions followed by a series of goals, objectives, and recommendations to guide the future development, maintenance, and character of these resources throughout the county. The element also provides a matrix of state and federal preservation programs that could be utilized to augment local programs and meet the preservation objectives of Waushara County and its municipalities.

## 5.2 Summary of Existing Agricultural, Natural & Cultural Resources Conditions

The following section identifies key agricultural, natural, and cultural resources identified by East Central Wisconsin Regional Planning Commission (ECWRPC) that are located in whole or in part within Waushara County. A complete listing of existing resources information can be located in the *Waushara County Comprehensive Plan Volume Two: Existing Conditions Report*.

### Agricultural Resources

- Agricultural land cover, which includes row crops, forages and grassland, comprised over 56% of the total area of Waushara County (1999). Prime farmland accounts for 18% of the county total.
- In 1997, an estimated 710 farms existed within the county. This represents a net gain of one farm from 1990.
- Between 1990 and 1997, 9,066 acres (4.4%) of farmland were lost in the county.

### Natural Resources Soils

- About 59% of the area in the county is suitable for conventional private onsite wastewater treatment systems; while another 19.2% is suitable for at-grade, in-ground pressure and mound systems.
- Just over one third of the area within the county has soils that are considered to have a very high suitability for building site development.
- The Waushara County Land Conservation Office has evaluated soil characteristics for the suitability of septage spreading based on groundwater depths, permeability, soil texture, slope, wetness, and soil depths. The ratings range from “slight” to “severe”. Only 28.5% pose a “slight” risk to no limitations for septage spreading throughout the County. Approximately 29% are listed as “moderate”, and 40.2% of the soils in Waushara County are considered a “severe” risk for septage spreading.

### Geology and Topography

- Evidence of several phases of the Wisconsin Glacier can be found in the county.
- Within Waushara County, land relief is approximately 390 feet, from a low of 750 feet above sea level near Poygan Marsh to a high of 1,137 feet at the Nordic Mountain Ski Hill (a granite monadnock located in the Town of Mt. Morris).
- Less than 10% of the county is classified as having slopes in excess of 12%.

### Water Resources

- In Waushara County, surface water drains to the Central Wisconsin River Basin, the Upper Fox River Basin and the Wolf River Basin.

- Waushara County is divided into ten sub-watersheds: Big Roche-A-Cri Creek, Little Roche-A-Cri Creek, Fourteenmile Creek, Sevenmile & Tenmile Creeks, Mecan River, White River, Fox River/Berlin, Pine River and Willow Creek, Waupaca River, Little River and Alder Creek (Walla Walla).
- There are 136 lakes and/or impoundments found within Waushara County.
- There are 46 named rivers/streams in Waushara County. The most prominent are the Mecan River, White River, Pine River and Willow Creek.
- 10% of Waushara County lies in a floodplain.
- Approximately 15% of Waushara County is classified as wetlands.
- A groundwater divide, located west and parallel to the topographic divide, cuts diagonally through Waushara County. It extends from Marquette County, through the Towns of Hancock and Coloma, the Village of Hancock, east of the Village of Plainfield to the Portage County line. East of this divide, groundwater moves southeasterly toward the Wolf and Fox Rivers. West of this divide groundwater moves westerly toward the Wisconsin River.
- The majority of homes within Waushara County are served by private wells. Some private wells located in this area contain nitrate levels that are higher than the EPA Safe Drinking Water Act standards of 10 mg/L. Water sample tests from 1990 – 2001 revealed that 96 wells within Waushara County exceeded the 10 ppm threshold level for nitrate. For conversion purposes, 1 part per million (ppm) is the same concentration as 1 mg/L.
- There are five Atrazine Prohibition Areas within Waushara County (See Exhibit 5-1 in Volume Two).

#### **Ecological and Woodland Resources**

- The majority of the county falls within the Central Sand Hills ecological landscape, while the eastern portion of the county falls within the Southeast Glacial Plains ecological landscape and the western portion of the county falls within the Central Sand Plains.
- In 2008, a total of 41,102 acres were actively managed within Waushara County under the Managed Forest Law (MFL), while a total of 1,233 acres were managed under the Forest Crop Law (FCL).

#### **Parks, Open Space and Recreational Resources**

- The WDNR owns approximately 19,736 acres within Waushara County.
- State Wildlife areas within Waushara County include: Greenwood Wildlife Area, Poygan Marsh Wildlife Area, Lunch Creek Wetlands, Mecan Springs, Karner Blue Meadow, Upper Fox Headwaters, Plainfield Tunnel Channel Lakes, Bohn Lake and the Bass Lake Fen State Natural Area.
- State Fishery Areas within Waushara County include: the Big Roche-A-Cri, Mecan River, Pine River, Willow Creek, and White River Fishery Areas.
- The State owns/manages a number of areas in Waushara County. These areas are scattered throughout the County and in some cases are easements to the State Fishery, Natural Areas, and the County's water resources.

#### **Mineral Resources**

- There are nineteen active non-metallic mining sites and no metallic mineral resource sites in Waushara County.

#### **Solid and Hazardous Waste**

- There are 36 sites in Waushara County that are listed on the WDNR's registry of active, inactive and abandoned sites where solid waste or hazardous wastes were known or likely to have been disposed.

**Air Quality**

- There are no areas in Waushara County which exceeds the limits of the National Ambient Air Quality Standards (NAAQS) for ozone, particulates, or carbon monoxide.

**Cultural Resources**

- The following three places are listed on the National Register for Waushara County: Alanson M. Kimball House – town of Leon; Waushara County Courthouse, Waushara County Sheriff's Residence and Jail – city of Wautoma; and Whistler Mound Group – village of Hancock.
- A number of properties within Waushara County are included in the Architecture and History Inventory. This inventory conveys no special status, rights, restrictions, or benefits to owners of these properties, however, the inventory is used to identify properties that may have significance as a historical property.
- According to the Wisconsin Historical Society, three historical markers or plaques are located within Waushara County: Sir Henry Wellcome – town of Oasis; Whistler Mound Group and Enclosure – town of Hancock; and The Auroraville Fountain – town of Aurora.
- There are a number of museums in and near Waushara County.
- The earliest inhabitants of Waushara County were Native Americans. Considerable evidence of their civilization has been found in the county.
- February 15, 1851, the Wisconsin Legislature established Waushara County and selected Sacramento as the county seat. In 1852, Waushara County was organized for judicial purposes and in September 1854 the county seat was moved to Wautoma.
- In 2000, the most common ancestry identified by Waushara County residents was German. 38.0% of Waushara County residents claimed German ancestry.
- Waushara County contains some Amish settlements, primarily located in the town of Richford.

**Community Design<sup>1</sup>**

Waushara County can be considered a composite of three discrete geographies. These include the western sub-area which contains sandy soils, crop production, and commuter trips to the Stevens Point area; the central sub-area with hilly and wooded topography that contains lake homes and retirement populations; and the eastern sub-area which contains clay soils, dairy production, and commuter trips to the Fox Valley. Regional nodes, such as the city of Wautoma, provide service centers for the surrounding rural areas. Many of these service centers include a traditional Main Street-type downtown. Densities in most towns are very low, with increased housing densities and provision of multifamily housing as well as commercial centers located in the incorporated communities.

**5.3 Agricultural, Natural & Cultural Resources Issues Identified Through the Planning Process**

Preserving the supply and quality of agricultural, natural, and cultural resources was one of the primary goals expressed by stakeholders throughout the Waushara County planning process. Cataloguing existing conditions and opinions is necessary for determining strategies to maintain or preserve these essential resources in Waushara County. A consolidated list of challenges identified during this process is described below.

**Losing Unique Character**

Some incorporated communities, such as the village of Hancock, are losing their historical character as storefronts along Main Street continue to fall into disrepair or are razed. Other historic buildings around the County are facing similar decline, and are being used for storage or other unintended uses.

<sup>1</sup> This item was not developed by ECWRPC but was included to satisfy state requirements for the agricultural, natural, and cultural resources element.

Many old schools were also lost over the years because they were not deeded as public institutions and after their lifecycle reverted to private landowners when many were destroyed.

Concerns about new residential development are having a similar impact in rural communities. New subdivisions and other residential developments have been encroaching upon active farmlands and increasing competition for available lands that would otherwise have been available for farm expansion. New housing has also been bringing with it changing expectations of rural living. Many rural areas are being forever altered by development of residential subdivisions and changing demographics.

### **Groundwater**

Low lake levels and poor groundwater quality in some areas have been concerns for Waushara County communities. Portions of Waushara County, especially the northwest portion, are particularly susceptible to groundwater quantity issues due to a regional groundwater divide. High capacity wells used by agricultural operations and incorporated communities may also cause greater strain on local supplies. In addition, the fish hatchery that was recently placed in the area by the DNR has caused additional concerns about the quantity of the local water supply.

### **Water Quality**

The water quality in some parts of the County has degraded. Though the source of the problem is unknown, a number of pesticides, herbicides, and other fertilizers used in traditional agricultural practices have been found in the local water supply. The increase in nitrates, phosphorus, and other chemicals in the water might be linked to upstream agriculture production practices.

### **Farm vs. Non-Farm Conflict**

Agriculture is a contributor to the local economy and residents enjoy the bucolic vistas and rural landscapes that working lands provide. Major crops include silviculture, dairy farming, soybean, corn, potatoes, and other “cash crops.” Hobby farming is also present.

Despite a respect for agriculture, residents disagree on how to preserve farmland. Some think that regulating land divisions is the best way to protect active lands from sprawling developments, while others feel that landowners should be allowed to self-regulate. Conversion of land from active agriculture to residential use is also a concern because new residential populations are sometimes unprepared for the smells and noises associated with rural living in actively farmed areas. The conversion of actively farmed lands also removes these parcels from agricultural production, often in perpetuity, which can alter the rural landscape.

Hobby farms are small farms that occupy small parcels of land. Some residents who move into an area with knowledge of the existing conditions become frustrated when hobby farmers move in after them and change the local landscape. Even though farming is an established part of the community, conflict has can arise between neighbors.

### **Recreational Trails**

There are many opportunities to create recreational trails throughout the County, especially on public lands owned by the DNR. Parts of Wisconsin’s Ice Age Trail run through Waushara County. Some land owners are unwilling to allow any recreational trails on their land, while others only permit snowmobile trails on their property during the winter. Other residents see the development of trails as an opportunity to generate tourist and economic activity and local recreational opportunities. Those that are supportive hope to encourage the development of biking, hiking, skiing, and horseback riding facilities.

**Public Land**

The amount of land owned by the DNR is an issue for some residents because the tax value of these lands is greatly reduced when removed from the private market.

**Changing Farm Economy**

Recently, the price of corn has risen due to increased demand for ethanol production. However, the farm economy overall has been waning due to pressures from foreign markets, and a lack of new farmers. Competition for rural lands has also increased land prices making it more difficult for farmers to compete with real estate developers for prime agricultural lands. The net effect is a landscape that may be altered by a private market hungry for undeveloped (often agricultural) land.

**Lake Access**

Public access to some lakes is a concern. Some shoreline is privately owned and unavailable for public use. Some public access points that do exist are difficult to locate and present poor conditions for launching watercraft.

**Invasive Species**

A number of natural resource lands contain areas that are overrun with invasive species that diminish the aesthetic and recreational value of park facilities and water resources. Existing colonies of invasive species should be monitored, and efforts to minimize increased invasion should be undertaken.

**5.4 Waushara County Agricultural, Natural & Cultural Resources Policy**

Waushara County acknowledges the role that agricultural, natural, and cultural resources have played in shaping the region. To preserve vital resources, Waushara County will require municipalities to utilize county resource protection ordinances and encourage municipalities to develop stricter policies where warranted. When possible, the county will assist in directing local governments to appropriate opportunities, personnel, or special interest groups to further resource preservation goals as stated in local comprehensive land use plans.

**5.5 Agricultural, Natural & Cultural Resources Goals, Objectives, and Recommendations**

The following section identifies goals, objectives, and recommendations for the conservation and effective management of unique and valuable resources in Waushara County. The goals and objectives identify what should be accomplished, whereas the recommendations focus on identifying the action necessary to achieve the goals and objectives. Wherever possible, prerogatives were carried over from existing documents that were written at local and regional levels.

Some of the goals, objectives, and recommendations were developed based on the Waushara County Land and Water Resource Management Plan (2006) and the Waushara County Outdoor Recreation Plan (2006). Revisions were performed based on direction from local and countywide committee review and comment.

The following goals, objectives, and recommendations provide an overarching framework for development of agricultural, natural, and cultural resource activities on a countywide scale.

**Goal 5.1 Reduce soil erosion and continue to protect natural resources.**Objectives

- a. Implement agricultural performance standards.
- b. Reduce wind erosion.
- c. Continue to promote existing conservation programs.

- d. Increase awareness of soil and water conservation in schools.
- e. Control runoff from construction sites.
- f. Assure proper reclamation of mining sites.

Recommendations

5.1.1 Implement actions identified in the Waushara County Land and Water Resource Management Plan (2006). Priority actions include:

- a. Working with Central Wisconsin Windshed Partners (CWWP) to install field windbreaks.
- b. Identify and create a database of “priority” farms based on creating voluntary compliance with agricultural performance standards.
- c. Promote existing conservation programs through press releases and radio announcements.
- d. Continue to work with partner agencies to promote state and federal programs.

5.1.2 Support local efforts to reduce soil erosion including creating strict standards for containing soil erosion or stormwater discharge on constructions sites for public buildings or places of employment.

5.1.3 Continue joint on-site inspections with Zoning Office to enforce the Shoreland Zoning Code.

5.1.4 Hold annual contractor trainings/certifications addressing construction site erosion control inspections with the Zoning Department.

5.1.5 Work with contractors, home buyers, landscapers, and developers to promote construction site erosion conservation. Continue to administer cost-share programs that provide funds to landowners who install conservation or best management practices.

5.1.6 Review the requirements of the Waushara County Non-Metallic Mining Code (Chapter 58, Article VII) with operators for compliance.

**Goal 5.2 Protect and enhance in-stream, riparian, wetland and upland habitats and water quality.**

Objectives

- a. Educate riparian owners on the value of conservation buffers.
- b. Restore and enhance previously altered wetlands.
- c. Stabilize stream banks and lakeshores.
- d. Continue education of landowners on the importance of wetlands.

Recommendations

5.2.1 Promote Waushara County as a Conservation Reserve Enhancement Program (CREP) expansion area and educate landowners about available state and federal programs that support open space buffer restoration/establishment.

5.2.2 Create riparian demonstration projects throughout the county to demonstrate the benefits of riparian buffers and banks stabilization projects.

5.2.3 Promote local efforts to protect diverse habitats through formal recognition and providing support including cost sharing and technical assistance.

5.2.4 Promote natural bio-engineered solutions for repairing stream banks and lakeshores.

5.2.5 Maintain the quality of the county’s lakes, including the means to prevent or minimize the introduction of invasive species.

5.2.6 Preserve wetlands necessary for continued fisheries and wildlife habitat and for groundwater recharge purposes.

5.2.7 Conserve other important ecological areas containing sensitive plant life or unique and irreplaceable plant and animal communities.

5.2.8 Identify partnerships for providing support to lake districts and associations for local education and preservation efforts. When possible, encourage municipalities to apply for grants to control invasive species in partnership with Waushara County.

**Goal 5.3 Preserve the most productive farmland for agricultural activities in Waushara County.**

Objectives

- a. Maximize opportunities for profitable agricultural activities.
- b. Reduce conflicts with non-farm residential development.
- c. Promote appropriate and sustainable nutrient management.

Recommendations

5.3.1 Discourage fragmentation of continuous tracts of agricultural lands for non-agricultural uses.

5.3.2 Work with unincorporated communities to assign areas within the county where establishment of Concentrated Animal Feeding Operations (CAFOs) will not be protested.

5.3.3 Update the Farmland Preservation Plan (by January 1, 2013) and ensure consistency with this comprehensive plan.

5.3.4 Continue the farmland preservation programs in whatever form available from the state. Currently, a tax incentive program in Waushara County encourages farmers to keep their farms in agriculture production in accordance with an approved conservation plan. As of 2009, the program included 77 signed contracts in Waushara County.

5.3.5 Support programs that educate new property owners about rural lifestyles and legacy of agriculture in the local economy. Consider distributing a standard public informational sheet to new renters, homeowners, developers, and/or property managers. Content should acknowledge that farming operations may exhibit noise, odor, and dust and that the hours of operation begin before dawn and extend past dark.

5.3.6 Explore the costs and benefits of initiating a voluntary countywide purchase of development rights (PDR) program as an option for farmland preservation.

5.3.7 Continue to enforce manure waste storage requirements as set forth in Chapter 22, Article IV of the Waushara County Code of Ordinances.

**Goal 5.4 Preserve scarce and valuable resources important to the ecological, cultural, and economic vitality of the county.**

Objectives

- a. Preserve unique or unusual geologic features.
- b. Protect and preserve the intrinsic value of the county's wildlife and fishery resources.
- c. Protect existing historical and cultural resources.

Recommendations

5.4.1 Encourage the identification, acquisition, preservation, and restoration of archaeological and other historic sites by public agencies and private organizations.

5.4.2 Encourage the preservation and enhancement of the county's natural features and protect them from encroachment by all man-made development including intensive public or private recreational development.

5.4.3 Promote an awareness of the importance of maintaining high quality natural areas free from intensive development.

5.4.4 Conserve trees and other vegetation needed to prevent erosion, siltation and floods, and to protect air and water quality.

5.4.5 Use Waushara County's Geographic Information System (GIS) to identify all archeological and historical sites in the county, including cemeteries.

**5.6 Agricultural, Natural & Cultural Resources Programs**

The following table identifies state and federal programs for the enhancement or preservation of agricultural, natural, or cultural resources. A complete listing of programming information can be located in the *Waushara County Comprehensive Plan Volume Two: Existing Conditions Report*.

**Table 5.1: Agricultural, Natural & Cultural Resource Programs**

<b>Agriculture Resources</b>			
<b>Federal</b>			
<b>Program</b>	<b>Department</b>	<b>Description</b>	<b>Program Information</b>
Conservation Reserve Program / Conservation Reserve Enhancement Program	NRCS/FSA	Allows landowners to enroll agricultural lands into various land conservation management programs.	<a href="http://www.nrcs.usda.gov/Programs/crp/">http://www.nrcs.usda.gov/Programs/crp/</a> <a href="http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=cep">http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=cep</a>
Grassland Reserve Program	FSA	Protects private grasslands, shrublands, and pasturelands.	<a href="http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=grp">http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=grp</a>
Grazing Lands Conservation Incentive	NRCS	Provides cost sharing to improve grazing land management.	<a href="http://www.nrcs.usda.gov/Programs/glci/">http://www.nrcs.usda.gov/Programs/glci/</a>
Environmental Quality Incentives Program	NRCS	Promotes agricultural production and environmental quality and compatible goals.	<a href="http://www.nrcs.usda.gov/Programs/eqip/">http://www.nrcs.usda.gov/Programs/eqip/</a>
USDA Farmland Protection Policy Act	NRCS	Maintains prime farmland in agricultural use through agricultural conservation easements.	<a href="http://www.nrcs.usda.gov/programs/fppa/">http://www.nrcs.usda.gov/programs/fppa/</a>
<b>State</b>			
<b>Program</b>	<b>Department</b>	<b>Description</b>	<b>Program Information</b>
Wisconsin Farmland Preservation Program	DATCP	Preserves farmland through local planning and zoning; promotes social conservation; tax relief.	<a href="http://www.datcp.state.wi.us/arm/agriculture/land-water/conservation/pdf/2007FPPSummaryMaps.pdf">http://www.datcp.state.wi.us/arm/agriculture/land-water/conservation/pdf/2007FPPSummaryMaps.pdf</a>

Farmland Tax Relief Credit Program	WDR	Provides tax relief to all farmland owners with 35 or more acres.	<a href="http://www.dor.state.wi.us/faqs/ise/farm.html">http://www.dor.state.wi.us/faqs/ise/farm.html</a>
Wisconsin Pollutant Discharge Elimination Systems Permits	WDNR	Regulates agricultural operations which discharge into local surface waters.	<a href="http://www.dnr.state.wi.us/org/water/wm/ww/">http://www.dnr.state.wi.us/org/water/wm/ww/</a>

**Natural Resources**

**Federal**

Program	Department	Description	Program Information
Wildlife Habitat Incentives Program	NRCS	Voluntary program that is used to develop or improve wildlife habitat on privately owned land.	<a href="http://www.nrcs.usda.gov/Programs/whip/">http://www.nrcs.usda.gov/Programs/whip/</a>
Wetland Reserve Program	NRCS	Provides financial and technical assistance to private landowners to restore, protect, and enhance wetlands.	<a href="http://www.nrcs.usda.gov/PROGRAMS/wrp/">http://www.nrcs.usda.gov/PROGRAMS/wrp/</a>
Forest Land Enhancement Program	FS	Aids landowners in the application of sustainable forestry management on private lands.	<a href="http://www.fs.fed.us/spf/coop/programs/loa/flep.shtml">http://www.fs.fed.us/spf/coop/programs/loa/flep.shtml</a>

**State**

Program	Department	Description	Program Information
Forest Crop Law (FCL) and Managed Forest Law (MFL)	WDNR	Encourages the growth of future commercial crops through sound forestry practices.	<a href="http://dnr.wi.gov/forestry/feeds/faqsFull.asp?s1=ForestTax&amp;s2=MFL&amp;inc=ftax">http://dnr.wi.gov/forestry/feeds/faqsFull.asp?s1=ForestTax&amp;s2=MFL&amp;inc=ftax</a>
Wisconsin Forest Land Owner Grant Program	WDNR	Assists private landowners in protecting and enhancing their woodlands.	<a href="http://dnr.wi.gov/forestry/private/financial/wflgp.htm">http://dnr.wi.gov/forestry/private/financial/wflgp.htm</a>
Partners for Fish and Wildlife	FWS	Provides financial and technical assistance to private landowners to restore, protect, and enhance wildlife.	<a href="http://www.fws.gov/midwest/WisconsinPartners/">http://www.fws.gov/midwest/WisconsinPartners/</a>

**Cultural Resources**

**Federal**

Program	Department	Description	Program Information
Federal Historic Preservation Credit	WHS	Returns 20% of the cost of rehabilitating historic buildings to owners.	<a href="http://www.wisconsinhistory.org/hp/architecture/iptax_credit.asp">http://www.wisconsinhistory.org/hp/architecture/iptax_credit.asp</a>

**State**

Program	Department	Description	Program Information
Wisconsin Historical Society	WHS	Provides funds to conduct surveys to identify and evaluate historical resources and other key services.	<a href="http://www.wisconsinhistory.org/">http://www.wisconsinhistory.org/</a>

Wisconsin Supplemental Historic Preservation Credit	WHS	Returns an additional 5% of the cost of rehabilitation to owners as a discount on State income taxes.	<a href="http://www.wisconsinhistory.org/hp/architecture/iptax_credit.asp">http://www.wisconsinhistory.org/hp/architecture/iptax_credit.asp</a>
25% State Income Tax Credits	WHS	Used for the repair and rehabilitation of historic homes in Wisconsin.	<a href="http://www.wisconsinhistory.org/hp/architecture/tax_credit.asp">http://www.wisconsinhistory.org/hp/architecture/tax_credit.asp</a>