Introduction

The Town of Oconto Falls has a strong farming history. Its landscape is dominated by farm fields, woods, rolling hills, open spaces, lakes, and rivers…each contributing to the community's character and sense of place. However, residential, commercial, and industrial development is changing the face of communities throughout Wisconsin. Most new construction outside of urban environments occurs on previously undeveloped agricultural lands and open spaces. As the Town of Oconto Falls grows it must consider how best to preserve the agricultural, natural, and cultural resources that have defined it, for the long-term benefit and enjoyment of future generations.

The purpose of the this chapter of the comprehensive plan is to describe the resources present in the community, identify those most valued by residents, and prepare a plan for their preservation.

Agricultural, Natural, & Cultural Resources Vision

The Town of Oconto Falls will adopt policies and programs to preserve its prime agricultural lands, unique natural environment, and cultural and historic resources to ensure that these assets remain available for the benefit and enjoyment of future generations.

Agricultural Resources

The preservation of farmland was a main area of focus for the 2006 comprehensive plan, and remains so in the 2016 update. Although farming (along with the other 'natural resource' industries such as forestry, fishing and hunting, and mining) employs fewer than 60 residents of the Town, agriculture remains the dominant land use and a driver of the local economy. It is also among the most threatened, since agricultural land in areas experiencing development demand is highly sought after for residential and commercial uses. Future development in the Town will result in a decrease of available agricultural acreage unless steps are taken to preserve farming, as both a viable land use and as an income producer for farm families.

Agricultural Challenges

The removal of land from agricultural use is not always avoidable. Roads need to be built and people need places to live and work. Agriculture needs land in order to operate and land is a commodity that cannot be manufactured. It seems logical to make some effort to assure that

there will be land available to farm in the future. A variety of factors may threaten the long-term viability of farming in Oconto Falls. They include:

- A slowly but steadily increasing population.
- Conflicts between agricultural and residential land uses, including the fragmentation of farm fields.
- Agricultural land values exceeding possible agricultural income opportunities.
- The increasing average age of the typical farm operator combined with fewer young people interested in farming.
- The desirability of the Town as a 'bedroom community' for people employed in the Green Bay Metropolitan region.

How to Minimize Conflicts between Farms and Residential Development

- Encourage or require the establishment of **vegetated buffers** between farms and fields and proposed subdivisions.
- Educate new residents about realities of rural living.
- Encourage farmers to use manure management practices and technologies to limit odors.
- Encourage farmers to communicate with neighbors when spreading or storing waste.

Loss of Farmland[1]

From 1992 to 2010, Wisconsin lost a total of 396,583 acres of farmland to urban development (267,798 acres of cropland and 126,768 acres of pasture or grassland). Some farmland is being lost in every county, but the effects are not equally distributed throughout the state. Eight counties in the state each lost more than 10,000 acres of farmland in 19 years leading up to 2010. They included Waukesha (21,768 acres lost), Dane (20,466), Outagamie (16,516), Brown (14,974), Winnebago (11,817), Racine (10,357), Washington (10,357), and Kenosha (10,077). Oconto County lost a total of 4,463 acres, an indication that development pressure is growing but has not yet reached the level of the Fox Cities and Madison and Milwaukee metropolitan regions.

Manure and Nutrient Management

Manure application to farm fields has come under increasing scrutiny, particularly the spreading of manure during winter months. Best management practices and best available technology govern the application of manure to frozen and snow covered ground. Although necessary to protect the quality of ground and surface water resources, these technologies increase the cost of farming and can pose particular challenges for smaller farming operations.

Oconto County adopted an Animal Waste Ordinance and permit system in April 2001. The ordinance regulates the installation, movement, reconstruction, extension, enlargement, conversion, substantial alteration, and abandonment of animal waste storage facilities in the county. A permit is also required for animal feedlots that exceed the state's prohibitions, do not meet state standards, or receive notice of discharges from the DNR. Feedlots of greater than 10,000 square feet and/or 10 animal units must be permitted.

The ordinance is intended to protect the groundwater and surface water resources of Oconto

[1] Excerpted from 'Losing Ground: Tracking the Rate of Farmland Loss in Wisconsin Counties', University of Wisconsin-Stevens Point, Center for Land Use Education, April 2012.

County by regulating the permitting of storage facilities, nutrient management practices, the four state prohibitions, and new and expanding feedlots. It also requires the removal of abandoned feed piles. Technical assistance is available at the Land Conservation Department to ensure such projects meet code requirements.[2]

Aging Farmers[3]

As the average age of the American farmer has crept up to 60, fewer young people are filling in the ranks behind them. That's prompted some to ask if young people even want to farm anymore. The quick answer is yes, just not in the same numbers as they used to. And surveys indicate many of them don't want to farm in conventional ways. A 2011 survey from the National Young Farmers Coalition showed access to land and capital to be the single biggest factors keeping young people from getting into farming or ranching. The survey also indicated young people are concerned about the environment — they're "generation organic" — and interested in small-scale operations.

Concentrated Animal Feeding Operations

Concentrated Animal Feeding Operations (CAFOs) are agricultural meat, dairy, or egg facilities where animals are kept and raised in confined situations. Feed is brought to the animals rather than the animals grazing or otherwise see king feed in pastures, fields, or on rangelands. CAFOs concentrate animals, feed, waste (manure and urine), and production operations on a small area of land. In 2012, the US Environmental Protection Agency (US EPA) reported that CAFOs make up approximately 15 percent of total Animals Feeding Operations in the United States.

The US EPA defines CAFOs as livestock operations where the animals are confined for at least 45 days in a 12-month period and have no grass or other vegetation present in the confinement during the normal growing season. In Wisconsin, a CAFO generally means a livestock operation with 1000 animal units. Animal units are based on the weight of the animals. The concentrated design of CAFOs can also pose many challenges, including bulk storage and application of large volumes of animal wastes and associated nuisance odors and noise.

Wisconsin Livestock Siting Law

Wisconsin's Livestock Siting Law (ATCP 51, Wis. Stats.) was adopted in 2004 and established a statewide framework for local regulation of livestock facilities, including limitations on the exclusion of livestock facilities in agricultural zones and requirements for issuing conditional use or other permits for siting livestock facilities housing cattle, swine, poultry, sheep or goats. Local governments implement the siting law by enacting ordinances that require new or expanding operations to obtain either a zoning or licensing permit. Under the siting law, local jurisdictions are not required to adopt regulation for siting livestock facilities; however, if a local

[2] Excerpted from Oconto County website, 2015.

[3] Excerpted from 'Young Farmers Break the Bank Before They Get to the Field', National Public Radio, August 2013.

government elects to require permits, they must follow the requirements of the siting rule for approving new or expanding livestock facilities.

Under the law, a local government may not deny or prohibit the siting or expansion of a livestock facility of any size unless one of the following applies:

- The site is located in a non-agricultural zoning district.
- The site is located in an agricultural zoning district where the livestock facility is prohibited. The zoning prohibition, if any, must be clearly justified on the basis of public health or safety. The law limits exclusionary local zoning based solely on livestock facility size.
- The proposed livestock facility violates a valid local ordinance adopted under certain State laws related to shoreland zoning, floodplain zoning, and construction site erosion control or stormwater management.
- The proposed livestock facility violates a State building, electrical or plumbing code for that type of facility.
- The proposed livestock facility will have 500 or more "animal units" (or will exceed a lower threshold incorporated in a local zoning ordinance prior to July 19, 2003), and the proposed livestock facility violates either the standards in the rule or a stricter local standard by ordinance. Those standards must be based on scientifically defensible findings of fact that clearly show the standards are necessary to protect public health or safety.

Natural Resources

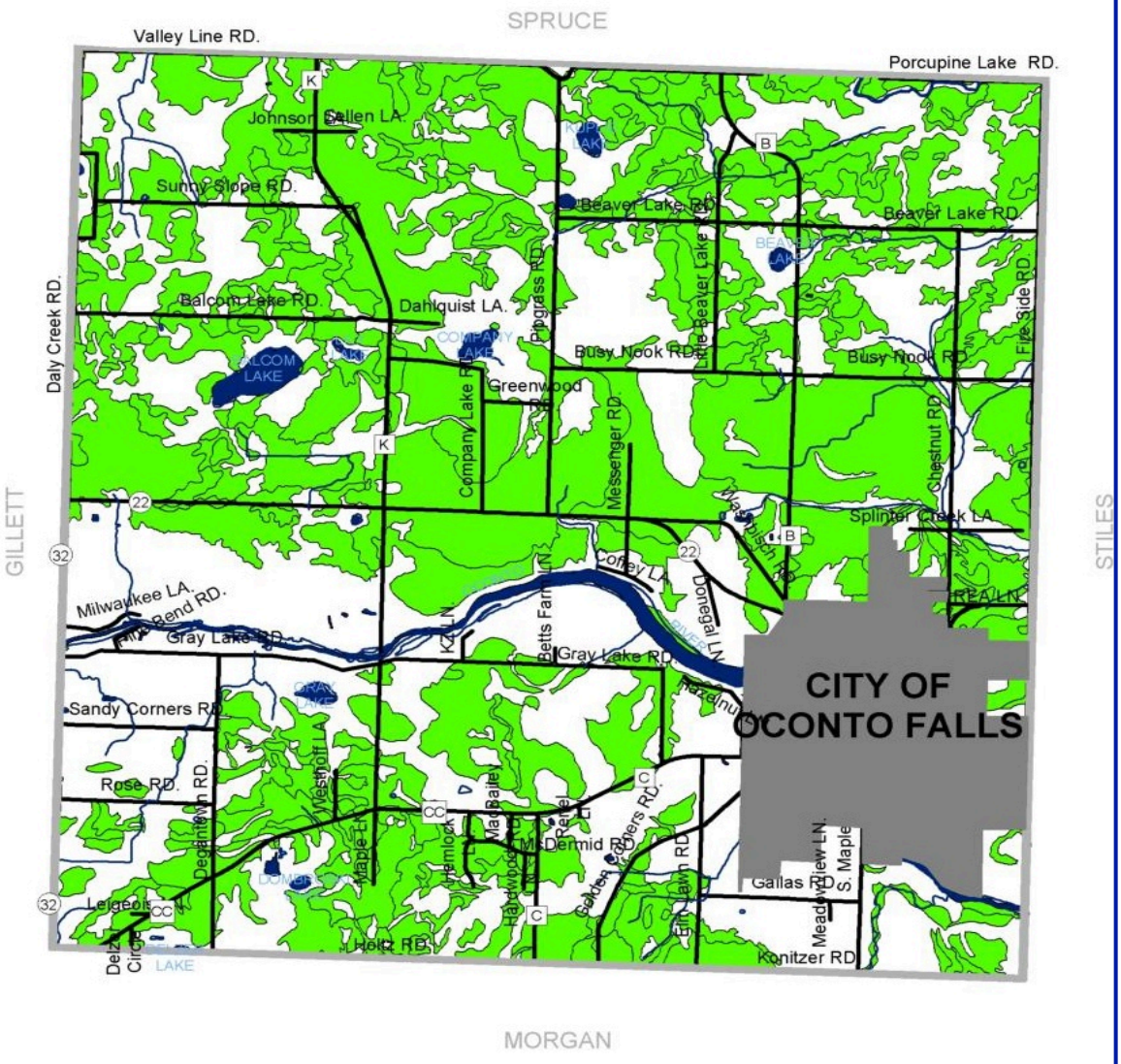
The variety and abundance of natural resources within a community play a significant role in attracting development, providing recreational opportunities, and maintaining a high quality of life among residents. A correlation exists between the presence and prevalence of open space and the positive feelings people have about their community. The Town of Oconto Falls benefits from a rich mosaic of landscapes and a diversity of ecosystems. Its natural environment includes upland hardwood forests, riparian systems, wetlands, glacial features, mineral deposits, and large expanses of prime agricultural soils, among others. The purpose of the Natural Resources section of this chapter is to describe the variety of resources present within the Town, identify those at greatest risk of loss due to development pressure, develop a plan for their sustainable use, and identify a means by which to preserve them for the future.

Bedrock Geology

Crystalline rocks of the Precambrian Era underlie Oconto County. These rocks are composed mainly of granites and other igneous and metamorphic types. Overlying the Precambrian layer in the central and southern sections of the county are younger rocks of the Cambrian and Ordovician Periods. These form the existing bedrock.

AGRICULTURAL SUITABILITY

TOWN OF OCONTO FALLS



Areas in green indicate soil types which are capable of producing high yields of crops typically grown in the county under a high level of management. Productive soils are considered to be those which are capable of producing an average of 4 tons per acre per year of grass-legume hay, or 100 bushels per acre of corn. The Soil Conservation Service considers a "high level of management" to include provisions for adequate drainage, appropriate tillage, planting and seeding with high yielding varieties, control of weeds, diseases, insects, optimum fertilizer application and timely, efficient harvesting techiniques.

OMNI ASSOCIATES

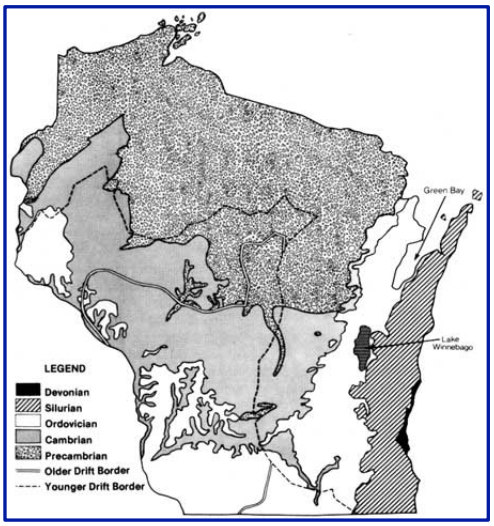
PROJECT #M1084A02
DATE: 7/19/02
DRAWN BY: KAL
REVISED: 10/05/04

LOCATION- F:\GIS\M1084A02\DRAWINGS\Agriculture_11x17.mxd
SOURCE: OCONTO COUNTY PLANNING DEPARTMENT

N

1"= 5400'

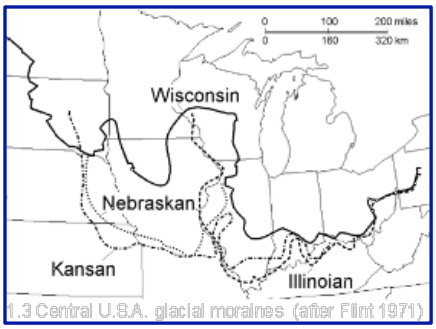
The northwest portion of Oconto County was once a mountainous region of Precambrian rock, since reduced by erosion and glaciations. This area is now covered with glacial material deposited during the last stages of glaciation. Landforms are composed of end moraines and pitted outwash plains. These features create an undulating and rolling surface with soils containing large quantities of sand and gravel. The central portions of Oconto County, including the Town of Oconto Falls, is relatively gently rolling plain approximately 20 miles wide and underlain by Cambrian sandstone. Relief in this area is modest, mostly composed of glacial lake deposits and ground moraines.



Courtesy Geology of Ice Age National Scientific Reserve of Wisconsin

Glaciation and Topography

The topography in the Town of Oconto Falls is characterized by rolling hills, plain meadows, lush and forested wetland and river systems. The area's major topographic features resulted from frequent periods of glaciation. Glaciers made four separate advances across what is Oconto County. These periods of glacial advance are called the Nebraskan, Kansan, Illinoian, and Wisconsin stages and are believed to have begun about one million years ago. The most recent advance, the Wisconsin stage, consisted of two major sub-stages known as the Cary and Valders. The Wisconsin period began approximately 70,000 years ago. This ice mass had its origin in the snowfields of the Hudson Bay region of Canada.



Courtesy University of Arizona, History of Pleistocene Study

Watersheds & Drainage

A watershed is the area of land where all of the water that is under it or drains off of it goes into the same place. John Wesley Powell, a 19th-century soldier, geologist, explorer of the American West, and professor at Illinois Wesleyan University, described a watershed as, "That area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of a community."[4]

The Town of Oconto Falls is split between three watersheds: the Lower Oconto River, Little River, and Pensaukee River. The map on the following page illustrates the boundaries of each watershed in the Town.

[4] Excerpted from "What is a Watershed", US Environmental Protection Agency, 2012.

Surface Water

The Oconto River is the primary water resource in the Town. It flows through the center of the Town, parallel with STH 22. The WDNR *Land Legacy Report* identifies the Oconto River as an important state environmental asset that should be protected. The purpose of the report was to identify important natural areas in the state. It did not identify how or who should be responsible for the protection of the natural areas identified.

Other water features of significance in the Town include local streams and several lakes, including Balcom Lake, Dunk's Lake, Lily Lake, Company Lake, Kuplie Lake, Gray Lake, Dombroski Lake and Delzer Lake. Dunk's Lake has public access from Pipgrass Road. Balcom Lake also has public access on its north side from an easement acquired by Oconto County. All of the other lakes are privately owned with undeveloped shores.

Soils[5]

The areas of the Town not covered by wetland generally are comprised of soils well suited to agricultural uses. The dominant soil types present in the community are Onaway Fine Sandy Loam and Solona Fine Sandy Loam. The Onaway series consists of very deep, well drained or moderately well drained soils formed in loamy deposits on ground moraines, end moraines, and drumlins. Onaway soils are important agricultural soils. Most are used for general farming and dairying. Corn, grain, hay, and potatoes are the principal crops. Wooded areas support northern hardwoods, with sugar maple predominating.

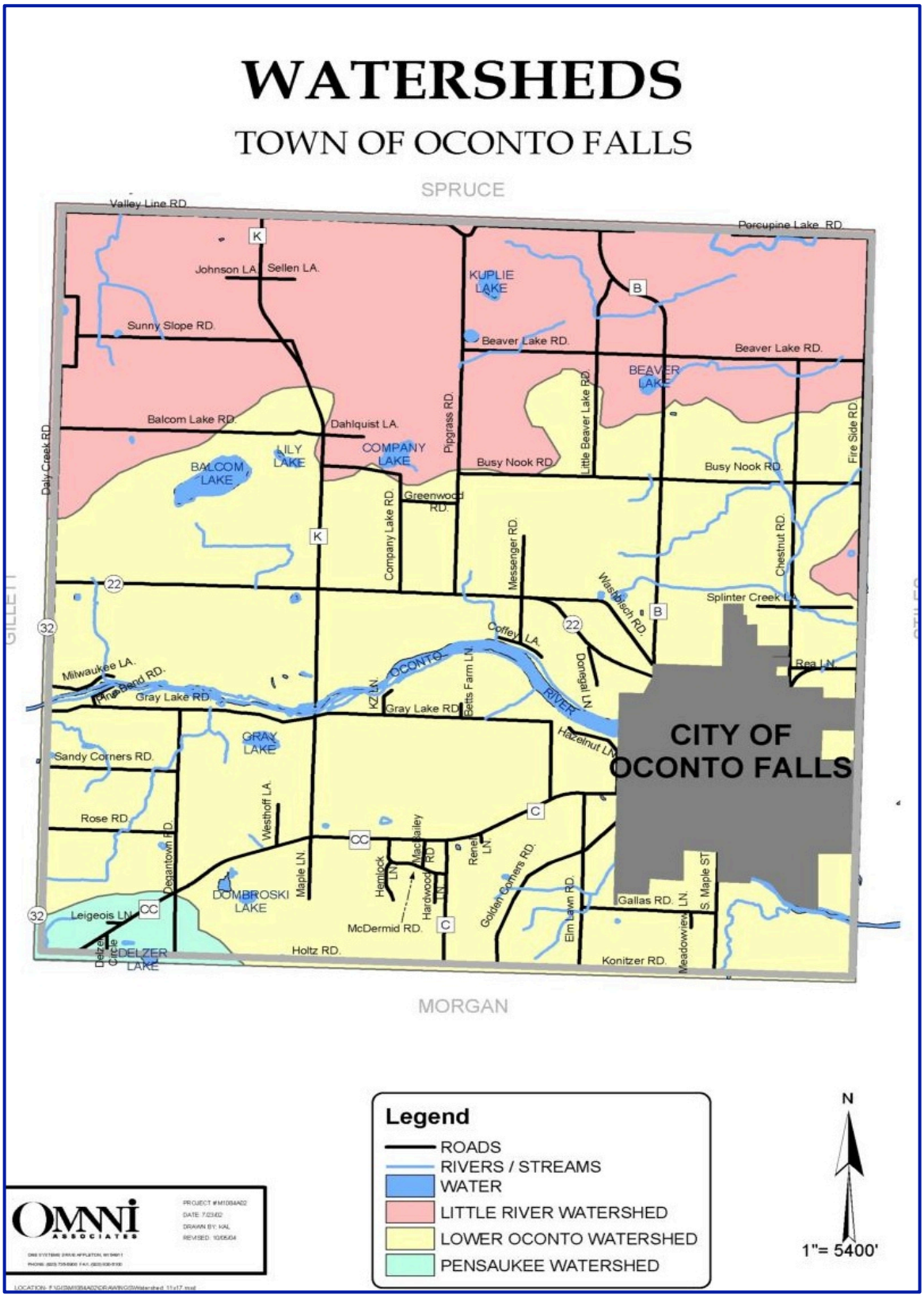
The Solona series consists of very deep, somewhat poorly drained soils formed in loamy glacial till on ground moraines. These soils have moderate permeability. Most areas covered by this soil type are used for cropland. Common crops are corn, small grain, and hay. Native vegetation is mostly mixed deciduous forest. Common trees are white ash, sugar maple, northern red oak, and American basswood. The Town of Oconto Falls Soils Association map is presented on page 6-10.

Shorelines and Floodplains[6]

The diversity of plant and animal species in shoreland zones and floodplains can be as much as 500% greater than in nearby upland areas. These areas abut the many rivers, streams, and lakes in the Town. The Oconto County Shoreland/Wetland Ordinance regulates land use and

[5] Excerpted from US National Soil Cooperative website, 2015.

[6] Excerpted from Information for this section was obtained from 'The Shoreland Stewardship Series', UW-Extension, WDNR, Wisconsin Lakes Partnership, the GMU Basin Teams, and the Wisconsin Association of Lakes in 2002.


WATERSHEDS
TOWN OF OCONTO FALLS
SPRUCE
MORGAN
GILLETT
Valley Line RD.
Porcupine Lake RD.
Johnson LA.
Sellen LA.
KUPLIE LAKE
Sunny Slope RD.
Beaver Lake RD.
Beaver Lake RD.
BEAVER LAKE
Balcom Lake RD.
Dahlquist LA.
Daly Creek RD.
LILY LAKE
COMPANY LAKE
Pigrass RD.
Little Beaver Lake RD.
Busy Nook RD.
Busy Nook RD.
Fire Side RD.
BALCOM LAKE
Greenwood RD.
Company Lake RD.
Messenger RD.
Chestnut RD.
Splinter Creek LA.
Washbash RD.
Coffey LA.
Milwaukee LA.
Gray Lake RD.
Gray Lake RD.
KZ LN.
OCONTO RIVER
Betts Farm LN.
Dongail LN.
Bea LN.
Hazelnut LN.
CITY OF OCONTO FALLS
GRAY LAKE
Sandy Corners RD.
Rose RD.
Westhoff LA.
Desantown RD.
Maple LN.
Hemlock LN.
MacBailey RD.
Hardwood LN.
Renee LN.
Golden Corners RD.
Elm Lawn RD.
Gallas RD.
S. Maple ST.
Meadowview LN.
DOMBROSKI LAKE
Leigeois LN.
McDermid RD.
Holtz RD.
Konitzer RD.
Delzer Creek
DELZER LAKE
Legend
ROADS
RIVERS / STREAMS
WATER
LITTLE RIVER WATERSHED
LOWER OCONTO WATERSHED
PENSAUKEE WATERSHED
N
1"= 5400'
OMNI ASSOCIATES

development within 1,000 feet from the ordinary high water mark of a lake, pond or flowage, and within 300 feet from the ordinary high water mark of a river. A permit is required before any filling or grading activities may occur within shoreland areas.

Wetlands

Wetlands act as a natural filtering system for sediment and nutrients such as phosphorus and nitrates, and serve as natural buffers protecting shorelines and stream banks from erosion. They are essential in providing wildlife habitat, flood control, and groundwater recharge. Floodplains serve a number of important functions related to flood and erosion control, water quality, groundwater recharge, and fish and wildlife habitats. They provide areas for streams and creeks to expand during high rainfall and snowmelt events. Floodplains are generally unsuitable for development due to potential risk to lives and property. The majority of wetlands in the Town are located within riparian areas. These typically entail smaller floodplain systems associated with adjoining lakes, creeks and streams.

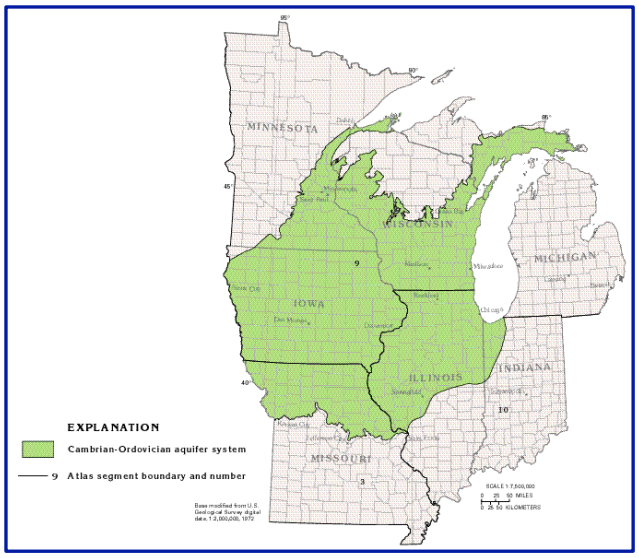
Quarries

A quarry is a type of open-pit mine from which rock or minerals are extracted. Quarries are generally used for extracting building materials such as dimension stone and are usually shallower than other types of open-pit mines. Types of rock extracted from quarries include cinders, coquina (a type of limestone), blue rock, granite, grit stone, limestone, marble, sandstone, and slate. Resources desirable for quarrying exist throughout the Town. Three are currently in operation: Zippel Quarry on CTH K, Wascbisch Quarry on STH 22, and Kurt Streblow Quarry on CTH CC.

Groundwater

Oconto County's groundwater source is part of a large aquifer system called the Cambrian-Ordovician aquifer system. It is the second largest source of groundwater for public, agricultural, and industrial use in the upper Midwest. This aquifer is a complex multi-aquifer system with several aquifers separated by leaky confining units.[7]

The depth to groundwater depends upon the general topography, the elevation above permanent stream level, and the lithology of the underlying bedrock and glacial deposits. Water is stored in porous or permeable strata (i.e., aquifers).

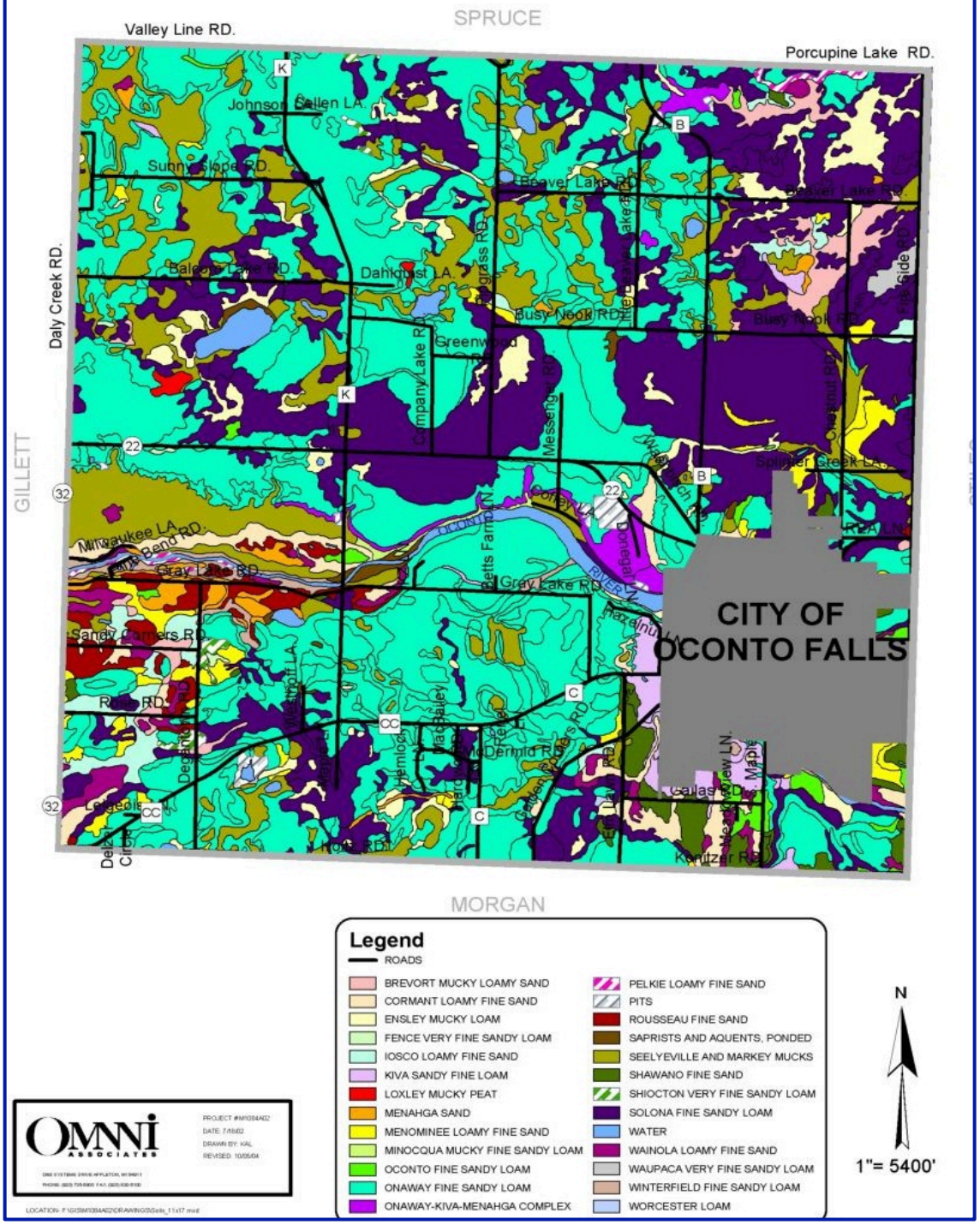


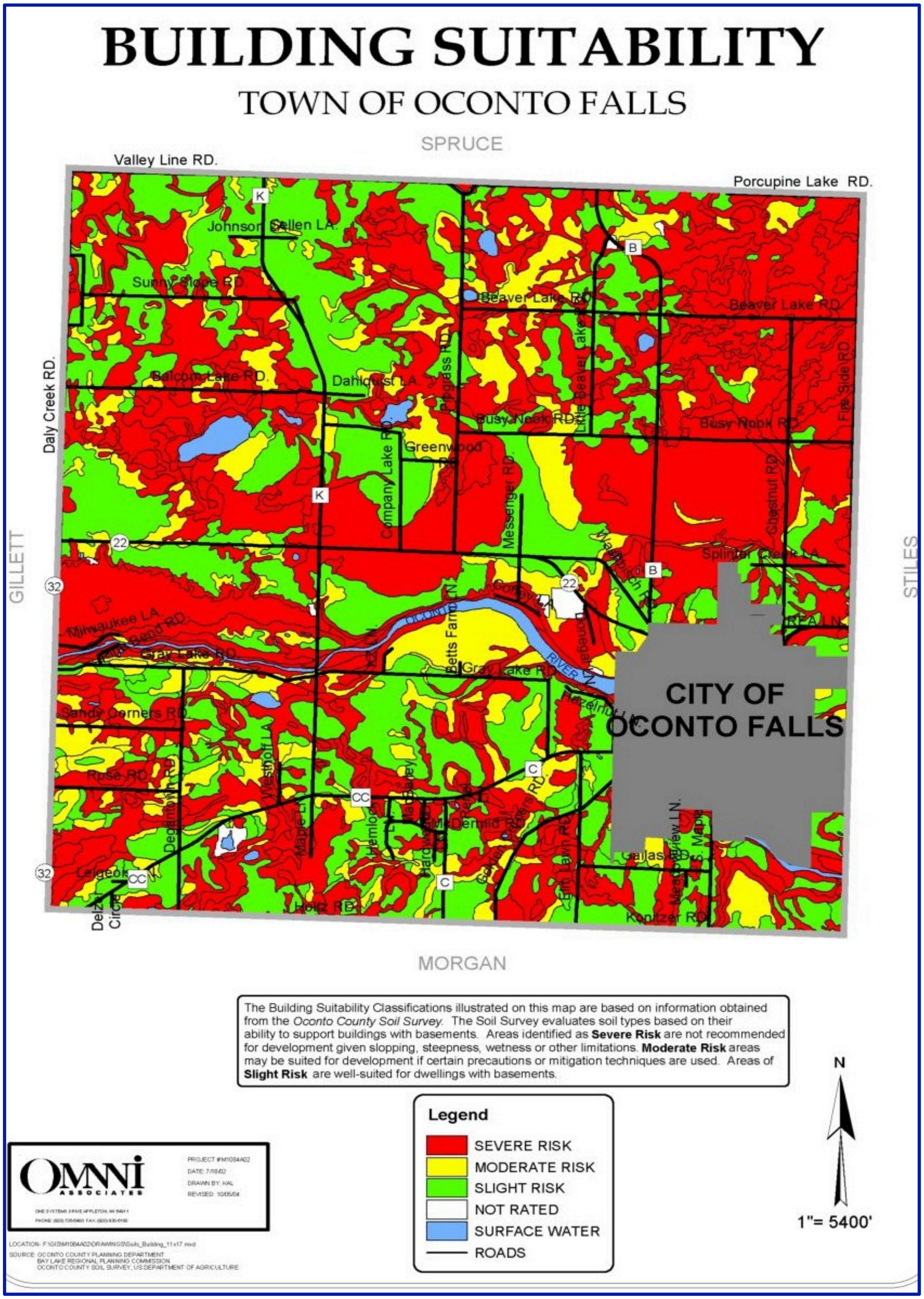
Courtesy H.L. Young, US Geological Survey

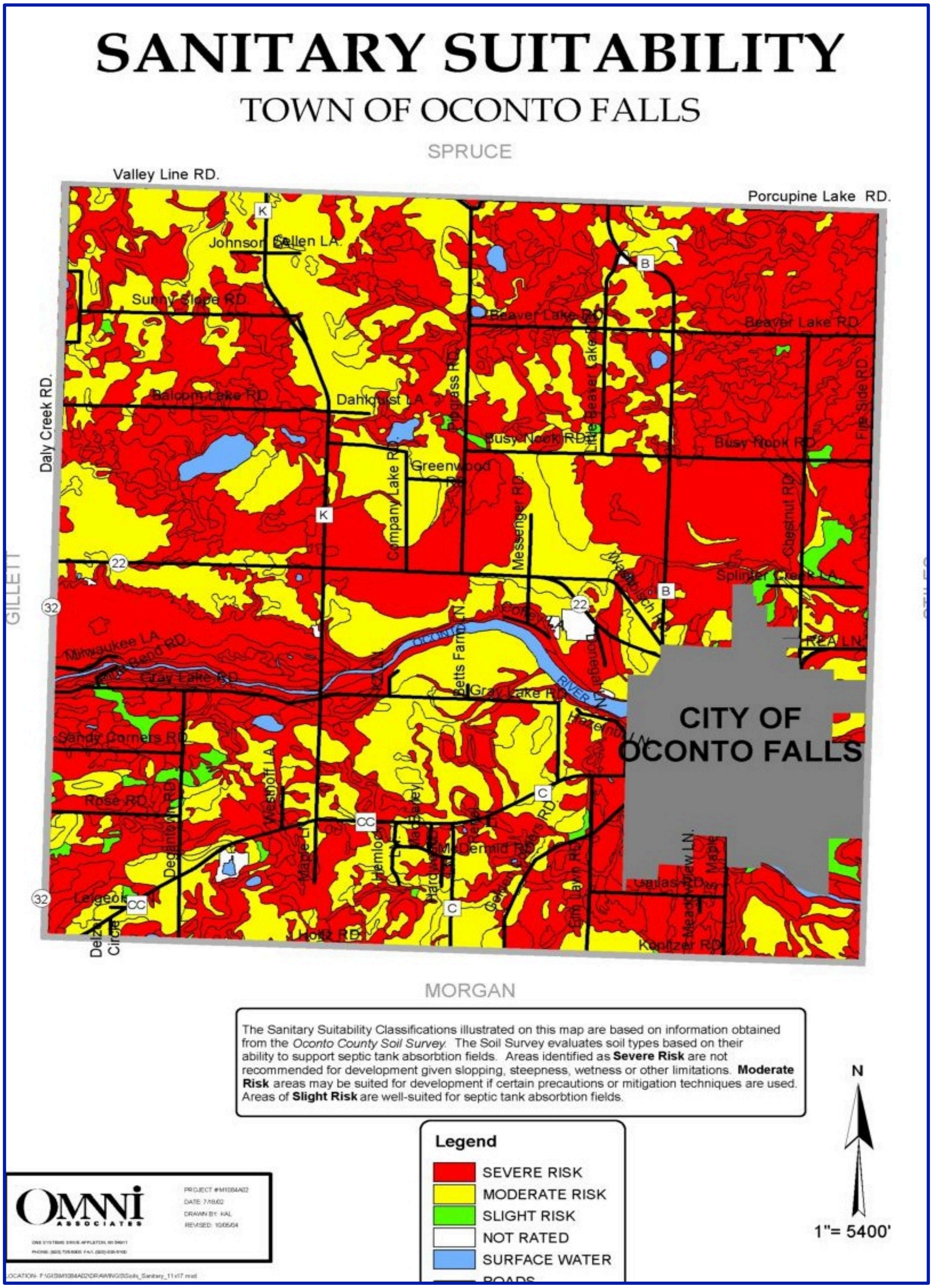
[7] Excerpted from 'Oconto County Comprehensive Plan', Bay Lake Regional Planning Commission.

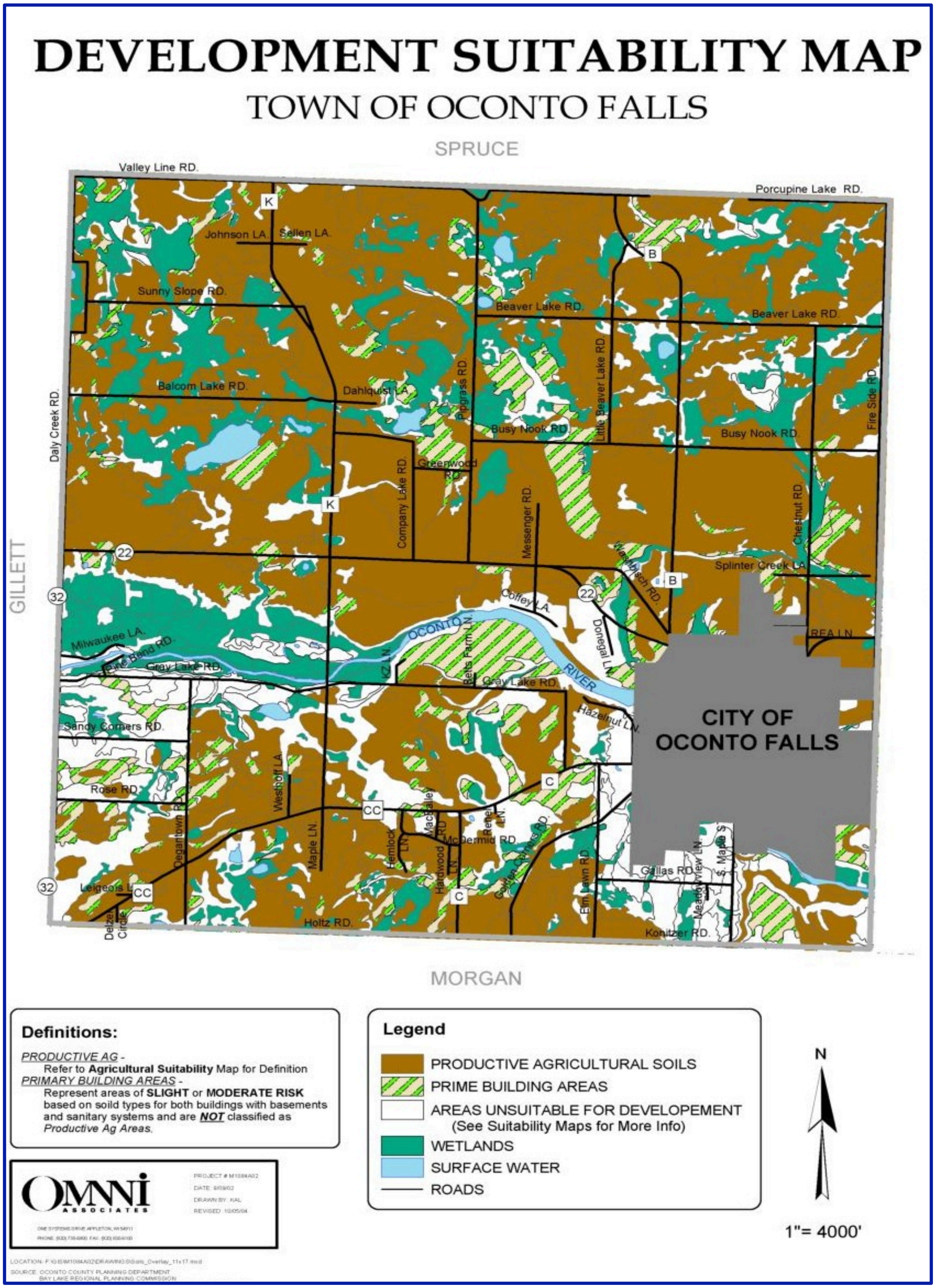
SOILS ASSOCIATION

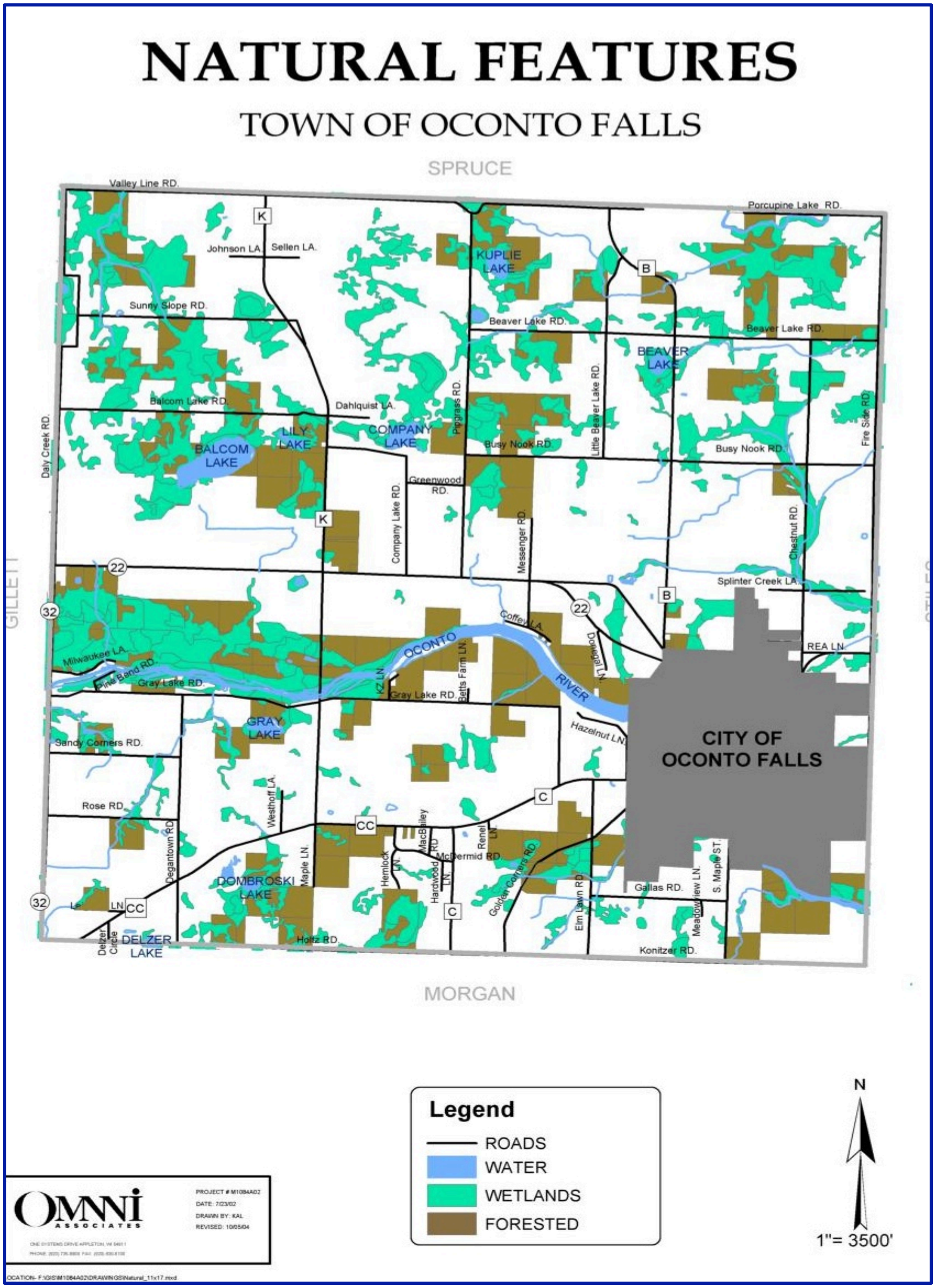
TOWN OF OCONTO FALLS




BUILDING SUITABILITY
TOWN OF OCONTO FALLS
SPRUCE
GILLETT
STILES
MORGAN
Valley Line RD.
Porcupine Lake RD.
Daly Creek RD.
Johnson Rd.
Gellen LA.
Sunny Slope RD
Balcom Lake RD.
Dahlquist LA
Beaver Lake RD
Busy Neck RD
Company Lake RD
Greenwood Rd
Messenger RD.
Little Beaver Lake
Fire Side RD
Chestnut RD
Splinter Creek LA
Milwaukee LA
Gray Lake RD
Betts Farm LN
Sandy Corners RD
Rose RD
Westhoff LA
Maple LN
Hemlock
McDermid
Holtz RD
Konitzer RD
Meadowview LN.
Dallas RD
Elm Lawn RD
Delzer Circle
CITY OF OCONTO FALLS
OCONTO RIVER
K
B
C
CC
22
32
The Building Suitability Classifications illustrated on this map are based on information obtained from the *Oconto County Soil Survey*. The Soil Survey evaluates soil types based on their ability to support buildings with basements. Areas identified as **Severe Risk** are not recommended for development given slopping, steepness, wetness or other limitations. **Moderate Risk** areas may be suited for development if certain precautions or mitigation techniques are used. Areas of **Slight Risk** are well-suited for dwellings with basements.
Legend
SEVERE RISK
MODERATE RISK
SLIGHT RISK
NOT RATED
SURFACE WATER
ROADS
N
1"= 5400'
OMNNI ASSOCIATES


SANITARY SUITABILITY
TOWN OF OCONTO FALLS
SPRUCE
MORGAN
GILLETT
Valley Line RD.
Porcupine Lake RD.
Daly Creek RD.
Beaver Lake RD
Balcom Lake RD
Busy Nook RD
Company Lake RD
Messenger RD.
Chestnut RD
Splinter Creek LA
Milwaukee LA
Gray Lake RD
Sandy Corners RD
Rose RD
Hotz RD
Konitzer RD
CITY OF
OCONTO FALLS
The Sanitary Suitability Classifications illustrated on this map are based on information obtained from the Oconto County Soil Survey. The Soil Survey evaluates soil types based on their ability to support septic tank absorbtion fields. Areas identified as Severe Risk are not recommended for development given slopping, steepness, wetness or other limitations. Moderate Risk areas may be suited for development if certain precautions or mitigation techniques are used. Areas of Slight Risk are well-suited for septic tank absorbtion fields.
Legend
SEVERE RISK
MODERATE RISK
SLIGHT RISK
NOT RATED
SURFACE WATER
N
1"= 5400'
OMNI ASSOCIATES


DEVELOPMENT SUITABILITY MAP
TOWN OF OCONTO FALLS
SPRUCE
GILLETT
MORGAN
CITY OF OCONTO FALLS
Valley Line RD.
Porcupine Lake RD.
Johnson LA.
Sellen LA.
Sunny Slope RD.
Beaver Lake RD.
Beaver Lake RD.
Balcom Lake RD.
Dahlquist LA.
Progress RD.
Little Beaver Lake RD.
Busy Nook RD.
Busy Nook RD.
Fire Side RD.
Daly Creek RD.
Greenwood RD.
Company Lake RD.
Messenger RD.
Chestnut RD.
Splinter Creek LA.
Coffey LA.
Donegal LN.
REA LN.
Milwaukee LA.
Gray Lake RD.
Gray Lake RD.
OCONTO RIVER
Hazelnut LN.
Sandy Corners RD.
Rose RD.
Westhoff LA.
Maple LN.
McDermid RD.
Gallas RD.
Holtz RD.
Konitzer RD.
Elm Lawn RD.
Meadowview LN.
Leigeois L.
Delzer Circle
Definitions:
PRODUCTIVE AG -
Refer to Agricultural Suitability Map for Definition
PRIMARY BUILDING AREAS -
Represent areas of SLIGHT or MODERATE RISK based on soild types for both buildings with basements and sanitary systems and are NOT classified as Productive Ag Areas.
Legend
PRODUCTIVE AGRICULTURAL SOILS
PRIME BUILDING AREAS
AREAS UNSUITABLE FOR DEVELOPEMENT
(See Suitability Maps for More Info)
WETLANDS
SURFACE WATER
ROADS
N
1"= 4000'
OMNNI ASSOCIATES


NATURAL FEATURES
TOWN OF OCONTO FALLS
SPRUCE
MORGAN
Valley Line RD.
Porcupine Lake RD.
Johnson LA.
Sellen LA.
KUPLIE LAKE
Sunny Slope RD.
Beaver Lake RD.
Beaver Lake RD.
BEAVER LAKE
Balcom Lake RD.
Dahlquist LA.
LILY LAKE
COMPANY LAKE
BALCOM LAKE
Busy Nook RD.
Busy Nook RD.
Daly Creek RD.
Little Beaver Lake RD.
Fire Side RD.
Greenwood RD.
Company Lake RD.
Messenger RD.
Chestnut RD.
Splinter Creek LA.
Coffey LA.
REA LN.
Milwaukee LA.
Gray Lake RD.
Gray Lake RD.
OCONTO RIVER
Betts Farm LN.
GRAY LAKE
Sandy Corners RD.
Hazelnut LN.
CITY OF OCONTO FALLS
Rose RD.
Westhoff LA.
Deagantown RD.
DOMBROSKI LAKE
Maple LN.
Hemlock LN.
McDermid RD.
Golden Corners RD.
Elm Lawn RD.
Gallas RD.
Meadowview LN.
S. Maple ST.
Holtz RD.
Konitzer RD.
DELZER LAKE
K
B
C
CC
22
32
Legend
ROADS
WATER
WETLANDS
FORESTED
N
1"= 3500'
OMNI ASSOCIATES

The level of groundwater may rise or fall depending on annual precipitation and local draw down.[8] All of the water used by municipalities and in homes in Oconto County comes from groundwater; 26% of county residents get drinking water from five municipal water utilities while 74% (approximately 27,700 residents) get drinking water from private wells. More than 12,000 wells have been constructed in Oconto County, the vast majority private.[9]

Woodlands

Historically, the landscape of Oconto County was dominated by a mixed conifer-northern hardwood forest (the northern mesic forest). Prior to Euro-American settlement, the northern mesic forest covered the largest acreage of any Wisconsin vegetation type. It is still very extensive, but made up of second-growth forests that developed following the Cutover. It forms the matrix for most of the other community types found in northern Wisconsin, and provides habitat for at least some portion of the life cycle of many species. It is found primarily on loamy soils of glacial till plains and moraines deposited by the Wisconsin glaciation. Sugar maple is dominant or co-dominant in most stands. Historically, eastern hemlock was the second most important species, sometimes occurring in nearly pure stands with eastern white pine; both of these conifer species are greatly reduced in today's forests.[10]

Wildlife Habitat

Primary wildlife habitat areas in Oconto County provide food and cover for deer, raccoons, skunk, and other animals common in the area. Farm fields serve as a food source for deer, sand hill cranes, turkeys, and waterfowl. Agricultural areas are important to wildlife because they provide travel corridors between waterways, woodlands, wetlands, and other habitat. Farmland also provides the cover and large contiguous open spaces needed by many wildlife species. Wildlife habitat includes an array of varied systems each critical to the viability of local species. These include:

Habitat Fragmentation

A primary threat to wildlife is fragmentation, the breaking up of larger habitat areas into smaller sections. This results from modification or conversion of the landscape due to development or agricultural operations.

Fragmentation decreases wildlife population sizes, isolates habitat areas and creates more edges – where 2 dissimilar habitats meet (e.g. grassland and residential subdivisions). Carefully planned environmental corridors provide opportunities to reconnect fragmented natural areas and improve habitat for important plant, animal and insect species.

- Feeding Habitat – The right types of food and the opportunity for animals to consume it.
- Nesting/Resting/Breeding/Burrow Habitat – places to lay eggs, rear young, rest, and breed.
- Wintering/Migratory Habitat – Places to rest during migratory flights and the availability of food and open water for over-wintering species.

[8] Excerpted from 'Soil Survey of Oconto County, Wisconsin', US Department of Agriculture.

[9] Excerpted from 'Protecting Wisconsin's Groundwater Through Comprehensive Planning', University of Wisconsin-Stevens Point, Center for Land Use Education, January 2008.

[10] Excerpted from 'Northern Mesic Forest', WDNR website, 2015.

- Environmental Corridors – Places that provide wildlife the ability to move to different habitats in order to complete daily and seasonal living cycles (see Environmental Corridors later in this section)

Environmental Corridors: Nature's Hallways

One way to think of environmental corridors is to compare them to hallways. A building contains hallways, which are places of concentrated movement back and forth; and rooms, which are destination points where people eat, work, play, and sleep. The hallways serve to link places of activity. Just as hallways enhance the operation of a building, environmental corridors increase the value of natural resource areas. Areas of concentrated natural resource activity ("rooms"), such as wetlands, woodlands, prairies, lakes, and other features, become more functional when linked by environmental corridors ("hallways").

Source: Environmental Corridors: Lifelines for Living, University of Illinois Extension, 2001.

Environmental Corridors

Environmental corridors connect natural areas and open spaces. They provide physical linkages between fragmented habitat areas and provide animals and insects a means of travel to and from feeding and breeding places. Wildlife populations depend upon movement through environmental corridors. Most native species decline when habitat areas are fragmented due to agricultural operations or development. Wildlife populations isolated in one location, like a stand of trees or a secluded wetland, can overpopulate or die out without access to adequate environmental corridors. The functional effectiveness of an environmental corridor depends on the type of species that use it and its size, shape, and edge effects[11].

Larger corridors offer greater habitat diversity. Linear corridors tend to be less diverse but offer important migration routes. In farming communities, corridors often lie along stream and riverbanks. More than seventy percent of all terrestrial wildlife species use riparian corridors. Fencerows provide important habitat links for songbirds and other wildlife. Historically, fencerows were used to mark off ownership of farm fields. Stones and stumps cleared from cultivated areas were laid along property lines.

During the 1920's the federal government advocated tree-lined fencerows as a means of reducing topsoil loss. Nationwide, farmers planted tree wooded lines to reduce wind erosion. Over time, these fencerows matured and provided new habitat for plants and animals. As farmland is developed, these important areas of habitat are lost.

Threatened & Endangered Species

Plant and animal species are considered one of the fundamental building blocks of ecological landscapes and biodiversity. The presence of one or more rare species can be an indication of an area's health and ecological importance, and should prompt attention to conservation, management and restoration needs. Protection of such species is a valuable and vital component of sustaining biodiversity.

[11] Edge effects include the penetration of wind, light, and sound, as well as visibility beyond and into surrounding areas. They are crucial in determining the type of habitat a corridor will provide.

While the conservation of plants, animals and their habitat should be considered for all species, this is particularly important for those that are rare or in decline. An endangered species is one whose continued existence is in jeopardy and may become extinct. A threatened species is one that is likely, within the foreseeable future, to become endangered.

Endangered Species Act[12]

The Endangered Species Act (ESA) defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." Endangered species are automatically protected by prohibitions of several types of "taking," including harming, harassing, collecting, or killing, under Section 9 of the ESA. There are some limited exceptions to these rules listed in Section 10 of the ESA. The ESA defines a threatened species as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Threatened species receive protections through regulations issued under Section 4(d) of the ESA. These regulations occur separately from the listing and detail what take prohibitions are in effect. Also called 4(d) rules, they can include the same prohibitions under Section 9.

Scientists may not consider the economic impact of listing a particular species. One must be listed if it is threatened or endangered due to any of the following five factors:

- Present or threatened destruction, modification, or curtailment of its habitat or range.
- Overutilization for commercial, recreational, scientific, or educational purposes.
- Disease or predation.
- Inadequacy of existing regulatory mechanisms.
- Other natural or human-made factors affecting its continued existence.

At present, there are no confirmed species on the federal endangered and threatened list present in Oconto County.

Wisconsin Endangered & Threatened Species[13]

WDNR manages the Natural Heritage Inventory (NHI) database, the most comprehensive source of rare species data for Wisconsin. The data collected by NHI are used for a variety of purposes including research, land management, state land master planning, community planning, conservation planning, and review of public and private activities across the state. It is provided for general planning and assessment purposes only and should not be used for screening or reviewing proposed land development or land management projects.

Please visit the WDNR NHI website for a complete listing of endangered and threatened species present in Oconto County.

[12] Excerpted from USEPA ESA website, 2015.

[13] Excerpted from WDNR NHI website, 2015.

Invasive Species

An invasive species is defined as, "A species whose introduction does or is likely to cause economic or environmental harm or harm to human health." The definition includes any species that is not native to a given ecosystem. Invasive species can be added to a community by natural range extensions as a result of human activity. Non-native invasive plants and animals threaten biodiversity by displacing species native to the region. They also pose a threat to agricultural, forestry, and fishery operations costing an estimated $137 billion in damages annually in the United States.

Invasive Species Commonly Used in Landscaping

The following species, often used in residential and commercial landscaping, are classified as invasive by the WDNR:

- Norway maple
- Bigtooth aspen
- Grey dogwood
- Red osier dogwood
- Wayfaringtree
- Smooth sumac
- Staghorn/Stagham sumac
- Purple loosestrife
- Hawthorne
- Japanese barberry

Examples of invasive plant species prevalent in Oconto County include, from left, phragmites, purple loosestrife, and Canada thistle.

Cultural Resources

Historical and cultural resources are valuable community assets warranting preservation. The term "cultural resources" typically refers to historic buildings and structures and archaeological sites; however, municipalities are granted the authority to identify the places that are cultural significant within their boundaries irrespective of the National Register of Historic Places or the State Historical Preservation Office. One of the most effective ways to do so is through a local historic preservation ordinance. A historic preservation ordinance can establish procedures to designate historically and culturally sensitive properties and places, and to review projects that have the potential to negatively affect these important places.

Another way in which local governments can protect historically significant structures and places is through the use of overlay zoning in the zoning ordinance. An overlay zone is an additional layer of regulations for a particular area that is laid atop the underlying or base zoning regulations. A design review board, site plan review committee, or historic preservation commission administers the regulations within the historic overlay zone.

Finally, the designation of 'secondary conservation areas' within the conservation subdivision component of a local subdivision ordinance allows a community to identify structures and places that should be preserved during the residential development process.

Wisconsin State Historical Society[14]

The mission of the Wisconsin State Historical Society (WSHS) is to maintain, promote and spread knowledge relating to the history of North America, with an emphasis on the state of Wisconsin. WSHS helps people connect to the past by collecting, preserving, and sharing stories. Its guiding principles are to:

- Reach out and partner with the broadest possible public.
- Present and promote sound and authentic history.
- Share its riches of staff, collections, and services in ways that captivate and respect its many audiences.
- Collect and safeguard evidence of Wisconsin's diverse heritage according to the highest standards of stewardship

Architecture and History Inventory

The Wisconsin Architecture and History Inventory (AHI) is a digital source of information on more than 140,000 historic buildings, structures and objects throughout Wisconsin. Each property has a digital record providing basic information about the property and most include exterior images. The AHI contains information on buildings, structures, and objects that illustrate Wisconsin's unique history. It documents a wide range of historic properties such as round barns, log houses, cast iron bridges, small commercial buildings, and Queen Anne houses, among others. The AHI lists four structures within the Town of Oconto Falls, all located on the 'Jerry Coolman Farm' on Daly Creek Road and including:

- Front Gabled Clapboard Style House.
- Astylistic Utilitarian Building Wisconsin Dairy Barn.
- Astylistic Utilitarian Building Metal Pole Building.
- Astylistic Utilitarian Building Shed.

Inclusion in the AHI conveys no special status or advantage. The inventory is merely a record of the property resulting from site reconnaissance conducted by staff of the Wisconsin State Historical Society.

Agricultural Resources Plan

The remainder of this chapter focuses on current and potential challenges related to agricultural, natural, and cultural resources; and the tools and methods with which the Town of Oconto Falls can ensure their long-term preservation.

[14] Excerpted from Wisconsin State Historical Society website, 2015.

Sustaining Farmland and Natural Areas

Preservation of natural resources and farmland is important to sustaining the local economy, maintaining wildlife habitat, and providing the 'green infrastructure' (e.g., wetlands and floodplains for stormwater management, scenic areas, etc.) necessary in recharging groundwater and reducing the impact of flood events. They are also important landscape features contributing to the Town's high quality of living.

Farmland Preservation Zoning[15]

Under the Farmland Preservation Program (Chapter 91, Wis. Stats.) administered by the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP), local governments may choose to adopt and have certified a farmland preservation zoning ordinance to ensure that landowners covered by the ordinance are eligible to claim farmland preservation tax credits. The credits are applied against tax liability on an annual basis. Tax credit amounts are as follows:

- $5.00 per eligible acre for farmers with a farmland preservation agreement signed after July 1, 2009 and located in an agricultural enterprise area.
- $7.50 per eligible acre for farmers in an area zoned for farmland preservation.
- $10.00 per eligible acre for farmers in an area zoned and certified for farmland preservation and in an agricultural enterprise area, with a farmland preservation agreement signed after July 1, 2009.

Certification of a zoning ordinance must be obtained through application to DATCP. Landowners must be residents of Wisconsin and their agricultural operations must meet the following criteria:

- Acres claimed must be located in a farmland preservation area identified in a certified county farmland preservation plan. Eligible land includes agricultural land or permanent undeveloped natural resource areas or open space land that is in an area certified for farmland preservation zoning, and/or is located in a designated agricultural enterprise area and under a farmland preservation agreement.
- Claimants must have $6,000 in gross farm revenue in the past year or $18,000 in the past three years. Income from rental receipts of farm acres does not count toward gross farm revenue. However, gross farm revenue produced by the renter on the landowner's farmland can be used to meet this eligibility requirement.
- Claimants must be able to certify that all property taxes owed from the previous year have been paid.
- Farmers claiming farmland preservation tax credits must certify on their tax form that they comply with state soil and water conservation standards. New claimants must also submit a certification of compliance with soil and water conservation standards that has been issued by the county land conservation committee.

[15] Source: Wisconsin Department of Agriculture, Trade, and Consumer Protection, Farmland Preservation website, 2015.

The Oconto County Farmland Preservation Plan was certified by DATCP in 2015 allowing for eligible landowners in the town of Oconto Falls to collect farmland preservation tax credits.

Conservation Easements

A conservation easement is a voluntary legal agreement between a landowner and a land trust or government agency that limits present and future development of a parcel. Under a conservation easement, the landowner retains ownership of the land (within the terms of the easement, i.e. only for farmland or natural space, not for development) and a land trust or similar organization assumes the responsibility for protecting the land's conservation values.

Donated conservation easements that meet federal requirements can provide significant tax advantages to landowners since their land will be assessed as undevelopable land, which has a much lower tax value than developable land. Qualified easements may also generate charitable contribution dedications for income and transfer tax purposes. All land is "taxed" at the same rate, though value determinations are variable.

Specialty Farming

On average, close to 3,000 acres of productive farmland are lost to development in the U.S. each day. Adapting to survive, many farmers have embraced a new paradigm that focuses on agricultural models custom-fit to changing markets and filling local niche markets with specialty produce and value-added products. Specialty (or niche) farming provides an alternative to conventional agricultural practices, particularly for smaller farmers attempting to compete with larger operations. The movement seems to be working.

Courtesy Washington Island Ostrich Farm

According to Agricultural Census data nearly 300,000 new farms have begun operations during the past decade. Compared with all farms nationwide, these new arrivals tend to have more diversified production, fewer acres, lower total-dollar sales, and operators who also work off-farm. The Town of Oconto Falls' proximity to Green Bay and the Fox Cities provides opportunities for directly marketing specialty agricultural products to local consumers.
Examples of specialty agricultural products include:

- Agroforestry
- Aquaculture products
- Alternative Grains and Field Crops
- Industrial, Energy and Non-food Crops
- Native Plants and Ecofriendly Landscaping
- Organic milk and cheese
- Organic produce
- Ornamental and Nursery Crops
- Post-harvest Handling and Processing
- Medicinal and Culinary Herbs

- Raising of non-traditional farm animals (llama, ostrich, bison, etc.)
- Seeds and Plant Breeding
- Specialty, Heirloom and Ethnic Fruits and Vegetables

Organic Agriculture

Organic farming is a particularly attractive specialty farm option given that organic food is the fastest growing segment of the agricultural industry. Products that once occupied a boutique marketplace niche are becoming mainstream as consumers seek healthier alternatives to conventional farm produce. Organic and specialty farming counter the notion that agricultural operations must become very big to remain profitable.

Community Supported Agriculture[16]

Courtesy Kellner Back Acre Garden, Denmark, WI

Community Supported Agriculture (CSA) is a system in which a farm operation is supported by shareholders who share both the benefits and risks of food production. CSAs consist of a community of individuals who pledge support to a farm operation so that the farmland becomes the 'community's farm', with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. In return, they receive shares in the farm's bounty throughout the growing season, as well as satisfaction gained from reconnecting to the land and participating directly in food production. Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests. By direct sales to community members, who have provided the farmer with working capital in advance, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.

No-Till Farming

Courtesy University of Wisconsin-Extension

In conventional tillage, soil is turned to a depth of eight to twelve inches with a plow. Subsequently, the plot is disked at least twice more to prepare the seedbed before planting takes place. In no-till, the first three steps in conventional cultivation are dispensed with. Planting is done right *through* the residues of previous plantings and weeds with a device (usually a coulter) that cuts a slot a few inches wide, followed by equipment that places the seeds and closes the trench.

Extensive field-scale research and more than five hundred farm operations in the U.S. have demonstrated how diverse crop rotations can make no-till profitable. Crop diversity keeps pests such as weeds, insects, and diseases in check, and techniques such as precise nutrient

[16] Excerpted from United States Department of Agriculture, Alternative Farming Systems Information Center, 2015.

placement, accurate seeding, and proper variety selection enhance crop competitiveness. No-till farming also conserves soil moisture allowing for enhanced crop production. A properly implemented no-till saves water, uses little or no fertilizers and pesticides, increases yield, and is more profitable than conventional techniques.

Agri-Tourism

Agri-tourism is a commercial enterprise at a working farm conducted for the enjoyment of visitors that generates supplemental income for the owner. It is one of the fastest growing segments of the travel industry. Agri-tourism operations may include outdoor recreation, educational experiences, entertainment, hospitality services, and on-farm direct sales, among others.

Table 6.1: Examples of Agri-tourism Opportunities in Town of Oconto Falls.

Category	Activity
Outdoor Recreation	Horseback riding; wildlife viewing & photography; fee fishing & hunting; camping & picnicking; wagon/sleigh rides; cross-country skiing; game preserve; clay bird shooting; off-road vehicles.
Educational Experiences	Farm tours; school and church tours; garden/nursery tours; winery tours; agricultural technical tours; historical agriculture exhibits; exotic animal farm.
Direct Agricultural Sales	On-farm sales; roadside stand; agriculture-related crafts/gifts; u-pick operations; farmers' market.
Accommodations	Bed & breakfast inn; farm vacations; youth exchange; elder hostel.
Entertainment	Concerts or special events; festivals or fairs; petting zoo; hunting/working dog trials/training.

Source: University of California Cooperative Extension, Small Farm Program website, 2015.

Purchase and Transfer of Development Rights

Another means of preserving agricultural (and natural) land is through the establishment of a purchase of development rights (PDR) or transfer of development rights (TDR) program. Such programs 'send' development from farmland and natural resource areas to designated 'receiving' areas within a community. Advantages of these approaches include just and fair compensation for landowners, permanent protection of farmland and natural resources, and voluntary participation.

Purchase of Development Rights

In a PDR program, a land trust, local government, or other organization offers to purchase the development rights on a parcel. The landowner is free to decline the offer or negotiate a higher price. When the development rights to a farm are sold, the landowner typically receives payment equal to the difference between the fair market value of the land and the price the land would command for agricultural use. Upon payment, a conservation easement is recorded on the property deed. The easement stays with the land in perpetuity.

The landowner retains the right to occupy and make economic use of the land for agricultural purposes, but gives up the right to develop the property in the future. Farmers are not compelled to sell their development rights. The main disadvantage of PDR is cost. Development rights can be expensive, so funding for a PDR program must to be selectively targeted in order

to protect the agricultural land that is most worthy of preservation. As a result, not every farmer who wants to sell his or her development rights will be able to do so.

Table 6.2: Purchase of Development Rights	
Strengths	**Limitations**
▪ Permanently protects land from development ▪ Landowner is paid to protect land ▪ Local governments can target locations effectively ▪ Land remains in private ownership and on the tax rolls ▪ Program is voluntary	▪ Can be costly for local unit of government, therefore land is protected at a slower rate ▪ Land remains in private ownership – typically no public access ▪ Since program is voluntary, it may be difficult to preserve large tracts of contiguous land

Transfer of Development Rights

TDR involves transferring development rights from one piece of property to another. In this approach, a landowner is compensated for selling his/her development rights. However, rather than simply eliminating these rights, they are transferred to another property in the community that is targeted for development. That landowner of the 'targeted property' is free to develop the land and may use the transferred rights to develop at a greater density or intensity (e.g., smaller lot sizes to locate more homes in a single area). This approach preserves farmland and natural areas in designated sending zones while allowing for more intensive development to occur in the receiving zones.

Table 6.3: Transfer of Development Rights	
Strengths	**Limitations**
▪ Permanently protects land from development ▪ Landowner is paid to protect their land ▪ Local governments can target locations effectively ▪ Low cost to local unit of government ▪ Utilizes free market mechanisms ▪ Land remains in private ownership and on tax roll	▪ Can be complex to manage ▪ Receiving area must be willing to accept higher densities ▪ Difficult program to establish ▪ Program will not work in areas where there is little to no development pressure on the area to be preserved

Wisconsin Right-to-Farm Act

Wisconsin's Right-to-Farm Law (Section 823.08, Wis. Stats.) protects farmers from nuisance lawsuits. As residential development expands into agricultural areas, issues often arise related to manure spreading and storage, plowing and harvesting at night, and large farm vehicles on roads (among others). People who move to rural areas may not be aware of these and other potential nuisances. To minimize conflicts, education is strongly recommended (newsletters, Town website, etc.). By educating new landowners about potential conflicts, 'surprise' nuisances can be avoided. Many communities require that right-to-farm language be included with the deed for all new home sales in or adjoining active agricultural lands.

Natural Resources Plan

Preservation of Surface Water Quality

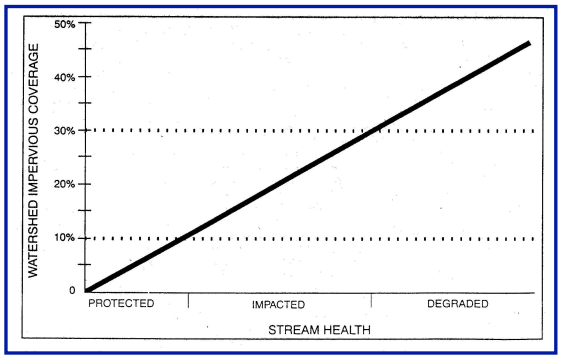
The Oconto River and the smaller creeks and streams in the community are important elements of the landscape. They provide critical habitat for important fish and wildlife species and provide recreational opportunities for residents and visitors. However, strains are placed on aquatic systems with each new home, business, or road constructed. Development in a watershed has direct and predictable effects on streams and wetlands. The implementation of best management practices can protect water quality during construction, road building, and farming.

Historically, water quality was degraded by point sources, or direct discharges to lakes and rivers from industry, municipal sewerage districts and the like. Since the passage of the Federal Water Pollution Control Act of 1972 (the Clean Water Act), the United States had taken dramatic steps to improve the quality of water resources. No longer are industries allowed to discharge untreated waste directly to surface waters.

Today, the greatest threat from a cumulative standpoint to streams and lakes comes through nonpoint-source water pollution. Nonpoint-source water pollution, or runoff, cannot easily be traced to a single point of origin. It occurs when rainwater or snowmelt flows across the land and picks up soil particles, organic wastes, fertilizers, and other contaminants that become pollution when carried to surface and/or groundwater. Nonpoint pollution, in the form of nitrogen, phosphorus and total suspended solids (soil particles), contaminates streams and lakes, increases the growth of algae and harmful aquatic weeds, covers spawning beds and feeding areas, and turns streams into conveyances of stormwater. The main sources of nonpoint pollution include impervious surfaces, agricultural fields, and residential lawns.

Impervious Surface

A correlation exists between the percentage of impervious surface in a watershed and surface water quality (see graph). Stormwater runoff from impervious surfaces such as roads and roofs has an adverse effect on surface waters. As the percentage of impervious surfaces increases in a watershed, lakes and streams experience greater degradation from stormwater runoff.



Courtesy Center for Watershed Protection

According to the Center for Watershed Protection (CWP) in Ellicott City, Maryland, more than 30 different scientific studies have documented that stream, lake, and wetland quality declines sharply when impervious cover in upstream watersheds exceeds ten percent.

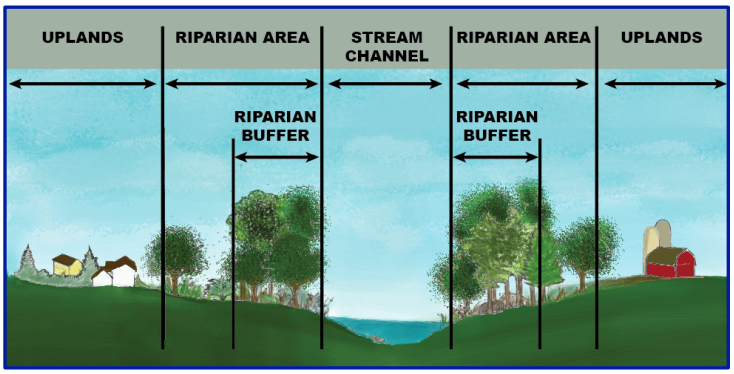
Agricultural Fields

Conventional agricultural practices expose topsoil to erosion from wind and precipitation. Plowed fields, row crops, the conversion of wetlands, and the overuse of commercial pesticides and fertilizers all intensify nonpoint source pollution loading to surface waters. By utilizing techniques such as conservation tillage, nutrient management planning, wetland restoration, grazing management, cover crops, and agricultural buffers, farmers can dramatically reduce nonpoint source pollution as well as the cost of farming.

Residential Lawns

Historically, Wisconsin and Minnesota residents use more fertilizers and pesticides on their lawns per capita than those of any other state.[17] Upwards of 95% of the chemicals applied to residential lawns are washed into storm drains and then into nearby creeks and streams following rain events. In northern climates, turf grass effectively utilizes fertilizer only during the fall. Fertilizers applied during spring and summer months contribute to algae blooms and eutrophication of surface waters. Moreover, many turf grass herbicides/pesticides, even those that claim to be focused on specific weeds or pests, kill beneficial organisms and are suspected causal factors in a number of autoimmune and endocrine illnesses in people and pets.

Riparian Buffers[18]



Courtesy USEPA

Riparian buffers are zones adjacent to water bodies such as lakes, rivers, and wetlands that protect water quality and wildlife, including both aquatic and terrestrial habitat. These zones minimize the impacts of human activities on the landscape and contribute to recreation, aesthetics, and quality of life.
Buffers include a range of complex vegetation structure, soils, food sources, cover, and water features that offer a variety of habitats contributing to diversity and abundance of wildlife such as mammals, frogs, amphibians, insects, and birds. Buffers can consist of a variety of canopy layers and cover

[17] Source: USEPA, Fertilizer and Pesticide Use on Turf Grasses IN THE U.S. and their Effects on Surface Waters, 1998.
[18] Excerpted from Managing the Water's Edge: Making Natural Connections, USEPA

types including: ephemeral (temporary-wet for only part of year) wetlands, ponds, and spring pools; shallow and deep marshes; wetland meadows; wetland mixed forests; grasslands; forests; and prairies. Riparian zones are areas of transition between aquatic and terrestrial ecosystems that provide numerous benefits to wildlife and people including pollution reduction and recreation. Riparian buffers are widely considered to be the single most effective protection for water resources.

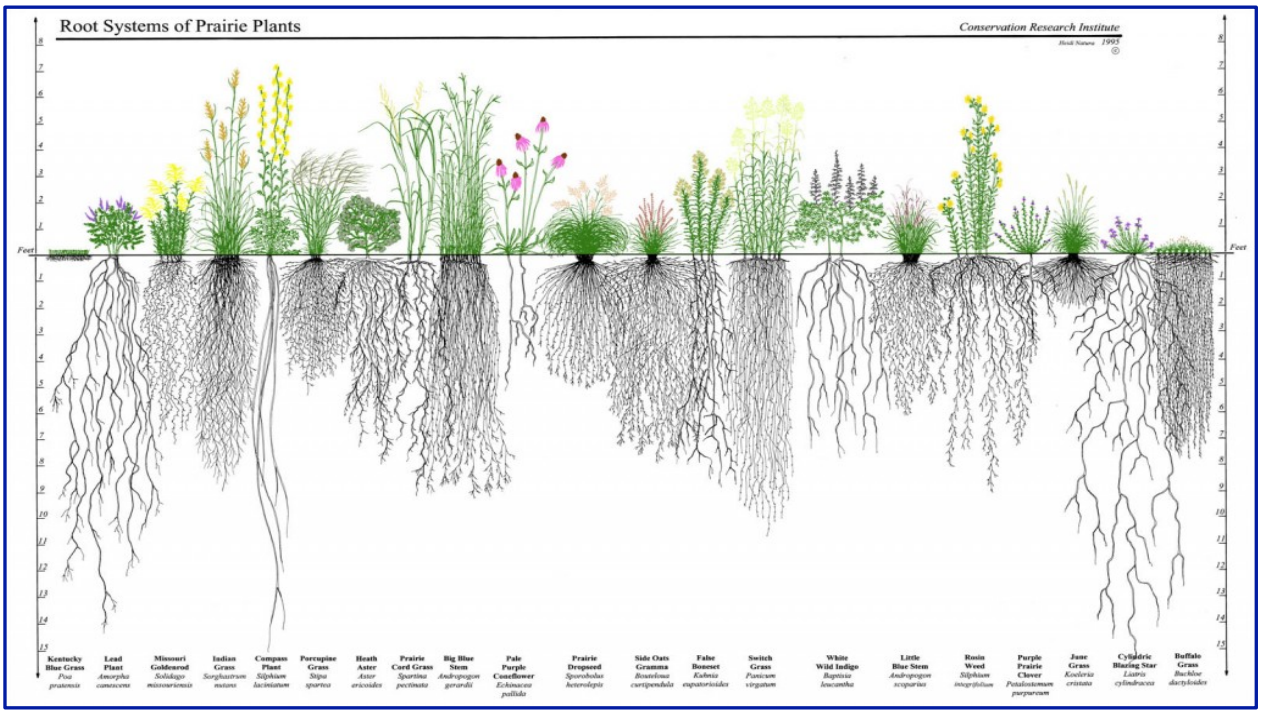
Native Landscapes

A native landscape is generally defined as one comprised of species that occur naturally in a particular region, ecosystem, or habitat, and that were present prior to European settlement. Landscaping with native wildflowers, grasses, shrubs, and trees improves the environment. Natural landscaping brings a taste of wilderness to urban, suburban, and corporate settings by attracting a variety of birds, butterflies, and other animals. Once established, native plants do not need fertilizers, herbicides, pesticides, or watering, thus benefiting the environment and reducing maintenance costs.[19] Finally, their extensive root systems create pathways for the infiltration of precipitation and snow melt thereby reducing runoff and the costs associated with constructed stormwater management systems.

The benefits of native landscapes include:

- Environmental - Once native plants are returned to the land, many species of birds, mammals, reptiles and beneficial insects return as well, restoring a vital part of the web of life. Landscaping with natives enriches the soil, decreases water run-off, and filters the pollution caused by nonpoint source pollution from commercial sites, subdivisions, parks, and farms.
- Economic - Over the long term, native landscaping is more cost-effective than traditional landscaping and requires no fertilizers, pesticides, or irrigation. Increased infiltration reducing the need for expensive stormwater management infrastructure.
- Aesthetic - While traditional landscapes use one or two species of grass, native landscape designs may include dozens of species of trees, shrubs, grasses, and wildflowers. Each is unique and constantly evolving, and thrives in wet, dry, sunny, and shaded locations.
- Educational - Native landscapes provide hands-on opportunities for people of all ages to learn about habitats and ecosystems.

[19] Excerpted from Landscaping with Native Plants in the Great Lakes Region, USEPA.



Comparing the root system of typical turf grass (far left) with those of grass and flower species native to Wisconsin. Deeper root systems provide greater opportunities for infiltration of precipitation and snow melt thereby reducing the incidents of flood events. Courtesy Conservation Research Institute

Cultural Resources Plan

Agricultural Heritage

The Town of Oconto Falls began as and remains an agricultural community. Farming is a cornerstone of the community's economy and culture and will remain so into the foreseeable future. However, land uses evolve over time. Across Wisconsin, historically and culturally significant farm structures are being lost to development or replaced with their modern equivalents…pole barns and semi-rigid livestock shelters.

Preserving important remnants of the Town's agrarian past will allow future generations to connect with the land and their ancestors. As development occurs, the Town will work with agricultural landowners and developers to preserve structurally sound barns, silos, fencerows, and other examples of Oconto Falls farming history.

Century Farms[20]

The Century Farm and Home Program began in 1948 in conjunction with the State of Wisconsin's Centennial Celebration. There are currently 8,583 Century Farms and Homes nestled throughout the Badger State. The Sesquicentennial Program originated in 1998 as part of the State's Sesquicentennial Celebration, and since that time, 616 families have been honored. In 2011, 138 Century properties and 30 Sesquicentennial properties were recognized for carrying on Wisconsin's rich family farming tradition.

Secondary Conservation Areas

As discussed in *Chapter 3: Housing*, conservation subdivisions provide a means by which local government, landowners, and developers may preserve important natural and cultural features present on a given piece of property. They do so by identifying *secondary conservation areas* (SCA) to be preserved during the residential development process. Unlike primary conservation areas (wetlands, flood plains, steep slopes, etc.), SCAs are cultural, natural, and agricultural resources that hold particular value within a given community. Examples of cultural SCAs may include architecturally significant homes, structurally sound barns, fencerows, and windmills, among others. Most importantly, SCAs are determined at the local level based upon local values.

Historic Preservation

The term historic preservation refers to the protection, rehabilitation, restoration, and reconstruction of cultural resources. Cultural resources can include structures, sites, and objects having historical, archaeological, social, or cultural significance within a community. Historic preservation ordinances are the tool typically utilized by local government to protect cultural resources.

Historic preservation ordinances provide protection to individual sites and structures or historic districts through a permitting process that requires advance review of proposed projects by a preservation commission or other administrative body. While similar in many respects, preservation ordinances can differ widely from place to place. Variations arise due to differing levels of political support for preservation. The most effective ordinances are tailored to meet the individual needs of the community and the resources being protected.

Agricultural, Natural, and Cultural Resource Programs

The following pages describe the various federal, state, and local programs that are available to aid the Town of Oconto Falls in implementing its agricultural, natural, and cultural resources plan.

[20] Excerpted from Agri-View website.

United States Department of Agriculture

Conservation Reserve Enhancement Program

The Conservation Reserve Enhancement Program (CREP) is an offshoot of the Conservation Reserve Program, the country's largest private-land conservation program. Administered by the Farm Service Agency, CREP targets high-priority conservation issues identified by local, state, or tribal governments, or non-governmental organizations. In exchange for removing environmentally sensitive land from production and introducing conservation practices, farmers, ranchers, and agricultural landowners are paid an annual rental rate. Participation is voluntary, and the contract period is typically 10–15 years, along with other federal and state incentives as applicable per each CREP agreement.

Natural Resource Conservation Service – Environmental Quality Incentives Program

The Environmental Quality Incentives Program (EQIP) is a voluntary program that provides financial and technical assistance to agricultural producers through contracts up to a maximum term of ten years in length. These contracts provide financial assistance to help plan and implement conservation practices that address natural resource concerns, and for opportunities to improve soil, water, plant, animal, air, and related resources on agricultural land and non-industrial private forestland. In addition, a purpose of EQIP is to help producers meet federal, state, tribal, and local environmental regulations. Owners of land in agricultural, or forest production or persons who are engaged in livestock, agricultural or forest production on eligible land and that have a natural resource concern on the land may participate in EQIP.

Natural Resource Conservation Service - Farm and Ranch Lands Protection Program

The Natural Resource Conservation Service (NRCS) - Farm and Ranch Lands Protection Program (FRPP) provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses. Working through existing programs, USDA partners with state, tribal, or local governments and non-governmental organizations to acquire conservation easements or other interests in land from landowners. USDA provides up to 50 percent of the fair market easement value of the conservation easement.

Natural Resource Conservation Service – Financial Assistance Program

NRCS offers voluntary programs to eligible landowners and agricultural producers to provide financial and technical assistance to help manage natural resources in a sustainable manner. Through these programs the agency approves contracts to provide financial assistance to help plan and implement conservation practices that address natural resource concerns or opportunities to help save energy, improve soil, water, plant, air, animal, and related resources on agricultural lands and non-industrial private forest land.

Natural Resource Conservation Service – Landscapes Initiatives Program

The NRCS Landscape Initiatives Program (LIP) is intended to accelerate the results that can be achieved through voluntary conservation programs. All NRCS programs are designed to support farmers, ranchers, and foresters in improving the environment while maintaining or improving a vibrant agricultural sector. Most program delivery is driven primarily by grassroots input and local needs. Landscape conservation initiatives enhance the locally-driven process to better address nationally and regionally important conservation goals that transcend localities. Improving water quality in the eight state Great Lakes region is a priority of the LIP.

Farm Services Agency – Conservation Reserve Program

The Conservation Reserve Program (CRP) is a land conservation program administered by the Farm Service Agency. In exchange for a yearly rental payment, farmers enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. Contracts for land enrolled in CRP are 10-15 years in length. The long-term goal of the program is to re-establish valuable land cover to help improve water quality, prevent soil erosion, and reduce loss of wildlife habitat.

Wisconsin Department of Natural Resources

Knowles-Nelson Stewardship Program – Acquisition and Development of Local Parks Program

The Knowles-Nelson Stewardship Program (KNSP) sets aside fifty percent of the funds in the Local Assistance Program for projects that improve community recreation areas and acquire land for public outdoor recreation. Funds are allocated on a regional basis with seventy percent distributed on the basis of each county's proportionate share of the state population, and thirty percent distributed equally to each county. Applicants compete against other applicants from their region. Funds may be used for both land acquisition projects and development projects for nature-based outdoor recreation.

Under all KNSP programs, eligible local governments are only those towns, villages, cities, counties, and tribal governments that have a DNR-accepted comprehensive outdoor recreation plan or master plan that has been approved by resolution by the local governing unit. Local governments with qualifying plans receive eligibility to apply for grants for up to five years.

Managed Forest Law

The intent of the Managed Forest Law is to promote forest management practices through property tax incentives. Property must be a minimum of ten contiguous acres of which eighty percent must be capable of producing merchantable timber.

Knowles-Nelson Stewardship Program – Acquisition of Development Rights Program

The purpose of the Acquisition of Development Rights Program is to protect natural, agricultural, or forestlands that enhance and/or provide nature-based outdoor recreation. "Development Rights" are the rights of a landowner to develop their property to the greatest extent allowed under state and local laws.

Land and Water Conservation Fund Program

The Land and Water Conservation Fund is a federal program administered in all states that encourages creation and interpretation of high-quality outdoor recreational opportunities. Funds received by the DNR for this program are split between DNR projects and grants to local governments for outdoor recreation activities. Grants cover fifty percent of eligible project costs. Eligible projects include:

- Land acquisition or development projects that will provide opportunities for public outdoor recreation.
- Property with frontage on rivers, streams, lakes, estuaries, and reservoirs that will provide water-based outdoor recreation.
- Property that provides special recreation opportunities, such as floodplains, wetlands, and areas adjacent to scenic highways.
- Natural areas and outstanding scenic areas, where the objective is to preserve the scenic or natural values, including wildlife areas and areas of physical or biological importance. These areas shall be open to the general public for outdoor recreation use to the extent that the natural attributes of the areas will not be seriously impaired or lost.
- Land or development within urban areas for day use picnic areas.
- Land or development of nature-based outdoor recreation trails.
- Development of basic outdoor recreation facilities.
- Renovation of existing outdoor recreation facilities which are in danger of being lost for public use.

Wisconsin Forest Landowners Grant Program

The Wisconsin Forest Landowners Grant Program (WFLGP) program assists private landowners in protecting and enhancing their forested lands, prairies, and waters. The program allows qualified landowners to be reimbursed up to fifty percent of the eligible cost of eligible practices. Private landowners are eligible for WFLGP funding if they own at least ten contiguous acres of non-industrial private forest, but not more than five hundred acres within Wisconsin.

Wisconsin Coastal Management Program

Approximately $1,500,000 is available through the Wisconsin Coastal Management Program (WCMP) to enhance and restore coastal resources within the state's coastal zone--all counties adjacent to Lakes Superior and Michigan. Projects eligible for WCMP funding include:

- Coastal Wetland Protection and Habitat Restoration.
- Nonpoint Source Pollution Control.
- Coastal Resource and Community Planning.
- Great Lakes Education.
- Public Access.
- Community Planning.

Wisconsin Historical Society

Historic Home Owner's Tax Credits

The Wisconsin Historical Society's Division of Historic Preservation (DHP) administers a program of twenty-five percent state income tax credits for repair and rehabilitation of historic homes in Wisconsin. To qualify, the residence must be one of the following:

- Listed in the state or national register.
- Contributing to a state or national register historic district.
- Be determined through the tax credit application process to be eligible for individual listing in the state register.

And, the property owner must spend at least $10,000 on the following types of eligible work within a 2-year period:

- Work on the exterior of the house, such as roof replacement and painting, but not including site work such as driveways and landscaping.
- Electrical wiring, not including electrical fixtures.
- Plumbing, not including plumbing fixtures.
- Mechanical systems, such as furnaces, air conditioning, and water heaters; and Structural work, such as jacking up floors.

Historic Preservation Tax Credits for Income-Producing Historic Buildings

Owners of historic income-producing properties in Wisconsin may be eligible for two income tax credits that can help pay for their building's rehabilitation. DHP administers both programs in conjunction with the National Park Service (NPS). The programs are:

- Federal Historic Preservation Credit. This program returns 20 percent of the cost of rehabilitating historic buildings to owners as a direct reduction of their federal income taxes.
- Wisconsin Supplemental Historic Preservation Credit. This program returns an additional 5 percent of the cost of rehabilitation to owners as a discount on their Wisconsin state income taxes. Owners that qualify for the Federal Historic Preservation Credit automatically qualify for the Wisconsin supplement if they get NPS approval before they begin any work.

UW-Extension Wisconsin Barn Preservation Program[21]

Despite the rich stock of historic barns in the Wisconsin landscape, we see fewer attempts to save them. The threats to these buildings are many, including urban growth and its associated roadway expansion, improper maintenance and upkeep, and new construction techniques, materials, and design. The University of Wisconsin-Extension and Wisconsin Historical Society, are spearheading a multifaceted approach aimed at saving many of Wisconsin's historic agricultural buildings. The Wisconsin Barn Preservation Program is aimed at both addressing public concerns and drawing attention to the importance of preserving the elements of Wisconsin's rural countryside, those elements that make it a unique part of America. Some of the strategies being pursued by this group include the coordination of regional educational workshops, the production of technical resource materials and the support of non-profit organizations that can help orchestrate efforts to establish grants and other kinds of technical assistance programs aimed at helping barn owners interested in preservation.

Oconto County Land Conservation Department

The Oconto County Land Conservation Department (OCLCD) administers funds and technical assistance on Best Management Practices available for cost-share through the Pensaukee River Priority Watershed Program, Soil & Water Resource Management Grant, and Oconto County Cost-Share Program. OCLCD also provides the following, when funds are available:

- Technical assistance with abatement and damage claims in the Wisconsin Wildlife Damage Abatement and Claims Program in conjunction with the Wisconsin Department of Natural Resources.
- Technical advice to landowners and agricultural operators for the planning, designing and installation of facilities and practices required under the Animal Waste Management Ordinance to protect surface and ground water quality.
- Technical advice to landowners and assist in securing any available funding to install practices and reach objectives identified in the County Land and Water Resource Management Plan.
- Technical advice to landowners in any matters of general natural resource management to protect and preserve the environment that is Oconto County.

Agricultural, Natural, & Cultural Resources Goals, Objectives, and Policies

The goals, objectives, and policies related to agricultural, natural, and cultural resources are presented in Chapter 10: Implementation.

[21] Excerpted from Wisconsin Barn Preservation Program website, 2015.