

Introduction

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. Without the need to demolish or rebuild existing structures, development costs are much lower in these areas. As the Village of Hobart grows it will need to consider which agricultural, natural, and cultural resources must be preserved for the long-term benefit and enjoyment of future generations.



Courtesy Wisconsin Department of Natural Resources

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

Comprehensive Planning Law

Wisconsin's Comprehensive Planning Law (Section 66.1001(2)(e), Wis. Stats.) requires that the agricultural, natural, and cultural resources element of a comprehensive plan contain all of the following:

- A compilation of objectives, policies, goals, maps, and programs for the conservation and promotion of the effective management of natural resources such as groundwater, forests, productive agricultural areas, environmentally-sensitive areas, threatened and endangered species, stream corridors, surface water, floodplains, wetlands, wildlife habitat, metallic and nonmetallic mineral resources, parks, open spaces, historical and cultural resources, community design, and recreational resources.

Beyond the requirements identified above, the planning law recommends that all communities address fourteen planning goals when preparing a comprehensive plan. Those related to agricultural, natural, and cultural resources include:

- Preservation of cultural, historic and archaeological sites.
- Encouragement of coordination and cooperation among nearby units of government.
- Balancing individual property rights with community interests and goals.
- Planning and development of land uses that create or preserve varied and unique urban and rural communities.

Agricultural, Natural, & Cultural Resources Vision

The Village of Hobart 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

Farming remains a significant component of Hobart’s landscape, particularly in the southern half of the community. It is also among the most threatened, since agricultural land within metropolitan regions is highly sought after for residential and commercial uses. Future development in the Village will result in a significant decrease in available agricultural acreage unless steps are taken to preserve farming as both a viable land use and as an income producer for farm families.

The removal of land from agricultural use is not always avoidable. Roads need to be built and people need places to live and work. Considering that agriculture needs land in order to operate, and that land is one 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. Development in rural areas of the Village should occur in a manner that preserves, to the greatest extent practicable, prime agricultural soils and established farm operations.¹

¹ Excerpted from Village of Hobart Smart Growth 2026.

Agricultural Challenges

Productive farm soils are located throughout the community, but active farming operations are concentrated in the southern half of the Village. A variety of factors may threaten the long-term viability of farming in Hobart. They include:

- A projected population approaching 12,000 by the year 2035
- Large-lot residential development outside of sewer service areas.
- Conflicts between agricultural and residential land uses, including the fragmentation of farm fields.
- Agricultural land values exceeding possible agricultural income opportunities.
- The desirability of the community as a location for future residential, commercial, and light industrial development.
- The increasing average age of the typical farm operator combined with fewer young people interested in farming.

A variety of tools are available to local governments and farmers to preserve prime agricultural lands. These include Wisconsin's Farmland Preservation Program (Chapter 91, Wis. Stats.), various Natural Resource Conservation Service and WDNR programs, and the purchase or transfer of development rights, among others. These tools are most effective in communities where farming will remain a primary land use over time. Successful farmland preservation efforts are dependent upon the support of local farmers and their ability to pursue new markets to sustain operations over time.

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 Village of Hobart benefits from a rich mosaic of landscapes, with a greater diversity of ecosystems than most

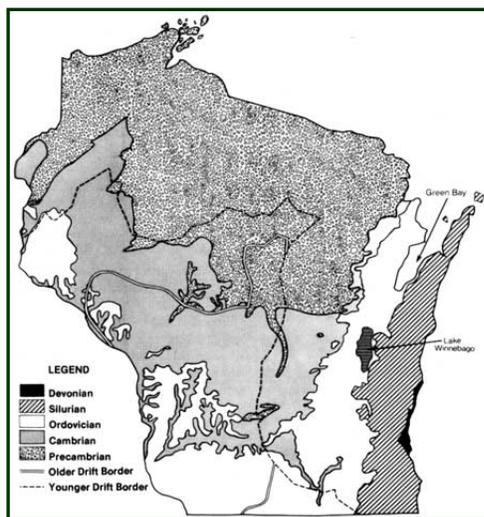
Agricultural map will be inserted here

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communities in Northeast Wisconsin. 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 Village, 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. This will be of particular importance considering the level of growth projected for Hobart, as well as a desire to induce and realize those growth opportunities.

Geology and Topography²



Courtesy Geology of Ice Age National Scientific Reserve of Wisconsin

The Village of Hobart is underlain by stratified layers of igneous and metamorphic rocks (principally granite and gneiss) formed during the Precambrian era. During subsequent geologic periods, shallow marine seas frequently inundated the area. Suspended sand, silt, and clay particles, along with the skeletal remains of sea life, settled on the seabed forming the sedimentary rock formations that underlie Hobart. As the seas retreated the land mass was exposed to erosion, leaving a rugged surface upon which younger sediments were deposited. As a result of this erosion, only the older rocks of Silurian, Ordovician, Cambrian, and Precambrian periods are found today.

Sedimentary bedrock is located within twenty feet of the surface in many areas of Hobart, most notably where Duck Creek has eroded much of the overlying material. The importance of subsurface strata is that it provides a source of water and mineral deposits and a foundation for construction. Improper use or disregard of the subsurface geology can result in contaminated water supplies, loss of potential mineral resources, inefficient waste disposal, and structure damage to buildings and roadways.

The area's major topographic features resulted from frequent periods of glaciation. Glaciers made four separate advances across what is now Hobart.

² Excerpted from Village of Hobart Smart Growth 2026.

Chapter 5:
***Agricultural, Natural,
& Cultural Resources***

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 (see image at right). 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

The Cary Sub-stage had the greatest influence upon the topography of Hobart. As the mile thick ice sheet advanced, it carried tremendous quantities of bedrock, soil, and other debris (called glacial drift) into the area. As temperatures warmed, the glacial ice began to melt and deposited glacial material in landforms known as recessional moraines. As the melting continued, water was trapped between the recessional moraine and the ice front forming a shallow lake known as Early Lake Oshkosh.

Further melting washed great quantities of sand from the ice into the lake forming outwash deposits. These sand deposits are common in northwestern Hobart and form the principal subsurface material of southern Hobart. Stream erosion in the Trout Creek area has exposed these deposits. After the Cary ice melted and the glacial lake water subsided, the present drainage system began to develop with most of the streams oriented in the same direction as glacial movement.

After a warm period of about 5,000 years, Hobart was covered by yet another ice mass known as the Valders Sub-stage. The Valders glacier was a much thinner ice sheet than earlier stages and, as a result, only slightly modified the topography of the area. It deposited a thin layer of red clay till over former Cary glacial lake deposits. The deposition of this red clay gives southern Hobart its classic gently rolling topography and provides some of the most productive agriculture land in Brown County.

Further evidence of the influence of glacial forces on Hobart can be seen at Gopher Hill at the southern tip of the Village. This hill is believed to be a drumlin; the product of a glacier overriding a mass of sand and clay, producing an elongated mound orientated in the direction of glacial movement. The two ridges running parallel to Duck Creek are also of glacial origin.

The following geologic features create potential development limitations in Hobart:

- The Valders ground moraine covering the Cary glacial lake deposits offer slight geologic constraints. The high clay and silt content of this region poses little hazard to aquifer contamination and minimal limitations for residential building support; however, internal drainage is poor and may limit the effectiveness of personal onsite wastewater treatment systems.
- Valders ground moraine covering Cary terminal moraine and outwash deltas offer moderate limitations for development. Although Valders moraines contain high clay and silt deposits, the thickness of this material varies substantially. Underlying sand and gravel outwash materials provide moderate recharge potential for shallow aquifers and moderate to poor protection from aquifer contamination. Careful attentions should be given to installation of septic systems in this region so as to protect against potential ground water contamination.
- The drumlinoid and stream terrace regions offer the most severe limitations for development. Due to their high gravel content, these regions provide the highest recharge potential for shallow aquifer supply and the least degree of protection from groundwater contamination. These regions should remain undeveloped.

Soils³

Approximately seventy-five percent of the Village is comprised of soils well suited for agricultural uses. The only large areas not so are the wooded ravines of northern Hobart. Soils range from loams, silt loams, alluvial, and loamy fine sands in the northern part of Hobart to mostly silt loams and small areas of muck in the center part of the community. Slopes throughout the Village are generally zero to six percent with some areas in northern Hobart approaching thirty percent.

The northern part of the Village is generally well-drained by diverse topography with sandy and loamy subsoils. In central Hobart the soils are deep, well drained to somewhat poorly drained clayey type soils on glacial tills. In the southern part of the Village, the soils are deep and well-drained, with either

³ Excerpted from Village of Hobart Smart Growth 2026.

Natural Features map will be inserted here

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clay or loamy subsoils. Permeability ranges from fast in the sandy soils to slow in the silty, clay soils. Soil erosion from resulting from wind and runoff are the main hazards. The majority of the soils in Hobart are well-suited to all the crops commonly grown in Brown County.

Sanitary Limitations

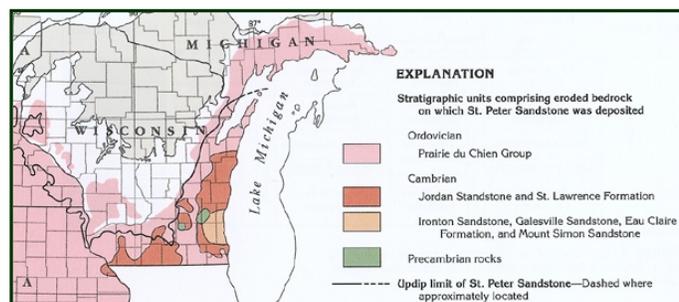
The soils in the northern part of the Village of Hobart are generally acceptable for on-site soil absorption sanitary systems. The Onaway, Sisson, and Shawano loams and sandy loams have slight to moderate limitations for on-site sanitary systems. However, some areas within the northern part of the community are identified as having severe to very severe limitations for on-site systems. These limitations are due to high water tables and perched water tables.

In the central part of the Village some soils have slight to moderate limitations for on-site sanitary systems but, for the most part, the soils have severe to very severe limitations for the on-site systems. These limitations are due to high water tables, perched water tables, and slow permeability. The soils with slight limitations are the Onaway and Waymor soils.

Southern Hobart is dominated by soils with slight limitations for on-site sanitary systems. These include the Waymor and Boyer series. Smaller areas have severe or very severe limitations for on-site sanitary systems due to slow permeability and seasonal high water tables.

Groundwater Resources⁴

The most important potable water source in Brown County is a bedrock aquifer composed of Cambrian and Ordovician age sandstone. This system is the principal water source available for domestic use in the Village. Water from the aquifer is characterized by high concentrations of dissolved solids, fluoride, and iron. Elevation of the aquifer ranges from 500 feet above sea level in eastern Hobart to 600 feet at the Village's western boundary.



Courtesy United States Geological Survey

⁴ Excerpted from Village of Hobart Smart Growth 2026.

Building and Sanitary Suitability map will be inserted here

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Many residential wells in the Village rely on shallow aquifers composed of glacial sand and gravel. These aquifers are at risk of groundwater contamination from malfunctioning individual waste disposal systems and abandoned or poorly constructed private wells. The sandstone aquifer, due to its depth and the presence of an overlying impermeable protective cover comprised of shale, is generally free of this concern.

Quarries⁵

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.

One limestone quarry is currently in operation in the Village of Hobart. It is located on the south side of CTH EE west of S. Overland Drive and is owned by Northeast Asphalt, Inc. and operated by Daanen and Janssen, Inc. The quarry has an approved reclamation plan as required by state statutes.

Surface Water Resources⁶

Surface water resources in the Village of Hobart are plentiful. Duck Creek, located in north central Hobart, is the largest stream in the Village and flows directly into the bay of Green Bay. The creek is fed by Trout Creek and a number of other smaller tributaries. Dutchman Creek is located in the south-central portion of the village and has many feeder streams. A small portion of the north branch of Ashwaubenon Creek is located in the Village.

Duck Creek

Duck Creek has a total length of 13.8 miles in Brown County, nine of which are within the Village of Hobart. It has a gradient of 8.7 feet per mile and varies from very muddy and sluggish in deep sections to relatively clear in more shallow, faster moving areas. Bottom types include bedrock, boulders, rubble, sand, and gravel. However, most of these materials are covered by silt. Notable invertebrates present in the stream are stone fly, caddis fly, and in some areas, crayfish. A variety of fish are found in the creek.

⁵ Excerpted from Village of Hobart Smart Growth 2026.

⁶ Excerpted from Village of Hobart Smart Growth 2026.

Trout Creek

Trout Creek is a faster moving stream with a gradient of 16.4 feet per mile. It flows through deep and wooded ravines. A large amount of low-density residential development has occurred along the wooded ravines of the creek. Special erosion control practices are necessary so that excessive run-off and increased soil erosion will not result in large sediment loads into Trout Creek. There is some history of marginal trout fishing in this creek.

Dutchman Creek

Dutchman Creek in the south central part of the Village is the slowest flowing stream in Brown County. The water is very turbid and sluggish.

Wetlands, Floodplains, and Shorelines

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 Village are located within riparian areas. These typically entail smaller floodplain systems associated with adjoining creeks and streams. A small number of larger wetlands are located within the Duck Creek valley, west of Duck Creek along the border with Outagamie County, and in the headwater areas of Dutchman Creek in southwest Hobart. Floodplains exist along every creek and stream in the Village. Their surface area varies as a result of the topography of the riparian corridor.

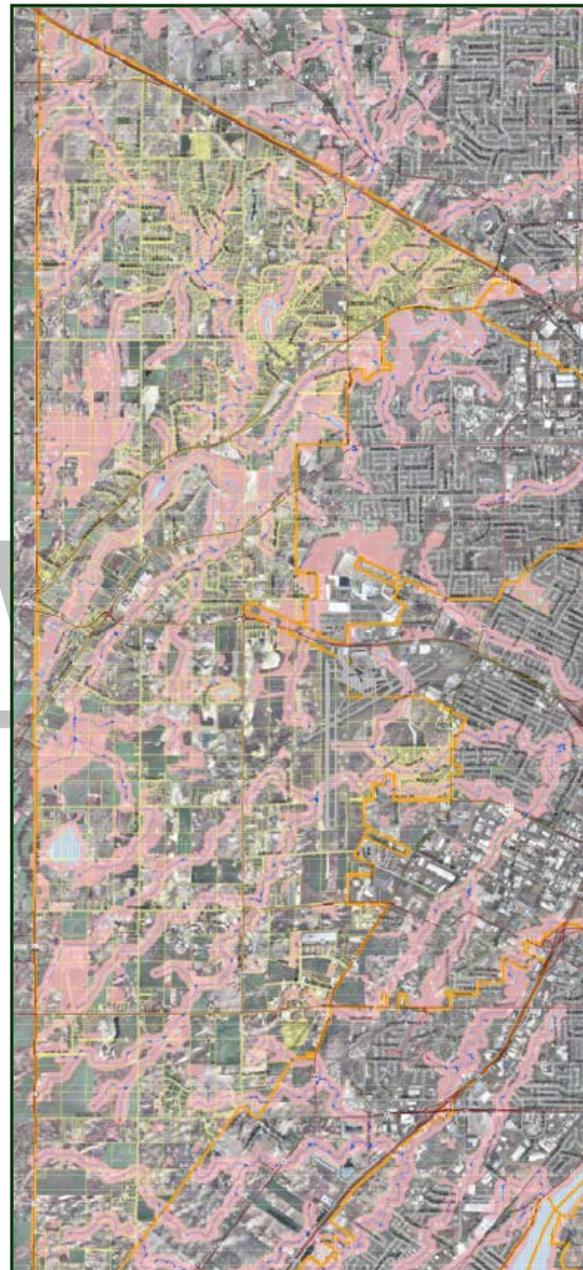
Shorelines are often thought of as a boundary between the land and water, but they also serve as a transition area within which the health of land and water ecosystems can be positively or negatively affected. In addition to providing habitat and migration corridors, the vegetation within shoreland areas traps and filters sediment and debris from rainfall and snowmelt preventing it from entering surface waters.

Environmentally Sensitive Areas⁷

Environmentally Sensitive Areas (ESAs) include parts of the landscape, generally associated with surface water features, which should be protected from intensive development. They include all lakes, rivers, streams, wetlands, floodways, and other locally designated significant and unique natural resource features. ESA regulations can include a setback (buffer) from these features to ensure the environmental functions of these features are not negatively impacted from development too close to the features. They may also include areas of steep slopes (slopes twenty percent or greater) when located within or adjacent to the features identified above.

Within Brown County, the regulated ESAs and setback from ESAs (if applicable) include:

- All wetlands two acres or less.
- All wetlands greater than two acres plus a thirty-five foot setback.
- All floodways plus a thirty-five foot setback or seventy-five foot setback from ordinary high water mark, whichever is greater.
- All navigable waterways plus a seventy-five foot setback from ordinary high water mark when no flood study is available.



Environmentally Sensitive and Shoreland Areas in the Village of Hobart (indicated in pink), courtesy Brown County Planning Department,

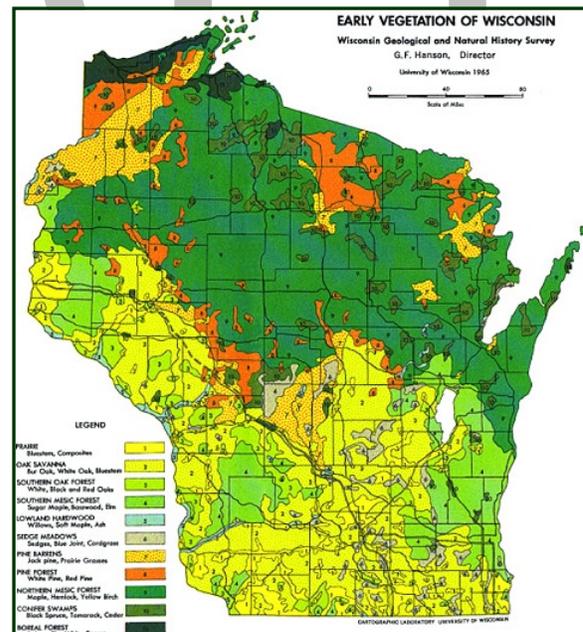
⁷ Excerpted from Brown County Shoreland Zone and Environmentally Sensitive Areas Best Management Report

- All waterways determined to be non-navigable, but are identified as streams (perennial or intermittent) on USGS or Brown County GIS maps plus a thirty-five foot setback from top of bank (setback is from both sides of top of bank).
- Slopes of twenty percent or greater plus a twenty-foot setback from the top and bottom of slope when the slope extends into any of the listed ESAs or their associated setback buffers.
- Other significant natural resource features, including on an individual basis: river and stream headwaters, groundwater recharge areas, unique woodlands, high-value wildlife habitat areas, geologic and natural area sites, wet or poorly drained organic soils, areas identified in the Wisconsin Land Legacy Report, and natural communities as identified in Wisconsin’s Natural History Inventory

Development, including cutting, filling, grading, or any other land disturbing activity is generally prohibited within the environmentally sensitive area, including the setback. These areas are intended to remain in a natural state to protect the surface water feature and provide critical habitat to plants and animals. However, management of ESAs through the removal of dead, diseased, or dying trees, removal of non-native invasive plant species, and/or the planting of native Wisconsin plant species is strongly encouraged.

Vegetation⁸

Significant areas of vegetation are found along the wooded ravines of Trout Creek. Most of these woodland systems consist of maples, oaks, and pines. The upstream portion of Trout Creek includes maples, elders, and hemlock. Other densely vegetated areas can be found in Sections 13, 17, and 18 in the northeast corner of the Village. The vegetation in this area is dominated largely by red and white oak. Vegetation along the shorelines of Duck Creek



Courtesy Wisconsin Geological and Natural History Survey

⁸ Excerpted from Village of Hobart Smart Growth 2026.

consists mainly of ash and elder in lowland areas and oaks and maples in upland areas.

The vegetation in Brown County Park is dominated by Sugar Maple, Red Maple, Red Oak, White Oak, and Basswood. The slope down to Duck Creek includes Paper Birch and American Elm. The shoreline of Dutchman Creek in the east-central and southern part of the Village has vegetation similar to that adjoining Duck Creek. The rest of the vegetation in the Village is found in scattered woodlots and along small stream tributaries.

Wildlife Habitat

Primary wildlife habitat areas in Hobart 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:

- 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.
- 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)

Wildlife Species

The Village of Hobart is blessed with an abundance and diversity of animal species. Wildlife is broadly defined to include all forms of animal life from large mammals and game fish to invertebrates such as insects and crayfish. Hobart is home to nearly one hundred bird species, some present seasonally while

others reside year round. These include songbirds, shore birds, waterfowl, upland game birds, and birds of prey, among others. The largest and most recognizable mammals in Hobart are black bear (few in number) and whitetail deer; however, as many as three-dozen others find habitat in the Village. Finally, more than one hundred reptiles, amphibians, and fish can be found in the community. A partial listing of the species present in the Village on an annual or seasonal basis is provided in *Table 5.2*. Species listed as endangered or threatened in Wisconsin are indicated with an asterisk (*).

Table 5.2: Wildlife Species Present in Village of Hobart.		
Raptors		
American kestrel	Cooper's hawk	Rough-legged hawk
Bald eagle	Great horned owl	Sharp-shinned hawk
Barn owl*	Red-tailed hawk	Snowy owl
Barred owl	Red-shouldered hawk	
Songbirds		
American robin	Hairy woodpecker	Red-headed woodpecker
Black capped chickadee	Hermit thrush	Song sparrow
Blue jay	Mourning dove	Tree swallow
Cardinal	Pine warbler	White-breasted nuthatch
Common flicker	Purple martin	Wood thrush
Eastern bluebird	Red-breasted nuthatch	Yellow warbler
Waterfowl and Marsh/Shore Birds		
Belted kingfisher	Common tern	Herring gull
Black tern	Cormorant	Mallard
Blue-winged teal	Great blue heron	Ring-billed gull
Canada goose	Greater scaup	Spotted sandpiper
Canvasback	Green heron	Whistling swan
Upland Game Birds		
American woodcock	Ring-necked pheasant	Wild turkey
Gray partridge	Ruffed grouse	
Mammals		
Beaver	Gray fox	Raccoon
Big brown bat	Groundhog	Red fox
Black bear	Little brown bat	Red squirrel
Cottontail rabbit	Long- and short-tailed weasel	River otter
Coyote	Mink	Striped skunk
Eastern chipmunk	Muskrat	Thirteen-lined ground squirrel
Eastern gray squirrel	Opossum	Whitetail deer
Small Rodents		
Deer mouse	Meadow vole	Norway rat
House mouse	Mole shrew	Pigmy shrew
Masked shrew	Northern white-footed mouse	Red-backed vole
Reptiles		
Blanding's turtle*	Eastern & western painted turtle	Smooth green snake
Common garter snake	Fox snake	Snapping turtle
Common water snake	Milk snake	Wood turtle*

Amphibians		
American toad	Green frog	Red-backed salamander
Blue-spotted salamander	Leopard frog	Spotted salamander
Bullfrog	Mudpuppy	Spring peeper
Common newt	Northern cricket frog	Tiger salamander
Common tree frog	Pickerel frog	Wood frog
Game and Pan Fish		
Black crappie	Northern pike	Smallmouth bass
Bluegill	Pumpkinseed	Walleye
Green sunfish	Rainbow trout	Yellow perch
Largemouth bass	Rock bass	
Rough and Forage Fish		
Black bullhead	Common shiner	Northern redhorse
Blacknose dace	Creek chub	Pearl dace
Blackside darter	Emerald shiner	Redbelly dace
Bluntnose minnow	Fantail darter	Redfin shiner
Brook stickleback	Fathead minnow	Redside dace*
Brown bullhead	Gizzard shad	White sucker
Carp	Longnose dace	Yellow bullhead
Central mudminnow		
Source: Wisconsin Department of Natural Resources, University of Wisconsin-Green Bay, and Oneida Tribe of Indians 1997.		

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.

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.

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.

The functional effectiveness of an environmental corridor depends on the type of species that use it and its size, shape, and edge effects⁹. Larger corridors offer greater habitat diversity. Linear corridors tend to be less diverse but offer important migration routes. In suburban environments, corridors often lie along stream and riverbanks. More than seventy percent of all terrestrial wildlife species use riparian corridors.

In farming areas, 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.

Endangered Species¹⁰

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 and natural communities in an area 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.

While the conservation of plants, animals and their habitat should be considered for all species, this is particularly important for rare or declining species. 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. A special concern species is one about which some problem of abundance or distribution is suspected, but not yet proven. The main purpose of the special concern category is to focus

⁹ 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.

¹⁰ Excerpted from Village of Hobart Smart Growth 2026.

attention on certain species before they become endangered or threatened. Remaining examples of Wisconsin's intact native communities are also tracked, but not protected by the law. Natural communities capture much of our native biodiversity and provide benchmarks for future scientific studies.

Both the state and federal governments prepare their own separate lists of such plant and animal species, but do so working in cooperation with one another, as well as with various other organizations and universities. The WDNR Endangered Resources Program monitors endangered, threatened, and special concern species and maintains the state's Natural Heritage Inventory (NHI) database. This program maintains data on the locations and status of rare species in Wisconsin and these data are exempt from the open records law due to their sensitive nature.

The Wisconsin Endangered Species Law was enacted to afford protection for certain wild animals and plants that the Legislature recognized as endangered or threatened and in need of protection as a matter of general state concern. It is illegal to:

- Take, transport, possess, process or sell any wild animal that is included on the Wisconsin Endangered and Threatened Species List.
- Process or sell any wild plant that is a listed species.
- Cut, root up, sever, injure, destroy, remove, transport or carry away a listed plant on public lands or lands a person does not own, lease, or have the permission of the landowner (There are exemptions to the plant protection on public lands for forestry, agriculture and utility activities. In some cases, a person can conduct the above activities if permitted under a Department permit, i.e. "Scientific Take" Permit or an "Incidental Take" Permit).

The Federal Endangered Species Act (ESA) also protects animals and plants that are considered endangered or threatened at a national level. The law prohibits the direct killing, taking, or other activities that may be detrimental to the species, including habitat modification or degradation, for all federally listed animals and designated critical habitat. Federally listed plants are also protected, but only on federal lands. Implementation of the ESA is usually accomplished during the state permit review process, but is ultimately the responsibility of a project proponent and property owner to ensure that they are not in violation of the laws.

Endangered/Threatened Species in Hobart¹¹

The Wisconsin Natural Heritage Inventory program’s database was used to determine the status and distribution of endangered resources and to learn what species or natural communities are known to exist within the Village of Hobart. *Table 5.3* lists endangered or threatened species known to, or suspected of, existing within the Village or adjoining municipalities.

Table 5.3: Endangered and Threatened Species In and Around the Village of Hobart.		
Group	Scientific Name	Common Name
Fish	Acipenser fulvescens	Lake sturgeon
Fish	Anguilla rostrata	American eel
Fish	Lepomis megalotis	Longear sunfish
Fish	Moxostoma Valenciennesi	Greater redhorse
Plant	Lithospermum latifolium	American gromwell
Plant	Polystichum acrostichoides	Christmas fern
Plant	Trillium nivale	Snow trillium
Plant	Trisetum melicoides	Purple false oats
Source: Wisconsin Natural History Inventory.		

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

¹¹ Excerpted from Village of Hobart Smart Growth 2026.

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 components 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 Society¹²

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.

¹² Excerpted from Wisconsin State Historical Society website, 2015.

- 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. As of March 2015, the AHI listed forty-six structures within the Village of Hobart.

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.

Archaeological Site Inventory¹³

The Archaeological Site Inventory (ASI) is a collection of archaeological sites, mounds, unmarked cemeteries, marked cemeteries, and cultural sites throughout Wisconsin. The Wisconsin Historical Society’s Division of Historic Preservation maintains the inventory. Similar to the AHI, the ASI is not a comprehensive or complete list; it only includes sites that have been reported to the Historical Society. The Historical Society estimates that less than 1% of the archaeological sites in the state have been identified. Wisconsin law protects all marked and unmarked human burial sites. There are also federal programs and restrictions relating to other archeological sites. Developing these sites before they can be catalogued and studied is the major threat to this resource. As of 2015, there are nineteen known archaeological sites within the Village of Hobart.

Agricultural, Natural, & Cultural Resources Plan

The remainder of this chapter focuses on current and potential challenges related to agricultural, natural, and cultural resources; and the tools and

¹³ Excerpted from Village of Hobart Smart Growth 2026.

methods with which the Village of Hobart can ensure their long-term preservation.

Agricultural Resources

Sustaining Farmland and Natural Areas in a Growing Community

Given the projected rate of population growth in the Village, there is a real concern about the impact development may have on open space and agriculture. 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 Hobart’s high quality of living.

Farmland Preservation Zoning¹⁴

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.

¹⁴ Source: Wisconsin Department of Agriculture, Trade, and Consumer Protection, Farmland Preservation website, 2015.

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:

1. 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.
2. 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.
3. Claimants must be able to certify that all property taxes owed from the previous year have been paid.
4. 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.

The Village of Hobart participates in the Farmland Preservation program. The Village's zoning ordinance was certified By DATCP under Chapter 91 in November of 2014 and adopted by the Village Board the following month.

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 deductions 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.

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. Interestingly, many of these operations are located in decidedly urban and suburban areas. Hobart’s proximity to Green Bay 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 farms must become very big or be lost to development. They provide a profitable choice for small, family farmers.

Community Supported Agriculture¹⁵

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.



Courtesy Kellner Back Acre Garden, Denmark, WI

No-Till Farming

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.



Courtesy University of Wisconsin-Extension

¹⁵ Excerpted from United States Department of Agriculture, Alternative Farming Systems Information Center, 2015.

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 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.

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.

Table 5.4: Purchase of Development Rights	
Strengths	Limitations
<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ 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

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.

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 5.5: Transfer of Development Rights	
Strengths	Limitations
<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ 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

Concentrated Animal Feeding Operations

On September 16, 2005, the Wisconsin Department of Agriculture's Board gave final approval of ATCP 51, which establishes standards for the siting of livestock operations. In its approval, the Board added an amendment to have the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) annually review ATCP 51 to see if any modifications are needed.

ATCP 51 implements Wisconsin’s Livestock Facility Siting Law (Chapter 93.90, Wis. Stats.). The law does not require local approval of new and expanding livestock operations. Should a local government require approval, it must grant or deny according to this rule. A municipality may not consider other siting criteria, or apply standards that differ from this rule, except as specifically authorized in the law. This rule applies to new or expanded facilities that keep cattle, swine, poultry, sheep, or goats. 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, which must be based on scientifically defensible findings of fact that clearly show the standards are necessary to protect public health or safety.

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 of the Village may not be aware of these and other potential nuisances. To minimize conflicts, education is strongly recommended (newsletters, Village 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

Loss of Habitat for Unique Species

The Village of Hobart has an abundance of important natural resources. As discussed earlier in this chapter, natural areas in the community provide

important wildlife habitat for a number of threatened and endangered species. Habitat loss and fragmentation are often the results of poorly planned development. In a community that values its natural environment, it will be important that Hobart utilize local land use tools (zoning ordinance, subdivision ordinance, etc.) to guide development away from the most sensitive habitat areas to ensure the long-term viability of a healthy ecosystem.

Preservation of Surface Water Quality

Duck Creek, Trout creek, and other streams drew the original settlers and entrepreneurs to the community and continue to attract residential and commercial development to this day. However, additional strains are placed on aquatic systems with each new home, business, or road constructed in the community. 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.

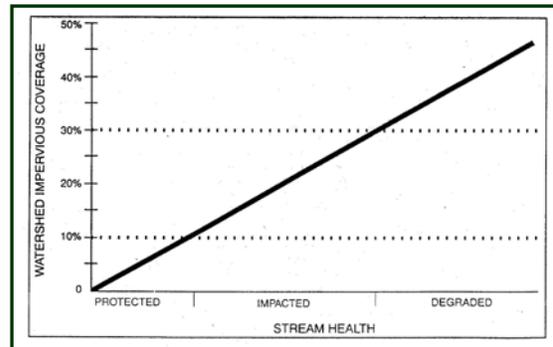
Today, the greatest threat from a cumulative standpoint to streams and lakes comes through nonpoint-source water pollution. Nonpoint-source water pollution, or runoff, cannot easily be traced to a single point of origin. It occurs when rainwater or snowmelt flows across the land and picks up soil particles, 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

Chapter 5:
***Agricultural, Natural,
& Cultural Resources***

waters. As the percentage of impervious surfaces increases in a watershed, lakes and streams experience greater degradation from stormwater runoff. 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.



Courtesy Center for Watershed Protection

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.

Lawn Fertilizers, Herbicides, and Pesticides

Wisconsin and Minnesota residents use more fertilizers and pesticides on their lawns per capita than those of any other state.¹⁶ 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.

Conservation-based Development

Conservation-based development is a tool that is intended to minimize the amount of disturbance to the natural landscape by preserving onsite resources

¹⁶ Source: USEPA, Fertilizer and Pesticide Use on Turf Grasses IN THE U.S. and their Effects on Surface Waters, 1998.

identified during the planning stages of development. Resources commonly targeted for preservation include wetlands, streams and ponds, riparian corridors, natural or sensitive habitat areas, steep slopes, view sheds, and agricultural lands.

The goal is to successfully integrate a development with its environment and unique natural surroundings, rather than having the environment functioning apart from the development altogether. Such an approach minimizes the site disturbance footprint by confining development to within existing open spaces and taking advantage of site topography by constructing roads on natural ridgelines. A conservation-based development typically involves a developer and his/her team of surveyors, engineers, and landscape architects conducting site assessments to identify features of interest to preserve from which a design layout is generated.

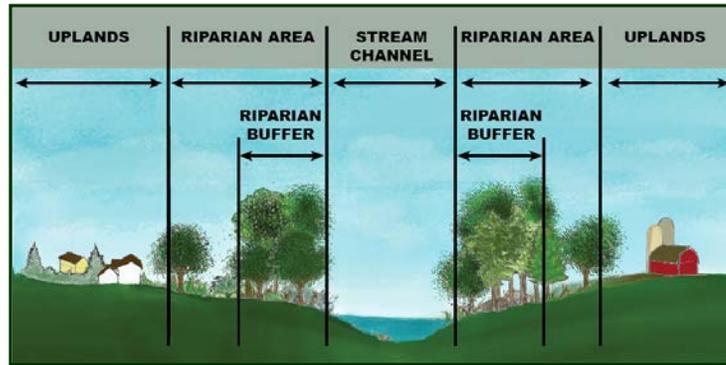
The following principles are integral to an effective conservation-based development design:

- Preservation and protection of natural drainage patterns.
- Protection of sensitive natural resources.
- Maintenance of existing topography.
- Clearing and grading as little as possible.
- Minimize the amount of impervious cover.
- Maintaining a community-determined ratio of preserved open space to developed area.

Local governments may implement conservation-based concepts for residential development within the zoning and subdivision ordinances, and for commercial and industrial development through the site plan review process. For additional information related to conservation-based development for subdivisions please refer to *Chapter 2: Housing*.

Riparian Buffers¹⁷

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.



Courtesy USEPA

Buffers can 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 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.

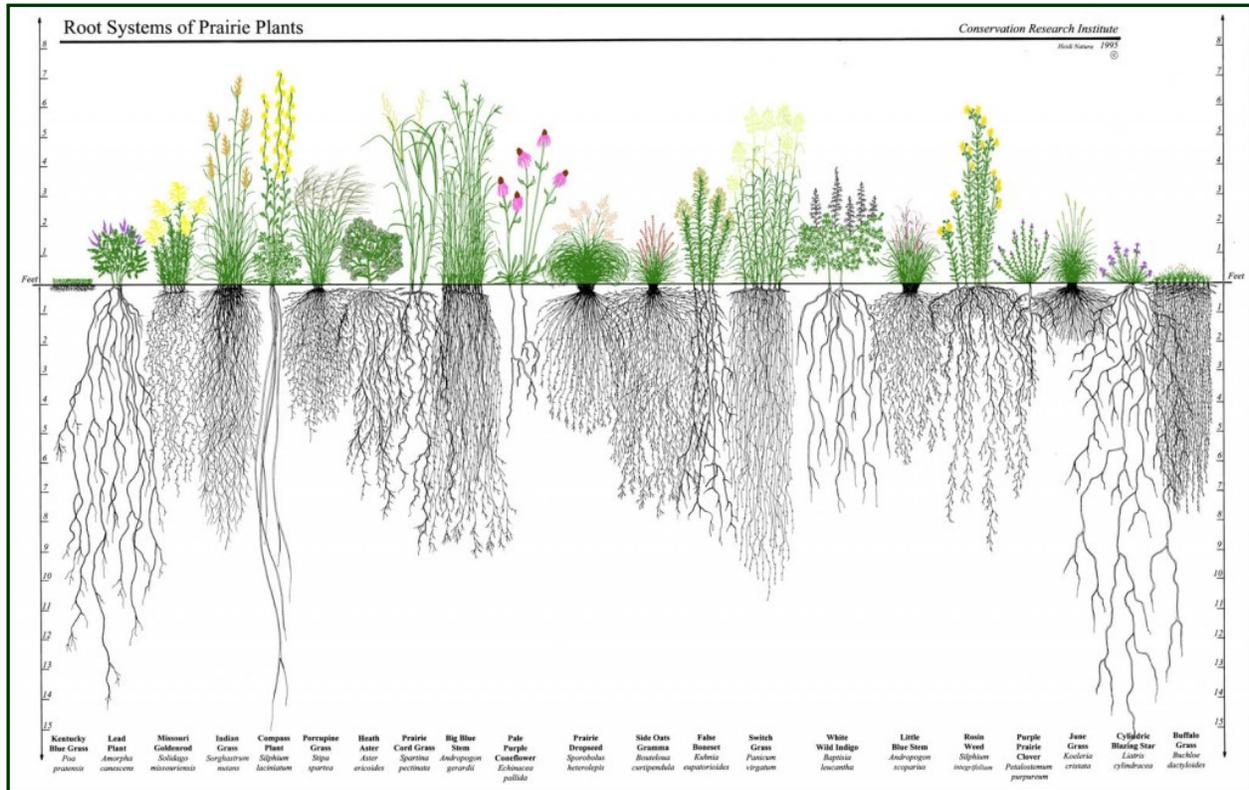
Native Landscapes

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.¹⁸

¹⁷ Excerpted from *Managing the Water's Edge: Making Natural Connections*, USEPA

¹⁸ Excerpted from *Landscaping with Native Plants in the Great Lakes Region*, USEPA.

Chapter 5:
***Agricultural, Natural,
 & Cultural Resources***



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

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. Natives also increase infiltration reducing the need for expensive stormwater management infrastructure (see image above).
- Aesthetic - While traditional landscapes use one or two species of grass, native landscape designs can 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.

Cultural Resources Plan

Century Farms¹⁹

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 honored for carrying on Wisconsin's rich family farming tradition.

Secondary Conservation Areas

As discussed in *Chapter 2: 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.



¹⁹ Excerpted from Agri-View website.

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.



Brick home in Hobart constructed in 1890, courtesy Wisconsin Historical Society AHI

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.

Certified Local Government Program²⁰

Local units of government that have enacted historic preservation ordinances may consider being certified to participate in the state and federal Certified Local Government (CLG) program. The CLG program provides special grants to fund planning and educational activities. The Division of Historic Preservation at the Wisconsin Historical Society administers the CLG program. Wisconsin has forty-four Certified Local Governments.

Jointly administered by the National Park Service in partnership with State Historical Preservation Officers, the CLG program is a cost-effective local, state and federal partnership that promotes historic preservation at the grassroots level across



Courtesy Wisconsin Historical Society

²⁰ Excerpted from Wisconsin Historical Society website.

the nation. Working closely with such national organizations as the National Association of Preservation Commissions, the CLG program seeks:

- To develop and maintain local historic preservation programs that will influence the zoning and permitting decisions critical to preserving historic properties.
- To ensure the broadest possible participation of local governments in the national historic preservation program while maintaining preservation standards established by the Secretary of the Interior.

Agricultural, Natural, and Cultural Resource Programs

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

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 rangeland 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.

Knowles-Nelson Stewardship Program – Urban Greenspace Program

The intent of the Urban Green Space Program (UGS) is to provide open natural space within or in proximity to urban areas; to protect from urban development areas within or in proximity to urban areas that have scenic, ecological, or other natural value; and to provide land for non-commercial gardening for the residents of an urbanized area.

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.

Urban Forestry Grants

WDNR offers urban forestry grants to cities, villages, towns, counties, tribes, and 501(c)(3) nonprofit organizations in or conducting projects in Wisconsin. These grants fall into three categories: Regular grants, start-up grants and catastrophic storm grants.

- Regular grants are competitive cost-share grants of up to \$25,000. Grants are to support new, innovative projects that will develop sustainable urban and community forestry programs, not to subsidize routine forestry activities.
- Start-up grants are competitive cost-share grants of up to \$5,000. These simplified grants are available to communities that want to start or restart an urban forestry program.
- Catastrophic storm grants fund tree repair, removal or replacement within urban areas following a catastrophic storm event for which the governor has declared a State of Emergency under s. 323.10, Wis. Stats.

Urban Nonpoint Source & Storm Water Management Grant Program

The Urban Nonpoint Source & Storm Water Management Grant Program offers competitive grants to local governments. Grants reimburse costs of planning or construction projects controlling urban nonpoint source and storm water runoff pollution. Eligible recipients include cities, villages, towns, counties, regional planning commissions, tribal governments, and special purpose lake, sewage, or sanitary districts may apply. The local government must have either jurisdiction over the project area or be required to control storm water discharge with an inter-governmental agreement between the municipality and the Department of Natural Resources.

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.

Brown County Land & Water Conservation Department

The Brown County Land and Water Conservation Department (BCLWCD) manages a number of programs directed at water quality improvement, soil erosion control, wildlife damage, and public awareness of those actions. BCLWCD addresses water quality and state-mandated Agricultural Non-Point Performance Standards and Prohibitions through administration of a variety of programs including: the West Shore Buffer Strip Northern Pike Proposal; Brown County Land and Water Resource Management Plan; the Regional Composting Initiative Feasibility Study; Conservation Reserve Enhancement

Chapter 5:
***Agricultural, Natural,
& Cultural Resources***



Program; Brown County Animal Waste Management Ordinance; Brown County Agriculture Shoreland Management Ordinance; Duck/Apple/Ashwaubenon Priority Watershed Program; Wisconsin Farmland Preservation Program; and the Brown County Cost Share Program.

Implementation Plan

The goals, objectives, and policies related to agricultural, natural, and cultural resources are presented in *Chapter 9: Implementation*.

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