Chapter 5. Natural, Agricultural & Cultural Resources

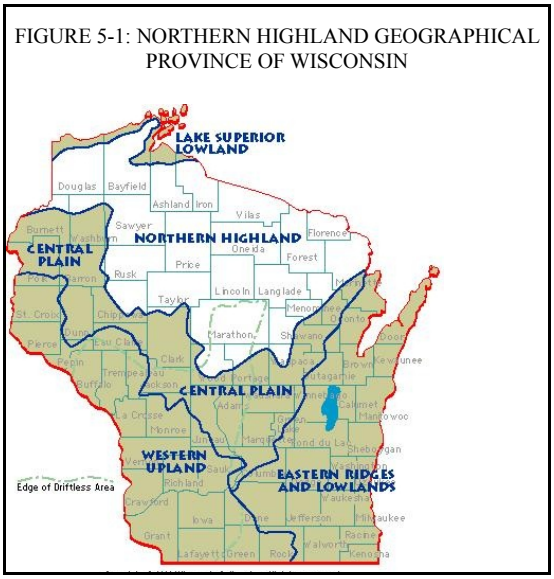
This element of the comprehensive plan provides an inventory and assessment of the natural, agricultural, and cultural resources of the Town of Little Black. Land development patterns are directly linked to the resource base, therefore, these features need to be considered before making decisions concerning future development in the town.

Natural Resources

The resource base found within Little Black is susceptible to irreversible damage through inappropriate land use, transportation, public facility and economic development, point and non-point pollution sources, and a variety of other threats. The town planning effort must therefore acknowledge the current resources found throughout the town and understand that these resources are limited, and that future development must be properly planned so that serious and costly environmental problems can be prevented and to ensure that these resources remain available for future generations.

Topography and Elevation

FIGURE 5-1: NORTHERN HIGHLAND GEOGRAPHICAL PROVINCE OF WISCONSIN



The Town of Little Black and Taylor County are part of the Northern Highland Geographical Province of Wisconsin. This region is characterized by an abundance of forest, hills and lakes. The elevation of the town ranges from a low of 1,328 to a high of 1,555. Map 5.1 Topography (Appendix).

Slope

Steeply sloping lands are usually characterized as those areas in excess of 15-20 percent vertical rise. Slope analysis is an important development consideration, as steep slopes can be potentially dangerous and/or unusable. Steeply sloping lands in the Town of Little Black are generally located along or adjacent to water bodies. Slope percentage in the Town of Little Black are from zero to greater than 20 percent. Map 5.1 Topography (Appendix)

Soils

The use and management of soils has many impacts on the communities in Taylor County. Soils form the foundation that all other ecosystems are dependent on – plant life, wildlife, streams, wetlands and lakes. Soils also may pose limitations to the use of the land in activities such as agricultural production, forestry, building development and road construction. Taylor County soils information is available through the Natural Resource Conservation Service (NRCS). The NRCS has grouped the soils of Taylor County into soil series. Soil suitability is a key factor in determining the best and most cost-effective locations for development. Soil type capabilities also foretell the viability of land for agricultural purposes. The Town of Little Black consists of 3 general soil series that are a combination of two or more soil types, which are shown on Map 5.2 (Appendix) and Map 5.3 (Appendix) and summarized below. These soils generally have a perched seasonal high water table at a depth of 1 to 2.5 feet for 1 month or more per year at some time during the period September to June in normal years. Common trees found on these soils are white pine, white spruce, eastern hemlock, American

basswood, sugar maple, red maple, yellow birch, American elm, white ash, black ash, balsam fir, and or quaking aspen.

The **Magnor** series consists of very deep, somewhat poorly drained soils which are deep to a densic contact. Permeability is moderate in the silty mantle, moderately slow or slow in the till subsoil, and very slow in the substratum. Somewhat poorly drained. Surface runoff is medium to very low. Many areas of this soil are cleared and used for cropland or pastureland. Common crops are corn, small grains, and hay. Many areas remain in woodland. Native vegetation is deciduous forest.

The **Freeon** series consists of very deep, moderately well drained soils which are deep. Permeability is moderate in the silty mantle, slow or moderately slow in the till subsoil, and very slow in the substratum. Slopes range from 0 to 20 percent. Surface runoff low to high. Much of this soil is cleared and used for pastureland or cropland. Corn, small grain, and hay are the major crops. The remainder is in woodland or wooded pasture. Native vegetation is deciduous forest.

The **Poskin** series consists of very deep, somewhat poorly drained soils which are moderately deep to sandy outwash. Permeability is moderate in the silty and loamy mantle and rapid or very rapid in the sandy outwash. Slopes range from 0 to 3 percent. Many areas have been cleared and are used for cropland or pastureland. Common crops are corn, small grains, and hay. The native vegetation is mixed deciduous and coniferous forest.

The **Maplehurst** series consists of very deep, somewhat poorly drained soils which are deep to stratified sandy outwash. Permeability is moderate in the silty mantle and rapid or very rapid in the sandy outwash. Slopes range from 0 to 3 percent. Many areas have been cleared and used for cropland or pastureland. Corn, small grains, and hay are the principal crops. The native vegetation is mixed deciduous and coniferous forest.

The **Brill** series consists of very deep, moderately well drained soils which are moderately deep to stratified sandy outwash. Permeability is moderate in the silty and loamy mantle and rapid or very rapid in the sandy outwash. Slopes range from 0 to 6 percent. Many areas have been cleared and are used for cropland. Common crops are corn, small grains, and hay. Some areas are used for pastureland or woodland. Native vegetation is dominantly deciduous forest with a few conifers in some areas.

The **Withee** series consists of very deep, somewhat poorly drained soils. Permeability is moderate in the silty mantle and moderately slow in the till. Slopes range from 0 to 6 percent. Most areas of this soil are used for cropland. Common crops are corn, small grain, and hay. Some areas are used for pastureland. Some areas remain in woodland. Native vegetation is deciduous forest.

The **Loyal** series consists of very deep, moderately well drained soils. Permeability is moderate in the silty mantle and moderately slow in the underlying till. Slopes range from 1 to 12 percent. Moderately well drained. Surface runoff is medium or high.. Most areas of this soil has been cleared and are used for cropland. Corn, small grain, and hay are the principal crops. Some areas are used for pastureland. Native vegetation is mainly deciduous forest with some conifers.

The **Marshfield** series consists of very deep, poorly drained soils. Permeability is moderate in the silty mantle and moderately slow in the underlying till. Slopes range from 0 to 2 percent. Surface runoff is very slow or ponded. Most areas of this soil are in woodland. Native vegetation is mostly water-tolerant hardwoods with some conifers. Common trees are black ash, red maple, quaking aspen, and white pine . Some areas are used for pastureland. Where drained, some areas are used for cropland. Common crops are corn, small grain and hay.

Land Cover

Land cover information for the Town of Little Black was obtained from the Wisconsin Initiative for Statewide Cooperation on Land Cover Analysis and Data (WISCLAND) data set. This data represents surface vegetation, open water and urban area delineation based on interpretation of satellite imagery. The data represents a generalized picture of land cover and should not be used to replace site examinations. WISCLAND land cover is depicted on Map 5.4 (Appendix).

Forests

Forests in the Town of Little Black are privately owned woodlots scattered throughout the township. Forests provide many benefits including wildlife habitat, forest products, recreational opportunities, aesthetics and other benefits that cannot be quantified.

Figure 5.2 Private Woods in Little Black

Surface Water Resources

Water resources in the Town of Little Black are environmentally, socially and economically significant. These resources represent unique and complex ecosystems that extend beyond the confines of lakes, rivers or streams and impact the surrounding terrestrial environment. Town of Little Black Surface Water is shown on Map 5.5 (Appendix). Rivers, creeks and streams also represent diverse and unique systems. Human and land use activities are intimately linked to the quality of these water resources. There are five named intermittent and perennial rivers, creeks and streams in the Town of Little Black. These are the Black River, Little Black River, Popple River, Trapper Creek and Pine Creek. In addition surface water from Little Black reaches Deer Creek and the Upper Big Eau Pleine River.

Water Quality

The water quality in the Town of Little Black is generally good. The WDNR evaluated surface waters in the state based on water quality, fish, wildlife, and aesthetic values. Little Black has no Outstanding Resource Waters (ORW) or Exceptional Resource Waters (ERW). Impaired waters, as defined by Section 303(d) of the federal Clean Water Act, are those waters that do not meet the state's water quality standards. Every two years, states are required to submit a list of impaired waters to EPA for approval. The WDNR Impaired Waters List update in 2010 has eight water resources identified in Taylor County. All were polluted with mercury, had a low priority rating, and had fish consumption advisories. In the Town of Little Black, the Black River is on this list. However town waters do flow into the impaired Big Eau Pleine River and flowage. It is possible that Pine Creek could be added to the Impaired

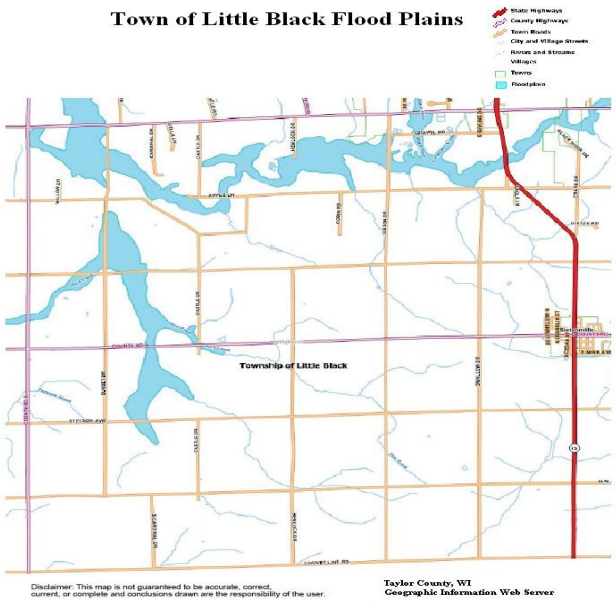
Waters List based on its high nutrient (nitrogen and phosphorus) content, its high BOD (biochemical oxygen demand), high fecal coliform, and occasional suspended solids. ***Source Pine Creek (Taylor County) Assessment December 2010 WDNR.***

Watersheds

A watershed is an interconnected area of land draining from surrounding ridges to a common point such as a lake, stream or wetland. The four watersheds that encompass the Town of Little Black include the Black and Little Black Rivers, the Upper Big Eau Pleine River, the Popple River, and Trappers and Pine Creek watersheds. See Map 5.6 (Appendix) for watersheds in the Town of Little Black.

Floodplains

Floodplains are lands adjacent to lakes, rivers and streams, which are subject to periodic and/or recurring flooding. Due to the flood-prone natures of these areas, development and other land use activities within these zones are discouraged. Resource protection and wildlife habitat uses would be considered appropriate uses for these areas. The Federal Emergency Management Agency (FEMA) has defined areas of flood susceptibility in the Town of Little Black. Flood prone areas were determined by statistical analysis of records of river flow, rainfall information, floodplain topographic surveys, and hydrologic analysis. Taylor County has developed a floodplain zoning ordinance (Chapter 29) to regulate development in flood hazard areas to help protect life, health and property within the county. Determination as to whether a present or future building site is located in a floodplain must be made through the Taylor County Zoning Department office maps or through field verification of flood boundaries. Floodplains in the Town of Little Black are depicted in Map 5.7



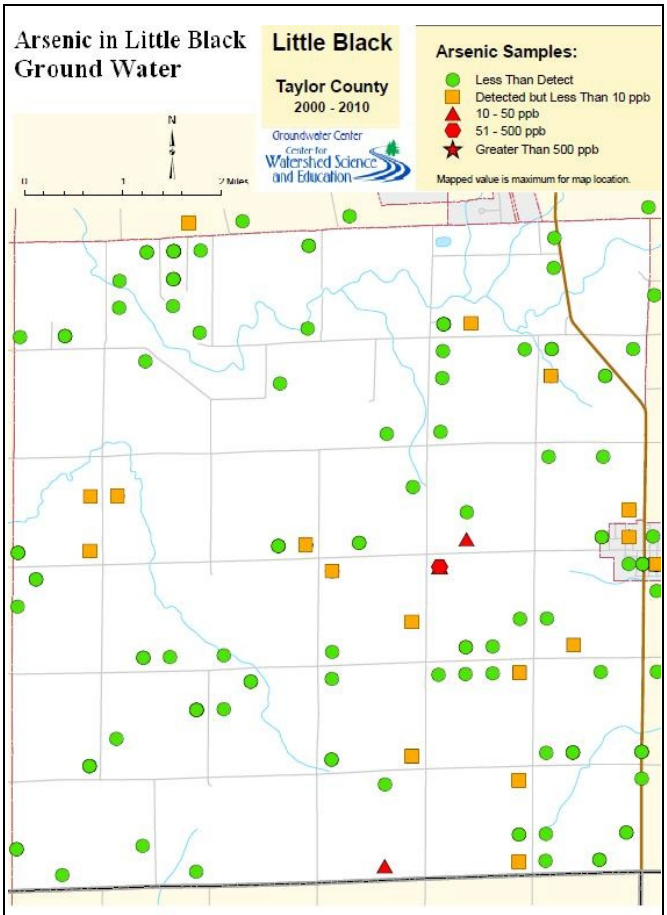
MAP 5.7 Flood Plains

Groundwater

Groundwater is a critical resource for the Town of Little Black, as it is the main source of drinking water for town residents. The depth to the groundwater in the town is generally 0-20 feet and movement is generally in a westerly direction. The Town of Little Black is located in a "water poor area of a water rich state" according to **Water Availability in Central Wisconsin – An Area of Near–Surface Crystalline Rock By E. A. Bell and M. G. Sherrill Geological Survey Water-Supply Paper 2022 U.S. Government Printing Office, Washington, 1974.** See Map 5.8 (Appendix). The quality of groundwater varies by location and is directly related to human activities such as the application of fertilizers, chemical spills, urban runoff, and non-point pollution can contribute to decreased quality of groundwater reserves. Since 1985, the Taylor County Land Conservation Department and UW-Extension have conducted drinking water testing that has painted a general picture of the quality of groundwater around the county. Testing has been conducted for coliform bacteria, nitrates, chlorides and arsenic.

Arsenic in groundwater

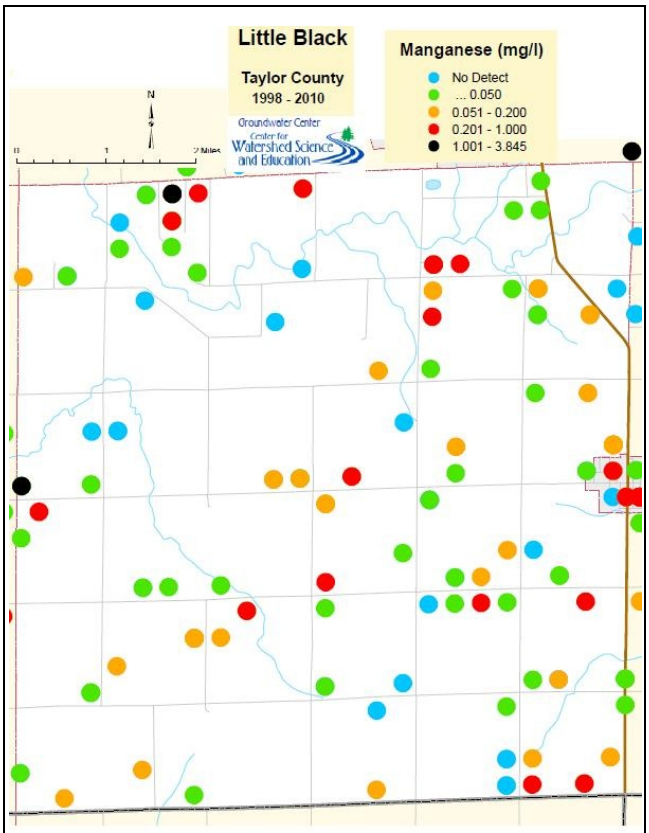
Arsenic is one of the most serious potential health threats in Taylor County's drinking water. Elevated levels of arsenic are found in drinking water tested throughout the county, with the highest levels in the northern half of the county. See Map 5.9 for arsenic in Little Black Groundwater.



MAP 5.9

Manganese in groundwater

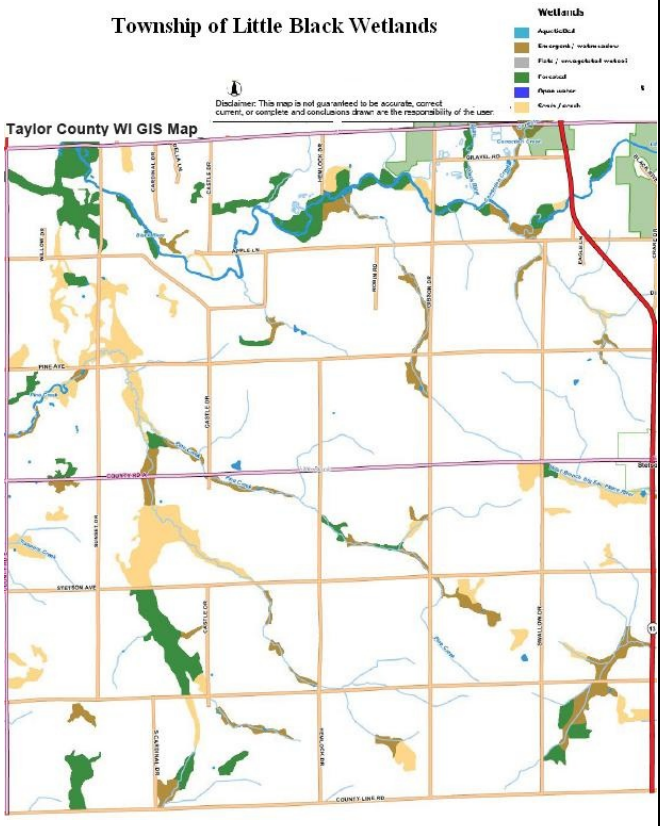
Many years of exposure to high levels of manganese can cause harm to the nervous system. A disorder similar to Parkinson's disease can result. See Map 5.10 for manganese in Little Black Groundwater



Map 5.10 Manganese in Little Black Ground Water

Wetlands

A wetland is an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or water-loving vegetation and which has soils indicative of wet conditions. Wetlands are commonly referred to as swamps, marshes, lowland or bogs. They represent one of the most unique and diverse components of the natural community. See Map 5.11 for wetlands in Little Black Township.



Map 5.11Wetlands

Table 5-1: Town of Little Black Natural Heritage Inventory (NHI)

Common Name	State Status	Group Name
Floodplain Forest	NA	Community
Wood Turtle	THR	Turtle
Northern Mesic Forest	NA	Community
Stream--Slow, Hard, Warm	NA	Community
Greater Prairie-chicken	THR	Bird

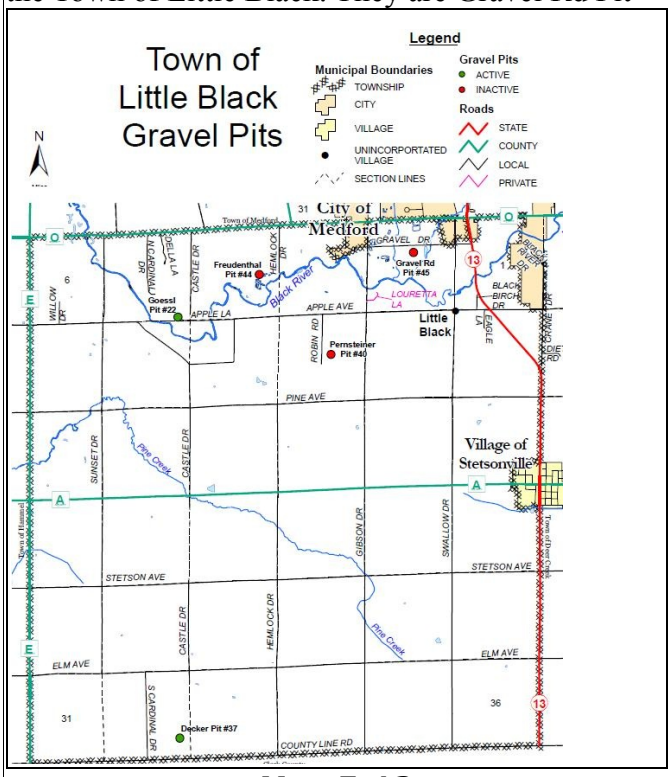
Source Natural Heritage Inventory (NHI) database

Threatened or Endangered Species

Wisconsin law prohibits the "taking" of any plant or animal listed as endangered or threatened regardless of where it occurs. Taking is defined as the act of killing, harming, collecting, capturing, or harassing a member of a protected species. The WDNR provides information of endangered and threatened species within the Bureau of Endangered Resources. This bureau also maintains Wisconsin's the Natural Heritage Inventory (NHI) database which contains recent and historic element (rare species and natural community) observations. The NHI database is dynamic, records are continually being added and/or updated. Table 5-1 details the NHI in the Town of Little Black.

Non-Metallic Mineral Resources

There are currently five identified gravel pits in the Town of Little Black. They are Gravel Rd Pit



Map 5-12

#45, Freudenthal Pit #44, Goessl Pit #22, Pernsteiner Pit # 40, and Decker Pit # 37. See Map 5-12 for the locations of the pits.

Agricultural Resources

Agricultural lands play an important part in defining the character of communities in Wisconsin. Good planning helps rural communities promote agriculture and its contribution to rural economies, support appropriate development of land, manage renewable resources especially groundwater, minimize unnecessary conflicts among neighboring land uses, protect community features of special value, and encourage appropriate community development. In the Town of Little Black, about 62 % percent of the land use is in agriculture, with another almost 10% classified as Ag-Forest. The majority of the agricultural land is considered prime if drained. Map 5.13 (Appendix). Agricultural-related issues were addressed in the Little Black Comprehensive Land Use Planning Community Survey for the Town of. Citizens in the town were asked if "Local and county units of government should address the issue of development in productive agricultural regions by:" The results are summarized in Table 5-2

Table 5-2 Preservation of Farm Lands

	Agree	Neutral	Disagree
Preserving existing farmland	203	64	7
Protecting productive farmland, but allowing development in areas not suitable for agricultural use.	164	72	35
Not protecting farmland	20	66	114
Protecting or preserving other agribusiness	137	76	8

Farmland Trends in the Town of Little Black

Between 1993 and 2010 the Town of Little Black has lost 2548 acres of farmland on its tax roll, a decrease of nearly 16 percent. In contrast, Taylor County as a whole has lost 10.8 percent of farmland on the tax role in the same period. See Table 5.2.

Table 5-3: Little Black Changes in Farmland on Tax Rolls 1993-2010

	Agriculture acres in 1993	Agriculture acres in 2000	Agriculture acres in 2010
Little Black	15,979	14,905	13,431
Taylor County	182,231	179,726	162,500

Source Taylor County Real Property Lister

.Working Lands Initiative/Farmland Preservation

The Farmland Preservation Program (FPP) was developed to address concerns about development pressures that were leading to loss of valuable farmland throughout Wisconsin. As part of the program, a conservation plan is developed to help prevent erosion and protect soil and water resources. The plan may also address other conservation and agricultural issues. FPP is now part of the Working Lands Initiative. Contact the LCD or the Wisconsin Department of Agriculture, Trade & Consumer Protection (DATCP) for more information.

Cultural Resources

A cultural resource is a broad term that can encompass much of a community's heritage. Cultural resources may include archaeological sites and cemeteries, historic buildings and landscapes, historic transportation routes, ethnic traditions and community festivals. Cultural resources are those elements around us that signify our heritage and

help to evoke the sense of place that makes an area different or distinctive.

National Register of Historic Places

There are no properties in Little Black listed on the NRHP. The Town does not have a local historic preservation committee. The Wisconsin Historical Society maintains the Wisconsin Architecture & Historic Inventory (AHI) that identifies any properties that may have been surveyed in the past. The inventory does not convey special status and may not be current. Table 5-3 lists the six historic properties listed in the AHI for the Town of Little Black. For more information on these sites they may be reviewed in more detail at www.wisconsinhistory.org/ahi.

Table 5-4: Town of Little Black AHI Sites

Location	Historic Name	Town, Range, Section:	Quarter Sections:
PRIVATE RD OFF OF COUNTY HIGHWAY A	J M NUERNBERGER HOUSE	30-01-E-18	
THE MAIN E-W RD	LOUIS SCHAEFER HOUSE	30-01-E-09	NW NW
A N-S RUNNING RD	GEORGE MATHEUS HOUSE	30-01-E-17	NW SW
E-W RUNNING GRAVEL RD	Cross Gabled	30-01-E-18	SE SW
E-W RUNNING GRAVEL RD	MATT BACH HOUSE	30-01-E-25	
CNR OF COUNTY LINE RD AND A N-S RUNNING GRAVEL RD	JOSEPH RUPRICH HOUSE	30-01-E-30	SE SE

Source: WHS

Archaeological Sites Inventory

Existing Information. The Wisconsin Historical Society maintains a list of archaeological sites and cemeteries referred to as the Archaeological Site Inventory (ASI). Since only a small portion of the Town has been surveyed for the presence of archaeological sites and cemeteries, the sites listed in the inventory represent only a fraction of the sites that are potentially present. Local residents and American Indian communities who have and do live and work in the area possess much additional information on other archaeological sites and cemeteries. Steps should be taken to have this information incorporated into the land use plan. Up to this point in time, 4 cemeteries has been reported for the Town. While no systematic survey has been completed, we would expect that many other types of sites including campsites/villages, logging camps, farmstead, sugar bushes, etc., are present in the town but have not been identified. No sites are listed on the National and State Register of Historical Places. Many sites and buildings in the Town certainly may be eligible and are important, however.

Natural, Agricultural and Cultural Resource Protection Programs

Natural Resource Programs

Runoff Management Programs

Targeted Runoff Management (TRM) grants are provided to control polluted runoff from both urban and rural sites. The grants are targeted at high-priority resource problems. Projects funded by TRM grants are site-specific and serve areas generally smaller in size than a subwatershed. The grant period is 2 years, with a possible 1-year extension. The maximum cost-share rate available to TRM grant recipients is 70 percent of eligible costs, with the total of state funding not to exceed $150,000.

Wisconsin Forest Landowner Grant Program (WFLGP)

This is a state program administered by the WI Department of Natural Resources (DNR). Cost

shares up to 50 percent are available for:

- Plan Preparation
- Tree Planting
- Timber Stand Improvement
- Soil & Water Protection
- Fencing
- Wildlife Practices
- Fisheries Practices
- Buffer Establishment
- Threatened & Endangered Species Protection
- Historic & Aesthetic Enhancement

Stewardship Incentives Program (SIP)
SIP can provide cost-sharing to protect, manage, and enhance forest resources while meeting landowner objectives. Forestry management plan, tree plantings, fish habitat improvement, recreational protection and enhancement, and wildlife habitat improvement, soil and water protection, shelter belts, threatened and endangered species, and wetland creation and restoration are eligible practices.
Eligible applicants include private landowner with 10 to 1,000 acres of woodland. A 10-year commitment to maintain and protect SIP funded practices is required. Public Access is not required. Contact the Farm Service Agency, Wisconsin Dept of Natural Resources, or Taylor County Land Conservation Department.

Forestry Incentives Program (FIP)
This federal program, administered by NRCS with DNR inputs, provides cost share for:

- Development of management plan.
- Tree planting (site prep, planting stock, planting, etc.)

Managed Forest Law (MFL*)*
The Managed Forest Law (MFL) is a landowner incentive program that encourages sustainable forestry on private woodland. In exchange for following sound forest management, the landowner pays reduced property taxes. It was enacted in 1985 and replaced the Woodland Tax Law and the Forest Crop Law. It is the only forest tax law that is open to enrollment. Land enrolled in the MFL program must be managed according to a plan agreed to by the landowner.

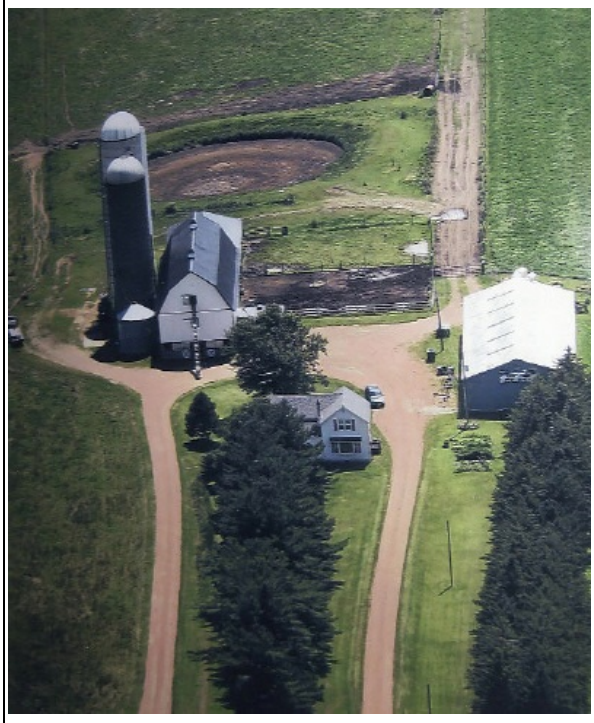
Wildlife Habitat Incentives Program (WHIP)
The Wildlife Habitat Incentive Program (WHIP) is a voluntary program for conservation-minded landowners who want to develop and improve wildlife habitat on agricultural land, nonindustrial private forest land, and Indian land Up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat is available.
Environmental Quality Incentives Program (EQIP)
This federal program that promotes agricultural production, forest management and environmental quality is administered by NRCS with WI DNR inputs and provides cost share for practices that:

- Reduce nonpoint source pollution
- Conserve ground and surface water resources
- Reduce missions
- Reduce soil erosion and sedimentation
- Promotes at-risk species habitat conservation.

Agricultural Resource Programs

Wisconsin Department of Revenue Farmland Preservation Programs
The goals of the **Farmland Preservation Credit Program** have been twofold: (1) to preserve Wisconsin farmland by means of local land use planning and soil conservation practices and (2) to provide property tax relief to farmland owners. To qualify for the credit in tax years through 2009, farmland must be 35 acres or more and zoned for exclusive agricultural use or be subject to a preservation agreement between the farmland owner and the state. In addition, all participants must comply with soil and water conservation standards set by the state Land Conservation

Board. The 2009-11 budget bill (2009 Act 28) made revisions to the program beginning with tax years ending in 2010 (for payments in 2011). The average Farmland Preservation Credit paid in 2010



(for tax year 2009) averaged $855 and equaled 21.6% of the average claimant's property tax bill. Approximately 33% of farm owners with 35 acres or more claimed Farmland Preservation Credits in 2010.

Wisconsin Farmland Protection Program (FRPP)

The Farm and Ranch Lands Protection Program (FRPP) keeps productive farmland in privately owned agricultural use by assisting States, Tribes, and local government or non-profit entities with the purchase of conservation easements or development rights on productive farmland, and on farms containing significant historical or archaeological resources. Through a cooperative agreement, the Natural Resources Conservation Service (NRCS) provides up to 50% of the purchase cost for perpetual easements (in Wisconsin) on eligible farmland.

Wisconsin Working Lands Initiative

The Wisconsin Working Lands Initiative includes three programs as part of the 2009 – 2011 state budget signed into law by Governor Doyle on June 29, 2009. The Wisconsin Working Lands Initiative can be found primarily in Chapter 91 of Wisconsin State Statutes.

Farmland Preservation Program

- Expand and modernize the state's existing farmland preservation program.
- Modernize county farmland preservation plans to meet current challenges.
- Provide planning grants to reimburse counties for farmland preservation planning.
- Establish new minimum zoning standards to increase local flexibility and reduce land use conflicts(local governments may apply more stringent standards).
- Increase income tax credits for program participants.
- Improve consistency between local plans and ordinances.
- Ensure compliance with state soil and water conservation standards.

- Collect a flat per acre conversion fee when land under farmland preservation zoning is re-zoned for other uses.

- Agricultural Enterprise Area Program (AEA)
  - Maintain large areas of contiguous land primarily in agricultural use.
  - Encourage farmers and local governments to invest in agriculture.
  - Provide an opportunity to enter into farmland preservation agreements to claim income tax credits.
    Encourage compliance with state soil and water conservation standards.

  Purchase of Agricultural Conservation Easement Program (PACE)
  - Protect farmland through voluntary programs to purchase agricultural conservation easements.
  - Provide up to $12 million in state grant funds in the form of matching grants to local governments.
  - and non-profit conservation organizations to purchase agricultural conservation easements from willing sellers.
  - Stretch state dollars by requiring grants to be matched by other funds such as federal grants, local contributions and/or private donations.
  - Establish a council to advise the state on pending grants and proposed easement purchases.
  - Consider the value of the proposed easement for preservation of agricultural productivity, conservation of agricultural resources, ability to protect or enhance waters of the state, and proximity to other protected land.
  - Ensure consistency of state-funded easement purchases with local plans and ordinances.

Cultural and Historic Resource Protection Programs

Wisconsin Historic Preservation Fund Subgrants (Tax Credits)

Historic Preservation Fund (HPF) sub-grants are administered by the Wisconsin Historical Society's Division of Historic Preservation (DHP). These grants are in the form of income tax credits for income-producing historic buildings, historic homes, and archaeological sites. These credits are available to all local units of government in the State of Wisconsin and to non-profit organizations.

Wisconsin Humanities Council Historic Preservation Grants

The Wisconsin Humanities Council offers grants of up to $10,000 for projects that enhance appreciation of the need for historic preservation and/or increase public awareness of the importance of particular historic buildings or decorative art works in Wisconsin. Preference is given to small towns and rural communities with populations under 30,000.

National Trust for Historic Preservation/Jeffris Preservation Services Fund (PFS)

This fund was established in 1998 by a gift from the Jeffris Family Foundation to the National Trust. The PSF provides funding to small towns to use in the planning stages of historic preservation projects. Eligible expenses include costs for professional consultants and educational activities. A dollar for dollar match is required for these grants.