

## Chapter 3- Agricultural, Natural and Cultural Resources

As defined in Wisconsin State Statutes 66.1001, the Agricultural, Natural and Cultural Resources element of a county comprehensive plan is designed to provide “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 non-metallic mineral resources consistent with zoning limitations under s.295.20 (2), parks, open spaces, historical and cultural resources, community design, recreational resources, and other natural resources”. This document adheres to these guidelines while utilizing a 30-year planning horizon.

The quantity and quality of agricultural, natural, and cultural resources in a community directly affect and influence the quality of life of its residents. The Town of Turtle is fortunate to be home to numerous areas and features that represent these resources. These special places and features warrant our promotion, protection, and conservation. It is the aim of this element to identify goals, objectives, and policies directed towards the effective management of these very important resources.

Results of the Town of Turtle Public Opinion Survey, done in the spring of 2004, report that citizens of The Town of Turtle are supportive of issues regarding the preservation of agricultural land. In addition, results from Turtle area residents from the Comprehensive Plan Countywide Survey conducted by Rock County in the spring of 2006 indicates that citizens are supportive of the preservation of environmentally significant areas and cultural and historical resources.

### Agricultural Resources

#### Goals and Objectives

##### **Agricultural Resources Goal**

*Preserve, protect, and assist in the responsible management of all agricultural resources identified within the Town of Turtle.*

- Objective:* Clearly designate Exclusive Agricultural Areas, and preserve them via land use and zoning decisions at the Town level.
- Objective:* Protect the profitability of farming, by discouraging rural-urban land use conflicts and by preventing the imposition of urban development into prime agricultural areas.
- Objective:* Encourage and promote the clustering of new residential properties, to maintain critical masses of uninterrupted agricultural land.

#### Purpose of Planning for Agricultural Resources

The preservation of agricultural land has many benefits, ranging from quality of life and aesthetic benefits to clean air and economic benefits. Orderly growth and development is imperative to reduce costs and to preserve the quality of life for The Town of Turtle's

residents. When scattered development occurs the impacts are negative for farmland owners, new rural residents, taxpayers and wildlife alike.

Urban sprawl is poorly planned development. It is rarely connected to existing public infrastructure, and it often takes agricultural land out of production. Sprawl development is often far removed from schools, parks and recreation, workplaces and shopping destinations. This creates more reliance on automobiles, thus increasing congestion, pollution and oil consumption. And the costs for extending utilities, improving roadways, constructing new schools, expanding emergency 911 operations and so forth, causes the need for more tax revenue. This is particularly true of sprawling residential development, which often costs more to service than the property taxes it generates. Farmland, on the other hand, provides considerable revenue to local government while requiring minimal public services in return.

In addition to the fiscal costs of allowing development in productive agricultural areas, it is otherwise important to maintain critical masses of prime agricultural land in the Town, to make farming a profitable career, and to supplement the nation's food supply while contributing to the Town's economic base. Once non-agricultural uses are located near farmland, the farmland may be assessed at a greater value, causing the farmers' taxes to increase. Also, when farmers foresee possible speculation of nearby land for development, they tend to invest less in their farming operation; an effect known as "impermanence syndrome".

The best practice is to preserve farmland when possible. Infill development of non-agricultural uses should be promoted, and growth should occur outwardly from urbanized areas where the location of public infrastructure is cost efficient. However, there is no reason for growth to occur at a rate greater than the rate of the population increase.

In Wisconsin, planning for agricultural resources tends to be done at the County level, in compliance with the Farmland Preservation Act of 1977, which grants tax credits to farmland owners living in counties with adopted agricultural preservation plans. Rock County's Agricultural Preservation Plan 2005 Update was certified by the State and adopted by the County Board in December of 2005. The Town of Turtle became eligible for the Farmland Preservation Program in 1979, with the adoption of the first farmland preservation plan in the County.

### **Soils Suitability for Agriculture**

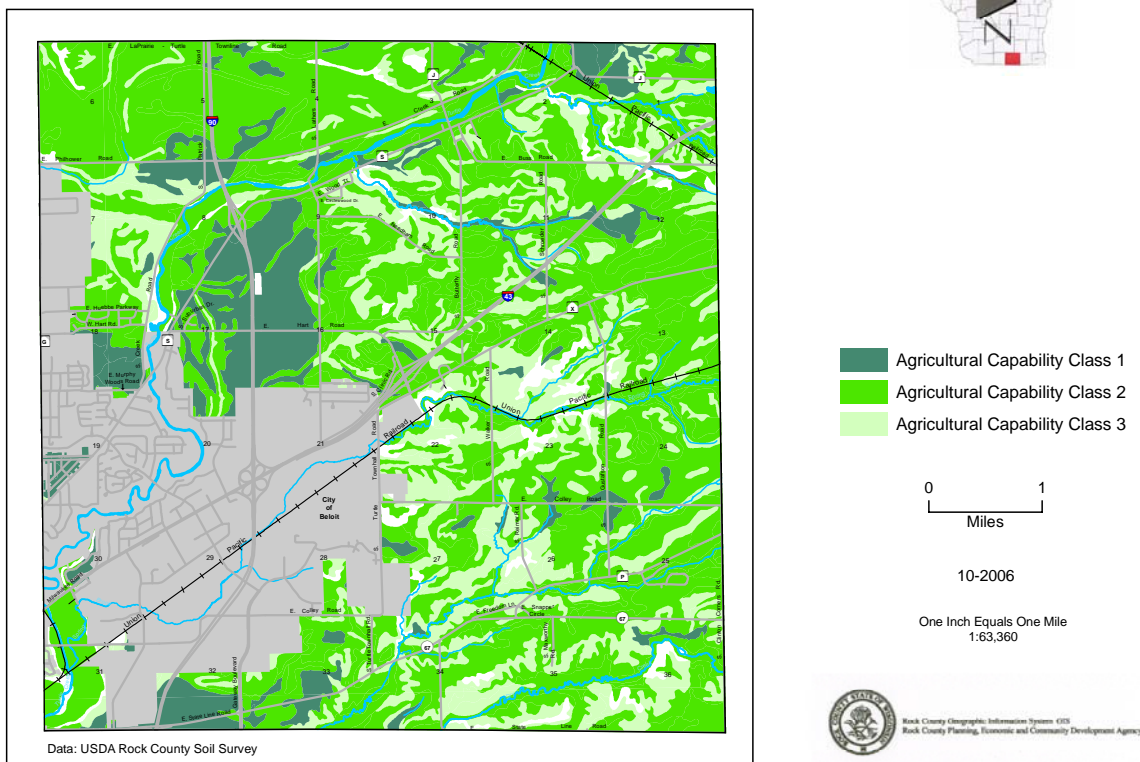
The properties of each soil type determine which land activities the soil is suitable for. Some soils are not suitable for construction, or on-site sewage disposal due to slope, high water table, frost heave, depth to bedrock and so forth. Likewise, some soils are not suitable for agriculture due to steepness and wetness. However, the Town of Turtle is abundant in soils that are prime for agricultural use. Unfortunately, soil that is suited for field crops oftentimes rank highly suitable for septic tank absorption fields, leaving much prime agricultural land as the only places able to handle below-grade private septic systems.

Soils are classified into eight capability classes, and when rating suitability for agriculture, classes I, II and III are most ideal. Class I has few limitations that restrict their use. Class II has moderate limitations that reduce the choice of plants, or requires moderate conservation practices. Class III has severe limitations that reduce the choice of plants, or requires very

careful management practices. As shown in map 3-1, agricultural capability classes I and II dominate the Town's landscape. This is not to say that all class I, II and III areas should be considered off-limits for development. However, The Town of Turtle is fortunate to have this resource, and given predicted development pressures, this resource will continue to be threatened. The American Farmland Trust has identified southern Wisconsin as one of the three most threatened farmland resources in the nation. Development should be planned and permitted in an orderly manner, so large quantities of prime agricultural land do not fall victim to degradation at a reckless rate.

**Map 3-1**

**Town of Turtle  
Soil Capability Classification**



### Agricultural Operations in the Town of Turtle

Currently in Turtle, agricultural operations are solely family businesses. There are no commercial farming operations in the Town. The only agricultural businesses in the Town are commercial nurseries. While Turtle is open to welcoming seed companies or other innovative agricultural industries, there are none in the Town at this time.

### Loss of Agricultural Land

As few as 9 individuals in the Town of Turtle were employed by farming, fishing or forestry, according to the 2000 census. That is over an 86% drop since 1980. Although Town specific data is not available, we do know that countywide nearly 1,000 farms had been lost between

1964 and 2002. Also, in the 20 years between 1982 and 2002, over 18,000 acres of farmland had been lost. The loss of agricultural land is a mounting issue, in the Town of Turtle and elsewhere.

Farmland in the Town of Turtle is consistently lost due to annexations into the City of Beloit, and due to rezonings out of the A1 district. Between 1999 and 2004, a total of 307.11 acres in Turtle were annexed into the City of Beloit. Only one other Town in the County has had more land annexed out of it, and that was the Town of Janesville. It is difficult to determine how much of this land was zoned A1 prior to annexations, but it can safely be assumed that all the acreage annexed was done so in preparation for development.

A total of 362.11 acres has been rezoned out of the A1 district, between 1986 and 2004. Table 3-1 shows what type of district these lands were rezoned to, whether a different agricultural district, residential, commercial or industrial. Also, the number of approved rezoning applications is shown in parenthesis.

TABLE 3-1:

**Acreage and Number of Zoning Changes Out of the Exclusive Agricultural Zoning District; Town of Turtle, 1986-2004**

Agricultural	Residential	Commercial	Industrial	TOTAL
277.96 (13)	75.63 (9)	5.00 (1)	3.52 (1)	362.11 (24)

(Source: Rock County Planning and Development)

As shown, most of the land rezoned out of the A1 district recently was changed to another agricultural district; A2 or A3. These two districts permit the construction of a single-family residence, and have minimum lot sizes of 10 acres and 3 acres, respectively. It is apparent that these zoning changes were granted to allow residential development for non-farming households. Approximately 21% of all the land rezoned out of A1 from 1986 to 2004 became the Rural Residential district, which has a minimum lot size of only 40,000 square feet, and should only be allowed in areas planned for residential development, near existing residential development. Though commercial and industrial land uses bring in the larger tax revenue, very little land in the Town of Turtle has been converted to these uses recently.

### **Managing Agricultural Resources**

There are a number of strategies and tools governments employ to regulate land uses in agricultural areas, thus preserving agricultural land. Some are traditional, and some are more innovative. But they all have their own strengths and weaknesses.

#### **Exclusive Agricultural Zoning**

The most common method is through zoning. In Wisconsin, Exclusive Agricultural Zoning is used extensively to prohibit non-farm uses in agricultural areas, as well as to require large lot sizes in rural areas and limit density. In the Town of Turtle, the A-1 district has a minimum lot size of 35 acres, and only structures and improvements consistent with agricultural uses are permitted. Residences for family and individuals involved in farm operations may be permitted with the granting of a conditional use permit. Also, non-farm residences may be constructed in the A-1 district with a conditional use permit, if the proposed parcel is not on soils with capability classes I, II or III.



### **Density Limits**

While the 35-acre minimum lot size does help to limit residential density in rural areas, it can also make the affordability of rural land within the means of only upper-income households, which may be viewed in either positive or negative terms. Also, 35 acres is still too small to be a viable farm unit, to some, and each housing site may consume large sums of productive agricultural land. It is possible to enforce density requirements, without requiring large lots, by establishing a maximum number of housing units allowed on a set number of acres of land. For instance, some zoning ordinances in the Midwest dictate that there can only be 1 house per 40 acres, or per 20 acres, without having a large minimum lot size requirement. Density can also be controlled, while allowing undeveloped areas, through Transfer of Development Rights (TDRs).

### **Differentiated Agricultural Districts**

As communities have become more aware of just how diverse separate agricultural uses can be, some have begun establishing separate zoning districts, for differentiated agricultural uses. For instance, there may be separate districts to permit livestock facilities, large commercial farms, farm tourism, and so forth. This tool can work, because a different set of performance standards and requirements may make sense for each separate farm use. Also, one farm use may not work well positioned near another.

In some cases, the use of overlay zoning districts may be another way to regulate and permit varying agricultural uses.

### **Land Division Controls**

The Rock County Land Division Regulations controls how parcels are created, when they are less than 15 acres in size. Generally, land is rezoned or granted a conditional use permit before the land division is applied for. But conditions can be placed on land divisions to further protect agricultural land, by dictating that a new home be placed in a way to minimize the amount of cropland taken out of production, for instance.

Also, land divisions could be worded in a way to promote conservation subdivisions or rural clustering of homes. These types of subdivisions differ from conventional layouts in the way they group homes near one another and set aside the remainder of the land as common open space. Planned Unit Developments are another way to allow development that provides shared open space, when a mix of uses is involved. Some view conservation subdivisions to be a good thing, while others disagree. While they leave large tracts of land undeveloped, many people who wish to live in a rural area don't want to be near other homes, on a small lot, and conservation subdivisions tend to be more expensive.

The granting of driveway access is another tool that can minimize degradation of farmland. For instance, a governmental unit granting a driveway permit may not allow a long winding driveway that cuts through an excessive amount of farmland, if the protection of farmland is one of their goals.

### **Agricultural Resources Policies**

- 1) Land uses in the Exclusive Agricultural Areas should be limited to those permitted under S. 91.75 Wis. Stats.

- 2) Rezoning granted by the Town should adhere to the Town of Turtle Land Use Plan Map, contained in Chapter 6 of this Plan, in order to preserve planned agricultural areas.
- 3) Develop regulations to allow and promote clustered residential development, so as to not impose on agricultural land.
- 4) When conditional uses are granted by the Town, to allow farm-family residences in the A-1 district, conditions shall be placed on the permit as necessary to require the home construction to take place on the soils least suitable for agricultural uses, and to cause the least interference with farming operations.
- 5) Support further investigation and consideration into the feasibility of utilizing PDR (Purchase of Development Rights) and TDR (Transfer of Development Rights) programs as a means to protect prime agricultural land.
- 6) Support the establishment of seed companies, or other comparable agricultural industries, within the Town of Turtle, in appropriate locations.

## Natural Resources

### Goals and Objectives

#### Natural Resources Goal

*To preserve and protect natural resources within the Town of Turtle.*

- Objective:* Manage and preserve Groundwater within The Town of Turtle.
- Objective:* Manage and preserve Forested and Woodland areas within The Town of Turtle.
- Objective:* Manage and preserve Threatened and Endangered Species of plants and animals, identified to be within The Town of Turtle.
- Objective:* Manage and preserve Surface Water, including streams and creeks, within The Town of Turtle.
- Objective:* Manage and preserve Floodplain areas within The Town of Turtle.
- Objective:* Manage and preserve Wetland areas within The Town of Turtle.
- Objective:* Manage and preserve Wildlife species and habitat areas within The Town of Turtle.
- Objective:* Continue to manage and regulate Nonmetallic Mining Sites within The Town of Turtle.
- Objective:* Continue to maintain and enhance park and outdoor recreation areas within The Town of Turtle.

*Objective:* Continue to maintain and enhance the rural character of the Town of Turtle, while designing land uses in a way that regards the natural environment.

### **Purpose of Planning for Natural Resources**

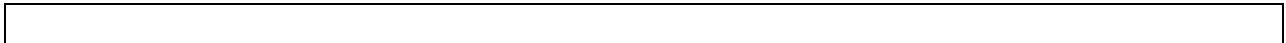
Natural resources offer many benefits, ranging from health, to recreation, to revenue. In addition to maintaining native habitat for an array of flora and fauna, humans rely on natural resources to help sustain safe and clean water and air. Parks, trails and scenic areas are considered natural resources, which should be preserved for future generations to enjoy. And natural resources can be a component of a vibrant economy, by increasing property values and increasing tourism, in a community.

While some state and federal regulations dictate use and protection standards for floodplains, shorelands and wetlands, local communities are encouraged to further regulate the use of natural resource areas that are unique and important to them.

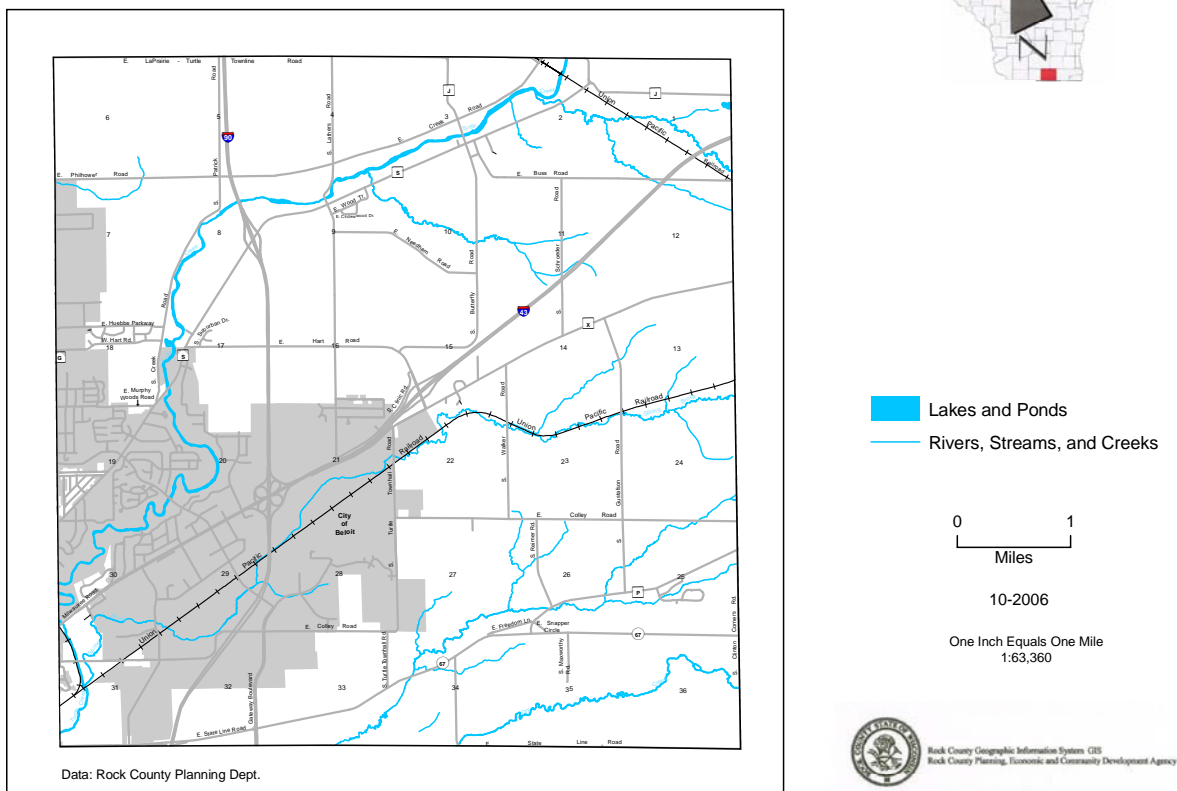
### **Water Resources**

#### **Surface Water**

Rivers, creeks, streams, brooks, lakes and ponds are all categorized as surface water. Turtle Creek is the predominant waterway through the Town, and is the northernmost of the Towns' three named waterways. Spring Brook runs through the central portion of the Town, and connects to Turtle Creek in the southwestern edge. And in the southeastern portion of the Town runs Dry Creek. All of these waterways are tributaries to the Rock River. The Town's surface waters are shown in Map 3-2.



Map 3-2  
Town of Turtle  
Surface Water



Both Turtle Creek and Spring Brook are designated as Exceptional Resource Waters (ERWs) by the State of Wisconsin. This means that the water quality is excellent, and they offer high recreational and aesthetic value, however they may be impacted by point source pollution or have the potential for future discharge from a small sewer community.

Areas adjacent to these bodies of surface water are currently protected. To fulfill the requirements of Wisconsin Statutes 59.971 and 87.30, Rock County regulates land uses in the Shoreland Overlay District area, through their Shoreland Zoning Ordinance. The Shoreland Overlay encompasses all land within 1,000 feet of the ordinary high-water mark of navigable lakes, ponds and flowages, and all land within 300 feet of the ordinary high-water mark of navigable rivers and streams. The intent of Shoreland Zoning is to prevent and control water pollution, protect spawning grounds, fish and aquatic life and control the placement of structures and land uses to preserve shore cover and natural beauty, to maintain safe and healthful conditions.

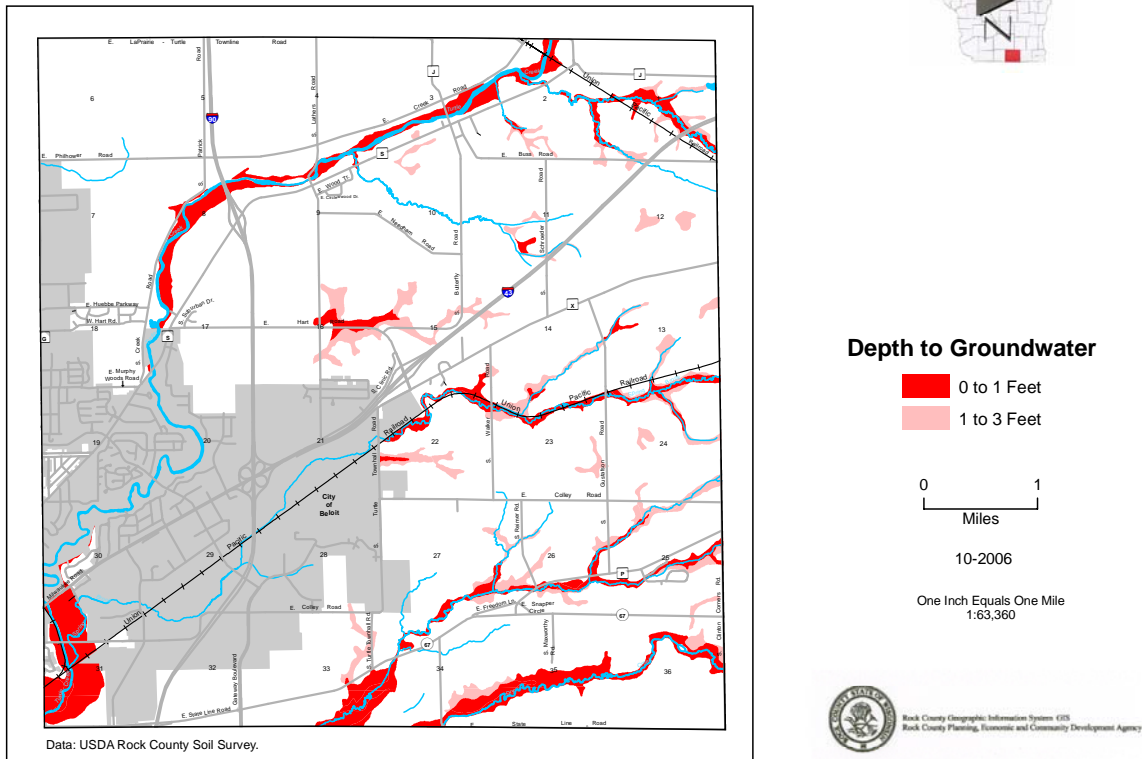
## Groundwater

It is unknown if there is an imminent threat that the supply of groundwater will be exhausted in the Town. Currently, there are no monitoring wells. However, as recently as two years ago, some wells in Turtle did run dry during drought conditions. The quantity of groundwater could become more of a concern in the future if development is not curbed, because

development brings a greater demand for water, and increases the amount of impervious area.

In addition, the quality of the groundwater is a growing concern. Map 3-3 shows the depth to groundwater in the Town. The aquifers are located rather near the ground surface, and are susceptible to pollutants, such as agricultural run-off, chemical storage and septic system discharge. The concern is greater in rural areas, where there is more spreading of animal waste, more use of fertilizers and more private septic systems. There are known contamination problems with well water in the Coleman Subdivision area, caused by Durst, a Regal Beloit Company located on Buss Road.

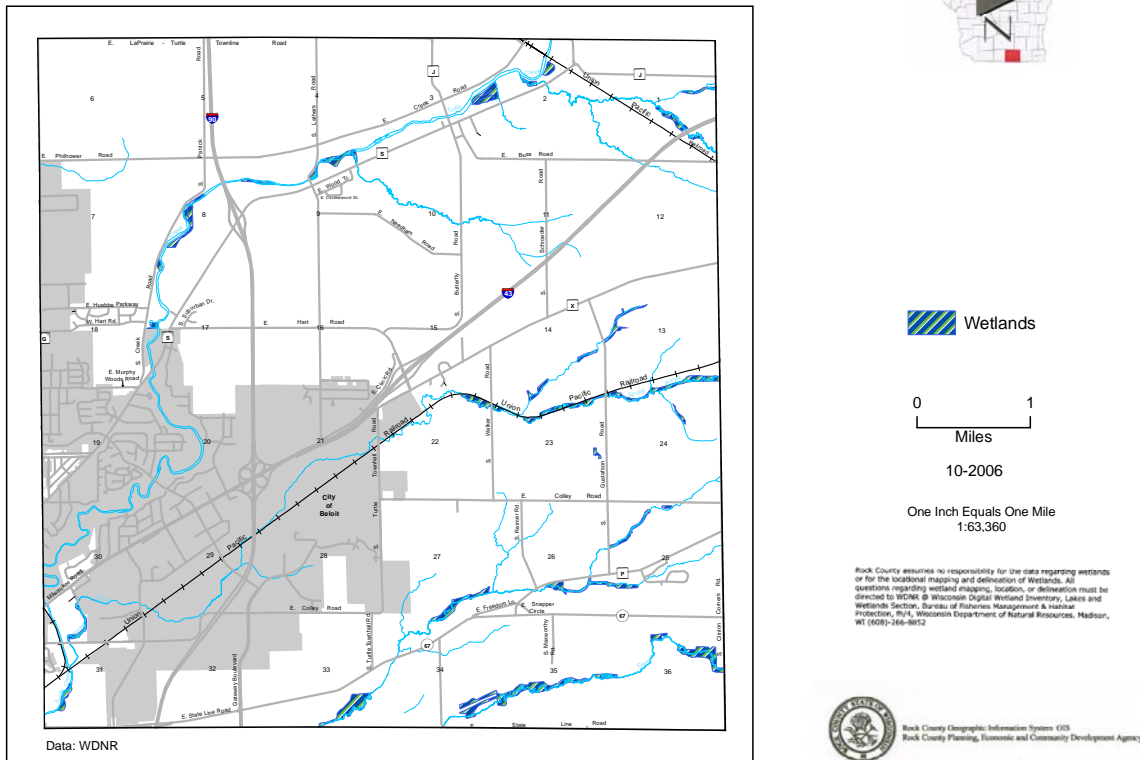
**Map 3-3**  
Town of Turtle  
Depth to Groundwater



### Wetlands

Wetlands are areas where water is at or above the land surface long enough to support aquatic or hydrophilic vegetation. There was a time when wetlands were viewed as wasteland, to be drained for agriculture. Today the benefits of wetlands are better understood. They filter pollutants and protect the quality of water in rivers, lakes and streams. They also form habitats for unique flora and fauna, as well as provide recreational opportunities. Wetland areas in Turtle are shown in Map 3-4.

### Map 3-4 Town of Turtle Wetlands

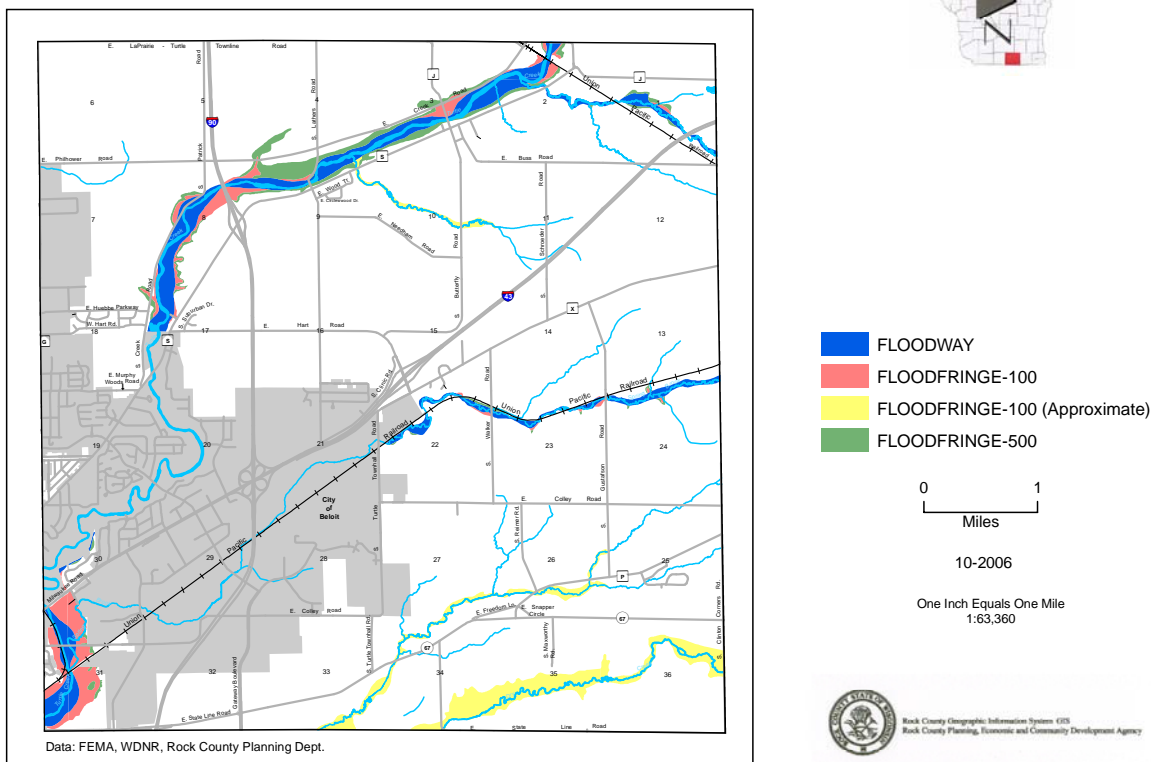


Section 61.351 and 62.231 of the Wisconsin Statutes and Chapter NR 117 of the Wisconsin Administrative Code dictate that at the very least, local zoning ordinances must protect wetlands that are 5 acres or larger in size, shown on the WDNR's final wetland inventory maps, and located within shorelands. Rock County's Shoreland Zoning Ordinance regulates what is termed the "Lowland/Wetland Overlay District One (C-1)".

### Floodplains

Lands that have been, or may be, covered by floodwater during a regional flood (commonly called a 100-year flood) are floodplains. They are areas expected to have a 1% chance of flooding in any given year, and are based on historical data. Floodplains in the Town of Turtle are depicted on Map 3-5. Because of the proximity of floodplains to water, these areas attract homeowners and developers, though it is self-evident why development in floodplains should be avoided.

**Map 3-5**  
**Town of Turtle**  
**Floodplains**



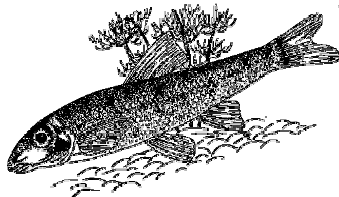
Floodplains offer natural value, by improving water quality, and providing fish and wildlife habitat. The damage floodwaters can inflict upon homes, businesses, wells, sewage treatment plants, roads and other infrastructure can be dangerous and costly. Also, as buildings are constructed in the floodplain, they cause the next flood to potentially crest even higher than previous floods. Land use controls are considered the best way to manage flood risks and costs. Rock County administers a Floodplain Zoning Ordinance, which regulates development in floodplains. Recommendations for how to mitigate damage from flooding can be found in the Rock County Natural Hazard Mitigation Planning Manual and Plan.

### Wildlife Resources

#### **Threatened and Endangered Species**

The State's Bureau of Endangered Resources maintains information regarding threatened and endangered species in the State. They also maintain the Natural Heritage Inventory (NHI), which lists data on the locations and status of rare species, natural communities and natural features throughout the State. According to the NHI, there are two imperiled natural communities in Turtle; Mesic Prairie and Southern Dry Mesic Forest, the Mesic Prairie being the most critically imperiled. Mesic Prairie is a grassland community, dominated by Big Bluestem grass.

Three different imperiled fish are found in the Town of Turtle; the Gravel Chub, Greater Redhorse and Ozark Minnow.



Gravel Chub

(Source: Wisconsin DNR)



Greater Redhorse



Ozark Minnow

There are fourteen different imperiled plants found in the Town of Turtle. They are the Woolly Milkweed, Kitten Tails, Prairie Indian Plantain, Pale-Purple Coneflower, American Gromwell, Three-Flower Melic Grass, Prairie False Dandelion, Prairie Parsley, Wafer-Ash, Hairy Wild-Petunia, Snowy Campion, Reflexed Trillium, Grade Mallow and Pink Milkwort.

Development must be controlled vigilantly in an effort to preserve these threatened and endangered species, in order to sustain the biodiversity of the area. Even if a development does not obviously maim or remove a rare species, it could affect its food supply, reproduction cycle or habitat in other ways. And though little is mandated to protect plants and animals on private property, stewardship of private property is encouraged just as with public lands. Attention should be given to conserve, manage and restore natural areas as necessary to care for these rare natural elements, in addition to all plants, animals and habitats.

There are both state and federal regulations to protect rare species. 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 1) take, transport, possess, process or sell any wild animal that is included on the Wisconsin Endangered and Threatened Species List; 2) process or sell any wild plant that is a listed species; 3) 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 exceptions 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 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 Endangered Species laws 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.

Local communities are encouraged to go above and beyond state and federal regulations, and adopt their own ecosystem management principles and protection activities.



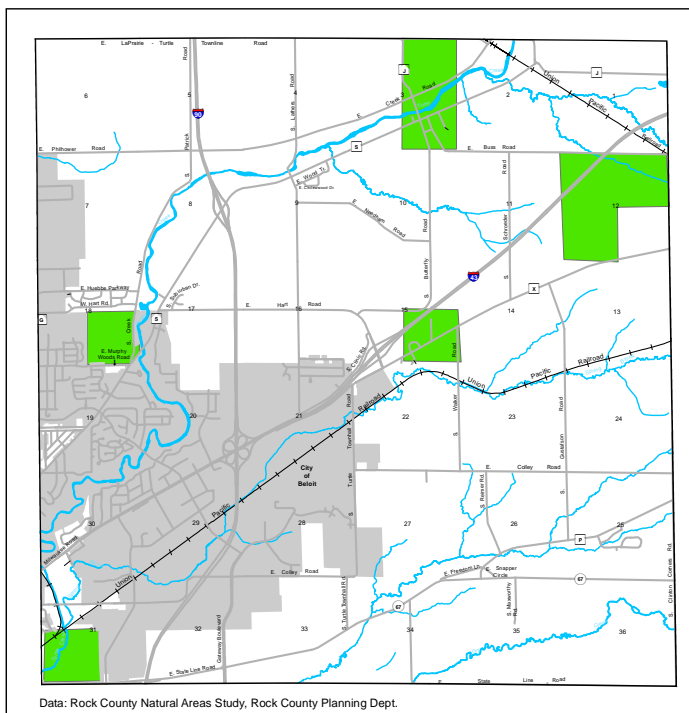
## Unique Habitats

The Mesic Prairie and Southern Dry- Mesic Forest found in Turtle are certainly unique habitats, which are rarely found in the state. In fact, there are fewer than 6 Mesic Prairies in all of Wisconsin. Grasslands in general, are considered unique habitats, which the state encourages protection of. Bird species dependent on grassland habitats have experienced greater declines than other bird species. The preservation of grasslands can be funded through the Conservation Reserve Enhancement Program, which is administered by the WDNR. Also, local ordinances can be constructed in a way to pay special attention to the preservation of grasslands.

Prairie remnants are just one of the examples of pre-settlement vegetation found to still be in existence in the Town of Turtle. In 2001 ecologist Robert Baller conducted a field study for entire Rock County by visiting, inventorying and evaluating sites identified as natural areas. Habitats he visited primarily included prairie, savanna, woodland, wetland and cliff communities.

The 2001 study was an update of previous studies done by the Department of Natural Resources in 1969 and 1986. A total of 169 sites were visited countywide; 114 on private land and 55 on public land. Of these, 138 sites were determined to be ecologically significant, five of which are located in the Town of Turtle (Map 3-6). To assess the sites, Mr. Baller considered the quality, condition, size and context of each site, in relation to pre-settlement flora, and ranked them on a scale of 1 to 10. Only areas with an overall ranking of 5 or above were denoted as being "significant".

**Map 3-6**  
Town of Turtle  
Natural Areas Ranked 5 and Above



 Natural Area Ranked 5 and Above

0 1  
Miles

10-2006

One Inch Equals One Mile  
1:63,360



Rock County Geographic Information Systems GIS  
Rock County Planning, Economic and Community Development Agency

### **Forest / Woodland Resources**

The Town of Turtle is not considered a heavily forested or wooded area, and there are no County Forest Lands in the Town, or in all of Rock County. However, local programs and ordinances are encouraged to preserve the grand, old trees and woodlands in the Town, and regulate and require future tree plantings. Woodlands provide ecological, economic and social benefits, and the fragmentation of woodland resources due to development can negatively impact plant and animal habitats, air and soil quality, and the overall aesthetics of rural areas.

The Town does not currently have a Tree Preservation Ordinance, but may be interested in adopting one in the future.

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

With increasing pressure for development; primarily residential development, outdoor recreation and open space areas have become very important ingredients to citizens' quality of life. Parks and outdoor recreation areas in Turtle should be accessible and adequate.

There are two small Town Parks. One is located in Hazelwood Subdivision and the other is located in Lindale Subdivision. *\*Insert Photos of Parks\**

In addition, improvements are being made to the Town Hall property. A pedestrian/bike path, known as the "Nature Walk", meanders the 125-acre property. And a veteran's memorial is being constructed in front of the Town Hall. An army tank sits at the site, and a playground has been installed to memorialize a recently fallen soldier. *\*Insert Photos\**

The Rock County Parks, Outdoor Recreation, and Open Space (POROS) Plan lays out objectives, needs and priorities for park and outdoor recreation facilities countywide. Sweet Allyn Park is the one facility in Turtle that is addressed in the POROS Plan, in addition to snowmobile trails and various bike/pedestrian routes.

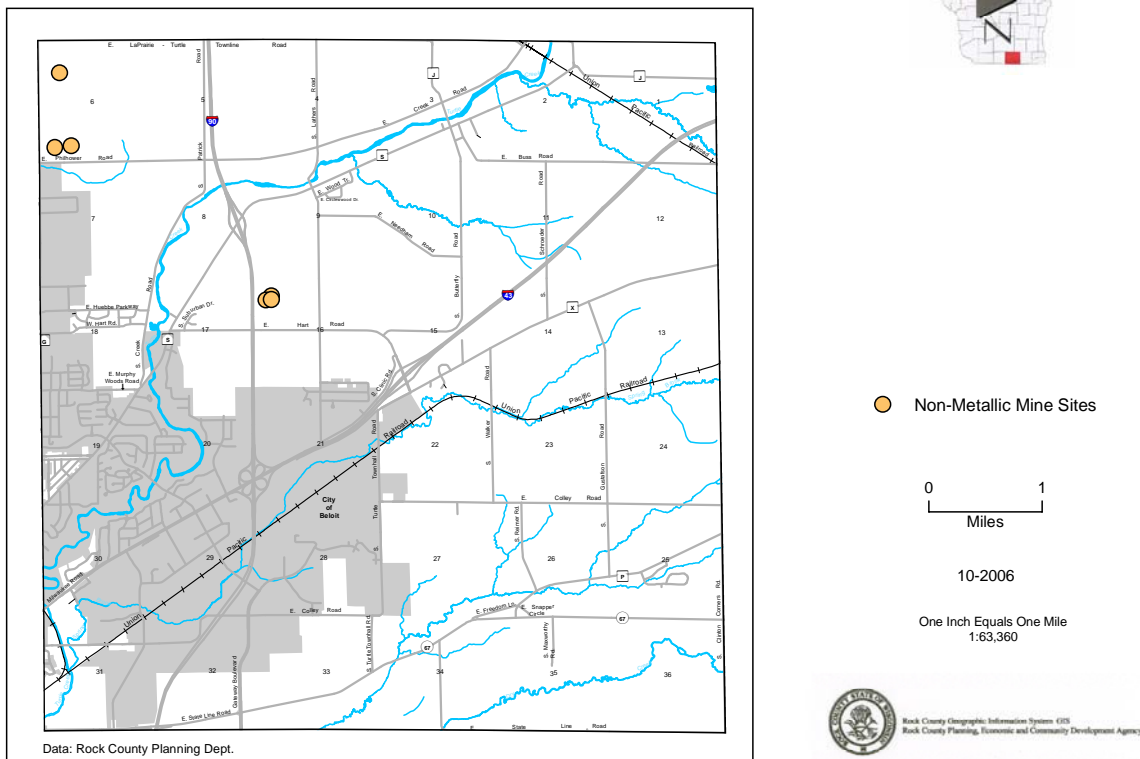
Future recreation amenities desired by the Town include a trail connection between Sweet Allyn Park and the Town Hall Nature Walk, and a possible future connection into the Town of La Prairie. There is also an aspiration to improve and promote the 5-Arch Bridge area, by providing tour bus parking, possibly a picnic site and kayak launch. The Town of Turtle has a 13-member Parks Committee, to promote and plan for park and recreation opportunities in the Town.

### **Mineral Resources**

There are 5 non-metallic mining sites in the Town of Turtle (Map 3-7). Much of the sand and gravel in the area was brought here by a series of glaciers. Over time, as the glaciers moved south from what is now Upper Michigan and Canada, rock and other material accumulated within the glaciers. As the glaciers melted, most recently around 10,000 years ago, a mixture of sand, gravel and boulders was deposited in south central and eastern Wisconsin. There are also limestone and dolomite formations throughout the area, which predate the sand and gravel.

State Administrative Code NR 135 establishes framework to regulate nonmetallic mining reclamation, to a best “post mining” land use, and Rock County enforces compliance with these regulations. In addition, the Town of Turtle regulates sand and gravel quarries, as a conditional use in the Special Use District. The ordinance addresses abandonment of quarries, setbacks, required screening and lot size. It also prohibits the dumping of waste into quarries.

**Map 3-7**  
**Town of Turtle**  
**Non-Metallic Mining**



### Community Design

Community Design can mean different things to different people. In denser, urban environments it can refer to the visual aesthetics of a community, or the community character, which comes through by the use of Form Based Codes or similar regulations. However, at the rural town level it can refer to the preservation of rural character, and the layout of developments, and their consideration for the natural features present.

New technology makes computer-generated analysis of the environmental features and physical characteristics of the land possible. Site evaluations and analysis enables development sites to be assessed prior to design, taking into account both the positive amenities and the environmental limitations of each building site.

### Managing Natural Resources

### **Education**

Educating citizens to involve them in becoming stewards of the natural environment is crucial, as private actions can be both the most beneficial and the most detrimental to the natural features surrounding us. Also, elected and appointed officials should consider natural resource goals with each land use decision that comes before them.

### **Environmental Assessments**

Though it can be time consuming, it is recommended that environmental assessments be conducted to thoroughly study the potential impacts a certain development or land use activity may have on the natural environment. Wisconsin does not have requirements dictating when environmental assessments are mandatory, like some states do (for a development of a particular size, for instance), although they must be done for many WISDOT projects. However, some local communities have included regulations in their zoning or land divisions ordinances to set guidelines for when environmental assessments should be done.

### **Regulatory and Acquisition Tools**

Some of the regulatory tools suggested for managing agricultural resources could also be applied to manage natural resources, such as Density Limits, and Cluster Developments.

Acquisition tools, such as TDRs and PDRs can be applied to protect natural resources. And in some cases acquisition tools utilizing non-profit conservation organizations may make sense, or even the use of eminent domain to acquire the most critical natural lands.

### **Environmentally Significant Open Space Areas (ESOSA)**

Currently, natural components such as stream corridors, floodplains, wetlands, steep slope, shallow bedrock and wet soils are being recommended as Conservation Easements whenever a land division is reviewed by Rock County, in areas containing these physical features. These areas do not lend themselves well for development, and they encompass natural resources that should be protected from destruction, in order to maintain and protect native plants and animals and to maintain green corridors for future generations to enjoy.

Authority to preserve ESOSAs was adopted by the Board of Supervisors via the POROS Plan in October of 2003.

### **Fiscal Tools**

There is a variety of state and federal grants and loan programs to help communities with their recreation, clean water, plant and wildlife needs. Impact fees are another fiscal tool, often used to fund outdoor recreation needs for a community.

### **Natural Resource Policies**

- 1) Create and adopt a Tree Preservation Ordinance for the Town of Turtle, to provide for the safeguarding of woodland resources.
- 2) Amend the Town of Turtle Zoning Ordinance to regulate nurseries as a conditional use permit, in order to protect soil quality.
- 3) Disallow building and construction within any designated floodplain areas in the Town of Turtle.

- 4) Prevent activities that directly or indirectly pollute or threaten the quality of surface water in the Town of Turtle.
- 5) Prevent activities that directly or indirectly pollute or threaten the quality of wetlands in the Town of Turtle.
- 6) Prevent activities that directly or indirectly disturb or threaten any and all species identified as Threatened or Endangered.
- 7) Expand and improve the recreational trail network in the Town of Turtle, to connect park and recreation areas, particularly the Town Hall property and Sweet Allyn Park.

## Cultural Resources

### Goals and Objectives

#### Cultural Resources Goal

*Preserve, protect and manage cultural resources identified within the Town of Turtle.*

- Objective:* Identify, document, preserve and celebrate historic sites and buildings in the Town of Turtle.
- Objective:* Continue to inform citizens of the Town of Turtle's cultural capital, and display and preservation of historic artifacts.
- Objective:* Promote and enhance opportunities to visit and enjoy the Railroad 5-Arch Bridge and surrounding area.
- Objective:* Alleviate disruption and degradation to cultural and historic sites, as development takes place.
- Objective:* Continue the maintenance and upkeep of cemeteries in the Town of Turtle.

### Purpose of Planning for Cultural Resources

Historic buildings and structures, and ancient and historic archeological sites are considered cultural resources. These cultural resources should be planned for in order to set the framework to protect, rehabilitate, restore and/or reconstruct these community jewels. Cultural resources provide a window to the past, and preservation efforts can cultivate community pride. In addition, cultural resources can benefit tourism, real estate values, and an overall improved quality of life.

Participants at the Town Visioning Session stated that the Railroad 5-Arch Bridge, Shopiere Store, 4-Sided Clock and the birthplace of the first governor are some of the local cultural resources in need of recognition and preservation.

## Cultural Preservation Efforts

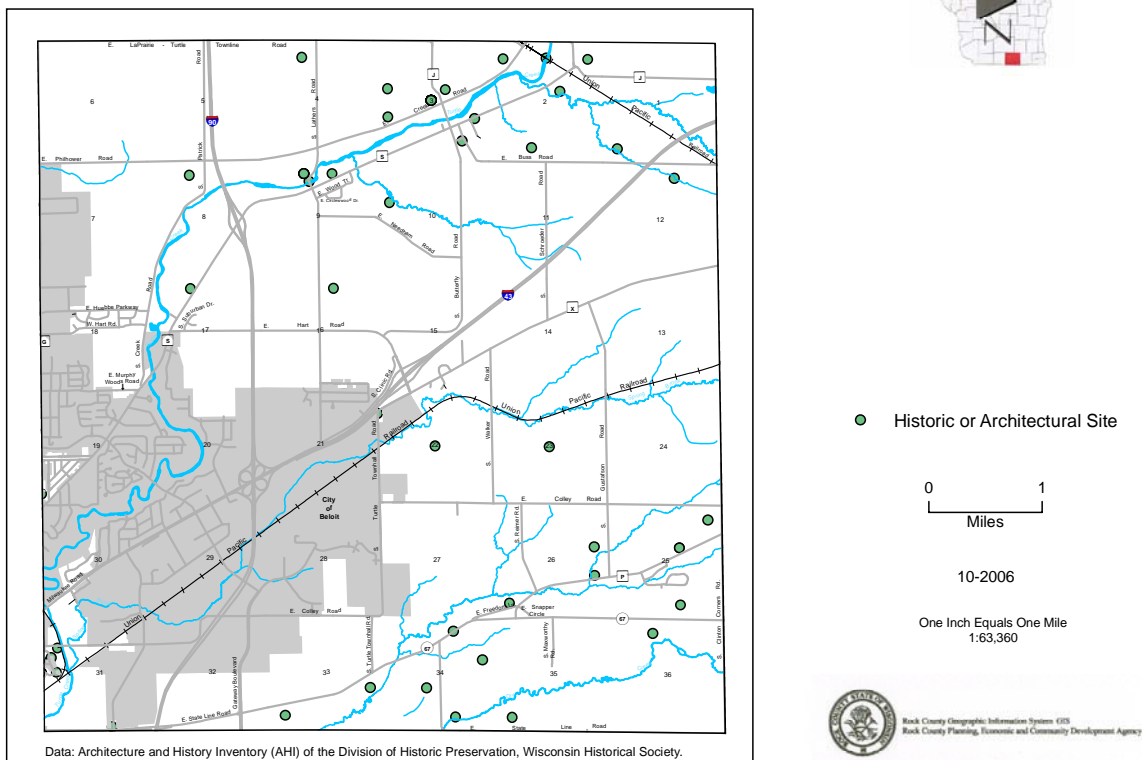
The Town of Turtle is very proud of their historic heritage. The Town Hall serves as a museum and repository of historic artifacts. One of the activities during the local Fall Festival, held every October, is a Historical Hayride, to tour significant sites throughout the Town. While there is no historical society in Turtle, the Clinton Historical Society covers the Turtle area.

## Historic Sites and Buildings

The most complete inventory of historic sites and buildings countywide is from a 1976 study, which may be viewed at the Rock County Planning, Economic and Community Development Agency office in the Courthouse, or at the Janesville Hedberg Public Library.

The Architecture and History Inventory (AHI) is a collection of information on historic buildings, structures, sites, objects and historic districts throughout the State. A number of these sites are in the Town of Turtle (Map 3-8). This inventory is housed at the Wisconsin Historical Society in Madison, and it is maintained by the Society's Division of Historic Preservation.

**Map 3-8**  
**Town of Turtle**  
**Architecture and History Inventory (AHI) Sites**

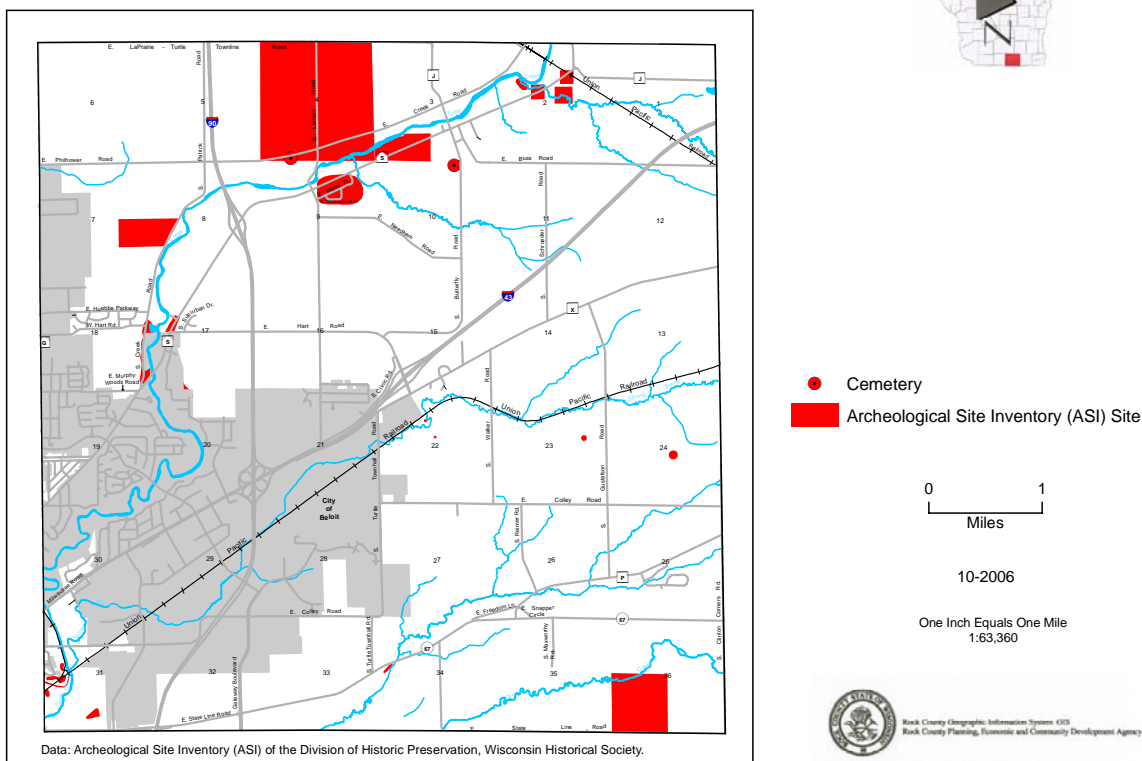


Cemeteries, ancient burial sites and historical markers are also considered cultural resources, a number of which are located in the Town of Turtle (Map 3-9). A tour of local cemeteries will produce a historical connection to surnames present in the local road names, historical sites, businesses and architecture. An often-overlooked aspect of cemeteries, other than the historical connection, is the cultural value of the stone artwork, design, and engraving.

The Town has a 13-member Cemetery Committee, which organizes cemetery clean-ups and allocates funds to restore and improve cemeteries each year.

**Map 3-9**

**Town of Turtle  
Archeological Site Inventory and Cemeteries**



## Managing Cultural Resources

Education and legal regulation are the two main methods utilized to protect and preserve cultural resources.

### **Educational Strategies**

The promotion of cultural resources, and educating the public about them, is a primary component to garner public support (both monetarily and physically) of historic preservation efforts. Historic Preservation and Archeology Week, held in early May, is a statewide event to showcase local preservation efforts, and it is an ideal occasion to encourage pride in a community's cultural heritage.

Some specific activities that can take place any time, including during Historic Preservation and Archeology Week, include walking tours, various hands-on workshops, and local recognition programs such as a plaque program to identify local landmarks.

### **Legal Strategies**

The State Register and National Register of Historic Places are programs to designate that a property is significant due to its architecture, archeology, culture or history, and should be preserved.

National Historic Landmark status is the highest level of national designation. Both the Registers of Historic Places and the National Historic Landmark procedures involve the nomination of a property that meets set criteria, and the eventual vote by a review board to decide if the property should be included. Public projects, whether they have federal, state or local involvement, are required to take the protection of listed properties into account.

Some communities have enacted historic preservation ordinances, which range in the amount of regulatory power they instill. The main purpose of such an ordinance is to establish a historic preservation commission that reviews any new construction, alterations or demolitions taking place within designated historic properties or areas. A model historic preservation ordinance is available from the State Division of Historic Preservation.

Many of the tools that help to preserve agricultural and natural resources can too be applied to preserve cultural resources. Zoning ordinances can address cultural character, and cluster developments, TDRs and PDRs, and subdivision controls can help, also.

### **Funding Strategies**

Fundraising is an essential component of historic and cultural preservation. Because the preservation of cultural resources can boost tourism, create jobs, raise property values and benefit communities fiscally in other ways, it is an aspect of a community deserving of funding.

Community Development Block Grant (CDBG) loans are increasingly being utilized across the state to establish loan programs designated for historic properties. Some private banks throughout the state are offering low interest loans in the name of historic preservation. And Revolving Loan Funds are ideal for funding rehabilitation and preservation efforts.

There are certain tax exemptions available through the State, for historic public buildings or archeological sites on private property. Investment tax credits are also available both federally and from the State, to pay for the rehabilitation of historic structures that are listed on the State or National Register of Historic Places. Lastly, Transportation Enhancement funds may be applied towards the rehabilitation of historic transportation facilities such as depots or locomotives.

There are a large number of other privately honored grant and foundation organizations that work to fund historic preservation efforts. But grassroots fundraising, through dinners, tours, auctions, pledge drives, etc. remains a critical component of most historic preservation efforts. Volunteerism is crucial.



**Cultural Resource Policies**

- 1) Prevent activities that directly or indirectly alter, disturb, or destroy significant historical sites and buildings within the Town of Turtle.
- 2) Continue installing historical markers and other signage identifying important historical people, places and events throughout the Town of Turtle.
- 3) Complete improvements to attract tourism and interest in the Railroad 5-Arch Bridge and surrounding area.