CHAPTER 6 Cultural and Natural Resources

Introduction

Cultural and natural resources help create a sense of place and identity for Erin Prairie residents. The preservation and promotion of cultural resources can have a positive impact by acknowledging the historical development of the Town of Erin Prairie and instilling pride in residents. The Township name itself, Erin Prairie, and St. Patrick's Catholic Church, remind residents of the Town's Irish heritage. Over time, the native landscape of the Town has been altered by human activity, mainly farming. The preservation of the remaining native landscapes and restoration of those that have been altered helps to preserve aesthetic value and to protect of wildlife.

Cultural Resources

Town History

The earliest history of the Town of Erin Prairie centered on two areas still referred to as Jewett (Mills) and Erin Corners (see Map 6-1). Jewett Mills was founded by a Mr. Jewett, who came from the east in the late 1800's, dealt in real estate and started selling lots in his new development, Jewett Mills.

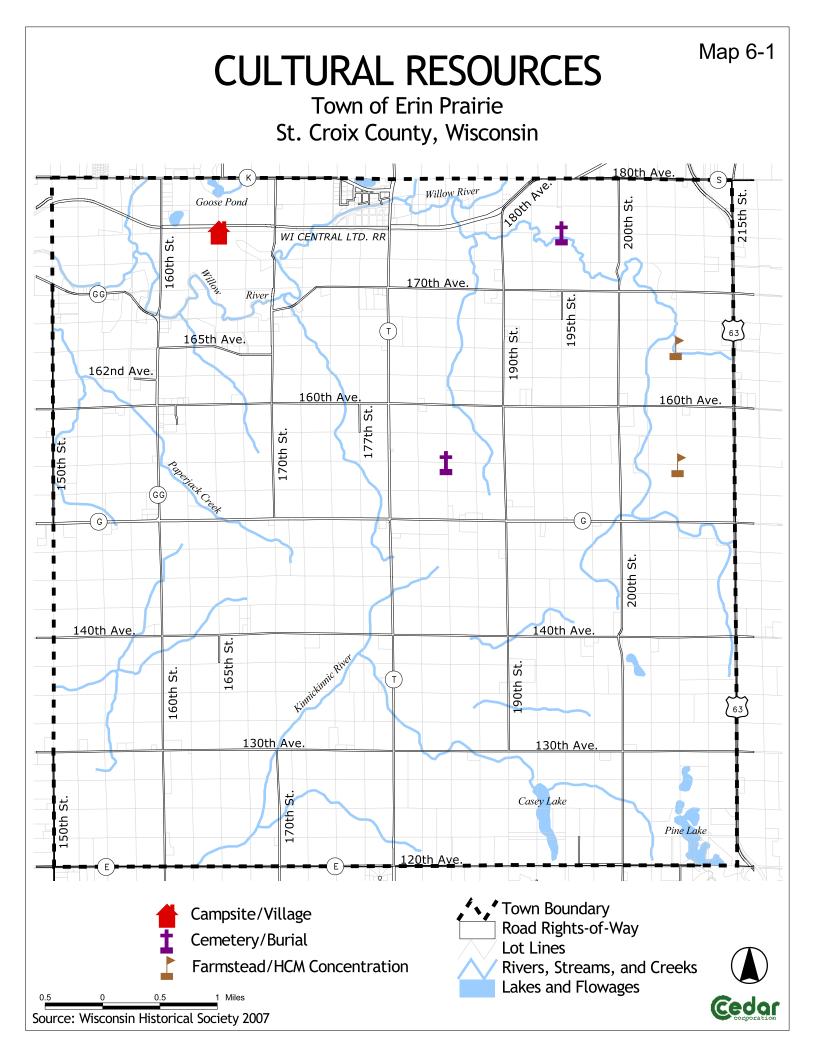
About 1900, Jewett Mills had a water driven saw mill and a grist mill. The community benefitted from having the railroad running through the south side of the development. At its peak, the population of Jewett Mills reached approximately 300 residents. The population began to wane as the railroad quit making stops in the area.

Erin Corners grew because of speculation that the Wisconsin Central Railroad was going to be coming through this area. When the railroad was built to the north, by Jewett Mills, the concentration of residents quickly dwindled. At one time, there were six school houses in the Town.

Archeological Sites

The Wisconsin Historical Society (WHS) maintains a database of known archaeological sites and historical buildings. There may be other sites not yet identified.

A search of the Wisconsin Historical Society (WHS) database reveals five archeological sites within the Town of Erin Prairie *(see Table 6-1, Map 6-1)*. The locations are general in nature to discourage human disturbance. The significance of the sites is not known at this time.



Site #/Burial Code	Site Name	Site Type	TRS		
BSC-0025	St. Patrick's Roman	Cemetery/Burial	T30N R17W S15		
	Catholic Cemetery				
BSC-0032	Unnamed Cemetery	Cemetery/Burial	T30N R17W S2		
SC-0063	PHST 2	Campsite/village	T30N R17W S5		
SC-0126	Walsh Farmstead	Farmstead	T30N R17W S13		
		*HCM concentration			
SC-0129	E. Manley Farm	Farmstead	T30N R17W S12		
	-	*HCM concentration			

 Table 6-1
 Archeological Sites

Source: Wisconsin Historical Society 2007

HCM concentration: Historic Cultural Materials Concentration: historic artifacts, dumps, and abandoned equipment.

There are current laws and statutes in place that protect these sites. Federal projects need to ensure that projects such as highways, do not adversely affect archeological sites (Section 106). In Wisconsin, state projects (Sec.44.40), political subdivisions (Sec.44.43), burial sites (Sec.157.70), rock art sites (Sec.943.01), public lands (Archaeological Resource Protection Act of 1979), and state lands (Sec.44.47) are all protected.

Wisconsin Architecture and History Inventory

The Architecture and History Inventory (AHI) was started in the mid-1970s (see Table 6-2) to collect information on historic buildings, sites, and structures. Beginning in 1980, more intensive surveys were conducted by professional historic preservation consultants and funded through subgrants.

A search of the AHI database shows that there are 6 properties in the Town of Erin Prairie. The properties and their AHI reference number are listed below.

Ahi #	County	Township	Location	Resource Type	
23731	ST. CROIX	ERIN PRAIRIE	NW NE T30 R17W S11	HOUSE	
23732	ST. CROIX	ERIN PRAIRIE	SW NW T30 R17W S12	CENTRIC BARN	
23733	ST. CROIX	ERIN PRAIRIE	SE SW T30 R17W S14	TOWN HALL	
23734	ST. CROIX	ERIN PRAIRIE	SE NE T30 R17W S15	HOUSE	
23735	ST. CROIX	ERIN PRAIRIE	SE SE T30 R17W S15	CHURCH	
23737	ST. CROIX	ERIN PRAIRIE	NE NW T30 R17W S31	OTHER	

 Table 6-2
 Architecture and History Inventory

A listing on the AHI registry imposes no restriction or special status on the property. The inventory has not been updated to show structures that have been demolished, moved, or given new addresses over time. This list should be used as a starting point for any local research into the creation of historical districts or the historical designation of homes, structures, or sites.

St. Croix County Historical Society

The St. Croix County Historical Society is located in Hudson, Wisconsin and maintains historical records for St. Croix County. There is no information related to historical structures but residents interested in local history can find information in four publications:

- 1. Historical Map of Saint Croix County, published by the St. Croix County Historical Society in 1974.
- Cows, Creameries and Cheese Factories, a St. Croix County Homemakers Association publication, 1995. (Has information on Jewett Mills Creamery, Gaughan Cheese Factory and Erin Cooperative Cheese Factory.)
- 3. Remembering Rural Schools of St. Croix County, St. Croix County Extension Homemakers publication, 1991. (Has information on the following schools: Jewett Mills, Liberty, Dry Run, Willow River, Erin Corner And Banner.)
- 4. Westward to the St. Croix, Harold Weatherhead, 1978, St. Croix County Historical Society. (Mentions the Erin store)

Natural Resources

Surface Water /Stream Corridors

Surface waters and stream corridors provide habitat for a wide variety of animals and plants, serving as foci of tourism and recreation. Protection of these water resources is critical to maintaining the water quality, and wildlife diversity that attract people to these resources.

Threats to these water resources are typically sedimentation and pollution, both point and non point, that is related to the disturbance of the land cover due to urban/rural development and agricultural practices. Since over 87% of the Town is zoned for exclusive agriculture, non-point sources comprise the vast majority of water-quality problems. It is essential that BMPs be practiced by all producers. Manure spreading and stockpiling shall be compliant with existing ordinances.

Development within the watersheds that directs runoff into local lakes and rivers or their tributaries should be completed in a way that minimizes impact on the natural system, and addresses potential pollution problems through the use of best management practices. Best Management Practices (BMP) designed to control stormwater runoff rates, volumes, and discharge quality can be used to protect water resources in developed areas and include shoreland buffers, erosion control, and the preservation of natural environmental corridors.

In the Town of Erin Prairie, the main surface waters are Casey Lake, Pine Lake, the Willow River, and the Kinnickinnic River (see Map 6-2). The Kinnickinnic River is designated as an outstanding resource water while the Willow River is designated as an exceptional resource water by the Wisconsin Department of Natural Resources (WDNR).

Both outstanding and exceptional resource water are surface waters which provide outstanding recreational opportunities, support valuable fisheries, have unique hydrologic or geologic features, have unique environmental settings, and are not significantly impacted by human activities. The main difference between the two designations is that typically, there are no direct source pollutants being discharged into outstanding resource water.

Floodplains

Floodplains are areas, which have been, or may become inundated with water during a regional flood. A regional flood is often referred to as a 100-year flood, having a 1% chance of occurrence in any given year. Because of dangers posed by a flood event, most structural development within a floodway is disallowed. Development within the floodfringe is generally accepted, provided adequate floodproofing measures are taken.

Map 6-2 shows floodplains in the Town of Erin Prairie. Most of these areas are adjacent to the Willow River with some areas running along the creeks that flow into the Willow River. There are substantial areas of land along the Willow River that can experience flooding. Land uses in these areas are regulated by St. Croix County.

Shorelands

Shorelands are connections between land and water. Shoreland areas serve as environmental buffer zones, catch potential pollutants, and filter runoff before it enters the waterway. These buffer zones also provide habitat for a wide range of plant and animal species and, in many cases, are considered environmentally sensitive areas. Shoreland areas are also very attractive as housing and second-home sites.

St. Croix County has ordinances in place regulating shoreland development. Shoreland buffer areas extend out 1,000 feet from lakes and ponds and 300 feet from rivers and creeks. The County's Shoreland Zoning addresses minimum lot sizes, the use of septic tanks, removal of natural shoreland cover, building setbacks, etc.

Wetlands

A majority of wetlands in the Town of Erin Prairie can be found in the northwest corner of the Town (see Map 6-3). These areas coincide with the floodplain areas shown in Map 6-2. Additional wetland areas can be found along portions of the creeks and near Casey Lake and Pine Lake in the southeast corner of the Town.

Wetlands act as natural filters, removing sediments and contaminants from water. Wetlands regulate water levels by containing water during periods of excessive rain or snow melt. These unique environments are host to a wide variety of plant and animal communities, including some threatened and endangered species. Wetlands serve as rest areas for migratory waterfowl during the fall and spring months and as sources of groundwater recharge and flood control. In the past decade, strict regulation has slowed the loss of wetland habitat and made conversion to other uses expensive and impractical. Wetlands, particularly disturbance of wetlands, are regulated by the Army Corp of Engineers, Wisconsin Department of Natural Resources, and St. Croix County.

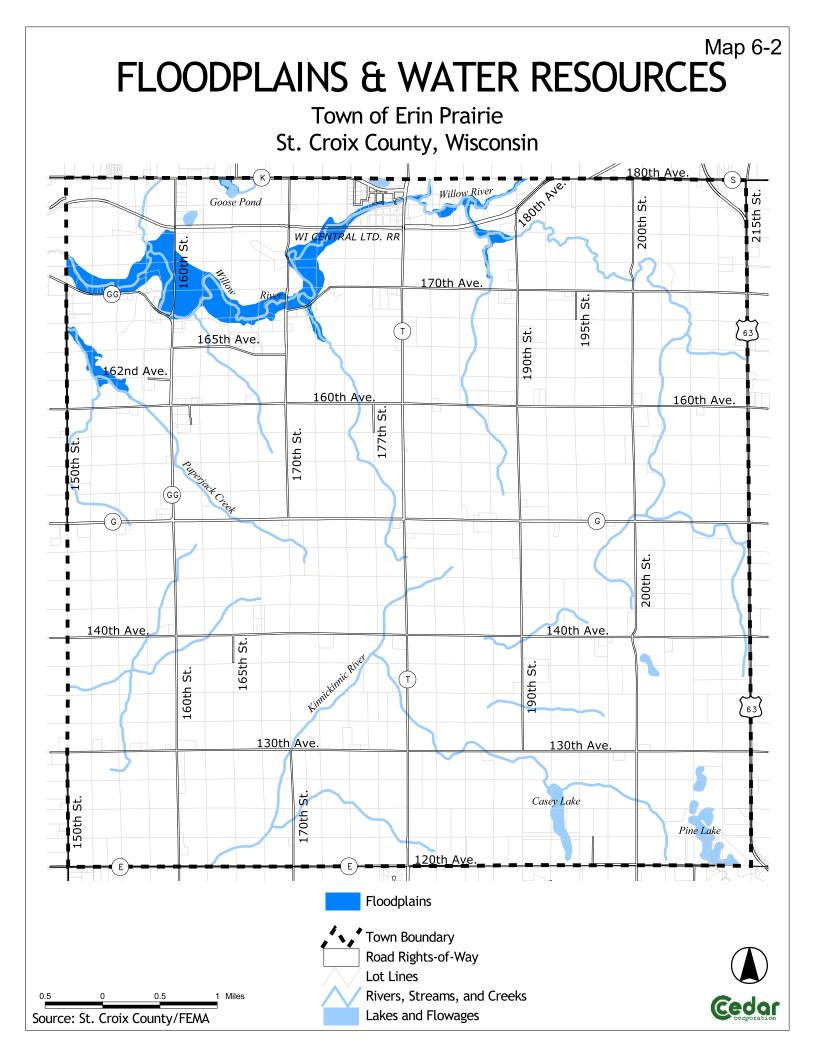
Watersheds

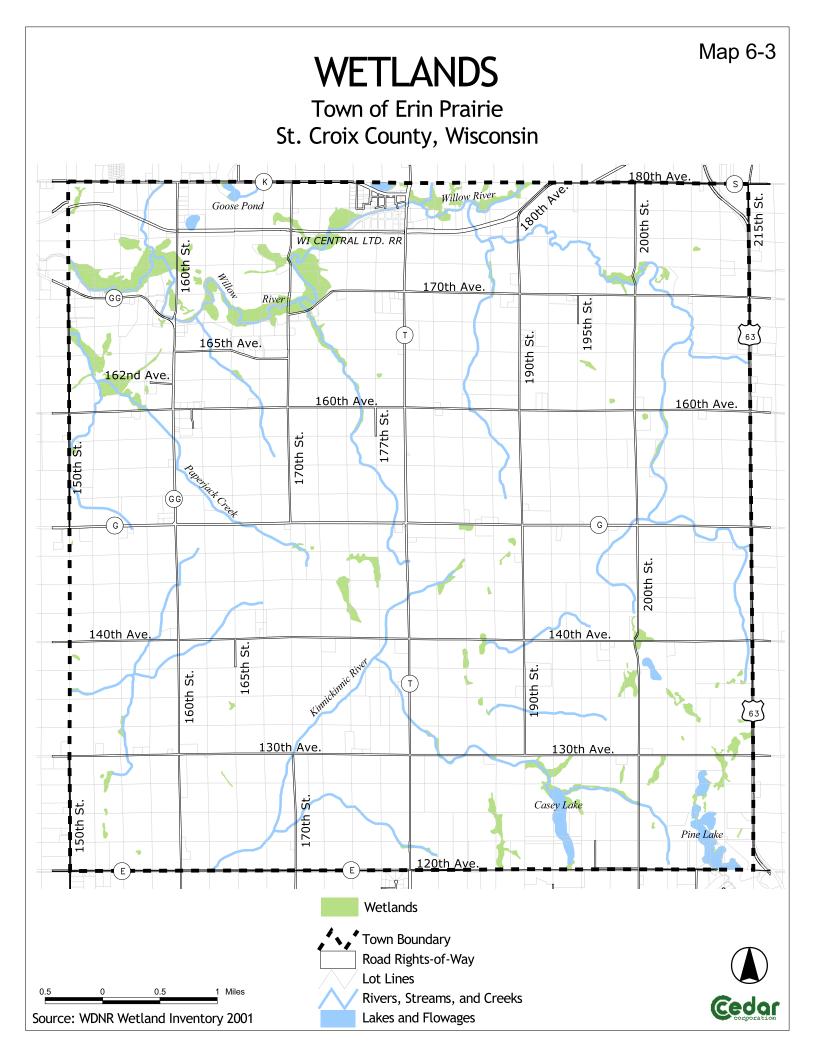
Map 6-4 identifies three watersheds in the Town of Erin Prairie. These are the Kinnickinnic River, Lower Willow River, and Upper Willow River watersheds.

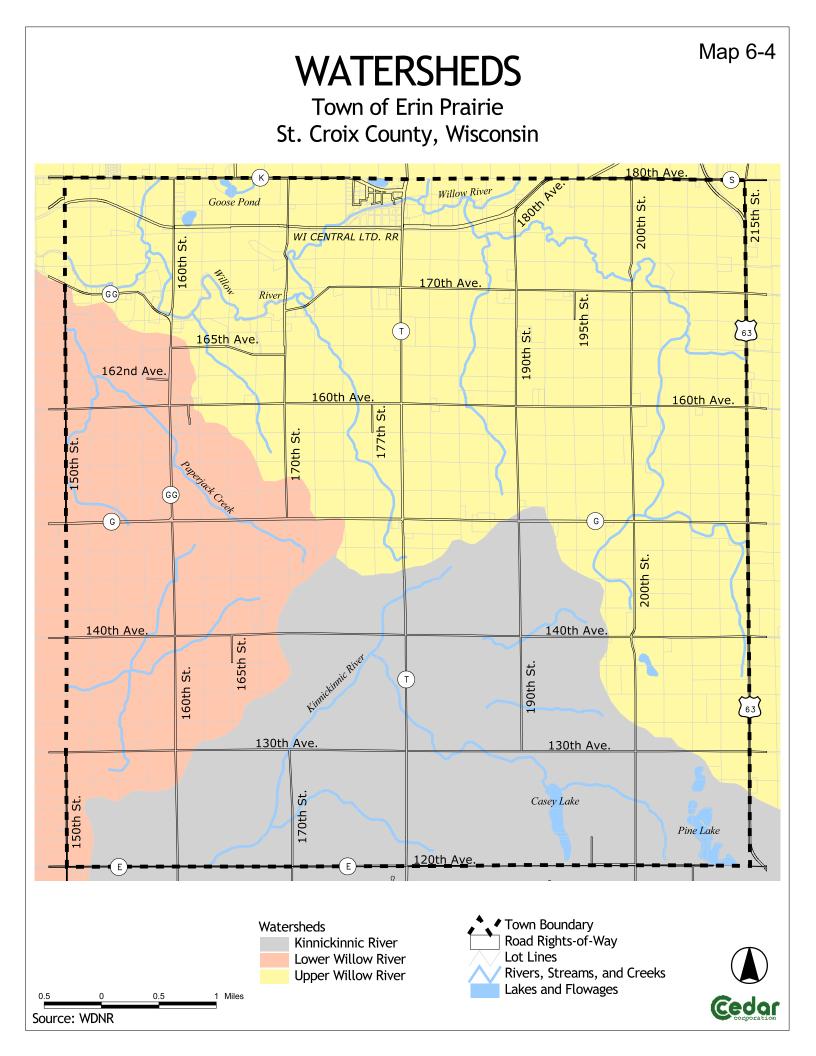
These watersheds can be described as areas of land that drain into a stream or other local surface waters. Watersheds are delineated topographically, by finding the ridges from which down-slope movement will collect at a common low point (usually some type of surface water). As water runs over the land either from storm events or snow melt, it can pick up and transport sediment and pollutants.

The sediments, contaminants and pollutants suspended in the runoff eventually reaching surface waters. Typically a body of water is a reflection of its watershed. If there are significant sources of pollutants within the watershed that are exposed to erosion, they are likely to eventually end up in those surface waters.

Portions of Erin Prairie are part of the St. Croix Lakes Priority Watershed. Project goals within priority watersheds focus on water quality improvements or protection resulting from reductions in pollutant levels delivered to streams, rivers, and lakes. In agricultural areas, best management practices in watersheds can be nutrient and pesticide management, contour strip cropping, or alternating livestock watering locations to preserve streambanks from erosion.







<u>Groundwater</u>

Groundwater is one of the town's most important natural resources. If it is contaminated, or mined and depleted, there will be serious impacts on human health and well being. Drinking water in the Town is sourced from groundwater and obtained by wells. If the groundwater becomes contaminated, there are few alternative sources of potable water for local residents.

Map 6-5 shows the generalized water table elevation in the Town of Erin Prairie. Generally, water flows in a southeast to northwest direction with the groundwater being deeper in the southeast corner of the Town while being shallower in the northwest region.

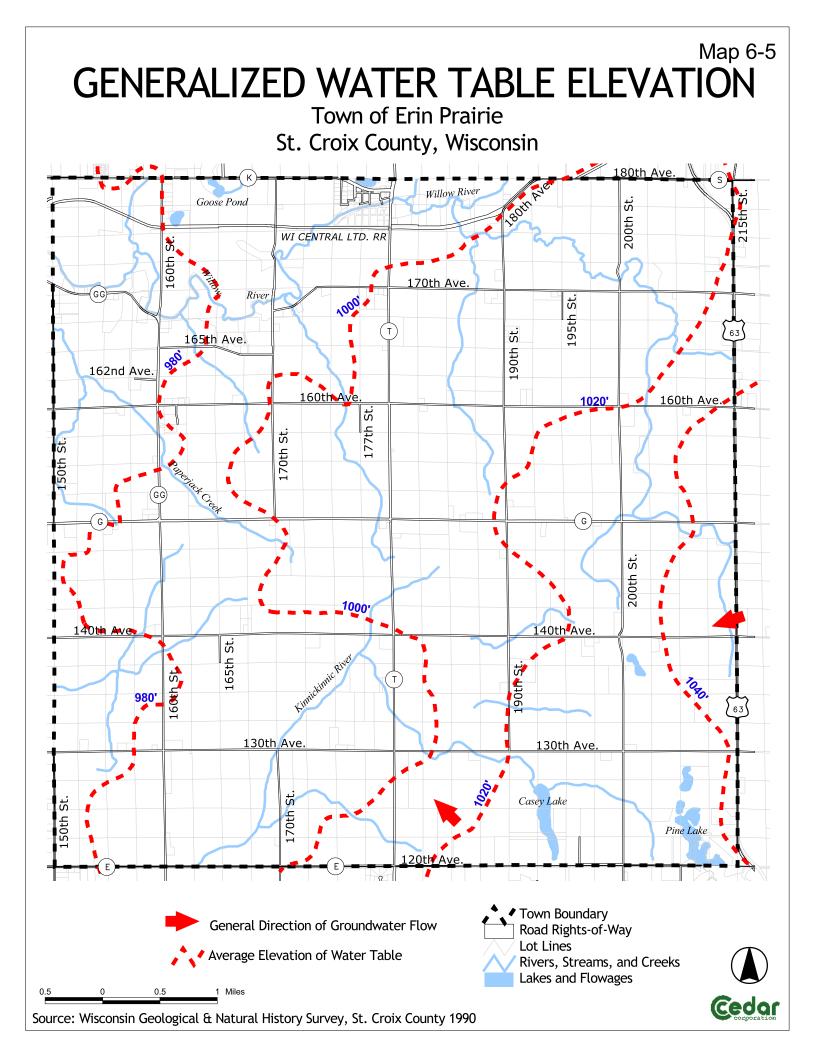
Map 6-6 shows groundwater contamination susceptibility in Erin Prairie. Susceptibility refers to the ease with which contaminants can be transferred from the land surface to groundwater. Most contamination of groundwater originates at the surface of the land and permeates through to the groundwater. Once contaminated, groundwater is difficult to clean. The groundwater contamination susceptibility map combines five physical resource characteristics to determine susceptibility to contamination: depth of bedrock, type of bedrock, soil characteristics, depth of water table, and characteristics of surficial deposits. The map can be used with other resources to help make groundwater and land-use planning decisions.

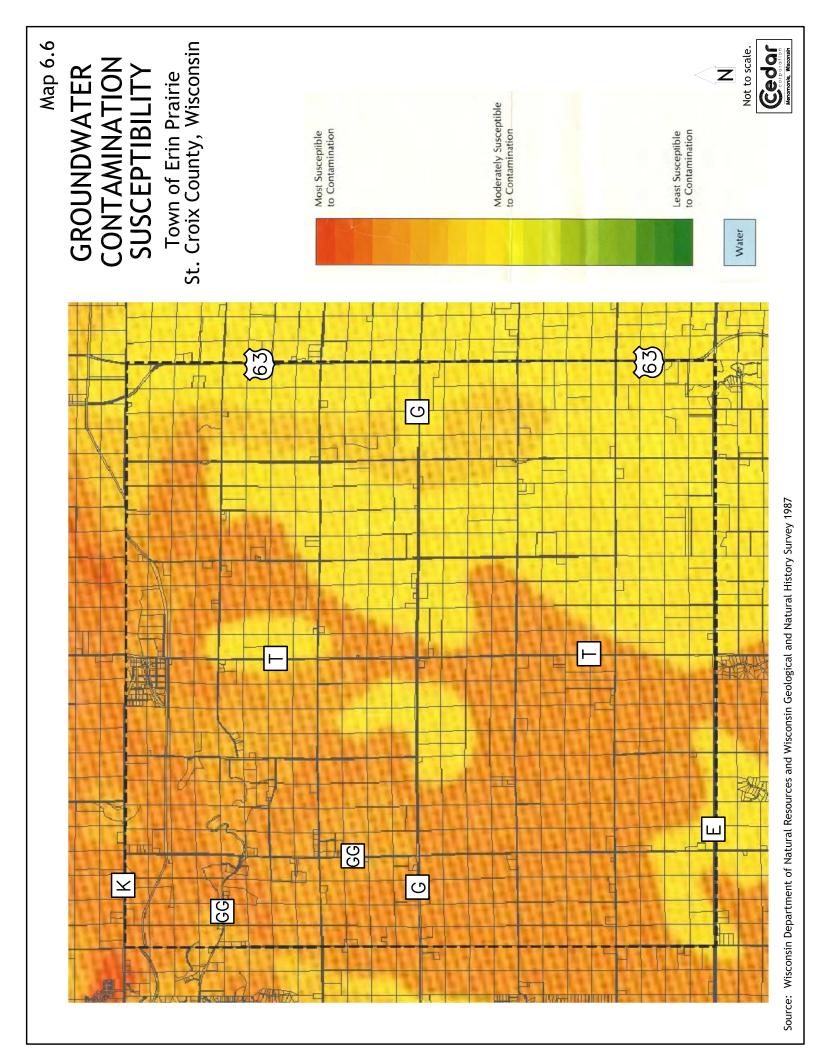
The depth of groundwater closely resembles the water table elevation contours and groundwater contamination susceptibility maps (see Map 6-7). Groundwater is generally deeper in the southeast corner of the Town and gets shallower as you move to the northwest corner near the Willow River.

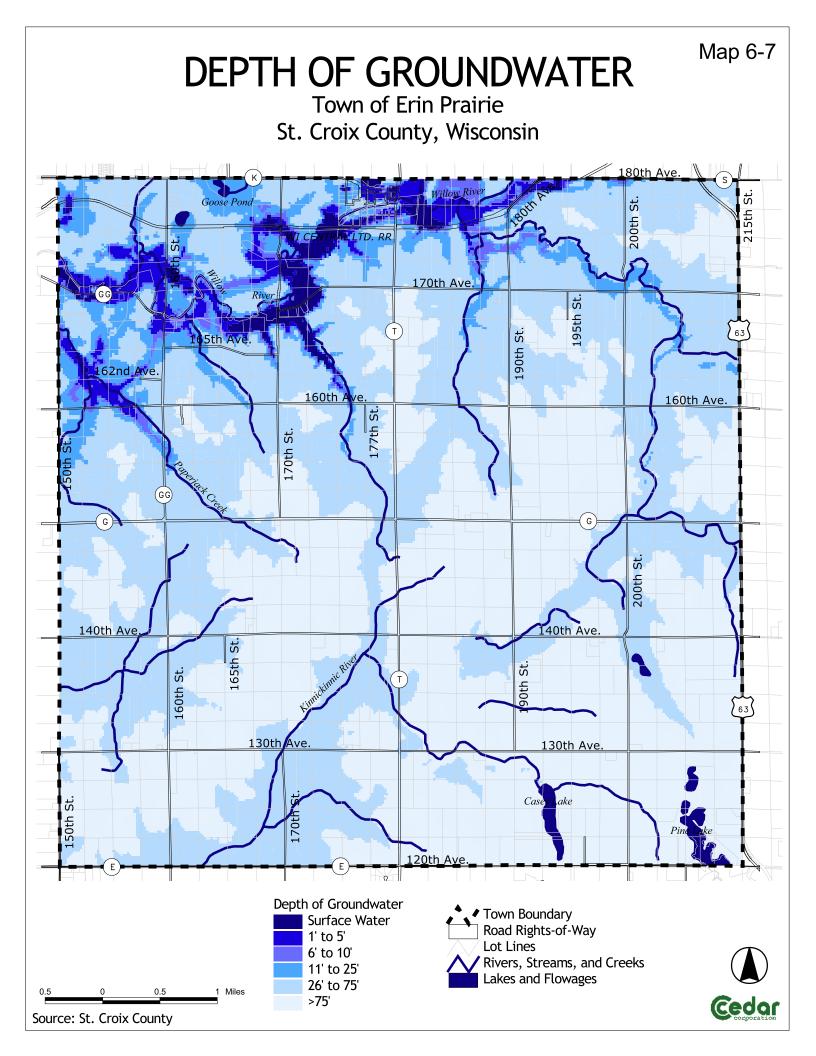
<u>Atrazine</u>

The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) is responsible for protecting groundwater from contamination by pesticides and fertilizers, and can restrict the use of agricultural chemicals that are contaminating groundwater at levels above health-based standards.

Atrazine is a common herbicide that is used to control weeds in corn fields. It can seep into groundwater as a result of its use on farm fields, spills, or improper disposal. The DNR has established a health-based standard or enforcement standard for atrazine (combined with its breakdown components) in groundwater of 3 parts per billion (ppb). Map 6-8 shows areas in Erin Prairie where the use of atrazine is prohibited. It is a concern that consuming low levels of atrazine over time may cause health problems. The areal extent of this contamination may have grown since the prohibition was established. Water testing should be implemented to characterize the current extent of this problem.





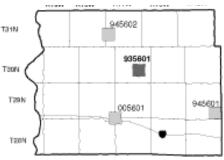


PROHIBITED ATRAZINE AREA

Town of Erin Prairie St. Croix County, Wisconsin

St. Croix County Town of Erin Prairie T30N R17W PA 93-56-01

All uses of atrazine are prohibited on lands within the shaded regions. There are four prohibition areas in St. Croix County. Refer to each map for specific locations.





Map 6-8

<u>Triazines</u>

Triazine is the term used to refer to the group of three breakdown components of atrazine. Figure 6-1 shows triazine levels in private wells that were tested between 1999-2005.

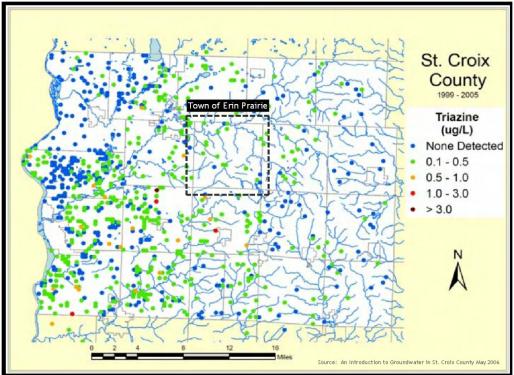


Figure 6-1 – Triazine Levels: St. Croix County 1999 - 2005

In 2006, the UW-Extension produced a report titled *Introduction to Groundwater in St. Croix County*. The report collected information to highlight groundwater concerns and to increase groundwater awareness among residents. Below is information the report stated relating to triazine in tested private wells throughout St. Croix County.

Results from St. Croix County revealed that 49% of the wells that were tested contained measurable amounts of triazine in the groundwater. These results are based on the triazine screen tests performed during the water testing programs. While none of the tests were over the 3 ppb standard for atrazine, this test is only a screening tool and often underestimates the amount of atrazine and its breakdown components. However, this is only one of many pesticides that are used in St. Croix County and does show that groundwater in St. Croix County is susceptible to contamination from localized pesticide use and is being affected by it. Care should be taken by individuals when deciding on the types and application rates of pesticides, and strategies should be developed to minimize the potential adverse health effects and environmental impacts that result from pesticide use.

Center Point Irrigation Wells

High capacity wells are permitted through and regulated by the Wisconsin Department of Natural Resources. There are several high capacity wells in the Town of Erin Prairie. These wells draw from the groundwater and are used for the irrigation of crops. The most recent high capacity wells were completed in 2009.

As part of the high capacity well's permit, the maximum withdrawal rate or pumpage, is limited to prevent impact to other wells, springs, trout streams, outstanding or exceptional resource waters, and withdrawals involving high water loss. Technological advances that reduce evaporative water loss, like low-pressure drip application, need to be used. Diesel engines used to power pumps and irrigators contribute noise pollution, and should be fitted with exhaust-muffling devices that prevent noise contamination of neighboring properties.

Threatened or Endangered Species

Map 6-9 shows areas with known rare species and natural communities. These areas are also referred to as threatened or endangered species.

According to the U.S. Fish and Wildlife Service, an "endangered" species is one that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is one that is likely to become endangered in the foreseeable future. These species are protected because of their scientific, educational, aesthetic, and ecological importance.

The Wisconsin Natural Heritage Inventory Program maintains data on the location and status of natural features, rare species, and natural communities in Wisconsin. These sites are broad in nature and provide a general location for rare, threatened, or endangered species as well as high-quality natural communities. The areas shown on the map are general in nature in order to discourage human disturbance. Know occurrences are located near the main water resources in the Township.

Steep Slopes

The definition for steep slopes comes from the United States Department of Agriculture Soil Conservation Service and is described as land having a slope of 12% or greater. Steep slopes are particularly vulnerable to erosion and require special management. Erosion can impair waterways and damage habitat. A majority of steep sloped areas can be found along the lakes, rivers, and creeks in the Town (see Map 6-10).

Maintaining the natural environment present on steep slopes can provide the necessary management to limit erosion. Restricting development, particularly development that clears these sensitive areas, can be implemented to limit erosion.

Forests

Both forest land and prairie that formed this dominant historical land cover of Erin Prairie have been converted over time into farmland. Many of the larger tracts of forested land and prairie can be found on areas unsuitable for farming, owned by the WDNR or U.S. Fish and Wildlife, or in CRP acreage privately held land (see Map 6-11). A majority of the forested land can be found in the northwest and southeast portion of the Town.

Both forests and prairie cover provide valuable wildlife habitat and are the homes for less visible threatened and endangered plant and wildlife. Prairie vegetation is particularly important because its substantial below-ground biomass builds soils that have been damaged by agricultural. These areas also offer erosion control for river banks and steep slopes. Contiguous forest is extremely important as fragmented forests can result in the disruption of habitat and can lead to problems between wildlife and humans.

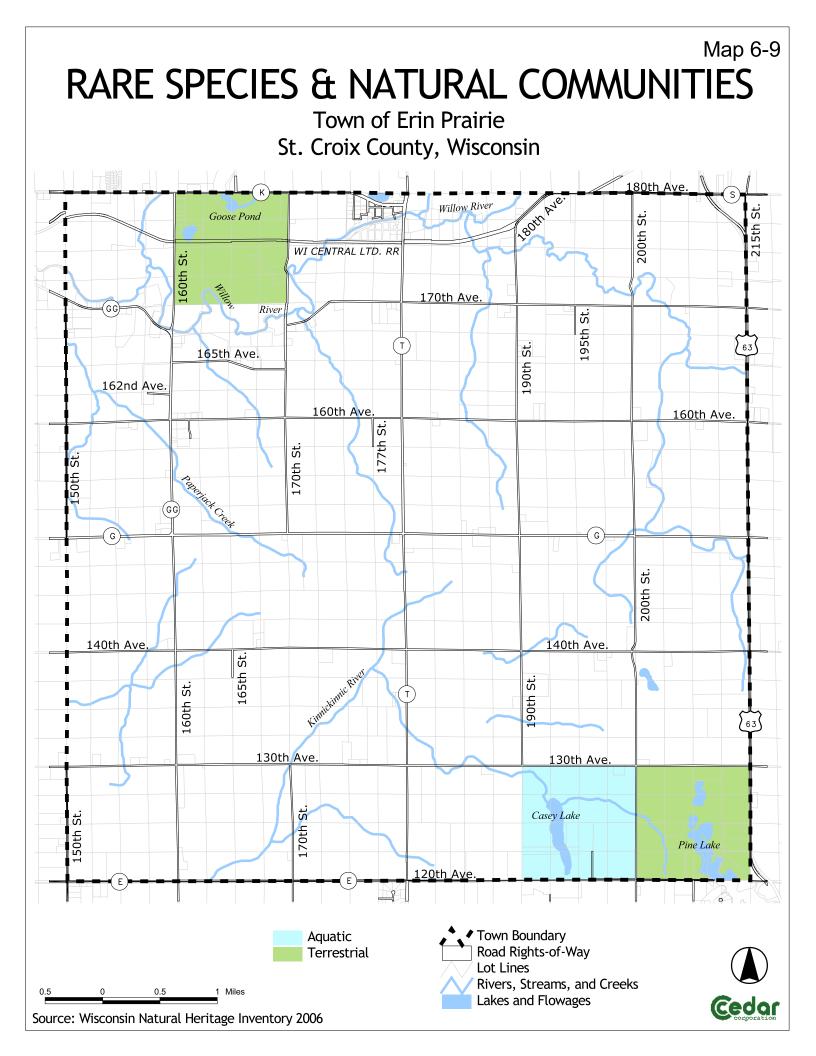
Bedrock Geology

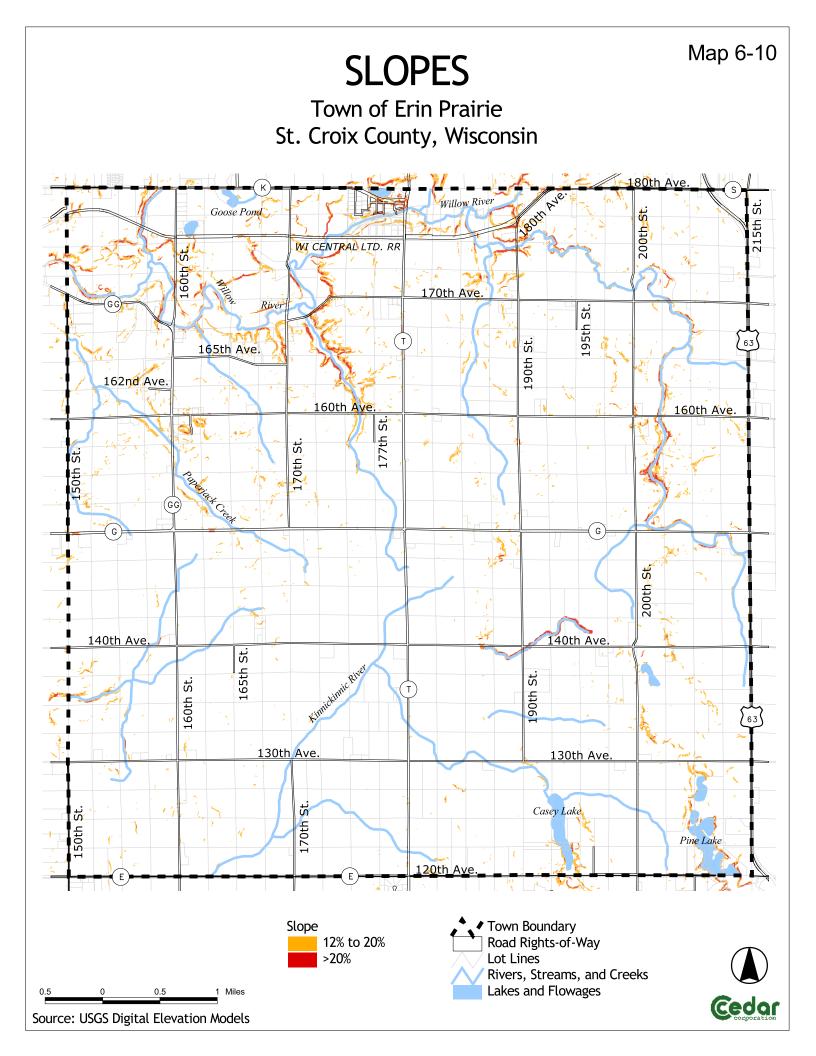
The bedrock underlying the majority of the Town of Erin Prairie is Ordovician Age Prairie du Chien dolomites and some small areas of Ancell Group sandstone. The depth to bedrock varies across the Town but is generally less than 30 meters (98.4 feet) below the ground surface. The majority of water supply wells are likely drilled into bedrock.

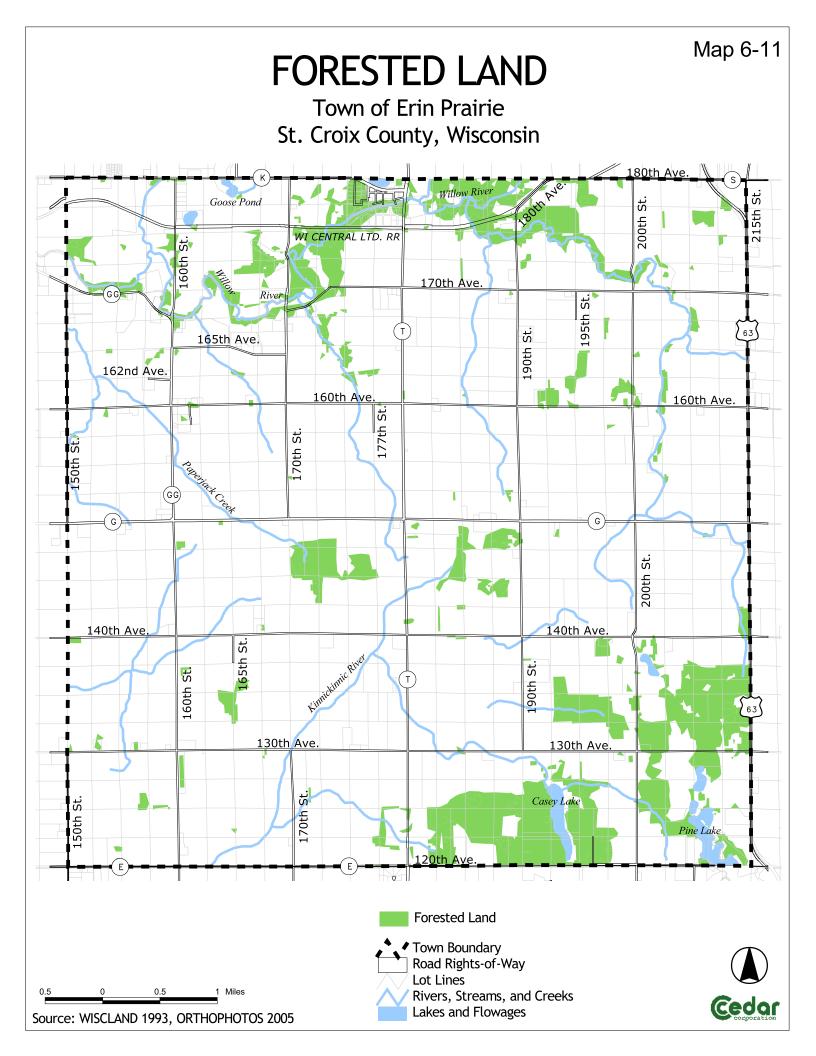
Metallic/Non-metallic Mineral Resources

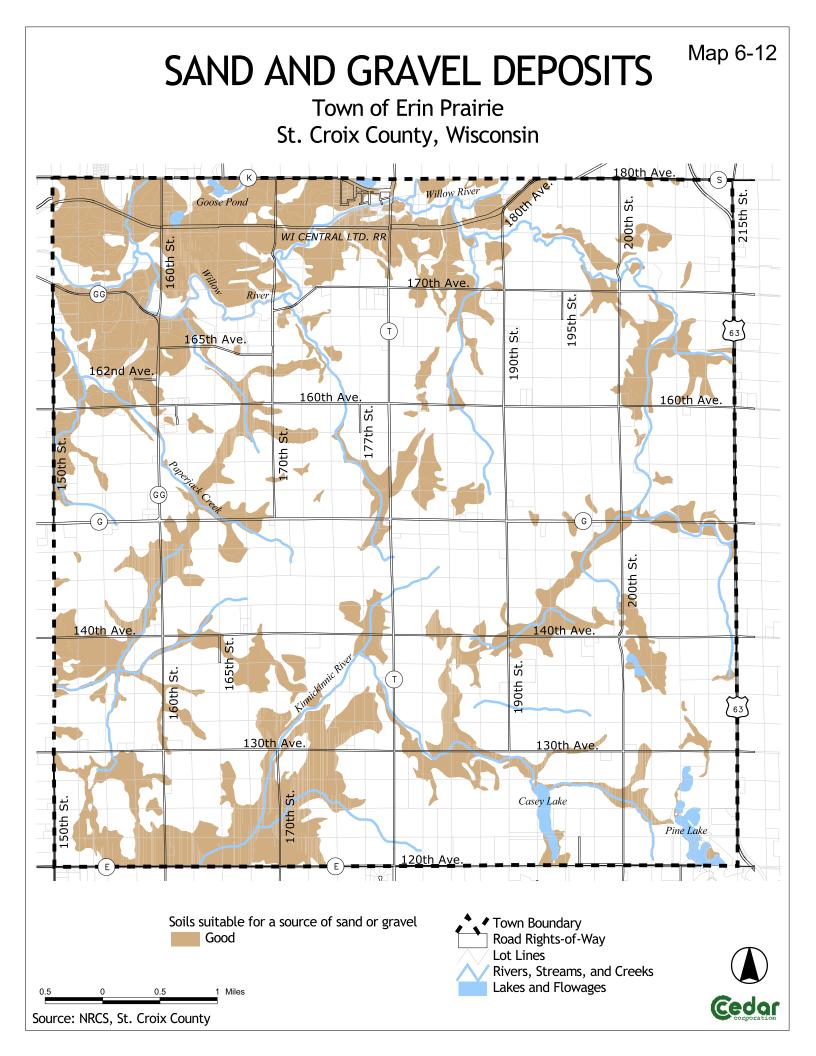
Metallic and Non-metallic mineral resources are naturally occurring sources of metalbearing ore and non-metallic (rock or sand and gravel) materials, respectively. When economically viable, these materials may be removed through mining to process the raw materials into commercial or industrial products. Mining in St. Croix County is limited to sand and gravel pits. Map 6-12 shows the locations where soils are classified as suitable for sand and gravel deposits.

Metallic mining is regulated by the Wisconsin Department of Natural Resources. Nonmetallic mining is regulated by local counties and St. Croix County has ordinances in place regulating non-metallic mining and reclamation following completion of mining activities.









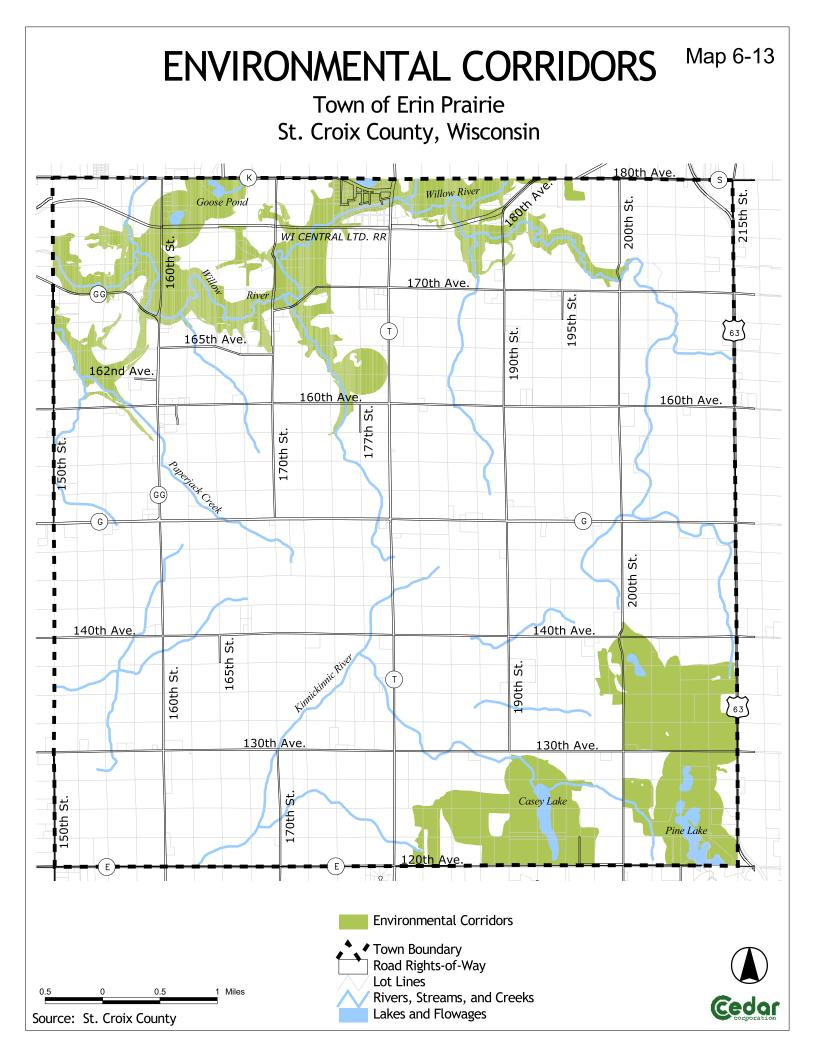
Parks/Open Space/Recreational Resources

The Town of Erin Prairie does not have its own designated park or open space nor any developed recreational facilities. Map 5.1, in the Community Facilities and Utilities chapter, highlights lands owned by the WDNR or U.S. Fish and Wildlife.

Environmental Corridors

Environmental corridors are extremely important for the protection of aquatic and terrestrial wildlife and plants. The preservation and possible expansion of these corridors is vital to maintaining a diverse ecosystem. Areas typically included in environmental corridors are forests, lakes, streams, rivers, wetlands, steep slopes, and shoreland buffers.

Map 6-13 shows areas identified as environmental corridors in the Town of Erin Prairie. The map represents primary environmental corridors as classified by St. Croix County. The areas shown can include environmentally sensitive areas and important wildlife habitat.



Prairie-Remnant Corridors and the Natural Landscape

The Town of Erin Prairie is located in what is known as the Western Prairie Landscape. This area is typified by rolling topography, rich soils, prairie grasses, oak savannas, lakes, and rivers. Over time, much of the land in St. Croix County areas have been urbanized or converted into agricultural lands.

Map 6-14 shows remaining prairies and grasslands in the Town of Erin Prairie. The loss of prairie grasses has threatened many plant and animal species that once thrived in these areas. Prairies and grasslands can be restored to help maintain the diversity of this ecosystem. These prairies and grasslands are even more important to the historical flora and fauna of the Town than forested corridors cited above.

Air Quality

The WDNR implements an air management program that is designed to maintain and improve Wisconsin's air quality in order to protect public health and the environment. The main tasks of the air management program are:

- Monitor the air for pollutants
- Inspect emission sources
- Provide compliance assistance to industry
- Initiate enforcement actions when necessary
- Operate a permit program
- Educate the public about air quality issues

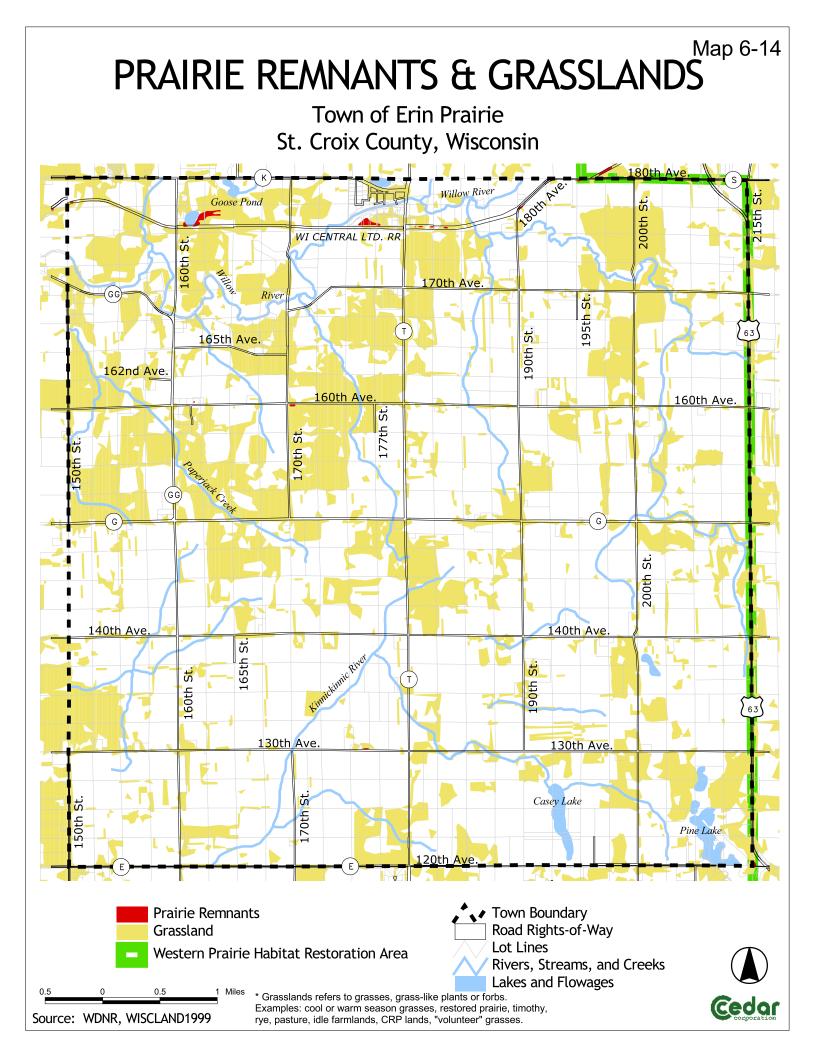
The nearest monitoring station is located in the Village of Somerset. Air quality is classified as good, moderate, unhealthy for sensitive groups, unhealthy, and very unhealthy. Advisories are issued when air quality reaches the unhealthy for sensitive groups level but can also be issued for the moderate level if on the high side.

Locally, residents can protect air quality by reducing the size of their lawns, use electric, rechargeable, or manual equipment instead of gas-powered mowers, plant slow growing grass, reduce driving trips and speeds, utilize landscaping to reduce heating and cooling costs for your home, and riding a bike or carpooling to work when possible.

Outdoor wood burners constitute a potential threat to local air quality and need to be regulated by local ordinances. Siting restrictions may need to be imposed in topographical depressions and river drainages where the pollutants become trapped under inverted, stable air conditions.

<u>Noise</u>

Rural areas are havens for peace and quiet. Activities such as diesel-powered irrigation rigs, grain dryers, and on-road/off-road vehicles that use Town roads should be appropriately muffled. Mud-racing and other vehicular competitions should be carefully reviewed and regulated via ordinances in the Town.



Cultural Resources Goals, Objectives, Policies, Programs, and Actions

Goal 1: Promote and preserve cultural and historical resources in the Town of Erin Prairie.

Objectives

- 1. Identify the Town's historical resources.
- 2. Support the creation of opportunities for residents to learn about the Town's history.

Programs, Policies, and Actions:

- 1. Support residents who feel they may have an archeological site or historical property on their land and want to preserve or register them.
- 2. Support residents who would like to form a historical preservation committee that documents structures or items in the Township that they feel have historical importance. Photos can be taken and these locations mapped.
- 3. Collect old photos of life in Erin Prairie or create a display of local history and have them in the Town Hall.
- 4. Identify "Century Farms" and acknowledge them with a sign or plaque.
- 5. Support the St. Croix Historical Society and assist in efforts to document the history of Erin Prairie.
- 6. Support the Wisconsin Barn Preservation which is a joint venture between the University of Wisconsin-Extension, <u>Wisconsin Trust for Historic Preservation</u>, and the <u>Wisconsin Historical Society</u> with the goal of both addressing public concerns and drawing attention to the importance of preserving the elements of Wisconsin's rural countryside.
- 7. Support the use of <u>BARN AGAIN!</u>, a national program to preserve historic farm buildings sponsored by the National Trust for Historic Preservation and Successful Farming magazine.
- 8. Collect interviews with older residents and have them talk about their experiences related to schooling, work, and life in Erin Prairie. The interviews could be recorded or videotaped.
- 9. Plant a prairie interpretive garden around the town hall, and work with the WDNR to install an information kiosk that explains the natural resource history of Erin Prairie.

Natural Resources Goals, Objectives, Policies, Programs, and Actions

Goal 1: To preserve the Town's natural resources and encourage the restoration of native prairie vegetation where possible.

Objectives

- 1. Protect the Town's water resources (groundwater, lakes, streams, wetlands, etc.).
- 2. Protect valuable habitat (floodplains, shorelands, forests, environmental corridors, etc.).
- 3. Protect air quality.
- 4. Promote and preserve unique natural areas.

5. Support and encourage participation in the Wisconsin DNR Western Prairie Habitat Restoration Area project, a farming and wildlife habitat cooperative venture.

Programs, Policies, and Actions:

- 1. Use DNR, St. Croix County, and UW-Extension staff to conduct workshops or for educational purposes.
- 2. Support the efforts of the Upper Willow River Rehab District to monitor water quality.
- 3. Support the use of sediment traps and other techniques that reduce the amount of sediment in rivers, streams, and lakes.
- 4. Work with surrounding communities and Counties to manage stormwater runoff.
- 5. Encourage the use of West Wisconsin Land Trust, the Star Prairie Land Preservation Trust, the USFWS, the WDNR or other groups to acquire or hold the easement to valuable land/habitat where feasible.
- 6. Promote development concepts such as Transfer of Development Rights and Conservations Subdivisions that protect farmland and other natural resources and conserve land.
- 7. Support St. Croix County developing regulations for outdoor wood burners.
- 8. Support the Town of Erin Prairie developing criteria to be evaluated before issuing building permits for outdoor wood burners and permits for operation of outdoor wood burners located in close proximity to neighboring dwellings.
- 9. Designate buffer areas along streams, lakes, and rivers where conservation easements and restorations of native vegetation would be desirable. Work with landowners and organizations to preserve these areas. Include buffering the public lands from future housing development. Include intermittent streams and dry runs worthy of buffers.
- 10. Encourage reduced and no tillage farming.
- 11. Maintain and mow grass waterways in fields to maintain their effectiveness
- 12. Encourage the use of programs such as the Conservation Reserve Program (CRP), Environmental Quality Incentives Program (EQIP), Grasslands Reserve Program (GRP), etc. that provide incentives for conservation of valuable natural resources and utilize UW-Extension, St. Croix County, NRCS and DNR staff to explain these programs at Town-sponsored educational meetings. Encourage enrollment in the CRP program called SAFE (State Acres for Wildlife Habitat Enhancement. Erin Prairie farmland is specifically targeted for this conservation and wildlife-friendly program
- 13. Partner with organizations such as Trout Unlimited, Ducks Unlimited, Pheasants Forever, Star Prairie Game and Fish, the WDNR, and the USFWS to preserve and restore wildlife habitat.
- 14. Encourage the rotational use of pesticides and herbicides to reduce concentrations and slow the evolution of plant tolerance and immunity.
- 15. Support the Working Lands Proposal of establishing the Purchase of Agricultural Conservation Easements (PACE) grant program that would be used to acquire agricultural easements for preservation of working farmland.