CHAPTER 4:

AGRICULTURAL, NATURAL, AND CULTURAL RESOURCES ELEMENT

This chapter provides a brief description of the agricultural, natural and cultural resources in the Village of Eagle and its surrounding area and associated preservation and protection issues. The chapter ends with implementation recommendations to protect agricultural, natural and cultural resources.

AGRICULTURAL, NATURAL, AND CULTURAL RESOURCE STRENGTHS:

- There is a community-wide desire to retain the "rural atmosphere" of the area, as referenced in numerous community surveys
- The centralized location of the Municipal Building serves as a genuine Community Center
- On-going efforts to collaborate with community organizations and neighboring communities to provide cultural and recreational programming
- Access to abundant potable water supplies

AGRICULTURAL, NATURAL, AND CULTURAL RESOURCE WEAKNESSES:

- Development groups and conservancy groups need to communicate and work together with regard to the proper use of land
- Incomplete public utilization of open spaces, in terms of pedestrian and bike paths

GEOLOGY AND PHYSIOGRAPHY

Surface Geology and Physiography

Four major stages of glaciation, the last of which was the Wisconsin stage, ending approximately 10,000 years ago in the State, have largely determined the physiography, topography, and soils of the Town. Map 4-1 presents the topographic and physiographic features of the County and the Town. The dominant physiographic and topographic feature in the Town and the Village of Eagle is the Kettle Moraine, an interlobate glacial deposit formed between the Green Bay and Lake Michigan lobes of the continental glacier that moved in a generally southerly direction from its origin in what is now Canada. The Kettle Moraine, which is oriented in a general northeast-southwest direction across western Washington, Waukesha, and Walworth Counties, is a complex system of kames, or crudely stratified conical hills; kettle holes formed by glacial ice blocks that became separated from the ice mass and melted to form depressions and small lakes as the meltwater deposited material around the ice blocks; and eskers, long, narrow ridges of drift deposited in abandoned drainageways. The Town is covered by a variety of glacial landforms and features, including various types of moraines, drumlins, kames, outwash plains, and lake basin deposits.

The combined thickness of unconsolidated glacial deposits, alluvium, and marsh deposits overlying bedrock exceeds 100 feet throughout most of the County. Thicknesses are greatest where glacial materials fill the bedrock valleys, and in areas of topographic highs formed by end moraines.

The most substantial glacial deposits, from 300 to 500 feet thick, are located in the northwestern part of the County in the lakes area and in portions of the Towns of Mukwonago and Vernon. The thinnest glacial deposits, 20 feet thick or less, are found along an approximately six-milewide band traversing the County in a northeasterly direction from the Village of Eagle to the Villages of Lannon.

Geologic properties can influence the manner in which land is used, since geologic conditions, including the depth to bedrock, can affect the cost and feasibility of building site development and provision of public facilities and infrastructure.

Bedrock Geology

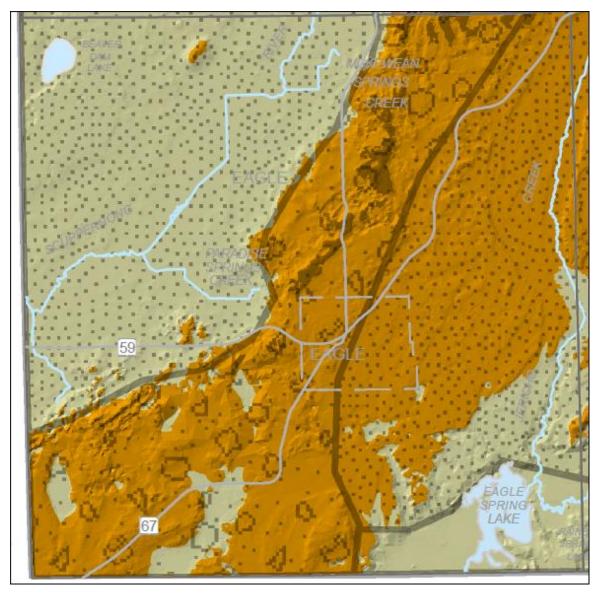
Bedrock topography was shaped by preglacial and glacial erosion of the exposed bedrock. The consolidated bedrock underlying Waukesha County generally dips eastward at a rate of about 10 feet per mile. The bedrock surface ranges in elevation from about 900 feet above mean sea level, at Lapham Peak, to approximately 500 feet above mean sea level in the eastern portion of the County. The bedrock formations underlying the unconsolidated surficial deposits of the County consist of Precambrian crystalline rocks; Cambrian sandstone; Ordovician dolomite, sandstone, and shale; and Silurian dolomite. The uppermost bedrock unit throughout most of the County is Silurian dolomite, primarily Niagara dolomite, underlaid by a relatively impervious layer of Maquoketa shale. In some of the pre-Pleistocene valleys in the southwestern and central portions of the County, however, the Niagara dolomite is absent and the uppermost bedrock unit is the Maquoketa shale.

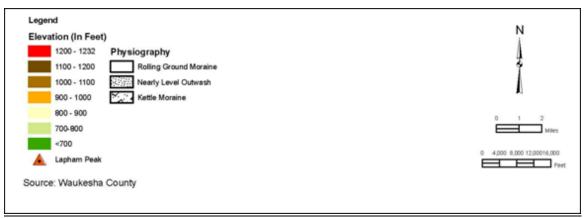
NATURAL RESOURCES AND SENSITIVE AREAS

Topography

Most of the Village of Eagle contains elevations that range between 900 and 1000 feet above sea level, or approximately 300 to 400 feet higher than the surface level of Lake Michigan. Immediately west of the Village, boundary elevations in the Kettle Moraine area are between 800 and 900 feet above level. Elevations immediately north-northeast of the Village rise to between 1000 and 1100 feet along a ridge that is part of the Kettle Moraine geologic formation. Elevations around Eagle Spring Lake are between 800 and 900 feet above sea level. Within the Village of Eagle the most significant topographical feature is the steeply sloped area that runs parallel to STH 59. Slopes along this ridge ranges from 13% to 20% of grade. Steep slopes in excess of 12% begin to present serious problems for residential and non-residential building construction. The ridge, steep as it is, is essentially as developed as possible. It lends picturesque topographic variety to Eagle's small downtown area. See Map 4-1

Map 4-1
TOPOGRAPHIC AND PHYSIOGRAPHIC FEATURES
IN AND AROUND THE VILLAGE OF EAGLE





AGRICULTURAL RESOURCES

Development in the Village of Eagle has reached levels that essentially preclude any large-scale farming and agricultural activities within Village limits. However, soils in the area have very high agricultural capabilities. Much of the Town of Eagle within 1.5 miles of the Village still contains very large parcels that continue to be farmed.

Soils

The major soil associations within the Village of Eagle and its 1.5 mile extraterritorial planning area are the Warsaw-Lorenzo and Roman-Casco Associations. Warsaw-Lorenzo soils, which are found in the eastern portion of the Village and surrounding area, are well-drained soils that have sub-soils of clay loam. They are moderately deep over sand and gravel. Roman-Casco soils, found in the western portion of the Village and surrounding area, are excessively well drained soils that have sub-soils of gravelly sandy loam and clay loam. Within the Kettle Moraine, they are shallow over gravel and sand. Most areas in the Village of Eagle and surrounding area present few problems for on-site septic sewage disposal systems and mound systems.

Prime Agricultural Lands

Prime agricultural lands in the Village of Eagle includes those lands in prime agricultural use, unused/open lands, and primary/secondary environmental corridor or isolated natural areas within a 5 square mile contiguous area that meet all of the following criteria: 1) is outside of any planned sewer service area boundary; 2) 75% is agricultural or open/unused land use; 3) 50% is Class I or Class II soils which meet Natural Resources Conservation Service standards; and 4) 75% consists of land ownership parcels of 35 acres or more.

These criteria are a modification of the standard used to prepare the Development Plan for Waukesha County in 1996. The definition used in 1997 became difficult to map using land information system technology. As a result, the County's Advisory Committee and Village Officials approved the modification of the standards used for the delineation of prime agricultural lands. The modified standards can be mapped using land information system technology. In general, the modified standards produced the same map results used in the 1997 Development Plan.

The standard utilized in the identification of prime agricultural lands in the design year 2010 regional land use plan, including the criterion indicating that the farm unit be located within a block of farmland at least 100 acres in size, and the criterion indicating that at least 50 % of the farm unit must be covered by Class I, Class II, or Class III soils was, to a large extent, based upon criteria utilized in the identification of farmland preservation areas in county farmland preservation plans completed within the Region in the early 1980s, including the Waukesha County Agricultural Land Preservation Plan. The 100-acre minimum combined farmland area was chosen for such plans because it was consistent with the State's minimum acreage planning criterion for farmland preservation areas under Wisconsin's Farmland Preservation Program. This relatively small area would enable the largest number of farmers to qualify for tax credits under the State Farmland Preservation Program.

While the recognition in a land use plan of smaller blocks of farmland may enable a larger number of farmers to qualify for tax credits, the maintenance of long-term agricultural use within such smaller blocks in an urbanizing region such as Southeastern Wisconsin has proven to be very difficult. Among those reasons frequently cited to explain that difficulty is the following:

- 1. Relatively large blocks of farmland are necessary to support such agriculture-related businesses as distributors of farm machinery and parts and farm supplies. Scattered, relatively smaller blocks of farmland do not provide the critical mass necessary for such agribusiness support enterprises. Consequently, farmers remaining in such smaller blocks must travel ever-increasing distances for support service.
- 2. In many cases, smaller blocks of farmland are merely remnants of formerly larger blocks which have been subject to intrusion by urban residential development. This intrusion has resulted in significant urban-rural conflicts, including problems associated with the objection by residents of urban-type land subdivision developments to odors associated with farming operations; to the use of fertilizers, herbicides and pesticides, and other agriculturally related chemicals; to the noise associated with the operation of farm machinery during the early and late hours of the day; and to the movement of large farm machinery on rural roads being used increasingly for urban commuting.
- 3. For most farming enterprises, the economies of scale require relatively large tracts of land, frequently involving many hundreds of acres. The breakup of large blocks of farmland by urban intrusion makes it more difficult for farmers to assemble such larger tracts either through ownership or rental arrangements. Tract assembly is thus complicated by scattered field locations, resulting in costly and inconvenient related travel distances and, therefore, in unproductive time and higher fuel consumption.
- 4. In agricultural communities on the fringe of urbanizing areas, there is often a declining interest among the next generation of farmers to continue farm operations. This is particularly true where alternative land uses are perceived to be available. This phenomenon is reinforced by the rigors of day-to-day farm life when compared with urban lifestyles.

Notes: National prime farmland consists of agricultural lands covered by U. S. Natural Resources Conservation Service-designated Class I and Class II soils. Class I soils are deep, well drained, and moderately well drained, nearly level soils with no serious limitation that restrict their use for cultivated crops. Class II soils are generally deep and well drained but may have some limitations that reduce the choice of plants that can be economically produced or require some conservation practices.

Farmland of Statewide importance consists of agricultural lands covered by U. S. Natural Resources Conservation Service-designated Class III soils. Class III soils have moderate limitations due to wetness, steepness or drought conditions that restrict the choice of plants or require special conservation practices or both.

The criterion specifying that prime agricultural lands include those areas where 50 % or more of the farm unit is covered by soils meeting U. S. Natural Resources Conservation Service standards for National prime farmland or farmland of Statewide importance was valid when the first county farmland preservation plans were prepared in the early 1980's. Inclusion of soils of statewide importance, or Class III soils, in the standard was appropriate even though such soils may have had marginal crop production value because a high proportion of the farms within the County then were dairy operations. Dairy operations can be viable even though a relatively large portion of the farm unit may be covered by Class III soils because such soils are suitable for grazing, production of animal feed crops, and the use of cover crops related to the dairy operations. However, increased specialization of farm operations, and loss of smaller "family" farms and dairy farms in Waukesha County has now raised questions concerning continued utilization of farmland of statewide importance, or Class III soils, as a criterion in the identification of prime agricultural lands within Waukesha County.

Local public officials, farmers, landowners, and soil scientists stated, at meetings held to review the preliminary 1997 Development Plan for Waukesha County land use plan, that lands covered by Class III soils should not be considered as prime farmland. It was noted that such soils in Waukesha County, being excessively wet, droughty or steep, rendering them unsuitable for the production of cash grain crops such as corn or soybeans. Because Class III soils are not as well-suited for intensive cash grain farming as Class I and Class II soils, and because of the significant loss of dairy farm operations within Waukesha County over the past three decades, lands covered by Class III soils no longer have the same inherent value as an agricultural resource as when dairy farms were prevalent. The criterion for the five square mile farmland block size is not a new criterion. Indeed, the Southeastern Wisconsin Regional Planning Commission utilized the five-square-mile-block criterion in the identification of prime agricultural land under the first-generation, design year 1990, regional land use plan adopted by the Commission in 1966. This criterion was established with direct input from, and utilizing the collective judgment of, University of Wisconsin-Extension agricultural agents working in the Region at that time.

WATER RESOURCES

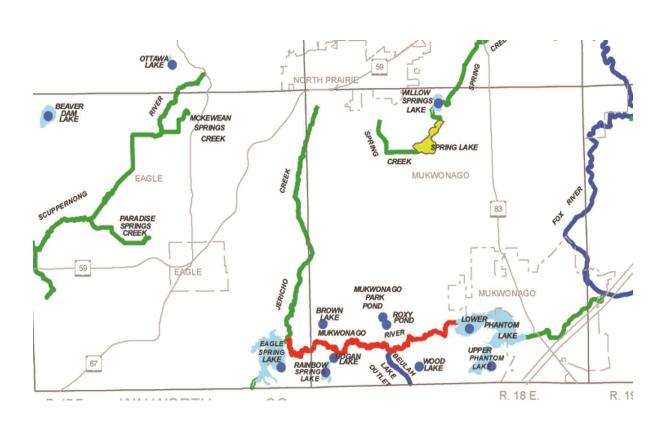
Streams and Surface Waters

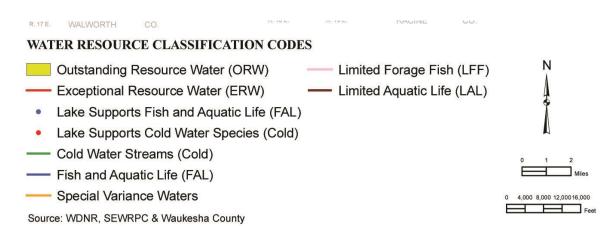
The major streams in the Eagle area are Scuppernong Creek and Jericho Creek. Scuppernong Creek is located west-northwest of the Village of Eagle and the Kettle Moraine State Forest. It is part of the Rock River watershed and drainage system. Jericho Creek runs near the eastern boundary of the Town of Eagle and is part of the Fox River watershed and drainage system (Map 4-2).

The major lake in the area is Eagle Spring Lake located in the southeastern portion of the Town of Eagle approximately 1.5 miles from the Village of Eagle (Map 4-4). Jericho Creek enters the Mukwonago River downstream from the Wambold Dam. There are also small ponds associated with the Kettle Moraine, including small ponds in the Old World Wisconsin historical site.

Notes: The Wisconsin DNR is required, under Wisconsin Statutes and the State Water Resources Act of 1965, to establish a set of water use objectives and supporting water quality standards applicable to all surface waters of the state. The type of aquatic community a particular surface water resource is capable of supporting is represented by the biological use objectives. The potential biological use of streams indicates the biological use or trout stream class a stream could achieve if it was well managed and pollution sources were controlled.

MAP 4-2 SURFACE WATER RESOURCES IN THE GREATER EAGLE AREA: 2008





Watersheds, Drainage, Floodplains and Wetlands

The northwest corner of the Village of Eagle sits astride the boundary between the Rock and Fox River watersheds. This boundary runs along the hilly spine of the Kettle Moraine State Forest. Areas to the west of this divide drain into the Scuppernong River sub-watershed of the Rock River watershed. Areas to the east of this divide drain into the Fox River watershed. There are no floodplains or wetlands within the Village of Eagle but large portions of the Kettle Moraine within the Rock River watershed west of Eagle are floodplains with wetland complexes. There are also floodplains and wetland complexes in the eastern portion of the Town of Eagle associated with Jericho Creek and Eagle Spring Lake. Most of the areas covered by the floodplain and wetland complexes are in close proximity to wooded areas (see below, under Woodlands) and together the mix of floodplain, wetland and woodland provides moderate to high quality wildlife habitats. As the Village and surrounding areas grow, and as the amount of impervious surface increases, the need to safeguard existing drainage patterns, the carrying capacity of floodplains, and these wildlife habitats will become greater. See map 4-3.

Aquifer Recharge Areas

A deep sandstone aquifer recharge area underlies the southeast portion and much of the western portion of the Town of Eagle. This recharge area is the source of the Village of Eagle's municipal water system. It is an important, high quality water resource and needs to be protected from unnecessary and incompatible land use development.

Groundwater Availability

Recharge to groundwater is derived almost entirely from precipitation. Much of the groundwater in shallow aquifers originates from precipitation that has fallen and infiltrated within a radius of about 20 or more miles from where it is found. The deeper sandstone aquifers are recharged by downward leakage of water through the Maquoketa Formation from the overlying aquifers or by infiltration of precipitation in western Waukesha County where the sandstone aquifer is not overlain by the Maquoketa Formation and is unconfined. On the average, precipitation annually brings about 32 inches of water to the surface area of the Village. It is estimated that approximately 80 percent of that total is lost by evapo-transpiration. Of the remaining water, part runs off in streams and part becomes groundwater. It is likely that the average annual groundwater recharge to shallow aquifers is 10 to 15 percent of annual precipitation.

The Wisconsin DNR has established Administrative Code NR 140 to establish groundwater quality standards for substances detected in or having a reasonable probability of entering the groundwater resources of the state; to specify scientifically valid procedures for determining if a numerical standard has been attained or exceeded; to specify procedures for establishing points of standards application, and for evaluating groundwater monitoring data; to establish ranges of responses the department may require if a groundwater standard is attained or exceeded; and to provide for exemptions for facilities, practices and activities regulated by the department.

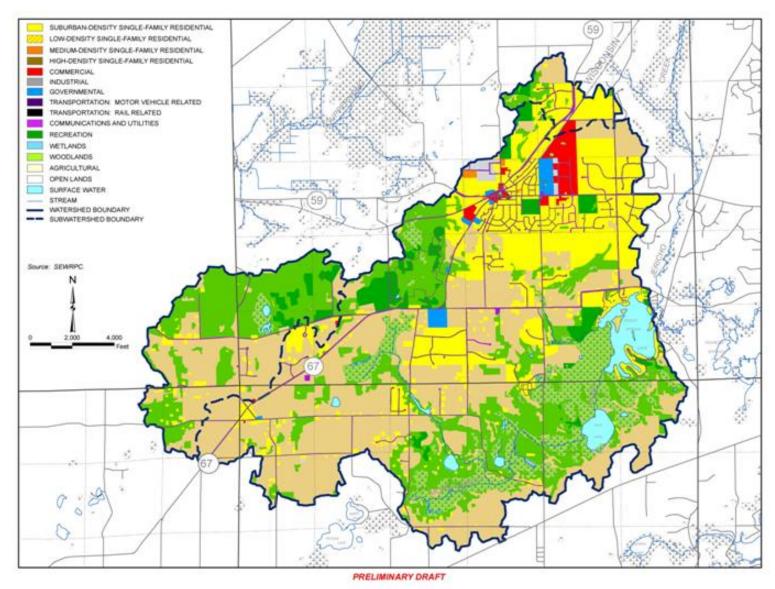
WOODLANDS

The pre-settlement vegetation of the Eagle area consisted of a rather complex mix of marsh, wet prairie, prairie, oak openings, bur oak open forest and oak forest. Now, most of the continuously wooded areas are contained within the Kettle Moraine State Forest where a mixed forest of oaks, hickories and elms cover many of the ridges and hills. There are also scattered, smaller wooded areas including those that line the banks of Jericho Creek, and those south of Eagle Spring Lake.

Map 4-3
MAJOR WETLANDS AND WOODLANDS



Map 4-4
PLANNED LAND USE WITHIN THE EAGLE SPRING WATERSHED: 2035



ENVIRONMENTAL RESOURCES

The mosaic of woodlands, streams, floodplains, wetlands, Kettle Moraine hills and associated wildlife habitats in the Eagle area are interconnected in nearly continuous, linear "green" corridors. These corridors, referred to by the Southeastern Wisconsin Regional Planning Commission as "environmental corridors" form the natural resource base for the Village of Eagle and its surroundings. They are also part of the area's natural beauty and recreational fabric.

Map 4-5

PLANNED ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS: 2000



CLIMATE

Its mid-continental location gives the Village a continental climate that spans four seasons, one season succeeding the other through varying time periods of unsteady transition. Summers, generally the months of June, July, and August, are relatively warm, with occasional periods of hot, humid weather and sporadic periods of cool weather. The cold winter, accentuated by prevailing frigid northwesterly winds, generally spans the months of December, January, and February, but may in some years include parts of November and March. Autumn and spring in the Village are transitional times of the year between the dominant seasons and usually periods of widely varying weather conditions. Temperatures are extremely varied, and long periods of precipitation are common in autumn and spring. Some of the more pronounced weather events include tornadoes and major snowmelt occurrences.

Air temperatures within the Village are subject to extreme seasonal variation. Data on temperature observations indicate variations in temperature from a low in January with a mean daily temperature of 18.7 degrees, to a high in July with a mean daily temperature of 71.8 degrees. The growing season, which is defined as the number of days between the last freeze in the spring and the first freeze in the fall, averages about 155 days in the Village. The last freeze in the spring normally occurs during the first two weeks in May and the first freeze in the fall normally occurs in mid-October.

Precipitation in the Village, in the form of rain, sleet, hail, and snow, ranges from gentle showers to destructive thunderstorms. The more pronounced weather events can cause major property and crop damage, inundation of poorly drained areas, and lake and stream flooding. Daily precipitation data for observations recorded at the City of Waukesha record that the total average annual precipitation observed is slightly more than 32 inches, expressed as water equivalent. Monthly averages range from a low of 1.2 inches in February to a high of 3.70 inches in June. Snowfall and sleet averages approximately 41 inches annually, with January receiving the most snow and sleet, at about 11 inches.

The Village is positioned astride cyclonic storm tracks along which low-pressure centers move from the west and southwest. The County also lies in the path of high-pressure centers moving in a generally southeasterly direction. This location at the confluence of major migratory air masses results in the Town being influenced by a continuously changing pattern of air masses associated with alternately high- and low-pressure centers and results in frequent weather changes superimposed on the aforementioned annual range in weather characteristics, especially in winter and spring.

Prevailing winds in the Village are generally northwesterly in the late fall and winter, northeasterly in the spring, and southwesterly in the summer and early fall. Wind velocities are less than five miles per hour (mph) for about 15 percent of the year, between five and 15 mph for about 60 percent of the year, and more than 15 mph for about 25 percent of the year.

AIR QUALITY

The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to set national ambient air quality standards (NAAQS) for six criteria pollutants (carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur oxides) which are considered harmful to public health and the environment. Areas not meeting the NAAQS for one or all of the criteria pollutants are designated as nonattainment areas by the EPA. In areas where observed pollutant levels exceed the established NAAOS and which are designated as "nonattainment" areas by the EPA, growth and development patterns may be constrained. For example, major sources of pollutants seeking to locate or expand in a designated non-attainment area, or close enough to impact upon it, must apply emission control technologies. In addition, new or expanding industries may be required to obtain a greater than one-for-one reduction in emissions from other sources in the nonattainment area so as to provide a net improvement in ambient air quality. Nonattainment area designation may therefore create an economic disincentive for industry with significant emission levels to locating or expanding within or near the boundaries of such an area. In order to eliminate this disincentive and relieve the potential constraint on development, it is necessary to demonstrate compliance with the NAAQS and petition EPA for redesignation of the nonattainment areas.

Ozone is formed when precursor pollutants, such as volatile organic compounds and nitrogen oxides, react in the presence of sunlight. The ozone air quality problem within the Region is a complex problem because ozone is meteorologically dependant. In addition, the ozone problem in the Region is believed to be attributable in large part to precursor emissions which are generated in the large suburban areas located to the south and southeast and carried by prevailing winds into the Region. The ozone problem can be effectively addressed only through a multistate abatement effort.

In March of 2008, the EPA revised the eight-hour ozone standard which is expected to take effect in 2010, and in December of 2008, the EPA designated six counties in Wisconsin as nonattainment areas for the 24-hour fine particulate matter air quality standard. The nonattainment counties are Milwaukee, Racine, Waukesha, Brown, Dane and a portion of Columbia County. Additional information can be found by visiting the SEWRPC website.

Over the past decade, the combination of local controls and offsets implemented within and external to the Region, along with national vehicle emissions control requirements have resulted in a significant improvement in ambient air quality within the Region as well as nationally, and projections of future emissions indicate a continued decline in precursor emissions and a continued improvement in air quality.

CULTURAL AND HISTORIC RESOURCES

History of Eagle

The area received its name when, in 1836, Thomas Sugden, John Coats and Mr. Garton came to a prairie and saw a huge bald headed eagle soaring overhead. The first claim was made by A. R. Hinkley but the first permanent settlers were E. Thomas and wife, who erected a house in 1836. Before the end of that year, the first mill in the town of Eagle was built in Eagleville. When the southern branch of the Milwaukee & St. Paul Railroad came through the town in 1851, the village of Eagle Centre was created, leading to the eventual decline of other villages in the township. With the passing of time, the village name evolved to Eagle.

By 1880, the village was considered the third ranking community in Waukesha County in terms of commercial importance. It could boast of two dry goods houses, two hardware stores, two clothing and tailoring establishments, a butcher shop, grocer, harness shop, milliners, salons, and a grain elevator and warehouse.

Eagle was nearly renamed Diamond City in the mid-1800's when it became known that a diamond had been discovered here in 1876. While digging a well at the summit of what is today called Diamond Hill, workers found a yellow pebble, which was eventually identified as one of the largest glacial diamonds ever found in the United States. The diamond ended up at New York's American Museum of Natural History. In 1964, it was stolen along with several other gems, including the Star of India sapphire. Never recovered, the Eagle Diamond was likely cut and fenced.

Blessed with fine natural springs, the town of Eagle became known for resorts like Eagle Springs and Paradise Springs. Called Minnehaha Springs at the time, Paradise Springs was once owned by Louis J. Petit, the Morton Salt king. Eagle's transition from an economy based on agriculture and railroads to one of recreation and tourism was furthered during the 1950's and 1960's as the state acquired land for the Southern Unit of the Kettle Moraine State Forest. In 1976, Old World Wisconsin, an outdoor living ethnic history museum, opened.

Cultural and historic resources can include historic buildings and structures, significant recreational areas, old roads and early trails, community facilities, churches, inns, museums and archaeological sites. In the Eagle area, the predominant cultural resource is also a recreational one – the Kettle Moraine State Forest. The headquarters of the Kettle Moraine State Forest and its museum are located just outside the Village of Eagle. Old World Wisconsin, said to be the world's largest living history museum on rural life, is another predominant cultural resource that is contained within the Kettle Moraine State Forest. Several buildings in the Village of Eagle and its surrounding area date from the nineteenth century and are on the National Register of Historic Places. These buildings, and the date they were entered into the Register, are listed below:

Ahira R. Hinkley House - entered 1-21-74

The Ahira R. Hinkley House was built of cobblestone at W354S7910 Highway 59. Ahira R. and Mary Daniels Hinkley built their house c. 1848, which was kept in the family until 1912. Ahira R. Hinkley was born in 1810, and came from New Hampshire to Wisconsin when it was still a territory. Ahira Hinkley was a prosperous man. His herd of fifty thoroughbred Jersey cattle was the only one of its kind in the county in 1893.

Hinkley served as Town Supervisor. He was also the director of the first Board of the Prairie du Chien branch of the St. Paul Railroad; and he was a trustee of the Eagle Methodist Church for years. He held all the offices in the Masons' Lodge No. 115.

Koepsell House in Old World Wisconsin - entered 10-25-73

The Koepsell House was constructed by the carpenter and master builder, Friedrich Koepsell, c. 1858 in the Town of Jackson, Washington County. It is an outstanding example of half-timbered architectural style. The building is restored to its 1880 appearance.

St. Peter's Church in Old World Wisconsin - entered 1976

St. Peter's Church was built c. 1839, and was the first Catholic church in Milwaukee. It is restored to its 1889 appearance, showing a fusion of the Greek Revival and Gothic architectural traditions.

Turck-Schottler House in Old World Wisconsin - entered 10-25-73

The Turck-Schottler House was built c. 1847 in the Town of Germantown, Washington County. The lean-to was added c. 1865 and the house is restored to c. 1875. It is located in the German farmstead area.

Ward District No. 3 Schoolhouse in Old World Wisconsin - entered 7-7-81

The Ward School was built in 1849 and is one of the oldest one-room schools in Waukesha County that is still on its original site. It is the only historic structure at Old World Wisconsin on its original site. From 1849 – 1957 the Ward School served students of the Town of Eagle's District #3. It was converted to a dwelling after the school district that it was in dissolved in the 1950s.

OTHER PROMINENT CULTURAL AND HISTORIC RESOURCES

Smiley Face Water Tower

In 1951, a member of the Eagle Village Board was traveling through the State of Indiana and saw a smiley face painted on a water tower. At a village board meeting, this board member mentioned the smiley face water tower, and the vote to paint the tower yellow with a smiley face was established 4 to 3. The painted smiley face water tower appeared in several newspapers in the United States and also in publications in Rome, Italy and London, England.

Eagle's water tower stands on the place where one of the largest glacial diamonds was found in 1876, while digging a well at the summit of what is today called Diamond Hill.

Eagle Historical Society

The Eagle Historical Society is a non-profit organization whose purpose is to collect and preserve printed material and material objects illustrative of life, conditions, events and activities of the past and present, especially in the history of Eagle Village and Township, Waukesha County and the surrounding areas. The Society maintains a museum and a historical library which is open to the public. Print materials in the Society's research center are available to the public. The society also maintains a web site to communicate events, photographs and historical information to the community,

Future goals include an addition to the Historical Society Museum building with appropriate artifact storage areas, conference and meeting rooms large enough to accommodate adults and school groups for historic programs. Rooms would be available for use by civic organizations and area residents.

Alice Baker Memorial Public Library

Alice Baker was born and raised in Eagle, Wisconsin. She was a long-term educator and started her teaching career in 1910 at the Eagleville School. She was a member of the Waukesha Writer's Club, the Waukesha County Historical Society, and the Eagle United Methodist Church. Alice Baker was a strong advocate for a public library in Eagle and devoted much of her time and effort to make it possible. She died on April 15, 1974 just months before a library would be established.

Today, the Alice Baker Library, through the Waukesha County Federated Library System, serves the needs of all library and non-library communities within the county, and adjacent counties, as well as the State and the Nation.

Eagles at Eagle Elementary School

On 12/20/85 a 7 ft. Eagle that stood atop the Georgetown Hotel in Washington DC landed in the Village of Eagle. Richard Cotter, GM of the hotel flew in from Washington DC to present the Eagle. State Representative Sensenbrenner was also on hand for the presentation. They read a letter from President Reagan complimenting the 200 students from Eagle Elementary who participated in the letter campaign to acquire the Eagle. The Eagle was produced in 1890 and stood atop the hotel since 1960. The value of the Eagle when donated was \$6000 and a glass fronted room was designed at the entrance of the elementary school to accommodate the gift.

The original Eagle that sits in front of Eagle Elem. was donated in 1969 by Case Corp. (now CNH). The molded metal replica of Old Abe the Eagle, was the mascot of Company C of the Eighth Wisconsin Regiment since 1860. Mr. J. I. Case adopted "Old Abe" in 1865 as a trademark for Case and the molded replica adorned Case Corporate for many years. The 1969 class of Eagle State Grade School donated the base Old Abe is perched on.

United Methodist Church

In 1860 the first Methodist Church was opened in Eagle. Before the building was built, the congregation met in homes, schools, and according to historical records in 1836 they met in a barn. They were served by itinerant preachers and their own laymen. The present Eagle United Methodist Church building was erected in 1871and its first pastor was Rev. Tilton.

St. Therese Roman Catholic Church

The first St. Theresa's Church was built in 1852 and pastored by Catholic pioneer priest Fr. Martin Kundig, The cross topped spire of St. Theresa's Catholic Church in Eagle is a familiar landmark in the Village of Eagle and it has been since 1906 when the present structure was built. The clock was purchased by the citizens of Eagle and installed in the spire in 1909.

OBJECTIVE, PRINCIPLES, AND STANDARDS

Agricultural, Natural, and Cultural Resources Objective No. 1

A spatial distribution of the various land uses which maintains biodiversity and which will result in the preservation and sustainable use of the natural resources of the Village, including its air, soils, groundwater, wetlands, inland lakes and streams, woodlands, prairies, and wildlife. The proper allocation of uses to land can assist in maintaining an ecological balance between the activities of man and the natural environment.

- 1-1. Environmental Corridors and Isolated Natural Resource Areas
- 1-2. Other Environmentally Sensitive Areas
- 1-3. Restoration/Enhancement of Natural Conditions
- 1-4. Soils
- 1-5. Clean Air

1-1. Environmental Corridors and Isolated Natural Resource Areas

Principle

The preservation of environmental corridors and isolated natural resource areas in essentially natural, open use yields many benefits, including recharge and discharge of groundwater; maintenance of surface water and groundwater quality; attenuation of flood flows and flood stages; maintenance of base flows of streams and watercourses; reduction of soil erosion; abatement of air and noise pollution; protection of wildlife habitat; protection of plant and animal diversity; protection of rare and endangered species; maintenance of scenic beauty; and provision of opportunities for recreational, educational, and scientific pursuits. These environmental corridors once lost would be impossible to reclaim or replace. Since some environmental corridors and isolated natural resource areas are poorly suited for urban development, their preservation can help avoid serious and costly development problems while protecting the Village's most valuable natural resources.

Notes: Environmental corridors are elongated areas in the landscape which contain concentrations of natural resource features (lakes, rivers, streams, and their associated shorelands and floodlands; wetlands; woodlands; prairies; wildlife habitat areas; wet, poorly drained, and organic soils; and rugged terrain and high-relief topography) and natural resource-related features (existing park and open space sites; potential park and open space sites; historic sites; scenic areas and vistas; and natural areas and critical species habitat sites). Environmental corridors should be a natural state of growth. Primary environmental corridors include a variety of these features and are at least 400 acres in size, two miles long, and 200 feet in width. Secondary environmental corridors also contain a variety of these features and are at least 100 acres in size and one mile in length. Isolated natural resource areas are smaller concentrations of natural resource features that are physically separated from the environmental corridors by intensive urban or agricultural uses; by definition, such areas are at least five acres in size and 200 feet in width.

Standards

- 1. Primary environmental corridors should be preserved in natural, open uses.
- 2. Secondary environmental corridors and isolated natural resource areas should be preserved in essentially natural, open uses to the extent practicable, as determined in Village and local plans.

1-2. Other Environmentally Sensitive Areas

Principle

Care in locating urban and rural development in relation to other environmentally sensitive areas can help to maintain the overall environmental quality of the Village and to avoid developmental problems.

Standards

- 1. Small wetlands, woodlands, and prairies not identified as part of an environmental corridor or isolated natural resource area should be preserved to the extent practicable, as determined in Village plans.
- 2. All natural areas and critical species habitat sites identified for preservation in the Regional Natural Areas and Critical Species Habitat Protection and Management Plan should be preserved.
- 3. The 100 year recurrence interval designated floodlands per Waukesha County or FEMA should not be allocated to any development, which would cause or be subject to flood damage; and no unauthorized structure should be allowed to encroach upon and obstruct the flow of water in perennial stream channels and floodways.
- 4. Urban and rural development should be directed away from areas, with steep slopes (12% or greater) or with seasonally high groundwater one foot or less from the surface.
- 5. Land use patterns should be designed to discourage development of below grade structures on soils with seasonally high groundwater less than 3 feet from the surface. Development of below grade structures (including basements) shall maintain a minimum of one foot separation from the seasonally high groundwater level.

Uses considered being compatible with both planning standards relating to the preservation of environmental corridors and isolated natural resource areas are indicated in Table 4-1.

1-3. Restoration/Enhancement of Natural Conditions

Principle

The restoration of unused farmland and other open space land to more natural conditions, resulting in the re-establishment or enhancement of wetlands, woodlands, prairies, grasslands, and forest interiors, can increase biodiversity and contribute to the overall environmental quality of the Village by providing additional functional values as set forth in Objective No. 1.

Standard

1. Carefully planned efforts to restore unused farmland and other open space land to more natural conditions should be encouraged.

GENERAL DEVELOPMENT GUIDELINES RELATED TO TABLE 4-1

• Transportation and Utility Facilities in Environmental Corridors: All transportation and utility facilities proposed to be located within important natural resources will be evaluated on a case-by-case basis to consider alternative locations for such facilities. If it is determined that such facilities should be located within natural resources, development activities will be sensitive to, and minimize disturbance of, these resources, and, to the extent possible following construction, such resources will be restored to preconstruction conditions.

Table 4-1 presents development guidelines for major transportation and utility facilities. These guidelines may be extended to other similar facilities not specifically listed in the table.

• Recreational Facilities in Environmental Corridors: In general, no more than 20 % of the total environmental corridor area, including areas of upland wildlife habitat and woodlands, should be developed for recreational facilities. It is recognized, however, that in certain cases these percentages may be exceeded in efforts to accommodate needed public recreational and game and fish management facilities within appropriate natural settings.

Table 4-1 presents development guidelines for major recreational facilities. These guidelines may be extended to other similar facilities not specifically listed in the table.

• Residential Development in Environmental Corridors: All residential development proposed to be located within important natural resources will be evaluated on a case-by-case basis to consider alternative locations for such development. Limited residential development may be accommodated in upland environmental corridors, provided that buildings are kept off steep slopes. The maximum number of housing units, accommodated at a proposed development site within the environmental corridor, may be determined by dividing the total corridor acreage within the site, less the acreage covered by surface water, floodplains and wetlands, by five. The permitted housing units may be in single-family structures. When rural residential development is accommodated, conservation subdivision designs are strongly encouraged to locate development outside the corridor while maintaining an overall development density of no more than one dwelling per five acres.

Single-family development on existing lots of record will be permitted as provided for under county or local zoning at the time of adoption of the land use plan.

Table 4-1
GUIDELINES FOR DEVELOPMENT CONSIDERED COMPATIBLE WITH ENVIRONMENTAL CORRIDORS

	Permitted Development											
Component Natural Resource and Related Features within Environmental Corridors ^a	Transportation and Utility Facilities (see General Development Guidelines below)				Recreational Facilities (see General Development Guidelines below)							Rural Density Residential
	Streets and Highways	Utility Lines and Related Facilities	Engineered Stormwater Management Facilities	Engineered Flood Control Facilities ^b	Trails ^C	Picnic Areas	Family Camping ^d	Play fields	Hard-Surface Courts	Parking	Buildings	Development (see General Development Guidelines below)
Lakes, Rivers, and Streams	e	f		g	h							
Shoreland	X	X	X	X	X	X				X	Xi	
Floodplain	j	X		X	X	X		X		X	Xk	
Wetland l	j	X			Xm							
Wet Soils	X	X	X	X	X					X		
Woodland	X	X	Xo		X	X	X	Xn	Xn	Xn	Xn	X
Wildlife Habitat	X	X	X		X	X	X	X	X	X	X	X
Steep Slope	X	X			O							
Prairie		f			0							
Park	X	X	X	X	X	X	X	X	X	X	X	
Historic Site		f			0					X		
Scenic Viewpoint	X	X			X	X	X			X	X	X
Natural Area or Critical Species Habitat Site					O							

NOTE: An "X" indicates that facility development is permitted within the specified natural resource feature. In those portions of the environmental corridors having more than one of the listed natural resource features, the natural resource feature with the most restrictive development limitation should take precedence.

Footnotes to Table 4-1:

^aThe natural resource and related features are defined as follows:

Historic Site: Includes sites listed on the National Register of Historic Places. Most historic sites located within environmental corridors are archeological features such as American Indian

settlements and effigy mounds and cultural features such as small, old cemeteries. On a limited basis, small historic buildings may also be encompassed within delineated corridors.

Floodplain: Includes areas, excluding stream channels and lake beds, subject to inundation by the 100-year recurrence interval flood event.

<u>Lakes</u>, <u>Rivers</u>, and <u>Streams</u>: Includes all lakes greater than five acres in area and all perennial and intermittent streams as shown on U. S. Geological Survey quadrangle maps.

Natural Area and Critical Species Habitat Sites: Includes natural areas and critical species habitat sites as identified in the regional natural areas and critical species habitat protection and management plan.

Park: Includes public and nonpublic park and open space sites.

Prairies: Includes open, generally treeless areas which are dominated by native grasses; also includes savannas.

Scenic Viewpoint: Includes vantage points from which a diversity of natural features such as surface waters, wetlands, woodlands, and agricultural lands can be observed.

Shoreland: Includes a band 50 feet in depth along both sides of intermittent streams; a band 75 feet in depth along both sides of perennial streams; a band 75 feet in depth around lakes.

 $\underline{\text{Steep Slope}}\textsc{:}$ Includes areas with land slopes of 12 % or greater.

Wetlands: Includes areas that are inundated or saturated by surface water or groundwater at a frequency, and with a duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wet Soils: Includes areas covered by wet, poorly drained, and organic soils.

Wildlife Habitat: Includes areas devoted to natural open uses of a size and with a vegetative cover capable of supporting a balanced diversity of wildlife.

Woodlands: Includes areas one acre or more in size having 17 or more deciduous trees per acre with at least a 50 % canopy cover as well as coniferous tree plantations and reforestation projects; excludes lowland woodlands, such as tamarack swamps, which are classified as wetlands.

bIncludes such improvements as stream channel modifications and such facilities as dams.

^CIncludes trails for such activities as hiking, bicycling, cross-country skiing, nature study, and horseback riding, and excludes all motorized trail activities. It should be recognized that trails for motorized activities such as snowmobiling that are located outside the environmental corridors may of necessity have to cross environmental corridor lands. Proposals for such crossings should be evaluated on a case-by-case basis, and if it is determined that they are necessary, such trail crossings should be designed to ensure minimum disturbance of the natural resources.

dIncludes areas intended to accommodate camping in tents, trailers, or recreational vehicles, which remain at the site for short periods of time, typically ranging from an overnight stay to a two-week stay.

^eCertain transportation facilities such as bridges may be constructed over such resources.

fElectric power transmission lines and similar lines may be suspended over such resources.

gCertain flood control facilities such as dams and channel modifications may need to be provided in such resources to reduce or eliminate flood damage to existing development.

^hBridges for trail facilities may be constructed over such resources.

¹Consistent with Chapter NR 115 of the Wisconsin Administrative Code.

jStreets and highways may cross such resources. Where this occurs, there should be no net loss of flood storage capacity or wetlands. Guidelines for mitigation of impacts on wetlands by Wisconsin Department of Transportation facility projects are set forth in Chapter Trans 400 of the Wisconsin Administrative Code.

^kConsistent with Chapter NR 116 of the Wisconsin Administrative Code.

¹Any development affecting wetlands must adhere to the water quality standards for wetlands established under Chapter NR 103 of the Wisconsin Administrative Code.

mOnly an appropriately designed boardwalk/trail should be permitted.

ⁿOnly if no alternative is available

^OOnly appropriately designed and located hiking and cross-country ski trails should be permitted.

Source: SEWRPC

1-4. Soils

Principle

The proper relation of urban and rural land use development to soil types and distribution can serve to avoid many environmental problems, aid in the establishment of better regional settlement patterns, and promote the wise use of an irreplaceable resource.

Standards

- 1. Unsewered suburban residential development should not be located in areas covered by soils identified in the detailed operational soil survey as unsuitable for such development.
- 2. Rural development, including agricultural and rural residential development, should not be located in areas covered by soils identified in the detailed operational soil survey as unsuitable for such uses.
- 3. Urban and rural development should be directed away from areas, with steep slopes (12% or greater) or with seasonally high groundwater one foot or less from the surface.
- 4. Land use patterns should be designed to discourage development of below grade structures on soils with seasonally high groundwater less than 3 feet from the surface. Development of below grade structures (including basements) shall maintain a minimum of one foot separation from the seasonally high groundwater level.

1-5. Clean Air

Principle

Air is a particularly important determinant of the quality of the environment for life, providing the vital blend of oxygen and other gases needed to support healthy plant and animal life. Air, however, contains pollutants contributed by both natural and human sources which may be harmful to plant and animal life, that may injure or destroy such life, and that may severely damage personal and real property.

Standards

- 1. Encourage a centralized land use development pattern to minimize automobile travel and related air pollutant emissions.
- 2. Encourage protection of existing woodlands, wetlands, and prairies to enhance atmospheric oxygen supply levels.

Agricultural, Natural, and Cultural Resources Objective No. 2

The preservation of productive agricultural lands.

Principle

The preservation of productive agricultural land is important for meeting future needs for food. Agricultural areas, in addition to providing food and fiber, can provide wildlife habitat and contribute to the maintenance of an ecological balance between plants and animals. Moreover, the preservation of agricultural areas also contributes immeasurably to the maintenance of the scenic beauty and cultural heritage of the Village. Maintaining agricultural lands near urban areas can facilitate desirable and efficient production-distribution relationships, including community-supported agriculture operations.

The preservation of agricultural lands can maximize return on investments in agricultural soil and water conservation practices; and minimizes conflicts between farming operations and urban land uses.

Standard

- 1. Development of agricultural lands should take place in an orderly and sequential fashion. In order to preserve farming as a viable economic pursuit, new development should not impinge on adjacent agricultural land use, or cause increased tax assessments for farmers.
- 2. Agricultural land use and operations will be encouraged to stay in the Town as a resource for the use and benefit of present and future generations.
- 3. Subdivision design may allow for the inclusion of both residential and agricultural uses and will encourage subdivision design that results in retention of open space.

Agricultural, Natural, and Cultural Resources Objective No. 3

The preservation and protection of open space to enhance the total quality of the Village's environment, maximize essential natural resource availability, give form and structure to urban development, and provide opportunities for a full range of outdoor recreational activities.

Principle

Open space is the fundamental element required for the preservation and sustainable use of such natural resources as soil, water, woodlands, wetlands, native vegetation, and wildlife; it provides the opportunity to add to the physical, intellectual, and spiritual growth of the population; it enhances the economic and aesthetic value of certain types of development; and it is essential to outdoor recreational pursuits.

Standards

- 1. Major park and recreation sites providing opportunities for a variety of natural resource-oriented, self actualized outdoor recreational activities should be provided within a 4-mile service radius of every dwelling unit in the Village, and should have a minimum gross site area of 250 acres. Examples of such uses could include: camp site, swimming beach, picnic area, golf course, hiking and cross country ski trails, horseback riding, boat launch, nature study area, and play field area.
- 2. Other park and recreation sites should be provided within a maximum service radius of one mile of every dwelling unit in an urban area, and should have a minimum gross site area of five acres.
- 3. As a general rule the Village provides outdoor recreation facilities to afford the resident population opportunities to participate in non-organized outdoor recreation activities. These types of facilities provide activities such as tennis, baseball, basketball, soccer, skate parks and playgrounds.
- 4. Areas having unique scientific, cultural, scenic, or educational value should not be subjected to any urban or agricultural land uses; adjacent surrounding areas should be retained in open space use, such as agricultural or limited recreational uses.

Agricultural, Natural, and Cultural Resources Objective No. 4

A spatial distribution of land uses and specific site development designs which protects or enhances the surface and ground water resources of the Village.

Principle A

Information regarding existing and potential surface and ground water quality conditions is essential to any comprehensive land use and natural resource planning program. The existing quality condition of the surface and ground water resource provides important baseline data. The potential condition becomes the goal upon which planners and resource managers target their land use efforts.

Standards

- 1. Potentially contaminating land uses should not be located in areas where the potential for ground-water contamination is the highest.
- 2. Storm water management planning should avoid any potential contamination to streams located within the Village's 1.5 mile extraterritorial area.

Principle B

Information regarding existing ground water quantity conditions is essential to any comprehensive land use and natural resource planning program. The existing condition of ground water quantity provides important baseline data. Potential ground water quantity conditions provide important data upon which planners and resource managers can make comprehensive development planning decisions.

Standards

- 1. Land use development patterns and practices should be designed to preserve important groundwater recharge areas and should support maintaining the natural surface and groundwater hydrology to the extent practicable.
- 2. Storm water management planning should seek to encourage ground water recharge to maintain the natural groundwater hydrology.

Notes: As of the writing of this Plan, the Southeastern Wisconsin Regional Planning Commission is engaged in the preparation of a Regional Water Supply Plan. The recommendations contained in the plan will be incorporated into future amendments to this Comprehensive Development Plan for Waukesha County.

Agricultural, Natural, and Cultural Resources Objective No. 5

Preservation of historic homes through proper maintenance and/or rehabilitation.

Principles

Encourage the preservation of historic homes in the Village in accordance with the Building Code and Ordinance 161 "An Ordinance to Preserve Historic Sites, Structures, and Districts".

Standard

- 1. Identify and catalog historic homes in the Village.
- 2. Encourage repair and rehabilitation that maintains the integrity of historic homes.
- 3. Older housing stock should be maintained to current building code standards, and in accordance with Ordinance 161 "An Ordinance to Preserve Historic Sites, Structures, and Districts".

IMPLEMENTATION RECOMMENDATIONS

- 1. Rehabilitate and redevelop historic buildings and cultural sites in full compliance with State and Federal regulations, and in accordance with Village Ordinance 161 adopted in 1995.
- 2. Develop policies to avoid development in sensitive areas.
- 3. Require site plans for any proposed new development or infill to ensure that all reasonable measures are taken to protect sensitive areas both during and after development.
- 4. Maintain maps of historic, cultural and archaeological sites, steep slopes, streams, buffer areas, floodplains, wetlands, habitat areas and woodlands for landowners and developer reference.
- 5. Require developers to use development techniques that minimize adverse impacts, when it is not possible for development to avoid sensitive areas, such as roads that traverse steep slopes
- 6. Protect and maintain environmental corridors to ensure flood carrying capacity, groundwater recharge areas, wildlife and encouraging tourism.
- 7. Review updates to the Regional Water Plan when completed by SEWRPC.

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