

## **CHAPTER 5: Agricultural, Natural and Cultural Resources**

66.1001 (2)(e) Wis. Stat.:

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

This element will discuss the agricultural landscape and the natural and cultural resources in and around the Village of Junction City.

### **Section 5.1 Agricultural Resources Inventory**

In general, agricultural and residential developments tend to have conflicts if located adjacent to each other. It seems, however, that this has not been a past issue in the Village of Junction City. Residential development within the Village has occurred at a slow pace, which has resulted in limited conflicts over time with adjoining agricultural activities. Residential expansion is projected to be minimal throughout the planning period (see the housing chapter for further information).

#### **A. Farm Numbers, Types, and Size**

The Village of Junction City has approximately 463 acres of agricultural land within its corporate boundary. None of these agricultural lands utilize irrigation. This farm land accounts for approximately 48% of the land within the Village boundary, and it surrounds the urbanized portion of the Village on all sides. Farms within these lands consist of both dairy and vegetable production. At the time the 1997 Census of Agriculture was taken, there were 116 farms located within the Village of Junction City zip code, therefore, some of these farms may be located within the Towns of Carson and Eau Pleine. Also as of the 1997 Census, there were 17 farms between 1-49 acres in size, and 99 farms between 50-999 acres in size. Since the last Census of Agriculture, at least one farm was added into the Village. Some outbuildings associated with these farms are located just outside the Village boundary.

#### **B. Farm Economy and Infrastructure**

There are two businesses in the community directly related to the agricultural economy of the surrounding area:

1. Fliss Feeds - an animal feed distributor
2. Winch L.P. Gas - propane provider for farms

### **Section 5.2 Natural Resources Inventory**

This section will describe the existing conditions of natural resources in the Village of Junction City and surrounding area. Natural resources include: soils, groundwater, wetlands, forests, vegetation and wildlife.

## A. Geology

The region's surface was shaped by the Green Bay lobe of the continental glacier more than 10,000 years ago. Till and outwash are the major glacial deposits in the area. The Village of Junction City is located in the Drift-Crystalline province of Wisconsin. This province consists of thin deposits of clay till, glacial outwash, and alluvium overlying crystalline bedrock located at a depth of 0-49 feet beneath the surface, ranging in thickness from 0-50 feet. The Village has difficulty obtaining water because only a small amount of water is stored in the bedrock and yields only small amounts to residents.

## B. Topography

The contour of the land has a slight southern slope in the majority of the built-up Village. The land slopes gently from the northern edge of the Village to the southern edge (Map 5.1). The highest elevation within Junction City is approximately 1,170 feet above sea level, located along the northern boundary of the Village. The lowest elevation is approximately 1,120 feet above sea level, located along the southern Village boundary. Junction City's average elevation is approximately 1,145 feet above sea level.

## C. Soils

There are eight soil types that occur in the Junction City area (Map 5.2). The most prevalent soil types include Rozellville loam, Point sandy loam and Dolph silt loam. Agricultural lands within the Village are composed of these three soil types. Other soils present in the Junction City area include; Alluvial wet, Altdorf silt loam, Dancy sandy loam, Meadland loam, and Mosinee sandy loam. Most of the smaller-grained soil types generally contain obstacles to community development since they are characterized as poorly drained and slowly permeable. They also may constitute a "severe" to "very severe" limitation for on-site sewage disposal systems because of the danger of contaminating groundwater supplies. This limitation would not apply in areas served by municipal sewer and water. However, the possible pollution of groundwater from on-site sewage disposal systems or other sources could endanger the Village's public water supply. There is also a "severe" limitation in certain areas for building a dwelling with a basement due to bearing capacity, poor drainage, shallow bedrock and outcrop. The suitability of soils for development in the Junction City area was determined from detailed soil surveys on file at the Portage County Agriculture Stabilization and Conservation Service Office.

## D. Groundwater

The Junction City area is on the southern fringe of the "drift" groundwater province of Wisconsin (Holt, 1964). Because bedrock slopes generally from northwest to southeast in Portage County, there is a difference of groundwater availability from the western to the eastern part of the County, where drift deposits are thicker and, therefore, contain more groundwater (see Map 5.3 below).

The major user of groundwater within Junction City is the Village municipal water utility. Table 5.1 below details water use by type and amount for 2002 in the Village of Junction City. Most water usage was used for residential use and fire protection.

Map 5.1: Junction City Topography

Map 5.2: Junction City Soils

**Table 5.1 Village Water Usage**

<b>Usage</b>	<b>Amount (Gallons)</b>
Residential	5,906,000
Commercial	1,250,000
Industrial	n/a
Services	
Fire Protection	
Other Public Authorities	1,595,000
<b>Total gallons used</b>	<b>8,751,000</b>

*Source: Village PSCW Annual Report, 2002*

Please refer to the Utilities and Community Facilities chapter of this Comprehensive Plan for further information on the Village's municipal water supply.

E. Surface Water

There is a small intermittent waterway near the Post Office, occurring mainly in the spring.

The land to the south of the urbanized area is wetter than the rest of the Village due to a Mill Creek tributary that runs through the southern part of the Village limits.

F. Wetlands

There is one small wetland area in Junction City, located along the northern border of the Village. There are also wetland areas south of the urbanized area of the Village that contains a tributary for Mill Creek.

These wetlands in the Village of Junction City (Map 5.4 above) are classified as forested wetland, which includes bogs and forested floodplain complexes that are characterized by trees 20 feet or more in height such as, tamarack, white cedar, black spruce, elm, black ash, and silver maple. These wetlands are located along the edges of Mill Creek.

Other types of wetlands which lie outside but in close proximity of the Village limits include:

Emergent/wet meadow – consists of wetland areas that may have saturated soils more often than having standing water. Vegetation includes: sedges, grasses and reeds as dominant plants, but may also include: blue flag iris, milkweed, sneezeweed, mint and several species of goldenrod and aster.

Scrub/shrub wetlands – includes bogs and alder thickets, are characterized by wood shrubs and small trees such as: tag aster, bog birch, willow and dogwood.

Wetlands are an important part of the watershed, as they act as a filter system for pollutants, nutrients, and sediments, along with serving as buffers for shorelands and providing essential wildlife habitat, flood control and groundwater recharge.

G. Shorelands. There are no shorelands located within the Village of Junction City.

H. Floodplains. There are no floodplains located in the Village of Junction City.

## I. Vegetation/Forest Area

Junction City was originally part of an expansive oak savanna that covered the western portion of Portage County. Forest cover gave way to logging, farming and homesteading, resulting in little remaining forest cover within the Village. The densest coverage remaining is located south of the railroad tracks. Street trees and other domestic vegetation have been introduced in the Village.

There are three main areas of forest cover in Junction City. One is located in the northeastern part of the Village, just west of the Village Park; another is just southwest of the trailer park (in the western part of the urbanized area, just south of USH 10); and the third area is along the southern border of the Village. Most of the surrounding area is used for agriculture.

## J. Wildlife

White-tailed deer, rabbits and squirrels are generally very plentiful in Junction City. The Village generally has no problems with the wildlife, however, there has been an increase in the coyote population close to the Village in the recent past, creating disturbances with some nearby residents.

## K. Endangered Species

Known rare and endangered species identified by the Wisconsin Natural Heritage Inventory (NHI) may be located within the Township 42406, which includes the Village of Junction City and Junction City area. Species include: Greater Prairie-Chicken, Franklin's Ground Squirrel, Northern Mesic Forest, and Southern Dry-Mesic Forest. These elements should be taken into consideration when development and protection measures are considered. Descriptions of these species are listed below:

### **Greater Prairie-Chicken**

Slightly larger than the sharp-tailed grouse; plumage is olive-brown to pale clove brown with cross-bars of buffy brown and white on back, wings, breast, belly, and tail. Tail is short and rounded. Prefer prairie-openings interspersed among oak woodland and oak savanna. Dense grassland is necessary for roosting, loafing, and nesting. Good habitat may include some shrubbery, aspen and birch for budding, weeds, berries, cultivated grains, and oaks.

### **Franklin's Ground Squirrel**

The Franklin's Ground Squirrel has a long body, with short ears and gray feet. The head and tail are gray, and the body is salt-and-pepper colored. This semi-colonial species prefers brushy and partly wooded areas, dense grassy, shrubby marshland, as well as, prairie edges, rather than open prairie.

### **Northern Mesic Forest**

This forest complex covered the largest acreage of any Wisconsin vegetation type prior to European settlement. Sugar maple is dominant or co-dominant in most stands, while hemlock was the second most important species, sometimes occurring in nearly pure stands with white pine. Beech can be a co-dominant with sugar maple in the counties near Lake Michigan. Other important tree species were yellow birch, basswood, and white ash. The ground layer varies from sparse and species poor (especially in hemlock stands) with wood ferns (especially *Dryopteris intermedia*), bluebead lily, clubmosses, and Canada mayflower prevalent, to lush and species-rich with fine spring ephemeral displays. After old-growth stands were cut, trees such as quaking and bigtoothed aspens, white birch, and red maple became and still are important in many second-growth Northern Mesic Forests. Several distinct associations within this complex warrant recognition as communities, and draft abstracts of these are currently undergoing review.

Map 5.3: Groundwater Elevations and Flow

Map 5.4: Wetland Map

### **Southern Dry-Mesic Forest**

Red oak is a common dominant tree of this upland forest community type. White oak, basswood, sugar and red maples, and white ash are also important. The herbaceous understory flora is diverse and includes many species listed under Southern Dry Forest plus Jack-in-the-Pulpit, Enchanter's-Nightshade, Large-Flowered Bellwort, Interrupted Fern, Lady Fern, Tick-Trefoils, and Hog Peanut. To the detriment of the oaks, mesophytic tree species are becoming increasingly important under current management practices and fire suppression policies.

## **Section 5.3 Cultural Resources Inventory**

### **A. Historical / Archeological / Cultural Resources**

Cultural and historic resources often help link the past with the present and can give a community a sense of place or identity. These resources can include historic buildings and structures along with ancient and archeological sites. A wide range of historic properties have been documented that help create Wisconsin's distinct cultural landscape. Descriptions of existing locations are identified on the list of historic places by the Wisconsin Historical Society. Many of the properties included in this inventory are privately owned and not necessarily open to the public. At this time, there are fourteen listings in Junction City, which include buildings, houses, mills, a school house, church, and water utility building. Some of the more noticeable sites include:

- Fliss Feeds - an Astylistic Utilitarian style brick mill, located on the southeast corner of Morgan and Main Streets.

Another source of information comes from the National and State Register of Historic Places. There are currently fourteen sites listed throughout Portage County, however, none of them are located in the Village.

There is one cemetery located in the Village: St. Michael's Cemetery, located on Cty Rd G, west of the Army Reserve Center (see Map 4.2 in the Utilities/Community Facilities chapter).

### **B. Cultural Resource Programs**

At the State level, the Wisconsin Historical Records Advisory Board (WHRAB) works in association with the Wisconsin Historical Society. The Board's activity falls primarily into three areas: it provides guidance and assistance to archives and records management programs in Wisconsin, promotes the value of historical records as keys to our cultural heritage and works through partnerships with statewide organizations whose purpose and goals support that end, and brings federal grant funds to Wisconsin for improving access and preservation of historical records.

### **C. Cultural Organizations and Traditions**

Several organization and events occur throughout the year in the Village for residents of all ages, including: Hunters Safety course; Snowmobile Safety course; Kennedy Acting Theater (KAT-held through the school); Boys and Girls Club (a branch of Portage County Boys & Girls Club); adult softball; youth softball and baseball; Lions Club (hosting annual pancake breakfasts and fisheries); Ice Cutting; and Adopt-A-Highway (cleanup of USH 10 for a few miles west of the Village). There is also a proposed tractor pull event that would be held in the Village. Several of these organizations meet at the Village Community Center, Village Hall, or at Kennedy Elementary School. The rest meet at designated outdoor locations.

The Village also has an annual Community Picnic, held the second Saturday of July. This includes a parade, softball game, and booths containing various things run by non-profit organizations (Boys & Girls Club, Lions Club, church groups, etc.). The Village fronts the money for the picnic and then gets reimbursed by the organizations that run the booths.

The Ice Cutting is an annual event for the Village held at Viersnik's Pond, located at the intersection of US Highway 10 and STH 34 south, east of the Village, held in late winter. This volunteer based event involves cutting blocks of ice from the nearby spring-fed pond, which is used for public events throughout the year.

## **Section 5.4 Issues**

### **A. Agricultural Issues**

1. When future residential development occurs next to agricultural uses, new residential land owners must fully understand the agriculture operations that take place near the Village and incorporate a buffer between housing and agricultural land.

### **B. Natural Resource Issues**

1. Protection of groundwater resources for well recharge areas from possible new USH 10 placement, especially the new Village well near North Limits Road.
2. There are several abandoned underground fuel tank leaks.

### **C. Historical and Cultural Resource Issues**

1. Residents of Junction City would like to preserve the youth organizations in the Village, including the Boys and Girls Club, Kennedy Acting Theatre (KAT), and other service organizations.
2. There is a need of recreational programs for youth in the summer.

## **Section 5.4 Goals, Objectives and Policies**

### **A. Agricultural Goals/Objectives/Policies**

Goal 1: Agricultural practices are unencumbered by development.

Objective 1: New development (agricultural, residential or commercial) is responsible for providing appropriate buffers from incompatible uses.

Policy 1: Educate the public about the operations and activities of the agriculture community.

Goal 2: Utilize agricultural practices that are environmentally sensitive and protect people, air, soil, water, and wildlife resources.

### **B. Natural Resources Goals, Objectives and Policies**

Goal: Even though the Village of Junction City is losing population, the Village should strive to protect environmental resources and maintain the ecological balance of the area.

Objective 1: Development takes into consideration the protection of our natural resources.

Policy 1: Support the creation of educational programs for municipal boards and the public related to natural resources issues.

Objective 2: Natural resources that provide recreational opportunities on public land are managed to ensure their lasting presence.

Policy 1: Develop partnership efforts that result in the preservation and restoration of natural resources.

Objective 3: Protection of the natural environmental qualities of the area.

Policy 1: Utilize agricultural practices that are environmentally sensitive and protect air, soil, water and wildlife resources.

Policy 2: Assistance, in conjunction with the County in protecting water resources, including water quality abatement of erosion, and insuring compatible land usage around municipal wells.

### C. Cultural Resources Goals, Objectives, and Policies

Goal 1: Historic and cultural arts become an integral part of our community.

Objective 1: Make the general public more aware of cultural resources.

Policy 1: Support the historic and cultural events in the Village.

Goal 2: Summer recreational activities are available to youth.

Policy 1: The Village and county work together to create activities in the Village.