

CHAPTER 5 Agricultural, Natural and Cultural Resources Element

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

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

Section 5.1 Agricultural Resources Inventory

A. Agricultural lands

The Village of Plover has approximately 439 acres of agricultural land within the Village limits (Map 8.1 Existing Land Use Map). It is assumed that the agricultural land within the Village limits will ultimately be converted to “urban” uses, and is therefore considered a holding area for future development both during and beyond the planning period.

B. Farm numbers, types, and size

The Village of Plover has no farms located within the Village limits.

C. Farm Economy and Infrastructure

The Village has several businesses in the Community directly related to the agricultural economy of the surrounding area. They include: Okray Family Farms, Worzella & Sons, Golden County Foods, Del Monte, Jay Mar, Inc., Moodie Trucking, Reinders, Inc. Foremost Farms, Rib Stone Silo, Roberts Irrigation, Penford Food, Big Iron Equipment, Warner and Warner, Allen Supply, and Volm Bag.

Section 5.2 Natural Resources Inventory

This section describes the existing conditions of natural resources in the Village of Plover and surrounding area. Natural resources include: soils, surface water, groundwater, floodplains, wetlands, forests, and wildlife.

A. Geology

The Village of Plover is located near the boundary line between two geological provinces, the northern highlands and the central sand plain. The former area is characterized by high bedrock, low available groundwater supply, clay type soils, poor land drainage and northern climate vegetation. Generally, this area lies to the north and west of the Village. The Village primarily lies within the central sand plain, which is characterized by flat topography, ample groundwater supply and sand plain features, including sandy soils that are well drained.

The surface geology of the region along the Wisconsin River is characterized as an “outwash plain”, formed from materials deposited in the area for melt water flowing to the Wisconsin River for the edges of the glacial ice sheets to the east. As a result, the Village’s landscape was

not shaped directly by glacial action, as was the case with lands a few miles east of the Village where glacial “drift” has formed a hilly landscape.

B. Bedrock

Except for an area along Hoover Avenue, near the Little Plover River, there is no bedrock near the ground surface. The bedrock that does underlie the area consists of granite, according to previous drilling reports.

C. Topography

The topography of the Village is relatively flat, with the greatest relief being the approximately 100 foot bluff forming the east bank of the Wisconsin River (Map 5.1).

D. Soils

Soils found in the Village are sandy in nature and present few limitations to development (Map 5.2). An exception is a band of Friendship soils, which extends from the base of the Arnott Moraine two miles east of the Village, through the southern quadrant of the Village (generally south of Roosevelt Drive to Wilson Street), to the Buena Vista Marsh. The Soil Survey of Portage County characterizes Friendship soils as having saturated soils within 3 to 5 feet of the surface. Elevated groundwater conditions exist in the area south of Forest Drive. The remainder of the area is subject to periodic elevated groundwater. The last occurrence of elevated groundwater levels was in 1993, when numerous basements were flooded. Local reports indicate that the previous elevated groundwater occurrences were in 1973/4 and 1938.

Soils that occur in the Plover area are characterized as rapidly permeable and may constitute a "moderate" 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. The rapid permeability of these soils, however, increases the impact of pollutant sources on the groundwater supply. The Village installed a public water system in 1989 and 1990.

E. Groundwater

The Village of Plover is located in the central sand plain geographical province of Wisconsin, an area of mostly flat, unglaciated lands composed of glacial outwash sands, which also function as an aquifer which provides an abundant supply of water.

The possible pollution of groundwater from on-site sewage disposal systems, lawn fertilization practices, agricultural practices, existing land uses and landowner practices could endanger the Village's public water supply and affect the surface waters of the Wisconsin and Little Plover Rivers. In 1990 and 2002, the Village adopted Wellhead Protection Plans to protect groundwater resources and safeguard public health and safety. The Wellhead Protection Plans delineate wellhead protection zones, evaluate contaminant sources, identify potential management strategies and offer specific recommendations for protection of the Village well recharge areas.

As described in the Utilities and Community Facilities Chapter, the Plover well fields are protected by wellhead protection ordinances through the Village of Plover, City of Stevens Point, Village of Whiting and Portage County. Please see Section 4.1(C) and Map 8.6 for a description of these regulations.

Map 5.1 Topography

Map 5.2 Soils

F. Surface Water

The Village is in the Plover and Little Plover River watershed (see Map 5.3). The Wisconsin River and Little Plover River are the only watercourses within the Village. Several subtle drainageways, coupled with the area's flat topography, result in troublesome surface water flooding, particularly in the spring. These drainageways generally do not have distinguishable stream bands and serve to carry runoff from the moraine hills east of the Village to the Wisconsin River. The development potential of prime developable lands south of Cty Rd B has historically been affected by this surface drainage condition. The Village has addressed a portion of this development limitation through the development of an open channel drainage system west of Business Highway 51/STH 54. The remainder of the surface drainage limitation was addressed by the Department of Transportation (WisDOT), when STH 54 was upgraded. The following is a summary of surface water resources within Village of Plover:

1. Springville Pond - Springville Pond is an 18 acre impoundment on the Little Plover River with clear, hard water. The natural sand bottom is covered by silt in some areas. Fish species present include northern pike, perch, largemouth bass, smallmouth bass, bluegills, brook trout, and rainbow trout. Wildlife use of the pond is light.
2. Little Plover River - The Little Plover River is a clear, hard water stream that flows through the Village and into the Wisconsin River. Within the Village, the Little Plover River becomes an impoundment which is called Springville Pond. Much of the volume of the Little Plover River is contributed by springs. Sand and gravel are the predominant bottom materials. Undercut banks, logs, and trees are abundant. Brook trout is the predominant fish species in this stream. In addition, there are approximately 190 acres of DNR fish management lands to the east of the Village, adjacent to the Little Plover River.
3. Wisconsin River - The Wisconsin River is a soft, darkly stained river that flows through Portage County. The Wisconsin River is used as a water source by the paper manufacturing industry, for industrial power, as a discharge site for wastewater treatment facilities, and as a recreational resource. Carp, white suckers, sturgeon, musky and redhorse, along with northern pike, walleye, perch, largemouth bass, sturgeon, musky, bluegill, black crappie, rock bass, pumpkin seed, bullhead, bowfin, and burbot constitute the fishery. Numerous backwater regions provide habitat for many varieties of wildlife.
4. Man-made Lakes – Man-made lakes include Lakes Pacawa and Clar-Re. Lake Pacawa has a public beach and picnic area. A Korean War Veterans' Memorial has been established on the island located in the center of the lake. Worzella Pines Park is located on the north end of the lake. Lake Pacawa is used for a variety of community events.

Lake Clar-Re is associated with residential development and is located just north of the Green Bay and Western railroad tracks along Hoover Avenue.

G. Wetlands

Small wetland areas of local significance are located along the Little Plover and Wisconsin Rivers' bottom lands. Some wetland areas along the Little Plover River have been lost to residential development, however, remaining wetlands are considered undevelopable (Map 5.4). Because of the limited extent of wetlands, streams, water bodies and high bedrock within the Village, development limitations are considered minimal. The Kimberly Clark waste treatment facility, located on an island in the Wisconsin River bottom, is the only development in an area associated with surface water limitations. This treatment is protected from flood waters.

H. Floodplains

The only conventional flood plain in the Village is associated with the Wisconsin River, and it has no effect on existing or future developable lands due to separation from the Village property by the high river bank, as noted above.

I. Wildlife

Fish and wildlife habitat is concentrated in the Wisconsin and Little Plover River corridors. The Little Plover River is a trout stream and the Wisconsin Department of Natural Resources has made considerable stream bank improvements east of the Village to improve trout habitat. Scattered woodlands exist throughout the Village, which provide habitat for various wildlife species, including white tailed deer. These woodlands are slowly being eliminated by development. This trend is expected to continue.

J. Forest Land

Natural Forest Land - Natural forest land includes approximately 120 acres of school forest land, located south of the Village along Lincoln Avenue. These lands are administered by the Stevens Point public school system, the Stevens Point Catholic school system and the University of Wisconsin - Stevens Point. Uses include timber planting/harvest and outdoor education.

K. Endangered/Threatened Species, Natural Areas

Nineteen known rare and endangered species have been identified by the Wisconsin Natural Heritage Resources (NHI) located within Section 42308, which includes parts of the Towns of Linwood and Plover, along with the Villages of Plover and Whiting and City of Stevens Point. Some or all may be found in the Village of Plover; they include: Red-Shouldered Hawk, Osprey, Karner Blue Butterfly, Northern Dry-Mesic Forest, Northern Mesic Forest, Alder Thicket, Floodplain Forest, Stygian Shadowfly, Prairie Vole, Pigmy Shrew, Deam's Rockcress, Woolly Milkweed, Pale Beardtongue, Dwarf Huckleberry, Yellow Screwstem, and Wild Licorice. See Appendix H for a complete description. These elements should be taken into consideration when development and protection measures are considered.

Section 5.3 Cultural Resource Inventory

A. Historical and archeological resources

- Morgan House
- Korean War Memorial
- Veterans Memorial Park
- Heritage Park
- Sherman House
- Iber House
- Indian Burial mounds exist along the banks of the Little Plover River and the banks of the Wisconsin River.

Map 5.3 Surface Waters and Floodplain

Map 5.4 Wetlands

B. Cultural Resources

In September 2000, the Village of Plover designated Heritage Park as an historic district, based on the regulations in place from the Village's Historic Preservation District Ordinance created in 1996. The Village Plan Commission also serves as the Historic Preservation Commission, and as such, only meets upon request.

The Portage County Historical Society is the sole owner of Heritage Park, which is bordered by Washington Avenue on the east, Willow Street on the south, Madison Avenue on the west, and Canadian National Railroad on the north. Directly west of Madison Avenue is the location of the original Village square when the community of Plover served as the County seat. The property now contains ten buildings, five of which have been restored and are open to the public for educational purposes, meetings, as well as museum displays. Below is a listing of buildings within Heritage Park:

- The old Plover Methodist Church – built in 1857 and original to the property, it has been restored as a museum.
- Precourt Blacksmith Shop – built in 1880; moved to the site in 1985 from the Town of Buena Vista from one the earliest homesteads in Portage County. It has been completely restored and is used as demonstration purposes.
- Franklin/Calkins Homestead – built in 1857, moved to the site in 1983.
- The Future general store – built in 1980-82, the store was moved from downtown Plover to the park in 1992.
- The Post Office/ Doctors Office – built in 1870; moved to the park in 1990 from downtown Plover.
- The Hie Corner School – built in 1989 in Amherst; moved to the park in 1990. It is one of three remaining one-room schoolhouses in the County made of lumber.
- The Pierce Building – built in the 1880's; moved to the park in 1992.
- The Bancroft Depot – built in 1898 in Bancroft; moved to the park in 1991.
- The Yellowstone Cabin – moved to the park in 2000.
- The "Circus House" – moved to the park in 2000.

C. 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 to bring federal grant funds to Wisconsin for improving access and preservation of historical records.

Section 5.4 Agricultural/Natural/Cultural Resources Issues and Conclusions

A. Agricultural Resources

1. Agricultural land within the Village limits will ultimately be converted to "urban" uses, and is therefore considered a holding area for future development both during and beyond the planning period.

2. Agri-business has been a strong component of the Village's history, and Plover is interested in continuing growth in that sector of the economy.

B. Natural Resources

1. Development in the Village is not subject to limitations which would be imposed by flood plain, wetlands, steep slopes, high bedrock or unbuildable soils.
2. The Village is located in a mostly flat, sand plain environment. Significant agricultural and urban growth is replacing much of the woodland and wildlife habitat that previously existed. There are no known natural environmental conditions which have extraordinary beneficial or adverse effects on the welfare of the Village, with the exception of the ample, good quality groundwater supply.
3. The Wisconsin River and Little Plover River corridors constitute the most valuable environmental corridors within the Village. Because these corridors represent a limited supply of special natural lands within the Village, their continued protection from the adverse effects of development is important.
4. The Village designed an open channel drainage system to address surface water drainage problems west of Business Highway 51/STH 54 and south of STH 54. The surface drainage problem (east of Business Highway 51/STH 54 and south of Cty Rd B) was addressed by the WisDOT when STH 54 was upgraded. In addition, development regulations for the protection of natural drainageways may be necessary to protect them and assure compatibility with future development.
5. With the development of a public water supply system, the protection of groundwater resources has become a major concern with the Village. In order to protect groundwater within the well recharge areas, the Village began implementation of Wellhead Protection Plan recommendations in 1992 with the adoption of the Wellhead Protection Ordinance. The Village should also consider methods for reducing nitrate contribution to the groundwater supply and advocate land use patterns which minimize contributions of harmful levels of contaminants to the wells' recharge area.

C. Cultural Resources

1. The Village should utilize all information available to them for identifying cultural and historic resources within the Village.

Section 5.5 Agricultural/Natural/Cultural Resources **Goals, Objectives and Policies**

A. Agricultural Goals, Objectives and Policies

1. Agricultural Resources Goal

The Village of Plover shall continue to support expansion of the Agri-business sector where appropriate.

2. Agricultural Resources Objectives

- a. The Village will work with the agricultural community on mutually beneficial timing and location of agricultural land as it transitions to urban-type uses.
- b. The Village will include adequate acreage within its Future Land Use map to accommodate expansion of the agri-business sector.

3. Agricultural Resources Policies

- a. The Village will regularly meet with representatives of the agriculture and agri-business community to discuss the needs and future plans for those sectors.

B. Natural Resources Goals, Objectives and Policies

The Village's environmental resources include air, energy, land, water and wildlife. The significant growth projected for the Village will impact environmental resources. The Village should strive to protect environmental resources and maintain the ecological balance of the area.

1. Natural Resources Goal

To conserve, protect and improve the environmental resources of the Village for the general purpose of:

- a. Maintaining natural diversity within the Village
- b. Providing for the recreational and leisure time needs of Village residents
- c. Enhancing the educational values of Village residents
- d. Enhancing the quality of life of Village residents
- e. Protecting property values

2. Natural Resources Objectives

- a. Preserve good air quality, with the intent that future air quality exceed standards for the area.
- b. Increase public and private sector energy conservation in the Village of Plover.
- c. Preserve land resources possessing special environmental values.
- d. Maintain and improve the quality of surface water resources in the Village.
- e. Recognize the preservation of wildlife habitat as a benefit to the Village and a contribution to the area's natural diversity.
- f. Preserve fish and wildlife habitat along the Wisconsin and Little Plover River corridors.
- g. Ensure that environmental and aesthetic qualities are considered when development proposals are submitted.

- h. Continue to provide a management system that evaluates development proposals and applies specific policies and regulations for the purpose of making informed discussions related to the protection of the Village's natural land resources.
- i. Utilize Village resources, including adopted planning documents and ordinances, to manage the location, timing and type of land activities adjacent to lakes, streams and wetlands, for the purpose of mitigating and/or avoiding negative impacts to these areas.
- j. Implement cost effective, energy efficient technology.
- k. Explain, identify and promote alternative energy sources.

3. Natural Resources Policies

- a. Support the State's air quality standards as minimum guidelines for development.
- b. Continuously evaluate the energy efficiency of municipal facilities, with the intent of implementing measures which can save energy. Examples include:
 - Types of street lighting
 - Lighting and maintenance of park and recreation facilities
 - Road construction and maintenance
 - Lighting and heating of municipal buildings
 - Use of methane from the sewage treatment plant
 - Performing energy audits of Village equipment and facilities
- c. Promote education about energy issues.
- d. Utilize the Subdivision and Zoning Ordinances to preserve wooded and other unique natural areas.
- e. Utilize publicly owned land for open space needs whenever possible and work with private landowners in providing public access to recreation areas.
- f. Preserve as natural areas lands that are acquired for wellhead protection.
- g. Maintain and improve the water quality of the Wisconsin River.
 - Continue to maintain or surpass the DNR's required standards for the wastewater treatment facility's effluent, which discharges into the Wisconsin River.
 - Protect the Wisconsin River from wastewater discharges that would degrade water quality.
- h. Maintain and improve the water quality of the Little Plover River.
- i. Support measures aimed at improving the water quality of Lake Pacawa.
- j. Promote the reduction of abatement of non-point source pollution of surface waters.
- k. Identify and preserve areas having special wildlife habitat values.
- l. Implement measures intended to protect fish and wildlife habitat as a part of Village projects, when such potential exists.
- m. Utilize the Village's park system to enhance wildlife habitat.

- n. The Village should continue to use the Floodplain, Shoreland-Wetland and Zoning Ordinances as a means of protecting environmentally sensitive and unique areas from urban development.
- o. Maintain and reinforce, as necessary, the regulatory provisions of the Village's Conservancy Zoning District as a tool in implementing the goals, objectives and policies identified in this section.
- p. Consider air quality performance standards in addition to State standards for proposed development, as deemed necessary by the Plan Commission and Village Board.
- q. Support and promote educational programs which Village officials, residents and businesses can benefit from, including:
 - Work sessions that utilize resources from the University of Wisconsin Extension, Wisconsin Public Service and other available agencies.
 - Publicize notices of educational programs.
 - Provide educational material in the Village's library and publicize information availability.
- r. The following are offered to address requirements of Wisconsin's new recycling law:
 - Work in conjunction with the University of Wisconsin Extension, University of Wisconsin – Stevens Point, Portage County and other available resources to design a program that will best meet Plover's needs.
 - Determine what services need to be provided and who can best provide those services. For example, the Village should determine who can best provide collection, enforcement, processing and marketing services.

C. Cultural Resources Goals, Objectives and Policies

1. Cultural Resources Goal: Encourage identification and protection of historic and cultural resources; Promote the arts as an integral part of our community; Educate the public of cultural resources.
2. Cultural Resources Objectives
 - a. Effectively accomplish the protection, enhancement and preservation of such improvements, sites and districts which represent or reflect elements of the Village's cultural, social, economic, political and architectural history.
 - b. Safeguard the Village's historic, prehistoric and cultural heritage, as embodied and reflected in such historic structures, sites and districts.
 - c. Develop site specific guidelines for protecting cultural and historic resources.
 - d. Stabilize and improve property values and enhance the visual and aesthetic character of the Village.
3. Cultural Resources Policies
 - a. Protect and enhance the Village's historic improvements, sites, districts, and cultural heritage through the Historic Preservation Commission.