CHAPTER 5 Agricultural, Natural And Cultural Resources Element

Section 5.1 Introduction

The agricultural, natural and cultural resources of the Town of Alban are perhaps the single most important reason why people choose to live here. Natural woodlands, varied and abundant wildlife, and productive farms and farmland all come together to create a unique Wisconsin landscape.

The residents of the Town of Alban recognize the value of their unique landscape and understand that it supports and sustains a way of life they are proud of. For those who choose to farm the land here, the community supports their efforts and works to minimize barriers that impede this economically viable industry. The residents also understand that the identification and protection of the historical and cultural resources of the community will help sustain a rich quality of life that is enjoyed by all who settle here.

Section 5.2 Agricultural Resources

A. Agricultural Potential Based on Land Evaluation Site Assessment Rating (LESA)

Land Evaluation and Site Assessment (LESA) is a tool that can be helpful in assisting Town leaders to identify land that has the highest value for agricultural use within the community. The LESA system is a point-based approach that can be used for rating the relative value of agricultural land resources. It does so by defining and measuring two separate sets of factors. The first set, **Land Evaluation**, includes factors that measure the inherent soil-based qualities of land as they relate to agricultural suitability. The second set, **Site Assessment**, includes factors that are intended to measure social, economic, and geographic attributes that also contribute to the overall value of agricultural land.

A Land Evaluation (LE) rating was developed for use across all of Portage County. Three soil property indexes, all published by the Natural Resources Conservation Service (NRCS), were combined to produce the LE rating: prime farmland classification, land capability class – natural condition, and productivity index. LE ratings reflect the productivity potential, as well as the economic and environmental costs of producing a crop. Possible LE ratings range from 0 to 100, with **higher numbers meaning greater value for agriculture**. Many physical and chemical soil properties are considered in the LE rating, either directly or indirectly, including soil texture and rock fragments, slope, wetness and flooding, soil erodibility, climate, available water capacity, pH (alkalinity versus acidity), and permeability.

A Site Assessment (SA) rating was also developed for the Town of Alban. The site assessment factors are further evaluated in the Land Use element of this plan. As with the LE rating, SA ratings range from 0 to 100, with higher numbers meaning greater value for agriculture. The LE and SA scores are combined to yield a score for each two-acre block of land within the Town ranging between 0 and 200 points, with a score of 200 representing lands that are of the highest value for agriculture (excluding specialty crops such as cranberries). Communities will then determine an appropriate threshold for ranking lands recommended for protection (i.e. areas with a score higher than 150 and greater than 40 contiguous acres in size). Weighting factors can be changed by each community to reflect its own priorities. See Appendix D for a complete explanation of this system. The Town of Alban has decided to use the LESA model as an advisory tool to help identify areas in the community that should remain in agricultural use.

B. Highly Productive Agricultural Soils

Highly productive agricultural soils in the Town of Alban have been identified, with the assistance of the County Conservationist, based on highest productivity and lowest degree of limitations for farming (Map 5.1 Highly Productive Agricultural Soils). Slopes greater than 6% were excluded from the "highly productive" designation (due to severe hazard for water or wind erosion), along with small parcels and stony, rough, and eroded sites. Highly Productive Soils in Alban include:

Prime Agriculture

- Billett Sandy Loam, 0-2% slopes
- Rosholt Loam, 0-6% slope

Prime Agriculture If Drained

Oesterle Sandy Loam

Prime Agriculture if Irrigated

• Richford Loamy Sand, 0-2% slopes

- Wyocena Sandy Loam, 2-6% slopes
- Oesterle Loam, Silty Subsoil Variant
- Richford Loamy Sand, 2-6% slopes
- C. Farming Systems, Demographics, and Land Tenure

The agricultural landscape of the Town of Alban can best be described as a "coming together" of farming systems. The Town is located near one of the two major farm regions in Wisconsin. First, and most prominent is the dairy region. In Wisconsin, dairying is most concentrated in a belt that begins near Hudson (St. Croix County), heads east to Wausau and Green Bay (Brown County), then turns southwest through Fond du Lac, Madison and ends near Dubuque (Iowa County). Wisconsin Department of Agriculture 2007 permit information listed 10 active dairy farms as operating in the Town of Alban, 9 active Grade A dairy farms, 1 Grade B dairy farm. Big dairy farmers continue to expand; the remainder turn to beef farming or cash crops. There are also veal and pig farmers located in the Town of Alban, as well as some specialty farms involved with vegetable production, trees, and flowers.

The amount of land dedicated to agricultural production can and often does change from one year to the next. In 2000, the Portage County Planning and Zoning Department analyzed the GIS database and aerial photography of Alban to identify active farmland within the Town. The land in farms was broken down by presence of irrigation, 1,849 acres; use for row crops or hay, 5,814 acres; and permanent pasture, 66 acres; Coniferous Forest Land Plantation 1,142 acres; and Confined Animal Operations of 92 acres, for a total of 8,963 acres.

There were 68 persons employed in an agriculturally-related field in the Town of Alban in 2000 (Table 1.10, Issues and Opportunities section). This represented 17.7% of employment for the Town. Although this is down substantially from the 1980 figure of 91 persons (36%), Alban did still have a higher percentage of agriculture-related employment in 2000 when compared to the Portage County Town average (6.9%). Decreasing farm employment is not a unique trend by any means. The number of farms is decreasing, while acreage per farm is up. Farm consolidation is a common practice in this industry.

Map 5.1: Highly Productive Ag Soils

D. Farm Economy and Infrastructure

Because of the lack of farm economy information available at the Town level, a detailed discussion of the farm economy at the Town level is not practical. Please see the complete discussion of the Portage County farm economy in the Agricultural, Natural and Cultural Resource Element of the Portage County Comprehensive Plan.

Generally speaking, farm operations under present economic conditions tend toward consolidation and expansion of existing agricultural operations. In particular, the consolidation and expansion of certain agricultural sectors such as livestock operations, into large scale, high density confined animal feeding operations should be a concern to everyone in Alban.

Large scale livestock operations can pose issues in an agricultural community due to intensity of use that would not otherwise occur with more traditional livestock operations of a lower density. These operations do not have to be a new farm proposed by a large "corporate farm", but can also be an expansion of an existing farm. These large livestock operations can have disproportionate impacts on the Town compared to smaller operations. The Town of Alban supports the right to farm, but a change in operations that negatively affects property due to a drastic change in land use should receive equal consideration for all residents of the Town.

Large scale livestock operations have definable impacts on their surroundings. The high density of animals creates animal waste issues. Farm workers develop respiratory infections due to high levels of ammonia released into the air by the concentrated animal waste. Large animal waste storage lagoons can seep into the groundwater and contaminate drinking water or get washed into local surface waters during storms and pollute lakes and streams.

The Town of Alban encourages Portage County to better define and codify the agricultural land uses associated with livestock in the County Zoning Ordinance. Town officials will investigate and utilize existing land use policies to address these land use issues until a comprehensive approach to the issue is achieved.

E. Other Local Influences on Agriculture

The Alban area has historically not seen great pressure for the development of rural residential properties. However, increased interest in Alban can bring more homes onto the agricultural landscape, which in turn could lead to increased potential for life-style conflicts; increased assessed value of non-farm lands; and most importantly, increases in the sale price per acre of land beyond the point of being economically viable for purchase as farmland.

F. <u>Agricultural Programs</u>

A number of programs are available to agricultural landowners to help achieve desired outcomes ranging from enhancing wildlife habitat to minimizing soil erosion. The following is a partial list from the Natural Resources Conservation Service (NRCS). For more information about these and other programs, contact the local NRCS office at 715-346-1325 or the Farm Service Agency at 715-346-1313.

Conservation Reserve Program (CRP)

The Conservation Reserve Program, administered through the Farm Service Agency (FSA), is a voluntary program for agricultural landowners. Through CRP, one can receive annual rental payments and cost-share assistance to establish long-term, resource conserving covers on eligible farmland. Participants enroll in CRP for 10 to 15 years.

Environmental Quality Incentives Programs (EQIP)

The Environmental Quality Incentives Program (EQIP) is a voluntary conservation program. It supports production agriculture and environmental quality as compatible goals. Through EQIP, farmers may receive financial and technical help with structural and management conservation practices on agricultural land.

EQIP may pay up to 75 percent of the costs of eligible conservation practices. Incentive payments may be made to encourage a farmer to adopt land management practices, such as nutrient management, manure management, integrated pest management, and wildlife habitat management.

Wetlands Reserve Program (WRP)

The Wetlands Reserve Program is a voluntary program to restore and protect wetlands on private property. It is an opportunity for landowners to receive financial incentives to restore wetlands for agriculture.

Landowners who choose to participate in WRP may sell a conservation easement or enter into a cost-share restoration agreement with USDA to restore and protect wetlands. The landowner voluntarily limits future use of the land, yet retains private ownership. The landowner and NRCS develop a plan for the restoration and maintenance of the wetland.

The program offers landowners three options: permanent easements, 30-year easements, and restoration cost-share agreements of a minimum 10- year duration

Wildlife Habitat Incentives Program (WHIP)

The Wildlife Habitat Incentives Program is a voluntary program for people who want to develop or improve wildlife habitat on private lands. It provides both technical assistance and cost sharing to help establish and improve fish and wildlife habitat.

Landowners agree to prepare and implement a wildlife habitat development plan. The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) provides technical and financial assistance to implement the wildlife habitat restoration practices.

Section 5.3 Agricultural Issues

The following agricultural issues were identified during the comprehensive planning process through public comment or by the Plan Commission:

- **A.** The farming industry is the economic engine that drives the Town of Alban. The Town understands the need to protect the land base that supports this industry.
 - Productive farmland needs to be protected.
 - Conflicts between farm and non-farm uses need to be minimized.
 - There needs to be a balance between the needs of large scale farming operations and the overall health, welfare, and quality of life for Alban residents.
 - The Town of Alban is very interested in working with Portage County Planning, Zoning, and Land Conservation staff to identify various issues relating to large animal livestock operations.

- B. Nitrates in the groundwater are of concern in the Town, but it is difficult to pinpoint an exact source, be it natural or man made. Concentrations of nitrates in well water vary greatly based on location, depth of well and rate of draw.
 - Groundwater needs to be protected from pesticides and herbicides (monitoring the Atrazine ban, and working with the County to monitor water quality in wells when possible).

Section 5.4 Agricultural Goals, Objectives and Policies

<u>Goal 1</u>: Protect productive agricultural lands in the Town.

<u>Objective 1.1</u>: Identify productive agricultural areas in the Town using the LESA model.

<u>Policy 1.1 (a)</u>: Protect productive agricultural lands through the continued use of A1, Exclusive Agricultural Zoning.

<u>Goal 2</u>: Future development does not conflict with agricultural operations.

<u>Objective 2.1</u>: Encourage low density, non-farm development in areas away from intensive agricultural activities.

<u>Policy 2.1 (a)</u>: Recommend new non-farm residences should be built at least 200 feet from lands zoned A1, due to dust, noise, spreading of animal waste or sludge, aerial or ground spraying, irrigation, etc.

<u>Goal 3</u>: Utilize agricultural practices that are environmentally sensitive and protect air, soil, water, and wildlife resources.

<u>Objective 3.1</u>: Encourage land use practices which protect the quality of surface and groundwater resources, including minimizing the loss of soil or agricultural chemicals to ground and surface water, as well as the proper location and maintenance of on-site sewage systems associated with residential development.

<u>Objective 3.2</u>: Encourage soil conservation practices that minimize erosion, including the retention and development of windbreaks.

<u>Goal 4</u>: The agricultural community is economically viable for the mutual benefit of the farmers and residents of Alban.

<u>Objective 4.1</u>: Maintain the agricultural land base and encourage a wide range of agricultural practices.

<u>Objective 4.2</u>: Protect the Town of Alban from potential detrimental effects caused by large farms with livestock.

<u>Policy 4.2 (a)</u>: Encourage Portage County to better define and codify the agricultural land uses associated with livestock in the County Zoning Ordinance.

<u>Policy 4.2 (b)</u>: Review agricultural operations proposing moderate to high density levels of livestock farming in order to protect ground water and surface waters from nitrates and concentrated animal waste byproduct.

<u>Policy 4.2 (c)</u>: Develop Town policies, if necessary, to protect Alban residents from pests, agricultural chemical contamination, and degradation of the environment associated with large agricultural livestock operations.

Section 5.5 Natural Resources

Natural resources in the Town serve as the foundation for residents physical and economic well being – from groundwater quality to land suitability for agricultural, residential, or commercial development. According to the results of the 2001 Comprehensive Planning and Zoning Survey, Town residents favored managing the natural resources that support and sustain them (see Appendix B).

This section will describe the existing natural resources inventory and state the issues, goals, objectives, and policies that were identified and adopted by the Town of Alban Plan Commission and Town Board.

A. <u>Geomorphology</u>

The present Portage County landscape primarily reflects the last or Wisconsin stage of the Pleistocene or glacial epoch (Holt, 1965). The glacial ice transported large amounts of rock debris known as drift. The drift is called till if deposited directly by the ice, and outwash if placed by glacial melt water. The drift province covers the eastern 1/3 of the County and is made up of a series of end moraines that represent the accumulation of ice-transported debris that piled up at the forward edge of the ice sheet. Portage County has two terminal moraines, one located to the west of Highway J and another to the east of Highway J. The Town of Alban is located to the east of both terminal moraines and the soil consists of a deep layer of till. The till deposits are 100 feet deep or more.

The melting ice deposited large volumes of ice-transported materials as soil by the melt waters east of the terminal moraines. The deep sand, gravel, and boulder deposits make up the soils of the Town. These deep, poorly sorted till deposits allow for high water capacities in the porous soils.

The topography of the Town is generally flat to slightly rolling and includes some pothole lakes, rivers and some lowland wet areas. The elevation ranges from 1,240 feet above sea level in the northwest part of the Town to 1,040 feet above sea level in the southeast corner. Depth to bedrock throughout the Town is 100 feet or greater. The highest mean sea level elevation in Portage County is located in the northwest portion of the Town, at the intersection of County Road I and Lost Road (Map 5.2).

B. Soils

Soils in the Town (Map 5.3) can be grouped into three soil associations, as follows:

<u>Wyocena-Rosholt association</u>: Well drained, gently sloping to very steep soils that formed in loamy deposits and sandy glacial till or outwash sand and gravel. These soils are found throughout the majority of the Town. The lesser sloping areas tend to be used for crops while the steeper areas are used for pasture or woodland. The steeper soils in this association have very severe limitations for septic absorption fields.

<u>Richford-Rosholt-Billett association</u>: Well drained, nearly level to gently sloping soils that formed in sandy and loamy deposits and outwash sand and gravel. These soils can be found primarily in the central and southwest portions of the Town. Corn, small grain, and alfalfa are the principal crops, while some specialty crops are grown in irrigated areas. These soils are subject to wind and water erosion.

Map 5.2: Topography

Map 5.3: General Soil Associations

Map 5.4: Wetlands and Watersheds

<u>Markey-Seeleyville-Cathro association</u>: Very poorly drained, nearly level soils that formed in organic deposits over sandy and loamy deposits. These soils are found along the western border and the southeast corner of the Town and are used primarily for pasture or wildlife habitat. Soils in this association have very severe limitations for basements and septic drain fields.

Soil testing by a certified soil tester is strongly recommended for more detailed, site specific information.

C. Surface Water and Wetlands (Map 5.4)

The major surface water bodies that are present in the Town of Alban are: Collins Lake, Lake Helen, Lions Lake, Mud Lake (upper), Mud Lake (lower), Penny Lake, Tree Lake, and Windorf Lake. A two year lakes study was conducted by the University of Wisconsin-Stevens Point and the Portage County Land Conservation Office to assess the characteristics of 29 lakes in the County; results for Lions Lake, Lake Helen, Collins Lake and Tree Lake are included in Appendix E.

Other surface water features in the Town include: Little Wolf River, Bradley Creek, Flume Creek, and Klondike Creek. The Flume Creek transects the Town from north to south. All four of these water features are listed as Class 1 trout streams by the Wisconsin Department of Natural Resources; Class 1 is defined as: high quality trout waters that have sufficient natural reproduction to sustain populations of wild trout, at or near carrying capacity. Consequently, streams in this category require no stocking of hatchery trout. These streams or stream sections are often small and may contain small or slow-growing trout, especially in the headwaters.

There are two drainage basins in the Town of Alban, the Upper Little Wolf River Watershed and the Waupaca River Watershed. Both watersheds eventually flow into the Wolf River Watershed that enters the bay of Green Bay via the Fox River. The Wolf/Fox River Watershed is the largest watershed emptying into Lake Michigan. A watershed can be defined as an interconnected area of land draining from surrounding ridge tops to a common point such as a lake or stream confluence with a neighboring watershed (WI DNR). Fluctuations in surface water elevation are more evident in Alban due in part to its close proximity to the groundwater divide. All but the southwest corner of the Town is included in the Little Wolf River watershed, therefore most of the surface runoff from Alban will have an impact on the Little Wolf River.

Wetlands are an important part of the watershed, acting 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. Wetlands within the Town of Alban are very limited, but include three general types: forested, scrub or shrub, and emergent/wet meadow.

Forested wetlands are the predominant type, including 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 throughout Alban, but primarily along the creek edges and adjacent to upper Mud Lake

Scrub/shrub wetlands are the second most abundant type. These wetlands, which include bogs and alder thickets, are characterized by wood shrubs and small trees such as tag aster, bog birch, willow and dogwood. These are also found primarily south of Penny Lake and adjacent to lower Mud Lake.

Emergent/wet meadow, the third most numerous type of wetland within Alban, consists of areas that may have saturated soils more often that 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. These types of wetlands are found interspersed throughout the Town near forested wetlands.

D. Flood Plains

A flood plain is defined as that land which has been or may be covered by floodwater during a regional flood. The flood plain includes the floodway and flood-fringe areas. A 100-year flood is defined as a flood event having a one percent chance of reaching the 100-year flood elevation in any given year. Contrary to popular belief, it is not a flood occurring once every 100 years. A 100-year flood plain then, is the area adjoining a river, stream, or watercourse covered by water in the event of a 100-year flood. According to Federal Emergency Management Agency maps, there are extensive areas of 100 year flood plain along Flume Creek, Bradley Creek, the Little Wolf River, and adjacent to as well as in wetland areas north and south of Lake Helen (see Map 5.5 below).

E. Groundwater

The majority of the Town of Alban is located east of the terminal moraine of the last glacial advance. The soil and substratum of the Town is made up of glacial till deposits that vary in size from fine loamy sands to large boulders. The composition of the till deposits result in very porous soils allowing easy acquisition of water from shallow wells. The depth to basement sandstone bedrock, known from wells that have contacted the bedrock, place the depth to bedrock in the Town of Alban at 100 feet or greater. The depth to groundwater generally varies between 0 to 50 feet. The depth to groundwater at any specific location will be influenced by the local geography including; underlying bedrock conditions, depth of glacial till deposits, and distance to local bodies of surface waters.

All Town residential water use comes from groundwater sources, therefore, protection of this resource is important. There is generally a thick unsaturated zone, however, given the sandy soil type, there exists little second line defense against pollutants regardless of the nature of the subsurface materials. Although some soils ranked moderate to good in pollution attenuation, this area of the County should be considered vulnerable overall given the sandy soil type.

Potential pumping yield rates for groundwater generally range from 500-1,000 gallons per minute throughout the Town. This rate is high when compared to areas west of the Wisconsin River where rates rarely exceed 50 gallons per minute.

Knowing groundwater flow can be a helpful piece of information when determining proper sitting of well and on-site waste systems. The general flow of ground water in the Town of Alban is from the northwest to the southeast (Map 5.6). Data collection for groundwater monitoring is an on-going process and the Town should work with the County and other research organizations to maintain the most current information possible.

1. Atrazine Prohibition Areas

The U.S. Environmental Protection Agency (EPA) is researching the health effects of Atrazine in water. Drinking water that contains Atrazine will not cause immediate sickness or health problems (acute toxicity). However, consuming low levels of Atrazine over time may cause health problems (chronic toxicity). The EPA is also concerned that Atrazine may be an endocrine disruptor which can cause unintentional hormone-like activity in the body.

The Wisconsin Department of Agriculture, Trade and Consumer Protection is responsible for protecting Wisconsin's groundwater from contamination by pesticides and fertilizers. Their authority to restrict the use of a pesticide that is contaminating groundwater at levels above

Map 5.5: Floodplain

Map 5.6: Groundwater Flow

Map 5.7: Atrazine Prohibition Areas

Map 5.8: Forested Land

health-based standards is found in the Wisconsin Groundwater Law, <u>Chapter 160 of the</u> <u>Wisconsin Statutes</u>, and by department rule in <u>ATCP 31</u>, <u>Groundwater Protection Program</u>. The rules for restricting the use of Atrazine and other pesticides in Wisconsin are part of <u>ATCP 30 - Pesticide Product Restrictions</u> and the county maps showing the location of the prohibition areas can be found in the rule in <u>ATCP 30 - Appendix A</u>.

Atrazine has been detected in wells within the Town of Alban and because of this, prohibition areas have been defined within the community (Map 5.7, Atrazine Prohibition Areas). Approximately 3,556 acres of land are within the prohibition area in the Town of Alban. The lands are found in the west central portion of the community.

F. Wildlife Habitat and Forested Areas

When people think about wildlife, birds, fish, and mammals most likely come to mind. It is important, however, to consider all organisms that make up an ecosystem in order for that system to continue providing the maximum benefit to humans and the environment. Town residents recognize the fact that human beings play a role in protecting or restoring, as well as, degrading or destroying wildlife and its habitat. They also recognize that while it will be very difficult to preserve all ecosystems in the Town from human encroachment or interaction, it is the desire of residents to protect wildlife habitat where practicable.

The biggest threats to wildlife are loss of habitat quality and quantity. These threats can be attributed primarily to fragmentation, invasive species, and pollution. **Fragmentation** refers to the loss of large, contiguous sections of land through subdivision into smaller parts, which can lead to an alteration and possible degradation of the native plant and animal communities on these properties.

Invasive species (both plant and animal) tend to out-compete or prey on native species, altering the native ecosystem. **Pollution** can lead to habitat degradation, and cause birth defects and increased mortality rates in animal species. Habitat areas are important for providing food and cover for nesting, brooding, and sheltering. Farmland is one type of habitat that also provides food, as well as travel corridors between wetlands and woodlands.

Woodlands or forested lands account for 44% of the land area in Alban (Map 5.8 above), while wetlands make up 18%. According to 2001 County Planning and Zoning survey data, 81% of respondents felt that an effort should be made to identify and protect woodlands, and 74% felt the same about wetlands and flood plains (see Appendix B). Woodlands are present in the Town primarily due to an inability to sustain successful agricultural practices in those areas. Loss of these habitat types can threaten the viability of certain species.

One option open to all private landowners owning ten or more acres of woodlands is the Managed Forest Law Program. The MFL program is intended to foster timber production on private forests while promoting other benefits that forested lands provide. Participants in this program have the option to choose a 25 or 50 year contract period and pay property taxes at a reduced rate on enrolled lands. A portion of the difference in property taxes is recouped by the State at the time of a timber harvest when a yield tax is imposed based on the volume of timber removed. For more information regarding specific requirements and how to enroll in this program, contact the Wisconsin Department of Natural Resources.

1. Threatened and Endangered Species

There are no known rare and endangered animal species identified by the Wisconsin Department of Natural Resources (WI DNR) Wisconsin Natural Heritage Inventory (NHI) that are located within the Town of Alban area, however rare and endangered plant communities include Northern Mesic Forest, Northern Wet-Mesic Forest, and Open Bogs (see Appendix F). These elements should be taken into consideration when development and protection measures are considered. A detailed description of rare and endangered plants and animals can be obtained from the WI DNR.

G. Air Quality

The following information comes from the WI DNR and the Environmental Protection Agency:

A few common air pollutants are found all over the United States. These pollutants can injure health, harm the environment and cause property damage. The Environmental Protection Agency calls these pollutants **criteria air pollutants** because the agency has regulated them by first developing health-based **criteria** (science-based guidelines) as the basis for setting permissible levels. These pollutants include ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter, and lead. One set of limits (**primary standard**) is designed to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly; another set of limits (**secondary standard**) is intended to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. A geographic area that meets or does better than the primary standard is called an **attainment area**; areas that do not meet the primary standard are called **non-attainment areas**.

All of Portage County, including the Town of Alban, is listed as an attainment area by the WI DNR.

H. Non-metallic mining

The glacial and geologic history of Portage County has made conditions suitable types of nonmetallic mining. Along the moraines in the eastern third of the County, glacial deposits have resulted in some lands that are desirable for gravel and aggregate extraction. This is in contrast with lands west of the Wisconsin River where soils are heavier and have higher clay content.

Conditions in Alban are favorable for some types of non-metallic mining as evidenced by 9 small previously worked sand and gravel pits within the Town. Sub-surface non-metallic materials may be considered an economic development resource to the Town.

I. <u>Natural Resources Programs</u>

Wetlands Reserve Program (WRP)

The Wetlands Reserve Program is a voluntary program to restore and protect wetlands on private property. It is an opportunity for landowners to receive financial incentives to restore wetlands that have been drained for agriculture.

Landowners who choose to participate in WRP may sell a conservation easement or enter into a cost-share restoration agreement with USDA to restore and protect wetlands. The landowner voluntarily limits future use of the land, yet retains private ownership. The landowner and NRCS develop a plan for the restoration and maintenance of the wetland.

The program offers landowners three options: permanent easements, 30-year easements, and restoration cost-share agreements of a minimum 10- year duration.

Wildlife Habitat Incentives Program (WHIP)

The Wildlife Habitat Incentives Program (WHIP) is a voluntary program for people who want to develop or improve wildlife habitat on private lands. It provides both technical assistance and cost sharing to help establish and improve fish and wildlife habitat.

Landowners agree to prepare and implement a wildlife habitat development plan. The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) provides technical and financial assistance to implement the wildlife habitat restoration practices.

Groundwater Guardian Program

The Wisconsin Groundwater Guardian Program (GG Program) is a program of The Groundwater Foundation, an international non-profit organization dedicated to educating and motivating people to care for and about groundwater. This is a voluntary membership program where participating communities gain information for proactive steps toward comprehensive groundwater protection.

Section 5.6 Natural Resources Issues

- Nitrates in the groundwater are of concern in the Town, but it is difficult to pinpoint an exact source, be it natural or man-made. Concentrations of nitrates in well water vary greatly based on location, depth of well and rate of draw. How can levels of nitrates in groundwater be reduced?
- Pesticide/herbicide applications need to be done in a way that protects our groundwater resources. Groundwater depths vary from 200 feet in the northeast corner of the Town to 20 feet in the southwest. This depth does provide some level of protection from immediate contamination.
- Mining operations should be well screened and in harmony with their surroundings. Hours of operation should be agreeable with those affected by the activities. How can the Town reduce conflict between existing uses and non-metallic mineral operations?
- Large livestock operations concern to all residents in the Town of Alban and a policy to review all such operations should be created in order to mitigate possible adverse effects. Large livestock operations have the ability to seriously degrade the natural environment on several levels. Such operations can degrade the quality of air Town resident's breath, encourage the spread of vermin and obnoxious insects, degrade and irreparably change surface waters, and contaminate the ground water so it is not fit for human consumption.
- Tree diseases and pests are an ongoing threat to the commercial and general health and welfare of the Town of Alban. The Town supports forestry disease and pest eradication methods. Should the Emerald Ash borer beetle be detected in the Town, all efforts by State officials to eradicate the pest shall be supported if necessary.
- The Town supports and promotes responsible logging. Residents may acquire the appropriate information on best cutting practices when receiving the County cutting permit. Species such as Oak should be cut during the proper seasons to avoid further spreading tree disease.
- The Town does not have an ability to control or minimize crop damage from deer, turkeys, cranes or other wildlife. All issues regarding wild animal pest control should be directed to the local offices of the Wisconsin Department of Natural Resources (DNR).

- The smallest residential lot now permitted in the Town of Alban is 2 acres in size. This limit should protect groundwater quality as long as low density residential development continues to be maintained.
- Additional groundwater protection can be provided by supporting the testing and monitoring of groundwater wells when possible, to maintain or improve water quality.

Section 5.7 Natural Resources Goals, Objectives and Policies

<u>Goal 5</u>: Identify, manage, preserve and protect natural resources throughout the Town.

<u>Objective 5.1</u>: Encourage land use practices which protect the quality of surface and groundwater resources, including minimizing the loss of soil or agricultural chemicals to ground and surface water, as well as the proper location and maintenance of on-site sewage systems associated with residential development.

<u>Policy 5.1 (a)</u>: Utilize the Conservancy Zoning District to protect important or fragile environmental areas, including the shorelines of navigable lakes and streams, as well as adjoining wetlands.

<u>Policy 5.1 (b)</u>: Work with Portage County to maintain a list of landowners who have registered interests in non-metallic resources.

<u>Policy 5.1 (c)</u>: Promote agricultural practices that are environmentally sensitive and protect air, soil, water and wildlife resources.

<u>Policy 5.1 (d)</u>: Encourage partnership efforts that result in the preservation and restoration of natural resources.

<u>Objective 5.2</u>: The protection of natural resources is taken into consideration when development occurs.

<u>Goal 6</u>: Natural resources that provide recreational opportunities on public land are managed to ensure their lasting presence.

Objective 6.1: Maintain the Alban lakes as a valued natural resource.

<u>Policy 6.1 (a)</u>: Encourage the Portage County Parks Department to continue to maintain other County park properties within Alban.

<u>Objective 6.2</u>: Units of government work together to define and develop appropriate public access to natural resources.

<u>Policy 6.2 (a)</u>: Request the assistance of the DNR when reviewing the "navigable" status of various lakes and streams in the Town and reclassifying those waters which do not warrant a "navigable" designation.

<u>Goal 7</u>: Provide the natural areas of the Town of Alban with protection from possible negative effects from large scale livestock operations.

<u>Objective 7.1</u>: Encourage Portage County to better define and codify the agricultural land uses associated with livestock in the County Zoning Ordinance.

<u>Policy 7.1 (a)</u>: Work with Portage County to develop policies to objectively review and establish criteria to protect natural land uses near high density livestock operations.

<u>Policy 7.1 (b)</u>: Encourage review of agricultural practices where moderate to high density levels of livestock operations occur and concentrated levels of manure are applied near local water systems

- To prevent nitrate levels from rising in ground water
- To prevent the chocking of surface waters caused by elevated BOD levels (Biological Oxygen Demand)

<u>Policy 7.1 (c)</u>: Develop a Town policy if necessary to protect natural resources near high density livestock operations to prevent environmental degradation such as:

- Prevent the fouling of surface waters and protection of potable ground water;
- Protect natural areas, flora, and fauna from environment changing land uses;
- Prevent the promotion of vermin, obnoxious insects, and foul air.

Section 5.8 Cultural Resources

How can you know where you are going if you don't know where you have been? 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.

Burial sites are one example of a resource that can add to a community's sense of history as well as provide a great deal of genealogical information. Formally catalogued burial sites are protected from disturbance in Wisconsin and are given tax treatment equal to that of operating cemeteries.

Information regarding cultural and historic resources in the Town is constrained by limited financial and human resources. This section will provide goals and policies that promote the effective management of historic and cultural resources.

A. Cultural and Historic Resources Inventory

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. Keep in mind many of the properties included in this inventory are privately owned and not necessarily open to the public, so please respect the rights of private property owners. At this time, there are four listings in the Town of Alban, which include different kinds of houses. Some of the structures on the sites listed, however, may no longer exist.

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 Town of Alban.

There are three cemeteries located in the Town of Alban: Alban Cemetery/Faith Lutheran Cemetery, located at the corner of Highway 66 and County Trunk A; St. Adalbert Catholic Cemetery, located one-half mile west of the Village of Rosholt, behind St. Adalbert Church on St. Adalbert Road.

B. <u>Cultural Resource Programs</u>

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 5.9 Cultural Resource Issues

The following issues or concerns were identified by the Town of Alban Plan Commission:

Some of the older barns in the Town depict rural character and should be considered as cultural or historic resources.

Section 5.10 Cultural Resource Goals, Objectives and Policies

<u>Goal 8</u>: The general public is more aware of cultural resources.

<u>Objective 8.1</u>: Work with the Portage County Historical Society to help identify cultural and historic resources in the Town.