



CHAPTER 3

AGRICULTURAL, NATURAL & CULTURAL RESOURCES

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INTRODUCTION

Agricultural, natural, and cultural resources give definition to a community and strongly affect quality of life. Outside of the urban areas of Winnebago County, a tapestry of working farms and stands of woodlands dot the landscape and contribute greatly to the area's identity and culture. While agricultural acreage and the number of farms have been on the decline in Winnebago County for the past several decades, agriculture is still an important component of the area economy. Natural features such as topographic relief, lakes, streams, wetlands and soils have also had a significant bearing on historic and current land use and development patterns. The ability to understand and make the connection between environmental characteristics and their physical suitability for future development is necessary in preparing the Town's future land use map. Appendix C-3 contains detailed information about agricultural, natural and cultural resources in the Town of Algoma.

GOAL

Manage the transition of agricultural lands to urban uses, while recognizing the importance of conserving, protecting and enhancing the Town's natural and cultural resource base.

SUMMARY OF KEY POINTS AND NARRATIVE

Below is a summary of the key environmental points with a brief narrative and what they collectively mean for the future of the Town:

AGRICULTURAL RESOURCES

THE FACTS:

- Approximately 34 acres of farmland per year were converted to other uses within the Town of Algoma between 2000 and 2015.
- In 2015, about 1,992 acres or 29.6% of the land in the Town was in cropland.
- A majority of the Town's soils are highly suitable for agriculture.
- The Town does not have any community gardens established at this time.
- The Town of Algoma does not specifically regulate or prohibit urban farming uses, such as beekeeping and raising of chickens within residential or commercial zoned areas.

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WHAT IT MEANS:

Farming and the processing of farm products are still important sources of income and employment within the Town and county; therefore, the protection of remaining productive farmland is important. Currently, slightly more than a quarter of the land in the Town remains in agriculture and outside of the sewer service area. However, the conversion from farmland to other uses has been occurring over time and municipal services are being extended to service those areas. The scheduled annexation of Town properties by the City of Oshkosh is likely to place added pressure to develop farmland to maintain a strong tax base.

GEOLOGY AND SOILS

THE FACTS:

- The bedrock geology of the Town consists of two distinct formations that divide the area.
- There are a total of 36.7 acres (0.5%) of high bedrock, mainly located in the quarry.
- The only area of high suitability for sand and gravel is located along Leonard Point Road which is nearly completely developed; therefore this resource can no longer be accessed.
- The major dominant soils group in the Town of Algoma is the Kewaunee-Manawa-Hortonville association.
- An examination of the soils information indicates that the entire Town is very limited for conventional onsite systems.

WHAT IT MEANS:

Soils support the physical base for development and agricultural within the Town. Due to high groundwater, much of the Town is very limited for conventional onsite individual septic systems. To offset this problem, most new platted subdivisions and areas noted for development will be served by municipal water and sewer. Existing homes will be encouraged to use municipal water and sewer as arsenic is prevalent in the north east corner of the Town. Developers should use best practices to mitigate the potential limitations of building in areas of high groundwater.

WATER RESOURCES

THE FACTS:

- The Town of Algoma is located entirely within the Upper Fox River Basin and the Lake Butte des Morts Watershed.
- Lake Butte des Morts is the dominant surface water feature near the Town of Algoma.

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- There are a few unnamed detention ponds with three named detention ponds, along with several unnamed drainage easements located throughout the Town assist with stormwater management.
- Honey Creek is the only navigable stream in the Town.
- While Sawyer Creek is not within the Town of Algoma, it does contribute to the Town's overall drainage patterns.
- The Steinhilber Wetland is about 34 acres and owned by the Town of Algoma. It is located in the northeastern corner of the Town.

WHAT IT MEANS:

Lake Butte des Morts provides recreational opportunities and a visual focal point for the community. The view from lakefront properties draws home construction and a tax base for the community. There are no more building sites available along the lake, and development is occurring in other areas. Sawyer Creek, though it is not necessarily within the Town limits, carries tremendous volumes of water during peak runoff periods for the Town. Honey Creek, the navigable stream within the Town, provides habitat for wildlife and also assist with stormwater management.

FLOODPLAINS AND WETLANDS

THE FACTS:

- Floodplains in the Town of Algoma are largely concentrated in the marshy areas east of N. Oakwood Road, as well as along Sawyer Creek, west of Clairville Road. There are approximately 282 acres of floodplains within the Town of Algoma.
- The major wetland areas in the Town of Algoma include the Steinhilber Wetland, the wetland south of the STH 21 and Leonard Point Road intersection, and a large parcel south of Witzel Avenue. There are approximately 20 acres of wetlands greater than 5 acres and about 300 acres of wetlands less than 5 acres.

WHAT IT MEANS:

Wetlands and floodplains are two very important natural features that control and moderate the volume of stormwater within the Town's watersheds. Floodplains store floodwaters, thus helping to reduce the amount of floodwaters downstream. Wetlands serve several vital functions such as flood control, water quality improvement, groundwater recharge and wildlife habitat. The Winnebago County Shoreland-Wetland Ordinance applies to wetlands that are five acres or larger. However, many of the wetland areas in the Town are small scattered sites which are less than 5 acres in size.

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GROUNDWATER

THE FACTS:

- A total of 43% (2,884 acres) of the Town of Algoma has high groundwater levels.
- According to a report prepared by the Wisconsin Geological and Natural History Survey, a large portion of the Town has high (4-8 inches/year) infiltration rates which are estimated to become stream base flows or continue down and eventually become groundwater recharge.
- About three-quarters of the community have moderate levels of groundwater contamination susceptibility.
- While the Town of Algoma lies within the WDNR Arsenic Advisory Area, all wells are located below the St. Peter Sandstone and should be monitored for contamination concerns.

WHAT IT MEANS:

Since much of the Town has high groundwater recharge potential and high groundwater contamination susceptibility. Protecting these areas will help safeguard the quality of the areas drinking water supply. The quality of ground and surface water is greatly impacted by human activity or land uses. Contaminants found in drinking water can negatively impact health. Therefore areas of high groundwater levels should be developed using best management practices to mitigate high groundwater levels on building foundations and basements, and persistent drainage ditch problems.

STORMWATER, EROSION AND NONPOINT SOURCE POLLUTION

THE FACTS:

- In February of 2020, the U.S. Environmental Protection Agency approved the Total Maximum Daily Loads for Phosphorus and Total Suspended Solids Upper Fox and Wolf Basins Report.
- The Town is actively working toward implementing its 2018 Stormwater Management Plan goals by building stormwater detention ponds, pursuing funding for maintenance of existing detention ponds and Honey Creek, and making improvements to the existing stormwater drainage easements as financially feasible.
- The Town of Algoma is a member of the Northeast Wisconsin Stormwater Consortium (NEWSC).

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WHAT IT MEANS:

Surface water quality can be impacted by both urban and rural point and non-point sources. In Algoma, waterway pollutants are derived from urban paved (roads and parking lots) and lawn fertilizers and agricultural runoff. A TMDL was approved in February 2020 for phosphorus and total suspended solids. To restore the waters within the Upper Fox River Basin, the TMDL will identify sources of pollutants and reductions necessary to address water quality impairments. The Town of Algoma and surrounding communities should follow these guidelines and recommendations as they are laid out in the report.

WILDLIFE RESOURCES

THE FACTS:

- A total of 311.6 acres of woodlands exist within the Town. Two woodland areas are located on either side of the east-west portion of Leonard Point Road, one is on the Town of Algoma line between STH 21 and Leonard Point Road, and the largest is between STH 21 and Witzel Avenue, west of Clairville Road extended.
- Areas providing wildlife habitat include the Steinhilber Wetland area in the northeast part of the Town.
- Sawyer Creek Nature Preserve is located just outside of the Town of Algoma limits to the east.
- Sheldon Nature Area is located near Oakwood Elementary School between Omro Road and Sheldon Drive.

WHAT IT MEANS:

Woodlands, wetlands and stream corridors provide valuable habitat for birds, mammals and other animals. While scattered habitat provides a safe place, their fragmented arrangements eliminate the ability for animals to safely travel from one habitat to another. Isolated wildlife habitats can be improved through strategic planning and planting plans that restore and connect these areas to larger habitats.

RARE, THREATENED, ENDANGERED SPECIES

THE FACTS:

- Wisconsin DNR Natural Heritage Inventory lists a total of seven animals, two plants and one community type in the Town.
- The Steinhilber Wetland should be preserved for stormwater management as well as for wildlife.

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- There is a large wetland area south of the STH 21 and Leonard Point Road intersection that should be preserved.

WHAT IT MEANS:

Several endangered or threatened species and one natural community exist in the Town. Due to the sensitive nature of this information, the location of these species is not identified in this report. While these species have been identified, it does not mean that others do not exist, or that others may not be found in the future. Therefore the maintenance and expansion of all habitat areas in the Town will ensure that a high quality landscape exists for both plant and animal species. The largest threat to habitat, next to development, is the introduction/proliferation of non-native (invasive) species. The Town should take appropriate steps to protect areas of critical habitat from the infestation of non-native species.

CULTURAL RESOURCES

THE FACTS:

- At this time, there is only one Town of Algoma listing in the National Register; the Bell Site Indian Burial Grounds, located between Leonard Point Road and Lake Butte des Morts in the Bell Haven Subdivision.
- A total of 64 properties within the Town of Algoma are shown on the Wisconsin Architectural and History Inventory.
- There are no historical markers located in the Town.

WHAT IT MEANS:

The Bell Site Indian Burial Grounds is a Native American burial site is a noteworthy cultural resource and should be protected located along the south side of Lake Butte des Morts in the Bell Haven Subdivision. The inventory of historical properties in the Wisconsin Architectural and History Inventory is a living document and frequently adds properties. Therefore, the Town should continue to review the Wisconsin Historical Society for the most up to date information.

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FRAMING CONCEPTS AND STRATEGIES

3a: NATURAL RESOURCES AND GREENSPACE

Water resources play an important role in the growth of communities, as well as the surrounding ecosystem. Allowing for proper stormwater management of the water resources in the Town of Algoma will help prevent flooding and assist with improving water quality.

Greenspace allows community members to access outdoor space within their neighborhoods, and can also help mitigate the impacts of stormwater. Implementing Greenspace practices into a community can help reduce overall costs of stormwater management. Lake Butte des Morts is an important water resource within the Town of Algoma, Winnebago County, and throughout the region. It is imperative that this resource be protected. According to the Wisconsin DNR, Lake Butte des Morts is an impaired waterway with excess algae growth.

Strategy 3a-1: Review and approve site plans that facilitate the use of Greenspace and trails into developments.

Strategy 3a-2: Actively promote and protect local and regional groundwater supplies by updating and implementing the Stormwater Management Plan.

Strategy 3a-3: Work with developers to include green space within new developments to preserve natural habitat.

Strategy 3a-4: Educate Town officials and the public on potential implications of rising lake levels in the Town of Algoma.

3b: AGRICULTURAL RESOURCES

The Town of Algoma has seen a decrease in agriculture throughout the Town while development has increased. Preserving these farms and supporting working agriculture would contribute to the Town's economy. Proper education of farming aspects within the municipal boundaries allow for growth of urban farming types, as well as support of the farmers in the Town.

Strategy 3b-1: Support farmers and farm operations within the Town.

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