

Town of Gardner

Door County, Wisconsin

20-Year Comprehensive Plan

November 4, 2009



Prepared By:
Bay-Lake Regional Planning Commission

TOWN OF GARDNER

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*Members of the Comprehensive Planning Committee helped to develop and review the *Town of Gardner 20-Year Comprehensive Plan* and the survey sent to Town residents.

Front Cover: ca. 1900 parcel map of the town of Gardner, existing Gardner Town Hall

TOWN OF GARDNER 20-YEAR COMPREHENSIVE PLAN

NOVEMBER 4, 2009

Prepared by:

Bay-Lake Regional Planning Commission
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RESOLUTION NO 02-09

**TOWN OF GARDNER PLAN COMMISSION
ADOPTION OF THE TOWN OF GARDNER
20-YEAR COMPREHENSIVE PLAN**

WHEREAS, Wisconsin Statutes 62.23 and 66.1001 authorize the adoption of a Comprehensive Plan for the general purpose of guiding and accomplishing coordinated, adjusted, and harmonious development of the Town;

AND WHEREAS, the *Town of Gardner 20-Year Comprehensive Plan* has been prepared by the Bay-Lake Regional Planning Commission which contains proposals, programs, descriptions, maps, and explanatory matter regarding natural resources, population, housing, economic development, transportation, land use, public facilities, outdoor recreation, and general plan design (future land use plan) for the 20-year planning period;

AND WHEREAS, the Comprehensive Plan has been prepared in accordance with the elements of a plan as defined in Wisconsin Statutes 66.1001;

AND WHEREAS, the Comprehensive Plan has been drafted and reviewed by the Town of Gardner Plan Commission;

NOW, THEREFORE BE IT RESOLVED that the Town of Gardner Plan Commission hereby recommends to the Gardner Town Board that a Comprehensive Plan entitled: *Town of Gardner 20-Year Comprehensive Plan*, be adopted by the Town Board pursuant to Wisconsin Statutes Sections 62.23 and 66.1001(4).

Dated this 22 day of Sept 2009.

Resolution introduced and adoption moved by: Glen Dart

Motion for adoption seconded by Walker Rutz Jr.

Voting Aye: 5 Nay: 0

APPROVED: Robert J. Tenberge
Town of Gardner Plan Commission Chair

ATTEST: Paul DeWitt
Town of Gardner Plan Commission Secretary

TOWN OF GARDNER
ORDINANCE NO. 03-2009

An Ordinance to Adopt a Comprehensive Plan Pursuant to
Wisconsin Statutes Section 66.1001 (Smart Growth)

WHEREAS, on February 12, 2008 the Town Board for the Town of Gardner approved a contract with Bay-Lake Regional Planning Commission to prepare a Comprehensive Plan for the Town of Gardner under the guidelines of Section 66.1001 Wisconsin Statutes; and,

WHEREAS, the project included a public participation plan in every stage of the process for preparation of a Comprehensive Plan for the Town of Gardner, which addressed provisions for wide distribution of the proposed elements of the Comprehensive Plan, and provided an opportunity for written comments to be received from the public and for the Town to respond to such comments; and,

WHEREAS, on September 22, 2009, the Town of Gardner Plan Commission recommended to the Town Board adoption of the Comprehensive Plan by resolution which passed by a majority vote of the entire membership of the Town Plan Commission, which vote is recorded in the official minutes of the Plan Commission; and,

WHEREAS, the Town of Gardner Board held a public hearing on October 28, 2009, which was preceded by a Class 1 Notice provided as described in Wisconsin Statutes Chapter 985, that was published at least 30 days before the hearing was held, and the notice included all of the following information:

1. The date, time and location of the hearing;
2. A summary of the proposed Comprehensive Plan;
3. The name of the individual employed by the Town of Gardner who may provide additional information regarding the proposed ordinance;
4. Information relating to where and when the proposed Comprehensive Plan could be inspected before the hearing, and how a copy of the Plan could be obtained; and,

WHEREAS, the Town Board of the Town of Gardner, having carefully reviewed the recommendation of the Town Plan Commission, having determined that all procedural requirements and notice have been satisfied, having given the matter due consideration, including consideration of the Plan components relating to issues and opportunities, agricultural, natural and cultural resources, housing, economic development, transportation, utilities and community facilities, intergovernmental cooperation, land use and implementation, and having determined that the Comprehensive Plan will serve the general purposes of guiding and accomplishing a coordinated, adjusted and harmonious development of the Town of Gardner which will, in accordance with existing and future needs, best promote the public health, safety, morals, order, convenience, prosperity and the general welfare, as well as efficiency and economy in the process of development.

NOW, THEREFORE, the Town Board of the Town of Gardner, Door County, Wisconsin,
DOES ORDAIN AS FOLLOWS:

Section 1: The Comprehensive Plan recommended by the Town of Gardner Plan Commission to the Town of Gardner Board, attached hereto as Exhibit A, is hereby adopted.

Section 2: The Town Clerk is directed to file a copy of the attached Comprehensive Plan for the Town of Gardner with all the following entities:

1. Every governmental body that is located in whole or in part within the boundaries of the Town of Gardner;
2. The Clerk of every local governmental unit that is adjacent to the Town of Gardner;
3. The Bay-Lake Regional Planning Commission;
4. The Gardner Public Library.

Section 3: SEVERABILITY Several sections of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a court of competent jurisdiction to be invalid, unlawful, or unenforceable, such decision shall only apply to the specific section or portion thereof directly specified in the decision, and shall not affect the validity of any other provisions, sections or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms are in conflict with the provisions of this ordinance are hereby repealed as to those terms in conflict.

Section 4: EFFECTIVE DATE. This ordinance will take effect immediately upon passage and publication as provided by law.

Adopted this 4th day of November, by a majority vote of the members of the Town Board of the Town of Gardner.



Chairman: Paul DeWitt


Attest: 
Clerk: Amy Sacotte

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Chapter 1 - ISSUES AND OPPORTUNITIES

HOW TO USE THIS PLAN

This Comprehensive Plan for the Town of Gardner is a legal document that serves as a guidance tool for both officials and citizens, to make decisions about future growth and development in the town over the next 20 years.

This comprehensive plan consists of eleven chapters in two volumes along with an Appendices section. The information discusses in detail, the growth and preservation of the town.

Volume I: Town Plan: Describes how the Town of Gardner envisions itself developing over the next 20 years to include detailed development strategies and generalized land use map, along with an implementation process that assists the plan in going from vision to reality.

Chapter 1: Issues and Opportunities - contains a summary of demographic information, the town's vision statement and future development strategy (goals, objectives, policies and programs).

Chapter 2: Future Land Use Plan - includes a projection of future land use demands, the detailed strategy of the town's preferred land use, and future land use map.

Chapter 3: Implementation - contains a work plan to assist in implementing the goals, objectives and policies of the town's Comprehensive Plan.

Chapter 4: Inventory and Trends - summary of the resources and demographics found in chapters 5 thru 11.

Volume II: Community Resources: Contains all background information that assists in the development of the town's Future Land Use Plan (Chapter 2).

Chapter 5: Natural, Agricultural and Cultural Resources - provides a description of the physical characteristics that make-up of the town's landscape.

Chapter 6: Population and Housing - presents historic demographic information along with future population and housing projections.

Chapter 7: Economic Development - provides an inventory of the labor force statistics and the area's economic base, in addition to an analysis regarding existing and future economic conditions of the area.

Chapter 8: Transportation - inventories the existing transportation system and highlights current and future transportation needs.

Chapter 9: Utilities and Community Facilities - inventories the community's utilities and community facilities, including schools and emergency services.

Chapter 10: Intergovernmental Cooperation - contains programs to facilitate for joint planning and decision making processes with other government units.

Chapter 11: Land Use Controls and Inventory - inventories land use controls, in addition to a summary of existing land uses in the town.

Appendices: Contains public participation materials, detailed land use for the town, in depth program descriptions, a list of acronyms and definitions, inventory of endangered and threatened species within the county, Nominal Group results, and other relevant data supporting the plan.

PURPOSE OF THE COMPREHENSIVE PLAN

The purpose of the Comprehensive Plan is to guide growth for a 20-year time frame. The plan contains a General Plan Design Map (Map 2.1) designating generalized areas to serve as locations for future land use activities. This General Plan Design Map shall be used with the town's development strategies to guide government and other decision makers in determining how the Town of Gardner should grow in the future.

State Planning Enabling Legislation

The Town of Gardner Comprehensive Plan also meets the requirements of Wisconsin's comprehensive planning law (1999 Wisconsin Act 9) and is adopted under the authority granted by Section 66.1001 ("Smart Growth") of the Wisconsin Statutes as the town's guide for future development based on the community's vision.

Wisconsin State Statute 66.1001 states that:

"Beginning on January 1, 2010, if a local governmental unit engages in any of the following actions, those actions shall be consistent with that local governmental unit's comprehensive plan:

- (a) Official mapping established or amended under s. 62.23 (6).
- (b) Local subdivision regulation under s. 236.45 or 236.46.
- (c) County zoning ordinances enacted or amended under s. 59.69.
- (d) City or village zoning ordinances enacted or amended under s. 62.23 (7).
- (e) Town zoning ordinances enacted or amended under s. 60.61 or 60.62.
- (f) Zoning of shorelands or wetlands in shorelands under s. 59.692, 61.351 or 62.231."

This means that any town ordinances or regulations that relate to land use may need updating to ensure consistency with the town's adopted comprehensive plan. This does not mean that the town has to adopt a zoning ordinance.

WHAT IS IN THIS CHAPTER

The Issues and Opportunities Element of the comprehensive plan contains the following information:

- I. History and Description of the Planning Area
- II. Plan Development Process
- III. Public Participation
 - A. Nominal Group
 - B. Visioning
- IV. Future Development Strategy
 - A. Goals
 - B. Objectives
 - C. Policies
 - D. Programs
- V. Maps

HISTORY AND DESCRIPTION OF PLANNING AREA

Town of Gardner History

In 1835, Door County's first white settler, Increase Claflin arrived in Little Sturgeon Bay. Mr. Claflin lived among the Native Americans, peacefully trading with them. Throughout the 1850s, many immigrants arrived to begin a life of farming; clearing land to build homes and planting crops. Other entrepreneurs were building businesses vital to the area. The most well known was F. B. Gardner who settled in Little Sturgeon Bay where he established a saw mill, the first grist mill, a shipyard, and two lime kilns. At the peak of business the labor force had more than 400 employees. Farmers of the area worked there to supplement their incomes. The town of Gardner was organized on June 10th, 1862 making it the 12th town established in Door County.

Town of Gardner Planning Area

The Town of Gardner is located in Door County and encompasses an area of approximately 33.86 square miles or 21,673 acres. The town is situated adjacent to Green Bay which constitutes the town's western and northern borders, the towns of Brussels and Union on the south, and Nasewaupée to the east. (Map1.2). Gardner Swamp lies in the heart of the town while the Niagara Escarpment traverses portions of the northern part of the town.

Map 1.1 illustrates the general location of the Town of Gardner in Wisconsin, while Map 1.2 focuses on the Town of Gardner planning area.

PLAN DEVELOPMENT PROCESS

The planning process for the town was completed in four phases:

First Phase: Promote Public Participation and Identify Issues

- Adopted public participation procedures to foster more public input during the planning process (Appendix A).

-
- Conducted an issues identification workshop (Appendix B) and a town-wide survey in order to identify current and future issues and concerns relative to land use and development within the town.

Second Phase: Inventory and Interpretation

- Collection of data on existing conditions.
- Analyzed data to identify existing and potential problem areas.
- Developed an overall vision statement along with the plan's goals, objectives, policies and programs by using results from the various issue identification workshops and background data.

Third Phase: Development of the General Plan Design (Future Land Use Plan).

- Utilized the first two stages to create a recommended land use plan to guide future growth, development and conservation within the town over the next twenty years.
- The preliminary General Plan Design was presented to the citizens of the community as well as nearby municipalities and government organizations for their review and comment. The comments were considered for inclusion into the final General Plan Design Map and text.

Fourth Phase: Establish tools necessary for implementation of the plan.

- Recommendations for regulatory techniques including zoning.
- An action plan was established to ensure that the intent of the plan will be achieved.

PUBLIC PARTICIPATION

A major element of the comprehensive planning process was public participation. In accordance with Wisconsin State Statute 66.1001(4), which defines "Procedures For Adopting Comprehensive Plans", written public participation procedures were adopted by the Gardner Town Board. A copy of these written procedures is included in Appendix A of this plan.

The town held public meetings to review background data, plan elements and growth options. Two "Open Houses" were also held to present background information and plan recommendations to the public. From these meetings, the Town Plan Commission and other interested citizens developed the *Town of Gardner 20-Year Comprehensive Plan*.

Nominal Group Workshop

On August 11, 2008, the Town of Gardner conducted a nominal group meeting with its Plan Commission, members of the Town Board, and other interested citizens. The purpose of this meeting was to produce a list of issues and concerns regarding future development in the town and surrounding area.

This list was then used in formulating goals and objectives for the town's Comprehensive Plan. Issues identified were also used as a checklist to ensure that they were addressed within the plan.

The following list illustrates the top issues and concerns facing the town as mentioned through this process. A description of the Nominal Group process and the entire list of results can be found in Appendix B.

- Need to make an eccentric, economic, social, recreational center near Stevenson Pier and ‘C’. Encourage new commercial development there. Make it a place for bicyclists.
- The two Squaw Islands should be acquired for a town park.
- Develop a senior center/town hall.
- Develop and support a county-wide telecommunications network.
- Recognize junk and nuisance on property and have a way of enforcing and removing it.
- Need to improve runoff into bay by eliminating farm waste from outside the town coming into the town.
- No mega-farms in Gardner.
- Preserve Little Sturgeon Bay like an inland lake. Consider no-wake zones.
- Promote low environmental impact “green” type of business.

Visioning

A visioning exercise was conducted to determine the future image of Gardner. The visioning process was designed to provide a foundation for the development of the goals, objectives, policies and other elements of the Comprehensive Plan. Town Board and Plan Commission members crafted the following vision statement during the planning process after all visioning comments were reviewed.

Town of Gardner 20-Year Vision Statement

“The town of Gardner is a rural recreational and farming community that has accommodated limited well planned residential developments and commercial services that have added to the town’s tax base. The town offers its residents a lifestyle accompanied by its many natural amenities such as clean air, clean water and open spaces. The town’s rural character is defined by its mix of water features, woods, open spaces and natural beauty. Residents have worked together to maintain a sense of community and encourage pride in ownership. The town has developed a network of bicycle routes and recreational trails that connect the commercial hubs throughout the town as well as facilities for commuting outside the town.

Through the town’s past policies and programs the town has protected and preserved its natural resources in order to allow future generations to enjoy them. The town’s efforts have ensured that current and future generations are able to live and work in Gardner.”

FUTURE DEVELOPMENT STRATEGY (GOALS, OBJECTIVES, POLICIES AND PROGRAMS)

The following statements describe the town’s intent regarding the overall growth and development during the next 20 years.

Goals, objectives, policies and programs are a combination of intended steps to produce a series of desired outcomes. They each have a distinct and different purpose within the planning process.

Goals - describe desired situations toward which planning efforts should be directed. They are broad and long range. They represent an end to be sought, although they may never actually be fully attained.

Objectives - are measurable ends toward reaching a defined goal.

Policies - are a rule or course of action used to ensure plan implementation.

Programs - are a coordinated series of policies and actions to carry out the plan.

Note: Since many planning issues are interrelated (e.g., land use and transportation), the goals, objectives and policies of one category may relate to those stated in other categories.

Community Planning

Goal:

For the *Town of Gardner 20-Year Comprehensive Plan* to provide guidance to local officials when making land use decisions that reflect the town's vision.

Objective:

1. Utilize this 20-year comprehensive plan to best reflect the interests of all the town's residents, follow an orderly and cost efficient method when developing and preserve significant features of the community.

Policies:

1. This 20-year comprehensive plan will be consulted by the Town Plan Commission, Town Board and other units of government before making any decision regarding land use and land use policies.
2. Ensure that all growth and development occurs in a planned and coordinated manner that will maintain or improve the quality of life associated with the rural character of the town.
3. Encourage cooperation and communication between the town, neighboring municipalities and county government in implementing this 20-year plan.

Programs:

1. Present the adopted 20-year comprehensive plan to neighboring municipalities and Door County.
2. Consider holding community planning related efforts/meetings with adjacent communities, media and/or private organizations to publicize ongoing planning projects and plan implementation projects found within this comprehensive plan.

Objective:

2. Review and update the town's comprehensive plan as needed through the Town Board and Town Plan Commission.

Policies:

1. Periodically review and update, when necessary, the adopted 20-year comprehensive plan in order to provide for the greatest possible benefits regarding future development and preservation of significant features such as agricultural, natural and cultural resources.
2. Review existing town and Door County ordinances as they relate to the implementation of this plan.
3. Hold Town Plan Commission meetings/working sessions to review the adopted 20-year comprehensive plan and make amendments to accommodate changing conditions.
4. Ensure the public is informed and involved to the greatest extent possible when considering updates and revisions to the town's comprehensive plan.

Natural Resources

Goal:

To identify, protect, and preserve the Town's significant natural, scenic and open space areas for enjoyment by its residents and visitors for present and future generations.

Objectives:

1. Maintain and improve the quality of ground water and surface waters of the Town.
2. Preserve wetlands of the Town to the greatest extent practical.
3. Preserve the natural beauty created by views of the bay, trees, bluffs and vistas.
4. Maintain the natural beauty and integrity of the Green Bay shoreline as seen from land and water while providing for public use and access.
5. Preserve and protect the identified unique geological features that exist in the Town.
6. Discourage artificial light pollution, while preserving the safety of the residents of the Town.
7. Discourage non-metallic mining within the Town.
8. Protect and preserve environmental corridors, green space, forests, environmentally sensitive areas, endangered species, parks and wildlife habitat in the Town.
9. Preserve and improve the Town's air quality.

Goal:

To provide a safe, clean and orderly natural environment for the residents of the Town.

Objectives:

1. Encourage land uses that result in the efficient use of land, low infrastructure, construction and maintenance costs, and decreased negative impacts on air and water quality.

-
2. Plan development adjacent to the bay, streams and wetlands carefully. The burden of proof shall be on the developer. The developer needs to prove that a negative result on the adjoining bay, streams, or wetlands will not take place. If this cannot be determined than the development shall not occur.

Policies:

1. Explore the use of an overlay district that would identify key natural resources and viewsheds the Town wants to protect. Consider a set of standards to apply within the district.
2. Explore the use of an overlay district with setbacks for lakes, streams, and wetlands requiring additional care and proof that development will not have a negative effect on these resources.
3. Explore the use of a sub-committee that would work with the adjacent Towns to further explore ways to best utilize or preserve natural features within the Town.
4. Coordinate the Town's efforts with adjoining municipalities and state agencies.

Agricultural Resources

Goal:

To encourage and protect farming while providing for the orderly development of land that is currently or was historically in productive farm use for non-farm development.

Objectives:

1. Promote the use of sound agricultural and soil conservation methods to minimize soil erosion and ground water contamination.
2. Encourage the sound management and preservation of the Town's forested areas.
3. Promote conservation-based land use policies for development.
4. Encourage the preservation of natural vistas.
5. Retain agricultural and open lands in the Town as key components of the rural area and aesthetic character of the community.
6. Identify areas recommended for future development on the General Plan Design.

Policies:

1. Encourage the use of prime agricultural areas for farming purposes.
2. Direct large scale residential development away from prime farmlands.
3. Develop large tracts of farmlands in a planned unit development approach as opposed to a piece by piece method over long time periods.

Parks and Recreational Lands

Goal:

To ensure residents have safe recreational sites within the Town that provide a number of activities.

Objectives:

1. Increase the number of good, well maintained recreational sites and trails within the Town, to include access to the waters of Green Bay.
2. Acquire, develop and maintain existing and future recreational sites within the Town.

Policies:

1. The Town should actively pursue the development of future recreational lands within the Town including waterfront property such as Squaw Islands, Little Sturgeon landing or other lands as they become available.
2. Connect recreational areas with a trail system wherever possible.
3. Use the Town's official mapping powers to designate areas for future park and recreational uses.
4. Consider access for the disabled, elderly and very young when planning, designing, and constructing all new recreation projects, including parking, trails, etc.
5. Establish a sub-committee to identify future recreational areas.
6. Work with adjoining communities to design interconnecting trailways.
7. Explore all available resources to further enhance the quality of the Town's recreational systems.
8. Seek public and private donations for funding park system improvements.

Metallic and Non Metallic Resources

Goal:

To discourage the development of future mining sites within the Town.

Objectives:

1. Do not harm views, the natural environment and aesthetics through mining operations.

Policies:

1. The Town will steer incompatible uses away from identified mining sites.
2. The Town will inform residents of any proposed mining sites.
3. The Town will work with the county and land owners to ensure that incompatible uses do not develop adjacent to one another or in a location that will allow or foster conflict.

Historic, Archeological and Cultural Sites

Goal:

To preserve the Town's historic, archeological and cultural locations and structures that are symbolic of the Town for residents and visitors.

Objectives:

1. Preserve the Town's historic, archeological and cultural locations and structures.

-
2. Identify these resources to the Town residents for their information and possible use.
 3. Maintain and update the Town's information on all such locations.
 4. Encourage the continued usage of areas of historical and cultural heritage.
 5. Tie these locations to recreational sites to further enhance them and their access, when appropriate.

Policies:

1. Encourage third parties, i.e., historical societies, school district, etc., to preserve historic structures within the Town.
2. The Town will work to preserve these sites and structures.
3. The Town will support tying these resources into recreational sites and trails.
4. The Town will discourage the destruction of these sites and will not allow incompatible uses around them that would have negative impacts on the resource.
5. The Town will work with state, federal and county agencies to ensure such sites and structures are identified and properly protected.
6. Form a sub-committee that will explore the future integration of these sites into any future trails or recreation sites.

Housing

Goal:

To manage high density development to preserve the rural, open, and natural character of the Town.

Objectives:

1. Control development of multi-unit housing.
2. Minimize the environmental, visual and social impact of multi-unit housing.
3. Minimize impact of multi-unit housing on the Town's infrastructure.
4. Identify land designated for multi-unit development on the Town's General Plan Design Map.

Policies:

1. Limit the number of multi-units per site.
2. Encourage citizens' groups to monitor developments and promote community awareness.
3. Encourage communication between Town Board and public regarding proposed condominium developments.
4. Require site plan and architectural review, with established standards, for all multi-unit housing.

-
5. Require clustering, tasteful design and vegetative screening for all multi-unit housing while maintaining access for emergency equipment.
 6. Enforce minimal density standards for multi-unit housing, which can be met by the purchase of development rights (which implies need for legal purchase or transfer of development rights).
 7. Require any multi-unit housing development to on-site sewage treatment and water supply sufficient for fire fighting.
 8. Enforce all open space and land set-asides and setbacks stringently.

Goal:

To provide for a variety of quality housing opportunities for all segments of the Town's population in such a way that will minimize the adverse impacts on the environment and preserve the Town's rural character.

Objectives

1. Develop and enforce policies and programs to assist citizens to obtain adequate housing.
2. Encourage new housing development in areas that will preserve the character of the Town.

Policies:

1. Encourage development of adequate housing for all persons including low and moderate income, elderly, and handicapped residents of the Town.
2. Regulate the construction of new homes through building codes and ordinances.
3. Encourage single family dwellings and seasonal homes/cottages while discouraging condominium development.
4. Identify unique natural areas that should be retained as open space prior to new development.
5. Explore new development ideas to minimize possible negative impacts on the water resources and other aspects of the environment.

Goal:

To provide for a variety of quality housing opportunities for all segments of the Town's current and future population.

Objective:

1. To encourage policies and programs to assist citizens in obtaining affordable quality housing.

Policies:

1. The Town will support the agencies and their programs that provide affordable housing to its residents.

-
2. The Town will support local initiatives to improve the housing conditions within the Town.
 3. The Town will promote adequate housing ranges for all persons including low and moderate income, elderly, and residents with special needs.
 4. The Town will encourage rehabilitation and preservation of the existing housing supply within the Town.
 5. The Town will work with the state, county and BLRPC to monitor the Town's population characteristics to stay informed of changing demographics/characteristics within the Town.
 6. The Town has identified areas within the Town, through its planning process, for a future mix of residential development with a variety of minimum densities to help in establishing a housing stock which meets differing needs of the community.
 7. The Town will work on any future controls affording more flexibility in regulations allowing for a greater variety of housing choices including considering Conservation Subdivisions and clustering.

Objective:

2. Encourage new housing development in areas where it is needed and can be done in an environmentally and cost effective way.

Policies:

1. Encourage new housing in areas in which community facilities already exist.
2. Discourage development that has the potential to adversely affect the assessed value or livability of neighboring residential properties.
3. The construction of new homes should be regulated by adequate building codes and ordinances.
4. Encourage single family homes, and the adequate availability of apartments and elderly housing.
5. Consider new development ideas which encourage a responsible use of land and the retention of natural or unique areas.

Economic Development

Goal:

To provide for development in the Town by seeking balanced economic growth in business and industry, while providing jobs for residents, increasing personal income and protecting and enhancing the Town's environmental assets

Objective:

1. Specify areas for future business development in the General Plan Design chapter which will enhance and promote the rural character of the Town.

Policies:

1. Encourage the establishments of local businesses in areas specified in the general plan design chapter that can enhance and promote the character of the Town.
2. Locate commercial development dependent on automobile traffic and easy access along County Highway C and Stevenson Pier road in order to provide commercial service to local and through traffic.
3. Strengthen the local economy by encouraging economic and agricultural development projects that involve one or more of the following: public and private participation; an increase in productivity; utilization of modern technology; employment of persons with low to moderate skills; and the upgrading of jobs and training of employees to improve job skills.
4. Work with the county to monitor closely the capacity of existing infrastructure, roads, electricity, public safety services, etc, to accommodate new development and weigh the costs to potential benefits.
5. Work with the county in promoting the approved types of commercial development wanted by the town.
6. Work with businesses to apply for grants and loans to establish or expand a business.
7. Work with the county, future developers and local residents to approve established compatible hours of operation, signage, lighting, parking, and landscaping to meet the Town's desire for well planned growth and rural character setting.

Goal:

To obtain an equitable return of tax revenue and services to The Town

Objectives:

1. Ensure the Town gets adequate share of taxes and services
2. Encourage effective communication between Town, County, State regarding tax revenue generated and returned to the Town
3. Town representatives should regularly petition Wisconsin Department of Transportation for additional State funds for roads

Policy:

1. The Town shall maintain a policy which seeks an equitable share of funding and services from Federal, State, and County sources

Goal:

To minimize property tax in order not to "price people out of their homes"

Objective:

1. Seek State legislation whereby elderly and fixed income homeowners can "freeze" real estate tax bills/appreciation & pay upon transfer of ownership of property

Policy:

1. Continue to participate with the Wisconsin Towns Association as a liaison with the state.

Transportation

Goal:

To establish a safe and efficient transportation system for motor vehicles, pedestrians, and bicycles that is compatible with the Town's adopted 20-Year Comprehensive Plan.

Objectives:

1. Develop a transportation system that provides for all transportation modes, and is harmonious with surrounding land uses.
2. Assure that safety issues are addressed for all transportation modes.
3. Provide for adequate traffic controls and convenient efficient vehicular movement near designated commercial areas.
4. Provide a safe system of bicycle, walking and motorized recreational vehicle paths and trails.
5. Plan for and designate future road rights-of-way within the Town.
6. Explore the need for public transportation options.

Policies:

1. The proper use of land for, and adjacent to, transportation facilities should be pursued in accordance with the Town's land use development objectives.
2. The total amount of land used for transportation facilities should be minimized.
3. Transportation facilities should be located to minimize impacts on visually pleasing buildings, structures, and natural features; and to enhance vistas to such features.
4. Abandoned utility right-of-way corridors should be maintained for future transportation facilities such as bicycle, pedestrian and recreational vehicles.
5. Identify and address any dangerous intersections within the Town.
6. Bicycle lanes or wide curb lanes should be constructed on higher volume roads to provide a comfortable margin of safety.

Utilities & Community Facilities

Goal:

To preserve clean water, establish programs to monitor on-site treatment systems, and plan for cost-effective treatment of waste as growth occurs.

Objectives:

1. Promote the orderly development of safe water systems.

-
2. Promote the orderly development of sanitary sewers.
 3. Promote adequate power facilities to allow for the controlled growth of the Town and promote alternative energy sources.
 4. Establish a waste disposal plan for future growth which will be cost effective, efficient and environmentally sound.
 5. Provide for future growth and for redundancy for utilities, especially telecommunication, i.e. 911.
 6. Encourage high speed data and communication links.

Policies:

1. Encourage additional voltage lines into the Town.
2. Support permit requests for expansion of transfer station.
3. Encourage private enterprise or have County handle hazardous waste by establishing sites at county Highway Department and Town sites.
4. Establish a separate composting operation.
5. Continue to provide curbside pickup of waste and recyclables.

Goal:

To continue to supply accessible and adequate Town facilities that will meet the needs of a growing community.

Objectives:

1. Provide a town facility for administrative and community functions.

Goal:

To provide a recreational and open space system with safe, passive and active opportunities for residents and visitors.

Objectives:

1. Consider the purchase of properties adjacent to parks, water access points and scenic vistas when they become available as long as these expansions fit the long term growth plan and can be properly maintained.
2. Consider the need to professionally evaluate all parks, water access points and scenic vistas to determine best safe and proper use and development.
3. Promote reclamation and adequately mark all rights-of-way at road ends for access to water.
4. Promote public awareness and appropriate use of all public recreational lands, especially those underused areas.

Policies:

1. Develop all-road bike/pedestrian/snowmobile paths.
2. Purchase property as it becomes available.

-
3. Develop public access and vista areas.
 4. Make land acquisitions and necessary improvements to all end of road scenic vistas.
 5. Develop appropriate signage at all public areas.

Goal:

To provide adequate police, fire, and emergency medical protection for all citizens of and visitors to the Town

Objectives:

1. Maintain adequate size of firefighting crews.
2. Maintain and upgrade fire facilities and equipment.
3. Maintain ambulance and emergency medical services at the highest level of competence with expansion to match the level of growth.
4. Encourage use of local health care facilities and services.

Policies:

1. Promote low cost transportation for citizens so that more use can be made of the local health care services

Goal:

To maintain existing cemeteries as necessary.

Intergovernmental Cooperation

Goal:

To promote cooperation between the Town and other units of government and governmental agencies that makes decisions impacting the town.

Objectives:

1. Coordinate and share community facilities and services whenever possible.
2. Coordinate with adjacent communities on future planning projects to maintain the rural character of the surrounding area.
3. Coordinate with other units of government to avoid duplication of efforts.

Policies:

1. Work with neighboring communities to discuss any unique natural features and other land uses which lie across township lines.
2. Explore the possibility of jointly developing and managing future recreational facilities.
3. Work with surrounding municipalities to address possible boundary issues to minimize conflicts.

Programs:

1. Promote cooperation and coordination with the County regarding any county plans.
2. Work with the DNR, Army Corps of Engineers and the Environmental Protection Agency to insure compliance with water quality regulations.
3. Continue to work with the Bay-Lake Regional Planning Commission or other planning agencies on town planning activities, and county and/or regional planning activities.

Land Use

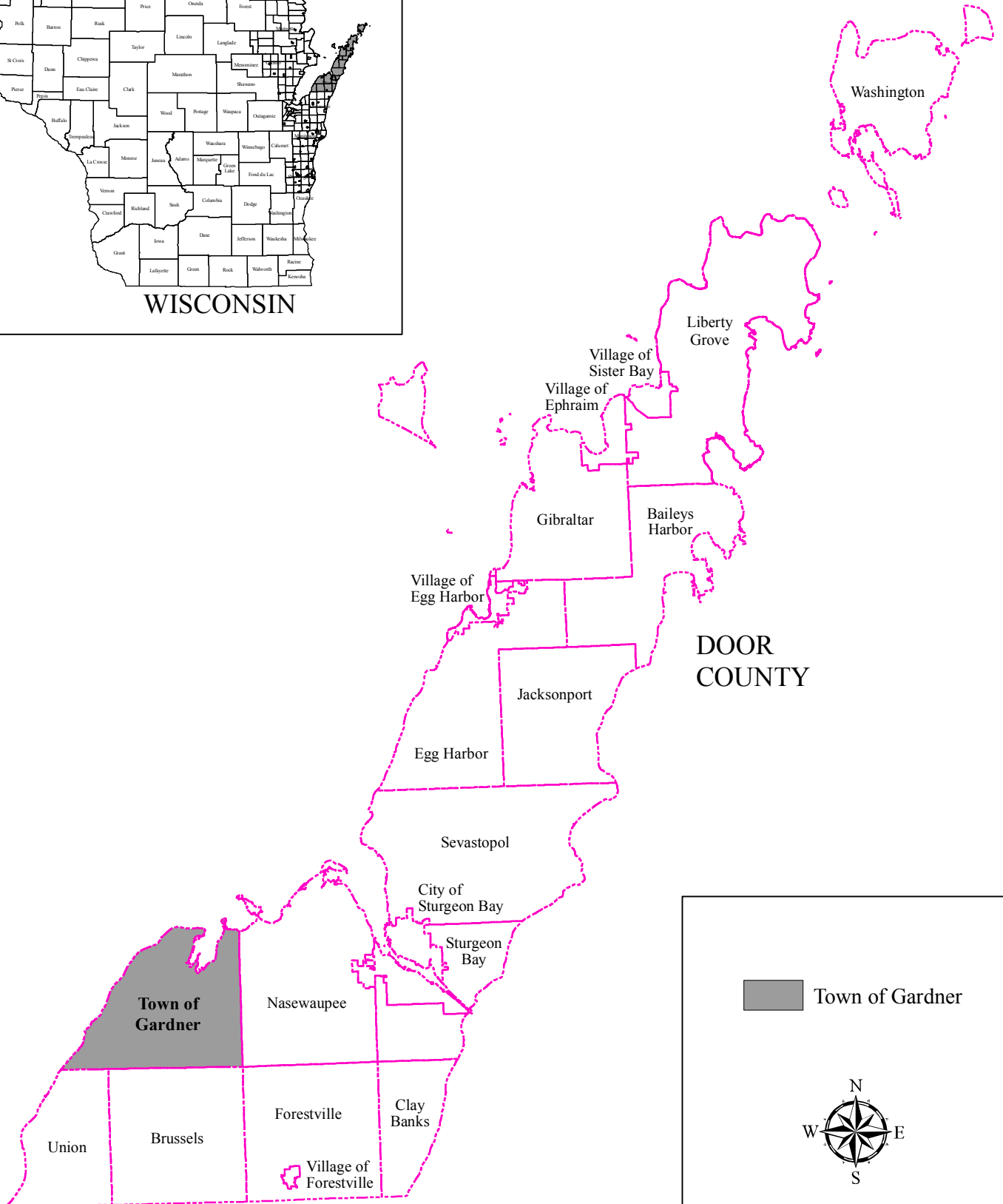
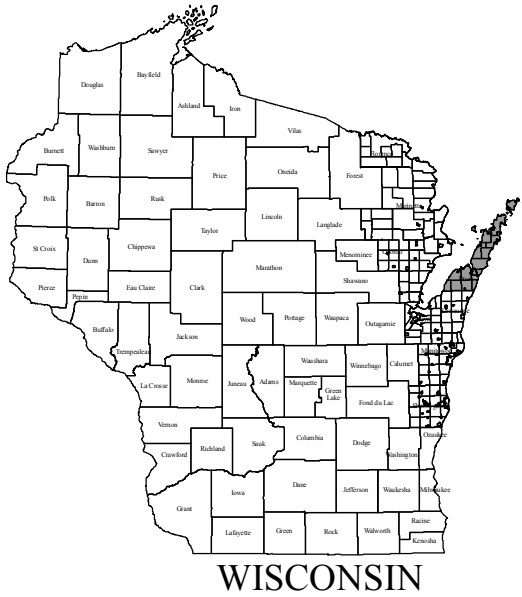
Goal:


To ensure the town's land use is developed and preserved according to the strategies described in the Future Land Use Plan (Chapter 2 of this document).

Location Map

Town of Gardner

Door County, Wisconsin









 Town of Gardner

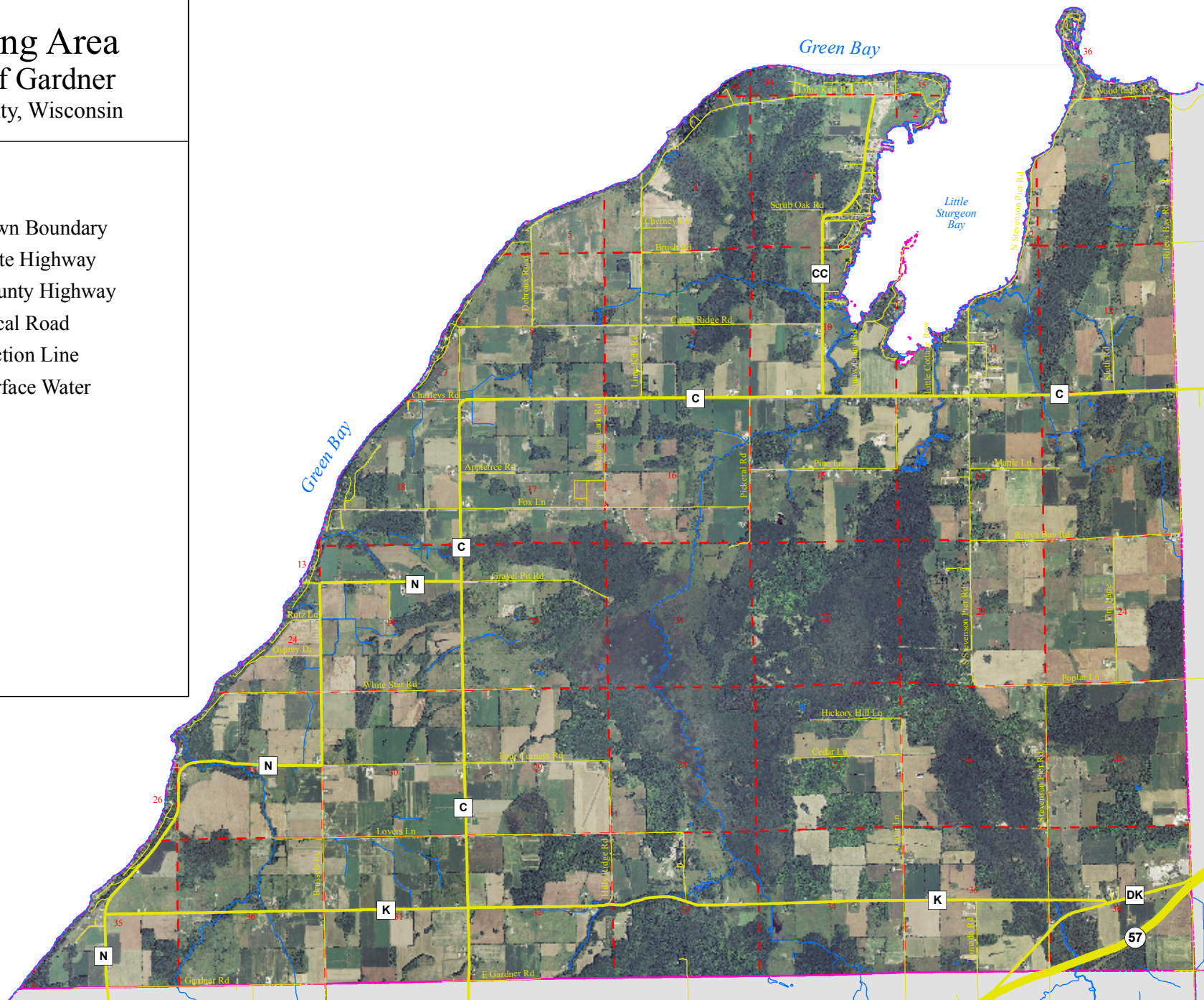


Source: Town of Gardner; Door County;
Bay-Lake Regional Planning Commission, 2009.

Map 1.2

Planning Area Town of Gardner Door County, Wisconsin

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water



Source: FSA, 2008; Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.

Chapter 2 - FUTURE LAND USE PLAN

INTRODUCTION

This element provides the future land use plan for the town of Gardner, Door County. The data from Volume II (Community Resources) of this document were major components in the development of the town's future plan. Present and future land use needs, along with a basic strategy and physical plan to guide the location, density and intensity of land development is contained within this chapter.

Over an 18-month period, the town Plan Commission held public meetings to review data and growth options for the community. From these meetings and presentations to the public, a 20-Year General Plan Design was developed and approved for the town of Gardner.

WHAT IS IN THIS CHAPTER

The Future Land Use Plan section of the comprehensive plan contains the following information:

- I. Planning Criteria
 - A. State Planning Criteria
- II. Land Use Issues and Conflicts
- III. Anticipated Land Use Trends
- IV. Development Considerations
 - A. Environmental and Public Utility Considerations
 - B. Redevelopment Opportunities
 - C. Land Supply and Value
- V. Design Year Land Use Projections
 - A. Five-Year Incremental Projections
- VI. General Plan Design
 - A. Recommended Development Strategy
 - B. Identified "Smart Growth Areas"
- VII. General Plan Design Map

PLANNING CRITERIA

Planning criteria are developed in order to give the community a sense in which to base their land use recommendations. The criteria used by the town when developing the general plan design were based upon values identified by the State, in addition to citizen responses of various surveys and workshops that were conducted in the town.

State Planning Criteria

The following State criteria are based upon Smart Growth criteria encouraged within community plans:

- Promotion of the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial and industrial structures.
- Encouragement of neighborhood designs that support a range of transportation choices.

-
- Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces and groundwater resources.
 - Protection of economically productive areas, including farmland and forests.
 - Encouragement of land uses, densities and regulations that promote efficient development patterns and relatively low municipal, state governmental and utility costs.
 - Preservation of cultural, historic and archaeological sites.
 - Encouragement of coordination and cooperation among nearby units of government.
 - Building of community identity by revitalizing main streets and enforcing design standards.
 - Providing an adequate supply of affordable housing for individuals of all income levels throughout each community.
 - Providing adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial and industrial uses.
 - Promoting the expansion or stabilization of the current economic base and the creation of a range of employment opportunities at the state, regional and local levels.
 - Balancing individual property rights with community interests and goals.
 - Planning and development of land uses that create or preserve varied and unique urban and rural communities.
 - Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit-dependent and disabled citizens.

LAND USE ISSUES AND CONFLICTS

- Further fragmentation of agricultural lands affecting the rural landscape, potentially increasing stormwater runoff and disturbing wildlife habitat.
- Development of the Green Bay shoreline should not impact the environment or scenic views.
- Development on or adjacent to the Niagara Escarpment should be limited so that it does not impact the environment or scenic views.
- Potential incompatibilities with farm and non-farm uses as development pressures increase.
- Work cooperatively with surrounding towns regarding development patterns near municipal boundaries.

ANTICIPATED LAND USE TRENDS

The following land use trends were developed for the 20 year planning period and provided direction in the development of the town's Recommended Development Strategy. Some of these trends may be similar to those of surrounding communities within Door County.

- The demand for larger lot sizes will likely increase while the ratio of persons per household will decrease resulting in greater acreage needs to accommodate future residential growth.

-
- Agricultural lands in the town will continue to be preserved to the greatest extent possible.
 - The rural character of the town will continue to be maintained through the preservation of natural features, open spaces, the Niagara Escarpment and the Green Bay shoreline.
 - Future development will be conscious of any environmental impacts.
 - Alternative design techniques will be explored (e.g., conservation subdivisions and clustering) to preserve the rural make-up of the town while allowing limited development to take place.
 - The use of on-site wastewater septic systems and individual groundwater wells will continue within the town with the recommendation of using shared on-site systems for future development.
 - If commercial uses begin to increase, small businesses will primarily locate in Stevenson Pier.
 - The town will work with surrounding towns to conduct cooperative planning efforts to ensure efficient and cost-effective development patterns and to lessen potential conflict.

DEVELOPMENT CONSIDERATIONS

Environmental and Public Utility Considerations

- The abundance of agricultural lands and open space features add significantly to the aesthetic appeal of the town while providing important ecological and environmental functions such as stormwater retention and flood control.
- Increasing development may be costly due to the wide array of supporting services needed to accompany it. The town should closely monitor all public service costs associated with future development in order to best control future property taxes.

Redevelopment Opportunities

Redevelopment possibilities within the town of Gardner:

- Areas within the town that are beyond repair should be redeveloped in a way that maintains/improves the overall rural character, including scale.
- Utilize natural areas in the town for potential recreational uses and uses that are more productive from an economic standpoint, while maintaining the natural beauty and function.

Land Supply and Value

Amount and Demand

Being a rural community, there is a significant amount of land available for future development within the town of Gardner. The rural nature of the town offers itself to development as the demand for larger lot sizes and open space properties increases.

Given the town's intent to preserve farmlands and being located on the Green Bay shoreline, the town of Gardner should monitor building permits for new home construction annually to analyze the trends occurring in the town.

To combat scattered development, the town should consider innovative development patterns that are orderly and efficient (e.g. conservation design, clustering, etc.), while ensuring preservation of the rural atmosphere and adequate provision of services.

Refer to the General Plan Design portion of this chapter, in addition to the General Plan Design Map (Map 2.1) to identify which areas of the town are considered for future development and for preservation.

Price

The price of developable lands may vary depending on the surrounding land uses, location, access, services, along with other subjective factors. Land prices in the town will continue to fluctuate as the market continues to change. Contact any local realtor to obtain more information on residential, commercial, industrial and other land prices within the town.

DESIGN YEAR LAND USE PROJECTIONS

Five Year Incremental Land Use Projections

Wisconsin statutes require Comprehensive Plans to include projections, in five-year increments, for future residential, commercial, industrial and agricultural land uses in the community over the 20 year planning period. The town of Gardner future land use projections can be viewed in Table 2.1.

Residential Projections

The town's future residential land use acreage was projected utilizing the following methodology:

- the projected housing needs;
- an average dwelling unit per acre ratio for housing development;
- a multiplication factor ranging from 1.25 to 2.5 to allow for market flexibility.

Commercial Projections

To calculate commercial land use projections, the Commission compared the current ratio of residential acreage to commercial land use acreage by parcel in the town based on the 2007 land use inventory.

Industrial Projections

Industrial lands are projected in the same manner as the commercial lands; by comparing the current ratio of residential acreage to commercial land use acreage by parcel in the town based on the 2007 land use inventory.

Table 2.1 illustrates the potential amount of acreage needed for future development within the town of Gardner through 2030 based on the WDOA population projections. These projections allow the town to achieve its vision of preserving its rural make-up of agricultural lands and open spaces.

Table 2.1: Five-Year Incremental Land Use Projections, 2010-2030, Town of Gardner.

Year	Residential		Commercial		Industrial	
	Acres	Total	Acres	Total	Acres	Total
2010	120.0	120.0	6.6	6.6	2.7	2.7
2015	147.0	267.0	8.1	14.7	3.3	6.0
2020	136.0	403.0	7.5	22.1	3.1	9.1
2025	90.0	493.0	4.9	27.1	2.0	11.2
2030	45.0	538.0	2.5	29.6	1.0	12.2

Source: Bay-Lake Regional Planning Commission, 2009.

* This is a net total for residential development. There are several other factors that must be taken into consideration including,

- it is **not** the intent of the plan to see an entire area within a classification to develop, rather the specified uses shall be allowed if consistent with the type, location, and density of the development;
- some of the lands would hinder development based on the environmental makeup of the area;
- within residential growth areas, lands may need to be allocated for future roads, parks, and recreation areas.

In most standard residential development, these additional factors generally account for approximately 25 percent of the gross land area. Therefore, the gross total for future residential land needed is approximately **864** acres.

Agricultural Projections

It is the town's intention to preserve most of the remaining farmlands over the next 20 years. However, with spacious living being the trend, the reality is farmlands in the town will experience increasing development pressure. The town's vision is to direct growth to areas where services are more readily available in an effort to protect its farming heritage. The projected loss of the town's agricultural lands will be dependant on the rate and location of growth in the town.

GENERAL PLAN DESIGN

The General Plan Design was developed based on the information contained in:

1. Volume II (Community Resources) of this document;
2. the goals, objectives, policies and programs found in Chapter 1 (Issues and Opportunities); and
3. the various survey results and other public input listed in the Appendices.

The data and input in these sections of the plan were major components in both the development of the General Plan Design Map (Map 2.1) and the following Recommended Development Strategy for the town's 20-year planning period.

RECOMMENDED DEVELOPMENT STRATEGY

The following land use classifications associated with the town of Gardner Future Land Use Plan best represent the community's character and are in the best interest of the town's future growth.

Note: All categories are not represented on General Plan Design Map (Map 2.1), however future development strategies for each are discussed in this chapter. The town's future land use classifications include:

- Shoreline Residential
- Rural Residential
- Commercial/Light Industrial
- Governmental/Institutional/Utilities
- Parks & Recreation
- Agricultural
- Woodlands/Open Space/Natural Areas
- Transportation
- Environmental Corridors

Utilizing the land use classifications, this section details the suggested type, location and density of development for the town of Gardner's 20-year planning period.

Residential

This classification identifies areas of more compact development with the intent to steer future residential growth adjacent to existing residential lands. Directing development to more concentrated growth areas of the town should help to keep the fragmentation of agricultural and open space lands to a minimum. This category includes existing development and allows for other types of uses (i.e. commercial, agricultural, etc.) as long as they are compatible with residential uses.

****Areas of the town have been designated for Rural Residential (i.e. larger lot sizes with spacious living environment) and Shoreline Residential (i.e. small lot sizes with orderly, more compact development patterns) development based on proximity to existing development and landscape.**

Recommendations:

1. **Existing residential areas are proposed to remain intact.** Residential development will continue throughout the 20 year planning period with the possibility of infill development and rehabilitation, or redevelopment of existing structures.
2. **Single family residencies will be the primary development.**
3. **Lands adjacent to Green Bay:** These areas are meant to continue to develop as smaller parcel residential growth. Infill adjacent to the bay should be considered with second tier development only where feasible. The practice of infilling assists in creating orderly and efficient development patterns. In addition, new infill and second tier development should co-exist well with existing structures in terms of scale and design.

-
4. **Residential developments along the Green Bay shoreline should maintain the visual and environmental integrity of the area.** It is recommended that landowners consider conservation easements to protect portions of this shoreline area.
 5. **Future residential development shall be sensitive to natural features.** New residential development should be designed in a way that helps preserve environmentally sensitive areas (e.g., woodlands, wetlands, floodplains, steep slopes, etc.). This will help to maintain the town's rural atmosphere, the water resources and preserve the wildlife habitat.
 6. **Preserve as much of the rural landscape and existing viewsheds as possible.** Encourage design techniques such as conservation/cluster subdivisions (Appendix G) that strike a creative balance between open space and development.
 7. **New residential development types should conform with surrounding uses.** New development that is out of context due to size or use may detract from existing properties.
 8. **As new residential development occurs in the town, new recreational areas should be identified and developed to serve the new population.**

Overall, the town's residential classifications encourage orderly development patterns and discourage further fragmentation of the rural areas. The town's vision is to protect productive farmland and existing natural areas (vegetated areas and/or open space views) from being developed by steering more compact development to areas designated as Shoreline Residential on the General Plan Design Map (Map 2.1).

Commercial/Light Industrial

The town has designated commercial/light industrial areas along County Highway C near Highway CC and at the intersection with Stevenson Pier Road, adjacent to Highway 57 near Southern Door High school and on County Highway CC near Carmody Park. This category allows for mixed commercial/residential uses as well.

Recommendations:

1. **Concentrate areas of business development.** If any new commercial/light industrial uses are to be developed within the town of Gardner, they are recommended to be concentrated adjacent to Highway 57 and along County Highway C at the intersection with Stevenson Pier Road, and not dispersed throughout the town. Any other areas proposed within the town for business development should be reviewed to limit incompatibilities (e.g., noise, lighting, etc.).
2. **If businesses plan to locate within the town of Gardner, they shall be compatible with the character of the town.** Any new commercial or industrial company must be consistent with the scale of the town and be environmentally friendly.
3. **Appearance of commercial and light industrial structures.** It is important for the town to control the design of business uses. Areas filled with blaring lights, competing signage, and vast areas of asphalt and concrete distract drivers and can detract from the

town's rural character. The town should review the designs and landscaping of future commercial establishments through building scale and appearance.

4. **Commercial/light industrial signage should be controlled.** In order to control signs appearances, rather than allowing signs to control the town's appearance, the town may need to address signage regulations.
5. **Home-based businesses are envisioned to remain.** With greater access to the Internet and better telecommunication systems, working from the home is a viable alternative to traditional employment practices. The town will need to ensure that the home occupational businesses do not outgrow their current location or become nuisances to adjoining property owners.
6. **Ensure any past, present and future mining operations are properly closed and that negative impacts do not affect neighboring properties.** The town should work with Door County to monitor quarries for negative effects and work with surrounding towns, Door County and state agencies to ensure they are reclaimed to a natural setting.

Overall, as with any kind of development, when commercial/light industrial development is proposed within the town, the Town Plan Commission and Town Board must closely monitor the capacities of the infrastructure and community services that accommodate this new development and weigh the future costs to benefits. The town should **not** encourage the development of commercial/industrial businesses that are not consistent with the scale of the town. More intensive commercial and industrial businesses should be directed to nearby communities that currently have adequate infrastructure and public services.

Governmental/Institutional/Utilities

Recognizes existing, or planned governmental/institutional facilities and utilities within and adjacent to the town.

Due to the town's rural nature, many of the governmental/institutional facilities and utilities are provided by, and located in other communities, thus are not mapped. Cemeteries located in the town are under this classification, but are not identified on the General Plan Design map.

Recommendations:

1. **The Town Board will continue to monitor services provided to the town residents** although many of these services are being provided by other municipalities and private contractors. The Town Board should work with adjoining communities and Door County to help provide future services as effectively and efficiently as reasonably possible.

This includes fire, police and emergency services, road maintenance, recycling services, disposal of solid waste, etc.
2. **The town is encouraged to become actively involved with the Southern Door School District.** Become involved with the long-range plans of the districts to be informed on future projects such as new facilities, improvements to existing structures, curriculum changes, etc.

-
3. **Promote the use of shared on-site wastewater treatment systems where appropriate.** With development in the rural portions of the town recommended for cluster type development, discuss shared on-site systems as an option with developers.
 4. **Be aware of the changing issues on telecommunication towers and antennas.** Work with adjacent communities to discuss issues such as alternate structures, joint use of new and existing towers, and visual and other potential adverse impacts of telecommunication towers. Remain informed as to when and where possible telecommunication towers may be constructed in the area.
 5. **Homeowners should explore renewable energy options where feasible.** More homeowners are utilizing individual renewable energy systems for the power. Discuss any possible impacts to the town's landscape prior to allowing individual systems.

Recreation/Conservation Areas

Recognize the importance of the recreational opportunities in the town.

Recommendations:

1. **Be involved in updates to the Door County Comprehensive Outdoor Recreation Plan.** This includes any recommendation to the recreation facilities at any of the county facilities located in the town.
2. **Encourage the development of new park and recreation areas in the town.** Consider adopting an Official Map to delineate future parks and parkways. An Official Map allows the Town Board to review development requests to ensure that new developments do not infringe on planned parks and parkways delineated on the town's Official Map.
3. **Cooperation in planning park and recreational facilities.** If future recreational development were to occur in or around the town, it is recommended that the town cooperate with surrounding towns and Door County to promote connectivity of recreational uses such as trails.
4. **Recognize the county and state conservation areas in the town,** while preserving other natural features and open space areas of the town in an effort to enhance the recreational opportunities found in the community.

Agricultural

The purpose of this classification is to preserve existing lands devoted to the growing of crops and the raising of livestock.

Recommendations:

1. **The town encourages the preservation of agricultural lands** and the farmer's right to farm in order to better serve the residents of the town. It is also intended to protect the agricultural atmosphere and rural character valued by the residents of the town of Gardner.
2. **Future residential development is encouraged to be directed toward areas in the Residential classifications** on the town's General Plan Design Map (Map 2.1). These

areas allow for orderly and efficient development patterns, and efficient distribution of services.

3. **Residential development may be considered at low densities** as long as steps are taken to preserve natural areas, viewsheds, open spaces, and areas deemed important for the town to keep preserved.
4. **Where appropriate, encourage new development techniques and programs which will preserve as much farmland as possible.** Utilize various development techniques such as conservation/cluster subdivisions (Appendix G) to help protect the surrounding productive farmlands within the town.
5. **Encourage natural buffers for development.** Adequate buffers are encouraged between farming and future non-farming operations in these areas in order to lessen conflict between land uses.
6. **Advocate that agricultural lands are under adequate farming practices.** It is important for these lands to continue to be under the best management practices for agricultural activities. Inappropriate agricultural practices can have a significant adverse impact on the quality of surface water and groundwater unless properly managed.
7. **Address the issue of large-scale farming operations.** It is recommended that the town, along with UW-Extension, Door County, and other professional agencies develop a program to discuss large-scale farming issues including the economic, environmental and community character impacts that these farms may have on an the area.

Woodlands

The Woodlands classification is intended to achieve the goal of encouraging the preservation of woodlands within the town of Gardner.

Recommendations:

1. **Maintain the town's wooded areas and promote efforts to prevent fragmentation.** Rarely should woodlands be developed with great densities. Lands adjacent to woodlands may be developed by utilizing unique development options such as conservation subdivision designs (Appendix G) or clustering. Efforts to prevent fragmentation will allow the town to enjoy contiguous woodlands and maintain wildlife habitat and migration patterns.
2. **Encourage the replacement of woodlands (reforestation).** Efforts to replenish woodlands would be beneficial to the natural makeup of the area. Several benefits include maintaining/improving wildlife habitat and recreation opportunities, restoration of clean water resources, erosion prevention, etc.

Transportation

Identifies the existing road network in addition to recommendations for safety and improved traffic movement in the town.

Recommendations:

1. **Ensure new developments follow the Town's *Minimum Highway Design Standards Ordinance*.** If any new subdivisions are proposed within the town, the Plan Commission

and Town Board should review and ensure that future roads are well designed to promote efficient traffic flow and to avoid unnecessary cul-de-sacs and loops that can increase the town's future maintenance costs or be disruptive for fire, police or rescue services.

2. **Consider adopting an Official Map** to delineate future road extensions. An Official Map allows the Town Board to review development requests to ensure that all new developments and roads conform to the town's Official Map.

The town is encouraged to work with surrounding communities to advocate consistency between the various Official Maps.

3. **Future development should maintain the town's rural character along major corridors.** Development along the major highway corridors (e.g. State Highway 57) should apply landscaping/buffers that would help to preserve the town's rural views.
4. **Ensure a cost effective road system management plan.** Utilize the PASER (Pavement Surface Evaluation and Rating) program to assist in maintaining the roads in the future.

Environmental Corridors/Natural Areas

The preservation and protection of natural areas within the town of Gardner will become increasingly important as population and development pressures increase. Many natural features enhance the appearance of the town; are unsuitable for development; and have characteristics critical to the environmental enhancement, ecological stability and water quality of the area.

Recommendations:

1. **Environmental corridors within the town should remain in their natural state** or be minimally modified for possible recreational uses. The environmental corridors are represented by four elements including; (1) 100-year floodplains as defined by the Federal Emergency Management Agency (FEMA), (2) WDNR wetlands with a 50-foot buffer, (3) steep slopes of 12 percent or greater, (4) and a water setback for buildings from all navigable waterways. These elements provide limitations to development and are generally regulated by federal, state, or county government. Together, these elements represent the portions of the town that are most sensitive to development. The corridors are an overlay to the recommended plan (Map 2.1) and should be utilized as a reference.
2. **Using the environmental corridors as a guide** when reviewing proposed development will give the town background information to determine what areas are important to maintaining the rural character and quality of the town's natural resource base.
3. **Direct development away from environmental corridors as much as possible** - or have them sensitively designed within development which will help minimize the negative effects on water resources, wildlife habitats and the overall rural nature of the town.
4. **Maintain wildlife corridors.** Development near the various environmental features in the town should be carefully reviewed in order to maintain ample wildlife corridors.
5. **Assist in efforts to improve the quality of beaches.** Cooperate with government agencies, surrounding communities, etc. to promote efforts to remedy beach closings.

IDENTIFIED “SMART GROWTH AREAS”

According to s. 16.965, Wis. Stats., a “smart growth area” is “an area that will enable the development and redevelopment of lands within existing infrastructure and municipal, state and utility services, where practicable, or that will encourage efficient development patterns that are both contiguous to existing development and at densities which have relatively low utility and municipal and state governmental costs.”

During the planning process the town of Gardner identified lands located in Little Sturgeon and adjacent to State Highway 57 as “smart growth areas”.

- Locating areas of new development adjacent to lands of existing development allows for more orderly and efficient development patterns.
- Assists the town of Gardner in maintaining its rural character by preserving the many valuable agricultural lands, natural areas and open space that make up much of the town’s landscape.

GENERAL PLAN DESIGN MAP

Table 2.2 contains a summary of the year 2030 land uses, along with their approximate acreage totals, which have been designated on the town of Gardner General Plan Design Map (Map 2.1). It is important to note that the 2030 acres are by general location and not by individual land uses, resulting in larger acreage calculations than those acreage totals found in the 2007 land use inventory.

Table 2.2: 2030 General Plan Design Acreage, Town of Gardner.

General Plan Design Category	Acres
Residential	4,172
Shoreline Residential	2,219
Commercial	443
Governmental/Institutional/Utilities	164
Agricultural	5,584
Parks and Recreation	106
Open Space	2,002
Woodlands	7,244
Water Features	23
Totals	21,956

Source: Bay-Lake Regional Planning Commission, 2009.

2030

General Plan Design

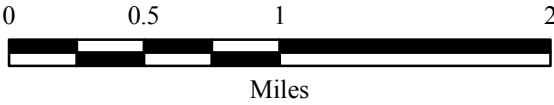
Town of Gardner

Door County, Wisconsin

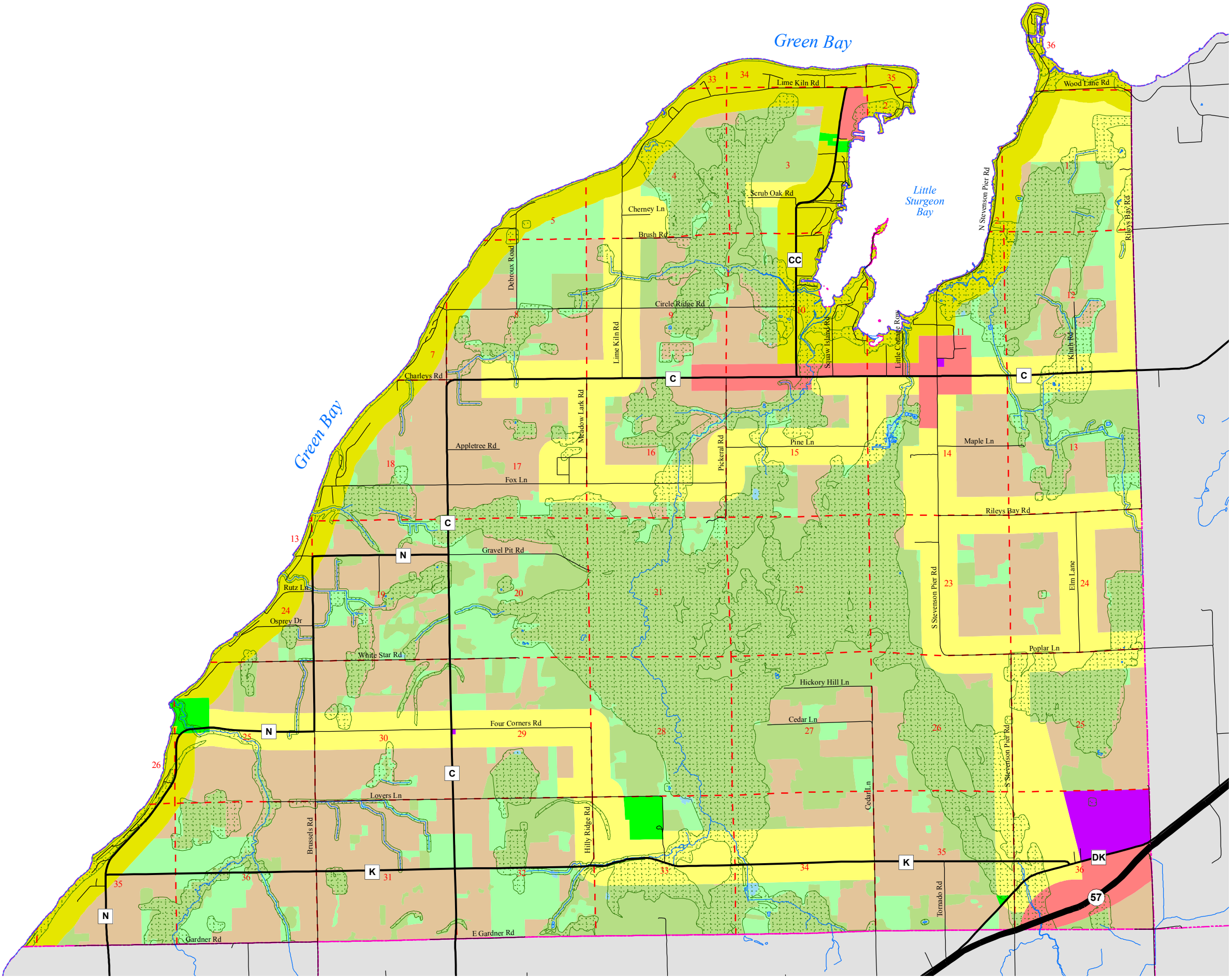
- Rural Residential
- Shoreline Residential
- Commercial
- Governmental/Institutional
- Parks and Recreation
- Agricultural
- Open Space
- Woodlands/Natural Areas
- Environmental Corridors

Basemap Features

- Town Boundary
- State Highway
- County Highway
- Local Road
- Section Line
- Surface Water



Source: Town of Gardner; Door County;
Bay-Lake Regional Planning Commission, 2009.



Chapter 3 - IMPLEMENTATION

INTRODUCTION

This section provides information and outlines a number of steps and activities necessary to implement the intent and vision of the town's comprehensive plan. Also, included is detailed information on various statutory powers which the town may use to amend and update the town's comprehensive plan in order to achieve the goals describe in the plan.

WHAT IS IN THIS CHAPTER

- I. Responsibilities of Local Officials
- II. Implementation & Land Use Control Recommendations
 - A. Zoning
 - B. Official Map
 - C. Floodplain Ordinance
 - D. Shoreland/Wetland Ordinance
 - E. Subdivision Ordinance
 - F. Sign Ordinance
 - G. Other Ordinances
- III. Comprehensive Plan Internal Consistency
- IV. Process for Updating Plan
 - A. Plan Review Timeline
 - B. Stakeholders
 - C. Priorities

RESPONSIBILITIES OF LOCAL OFFICIALS

Role of the Town Plan Commissions

The Wisconsin Statute 66.1001 (3) stipulates that certain land use controls for the Town of Gardner must be consistent with their adopted comprehensive plans. One of the Plan Commission's primary responsibilities is to implement the comprehensive plan and to ensure that all supporting ordinances are consistent with the plan. When reviewing any petition or when amending any land controls within the town, the comprehensive plan shall be reviewed and a recommendation will be derived from its identified statements, goals, objectives, vision statement and General Plan Design. If a decision is one that needs to be made which is inconsistent with the comprehensive plan, then before the decision can take effect, the comprehensive plan must be amended to include this change in policy.

The Plan Commission will need to ensure that the comprehensive plan is updated at least once every 10 years per s 66.1001 (2) (i). Members of the Plan Commission need to become very familiar with the plan's maps and text as well as its stated vision statement, goals, policies, and programs. An annual review of the vision statement, goals objectives and policies is recommended to keep them current.

Role of the Elected Officials

The elected officials must make their decisions from the standpoint of overall community impact - tempered by site specific factors. In this task they must balance the recommendations made by plans and policies, the objectives of the applicant, the technical advice of staff, and the

politically neutral recommendations of advisory boards, with their own judgment on the matter at hand.

The comprehensive plan will provide much of the factual information elected officials need in making a decision, therefore, even though the prime responsibility of implementing and updating the comprehensive plan falls on the shoulders of the respective Plan Commissions, elected officials alike should become familiar with this important community plan and assert that community support and resources are maintained to ensure the comprehensive plan stays current and viable.

IMPLEMENTATION AND LAND USE CONTROL RECOMMENDATIONS

Zoning

The most common tool for controlling land use is a zoning ordinance whose state purpose is to promote the health, safety, morals, prosperity, aesthetics, and general welfare of the town. The town of Gardner does not have a Zoning Ordinance but might consider adopting one in the future.

Official Maps

Under §62.23(6), the Town Board (under village powers)"may by ordinance or resolution adopt an official map showing the streets, highways, parkways, parks and playgrounds laid out, adopted and established by law." Once an area is identified on an official map, no building permit may be issued for that site, unless the map is amended.

The official map serves several important functions:

1. It helps assure that when the Town acquires lands for roads streets, etc., it will be at a lower vacant land price;
2. It establishes future streets that subdividers must adhere to unless the map is amended; and,
3. It makes potential buyers of land aware that land has been designated for public use.

The town may wish to establish an official map that is consistent with the comprehensive plan to assure new roads provide connectivity and that recreation areas are identified for future development.

A recommended technique for consistency with road alignments is to require area development plans prior to the approval of certified survey maps or subdivision plats. The town will maintain full discretion in the design and approval of any area development plans and if approved, the plans would be incorporated as part of the official map for the specified area. Thus, developers would be required to assure the community that their proposals will result in planned, orderly growth and development. In effect, roads and utilities would be planned to include areas beyond the land originally proposed to be platted. This would help avoid dead ends and looped streets that are characteristic of developments that have not considered adjacent lands owned by other parties.

Floodplain Ordinance

The Door County Floodplain Zoning ordinance is contained in Chapter 15.02 of the Door County Code of Ordinances and covers the town of Gardner. The general purpose of the ordinance is to regulate development in the flood hazard areas to protect life, health and property. The regulations limit development within identified areas. In some instances it will be important to re-adjust the floodplain boundaries in specific areas. To do so the Town must follow three steps:

1. Hire an engineering firm to conduct hydrologic and hydraulic engineering models to calculate floodplain boundaries for the specified area.
2. Submit the re-calculated floodplain boundaries to the Wisconsin Department of Natural Resources (WDNR) Bureau of Watershed Management and the Federal Emergency Management Administration (FEMA) for their review.
3. If approved, amend existing zoning maps to reflect the re-calculated floodplain boundaries.

Shoreland/Wetland Ordinance

The Door County Shoreland-Wetland Zoning ordinance covers the town of Gardner. The ordinance was adopted pursuant to Wis. Stats. 59.57, 59.971, 59.99, 87.30, and 144.26. The ordinance recognizes that the uncontrolled use of shorelands and pollution of navigable waters of Door County would adversely affect the public health, safety, convenience and general welfare and would impair the tax base. The ordinance states that the legislature of Wisconsin has delegated the responsibilities to the counties to further the maintenance of safe and healthful conditions; to prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses; and to preserve shore cover and natural beauty.

The ordinance regulates all lands within unincorporated areas of the county that are:

1. Within 1,000 feet of the ordinary high water mark of navigable lakes, ponds or flowages,
2. Within 300 feet of the ordinary high water mark of navigable rivers or streams or to the landward side of the floodplain which ever is greater.

Subdivision Ordinance

Door County, under Wisconsin Statutes 236, establishes the procedure for the division and subdivision of lands in unincorporated areas of the county. Under the ordinance, the county reviews all land divisions of existing tax parcels in the shoreland area, pursuant to s.236.45, Wis. Stats. The county may require the installation of streets and utility improvements, the dedication of land for public streets, public use, and public access to the navigable lakes or streams. The ordinance defines a subdivision *as a division of a lot, parcel or tract of land by the owner thereof or the owner's agent for the purpose of sale or building development where: 1. The act of subdivision creates five or more parcels or building sites of 1-1/2 acres each or less; or 2. Five or more parcels or building sites of 1-1/2 acres are created by successive division within a period of five years.* The ordinance further regulates the dimension of building sites, setbacks from water and highways, the minimum square footage of living space, removal of shore cover, filling, grading, lagooning, dredging, ditching, and excavating.

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- It is recommended that the Town of Gardner explore developing and adopting a subdivision ordinance to utilize the ordinance to regulate how lots are developed and arranged within specific areas. It is recommended that any ordinance be developed by working jointly with Door County.
 - The town can petition Door County to amend the County Subdivision Ordinance to include specific town wishes or standards.

Sign Ordinance

Many communities are finding themselves having to regulate signage especially along transportation corridors, in order to preserve a sense of place and community character. As signs become bolder, have greater illumination placed on them, and have greater square footage, the sides of roadways and within community centers become places of growing confusion as each sign attempts to get your attention. The Town may choose to adopt sign regulations in order to preserve and maintain the aesthetic qualities and character of the community.

Erosion and Storm Water Control Ordinances

Under § 61.354 of the Wisconsin Statutes, the Town may enact a construction site erosion control and storm water management zoning ordinance. Door County has an adopted Erosion Control ordinance in place. The purpose of such an ordinance is to protect water quality and to minimize the amount of sediment and other pollutants carried by runoff or discharged from construction sites to lakes, streams, and wetlands.

Historic Preservation Ordinances

As communities progress, historic preservation ordinances can assist them in protecting their culture and history. The ordinances provide identification, protection, enhancement, perpetuation and use of buildings, structures, objects, sites and districts within a community that reflect special elements of a communities historical, architectural, archaeological, cultural, or aesthetic heritage. The ordinances can also set standards for alterations, design, restoration, demolition or new construction, ensuring that the features/neighborhoods maintain their historical significance. In addition, historic preservation can increase the economic benefits to a community and its residents, protect/increase property values, and enhance the overall visual character of a community.

The Town may wish to adopt a historical preservation ordinance identifying possible historical districts, structures, landmarks, etc. which are significant elements detailing the Town's history. The ordinance should also describe ways to renovate and restore structures or sites that reflect Town's history.

Design Review Ordinances

Design review can accompany many different development aspects and will assist communities in achieving the identified look and character they expressed within their vision statements and goals. These ordinances however, need to be based upon well defined sets of criteria. Signage, lighting, exterior building material types and colors would be specifically identified within the ordinance.

Building and Housing Codes

The town should continue to enforce all applicable building and housing codes to ensure that properties are adequately maintained to preserve the character of the community and to protect property values. This is important especially for those older areas and for properties that are not owner occupied.

Sanitary Codes

The County has adopted on-site waste disposal regulations. Groundwater protection is of great importance to both the County and the town of Gardner. Uncontrolled waste can have detrimental and wide ranging impacts on health and property values.

Lighting Controls/Ordinances

As development encroaches upon the countryside, communities find that not only are the open spaces and natural features being altered, but also the night sky they enjoy in the evenings. Yard lighting can change the character of a town as surely as any physical developments. This is indeed the case when lighting is deemed excessive - such as in the case of many commercial/industrial uses (i.e. lighting of stockyards, parking lots, equipment yards, etc.).

Direct lighting or glare can and should be regulated in order to maintain the character of the town that so many people want to preserve. Many light manufacturers have light cutoff shields that will limit or remove glare, thus increasing the lights effectiveness and thus lowering its overall energy consumption (adding savings to the owner). Currently lighting and its evening glare is one of the chief complaints residents have in communities across this state and nation and the manufacturers of lights have positively responded. There are many examples today of gas stations, malls, as well as street lighting that have non-glare lighting. The technology exists and non-glare lighting is no more expensive than the older inefficient lighting.

Consider a lighting control ordinance governing excessive light glare, especially over any operation that continues into the evening hours or may intrude on neighboring parcels or impact drivers' visibility.

COMPREHENSIVE PLAN INTERNAL CONSISTENCY

The comprehensive plan was developed sequentially in order to develop a plan with supportive goals, objectives, policies, and programs. Utilizing the community survey and nominal group session as a base, key issues were identified within each of the nine elements of the plan. Using these issues along with factual information regarding natural features, past population and housing data and infrastructure, a set of goals, objectives, policies and programs were developed in order to determine a desired vision which would be used throughout the planning period. The identified vision, goals and strategies expressed within this plan were utilized to determine the General Plan Design as well as the specified implementation actions the town will undertake throughout the planning period. Any amendment to the plan shall be accompanied with an overall review of the nine elements along with their identified goals, objectives, policies and programs, in order to ensure that inconsistency within and between elements does not occur in the future.

PROCESS FOR UPDATING PLAN

This comprehensive plan shall be amended/updated following s. 66.1001 (4)(b) and the town's adopted written procedures for fostering public participation. It is recommended that the town's comprehensive plan be reviewed/updated by the Town Plan Commission based on the following schedule:

- ***Annually***
 - Review the vision statement and future development strategies;
 - Identify updates to the Wisconsin Department of Administration (WDOA) population and housing estimates, and U.S. Census data;
 - Review implementation priorities and relevance of the development strategies;
 - Update any changes to 20-Year General Plan Design text or map;
 - Ensure consistency with new or revised ordinances proposed by Door County
- ***Five Years***
 - Review U.S. Census data, WDOA population and housing projections;
 - Identify substantial changes over the past five years and any potential impacts to the community in the near future. This helps monitor outcomes of implemented development strategies and identifies any possible needs for the 10-year update;
 - Be aware of updates or completion of other local, county, or regional plans.
- ***Ten Years*** - required comprehensive plan update per Wisconsin Statute 66.1001(2)(i). Amend the plan as needed based on changing conditions.
 - Conduct a review of the town's vision statement, 20-Year General Plan Design development strategies and map, land use recommendations, update the town's population, housing, and economic data, along with other relevant planning information inventoried in this plan.
 - Review ordinances and other controls for consistency.

Plan Review Timeline

Town officials should establish a general process and timetable for addressing the development strategies that will ultimately lead to implementing the *Town of Gardner 20-Year Comprehensive Plan*. Steps to address the development strategies could include the following:

1. To ensure the comprehensive plan remains current, review of the plan should be a standing agenda item for at least two (2) Plan Commission meetings and a minimum of one (1) Town Board meeting per year. The review of the comprehensive plan should also include assessment of the land use control tools (e.g., ordinances and regulations) previously listed in this chapter.
2. The Plan Commission and Town Board should identify priority policies and programs that need to be addressed within the first 12-24 months. These priority strategies will lead to the implementation of additional policies and programs in subsequent years.

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3. Town officials should identify key stakeholders and collaborators to assist in the implementation of the development strategies. A list of some of those entities is provided at the end of this chapter.
 4. The Town of Gardner has various tools available for the implementation of the community development strategies over the 20-year planning period. Within the appendices of this plan there are comprehensive lists of financial and technical resources to implement many of the strategies listed for the housing, economic development, and transportation elements of the plan.
 5. The implementation schedule should be evaluated and revised on an annual basis. Town officials will need to monitor demographic trends and forecasts to ensure that development strategies address the changing conditions of the Town of Gardner.

Stakeholders

Door County
Town of Brussels
Town of Forestville
Town of Nasewaupee
Town of Union
Door County Emergency Services
Door County Highway Commission
Door County Planning Department
Door County Soil and Water Conservation
Door County UW-Extension
Southern Door Public School District
Northeast Wisconsin Technical College
Bay-Lake Regional Planning Commission
Wisconsin Department of Commerce
Wisconsin Department of Natural Resources
Wisconsin Department of Transportation
Wisconsin Housing and Economic Development Authority (WHEDA)
Wisconsin Department of Administration
Federal Emergency Management Agency (FEMA)
United States Department of Agriculture, Natural Resources Conservation Service

Priorities

1. Work with Door County to develop a detailed packet of information on what new residents should come to expect when building and living within the rural portions of the county. This information should be readily available to the public, and provided whenever a town permit for new construction is issued.
2. Work closely with the surrounding townships to explore opportunities for streamlining like services such as recycling, policing, fire protection, etc.

Chapter 4 - INVENTORY AND TRENDS

INTRODUCTION

This chapter of the comprehensive plan provides a summary of the following resource elements that comprise Volume II (Community Resources) of the Town of Gardner Comprehensive Plan.

- (Chapter 5) - Natural, Agricultural & Cultural Resources
- (Chapter 6) - Population & Housing
- (Chapter 7) - Economic Development
- (Chapter 8) - Transportation
- (Chapter 9) - Utilities & Community Facilities
- (Chapter 10) - Intergovernmental Cooperation
- (Chapter 11) - Land Use Controls and Inventory

Each of these resource chapters discusses the importance of evaluating various aspects of the town and how those components can impact planning for the community's future growth and preservation. Ultimately, information provided in these elements form the basis for the development of town's Future Land Use Plan (Chapter 2 of this document).

RESOURCE SUMMARIES

Natural, Agricultural & Cultural Resources – Chapter 5

Natural Resources Summary

Natural resources inventory geology, soils, water resources, woodlands, etc. found within the Town of Gardner and surrounding area.

- The geology of the town consists of Niagara Dolomite bedrock which is covered with glacial drift consisting primarily of sediments in the form of an outwash plain, consisting of sand and gravel. Clay interbedded with other loam (i.e., sand and silt) deposits are found in the eastern portion of the town.
- The topography of the area is nearly level to rolling near the town's water features.
- The *Soil Survey of Door County, Wisconsin*, is utilized to provide details of all soils in the county, specifying information on the suitability and limitations of soils for private on-site wastewater treatment systems, basements, sand and gravel extraction, and other natural resource and engineering uses.
- Kayes Creek, Sugar Creek, Little Sturgeon Bay and Green Bay are the significant surface water features within or adjacent to the town.
- The protection of the Kayes Creek and Sugar Creek watersheds, along with ground and surface water resources from the potential impacts of new developments and other land activities is encouraged through best management practices such as erosion controls, preservation of wetlands and vegetative cover, contour farming, wellhead protection planning, etc.

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- The town's surface water features, floodplains, shorelands and wetlands (including the 1,112 acre Gardner Swamp Wildlife Area/Natural Area) provide important environmental functions (e.g. storm water retention and groundwater recharge), quality wildlife habitat and recreational opportunities.
 - The woodlands within the town maintain watershed cover, help reduce soil erosion and provide wildlife habitat for some of the rare, threatened, and endangered species that are found within area.

Agricultural Summary

- Prime agricultural lands are concentrated in the southern portion of the town and scattered along the eastern border of the town.
- In 2002, Door County had 152 dairy farms. The Town of Gardner accounted for 11 of these dairy farms.
- From 1997 to 2002, the town has experience a decline in the total number of farms along with harvested croplands.
- The production, sales, and processing of Door County's farm products generate employment, economic activity, income and tax revenue. In 2002, agriculture in Door County accounted for nearly \$189 million, or 24 percent of the county's total economic activity.

Cultural Summary

- Town of Gardner has 57 sites considered to be of historic significance. Several of these features, which includes various houses and barns dating back to the mid-1800s up to the early 1900s.

Demographics – Chapter 6

The Population and Housing chapter of this plan inventories the demographics of the town, detailing population and housing trends and projections.

Population Summary

- The Town of Gardner currently is at its highest population level of 1,197. The town saw a rapid decline in population between 1920 and 1930, then fairly stable population growth until 1970 when the town's population increased dramatically growing by nearly 24 percent through 1980. The town's population has fluctuated, but grown more slowly since 1980 to the current level of 1,197 in 2000.
- The working age group (16+) accounted for 81 percent of the total population, while the school age group (5-17) accounted for just 14 percent of the population. The retirement age group (65+) accounted for 14 percent of the total population.
- According to Wisconsin Department of Administration (WDOA), the town's population is projected to increase to 1,403 persons by 2030. A growth trend projection indicates a population of 1,546 by 2030, while a linear trend projection identifies a 2030 population of 1,453.

Housing Summary

- The town has experienced a 72percent increase in housing units since 1970 (561 units to 966 units).
- The town had 493 occupied housing units in 2000, which accounted for 51 percent of the total housing in the town leaving 49 percent of housing in the town is vacant.
- The town contains 456 housing units that are used for seasonal, recreational, or occasional purposes. These units make up just over 47 percent of the town's total housing.
- Over 15 percent of the existing housing units in the Town of Gardner were built before 1940, while nearly 20 percent of the existing housing units in the town were constructed between 1970 and 1979.
- In 2000, the majority of housing units in the Town of Gardner were valued between \$50,000 and \$99,999 or \$100,000 to \$149,999.
- Occupied housing unit projections indicate an increase of 189 to 442 new housing units in the town by 2030.

Economic Development – Chapter 7

The chapter details the Town of Gardner and Door County's general economic characteristics including labor force and economic base.

Labor Force Summary

- According to the 2000 Census, nearly 83 percent of town residents age 25 and over are high school graduates or are graduates of higher degrees. Nearly 10 percent of the town residents have a bachelor's degree or higher.
- The median household income for the town increased from \$22,357 in 1989 to \$39,063 in 1999.
- Most of the people in the workforce in the town were employed by the manufacturing industry, 30 percent. The educational, health and social services group was the second highest employment percentage in the town with 11.5 percent.
- Of the 582 working residents in the town, 80 people (13.7 percent) lived and worked in the Town of Gardner. Nearly 85 percent of town residents were commuting to other communities for work. Approximately 46 percent traveled to the nearby City of Sturgeon Bay for work.
- Door County's unemployment rate and the number of unemployed in 2000 was the lowest for the period 1990 to 2008 (3.9 percent), whereas the unemployment rate in 1994 was the highest during the same time period at 8.7 percent.

Economic Base Summary

- Manufacturing and services have, and continue to be the primary industries for Door County's economy. Manufacturing contributes over \$78 million to the county's economy, while services provide \$148 million of the county's total income.

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- According to the Wisconsin Department of Tourism’s 2008 Tourism Economic Impact Study travelers spent an estimated \$484 million in Door County in 2008.
 - Door County boasts a variety of large employers from both the public and private sectors. Public sector employers include Door County, the School District of Sturgeon Bay and Southern Door School District. Private employers include the Marinette Marine and Door County Memorial Hospital both employing more than 500 people.
 - In 2007, Accommodation and food services; Arts, entertainment, and recreation; Other services, except public administration; Manufacturing; Construction; Retail trade; and Real estate and rental and leasing were considered “export based”, meaning these areas produce more goods and services than the local economy can use. Conversely, Health care and social assistance; Information; Finance and insurance; Administrative and waste services; Professional and technical services; Wholesale trade; Educational services; and Management of companies and enterprises industries were not meeting local demand for given goods or services.

Transportation- Chapter 8

The chapter includes descriptions of the town’s transportation system including a detailed explanation of the town’s highway and road system; rail, waterborne and air service; bicycle transportation; pedestrian transportation; elderly and disabled transportation services; etc.

The detailed description of the highway and road system includes the functional classification of roads within the town, traffic counts, etc. In addition, local plans are inventoried and compared with transportation plans developed at the county, regional and state level.

- There are more than 49 miles of local roads under the jurisdiction of the town, comprising approximately 74 percent of the total road mileage within the town. County Roads cover over 22 miles of road in the town.
- STH 57 is the arterial highway located within the Town of Gardner, meaning it moves traffic over medium to long distances, often between regions as well as between major economic centers, quickly, safely and efficiently.
- The Door County Senior Resource Center, Sunshine House Inc. and the Red Cross provide specialized transportation services to the elderly and disabled within Door County.

Utilities & Community Facilities – Chapter 9

The chapter inventories of the location, use and capacity of the existing utilities and community facilities that serve the Town of Gardner.

- Being a rural community, the majority of the town residents maintain individual wells and on-site wastewater treatment systems.
- The town of Gardner shares fire services with the towns of Brussels and Union. Many of the other town’s services are provided by private contractors (EMS/ambulance, solid waste and recycling), or Door County (police protection, road maintenance).
- The Southern Door School District provides public education to the town’s children. A number of private schools are also available within the City of Sturgeon Bay.

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- Residents can make use of Sugar Creek and Carmody County Parks, the Gardner Town Park and Claflin Memorial Park as many access points to Green Bay along the shoreline.

Intergovernmental Cooperation – Chapter 10

The town's relationship and cooperative efforts with its neighbors and other government entities is detailed in this chapter of the document.

- The town has a good working relationship with the neighboring communities, Door County and Regional Planning Commission, while the relationship with the school district is considered open.
- Agricultural vs. residential development conflicts; annexations; need for more communication/cooperation; and protection of water resources are several existing or potential issues identified during an intergovernmental workshop led by Door County with surrounding communities.
- More open communication and joint meetings and more cooperative planning efforts are some of the potential conflict resolutions the town may use as the need arises.

Land Use –Chapter 11

This portion of the plan inventories the town's current land uses along with existing land controls that may affect or restrict the use of land for specific purposes.

- Based on a 2005 land use inventory, approximately 93 percent of the town's land is undeveloped. The vast majority of the undeveloped acreage consists of croplands or pastures, covering 53 percent of the town. Woodlands cover nearly 40 percent of the town.
- The developed portions of the town consisted primarily of single family residential structures, agricultural structures and the transportation network of the town.

The current pattern of land use serves as the framework for creating the town's future land use plan found in Chapter 2 of this document.

Chapter 5 - AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

INTRODUCTION

This section provides an inventory of the existing natural, agricultural and cultural resource features within the town of Gardner planning area. The inventory provides an understanding of the physical characteristics of the planning area as these features make-up major determinants of future development options. To understand where these resources are located and how they relate to one another is important to help limit unnecessary public expenditures and to minimize the negative impacts to these valued environmental/cultural resources.

WHAT IS IN THIS CHAPTER

This element of the comprehensive plan contains an inventory of the following information:

- I. Natural Resources
 - A. Geology
 - 1. Bedrock
 - 2. Glacial
 - 3. Topography
 - B. Soils
 - 1. Soils Description
 - 2. Soil Limitations
 - (a) Private Sewage Systems
 - (b) Basements
 - C. Water Resources
 - 1. Watersheds
 - 2. Stormwater
 - 3. Groundwater
 - 4. Surface Water
 - 5. Shorelands
 - 6. Coastal Resources
 - 7. Floodplains
 - 8. Wetlands
 - D. Woodlands
 - E. Wildlife Habitat
 - 1. Threatened and Endangered Species
 - 2. Significant Natural Features
 - 3. Environmental Corridors and Isolated Natural Areas
- II. Parks and Open Space
- III. Metallic and Non-Metallic Mining Resources
 - A. Nonmetallic Mineral Resources
 - B. Nonmetallic Mining Reclamation (NR 135)
- IV. Agricultural Resources
 - A. Climate
 - B. Prime Agricultural Land

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- C. Farm Numbers and Types
 - D. Farm Household Demographics
 - E. Trends in Agriculture
 - F. Environmental Impacts of Agriculture
 - G. Economic Impacts of Agriculture
 - V. Air Quality Issues
 - VI. Cultural Resources
 - A. Historic and Archeological Sites
 - B. Community Design

TOWN OF GARDNER LOCATION

The town of Gardner is located in the southwest portion of the Door County Peninsula along the bay of Green Bay covering 22,000 acres. The unincorporated community of Little Sturgeon is in the northwestern part of the town. County Highway C runs north – south then east – west into the city of Sturgeon Bay. State Highway 57 also provides access to the town of Gardner cutting through the southeastern corner of the town.

NATURAL RESOURCES STRATEGY

Goal:

To identify, protect, and preserve the Town's significant natural, scenic and open space areas for enjoyment by its residents and visitors for present and future generations.

Objectives:

1. Maintain and improve the quality of ground water and surface waters of the Town.
2. Preserve wetlands of the Town to the greatest extent practical.
3. Preserve the natural beauty created by views of the bay, trees, bluffs and vistas.
4. Maintain the natural beauty and integrity of the Green Bay shoreline as seen from land and water while providing for public use and access.
5. Preserve and protect the identified unique geological features that exist in the Town.
6. Discourage artificial light pollution, while preserving the safety of the residents of the Town.
7. Discourage non-metallic mining within the Town.
8. Protect and preserve environmental corridors, green space, forests, environmentally sensitive areas, endangered species, parks and wildlife habitat in the Town.
9. Preserve and improve the Town's air quality.

Goal:

To provide a safe, clean and orderly natural environment for the residents of the Town.

Objectives:

1. Encourage land uses that result in the efficient use of land, low infrastructure, construction and maintenance costs, and decreased negative impacts on air and water quality.
2. Plan development adjacent to the bay, streams and wetlands carefully. The burden of proof shall be on the developer. The developer needs to prove that a negative result on the adjoining bay, streams, or wetlands will not take place. If this cannot be determined than the development shall not occur.

Policies:

1. Explore the use of an overlay district that would identify key natural resources and viewsheds the Town wants to protect. Consider a set of standards to apply within the district.
2. Explore the use of an overlay district with setbacks for lakes, streams, and wetlands requiring additional care and proof that development will not have a negative effect on these resources.
3. Explore the use of a sub-committee that would work with the adjacent Towns to further explore ways to best utilize or preserve natural features within the Town.
4. Coordinate the Town's efforts with adjoining municipalities and state agencies.

NATURAL RESOURCES

Natural resources are materials that occur in nature and are essential or useful to humans, such as water, air, land, trees, animals, plants, soil and minerals. The following text describe the types and locations these many resources and discusses their importance when planning for future growth of the town/village planning area.

The Gardner town planning area contains a variety of natural resources. The natural resource base of the planning area is the primary determinant of its development potential and ability to provide a pleasant and habitable environment. The principal elements of the natural resource base are climate, topography, geology, soils, and natural areas, including woodlands, wetlands, and water resources. Knowledge and recognition of these elements and their interrelationships is essential so that human use and alteration of the natural environment does not advance at the risk of excessive costs in terms of major public expenditures and the destruction of nonrenewable or slowly renewable resources.

Geology

Two different types of geologic settings, Quaternary geology and bedrock geology, characterize the town of Gardner. Quaternary geology refers primarily to the effects that continental glaciation has had on the region and to a lesser extent the surface effects of more recent erosion and deposition. Bedrock geology refers to the solid rock layers that lie beneath Quaternary sediments.

Bedrock Geology

The Niagara Dolomite bedrock formation of the town of Gardner consists of sedimentary deposits formed during the Silurian age. These sedimentary rocks are solidified marine

sediments that dip to the southeast towards Lake Michigan. The Niagara formation not only makes up the bedrock formation of the town, but also virtually all of Door County.

The town of Gardner is underlain by both Maquoketa Shale of Ordovician age along the shoreline and the western half of the town and by Undifferentiated Dolomites throughout the eastern half of the town. Maquoketa Shale is soft and has a distinctive bluish-gray color. The Niagara escarpment, composed of Niagara dolomite, is not as prominent as it is to the north and south due to it being partly covered by glacial drift, although outcrops of both Maquoketa shale and Niagara dolomite do occur within the town. This series of sedimentary rocks overlie crystalline rocks of Precambrian age.

Overall, the bedrock does not present significant problems to development. In areas where bedrock may cause problems, large stones and bedrock exist near the surface and have the potential for hindering excavation and increase the cost of construction. The bedrock along with the overlying soils also a major source of the area's water supply. However, where the bedrock is at or near the surface there is more potential of pollutants entering the groundwater through fissures and crevices in the bedrock because not enough overlying soils exist to filter out potential contaminants as the water infiltrates the surface.

Pleistocene or Glacial Geology

Glacial lake deposits consisting of organic materials and stratified clay, silt and sand cover the bedrock in an area along the west side of the town along Green Bay, while the remainder of the town is covered in ground and end moraines (Map 5.1). These deposits can be classified according to their origin as stratified drift or till. Stratified drift consists primarily of sand and gravel that was sorted and deposited as outwash by glacial melt water. Clayey Till, a mixture of clay, silt, sand, gravel, and boulders, was deposited from glacial ice without the sorting action of water. The thickness of the glacial deposits in the area varies from five to 100 feet.

The last glacial ice of the Quaternary glaciation modified the bedrock surface by scouring highlands and depositing material in lowlands created by pre-glacial erosion. Deposits include till and glaciofluvial sediment. Till, or unstratified drift, is a mixture of unsorted, angular- to round-shaped sediments ranging in size from clay to boulders originating directly from glacial ice. Glaciofluvial deposits consist of coarse-to medium-grained sand and gravel, poorly to well sorted and bedded, with numerous cobbles, boulders and portions of till. They were deposited in ice contact or near-ice positions by glacial melt-water during the last phase of glaciation, when glaciers were stagnant or retreating.

Ground and end moraines are two common types of topographic landforms found in the area that consist primarily of clayey till. A ground moraine is an irregular surface of till that was deposited by a receding glacier. The steeper slope points in the direction from which the glacier advanced. An end moraine is an accumulation of earth, stones, and other debris deposited at a glacier's end stage.

The majority of the glacial drift in the town of Gardner consists of clay interbedded with other loam (i.e., sand and silt) deposits. The soils may be less than five feet thick in some areas and up to 200 feet in depth above the bedrock.

Karst Features

Areas along the Niagara Escarpment have thin soil deposits (Map 5.2), due to glacial scouring and relatively little post glacial deposition. Karst topography is terrain with distinctive characteristics of relief and drainage resulting from the dissolution of soluble rocks such as limestone and dolostone. The terrain has poorly developed surface features such as sink holes, caves, considerable sub-surface drainage, and minor features on rock surfaces known as karren. Karst features form as rain and snow meltwater percolates through the rock or along fractures called joints. Natural waters are made slightly acidic and corrosive by reacting with the CO₂ in the atmosphere and soil gas, mixing with organic acids or with less saturated water in the subsurface. The CO₂ combines with the water to form carbonic acid, an effective weathering agent. In time, sinkholes, caves, widened joints form, and much of the drainage is directed into the subsurface. These conditions of shallow soils lying directly over fractured bedrock make the area susceptible to groundwater contamination.

Topography

The attractiveness of the Gardner area is due, in part, to its topographic features. The dominate feature is the Niagara Escarpment which is a geologic landform that crosses state and national borders as a sickle-shaped ridge beginning in western New York state and running through central Ontario into Michigan, ending in south central Wisconsin. In the town, the escarpment The southern and eastern portions of the town are influenced by the Niagara dolomite and have greater changes in elevation notably along the town's eastern edge and the hills in the southern part of town (Maps 5.3 & 5.4). The Niagara Escarpment is characterized by relatively level tops, similar to plateaus, with steep slopes dipping to the southeast.

Much of the northern portion of the town is characterized by a gently rolling land surface occasionally marked by small depressions which slope to the south.

Soils

Soils Descriptions

Soils are grouped into general soil associations which have similar patterns of relief and drainage. These associations typically consist of one or more major soils and some minor soils. The general character of the soils of the planning area is largely the result of various types of glacial deposits overlying the Silurian dolomite. The town of Gardner falls within the following soil associations as described by the *Soil Survey of Door County*:

Kewaunee-Kolberg Manawa

Kewaunee series soils consists of deep, well drained and moderately well drained soils on glacial till plains and ridges. These soils formed in a thin mantle of silty or loamy material and in the underlying clayey glacial till. Slopes range from 2 to 30 percent. The Kolberg series consists of well drained soils moderately deep to limestone. These upland soils formed in thin, loamy deposits and the underlying moderately fine or fine textured glacial till. Permeability is moderately slow or slow. Slopes range from 0 to 12 percent. Manawa series soils consists of somewhat poorly drained, nearly level and gently sloping soils in waterways and shallow depressions on glacial till plains. Permeability of Manawa type soils is slow and slopes range from 0 to 3 percent.

Emmet-Solona-Angelica

Emmet series soils consists of well drained and moderately well drained, nearly level to very steep soils on glacial till plains and ridges. Permeability is moderate and slopes range from 2 to 6 percent. Solona series soils consists of somewhat poorly drained, nearly level soils in depressions and drainageways on glacial till plains. Solona soils are moderately permeable with slopes ranging from 0 to 3 percent. Angelica series soils are poorly drained and nearly level occurring in broad drainageways and depressions. Permeability of Angelica series soils is moderate to moderately slow and slopes range from 3 to 6 percent.

Summerville-Longrie-Omena

These soils are shallow to deep, level to moderately steep, well drained, and have a sandy loam or loam subsoil over sandy loam or fine sandy loam till or dolomite bedrock. The Summerville series consists of shallow, well drained soils formed in loamy materials overlying limestone on ground moraines, end moraines, and glacial lake benches. Permeability is moderate. Slopes range from 0 to 45 percent. The Longrie series consists of moderately deep, well drained soils formed in loamy glacial deposits underlain by limestone bedrock at a depth of 20 to 40 inches on ground moraines, glacial lake benches and terraces. Permeability is moderate. Slopes range from 0 to 25 percent. The Omena series consists of well drained, gently sloping to moderately steep soils on glacial till plains and moraine ridges. Permeability of Omena series soils is moderate and slopes range between 6 and 12 percent.

Carbondale-Cathro

The Carbondale Series consists of deep, very poorly drained soils in shallow glacial lake basins and depressions in stream valleys. Carbondale soils formed in organic material derived from decayed water tolerant grasses, shrubs, and reeds. The Carbondale series consists of very deep, very poorly drained soils formed in organic deposits more than 51 inches thick on ground moraines, outwash plains and lake plains. These soils have moderately slow to moderately rapid permeability and poor fertility. Slopes range from 0 to 2 percent. Cathro series also consist of very poorly drained organic soils that are moderately deep to loamy. These soils formed in shallow glacial lake basins and depressions. Like Carbondale soils, Cathro series soils also have moderately rapid permeability, and 0 to 2 percent slopes.

Soils Limitations

Soil Attributes Relative to Septic Systems

Without consideration of the properties of these soils, on-site wastewater treatment systems may fail and collection systems may require expensive and frequent maintenance. Factors which are considered when evaluating soils for on-site waste systems are:

High or Fluctuating Watertable. When groundwater is near the soil surface, proper filtering cannot take place and often results in on-site systems either backing up into the home or contamination of groundwater. In addition, construction techniques used to de-water systems are costly.

Bedrock. Large stones or bedrock near the soil surface may hinder excavation and considerably increase the cost of construction. In addition, conventional on-site septic systems cannot function properly, which may result in wastewater passing through the cracked bedrock and contaminating the groundwater.

Soil Permeability. Permeability refers to the rate at which water flows through the soil. When passage is too rapid, groundwater can become polluted. If it is too slow, the soils can become saturated and effluent ponding may result.

Flooding. On-site waste disposal systems that are located within a floodplain can result in problems. As water levels rise during periods of flooding, the system becomes saturated and results in untreated solid and liquid waste being discharged into the ground or surface waters.

Private Sewage Systems

Private on-site wastewater treatment systems (POWTS) are systems that discharge effluent to groundwater through a subsurface infiltration system. Success of these on-site systems (i.e., drain-fields or mounds) is based on the depth and permeability of the soils where they are installed.

The *Soil Survey of Door County, Wisconsin*, provides information on the limitations of each type of soil for these sanitary facilities. Soil ratings of severe, moderate or slight limitations are based on soil properties, site features, and observed performance of the soils.

Severe limitations mean soil properties or site features are so unfavorable or so difficult to overcome that these systems may require a special design that results in a significant increase in construction costs or possibly costly ongoing maintenance.

Moderate limitations mean soil properties or site features that are not favorable for the indicated use and too may require special planning, design, or maintenance to overcome or minimize these limitations.

Slight limitations mean soil properties and site features are generally favorable for the indicated use and limitations are minor and therefore easily overcome.

As a way to mitigate these limitations, the revised COMM 83 health and safety code allows new technologies for private sewage systems. The code allows the use of soil absorption systems on sites with at least six inches of suitable native soil. The revised code gives property owners the opportunity and flexibility to meet environmental performance standards with several treatment technologies.

The current code will allow for infill development where it was not permitted previously by the former plumbing code as interpreted by the Department of Industry, Labor and Human Relations (DILHR). Housing and population density will increase in some areas due to the revised COMM 83 code. This in turn may increase the need for land use planning and integrations of environmental corridors to address the adverse impacts related to development. Planning along with land use controls will assist in achieving more efficient development patterns.

Basements

The *Soil Survey of Door County, Wisconsin* provides information on the limitations of each soil for building site development including the construction of dwellings with basements. The

limitation ratings are identical to those identified in the abovementioned limitations for private sewage systems.

Water Resources

Watersheds and Sub-Watersheds

The town of Gardner is primarily encompassed within the Red River/Sturgeon Bay watershed. The Red River/Sturgeon Bay Watershed is a 139 square mile drainage area located in Door, Kewaunee and Brown Counties and includes the city of Sturgeon Bay. Approximately 15,000 people live in the watershed on primarily rural land. The watershed was designated a priority watershed in 1992 under the Wisconsin Nonpoint Source Water Pollution Abatement Program. It covers the surface waters of Little Sturgeon Bay, Rileys Bay, Sand Bay, Sturgeon Bay and Green Bay as well as several intermittent and perennial tributaries to these bays. Streams within the town which fall within the watershed include Sugar Creek and Kayes Creek.

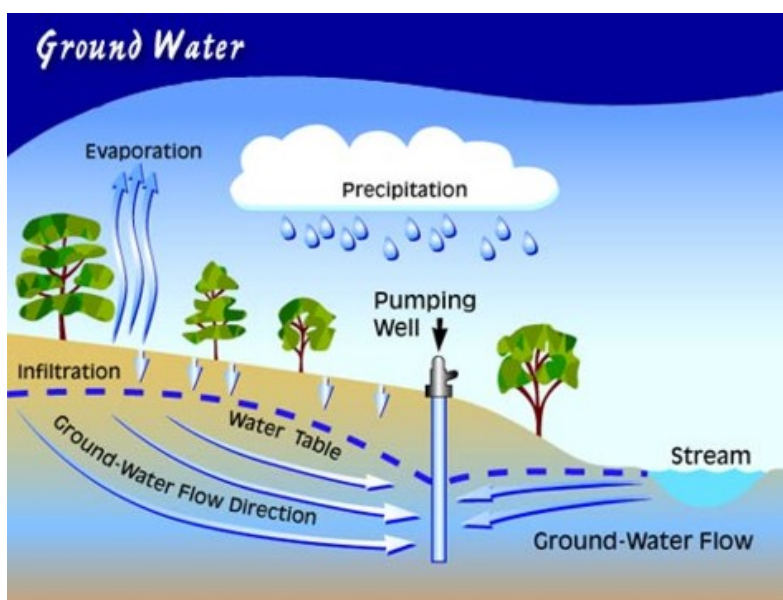
The Sugar Creek sub-watershed covers much of the western portion of the town adjacent to Green Bay while the Ahnapee River, Maplewood Swamp and Silver Creek sub-watersheds cover a small portion of the southeastern corner of the town (Map 5.5).

Nonpoint source pollution in the watershed comes from animal lot runoff, winter spread manure, cropland erosion, improperly sited manure storage, streambank erosion, and urban runoff. Many of the streams in the watershed have been channelized or straightened resulting in loss of aquatic habitat. Karst features such as sinkholes, caves, swallets, exposed bedrock and fracture traces are prevalent in many areas of the watershed.

Protection of the watersheds should be a concern as the town continues to develop. Nonpoint source activities such as farming, construction, mining, etc. can produce runoff (e.g., sediment, nutrients, pesticides, debris, and toxic chemicals) that can move across the land and through the soil, entering local waterways and ground waters. Many of these activities may not occur in the town. However, the negative affects eventually travel downstream impacting the water quality in the town, posing a threat to the environment, economy and health of the town of Gardner.

Groundwater

The town's groundwater source is part of a large aquifer system called the Cambrian-Ordovician aquifer system. It is the second largest source of groundwater for public supply, agricultural, and industrial use in the northern segment which consists of the four states of Wisconsin, Michigan, Minnesota, and Iowa. This aquifer is a complex multi-aquifer system with several aquifers separated by leaky confining units. The Maquoketa



Source: www.norcalblogs.com/commission/images/ground-water.jpg

confining unit caps the whole system where it is overlain by younger bedrock.

More specifically, the groundwater for the town comes from the Eastern Dolomite Aquifer. This aquifer is the most common aquifer in the area and the most widely used source of generally good quality ground water. This aquifer occurs from Door County to the Wisconsin-Illinois border. It consists of Niagara dolomite underlain by Maquoketa shale. The amount of water held from a well in this aquifer depends mainly on the number of fractures the well intercepts. In areas where fractured dolomite bedrock occurs at, or near, the land surface, the groundwater in shallow portions of the western dolomite aquifer can easily become contaminated. Portions of this aquifer have little soil to filter pollutants carried or leached by precipitation, meaning little or no filtration takes place once the water reaches large fractures in the dolomite. This has resulted in several groundwater quality problems throughout the aquifer. However, the town of Union contains a layer of clay soils above the water table that allow for a slow rate of water infiltration, thus the town's susceptibility to groundwater contamination is low.

Most users of more substantial quantities of groundwater tap into the Sandstone and Dolomite Aquifer to obtain a sufficient amount of water. The Sandstone and Dolomite Aquifer which lies beneath the Eastern Dolomite Aquifer, consists of layers of sandstone and dolomite bedrock that vary greatly in their water-yielding properties. However, drilling deep to the sandstone aquifer is costly and the water is locally saline.

Although the town has a low susceptibility rating to groundwater contamination, efforts to protect the water supply should be considered. In Wisconsin the primary sources for groundwater contamination are agricultural activities, municipal landfills, leaky underground storage tanks, abandoned hazardous waste sites, and spills. Septic tanks and land application of wastewater are also sources for possible contamination. The most common ground water contaminant is nitrate-nitrogen, which comes from fertilizers, animal waste storage sites and feedlots, municipal and industrial wastewater and sludge disposal, refuse disposal areas, and leaking septic systems.

Stormwater

Runoff refers to water from precipitation (stormwater), irrigation, or other sources, such as overwatering of lawns, that moves over and through the ground. These waters generally flow over impervious surfaces such as rooftops, driveways, sidewalks, streets and parking lots. As the water flows over these impervious surfaces it picks up and carries away natural and man-made pollutants, eventually depositing them into lakes, rivers, wetlands, coastal waters and groundwater supplies. The polluted run-off can destroy lake and river ecosystems, contaminate drinking water, and clog drainage ways with sediment thereby increasing the likelihood of flooding.

In October 2002, the State of Wisconsin established Run-off Management Administrative Rules to address uncontrolled run-off from urban and rural land use activities. These administrative rules establish a variety of best management practices, performance standards, regulations and permit requirements that farms, cities and construction sites are required follow as a way to reduce polluted runoff.

The following are the eight rules written by the WDNR and one by the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) that are intended to reduce the affects of runoff:

-
- NR 120 Priority Watershed and Priority Lake Program
 - NR 151 Runoff Management (Performance Standards and Prohibitions)
 - NR 152 Model Ordinances for Construction Site Erosion Control and Post-Construction Storm Water Management
 - NR 153 Targeted Runoff Management Grant Program
 - NR 154 Best Management Practices and Cost-Share Conditions
 - NR 155 Urban Nonpoint Source Water Pollution Abatement and Storm Water Management Grant Program
 - NR 216 Storm Water Discharge Permits
 - NR 243 Animal Feeding Operations
 - ATCP 50 Soil and Water Resource Management Program

These rules have a direct impact on private actions and on local government activities. They require that certain local governments take specific action to control storm water. As more impervious surfaces are created, causing a decrease in the amount of land that is available for filtration, these rules may require local governments to construct costly stormwater diversion and storage facilities. Furthermore, construction and agricultural activities within the community can contribute heavily to pollution issues if these requirements are not followed properly. Therefore, it is important that these requirements are addressed through local planning activities by promoting and utilizing best management practices. These practices will help to preserve the quality of the groundwater supply, protect surface waters from pollution, and safeguard significant aquatic habitats. For more information regarding best management practices and nonpoint source pollution control, visit the WDNR's runoff management website.

Surface Waters

The largest surface water resource impacting the planning area is the bay of **Green Bay** (Map 5.6). The Green Bay shoreline in the town of Gardner is approximately 14 miles long. The use of Green Bay is generally shore related, with most fishing done close to a home port. There are two parks along the shoreline that provides provide public access to the bay. The sport fishery consists mainly of yellow perch, smallmouth bass, northern pike, and some walleyes. Development pressure along the bay is high because of the amount of public and resort access. Also, there are many sheltered areas and waves are not generally as high.

Kayes (Keyes) Creek is a small creek which originates in several spring-fed tributaries and springs at the base of the dolomitic exposure and flows north through marshland to Little Sturgeon Bay. It is about 5 miles long with the upper two miles managed for brook trout. Access is along county highways and town roads.

Sugar Creek is a shallow, rubble and gravel stream which drains from the flat terrace along Green Bay in the town of Gardner, flowing south and east through the town of Union. It is approximately nine miles in length with its mouth at Sugar Creek County Park in the town of Gardner. Northern pike enter the stream in spring to spawn. It is classified as a warm water forage fishery perennial stream with good to fair aquatic life habitat

Outstanding and Exceptional Resource Waters Program

Wisconsin Administrative Code NR 102 was created in 1973 and established the “Outstanding and Exceptional Resource Waters Program” to maintain the water quality in Wisconsin's cleanest surface waters in accordance with the Federal Clean Water Act. Outstanding and Exceptional Resource Waters are listed in s. NR 102.10 and NR 102.11, respectively. The initial listing of outstanding and exceptional resource water segments was established in 1988, and updates to the list were made in 1989, 1993, 1998, and 2006. An Outstanding Resource Water is a lake or stream having excellent water quality, high recreational and aesthetic value, high quality fishing, and that is free from point and nonpoint source pollution. An Exceptional Resource Water is a lake or stream exhibiting the same high quality resource values as an Outstanding Resource Water, but that may be impacted by point or nonpoint sources of pollution or have the potential for receiving a wastewater discharge from a non-sewered community in the future.

Kayes Creek is one of only two streams in Door County that are designated as Exceptional resource waters. It has a high non-point source ranking.

Floodplains

In addition to their primary function of storing water after major storm events and in spring after snowmelt, floodplains are often viewed as valuable recreational and environmental resources in both rural and urbanized areas. These areas provide for stormwater retention, ground water recharge, and habitat for various kinds of wildlife unique to the water.

Development that is permitted to take place in these areas is susceptible to storm damages and can have an adverse effect on water quality and wildlife habitat. In addition, it can also result in increased development and maintenance costs such as: providing floodproofing, repairing damage associated with flooding and high water, increased flood insurance premiums, extensive site preparation, and repairing water related damage to roads, sewers, and water mains.

As a result, the state of Wisconsin requires that counties, cities, and villages adopt shoreland/floodplain zoning ordinances to address the problems associated with development in floodplain areas. Development in shoreland areas is generally permitted, but specific design techniques must be considered. Development in floodplain areas is strictly regulated and in some instances is not permitted. For planning and regulatory purposes, the floodplain is normally defined as those areas, excluding the stream channel, that are subject to inundation by the 100-year recurrence interval flood event. This event has a one percent chance of occurring in any given year. Because of this chance of flooding, development on the floodplain should be discouraged and the development of park and open space in these areas encouraged.

The authority to enact and enforce these types of zoning provisions in counties is set forth in Chapter 59.97 of the Wisconsin Statutes and Wisconsin Administrative Code NR 116. This same authority is also vested to cities and towns in Chapter 62.23 of the Wisconsin Statutes.

The floodplain area is comprised of a narrow strip along the Green Bay shoreline and an area to the north and south of the Gardner Swamp along Kayes Creek. The floodplains have been identified within the planning area according to the Federal Emergency Management Flood Insurance Rate Maps (Map 5.7).

Door County is currently administering a shoreland zoning ordinance in its unincorporated areas, including the town of Gardner. The jurisdiction of the ordinance includes the shoreland and

floodplains of lakes, ponds or flowages as well as the shorelands of both intermittent and perennial streams.

Shorelands

Shorelands (Map 5.8) are considered lands within the following distances from the ordinary high water mark of navigable waters:

- 1,000 feet from a lake, pond or flowage; and
- 300 feet from a river or stream or to the landward side of the floodplain, whichever distance is greater.

Shorelands are viewed as valuable environmental resources in rural areas. As a result, the State of Wisconsin requires counties to adopt shoreland/floodplain regulations for the protection of all shorelands in unincorporated areas. The authority to enact and enforce shoreland and other zoning provisions in counties is set forth in Chapter 59.692 of the Wisconsin Statutes and Wisconsin Administrative Code NR 115.

- The *Door County Zoning Ordinance* regulates the shorelands of all navigable waters in the unincorporated areas of the county including the town of Gardner.

Development within shoreland areas is generally permitted, however specific design techniques must be considered. In more environmentally sensitive locations, any alteration of the shoreland is strictly regulated, and in some cases, not permitted under any circumstances.

Coastal Resources

The Green Bay coastline offers a variety of natural resources (e.g., bluffs, beaches, wetlands, etc.); living resources (i.e., flora and fauna and unique habitats of the coast); and cultural resources (e.g., history, recreation and agriculture). It is important to protect these valuable assets as development in coastal areas typically leads to greater land disturbance, runoff, and pollutants.

Coastal development can affect the shape and use of the shoreline. Several issues to consider when planning include shoreline/bluff erosion, impact to coastal wetlands, fluctuating lake levels, increased non-point pollution, economic impacts, wildlife habitats, and the unique historic and archeological resources of the area.

The preservation of coastal resources will go a long way in maintaining/improving community health and safety, aesthetics and economic viability (tourism, clean parks and beaches, recreational fishing, etc.).

Wetlands

The State of Wisconsin defines wetlands as areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophilic vegetation and which has soils indicative of wet conditions. Wetlands are important for groundwater recharge and provide habitat for a variety of plants and animals. They also provide natural open space, help maintain both surface and groundwater quality, and provide water storage areas for periods of flooding and high water. Whenever possible, wetlands should be left unaltered. Filling or draining of wetlands is also quite costly, destroys the productive capacity of the ecosystem and can adversely affect surface water quality and drainage.

In 1972, Congress passed the Federal Water Pollution Control Act Amendments, also known as the Clean Water Act, “to restore and maintain the chemical, physical, and biological integrity” of the nation’s waters. The Act defined “navigable waters” as “waters of the United States.” Section 404 of the Clean Water Act established a permit program regarding discharges of dredged and filled material. In 1977, the U.S. Army Corps of Engineers issued final regulations on the Section 404 program and explicitly included “isolated wetlands and lakes, intermittent streams, prairie potholes, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, the degradation or destruction of which could affect interstate commerce. The basic premise of the program is that no discharge or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation’s waters would be significantly degraded. Activities that are regulated under this program include fills for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry. When a permit is applied for in conjunction with any of these activities, the applicant must show that he has: 1) taken steps to avoid wetland impacts where practicable, 2) minimized potential impacts to wetlands, and 3) provided compensation for any remaining unavoidable impacts through activities to restore or create wetlands. The permit process is often accompanied by a field review of the site.

Wisconsin Administrative Code NR 115 falls under the jurisdiction of the Wisconsin Department of Natural Resources and mandates that shoreland wetlands be protected in both the rural and urban areas of the state. In unincorporated areas, NR 115 provides the legislation to protect wetlands of five acres or more that are within the jurisdiction of county shoreland zoning ordinances. This wetland provision would be applicable throughout the town.

The largest wetland area in the town of Gardner is the Gardner Swamp which covers much of the central portion of the town. Additional wetland areas are scattered throughout the town. Map 5.9 illustrates the WDNR inventoried wetlands greater than two acres. It should be noted that all wetlands, no matter how small, are subject to WDNR and possible federal regulations if they meet the state definition.

Woodlands

Woodlands in the town are comprised primarily of sugar maple, yellow birch, American beach, Basswood, red oak and red pine in western Gardner. Sugar maple, paper birch, aspen and white cedar are predominant in the area. These woodlands provide an aesthetic and natural purpose, providing habitat to many animals. Map 5.10 shows the woodlands, both upland and lowland, within the town.

Wildlife Habitat

Wildlife habitat can be defined as areas that provide for the arrangement of food, water, cover, and space required to meet the biological needs of an animal. Each wildlife species has different diet and shelter requirements over the course of a year. The town’s woodlands, wetlands, floodplains and the water features provide habitat for many species of wildlife.

- White-tailed deer, turkey, grouse, beaver, muskrat, gray and red squirrel, and chipmunks are some of the more well known species found in the area. Migratory fowl also frequent the town’s streams and wetland areas to raise their young. Green Bay can provide habitat for many fish species including perch, bass, smelt, panfish, etc.

Threatened and Endangered Species

Many rare, threatened, and endangered species are found within Door County. Appendix D lists the rare species and natural communities that have occurred in Door County as identified in the Wisconsin DNR Natural Heritage Inventory.

- According to the WDNR various rare species occurrences within the town of Gardner have been noted in or adjacent to the various waters features and wetlands in the town.

Potential impacts should be discussed before any development occurs in order not to disturb habitat for any plant or animal species especially those noted on the threatened or endangered list.

Significant Natural Features

The Wisconsin State Natural Area program was established to formally designate sites in natural or near natural condition for scientific research, the teaching of conservation biology and most of all, preservation of their natural values and genetic diversity for the future. These areas are not intended for intensive recreation use, but rather to serve the mission of the Natural Areas Program, to locate and preserve a system of State Natural Areas harboring all types of biotic communities, rare species, and other significant natural features native to Wisconsin (Map 5.11).

The ***Gardner Swamp Wildlife Area - Gardner Swamp Natural Area*** is 1,112 acres. Its habitat consists of marsh, forested lowland and stream. The principal wildlife includes deer, waterfowl, ruffed grouse, rabbits and raccoons. The recreational activities include bird watching, canoeing, berry and mushroom picking.

The ***Niagara Escarpment*** is a 650-mile sickle-shaped cuesta (a ridge with a steep face on one side and a gentle slope on the other) which begins in the United States, south of Rochester, New York, plunges north through Canada and continues through the state of Wisconsin, eventually becoming covered by topsoil through the southern part of the state and into Iowa. Within Wisconsin, the Niagara escarpment is a linear feature that starts at Washington Island at the tip of Door County, following southwesterly along the western edge of the Door Peninsula. It is part of a geologic feature made up of Niagara dolomite forming a cup under Lake Michigan and Lake Huron. The Niagara escarpment is the exposed edge of the northern portion of this geologic feature.

Environmental Corridors and Isolated Natural Areas

Many planning activities require delineation of environmental corridors (comprehensive plans, watershed plans, sewer service area plans, etc.). Environmental corridors protect local water quality and wildlife habitat through identification and preservation of environmentally sensitive areas. Typically, environmental corridors contain wetlands, water features, floodplains, natural and scientific areas, woodlands, parks and recreation areas, areas of steep slope, and other unique natural features which overlap or are contiguous. The concept of a corridor is based on the delineation of environmental features adjacent to waterways and water related resources.

The Bay-Lake Regional Planning Commission has identified environmental corridors for the town of Gardner planning area to help in identifying areas which have the greatest need for protection. These corridors (Map 5.12) were delineated through the use of the Commission's Geographic Information System (GIS) to overlay a variety of features. The environmental

corridors include: wetlands, floodplains, areas of steep slope (having a slope greater than 12 percent), water resources and a 75-foot setback from these water resources. Upland woodlands were considered for inclusion in areas where they were either not adjacent to development or where they coincided with other features.

As part of its on-going effort to complete a regional master plan, the Bay-Lake Regional Planning Commission (BLRPC) has begun to compile and delineate region-wide data needed for land use planning within the region. The BLRPC has defined its environmental corridors to include the following set of uniformly available information: Wisconsin Department of Natural Resources wetlands; 100-year FEMA floodplains; areas with slopes greater than or equal to 12 percent; lakes, rivers, streams and ponds; a 75-foot lake and river setback; and, a 25-foot buffer of the wetlands. Other features that are considered as part of the environmental corridor definition on an area-by-area basis include: designated scientific and natural areas; unique and isolated woodland areas; scenic viewsheds; historic and archaeological sites; unique geology; wetland mitigation sites; isolated wooded areas; unique wildlife habitats; parks and recreation areas; and other locally identified features.

These areas can be utilized by the town in determining possible future protective measures of the individual features within these corridors. Additional town controls may be derived from these identified corridors.

Other Local Key Natural Features

Brussels Hill

Brussels Hill is the highest named point in Door County with an elevation of 851 at its summit. This hill is located in the north central part of the town of Brussels and extends into the south central part of the town of Gardner. This geological feature consists of layers that are tilted which seem to be due to karst collapse rather than a tectonic disturbance. The Brussels Hill encompasses an area of approximately 2.5 square miles. There is an elevation difference of more than 100 feet from the hill's summit to the base.

PARKS AND OPEN SPACES

Goal:

To ensure residents have safe recreational sites within the Town that provide a number of activities.

Objectives:

1. Increase the number of good, well maintained recreational sites and trails within the Town, to include access to the waters of Green Bay.
2. Acquire, develop and maintain existing and future recreational sites within the Town.

Policies:

1. The Town should actively pursue the development of future recreational lands within the Town including waterfront property such as Squaw Islands, Little Sturgeon landing or other lands as they become available.
2. Connect recreational areas with a trail system wherever possible.

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3. Use the Town's official mapping powers to designate areas for future park and recreational uses.
 4. Consider access for the disabled, elderly and very young when planning, designing, and constructing all new recreation projects, including parking, trails, etc.
 5. Establish a sub-committee to identify future recreational areas.
 6. Work with adjoining communities to design interconnecting trailways.
 7. Explore all available resources to further enhance the quality of the Town's recreational systems.
 8. Seek public and private donations for funding park system improvements.

Outdoor recreation facilities are important features of community life. Interest in providing good recreational facilities in the town of Gardner, Door County has been generated as the community experiences increasing needs for improvements to their recreation areas. The town of Gardner is well aware of the need to have an organized plan for recreation improvement and development to meet the demands of both the resident and nonresident population using the recreation facilities in the area.

Map 9.1 in *Chapter 9: Utilities and Community Facilities* identifies the locations of recreation sites within the town of Gardner. These include access points to the bay as well as private recreation areas. For more detailed information on the parks and recreation opportunities in the town, please refer to the Utilities & Community Facilities element of this document.

METALLIC AND NON-METALLIC MINING RESOURCES

Goal:

To discourage the development of future mining sites within the Town.

Objectives:

1. Do not harm views, the natural environment and aesthetics through mining operations.

Policies:

1. The Town will steer incompatible uses away from identified mining sites.
2. The Town will inform residents of any proposed mining sites.
3. The Town will work with the county and land owners to ensure that incompatible uses do not develop adjacent to one another or in a location that will allow or foster conflict.

Mining has economic value to multi-regional areas, but also has the ability to degrade natural resources. Any new mines need to have a permit granted by the WDNR, which includes a reclamation plan. No metallic mines have existed in Door County.

Nonmetallic Mineral Resources

As the town undergoes further growth and development there will be greater demands for sand, gravel, and crushed stone. Even though sand, gravel, and crushed stone are ubiquitous some deposits are of far better quality than other deposits. Gravel and crushed stone deposits with low chert content are best suited for concrete. Gravel deposits with low percentages of foliated metamorphic rock, gabbro, and basalt fragments are best suited for sub-base material and

concrete. The best sources for better quality sand and gravel are outwash plains, kames, eskers, dunes, point bars, and stream channels.

Sand, gravel, and crushed stone have low intrinsic value but high place value. Intrinsic value refers to cash value of a given unit (weight or volume) of the product while place value refers to the cost of transporting a given unit of the product. Construction costs increase significantly as the distance from the source for sand, gravel, and crushed stone increases to the point that transportation costs may exceed production costs.

When planning for growth, care needs to be taken to ensure that the potential mineral resources within the town are conserved for future mining consideration. Also, mining operations should show that they have little negative impact on the neighboring properties or other portions of the town and surrounding areas. This not only includes noise and odors but adverse affects on groundwater and significant wear on local roads.

Nonmetallic Mining Reclamation (NR 135)

Any new mines need to have a permit granted by the Wisconsin Department of Natural Resources (WDNR) and are subject to the requirements of NR 135, which includes a reclamation plan.

- The reclamation plan is a detailed technical document with goals to successfully reclaim the area as well as limit the long-term negative impact to the environment once the mine is abandoned.
- The WDNR defines successful reclamation as “the restoration of all areas disturbed by mining activities including aspects of the mine itself, waste disposal areas, buildings, roads and utility corridors.”
- Restoration is defined as “returning of the site to a condition that minimizes erosion and sedimentation, supports productive and diverse plants and animal communities, and allows for the desired post-mining land use.”

Depleted mining sites can be reclaimed as parkland, wildlife habitat, recreational land or other uses. NR 135 also allows landowners to register marketable nonmetallic mineral deposits as a way to prevent future development that would interfere with the extraction of those deposits. As a result, registered sites are protected from local zoning or other decisions that permanently interfere with mining on the site for at least 20 years.

Door County has a Nonmetallic Mine Reclamation Ordinance. However, it is only intended to create a reclamation program only. It neither regulates active mining operations nor has any effect upon local zoning decisions such as those related to the approval of new mine sites.

AGRICULTURAL RESOURCES

Goal:

To encourage and protect farming while providing for the orderly development of land that is currently or was historically in productive farm use for non-farm development.

Objectives:

1. Promote the use of sound agricultural and soil conservation methods to minimize soil erosion and ground water contamination.
2. Encourage the sound management and preservation of the Town's forested areas.
3. Promote conservation-based land use policies for development.
4. Encourage the preservation of natural vistas.
5. Retain agricultural and open lands in the Town as key components of the rural area and aesthetic character of the community.
6. Identify areas recommended for future development on the General Plan Design.



Source: Wisconsin Farm Bureau Media Center

Policies:

1. Encourage the use of prime agricultural areas for farming purposes.
2. Direct large scale residential development away from prime farmlands.
3. Develop large tracts of farmlands in a planned unit development approach as opposed to a piece by piece method over long time periods.

Climate

The climate of the town of Gardner (and the Door Peninsula) is modified by Green Bay and Lake Michigan. The cool waters of the lake and bay delay spring, while relatively warm water in fall retards early frost. Summers, on the average, are mild due to the community's proximity to water which moderates daily extremes.

The annual average temperature for Gardner is 42.5 degrees Fahrenheit. January has the lowest average monthly temperature of 16.5 degrees, while July has the highest average temperature of 65.7 degrees. Frost generally leaves by mid-May and reoccurs during the first week of October. The resultant growing season is about 135 days.

Ice forms on Green Bay in late December and generally covers the bay by mid-January. During mild winters, the bay may not freeze completely. Ice breakup usually occurs in early April.

The average annual heating degrees for the area, is 8,427 with July having the lowest average number of heating degree days at 47, while January has the highest with 1,502. A heating degree day is equal to the difference between the mean daily temperature and 65 degrees Fahrenheit. If

the mean daily temperature is greater than 65 degrees, the number of heating degree days is considered to be zero.

The normal annual total precipitation is 28.92 inches. The lowest monthly average of 0.97 inches occurs in February, while the highest of 3.60 inches occurs in June. More than one-half the average annual precipitation falls between May and September. The first half of June and middle of August are likely to receive the heaviest summer rains. The end of August is normally the driest summer period.

Prime Agricultural Lands

The USDA, Natural Resources Conservation Service defines prime agricultural lands as land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Prime agricultural lands include land that is being used currently to produce livestock and timber. It does not include land already in or committed to urban development or water storage.

Prime agricultural lands are concentrated in the southern portion of the town and scattered along the eastern border of the town. Map 5.13 shows those areas that can be classified as prime agricultural soils based on the soil types.

Since agriculture plays an important role in the economic, cultural and social structure of the town and all of Door County, it will be important to preserve these areas against future development. Agricultural land that has been disturbed or replaced by another land use cannot be effectively returned to agricultural production.

Farm Numbers and Types

According to the 2002 Census of Agriculture, there were a total of 877 farms in Door County. The farms produce a variety of products including dairy, cattle and calves, poultry, apples and nursery and greenhouse. Dairy farming is the largest agricultural use in Door County.

- According to the Program on Agricultural Technology Studies (PATs), Door County contained 152 dairy farms in 2002. The town of Gardner accounted for 11 of these farms.
- According to PATs, the average size of the dairy herd in Door County has increased from 60 in 1999, to 62 in 2002.
- More than 90 percent of the farms in Door County are owned by individuals or families, another six percent are owned by family partnerships and corporations account for slightly more than three percent.

Farm Household Demographics

According to the US Census, in 2002 about 6.6 percent of Door County's population lives on a farm. In the town of Gardner, just over 9 percent of the population lives on a farm.

The age structure of the farm operators can often tell a lot about the future longevity of agriculture in a community. If a significant proportion of the farm operators are over the age of 55, it is likely that many farmers will be retiring over the coming 10-20 years.

- The average age of farmers in Door County is 54.7, with the largest group of farmers ranging from 45 to 54 years of age.

Similarly, the number of farmers under 45 years old can provide an indication of the amount of recent entry of new operators into the farm sector.

- Out of a total of 877 principal farm operators in Door County, just over 200 are under 45 years of age.

Trends in Agriculture

The 2002 Census of Agriculture indicates that the total number of farms has increased in Door County from 861 in 1997, to 877 in 2002.

The reduction in number of farms may be attributed to retirement of farm operators, increasing operational costs or the conversation of traditional dairy farms to other types of farming operations such as those focusing on horticulture.

The 2002 Census of Agriculture also indicates that harvested cropland in Door County dropped by 139 acres from 731 acres in 1997 to 592 acres in 2002. The reduction in harvested croplands may be an indicator of the development pressures within the county.

The amount of agricultural land sold over a period of time is a good indicator of how much development has taken place. Table 5.1 illustrates that 5,027 acres of agricultural land was sold between 2001 and 2005 in Door County.

- 1,680 acres, or 33 percent, of these acres were converted to non-agricultural uses, with the remainder kept in agriculture.
- The value of each acre diverted from agriculture to non-agriculture use has risen from \$2,142 per acre in 2001 to \$10,635 per acre in 2005. Recent trends in Door County and surrounding counties are showing that more sold agricultural land is being used for non-farm uses.

Table 5.1: Door County Agricultural Land Sales, 2001-2005

Year	Acres Sold Continuing as Agriculture	Average Cost per Acre	Acres Sold Diverted from Agriculture	Average Cost per Acre	Total Acres Sold
2001	625	\$2,116	386	\$2,142	1,011
2002	508	\$2,528	543	\$2,670	1,051
2003	468	\$2,404	431	\$3,936	899
2004	946	\$3,409	256	\$8,016	1,202
2005	800	\$3,272	64	\$10,635	864
Total	3,347	\$2,746	1,680	\$5,480	5,027

Source: Wisconsin Agricultural Statistical Service, 2002.

The cost of developing productive agricultural lands needs to be the considered. For instance, farmlands provide revenues to local governments and require very few services. Conversely, residential land uses may cost communities more to provide services than gained through local property tax increases. This is evident in areas of widespread development as road maintenance; school transportation, police service, fire protection, etc. will likely increase the overall cost of services throughout the entire community.

Planning for areas of concentrated development will not only help keep the cost of services down, but will also help preserve the valuable farmlands and rural landscape that make up the town of Gardner.

Environmental Impacts of Agriculture

Most of the agricultural lands within the county are interspersed with the various natural resources that make up much of Door County's landscape. Within the town of Gardner, agricultural lands are located near wetlands, steep slopes, etc.

The integration of agriculture within natural resources can raise concerns. Agriculture is one of several sources of non-point water pollution to surface waters and groundwater. Soil erosion from farm fields and the surface runoff of crop nutrients and agricultural chemicals can impact the quality of streams, rivers, lakes and underground aquifers, ultimately impacting drinking water supplies. Specific crop rotations, livestock and tillage practices all affect the amount of soil erosion and nutrient losses. As a result, the town and many farmers are encouraged to implement various conservation practices to protect environmental resources.

Agricultural lands, such as those areas that are not cropped (e.g., woodlots and stream corridors) can also have a positive impact on a community. These lands assist with providing contiguous habitat for wildlife, in addition to providing open space lands for maintaining the town's rural character.

Economic Impacts of Agriculture

Farming and farm related businesses provide contributions to the local economy. The production, sales and processing of farm products generates employment, economic activity, income and tax revenue.

- According to UW-Extension, in 2000 agriculture in Door County accounted for nearly \$189 million, or 14 percent of the county's total economic activity.

More information of the economic impacts of agriculture can be found in Chapter 7 of this document.

AIR QUALITY ISSUES

According to the U.S. Environmental Protection Agency (EPA), all of Door County and other adjacent lakeshore counties are identified as "non-attainment" areas, or areas that do not meet the EPA's 8-hour ozone national air quality standard (i.e. 85 parts per billion).

By law, non-attainment areas may be subject to certain requirements to reduce ozone-forming pollution and requires states to submit plans for reducing the levels of ozone. Several methods to meet the ozone standard may include stricter controls on emissions by industrial sources, transportation emissions, etc.

Designed to protect the public from breathing unsafe air, the EPA's 8-hour ozone standard could also have a negative impact on economic development efforts for Door County. The ozone reducing requirements identified in the state's plan may end up costing potential employers for pollution offsets or emission-cutting technology rather than enabling them to make investments in expanding the companies operations.

HISTORIC, CULTURAL AND ARCHEOLOGICAL RESOURCES

Goal:

To preserve the Town's historic, archeological and cultural locations and structures that are symbolic of the Town for residents and visitors.

Objectives:

1. Preserve the Town's historic, archeological and cultural locations and structures.
2. Identify these resources to the Town residents for their information and possible use.
3. Maintain and update the Town's information on all such locations.
4. Encourage the continued usage of areas of historical and cultural heritage.
5. Tie these locations to recreational sites to further enhance them and their access, when appropriate.

Policies:

1. Encourage third parties, i.e., historical societies, school district, etc., to preserve historic structures within the Town.
2. The Town will work to preserve these sites and structures.
3. The Town will support tying these resources into recreational sites and trails.
4. The Town will discourage the destruction of these sites and will not allow incompatible uses around them that would have negative impacts on the resource.
5. The Town will work with state, federal and county agencies to ensure such sites and structures are identified and properly protected.
6. Form a sub-committee that will explore the future integration of these sites into any future trails or recreation sites.

History of Gardner

In 1835, Door County's first white settler, Increase Claflin arrived in Little Sturgeon Bay. Mr. Claflin lived among the Native Americans, peacefully trading with them. Throughout the 1850s, many immigrants arrived to begin a life of farming; clearing land to build homes and planting crops. Other entrepreneurs were building businesses vital to the area. The most well known was F. B. Gardner who settled in Little Sturgeon Bay where he established a saw mill, the first grist mill, a shipyard, and two lime kilns. At the peak of business the labor force had more than 400 employees. Farmers of the area worked there to supplement their incomes. The town of Gardner was organized on June 10th, 1862 making it the 12th town established in Door County.

Historic Sites

The State Historical Society of Wisconsin's Architecture and History Inventory (AHI) is a list compiled by many individuals on the belief that various structures contain historical significance.

- According to the Wisconsin Historical Society, the town of Gardner has 57 structures of historic significance. These sites date back to the mid 1800s up to the early 1900s and consist

of various houses and barns. For a complete listing of the historic sites, please contact the Wisconsin Historical Society or visit their web site: www.wisconsinhistory.org/ahi.

Please note that these sites are not all eligible by the State Historical Society of Wisconsin. It is a list compiled by many individuals on the belief that these areas be considered for eligibility. There is a possibility that several structures or sites may not be listed, and some of the structures may have been torn down.

There are also a few archeological sites within the town uncovering several items such as flint arrows, pebble hammer stones, etc. Historical research of developable lands should be done prior to excavations within the town, since there is the possibility of disturbing a historical or archeological site.

Land developers trying to obtain state permits from the Wisconsin Department of Natural Resources or any development involving federal monies, are required to be in compliance with Section 106 of the National Historic Preservation Act and 36 CFR Part 800: Protection of Historic Properties. For further information, please contact the State Historical Society of Wisconsin.

Cemeteries

According to *Cemetery Locations in Wisconsin*, the town of Gardner contains six cemeteries:

- Cemetery in the Sky on County Highway c
- Stevenson Pier Cemetery located on County Highway CC in Little Sturgeon.
- St. Joseph Catholic Cemetery on Fox lane near Meadowlark Road.
- Precious Blood Episcopal Cemetery on County Highway C at Gravel Pit Road.
- St. John the Baptist Catholic Cemetery on County Highway K (stones are gone)
- White Star Spiritualist on County Highway K
- Geise Family Cemetery on County Highway K, just west of State Highway 57, southwest of Southern Door High School.

The local cemeteries have space to meet future needs for the next 20 years. Town residents may also utilize public and private cemeteries located in other surrounding communities.

Cultural Resources

The Southern Door Auditorium is a 592 seat auditorium located on the Southern Door High School on State Highway 57, six miles north of Brussels and seven miles south of Sturgeon Bay. The auditorium was added in 1991 to the original high school building and is used for many community events.

Community Design

Community design deals with the large-scale organization and design of the community, particularly the organization of the buildings and the space between them thus helping to define the character of the community. An evaluation of community design is often subjective and requires personal judgment. In an effort to remove some of this subjectivity, the community design resources of the town of Gardner have been inventoried according to the following six criteria that represent the building blocks and language of community design:

Landmarks

Landmarks are important reference points that represent a prominent feature of the landscape and have the ability to distinguish a locality, mark the boundary of a piece of land, or symbolize an important event or turning point in the history of the area. They are distinctive in appearance and that are clearly visible to the passerby. Landmarks are sometimes used for orientation and way finding, and other times simply comprise unique or interesting aspects of a place.

- Town Hall
- Road Crossings
- Parks
- Cemeteries
- Stevenson Pier Road and County C
- Little brown Jug
- Tornado Park

Pathways

Pathways are linear features that represent both vehicular and pedestrian movement. Pathways provide connections between places, as well as along them. They are movement channels such as streets, railroads, trails, and footpaths. Whether a major arterial, local street, or undefined woodland trail, pathways are hierarchical and represent a degree of usage. They are a predominant element in the structure of the community, and form the skeleton on which we "hang" a lot of our knowledge of a place, since these are the routes by which we "view" our hometown.

Major Pathways:

- County Highway C
- Stevenson Pier Road

Secondary Pathways:

- County Highway K
- County Highway CC
- County Highway N

Minor Pathways:

- County Highway DK

Edges

Edges are linear elements that are not used as paths. Edges are important organizing elements that represent boundaries that can be either soft or hard, real or perceived. They become increasingly important as a community grows so as to visually distinguish the edges of the community. Things like a waterfront, a limited access highway, or a wall can act as an edge. An edge can also be subtle: the edge of one type of land use from another, for example. These edges do not necessarily coincide with jurisdictional boundaries.

- Green Bay shoreline
- County Highway K
- Stevenson Pier Road

Districts

Districts are distinctive regions of an area, usually having some common defining character within, and a boundary around, that may be either very precise or quite vague. Many, although not all, districts have names that are widely known – some of these names might be “official” while others might simply be names that people “in the know” use in conversation. You might have a recreational district, restaurant district, student district, etc. These areas represent buildings and spaces where clearly defined and separate types of activities take place.

- Little Sturgeon
- Sugar Creek area
- Rileys Point
- Stevenson Pier

Nodes

Nodes are focal points where paths meet, as in intersections or transportation junctions. Nodes can also be places where there is some concentration of activity, they are destinations and very often represent the core or center of a district. In addition, nodes are closely associated with pathways as they provide access to and from districts. A node is a focus or point of concentration, and nodes form major "hinges" for the skeleton of our image of a place.

- Stevenson Pier Gas
- Em Jay’s Fish Cove
- Merkle’s Saloon

Community Entryways

Community entryways are associated with edges in that the entryway begins at an edge. Entryways can be unique and are very valuable assets for they help define a community to those using the entryway. In many cases these entryways are more correctly described as “Doorways” to a community and help define the community to its residents and its neighbors. How people perceive an entrance to a business area or doorway to a town will determine whether they stop or drive on through the community. These points of interest may need to be protected or enhanced through the use of zoning standards requiring landscaping, building design, signage, lighting, and public furnishings.

The **Primary** entryways into Gardner should be protected and enhanced. High quality public entry signs and or public art may be used to formally announce entry to the town. Around the town’s periphery, these entrances include:

- County Highway C
- Stevenson Pier Road

The **Secondary** entryways into the town of Gardner are more subtle portals enjoyed by local town residents. The use of formal entry markers such as signage and artwork should be low key, if used at all, in order to maintain the rural/agricultural look of the area. Secondary entryways around the town’s periphery include:

- County Highway N
- Brussels Road
- Wood Lane

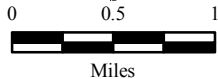
Map 5.1

Pleistocene Geology Town of Gardner Door County, Wisconsin

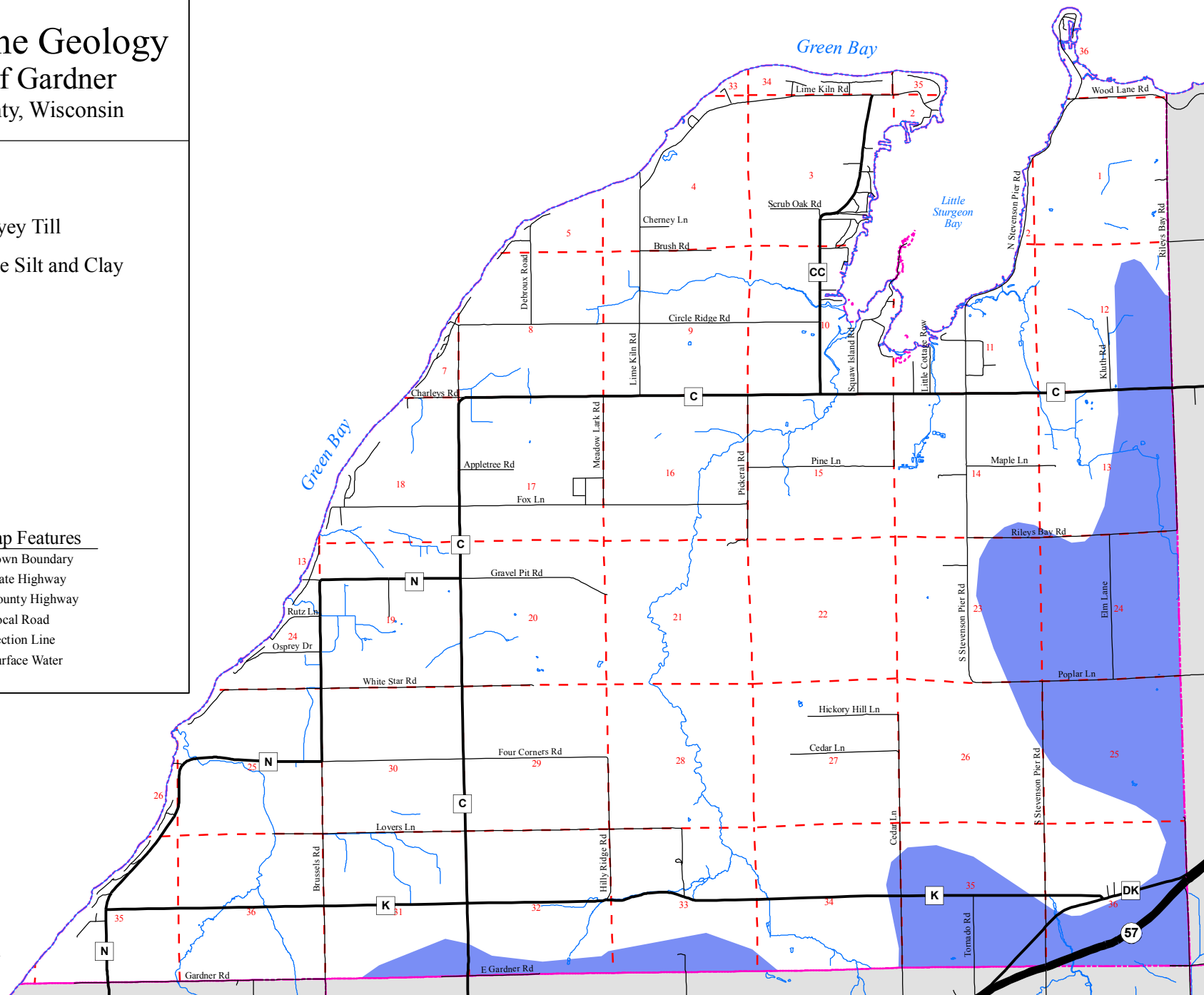
- Clayey Till
- Lake Silt and Clay

Basemap Features

- Town Boundary
- State Highway
- County Highway
- Local Road
- Section Line
- Surface Water



Source: USGS, 2001; Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.

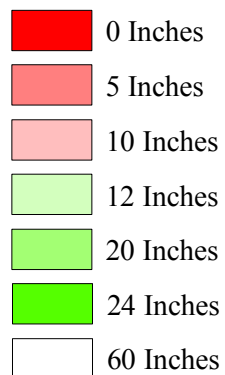


Map 5.2

Depth to Bedrock

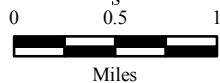
Town of Gardner

Door County, Wisconsin

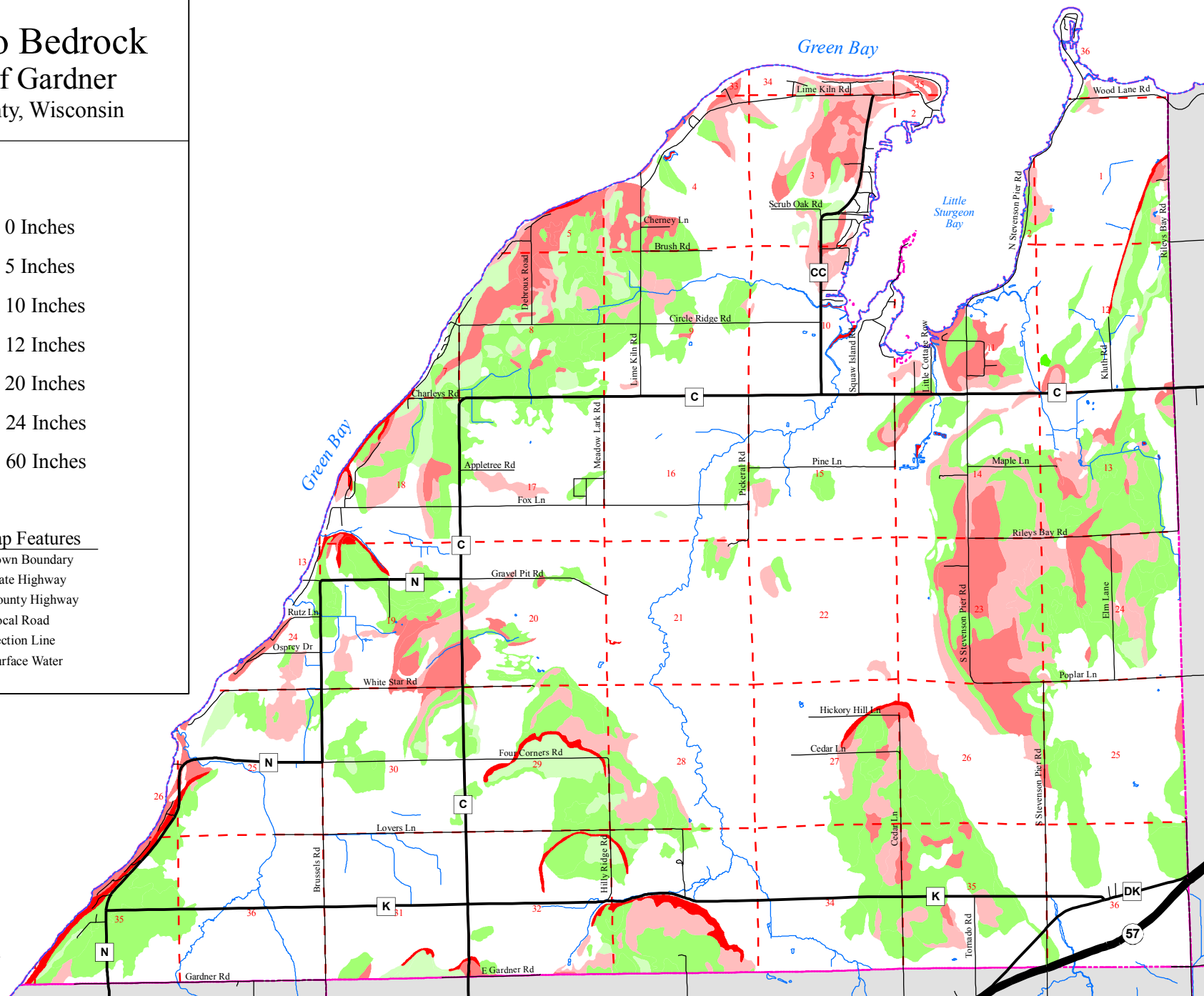


Basemap Features

- Town Boundary
- State Highway
- County Highway
- Local Road
- Section Line
- Surface Water



Source: NRCS, 2004; Town of Gardner, Door County; Bay-Lake Regional Planning Commission, 2009.









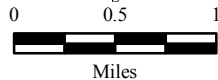
Map 5.3

Steep Slope Town of Gardner Door County, Wisconsin

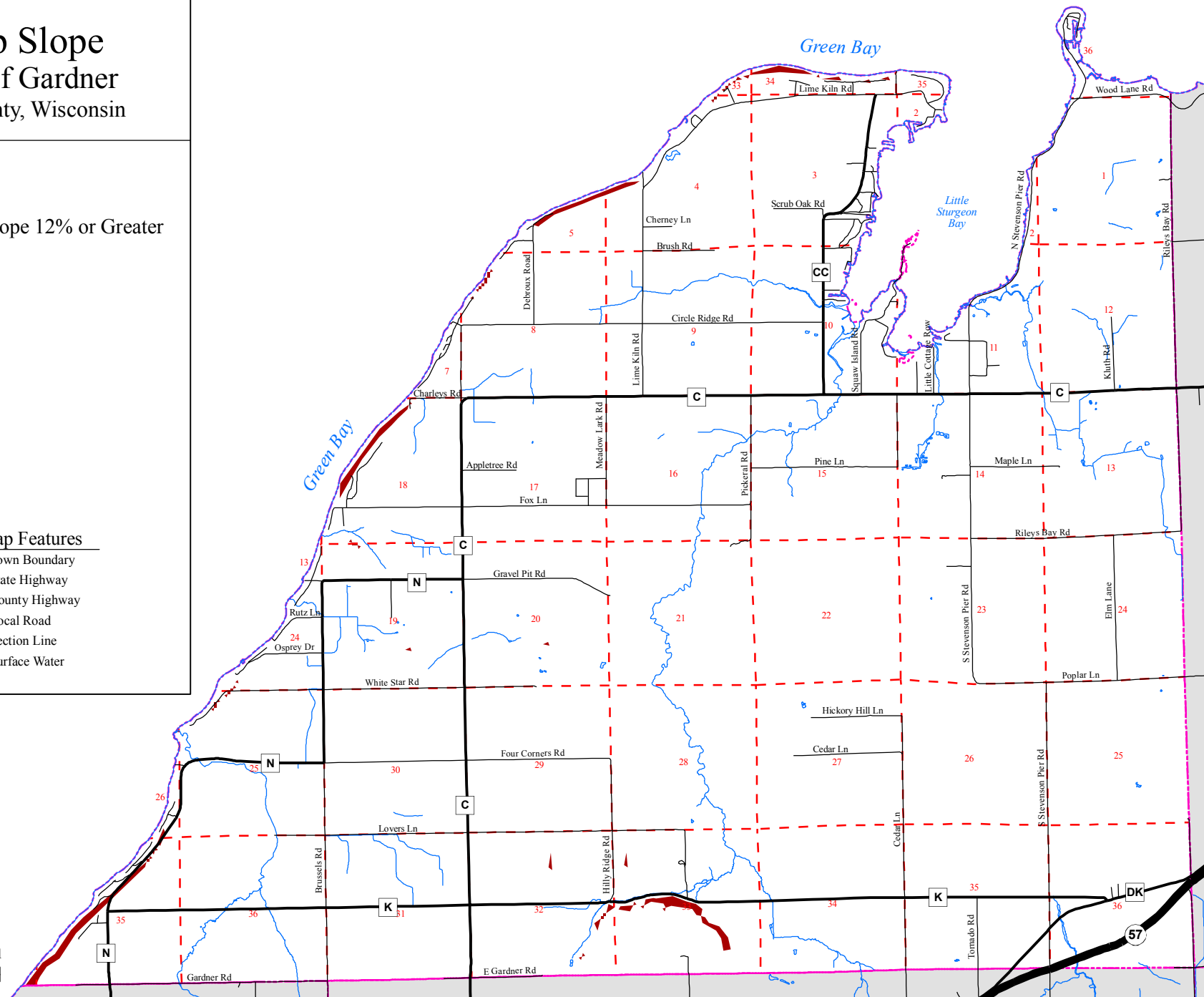
 Steep Slope 12% or Greater

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water



Source: Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Map 5.4

Elevation

Town of Gardner

Door County, Wisconsin

Elevation

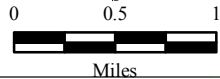


High : 820 Feet

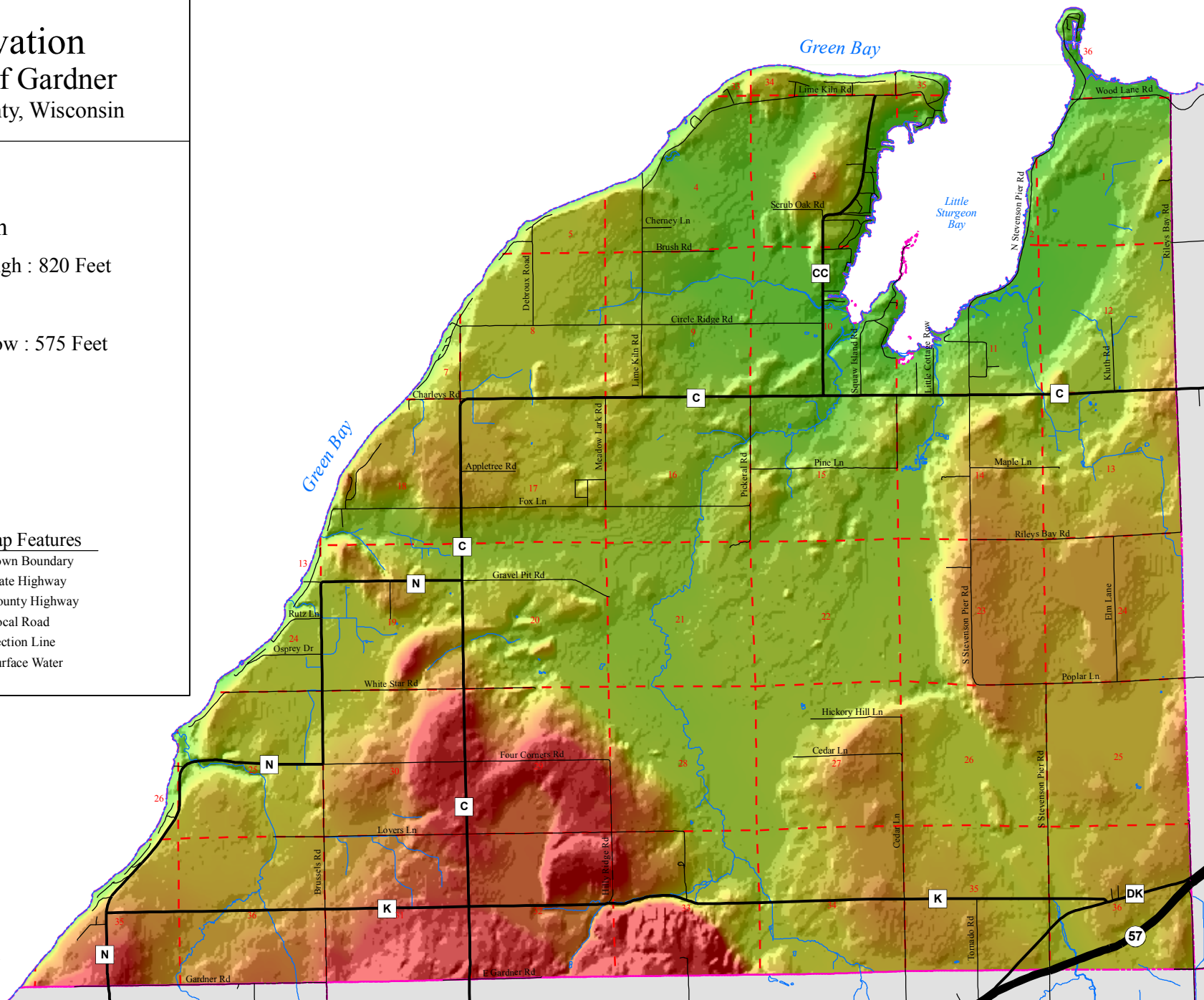
Low : 575 Feet

Basemap Features

- Town Boundary
- State Highway
- County Highway
- Local Road
- Section Line
- Surface Water



Source: Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



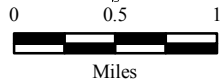
Map 5.5

Watersheds Town of Gardner Door County, Wisconsin

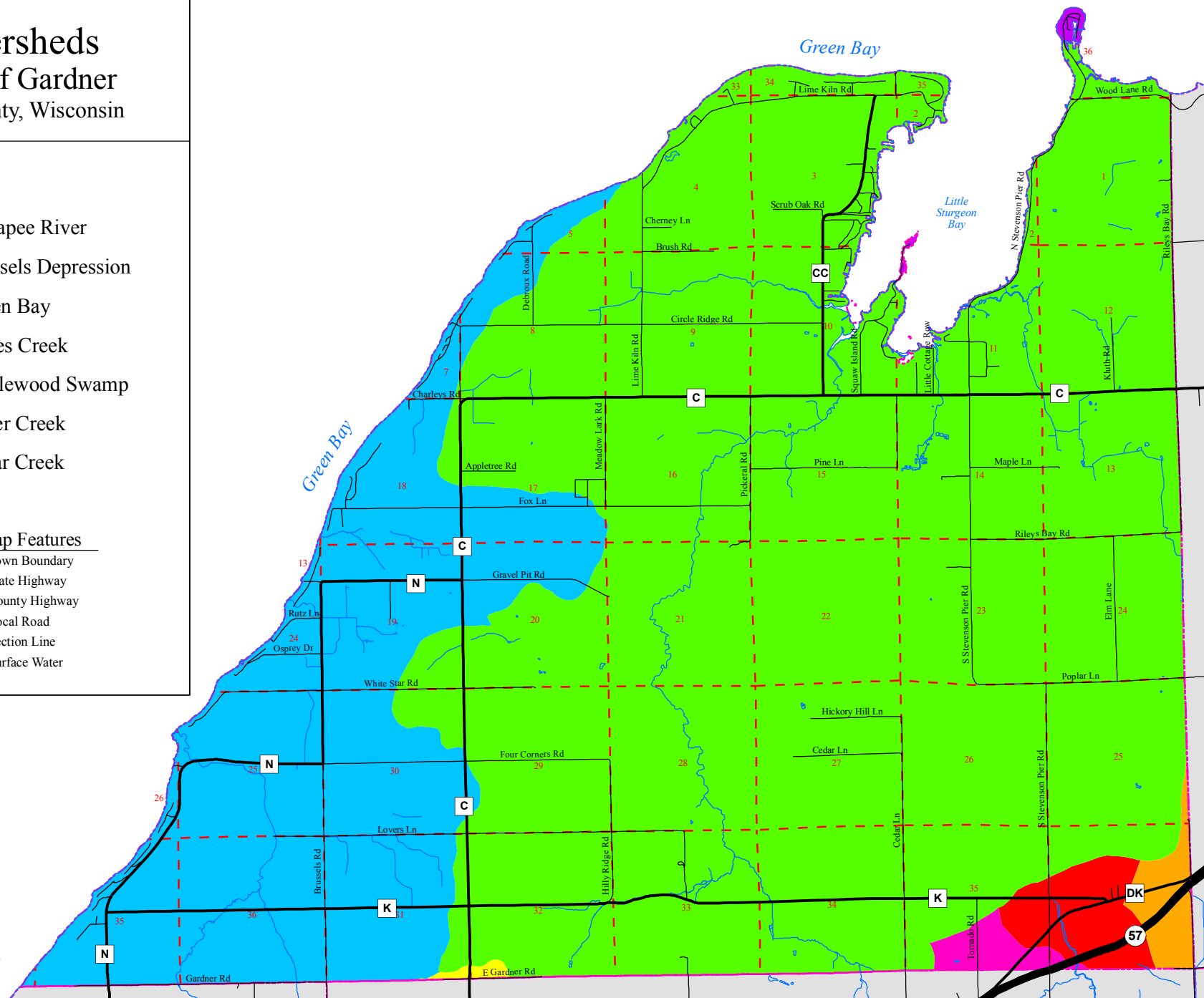
- Ahnapee River
- Brussels Depression
- Green Bay
- Kayes Creek
- Maplewood Swamp
- Silver Creek
- Sugar Creek

Basemap Features

- Town Boundary
- 57 State Highway
- K County Highway
- Local Road
- Section Line
- Surface Water



Source: WDNR, 1992; Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.









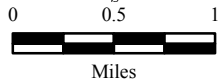
Map 5.6

Surface Water Town of Gardner Door County, Wisconsin

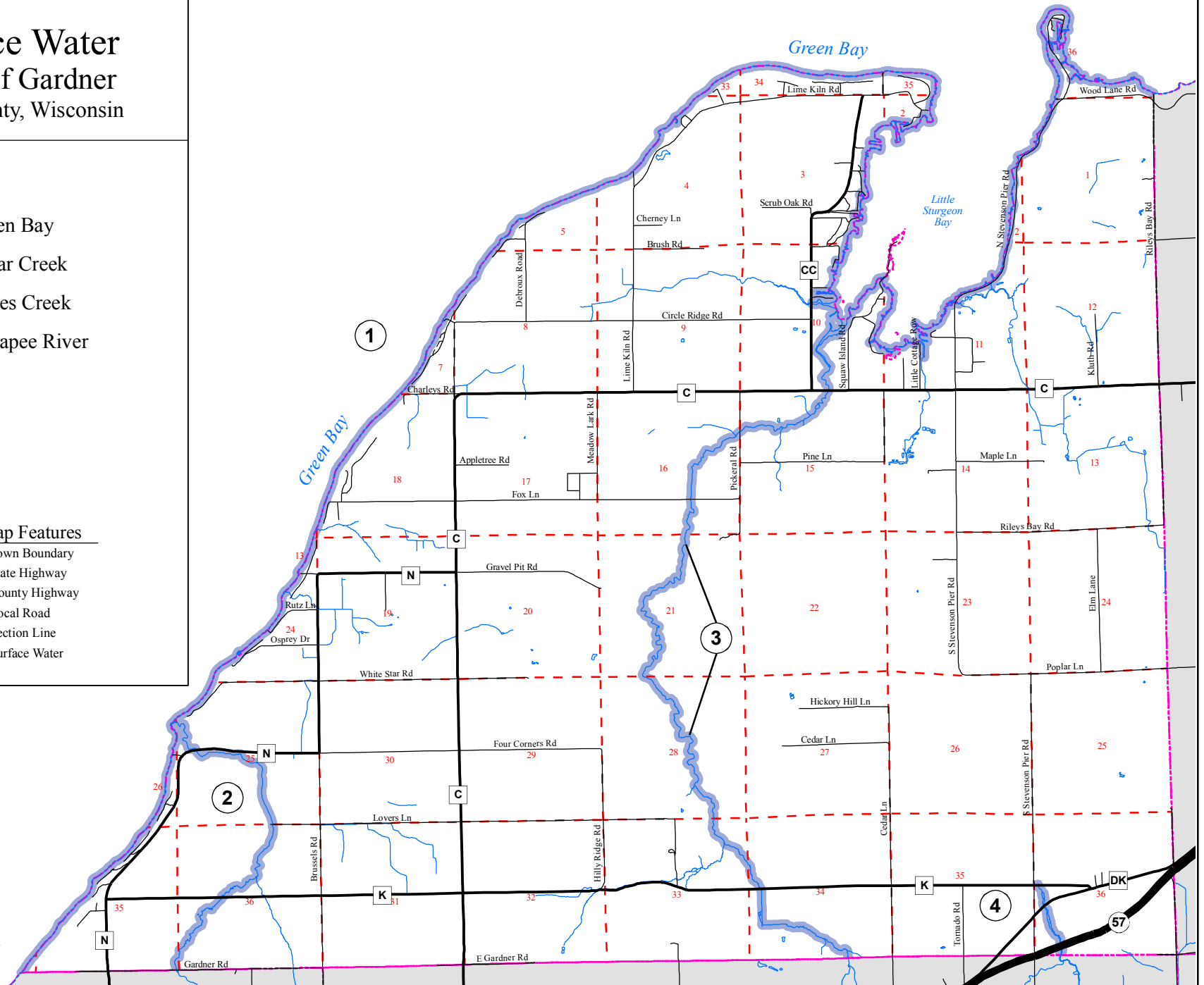
- 1 - Green Bay
- 2 - Sugar Creek
- 3 - Kayes Creek
- 4 - Ahnapee River

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water




Source: WDNR, 1965; Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.









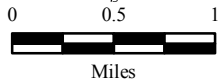
Map 5.7

Floodplain Town of Gardner Door County, Wisconsin

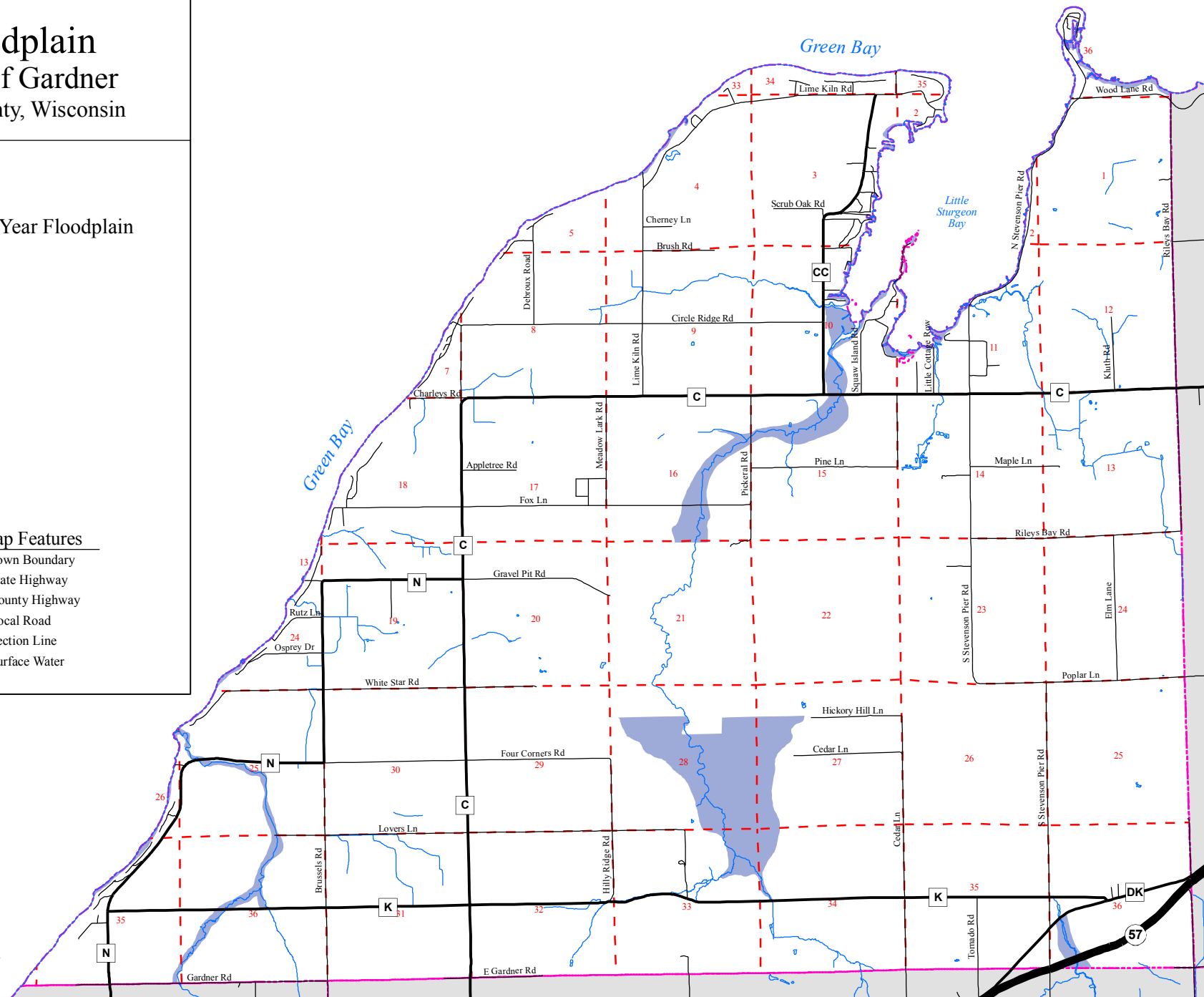
 100-Year Floodplain

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water



Source: FEMA, 1978; Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Map 5.8







Shorelands

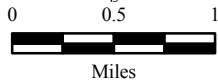
Town of Gardner

Door County, Wisconsin

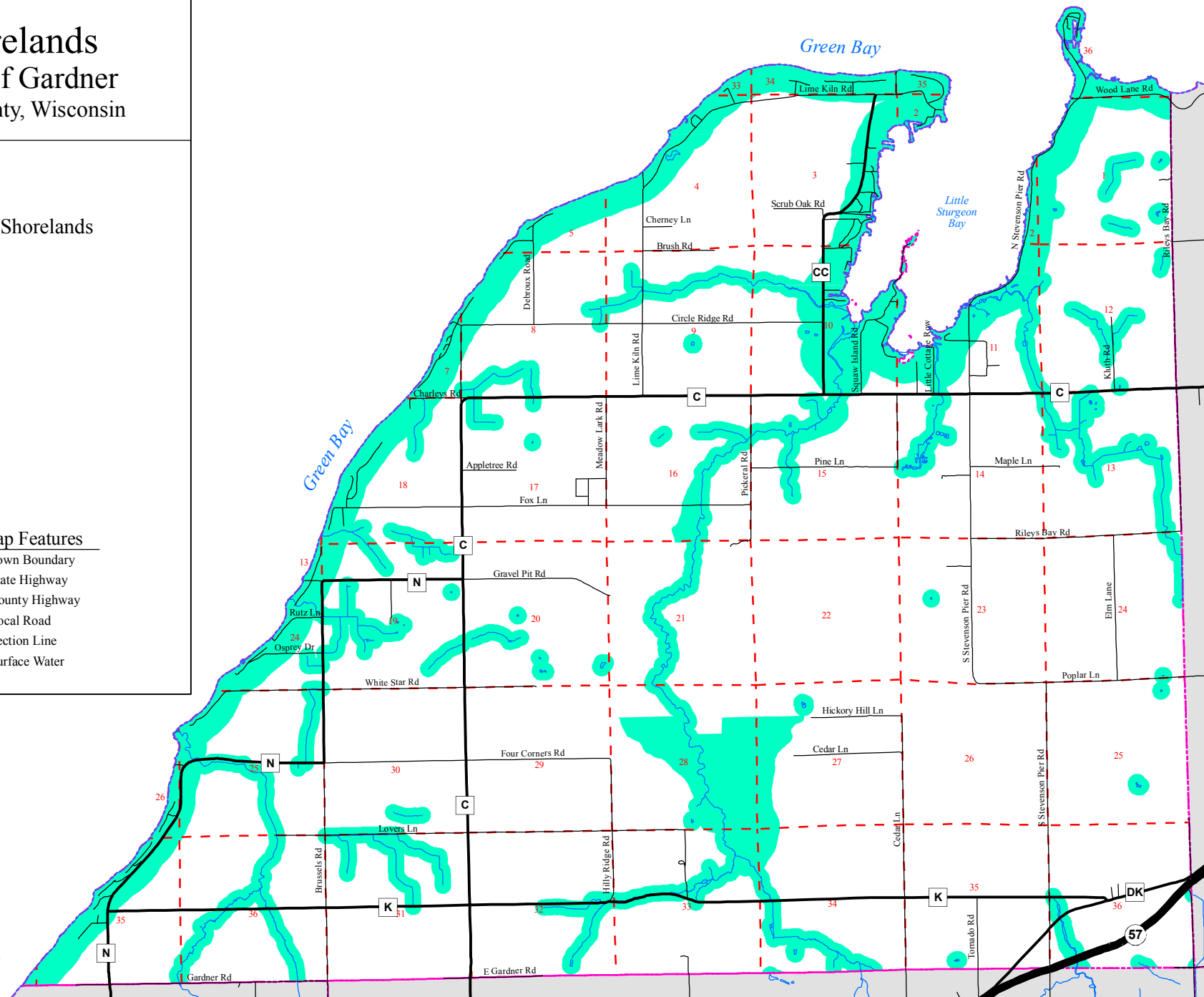
 Shorelands

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water



Source: Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Map 5.9







Wetlands

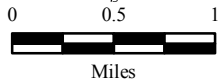
Town of Gardner

Door County, Wisconsin

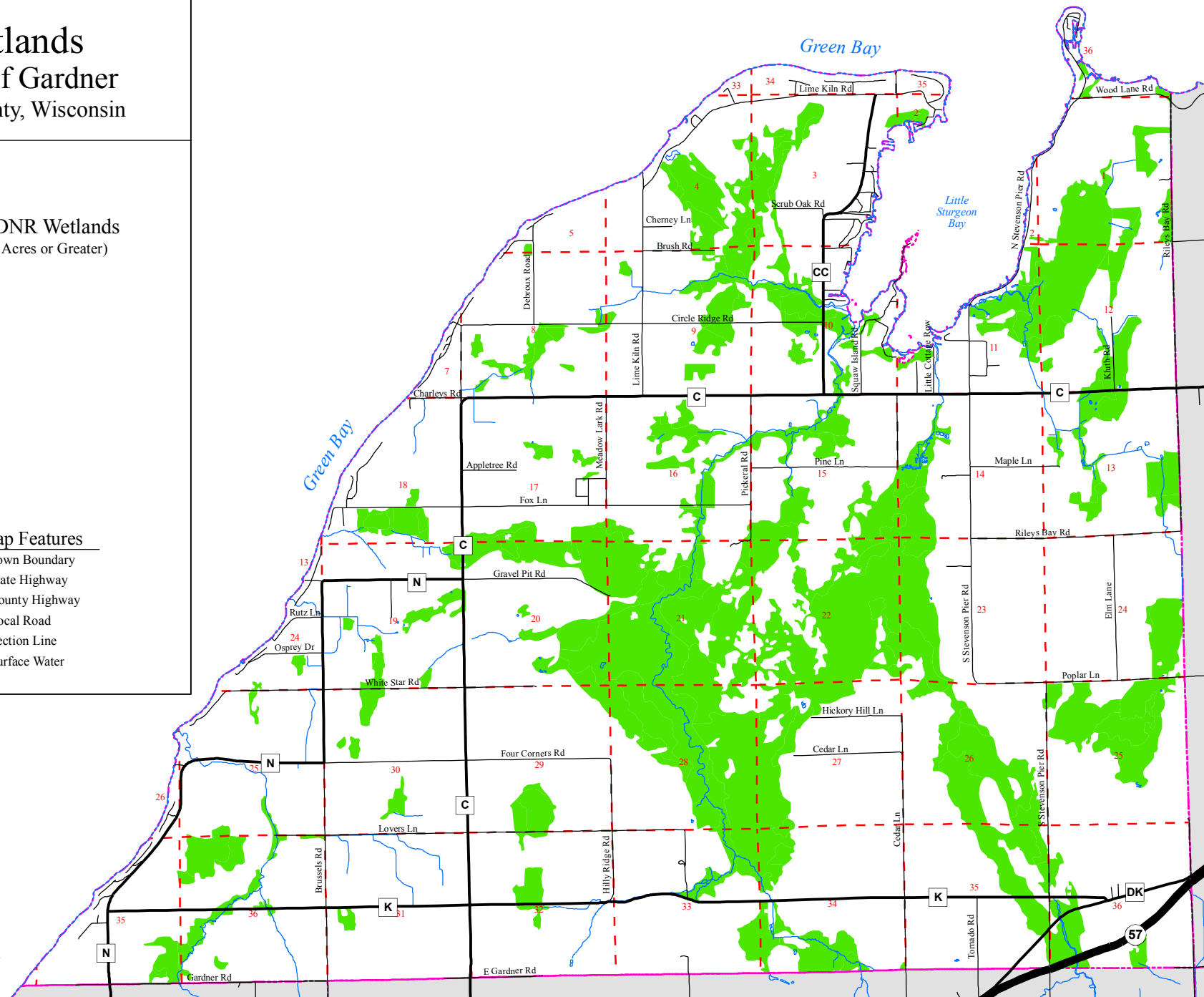
 WDNR Wetlands
(2 Acres or Greater)

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water



Source: WDNR, 2006; Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Map 5.10

Woodlands

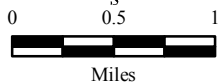
Town of Gardner

Door County, Wisconsin

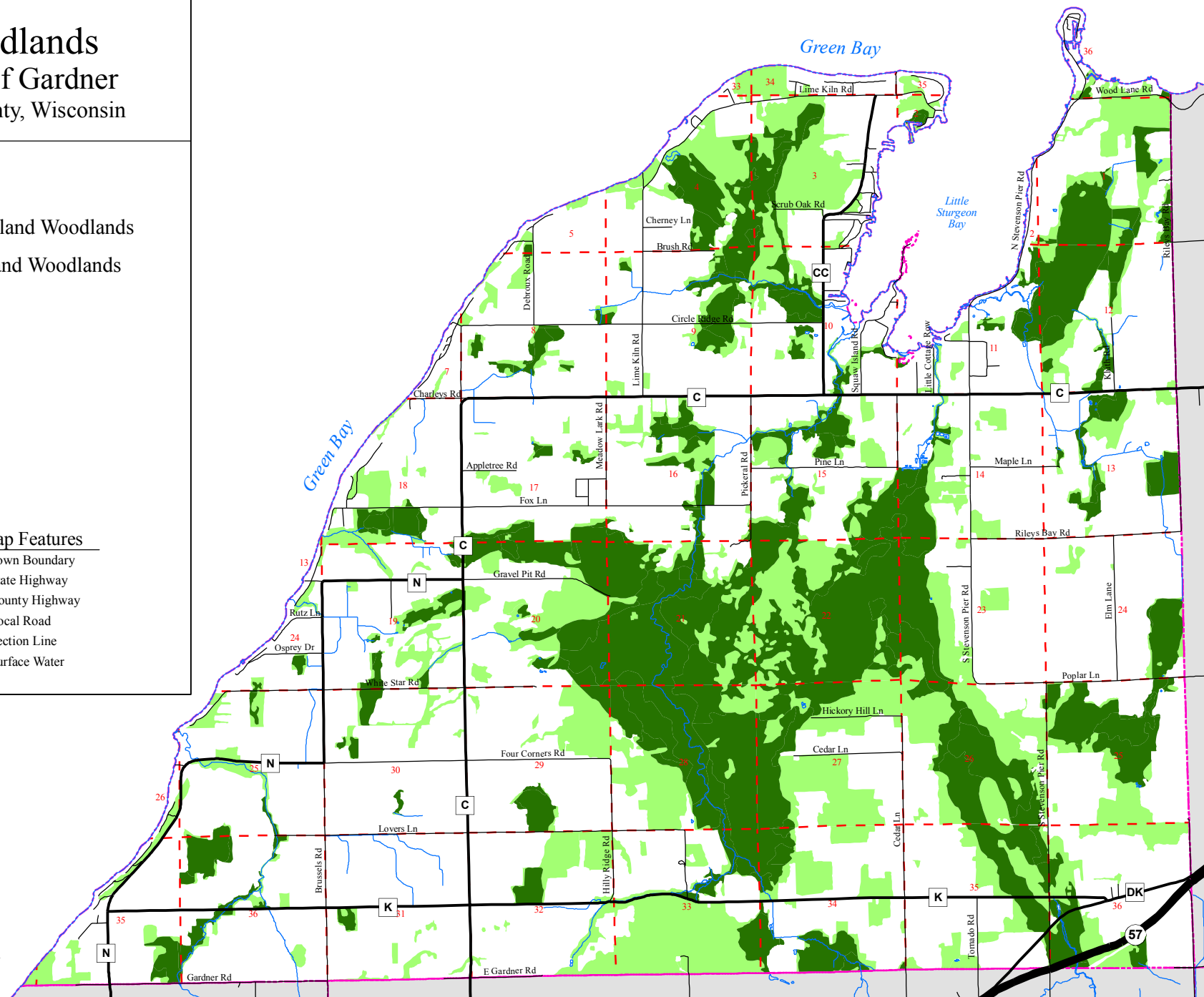
- Lowland Woodlands
- Upland Woodlands

Basemap Features

- Town Boundary
- State Highway
- County Highway
- Local Road
- Section Line
- Surface Water



Source: Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.









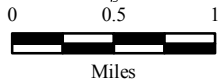
Map 5.11

Significant Natural Features Town of Gardner Door County, Wisconsin

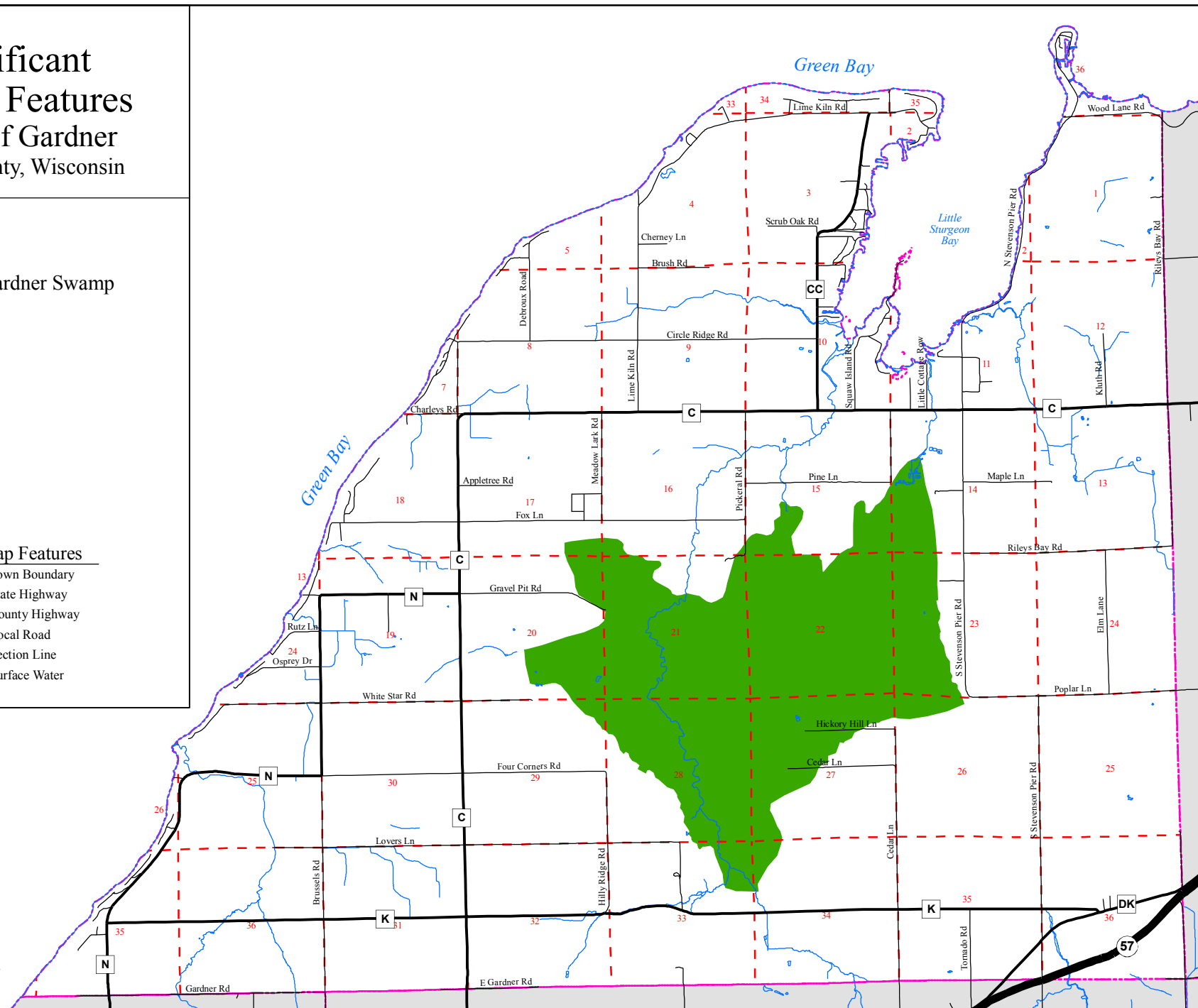
 Gardner Swamp

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water



Source: Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Map 5.12

Environmental Corridors

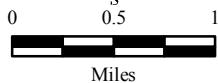
Town of Gardner

Door County, Wisconsin

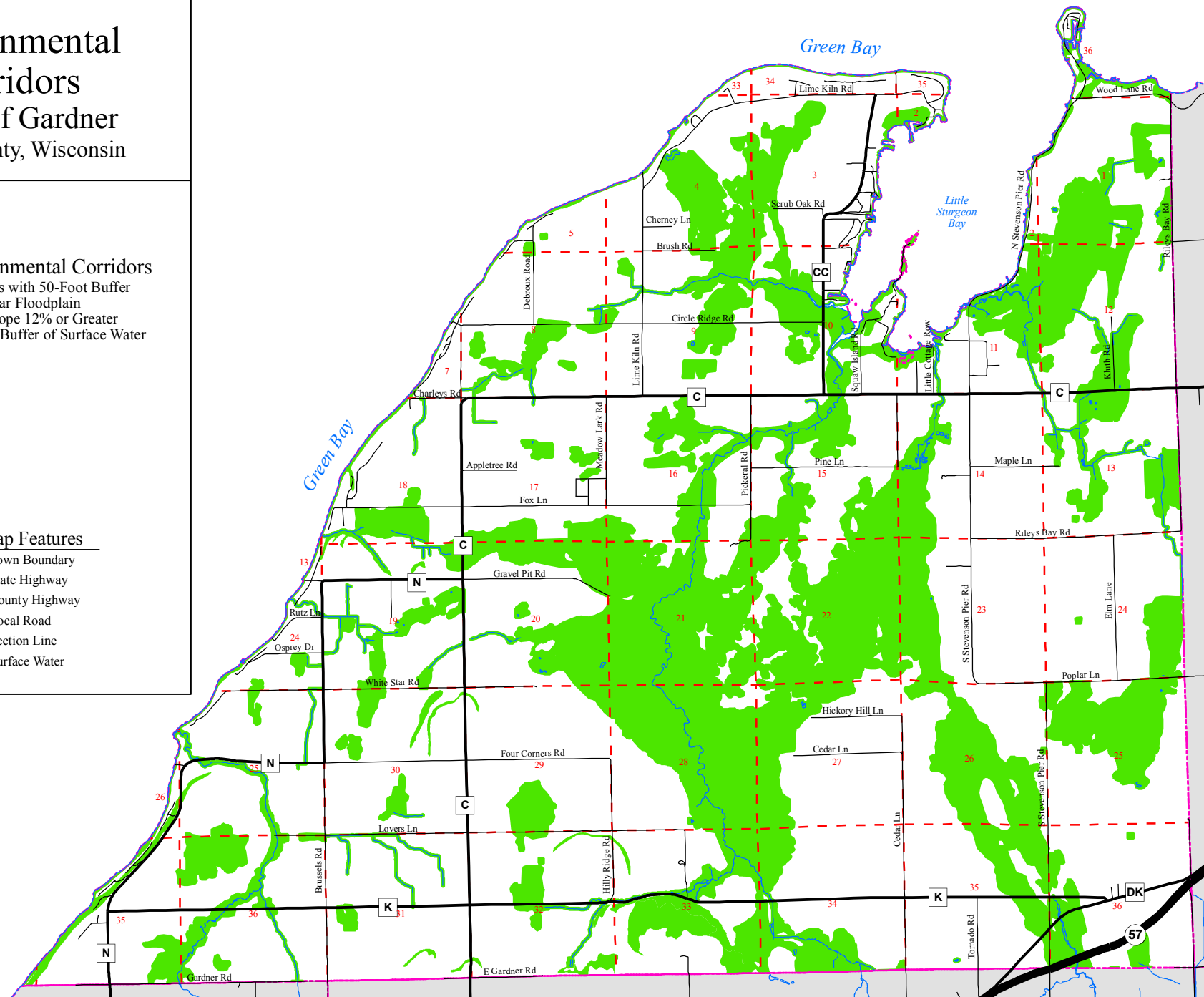
Environmental Corridors
 Wetlands with 50-Foot Buffer
 100 - Year Floodplain
 Steep Slope 12% or Greater
 75-Foot Buffer of Surface Water

Basemap Features

- Town Boundary
- State Highway
- County Highway
- Local Road
- Section Line
- Surface Water



Source: Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.









Map 5.13

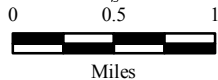
Prime Agricultural Soils

Town of Gardner
Door County, Wisconsin

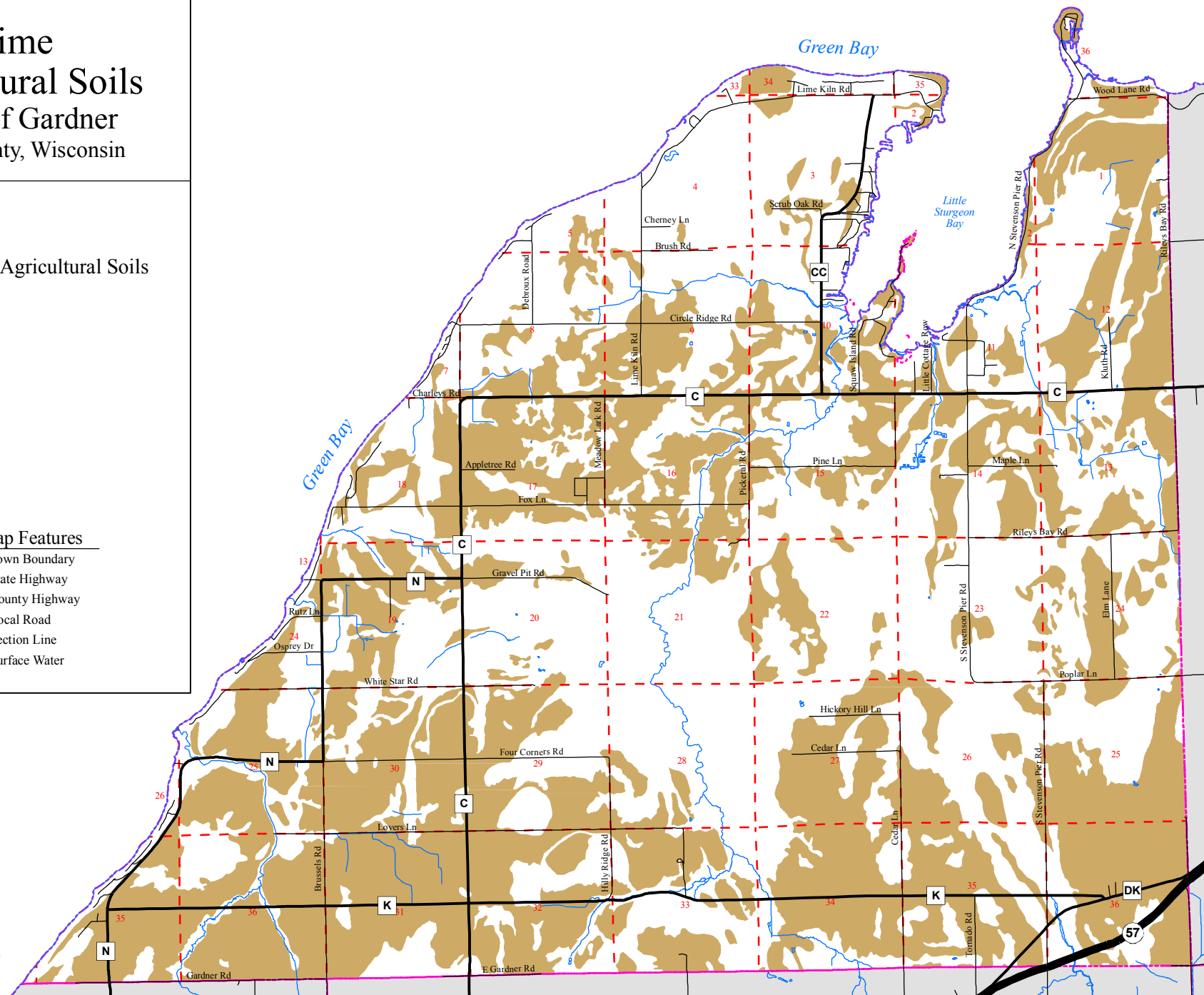
 Prime Agricultural Soils

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water



Source: NRCS, 2004; Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Chapter 6 - POPULATION AND HOUSING

INTRODUCTION

This section of the comprehensive plan identifies existing demographic and housing trends for the Town of Gardner. The majority of this chapter is based upon the 2000 Census information along with data provided by the Wisconsin Department of Administration (WDOA) on population estimates and projections.

The demographic information of this chapter analyzes the characteristics of its existing and projected population; including age, household size, location, etc. The housing data identifies the characteristics of the existing and expected housing supply, including location, size, cost, and condition.

The inventory of the town's demographics and housing may help determine the demand for housing the future population and also the influences on the town's educational, recreational and community facility capacities over the 20-year planning period.

WHAT IS IN THIS CHAPTER

This element of the comprehensive plan contains an inventory of the following information:

- I. Population Characteristics
 - A. Historical Population Trends
 - B. Age and Sex Distribution
 - Decade Population Pyramids
 - School Age, Working Age, and Retirement Age
 - C. Median Age
 - D. Seasonal Population
 - E. Population Projections
- II. Housing Characteristics
 - A. Total Housing Unit Levels by Decade
 - B. Housing Types – Units in Structure
 - C. Housing Occupancy and Tenure
 - Seasonal Housing
 - D. Age of Housing
 - Condition of Housing Stock
 - E. Housing Values
 - Housing Costs – Rents and Mortgage
 - Rent and Income Comparison
 - Owner Costs and Income Comparison
 - F. Projected Housing Units
 - Household Size
 - G. Subsidized and Special Needs Housing
 - H. Housing Development Environment
- III. Analysis and Development of Community Policies and Programs

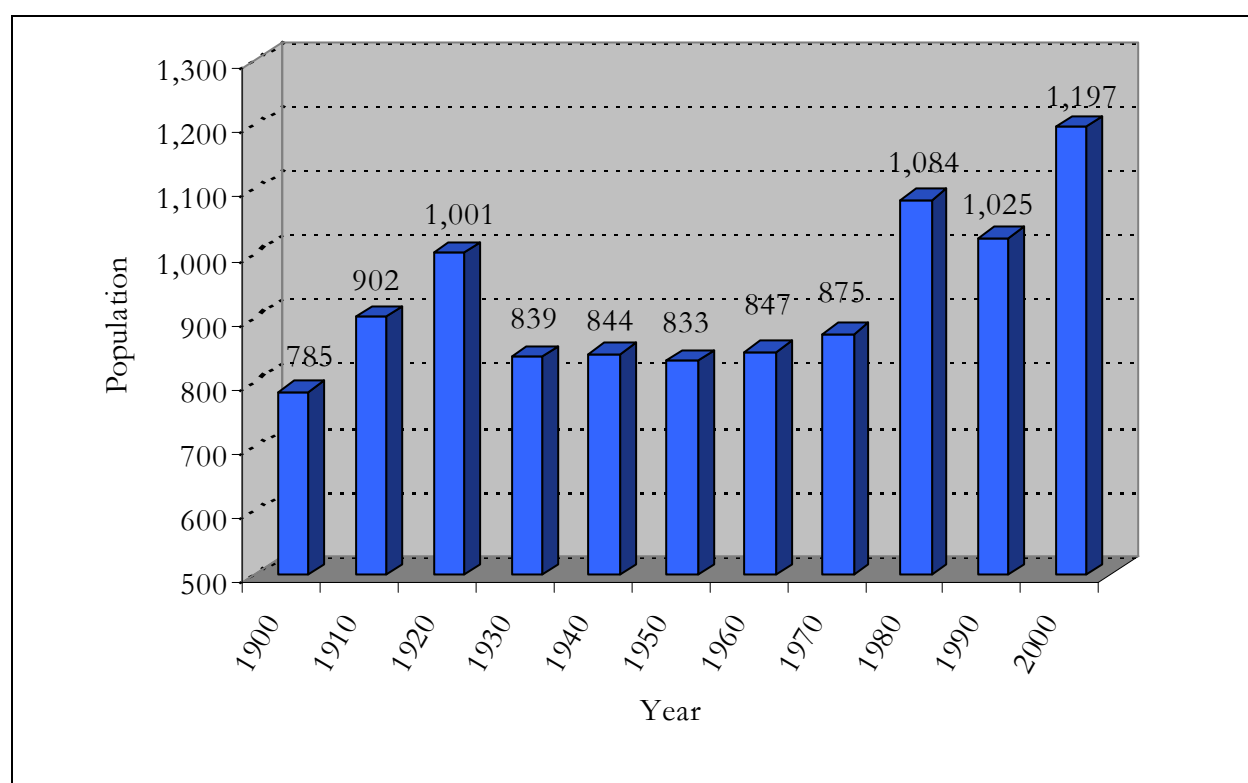
POPULATION CHARACTERISTICS

Historical Population Trends

The Town of Gardner currently is at its highest population level of 1,197. The town saw a rapid decline in population between 1920 and 1930, then fairly stable population growth until 1970 when the town's population increased dramatically growing by nearly 24 percent through 1980. The town's population has fluctuated, but grown more slowly since 1980 to the current level of 1,197 in 2000.

Figure 6.1 illustrates the population changes that the Town of Gardner has experienced during the past century.

Figure 6.1: Historical Population Levels, Town of Gardner, 1900-2000



Source: U.S. Bureau of the Census, *General Population Characteristics 1840-1970*, Bay-Lake Regional Planning Commission, December 1975; Census 2000; and Bay-Lake Regional Planning Commission, 2008.

Table 6.1 displays the change in the town's population levels while making comparisons with the surrounding towns and Door County.

While all the towns in the area have had fluctuating populations over the last century, the Town of Gardner has seen the greatest percent growth in the last 20 years second only to the town of Union. Door County and all of the compared towns except Union experienced their greatest growth in population from 1970 to 1980 and have since slowed somewhat.

The 2000 Census indicates the population of the town was 1,197 people. According to the Wisconsin Department of Administration, the Town of Gardner had an estimated 2008 population of 1,294.

Table 6.1: Historical Population Levels, 1900-2000

Year	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupée		Door County	
	Number	Percent Change	Number	Percent Change	Number	Percent Change	Number	Percent Change	Number	Percent Change
1900	785	--	639	--	1,287	--	1,349	--	17,583	--
1910	902	14.9	641	0.3	1,410	9.6	1,301	-3.6	18,711	6.4
1920	1,001	11.0	691	7.8	1,505	6.7	1,202	-7.6	19,073	1.9
1930	839	-16.2	698	1.0	1,260	-16.3	1,220	1.5	18,182	-4.7
1940	844	0.6	695	-0.4	1,215	-3.6	1,223	0.2	19,095	5.0
1950	833	-1.3	598	-14.0	1,177	-3.1	1,184	-3.2	20,870	9.3
1960	847	1.7	586	-2.0	1,139	-3.2	1,319	11.4	20,685	-0.9
1970	875	3.3	620	5.8	1,050	-7.8	1,470	11.4	20,106	-2.8
1980	1,084	23.9	755	21.8	1,097	4.5	1,899	29.2	25,029	24.5
1990	1,025	-5.4	713	-5.6	1,042	-5.0	1,798	-5.3	25,690	2.6
2000	1,197	16.8	880	23.4	1,112	6.7	1,873	4.2	27,961	8.8

Source: U.S. Bureau of the Census, General Population Characteristics 1840-1970, Bay-Lake Regional Planning Commission, December 1975; Census 2000; and Bay-Lake Regional Planning Commission, 2005.

Age and Sex Distribution

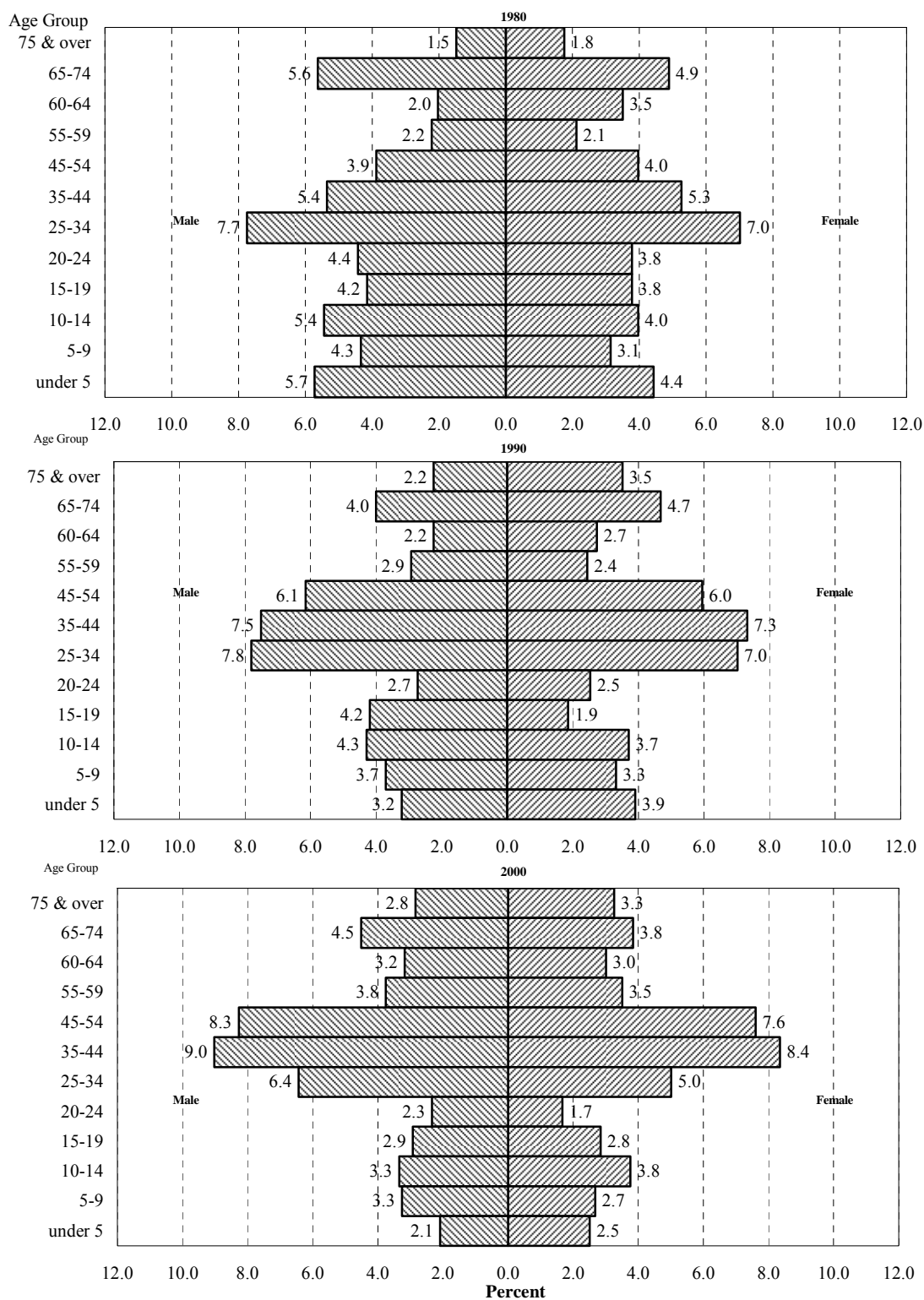
From 1980 to 2000, the town's population has experienced several shifts in its age distribution (Figure 6.2) indicating a continued trend towards older age groups.

- In 1980, 43 percent of the town's population was under the age of 25. By 2000, this age group decreased to 27 percent of the total population suggesting that individuals in the age group are leaving the town to further their education or to find work elsewhere.
- In 1980, the greatest percentage of the town's population was the 25-34 age group (14.8 percent) with more than 10 percent of the population concentrated in each of three other age groups (under 5, 35-44, 65-74) indicating extended families were prevalent in the town. By 1990, the 25-34, 35-44 and 45-54 age groups represented more than 40 percent of the population with this trend continuing through 2000 when these three groups constituted more than 44 percent of the town's population.
- In 1980, the Town of Gardner's population was comprised of more males than females. This trend has remained consistent with more males than females continuing 2000 (Figure 6.2). Based on the 2000 Census, there are predominantly more males in every age group except the youngest and oldest age groups, while the working age groups between 20 and 54 have the greatest percent of males.

Decade Population Pyramids

Figure 6.2 illustrates the Town of Gardner population through population pyramids that compare age groups between males and females. The pyramids show how the town's population has slowly aged over the last 20 years.

Figure 6.2: Town of Gardner Population Pyramids, 1980-2000



Source: U.S. Bureau of the Census, 1980 Census of Population and Housing, STF 1A, Table 10; 1990 Census of Population and Housing, STF 1A, Table P012; 2000 Census of Population and Housing SF-1; and Bay-Lake Regional Planning Commission, 2008.

Note: Age groups are not uniform due to limitations in availability of age group data from the 1980 Census.

School Age, Working Age, and Retirement Age

Table 6.2 divides the population of the Town of Gardner into four age groups including: school age group (5-17), working age group (16+), voting age group (18+) and those of retirement age (65+).

- The working age group accounts for 81 percent of the total population. When considering an average retirement age of 65 years and subtracting that group from the working age group, the figure drops to 66 percent.
- In 2000, just 17 percent of the town's total population was school age and the retirement age group consisted of 14 percent of the town's population. While the percent of the town's retirement age population has risen by less than one percent since 1990 (from 13.6 to 14.5 percent), the school age population has fallen more significantly from 19.3 percent in 1990 to 17.2 percent in 2000.

The population is expected to shift towards older age groups through the town's 20 year planning period and beyond. This may result in a greater demand for elderly housing, care facilities and other services for the elderly including transportation and facilities to accommodate retirees.

Since deaths are expected to outnumber births over the next 25 years, any population growth will occur through migration. According to WDOA county population projections by age group, the 55+ age group in Door County will experience the greatest increases by the year 2030, indicating that the majority of people migrating to the county are expected to be in the retirement stage of life. The 60 and over is the only age group expected to increase in numbers by the year 2030 while all other age groups will decrease. The decrease in the workforce age group (24-64) will affect any future employment growth as the workforce availability declines.

Table 6.2: Population by Age Groups and Sex, 2000

Age Groups	Town of Gardner				Door County	Wisconsin
	Total	Male	Female	Percent	Percent	Percent
School Age						
5-11	110	55	55	9.2	8.9	10.1
12-14	46	24	22	3.8	4.2	4.5
15-17	50	24	26	4.2	4.4	4.5
Working and Voting Age						
16+	969	510	459	81.0	80.8	77.5
16-64	796	422	374	66.5	62.1	64.4
18+	936	494	442	78.2	77.9	74.5
18-64	763	406	357	63.7	59.2	61.4
Retirement Age						
65+	173	88	85	14.5	18.7	13.1
Total Population	1,197	622	575			

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, STF 1A, General Profile and Table P012; and Bay-Lake Regional Planning Commission, 2008.

Median Age

Table 6.3 displays the gradual increase in median age for the towns of Gardner, Brussels, Nasewaupée and Union, Door County and State of Wisconsin from 1970 to 2000.

- The town's median age has risen from 34.2 years in 1970 to 41.56 years in 2000. The result is an increase of 7.4 years in the town, which is one of the smallest increases of those areas compared. In comparison, the Town of Nasewaupee's median age fell slightly from 1970 to 1990, but it now has the oldest median age in the immediate area. This trend of an increasing median age should be considered when planning for the future needs of the town, as an aging population generally demands additional community services.

Table 6.3: Median Age, 1970-2000

Geographic Area	1970	1980	1990	2000
Town of Gardner	34.2	29.3	36.1	41.5
Town of Union	27.3	28.1	32.6	38.2
Town of Brussels	29.7	28.7	32.6	36.3
Town of Nasewaupee	30.5	29.9	36.2	43.3
Door County	33.8	31.4	36.5	42.9
Bay-Lake Region	29.6	30.7	34.6	38.6
State of Wisconsin	27.2	29.4	32.9	36.0

Source: U.S. Bureau of the Census, Census of Population, General Population Characteristics, Wisconsin, 1970, Tables 33, 35; 1980 Table 14; 1990 STF 1A, General Profile; Census 2000 and Bay-Lake Regional Planning Commission, 2008.

Seasonal Population

The estimated seasonal population for the town is found by multiplying the number of seasonal housing units by the average number of persons per household (Table 6.4).

- In 2000, the town had 456 seasonal housing units, along with an average number of persons per household of 2.43. The result is an estimated additional 1,108 people in the town who are considered seasonal residents.

Table 6.4: Estimated Seasonal Population, 2000

	Geographic Location				
	Town of Gardner	Town of Union	Town of Brussels	Town of Nasewaupee	Door County
Population	1,197	880	1,112	1,873	27,961
Persons Per Household	2.43	2.63	2.76	2.41	2.33
Total Housing Units	966	512	428	1,320	19,587
Total Seasonal Housing Units*	456	159	6	497	6,970
Percent of Housing Units Seasonal	47.2	31.1	1.4	37.7	35.6
Estimated Seasonal Population**	1,108	418	17	1,198	16,240
Percent Population Seasonal	92.6	47.5	1.5	63.9	58.1

*Seasonal housing includes seasonal, recreational, or occasional use units, does not include other vacant

**Estimated Seasonal Population = Total Seasonal Housing Units x Persons per Household

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing and Bay-Lake Regional Planning Commission, 2008.

Population Projections

Population projections are an important factor necessary to assess the area's future need for housing, community facilities, transportation, and other population-related facilities. They can also be used to forecast the area's future expenditures, revenues, and tax receipts.

In 2008, the Wisconsin Department of Administration (WDOA) Demographic Services Center prepared population projections to the year 2030 for the communities and counties of the state

utilizing a projection formula that calculates the annual population change over three varying time spans.

- According to the WDOA projections, the Town of Gardner is projected to have a population of 1,403 by 2030. This represents an increase of 206 persons, or 17 percent from the 2000 Census count of 1,197.

Table 6.5 identifies the past population trends and WDOA projections for the Town of Gardner, surrounding towns, Door County, the eight-county Bay-Lake Region and Wisconsin.

Table 6.5: Population Trends, 1970-2030, Town of Gardner & Selected Areas

Year	Geographic Location						
	Town of Gardner	Town of Union	Town of Brussels	Town of Nasewaupée	Door County	Bay-Lake Region	State of Wisconsin
Actual Population							
1970	875	620	1,050	1,470	20,106	440,926	4,417,731
1980	1,084	755	1,097	1,899	25,029	476,134	4,705,767
1990	1,025	721	1,042	1,798	25,690	498,824	4,891,769
2000	1,197	880	1,112	1,873	27,961	554,479	5,363,715
2008 WDOA Estimate	1,294	940	1,168	1,992	30,303	588,532	5,675,000
WDOA Population Projections							
2010	1,298	956	1,186	1,986	30,204	602,137	5,772,372
2015	1,344	994	1,211	2,011	31,110	626,866	5,988,455
2020	1,380	1,026	1,230	2,026	31,832	651,531	6,202,825
2025	1,401	1,046	1,234	2,018	32,193	673,654	6,390,939
2030	1,403	1,050	1,221	1,984	32,090	691,962	6,541,222
Number Change							
1970-1980	209	135	47	429	4,923	35,208	288,036
1980-1990	-59	-34	-55	-101	661	22,690	186,002
1990-2000	172	159	70	75	2,271	55,655	471,946
2000-2010	147	114	99	138	3,149	72,387	624,740
2000-2030	206	170	109	111	4,129	137,483	1,177,507
Percent Change							
1970-1980	23.9	21.8	4.5	29.2	24.5	8.0	6.5
1980-1990	-5.4	-4.5	-5.0	-5.3	2.6	4.8	4.0
1990-2000	16.8	22.1	6.7	4.2	8.8	11.2	9.6
2000-2010	12.3	13.0	8.9	7.4	11.3	13.1	11.6
2000-2030	17.2	19.3	9.8	5.9	14.8	24.8	22.0

Source: U.S. Bureau of the Census, Census of Population and Housing, 1980-2000; Wisconsin Department of Administration, for years cited; Wisconsin Department of Administration, Official Population Projections, 2008; and Bay-Lake Regional Planning Commission, 2009.

In an effort to establish a range of possible population growth for the next 20 years or more, the Town of Gardner utilized three additional population projections along with the previously mentioned WDOA projections. These additional projections include:

- **Growth Trend** - developed by using the 1970, 1980, 1990 and 2000 Census figures and creating exponential “growth trend” series to the year 2030. According to these projections, the 2025 population for the Town of Gardner would be 1,481 people, which is an increase of 284 people or 24 percent from the 2000 Census population count. If the town were to continue to grow at this rate, it would have 1,546 people by 2030.

- **Linear Trend** - also utilized the 1970, 1980, 1990 and 2000 Census figures and created a “linear trend” series to the year 2025. This method identified a 2025 population of 1,408 people for the Town of Gardner, which is an increase of 211 people or 18 percent from the 2000 Census population count. If the town were to continue to grow to 2030 at this rate, it would have 1,453 people.
- **Share-of-the-County** - An additional projection methodology termed share-of-the-county uses a ratio methodology to distribute annual county projections to the town level, and adjust for current population estimates. This method identified a 2025 population of 1,377 people for the Town of Gardner, which is an increase of 180 people or 15 percent from the 2000 Census population count. Projecting to 2030, the town would begin to decline to 1,342 people.

The limitations of population projections should be recognized. It should be noted that the growth and linear trend population projections assume that the town will continue to grow based on past trends in population. Slight changes in the community or the region in the future may cause significant modifications to these projections.

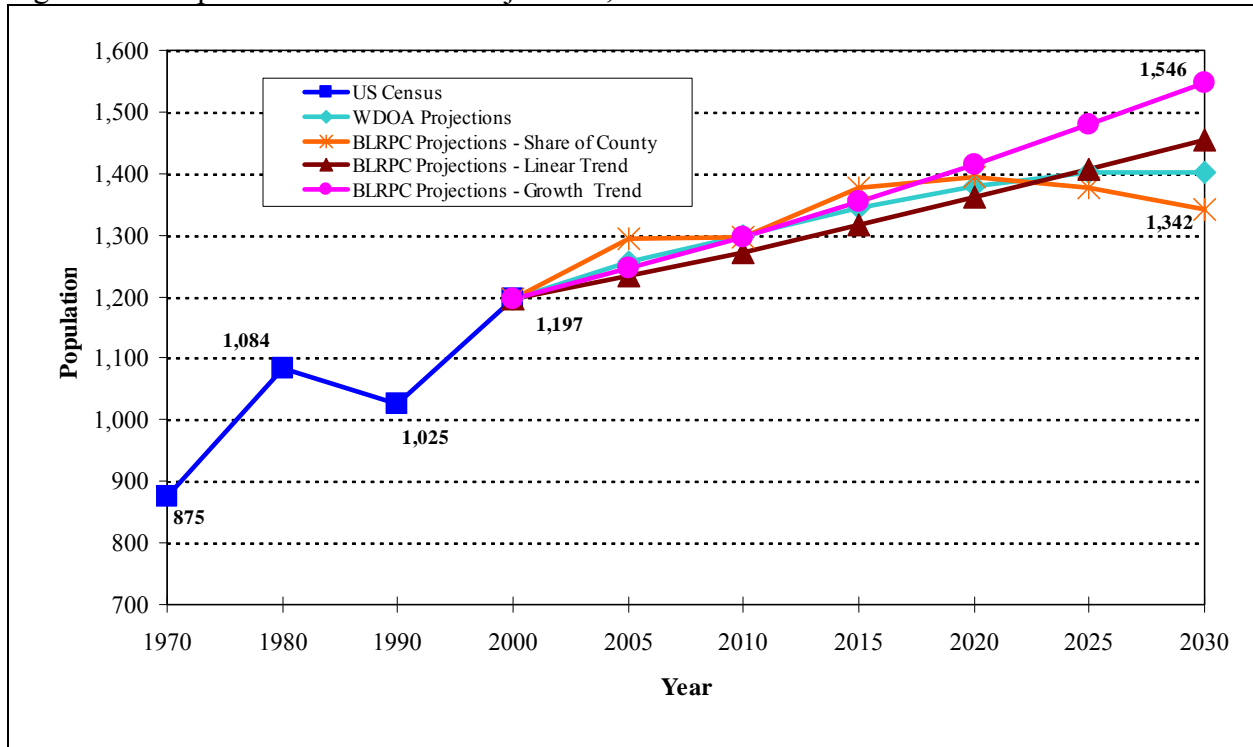
Table 6.6 and Figure 6.3 display the town’s actual U.S. Census counts, 2008 WDOA projections, the growth and linear trend projections based off past population trends, and the Commission’s “Share of County” projections.

Table 6.6: Population Trends and Projections, 1970-2030, Town of Gardner

Town of Gardner	1970	1980	1990	2000	2005	2010	2015	2020	2025	2030
US Census	875	1,084	1,025	1,197						
WDOA Projections				1,197	1,257	1,298	1,344	1,380	1,401	1,403
BLRPC Projections - Share of County				1,197	1,295	1,296	1,378	1,394	1,377	1,342
BLRPC Projections - Linear Trend				1,197	1,235	1,272	1,317	1,363	1,408	1,453
BLRPC Projections - Growth Trend				1,197	1,246	1,296	1,355	1,415	1,481	1,546

Source: U.S. Department of Commerce, Bureau of the Census, 1970, 1980, 1990, 2000; Wisconsin Department of Administration, *Official Municipal Population Projections 2005-2030*, 2008; Bay-Lake Regional Planning Commission, 2009.

Figure 6.3: Population Trends and Projections, 1970-2030



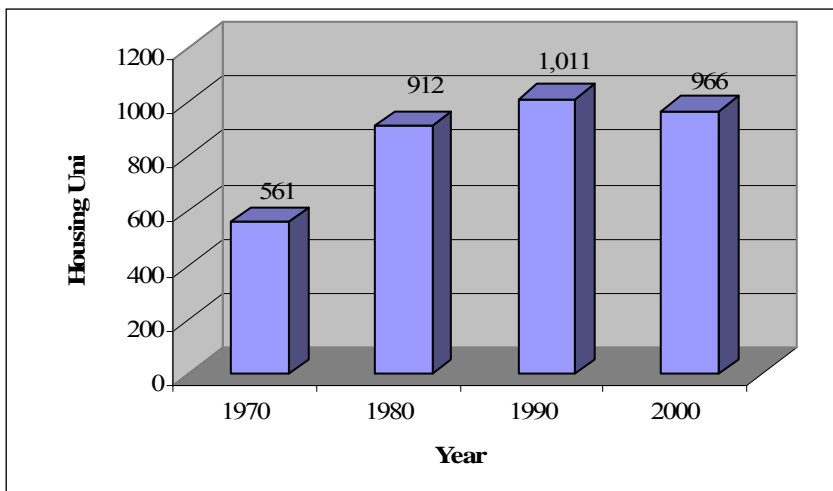
Source: U.S. Bureau of the Census, Census of Population and Housing, 1970-2000; Wisconsin Department of Administration, Official Population Projections, for years cited; and Bay-Lake Regional Planning Commission, 2009.

HOUSING CHARACTERISTICS

Total Housing Unit Levels by Decade

The total number of housing units within the Town of Gardner has increased steadily from 1970 to 2000 by 72 percent in total (Figure 6.4 and Table 6.7). This is greater than all the surrounding towns and Door County as a whole. Much of this may be attributed to growth along the Green Bay shoreline. The decline in housing units from 1990 to 2000 is due in part to a difference in counting methodologies between the 1990 to 2000 Censuses.

Figure 6.4: Historic Housing Unit Levels, 1970-2000 - U. S. Census



Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, Series 100, Table 2; 1980 Census of Population and Housing, Table 45; 1990 Census of Population and Housing, STF 1A; State of Wisconsin Demographic Services Center, Table DP-1; and Bay-Lake Regional Planning Commission, 2008.

Table 6.7: Total Housing Units, 1970-2000

Area	Year				Percent Change			
	1970	1980	1990	2000	1970-80	1980-90	1990-00	1970-00
Town of Gardner	561	912	1,011	966	62.6	10.9	-4.5	72.2
Town of Union	377	575	589	512	52.5	2.4	-13.1	35.8
Town of Brussels	313	373	398	428	19.2	6.7	7.5	36.7
Town of Nasewaupee	857	1,202	1,263	1,320	40.3	5.1	4.5	54.0
Door County	10,779	15,324	18,037	19,587	42.2	17.7	8.6	81.7
Bay-Lake Region	148,035	194,960	222,116	246,212	31.7	13.9	10.8	66.3
Wisconsin	1,472,466	1,863,897	2,055,774	2,321,144	26.6	10.3	12.9	57.6

Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, Series 100, Table 2; 1980 Census of Population and Housing, Table 45; 1990 Census of Population and Housing, STF 1A; Census 2000; and Bay-Lake Regional Planning Commission, 2008.

Housing Permit Data

According to the data tabulated by the state WDOA from housing permit data, the town of Gardner had a total of 108 new housing units added to the town from 2000 to 2006 (Table 6.8).

Table 6.8: Housing Unit Additions and Deletions, 2000-2006

Year	Town of Gardner	Town of Union	Town of Brussels	Town of Nasewaupee	Door County
2000	17	13	10	0	336
2001	23	11	8	20	487
2002	7	9	5	36	367
2003	11	18	7	25	404
2004	21	11	14	29	447
2005	16	6	9	14	300
2006	16	7	2	17	392
Total Additions	111	68	53	124	2,733
Total Deletions	3	28	13	1	116
Net Change	108	40	40	123	2,617

Source: State of Wisconsin Demographic Services Center, Annual Housing Unit Surveys, 2007.

Housing Types - Units in Structure

According to the 2000 Census, one unit detached structures made up about 73 percent of the housing types in the Town of Gardner (Table 6.9). The second largest housing type found in the town was mobile homes, which made up more than 26 percent of structures. The high percentage of mobile homes is indicative of the seasonal nature of the area.

Table 6.9: Units in Structure, 2000

Units	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupee		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1, Detached	700	73.3	460	89.8	348	80.4	1,090	82.9	15,188	77.5
1, Attached	3	0.3	3	0.6	5	1.2	6	0.5	737	3.8
2	2	0.2	8	1.6	12	2.8	13	1.0	529	2.7
3 or 4	-	-	1	0.2	5	1.2	10	0.8	619	3.2
5 to 9	-	-	-	-	-	-	-	-	601	3.1
10 to 19	-	-	-	-	-	-	-	-	269	1.4
20 or more	-	-	-	-	2	0.5	2	0.2	307	1.6
Mobile Home	250	26.2	40	7.8	61	14.1	194	14.8	1,320	6.7
Other	-	-	-	-	-	-	-	-	17	0.1
Total	955	100.0	512	100.0	433	100.0	1,315	100.0	19,587	100.0

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF- 1; and Bay-Lake Regional Planning Commission, 2008.

Note: “1 unit, detached” dwelling units can be either typical single-family homes with open space on all sides or dwelling units attached to a non-residential use, but where the entire building has open space on all sides. “1 unit, attached” dwelling units are those that have one or more walls extending from the ground to the roof separating it from adjoining, attached structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is counted as an individual, attached structure if the dividing or common wall goes from ground to roof.

Housing Occupancy and Tenure

According to the 2000 Census, the Town of Gardner had 493 occupied housing units, which accounts for just 51 percent of the housing in the town. The other 49 percent of housing in the town was vacant (473 units) (Table 6.10). Of the 493 occupied units, 437 were owner-occupied while 56 units were renter-occupied.

Seasonal Housing

Of the 473 vacant units in the town, 456 units, or 47.2 percent of the total housing in the town, are for seasonal, recreational, or occasional use (Table 6.10). All of the units of government in the area except the town of Brussels (which has no shoreline) have significant numbers of seasonal housing.

Table 6.10: Housing Occupancy and Tenure, 2000

Units	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupée		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupied	493	51.0	335	65.4	459	94.8	778	58.9	11,828	60.4
Owner	437	45.2	290	56.6	403	83.3	699	53.0	9,394	48.0
Renter	56	5.8	45	8.8	56	11.6	79	6.0	2,434	12.4
Vacant	473	49.0	177	34.6	25	5.2	542	41.1	7,759	39.6
Seasonal, Recreational, Occasional Use	456	47.2	159	31.1	6	1.2	497	37.7	6,970	35.6
Other	17	1.8	18	3.5	0	0.0	45	3.4	789	4.0
Total Units	966	100.0	512	100.0	484	100.0	1,320	100.0	19,587	100.0

Source: U.S. Bureau of the Census, and Bay-Lake Regional Planning Commission, 2008.

“Housing occupancy” refers to whether a housing unit is occupied or vacant; “housing tenure” refers to whether the occupant is an owner or renter.

- A housing unit is *occupied* if it is the usual place of residence of the person or group of people living in it at the time of enumeration or if the occupants are only temporarily absent.
- A housing unit is *vacant* if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent. Units temporarily occupied at the time of enumeration entirely by people who have a usual residence elsewhere are classified as vacant. Vacancy status includes units for rent; for sale only; rented or sold, not occupied; for migrant workers; and for seasonal, recreational, or occasional use.
- Housing *tenure* statistics are for occupied housing units and denote whether the occupant owns the unit or is renting the unit.

Note that housing occupancy status can easily change from seasonal to year-round residence (or vice-versa) due to factors such as retirement of the homeowners or a change in ownership.

Age of Housing

Slightly more than one percent of the existing housing units in the Town of Gardner were built between 1999 to March 2000, while just less than 20 percent were constructed between 1970 and 1979 and more than 21 percent were built between 1940 and 1950 (Table 6.11).

Table 6.11: Housing Units by Year Structure Built, 2000

Year Structure Built	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupee		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1999 to March 2000	13	1.4	22	4.3	14	3.2	23	1.7	17	0.1
1995 to 1998	111	11.6	21	4.1	30	6.9	114	8.7	702	4.7
1990 to 1994	60	6.3	61	11.9	17	3.9	63	4.8	1,878	12.5
1980 to 1989	125	13.1	48	9.4	58	13.4	149	11.3	1,373	9.1
1970 to 1979	190	19.9	54	10.5	51	11.8	236	17.9	3,033	20.1
1960 to 1969	99	10.4	34	6.6	21	4.8	182	13.8	3,246	21.5
1940 to 1959	209	21.9	126	24.6	56	12.9	218	16.6	1,510	10.0
1939 or earlier	148	15.5	146	28.5	186	43.0	330	25.1	3,316	22.0
Total	955	100.0	512	100.0	433	100.0	1,315	100.0	15,075	100.0

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF- 3; and Bay-Lake Regional Planning Commission, 2008.

Condition of Housing Stock

Determining the number of substandard housing units in the Town of Gardner will be an indication of the condition of the overall housing stock.

According to the Department of Commerce, the definition of a substandard unit is a housing unit which is in need of major repair or replacement in three or more of the following areas: roof, electrical, heating, plumbing, foundation/structure (including interior walls/floors/ceilings), siding, doors/windows and well/septic or water/sewer laterals.

- There were 148 units in the town built prior to 1940 at the time of the 2000 Census (Table 6.10) compared to more than 280 according to the 1990 Census which could indicate that there are some substandard housing units within the Town of Gardner. There were also 20 units in the town that indicated they did not have plumbing facilities and ten without kitchen facilities in 2000.

Housing Values

In 2000, the greatest number of housing units in the Town of Gardner were valued at less than \$50,000 (Table 6.12). The median value of specified owner-occupied housing units in the town was \$122,000 compared to \$120,800 for the county. When comparing the town's housing values with surrounding towns, Gardner has significantly more homes in the less than \$50,000 range than any other community. Door County as a whole had its highest percentage of housing units valued between \$50,000 and \$99,999 while Nasewaupée had its highest percentage within the \$100,000 to \$149,999 range.

Table 6.12: Values of Specified Owner-Occupied Housing Units, 2000

Value	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupée		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$50,000	0	0.0	4	2.6	8	4.5	14	3.4	241	3.8
\$50,000 to \$99,999	80	33.3	45	29.2	95	53.1	106	26.1	2,181	34.2
\$100,000 to \$149,999	73	30.4	37	24.0	49	27.4	141	34.7	1,613	25.3
\$150,000 to \$199,999	22	9.2	28	18.2	17	9.5	60	14.8	850	13.3
\$200,000 to \$299,999	31	12.9	18	11.7	10	5.6	43	10.6	776	12.2
\$300,000 to \$499,999	28	11.7	16	10.4	0	0.0	36	8.9	447	7.0
\$500,000 to \$999,999	4	1.7	6	3.9	0	0.0	6	1.5	238	3.7
\$1,000,000 or more	2	0.8	0	0.0	0	0.0	0	0.0	28	0.4
Median Value	\$122,000		\$124,100		\$94,800		\$125,400		\$120,800	
Total Units	240	100.0	154	100.0	179	100.0	406	100.0	6,374	100.0

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF-3; and Bay-Lake Regional Planning Commission, 2008.

*Note: Census housing values may not be the actual assessed values, they are based on what the homeowner perceives the housing unit is worth.

Data from the Door County Board of Realtors provides a snapshot look at homes values throughout the county over a short time period. While Census data on housing unit values is self-reported based on what the homeowner perceives the housing unit is worth (which may or may not be the actual assessed value), the information from the Door County Board of Realtors is based on actual housing unit sales. In comparing home prices from 2005 to the 2000 Census data, it appears that prices have risen somewhat from 2000.

Table 6.13: 2007 Housing Statistics

Market Category	Number of Sales	Average Price	Median Price	Price Range
All housing units				
Door County	561	\$ 277,645	\$ 187,000	21,000-5,000,000
Northern Door County	279	\$ 386,724	\$ 269,900	26,000-5,000,000
Sturgeon Bay	129	\$ 117,648	\$ 145,000	26,800-729,900
Southern Door	62	\$ 202,065	\$ 153,500	40,000-995,000
Inland housing units, no waterview, no waterfront				
Door County	323	\$ 166,784	\$ 147,000	21,000-582,000
Northern Door County	111	\$ 230,351	\$ 205,000	26,000-582,000
Sturgeon Bay	97	\$ 140,744	\$ 129,900	26,800-360,000
Southern Door	39	\$ 132,855	\$ 120,000	40,000-270,000
Inland single family housing units, no waterview, no waterfront, no condos, no mobile, no business, less than 10 acres				
Door County	276	\$ 162,378	\$ 137,250	21,000-582,000
Northern Door County	89	\$ 233,903	\$ 200,000	26,000-582,000
Sturgeon Bay	95	\$ 142,504	\$ 130,000	43,000-360,000
Southern Door	28	\$ 127,759	\$ 120,000	55,000-237,000
Manufactured and Modular homes				
Door County	26	\$ 153,770	\$ 153,000	26,800-350,000
Northern Door County	13	\$ 173,708	\$ 158,000	110,000-330,000
Sturgeon Bay	2	\$ 57,150	\$ 57,150	26,800-87,500
Southern Door	7	\$ 122,085	\$ 88,000	40,000-275,000
Total	2137			

Source: Door County Board of Realtors, 2008.

Rent and Income Comparison

Providing affordable housing which meets the needs of future Town of Gardner residents is an important element of planning. Housing influences the economy, transportation, infrastructure, natural features, and various other aspects of a comprehensive plan.

According to the U.S. Department of Housing and Urban Development (HUD), housing affordability is defined as paying no more than 30 percent of household income for housing.

The National Low Income Housing Coalition (NLIHC) estimates that renter households make up one-third (33 percent) of the households in the United States. Comparably, renter households made up 21 percent of the total occupied households in Door County in 2000 and 5.8 percent of occupied households in Gardner.

The NLIHC assesses housing affordability based on the generally accepted standard, described above, of paying no more than 30 percent of income for housing costs. The NLIHC uses this standard compared against Fair Market Rent (FMR) to assess housing affordability in all counties of the United States. The Department of Housing and Urban Development (HUD) defines FMR as the market cost to rent a home or apartment, plus the cost of all utilities, heat, etc., except for telephones. They estimate FMR based on a “modest apartment in the conventional marketplace.”

In Door County, the 2008 HUD FMR for a two-bedroom apartment is \$641. In order to afford this level of rent and utilities, without paying more than 30 percent of income on housing, a household must earn more than \$25,640 annually. Assuming a 40-hour work week, 52 weeks per

year, this level of income translates into a housing wage, the wage required to afford FMR, of \$12.33 per hour.

According to the 2000 Census, the median gross rent for renter-occupied housing units in the Town of Gardner was \$544 equaling a need for income greater than \$21,760 or a wage of \$10.46.

For Door County, NLIHC has estimated the average wage for renters to be \$7.91 an hour. This figure is estimated by NLIHC based on adjusted 2006 Bureau of Labor Statistics (BLS) data, using the ratio of renter to total household income reported in Census 2000. So, in order to afford the FMR for a two-bedroom apartment at this wage, a renter must work 62 hours per week, 52 weeks per year. Or, working 40 hours per week year-round, a household must include 1.6 worker(s) earning the mean renter wage in order to make the two-bedroom FMR affordable. The NLIHC estimates that 43 percent of the households renting in Door County in 2008 are unable to afford a 2-bedroom unit at FMR.

In comparison, the state's 2008 FMR for a two-bedroom apartment is \$715. Without paying more than 30 percent of income on housing, a household must earn \$2,383 monthly or \$28,593 annually, which translates into a housing wage of \$13.75 per hour. The NLIHC estimates the state's average wage for a renter at \$11.64 an hour, \$3.73 higher than Door County's average wage for a renter. In order to afford the state's FMR of \$715 for a two-bedroom apartment at this wage, a renter must work only 47 hours per week, compared to Door county's 62 hours per week, or a household must include 1.2 worker(s) earning the mean renter wage in order to make the two-bedroom FMR affordable.

According to the 2000 Census, seven renters out of 56 specified renter-occupied housing units in the Town of Gardner paid more than 30 percent of their income in rent. These occupants are considered as living in non-affordable housing.

Homeowner Costs and Income Comparison

According to the 2000 Census, Door County had 6,374 specified owner-occupied housing units, of which 3,747 units had a mortgage. The median selected monthly owner costs for units with a mortgage were \$894 for Door County as a whole and \$882 in the Town of Gardner. "Selected monthly owner costs" for housing units with mortgages include mortgage and related payments, real estate taxes, homeowners' insurance, utilities, and fuels. For specified owner-occupied units without a mortgage, the median monthly cost was \$296 for Door County and \$289 for the Town of Gardner in 2000. The 2000 census indicates that 48 owners out of 437 (11 percent) specified owner-occupied housing units in the Town of Gardner paid more than 30 percent of their income for monthly owner costs. These occupants are considered as living in non-affordable housing.

Table 6.13 includes estimates from a Ginnie Mae home affordability calculator (accessed through the HUD website) as to income levels necessary for a household to take on a loan covering the mortgage principal, interest, taxes, and (homeowners') insurance (PITI) costs for median-priced homes in Door County. The income levels Ginnie Mae estimates are those required for a household to affordably take on the PITI figures below; they assume a 30-year conventional loan at a 6.25 percent fixed interest rate, a 15 percent down payment, and that the household has no other debt. Note, however, that once Ginnie Mae-estimated utilities and maintenance costs are also factored in, none of these median-priced homes are actually affordable per the standard definition of affordable housing as costing no more than 30 percent

of household income: 43 percent of the household income estimated as required by Ginnie Mae to “afford” these homes would be spent on total housing costs in all scenarios below.

The percentage of 2005 monthly median household income for Door County (the most recent figures available) that would be required to cover total monthly housing costs for a home in three areas of the county is shown in Table 6.14. Though not directly comparable since the MLS housing values come from 2007 sales, these percentages give a rough idea of the affordability of the housing market in Door County. Northern Door County is the least affordable, at 53 percent of monthly median household income required to cover median-priced housing. A median-valued home in the City of Sturgeon Bay would cost 34 percent of median household income. Southern Door is the most affordable at 31 percent of median household income going towards housing costs.

Table 6.14: Median Valued Home Qualification and Affordability Estimates, Door County, 2008

Home Location	Median Sales Price, 2007	Annual Income to Afford PITI Only	Monthly Income to Afford PITI Only	Monthly PITI**	Estimated Utilities & Maintenance	Total Monthly Housing Costs	% of 2005 Monthly MHI*** (\$3,643)
Northern Door*	\$205,000	\$54,000	\$4,500	\$1,485	\$453	\$1,938	53%
City of Sturgeon Bay*	\$129,900	\$34,250	\$2,854	\$942	\$287	\$1,229	34%
Southern Door*	\$120,000	\$31,500	\$2,625	\$866	\$265	\$1,131	31%

Source: Ginnie Mae – Affordability Calculator; US Census Bureau – Small Area Income and Poverty Estimates.

* 2007 MLS Inland Home, no water view or waterfront

** Principal, interest, taxes, insurance

***Median Household Income (2005 Annual MHI = \$43,720)

Housing Development Environment

Due to its rural atmosphere, the Town of Gardner has a limited number of public utilities and services. The town offers a scenic landscape with views of the bay of Green Bay, has access to State Highway 42, and is situated near the city of Sturgeon Bay urban area. These features along with the desire for more spacious property make the town an attractive place for many people to live.

Projected Housing Units

Table 6.15 and Figure 6.5 illustrate the likely total and occupied housing unit projections for the Town of Gardner through 2030. Four methods were used for determining the most likely housing projection to the year 2030 for the Town of Gardner. The following methods were used to estimate the future occupied housing unit demand within the town.

Methods one and two used the year 2000 “occupied housing” count of 493 units as a base figure. Method three used the 2003 Department of Administration (WDOA) population projections along with the town’s projected persons per household, while the fourth method uses the Bay-Lake RPC’s population projections in combination with the persons per household.

Household Size

According to the Wisconsin Department of Administration, the household size within Egg Harbor is projected to decrease throughout the planning period. Table 6.13 indicates that the number of persons per household in the town will consistently decrease during the planning period, from 2.43 in 2000 to 2.063 in 2030.

The three occupied housing unit projections for the Town of Gardner are detailed in the following:

- **Growth Trend** - Using the census “occupied” housing counts from 1970 to 2000, a “growth trend” was created to the year 2030. This created a housing unit projection that indicated the town could have 861 occupied housing units by 2025 and 935 occupied housing units by 2030, or an increase of 90 percent or 442 occupied housing units from the 2000 Census count of 493. The total number of housing units (occupied and seasonal) would increase from 966 in 2000 to 1,834 in 2030 (Table 6.15 and Figure 6.5).
- **Linear Trend** - A “linear trend” to the year 2030 also utilizes the census “occupied” housing counts from 1970 to 2000. This created a housing unit projection indicated the Town of Gardner could have 708 occupied housing units by 2025 and 741 total occupied housing units, or an increase of 248 occupied housing units by 2030.
- **WDOA Population Projections/Persons per Household** - By using the town’s WDOA population projections and persons per household projection to the year 2025, the town is able to determine the possible number of occupied housing units by 2025. The WDOA population projections show an increase of 180 persons and a decline in persons per household of 2.65 to 2.06 from 2000 to 2030. The result equals 652 occupied housing units, or an increase of 159 occupied housing units for the Town of Gardner by 2030.
- **Bay-Lake RPC Population Projections/Persons per Household** - By using the Bay-Lake RPC’s population projections for the town and persons per household projection to the year 2030, the town is able to determine the possible number of occupied housing units by 2030. The “share of county” population projections show an increase of 204 persons and a decline in persons per household of 2.65 to 2.06 from 2000 to 2030. The result equals 682 occupied housing units, or an increase of 189 occupied housing units for the Town of Gardner by 2030.

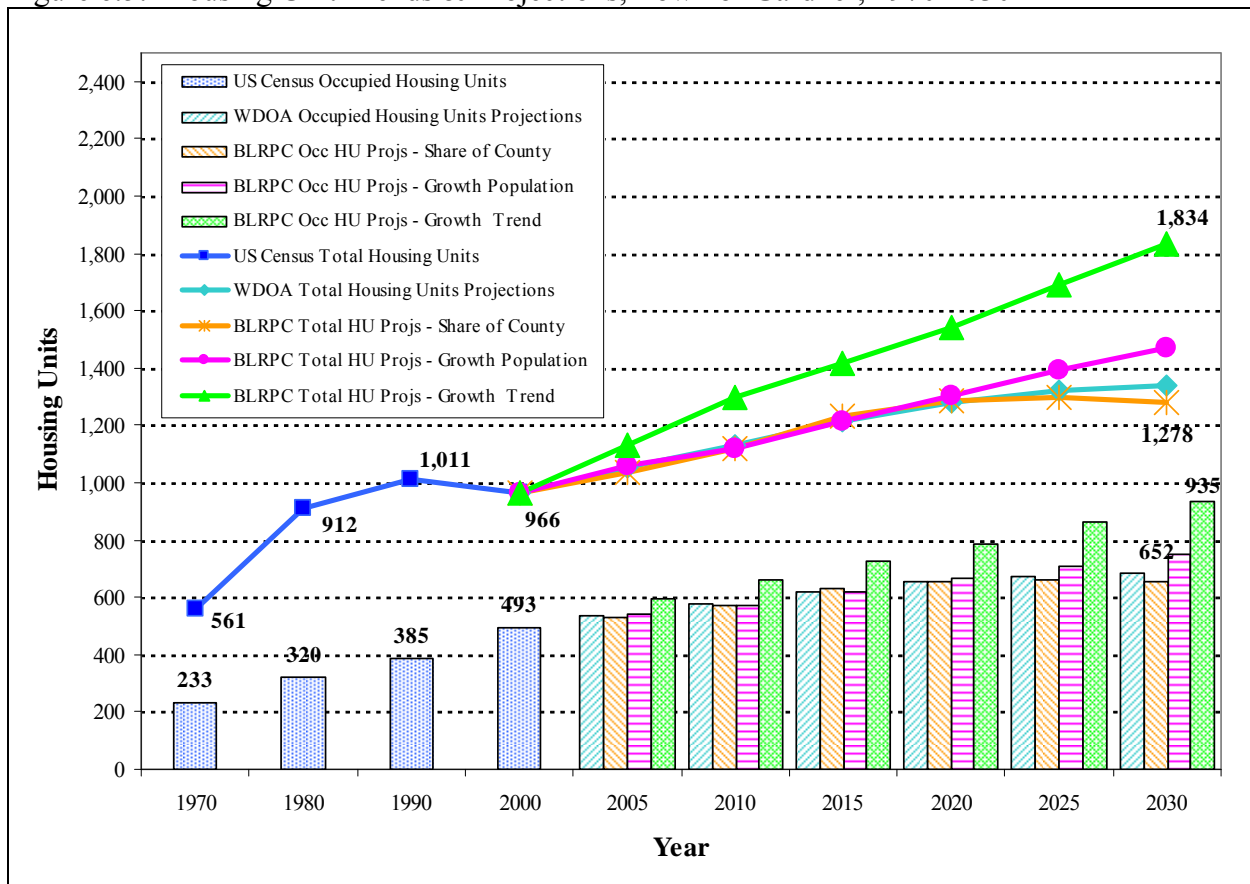
Table 6.15: Housing Unit Trends & Projections, Town of Gardner, 1970-2030

Area	Year								
	1970	Census 1980	1990	2000	2005	2010	Projection 2015	2020	2025 2030
US Census Occupied Housing Units	233	320	385	493					
WDOA Occupied Housing Units Projections					537	577	619	653	673 682
BLRPC Occ HU Projs - Share of County					528	572	629	655	661 652
BLRPC Occ HU Projs - Linear Population					522	562	601	640	676 706
BLRPC Occ HU Projs - Linear Trend					538	607	641	674	708 741
BLRPC Occ HU Projs - Growth Population					541	572	619	665	711 751
BLRPC Occ HU Projs - Growth Trend					593	661	724	787	861 935
US Census Total Housing Units	561	912	1,011	966					
WDOA Total Housing Units Projections				966	1,053	1,131	1,214	1,280	1,320 1,337
BLRPC Total HU Projs - Share of County				966	1,036	1,121	1,233	1,284	1,297 1,278
BLRPC Total HU Projs - Linear Population				966	1,024	1,101	1,179	1,255	1,326 1,385
BLRPC Total HU Projs - Linear Trend				966	1,079	1,191	1,257	1,322	1,388 1,454
BLRPC Total HU Projs - Growth Population				966	1,061	1,121	1,213	1,303	1,394 1,473
BLRPC Total HU Projs - Growth Trend				966	1,131	1,297	1,420	1,542	1,688 1,834
Household Size		2.65	2.43	2.35	2.27	2.19	2.13	2.08	2.06

Source: Wisconsin Department of Administration, 2008; Bay-Lake Regional Planning Commission, 2009.

Note: The increments used to obtain the projected household sizes for the Town of Gardner were taken from Door County's projection increments prepared by the Demographic Services Center and through linear trending from 1970 to 2030 by Bay-Lake RPC, 2008.

Figure 6.5: Housing Unit Trends & Projections, Town of Gardner, 1970-2030



Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, Series 100, Table 2; 1980 Census of Population and Housing, Table 45; 1990 Census of Population and Housing, STF 1A; and Bay-Lake Regional Planning Commission, 2009.

ANALYSIS AND DEVELOPMENT OF COMMUNITY POLICIES AND PROGRAMS

The following list of programs and resources (as well as the housing strategy found in Chapter 1) can help the town with maintaining the desired housing environment it wishes to provide its residents.

All communities in Wisconsin have a number of housing implementation tools available to them. An important first step to the utilization of those resources is on-going education of citizens and local officials regarding the contents of this housing chapter and on the importance of housing quality and affordable housing for all types of individuals within the Town of Gardner. Elected and appointed town officials, as well as the citizens, need to understand the relationship between housing, economic development, natural and cultural resources, land use, community facilities and transportation on the overall well-being of the town.

Some implementation alternatives available to the town include regulatory tools such as zoning and subdivision ordinances; plus governmental and private non-profit programs available to encourage the maintenance and development of affordable housing.

Housing Programs

A number of local, state, and federal housing programs are available to help local communities promote the development of housing for individuals with lower incomes and certain special needs. If there is a gap in service, the Town of Gardner may want to explore developing its own program(s) to address those needs. Below are agencies with available programs that have been established to provide assistance on a wide range of housing issues.

Subsidized and Special Needs Housing

There are a variety of agencies working within Door County that help locate, finance, develop, and provide housing assistance for all persons, including the senior citizens, low-income residents, and persons with various physical and mental disabilities or other special needs. The Door County Housing Authority (DCHA), funded by HUD, provides both rental and home ownership assistance to families, senior citizens, the disabled, and individuals who qualify based on household income. The Door County Department of Human Services has information on what is available through several organizations such as WHEDA, Lakeshore CAP, and the Veteran's Administration. Another agency that provides assistance to all special needs housing is the Door County Weatherization Program, which helps reduce energy cost by making homes more energy efficient.

Below are general descriptions of the types of special needs housing available in Door County.

Housing for Senior Citizens and Those With Physical Disabilities and Mental/Emotional Disabilities

Subsidized housing for senior citizens is available through both the DCHA Section 8 Rental Voucher Program (see description below) and through apartments that have their own subsidy programs. Other types of housing for senior citizens, the physically disabled, and mentally/emotionally disabled include assisted living apartments, Community-Based Residential Facilities (CBRF), nursing homes, and Residential Care Apartment Complexes (RCAC).

Income-Based Housing

The DCHA administers the HUD Section 8 Rental Voucher Program housing program for Door County, which promotes affordable housing choices for very low-income households by allowing families to choose privately owned rental housing. The DCHA generally pays the landlord the difference between 30 percent of household income and the DCHA-determined payment standard (about 80 to 100 percent of the FMR). For an apartment to "qualify" for the program it has to pass housing quality standards inspection, the landlord has to be willing to go along with the program, and it has to be affordable based on the family's income. An apartment is considered unaffordable if rent is over 40 percent of household income. The maximum number of units DCHA can assist in any month is 255, or not more than their HUD funding; in 2007, only 243 families were assisted due to limited funding in the first half of the year. Currently, they have 27 families on a waiting list.

Homeownership Assistance

There are a variety of resources available to help people become homeowners and to maintain their homes. Agencies that provide homeownership assistance in Door County are listed below followed by a more detailed description of a few of these programs in the next section.

- Door County Housing Authority

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- Downpayment Plus®
 - Door County Habitat for Humanity
 - FISC Consumer Credit Counseling (<http://www.fisc-cccs.org/index.htm>)
 - Lakeshore-CAP (<http://www.lakeshorecap.org/>)
 - Wisconsin Housing and Economic Development Authority (WHEDA)
 - USDA Rural Development

These agencies provide a variety of homeownership services and funding, including:

- down payment and closing cost assistance
- mortgage assistance
- credit counseling
- homebuyer education and counseling
- grants
- direct loans
- savings programs
- assistance with home repair, weatherization, and removal of health hazards; and
- develop homes at a lower cost than conventional homes.

Local Programs and Revenue Sources

Housing trust fund. A housing trust fund is a pool of money available for housing projects for middle or lower income households. The fund is used to fill financial gaps to make projects feasible. Trust funds may be replenished yearly or they may be designed to be perpetual and self-sustaining. Revolving funds are sustained by the payments of loan recipients, which are then used to supply additional loans. Sources of revenue to begin or replenish housing trust funds include eschewed or abandoned funds, sale of public land, general obligation bonds, general appropriations, endowments and grants, and surplus reserve funds.

Housing trust funds are particularly well-suited to meet the large and long-term capital investment needs of projects. Unlike funds that rely on the vagaries of state or local annual appropriations, a housing trust fund is a permanent dedication of a specified amount for housing. Trust fund money can be used in a number of ways. It may assist in home purchase, down payment assistance, security deposit assistance, housing construction, rehabilitation, maintenance, and operation, technical assistance for housing organizations, homeless shelters, debt or equity financing, and second mortgages.

The city of Stevens Point, in central Wisconsin, is one example of a community that has established a housing trust fund. For information on how this fund was established and how it is used, contact the Housing Authority of the City of Stevens Point.

Housing linkage programs. Voluntary housing linkage programs encourage developers of office, commercial, retail, or institutional development to construct or make financial contributions towards affordable housing. The underlying rationale is that new non-residential development creates a need for housing by attracting employees to an area. Therefore, the developers should contribute towards satisfying this need. Linkage programs usually apply to new construction but they may also apply to expansion of existing space. The programs are popular with developers when they either reduce costs or add value to the project. Examples of incentives are density bonuses, reduced setbacks, and reduced parking requirements.

These programs benefit businesses, the developer, and the community. Developers benefit from the incentives while communities benefit from more affordable housing. Businesses benefit from a well-housed and accessible labor force. Office/housing linkage programs will be most useful in communities experiencing high growth rates where developers are more willing to take advantage of incentives and where linkage programs can reduce the pressure for housing.

State Programs and Revenue Sources

Department of Commerce, Division of Community Development administers several programs that are funded by the state and many more that are funded by HUD. State programs funded by general purpose revenue cannot be used to invest directly in housing development. Instead these funds are used to help organizations develop the capacity to develop houses or to provide various types of financial assistance to home buyers or renters through grants to local governments or non-profit agencies.

Wisconsin Housing and Economic Development Authority (WHEDA) is a quasi-governmental agency that finances housing development through the sale of bonds. It receives no direct state-tax support. It provides mortgage financing for first-time home buyers and financing for multifamily housing as well. Specific programs evolve and change with the needs of the housing market.

WHEDA also manages several federal housing programs. One program, the Low Income Housing Tax Credit Program, encourages housing development by providing private investors with income tax credits when they invest in low income housing development. Tax credits are allocated to housing projects on a competitive basis.

Information about WHEDA programs can be obtained by contacting WHEDA or visiting its web site at www.wheda.com.

The **Lakeshore Community Action Program** (Lakeshore CAP, Inc.) has an assistance program available to residents in Door County. This program is the **Section 8 Voucher Housing Assistance** program which provides rental subsidies to low income families, senior citizens, handicapped, and disabled individuals who reside in rental housing.

The Door County Housing Authority (DCHA) is funded 100 percent by the Department of Housing and Urban Development (HUD) and provides Section 8 rental assistance to income eligible families. DCHA owns no housing and provides rental assistance in the private market. They are currently assisting 238 income eligible renters who pay a minimum of 30 percent of their adjusted gross income toward rental expenses.

Federal Programs and Revenue Sources

The **Department of Housing and Urban Development (HUD)** is the federal agency with primary responsibility for housing programs and community development. It provides subsidized housing through low-income public housing and the Section 8 program that provides subsidies for rent in private apartments to low-income households. Both of these programs operate principally through local public housing authorities. To be eligible for these programs and others, a community may want to explore establishing a public housing authority under section 66.40 of the Wisconsin Statutes.

HUD also provides money to communities for a variety of housing purposes. Part of this money is distributed to entitlement jurisdictions (cities of over 50,000 population and designated urban

counties) also to other communities through grants to states who distribute the money to non entitlement communities. In Wisconsin, the state agency that serves as the conduit for these funds is the Division of Community Development within the Department of Commerce. It awards these funds through a competitive request-for-proposals' process. Funding from other HUD programs is distributed through national competitions.

For information about programs that might be available for specific local initiatives, contact the Wisconsin HUD office located in Milwaukee.

Rural Development - United States Department of Agriculture (USDA-RD) provides a variety of housing and community development programs for rural areas. Its programs are generally available in areas with populations of 10,000 or less. It provides support for rental housing development, direct and guaranteed mortgage loans for home buyers, and support for self-help and cooperative housing development.

USDA-RD has district offices serving most parts of Wisconsin. To find out about programs that might benefit your community, look in the phone book in the federal government listings under "Agriculture, Department of" for "Rural Development." You can also contact the state office located in Stevens Point, or explore the web site of the national office at www.rurdev.usda.gov/agency/rhs/rhs.html.

The Bay-Lake Regional Planning Commission is also available to assist in gathering information.

Private Programs

Non-profit housing development corporations. A non-profit corporation is an organization that may qualify for tax-deductible donations, foundation grants, and public funds. To be eligible, the organization must apply for and receive non-profit status from the IRS. Non-profits build and maintain housing in many areas of Wisconsin. Their projects help communities improve their range of housing opportunities.

Non-profits are eligible for state and federal financial resources, making them an important vehicle for publicly desired housing. They often work in collaboration with local governments, civic organizations, citizen groups, and for-profit developers. This improves communication and coordination in the community and creates an atmosphere for future projects. Municipalities too small to have their own housing staff or programs may contract with non-profits to provide services such as housing management and grant-writing. They may also be able to pool resources with the non-profit organizations in other area communities. Non-profits can develop technical expertise and skills with regard to finance, construction, rehabilitation, and project management.

Wisconsin is unique in that it has a program to specifically assist nonprofit housing organizations. The program is called the Local Housing Organization Grant (LHOG) Program. It provides grants to nonprofits to increase their capacity. To find out if there is a non-profit housing developer serving your area or about LHOG, contact the Department of Commerce, Division of Community Development.

Chapter 7 - ECONOMIC DEVELOPMENT

INTRODUCTION

The economic development element details the planning area's general economic characteristics including workforce, economic base and economic opportunities; along with a complete listing of economic development resources. These characteristics are compared to Door County and the State of Wisconsin. This chapter also discusses the importance of retaining, developing, and attracting businesses; the types of businesses and jobs to be encouraged; and a summary of the planning area's economic strengths and weaknesses.

The purpose of this inventory is to establish strategies for economic growth and vitality that will maintain and enhance the identity and quality of life in the Town of Gardner. Because the economy is interrelated with all aspects of community life, the economic development priorities also have an impact on strategies developed for other community characteristics such as natural resources, housing, transportation, utilities and land use. See Chapter 1 of this document for a detailed listing of these strategies.

WHAT IS IN THIS CHAPTER

This element of the comprehensive plan contains the following information:

- I. Economic Development Components
- II. Strengths, Weaknesses, Opportunities and Threats
- III. Labor Force Characteristics
 - A. Education Attainment
 - B. Median Household Income
 - C. Occupation
 - D. Industry
 - E. Commuting Patterns
 - F. Unemployment Rate
 - G. Labor Participation Rate
 - H. Industry and Employment Forecast
- IV. Economic Base
 - A. Revenue by Industry
 - B. Major Employers
 - C. Employment by Economic Division
 - D. Location Quotient Analysis
 - E. Threshold Analysis
 - F. Community Finances
- V. Sites for Business and Industrial Development
 - A. Existing Site Inventory and Analysis
 - B. Evaluation of Environmentally Contaminated Sites

ECONOMIC DEVELOPMENT COMPONENTS

To be successful, economic development must function as a part of the whole socio-economic environment. This is accomplished through the development of strategies linked to several economic development components including: 1) *infrastructure*; 2) *business development*; 3) *workforce development* and 4) *community cash flow*. These components consist of several elements that influence the quality and effectiveness of economic development within a community.

Infrastructure

Infrastructure provided by both government and private business is the support system needed for producing and delivering goods and services. Examples of infrastructure include:

- Utilities (e.g., water, sanitary and storm sewer, gas, electric, natural gas)
- Transportation services (e.g., roads, parking, airports, ports, rail, signage, sidewalks, trails)
- Social infrastructure (e.g., schools, hospitals, government and other public services)
- Communications infrastructure (e.g., telephone, radio, television, video, satellite, cellular, etc.)

Communities must identify both current and future needs and work with both public and private sector providers to ensure the provision of adequate infrastructure.

Business Development

This component addresses business retention and expansion, business attraction and new business development.

- *A business retention and expansion* program should identify the businesses' existing and changing needs and address those needs with resources and tools. It is important to remove obstacles that restrict the growth of existing businesses (e.g., infrastructure, availability of space, transportation, etc.) and assist them to remain competitive through such things as management training, workforce development programs, technology, etc.
- *Business attraction* activities are designed to encourage businesses that are expanding or planning to relocate, to choose your community. In order to attract new businesses, a community must provide a competitive and attractive environment. Marketing and promotion are used extensively to promote the positive business climate, environment quality of life, workforce, services available, etc.
- *Entrepreneurship and new business development* helps diversify the economic base and creates new jobs, and also provides stability to the economic base. Building an effective support system for promising businesses is an important responsibility of the economic developer. This means such things as land with available public infrastructure (e.g., streets and utilities), existing transportation options in place, availability of the internet with high speed access, permits for home-based business, etc.

Workforce Development

Communities need a quality workforce development program in place to stay competitive, to keep existing businesses strong, to keep young people in the community, and to raise residents' standard of living. Workforce development helps to identify skilled labor supply, educational institutions, workforce training programs, etc.

Community Cash Flow Development

Communities looking to bring new dollars into a community to ensure a balance of economic activity can look at two sources of new dollars: those brought in by individuals, and those brought in by organizations, businesses or government.

- New individual dollars consist of earned income (wage and salary) and transfer income (government payments and investment dividends).
- New dollars brought into a community by entities or institutions cover a wide range of sources, including tourism, expanding markets, government contracts or grants, etc.

ECONOMIC DEVELOPMENT ISSUES AND OPPORTUNITIES

Planning for economic development requires recognition of the planning area's assets and liabilities through a thorough evaluation of the four previously described economic components. This analysis of the area's economic strengths, weaknesses, opportunities, and threats provides a broad overview of where the town is currently and what the economic composition of the area may be in the future. If the area is to develop and maintain a vibrant and diversified economic foundation, the town need to maximize their strengths, offset their weaknesses, take advantage of their opportunities, and minimize their threats.

As a rural town in Door County, the Town of Gardner's economic development potential is tied into the general economy of the county as a whole therefore economic development activities affecting Door County will have an effect on the town of Gardner as well. As part of the development of the *Door County Comprehensive Plan*, the County's planning work groups and Core Planning Committee identified the following economic development issues and opportunities:

ISSUES

1. General issues

- Youth are not involved in this (or other) planning processes. Is our vision shared by young people?
- We are not pursuing bonding power and other funding sources available to subsidize plans and ideas
- Land is too expensive for most people, especially in northern Door
- Increased fuel (transportation) costs
- Lack of air transportation to get here
- Geology of county and water quality will (or should) affect increasing population and tourism levels, housing and economic development activities that can be established
- Technology infrastructure can't support tech (or tech-dependent) jobs
- Dual career couples – hard to find two jobs here even if a couple wants to move here

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- Good quality health-care – affordability issue (many jobs here don't offer benefits)
 - Zoning/financial obstacles to development of different types of housing, new businesses

2. *Workforce readiness/availability*

- Workforce is getting older, not being replaced – true for tourism, agriculture, and manufacturing
 - ✧ We're not keeping enough high school (or bringing back other) graduates in (to) the county
- People are not being trained for the jobs that are out there
 - ✧ There are job openings in all levels in the county, particularly in manufacturing
 - ✧ Is training at NWTC furthering our economic development goals? For example, NWTC does not provide training in business planning, entrepreneurship, or marketing. (Note: DCEDC does.)
 - ✧ Basic job skills are lacking in northeast WI generally (and probably other areas of state, country).
- Employers report that many young people want to work but lack fundamental skills such as:
 - ✧ knowing how to dress properly for work
 - ✧ punctuality/timeliness
 - ✧ attendance
 - ✧ a general sense of responsibility
 - ✧ Note: Bay Area Work Force Development is developing a pilot program in northeast Wisconsin to improve these skills, and Door County Job Center already offers some training locally to develop these skills.

3. *Tourism industry*

- Is there enough for tourists to do here for longer and/or winter visits?
- Weather is an uncontrollable threat to tourism, year-round
- Extending the season might be difficult.
 - ✧ Maybe need more indoor activities in winter
 - ✧ Indoor ice arena could be big draw (hockey leagues, etc.)

4. *Housing issues*

- Lack of housing options for senior residents
- \$95 - \$100,000 is affordable range, given Door County's workers' incomes, but few houses are available in that range (especially in northern Door)
- Lack of affordable housing affects:
 - ✧ economic well-being of residents (spending huge chunk of income on housing)
 - ✧ employers' ability to get/keep workers
 - ✧ school population (young families leaving)
 - ✧ workforce supply (young families leaving)
- Land too expensive unless donated or significantly discounted
- Habitat for Humanity has not constructed any homes north of Institute since 2001
- Larger inland homes are sitting on the market for a very long time
- Trend (mostly by non-residents) is to build huge homes.
 - ✧ Perpetuates perception that Door County is comprised of wealthy people

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- ✧ Not affordable/not easy to re-use or sell (unless on water)
 - ✧ No real regulations to limit size
 - ✧ Environmentally unfriendly

5. *Regulatory issues*

- Zoning regulations impede provision of affordable housing and some economic development options
- Several municipalities in the county have or are petitioning to decrease multi-family density allowances
- Some municipalities are petitioning for larger lot sizes (sometimes the same that are petitioning for decreased multi-family density allowances)
- Education/attitudes
- We don't really think of ourselves as a county. Distinct economic engines drive different areas of the county, plus individual (and municipal) agendas, interests.
- County board turnover – and committees re-hash the same issues every time there is a new member
- Follow-through on issues – often doesn't happen
- Many objections – often primarily to looks of – multi-family housing, but this is one of more affordable ways to provide workforce housing
- We – the county and local municipalities – need to subsidize affordable housing

OPPORTUNITIES

1. *We have local resources we could tap into, enhance, or market more effectively:*

- Arts/cultural offerings
- Lots of educated, wealthy retirees – give them equity/entrepreneur investment opportunities
- Airport(s) are an underutilized resource, particularly coming into Sturgeon Bay
- Door County could be a place for meetings/conferences.
 - ✧ Air transportation can sustain and grow business – bring business people here for conferences.
 - ✧ DCVB has hired someone to work doing group sales.

2. *Other areas have tackled these problems – learn from them*

- Other states offer tax credits/incentives for developers to build affordable housing
- Municipalities in other areas subsidize the land for affordable housing

3. *State/national opportunities*

- Unused bonding power(s), state and federal grants not being pursued
- Housing starts for homes with small square footages (1,200 to 1,500 range) are level or even
- Interest in eco-tourism – Door County has lots of activities to offer
- Tech industry (or tech dependency) is increasing nationally; when we have good telecommunications, could grow those industries here
- Vastly increased transportation costs will create a market for locally produced supplies
- Health care industry – growing nationally, good opportunity to expand here due to aging population

LABOR FORCE CHARACTERISTICS

As a key component to economic development, the quality and quantity of the area's labor force dictates what types of business the Town of Gardner will be able to attract and support in the future. This section focuses on characteristics of the local and county labor force. This includes general information on education levels, incomes, the types of occupations in which individuals are employed, the types of business in which these people are employed, commuting patterns, unemployment rates, labor participation rates, and a review of how these characteristics determine/influence the area's employment forecast.

The civilian labor force is comprised of employed persons and those seeking employment who are residents of the Town of Gardner, and excludes persons in the armed forces and those under age 16.

Educational Attainment

The education levels attained by the residents of a community will often be an indicator of the type of jobs in the area and the general standard of living. Areas with higher percentages of people with post high school education will be able to attract the employers offering higher paying professional positions. Table 7.1 illustrates the levels of education that individuals in the town age 25 and older have completed.

- The percentage of high school graduates in the Town of Gardner is 52.6 percent, which is the highest percentage of the compared areas.
- The percentage individuals with at least a high school diploma in the Town of Gardner is 83 percent, which is slightly lower than the state average (85 percent), and below the averages of the county (88 percent) and most of the communities compared. Only the town of Union at 82.6 percent is lower than Gardner. This low percentage is indicative of the relatively agricultural nature of the town.

Table 7.1: Educational Attainment, Population (Age 25 & Over), 2000, Town of Gardner and Selected Areas

Education Level	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupée		Door County		State of Wisconsin	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than 9th grade	61	7.0	43	7.2	41	5.5	67	5.0	923	4.6	186,125	5.4
9th to 12th grade, no diploma	87	10.0	61	10.2	65	8.8	118	8.9	1,530	7.6	332,292	9.6
High school graduate (includes equivalency)	458	52.6	301	50.3	366	49.4	569	42.7	7,741	38.6	1,201,813	34.6
Some college, no degree	138	15.9	72	12.0	113	15.2	278	20.9	4,246	21.2	715,664	20.6
Associate degree	41	4.7	42	7.0	64	8.6	75	5.6	1,328	6.6	260,711	7.5
Bachelor's degree	62	7.1	53	8.8	71	9.6	154	11.6	2,935	14.6	530,268	15.3
Graduate or professional degree	23	2.6	27	4.5	21	2.8	71	5.3	1,359	6.8	249,005	7.2
Total Persons 25 Years and Over	870	100.0	599	100.0	741	100.0	1,332	100.0	20,062	100.0	3,475,878	100.0

Source: U.S. Bureau of the Census, 2000 Census, DP-2; and Bay-Lake Regional Planning Commission, 2008.

Median Household Income

Median household income is one measure of average household income. It divides the household income distribution into two equal parts: one-half of the households fall below the median line while the other one-half are above it. The median household income is a general indicator of the economic well-being of all households in the community.

Table 7.2 provides a comparison of the 2000 median household incomes for the Town of Gardner and selected areas.

- The median household income for the Town of Gardner in 2000 was \$39,053, which was higher compared to Door County (\$38,812) but lower than the state (\$43,791) median household income and surrounding communities.
- 21 percent of the total households in the Town of Gardner made between \$50,000 and \$74,999 in 2000. The other compared communities, Door County, and the State also have their highest income percentage in the range between \$50,000 and \$74,999.

Table 7.2: Median Household Income, 2000, Town of Gardner and Selected Areas

Annual Household Income	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupée		Door County		Wisconsin	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$10,000	25	5.0	27	8.1	22	5.5	32	4.2	824	7.0	148,964	7.1
\$10,000 to \$14,999	59	11.7	12	3.6	29	7.2	42	5.5	847	7.2	121,366	5.8
\$15,000 to \$24,999	76	15.0	41	12.3	54	13.4	126	16.6	1,857	15.7	264,897	12.7
\$25,000 to \$34,999	71	14.1	33	9.9	57	14.1	103	13.6	1,717	14.5	276,033	13.2
\$35,000 to \$49,999	88	17.4	65	19.5	85	21.1	126	16.6	2,208	18.7	377,749	18.1
\$50,000 to \$74,999	105	20.8	95	28.5	85	21.1	203	26.7	2,482	21.0	474,299	22.7
\$75,000 to \$99,000	44	8.7	24	7.2	37	9.2	69	9.1	855	7.2	226,374	10.9
\$100,000 to \$149,000	29	5.7	29	8.7	34	8.4	48	6.3	741	6.3	133,719	6.4
\$150,000 to \$199,000	1	0.2	2	0.6	0	0.0	0	0.0	122	1.0	30,598	1.5
\$200,000 or more	7	1.4	5	1.5	0	0.0	10	1.3	158	1.3	32,305	1.5
Total Households	505	100.0	333	100.0	403	100.0	759	100.0	11,811	100.0	2,086,304	100.0
1990 Median Income	\$22,357		\$30,781		\$22,500		\$26,434		\$26,259			
2000 Median Income	\$39,063		\$47,604		\$42,212		\$43,292		\$38,812		\$43,791	

Source: U.S. Bureau of the Census, 2000, DP-3; and Bay-Lake Regional Planning Commission, 2008.

Occupation

In 2000, the two highest percentages in employed persons by occupation in the Town of Gardner were in the management, professional, and related occupations (35 percent), and sales and office occupations (23 percent) (Table 7.3) which is also true for the compared areas.

Table 7.3: Employed Persons by Occupation, 2000, Town of Gardner and selected areas

Occupation	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupée		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Management, professional, and related occupation	193	35.2	138	29.7	200	32.1	263	25.9	3,828	27.5
Service occupations	105	19.2	68	14.7	69	11.1	178	17.5	2,172	15.6
Sales and office occupations	129	23.5	74	15.9	118	18.9	197	19.4	3,285	23.6
Farming, fishing, and forestry occupations	8	1.5	12	2.6	7	1.1	9	0.9	267	1.9
Construction, extraction, and maintenance occupations	62	11.3	62	13.4	84	13.5	128	12.6	1,847	13.3
Production, transportation, and material moving occupations	51	9.3	110	23.7	145	23.3	241	23.7	2,502	18.0
Total	548	100.0	464	100.0	623	100.0	1,016	100.0	13,901	100.0

Source: U.S. Bureau of the Census, 2000 Census, DP-3; and Bay-Lake Regional Planning Commission, 2008.

Industry

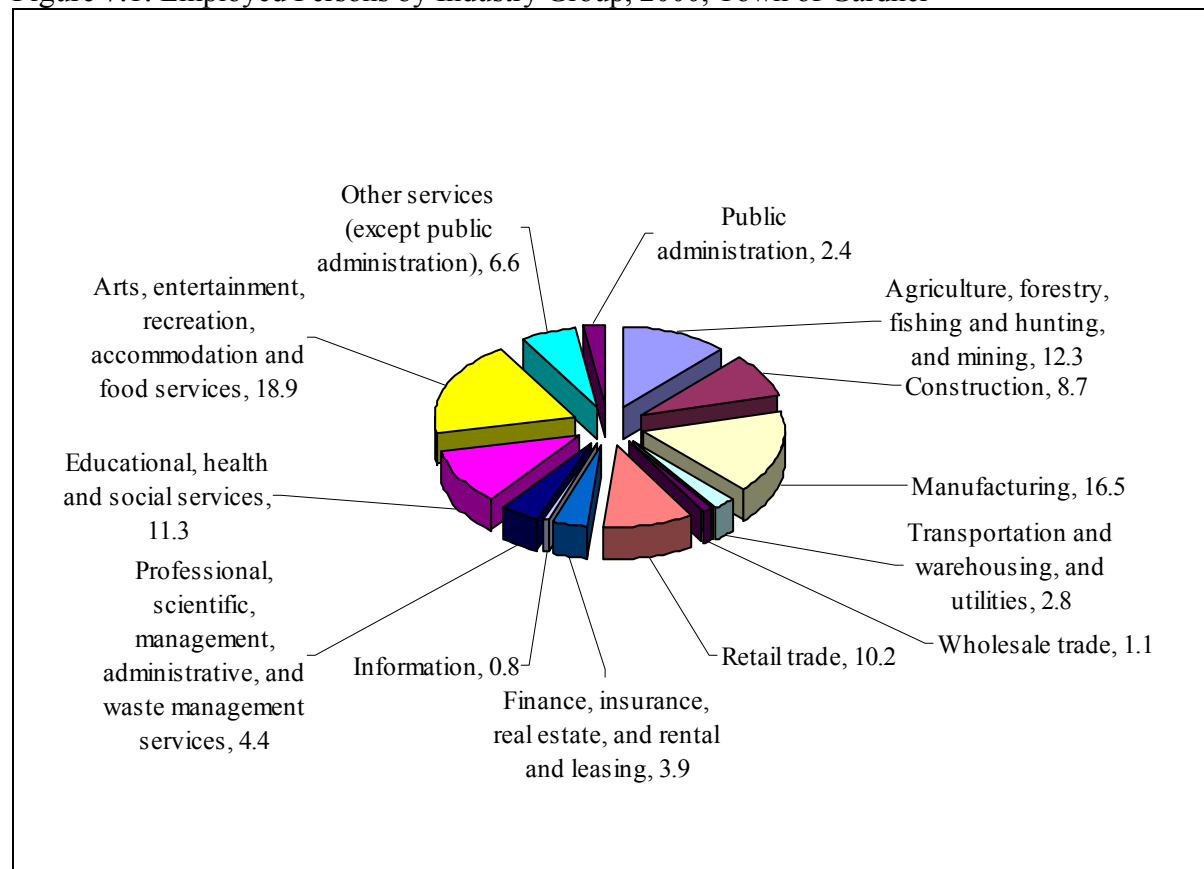
Table 7.4 and Figure 7.1 illustrate the employment by major industry group for the Town of Gardner and selected areas for 2000. The greatest percentage of person employed by industry for all areas compared was in the manufacturing industry followed by the educational, health and social services industry.

Table 7.4: Employed Persons by Industry Group, 2000, Town of Gardner and selected areas

Industry	Town of Gardner		Town of Union		Town of Brussels		Town of Nasewaupée		Door County	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Agriculture, forestry, fishing and hunting, and mining	48	8.0	53	11.4	74	11.9	36	3.5	625	4.5
Construction	55	9.2	63	13.6	74	11.9	92	9.1	1,392	10.0
Manufacturing	177	29.6	103	22.2	149	23.9	255	25.1	2,607	18.8
Wholesale trade	13	2.2	6	1.3	15	2.4	23	2.3	200	1.4
Retail trade	58	9.7	43	9.3	67	10.8	96	9.4	1,881	13.5
Transportation and warehousing, and utilities	25	4.2	20	4.3	12	1.9	36	3.5	388	2.8
Information	11	1.8	0	0.0	7	1.1	15	1.5	198	1.4
Finance, insurance, real estate, and rental and leasing	20	3.3	38	8.2	28	4.5	41	4.0	717	5.2
Professional, scientific, management, administrative, and waste management services	30	5.0	17	3.7	25	4.0	63	6.2	865	6.2
Educational, health and social services	69	11.5	65	14.0	101	16.2	159	15.6	2,096	15.1
Arts, entertainment, recreation, accommodation and food services	49	8.2	31	6.7	43	6.9	117	11.5	1,919	13.8
Other services (except public administration)	21	3.5	14	3.0	24	3.9	57	5.6	572	4.1
Public administration	22	3.7	11	2.4	4	0.6	26	2.6	441	3.2
Total	598	100.0	464	100.0	623	100.0	1,016	100.0	13,901	100.0

Source: U.S. Bureau of the Census, 2000 Census, DP-3; and Bay-Lake Regional Planning Commission, 2008.

Figure 7.1: Employed Persons by Industry Group, 2000, Town of Gardner



Source: U.S. Bureau of the Census, 2000 Census, DP-3; and Bay-Lake Regional Planning Commission, 2008.

Commuting Patterns

Identifying and tracking commuting patterns is a labor market concept that refers to worker flows between municipalities and/or counties. These commuting patterns highlight the communities that have a strong local economic base and attract workers from surrounding communities. Conversely, it demonstrates which areas lack local employment opportunities for

their residents or serve as “bedroom” communities that may offer a greater number and perhaps more affordable housing options in comparison to other locations.

Table 7.5 illustrates the place of work for the Town of Gardner, three of its surrounding communities, Door County and the State. Approximately, 76 percent of workers, who were 16 years of age and older, in the Town of Gardner worked in the county. The other municipalities also had more than 70 percent of their residents working in the county. The percentage of workers in the Town of Gardner is lower compared to the state (81 percent) and the County (93 percent), but higher than the town of Union (42 percent).

Table 7.5: Place of Work, 2000, Town of Gardner and selected areas*

Place of Work	Town of Gardner	Town of Union	Town of Brussels	Town of Nasewaupée	Door County	State of Wisconsin
Worked in state of residence	575	462	611	971	11,580	2,271,607
Worked in county of residence	446	196	436	857	10,808	1,846,382
Worked outside county of residence	129	266	175	114	772	425,225
Worked outside state of residence	7	0	5	23	81	78,084

* Workers 16 years of age and older

Source: U.S. Bureau of the Census, 2000; and Bay-Lake Regional Planning Commission, 2008.

Unemployment Rate

The unemployment rate is the proportion of the civilian labor force that is currently unemployed. Persons not employed and not looking for work are not counted as in the labor force therefore not counted as unemployed. Table 7.6 and Figure 7.2 highlight the fluctuations in Door County’s civilian labor force since 1990. Variations in the number of persons in the labor force are the result of many factors: shifts in the age and sex characteristics of the population; changes in the number of residents age 16 and over; the proportion of citizens age 16 and over working or seeking employment; and seasonal conditions.

Companies looking to expand operations seek areas with higher unemployment rates or excess labor. With a rapidly growing economy in many parts of the Upper Midwest, one of the major criteria companies use in selecting an area in which to locate is available labor. However, continued high unemployment rates is the result of a much greater problem that may indicate an under skilled or under educated workforce or an area that lacks sufficient infrastructure or capital investment to support economic expansion.

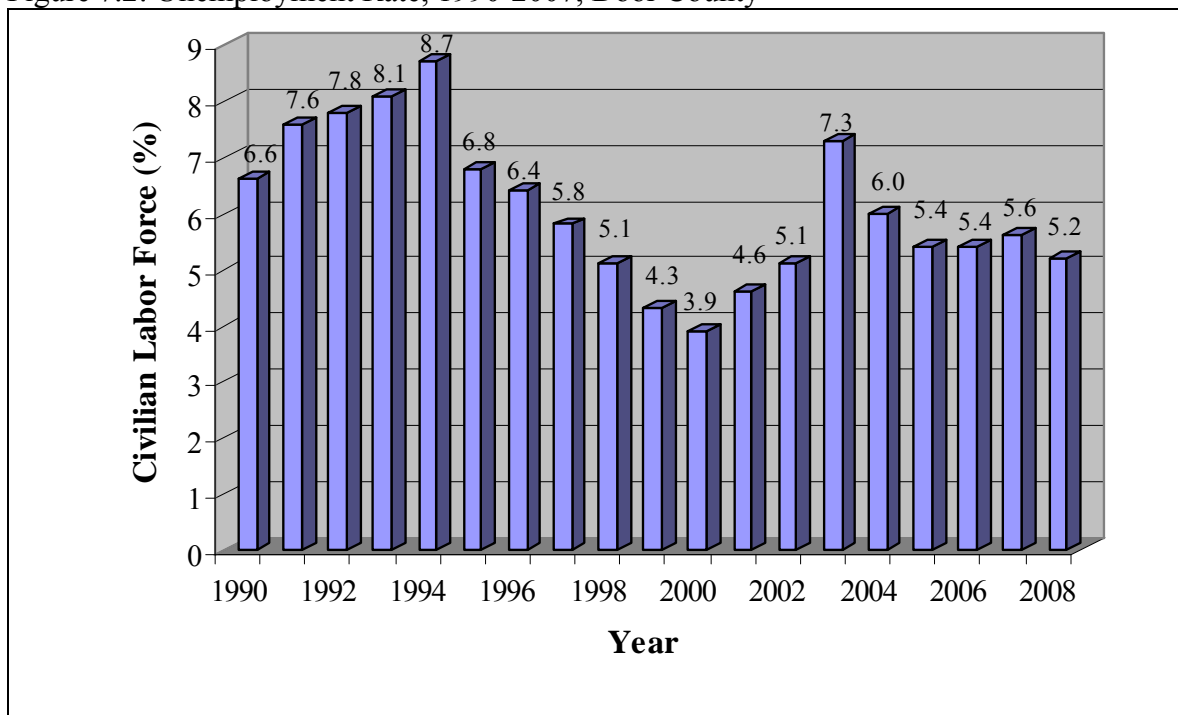
- The civilian labor force comprised 57 percent of Door County’s population in 1990, 59 percent in 2000 but only 56 percent in 2008.
- The county’s labor force number increased by 2,306 workers, or 15.5 percent from 1990 to 2008.
- For the period 1990 to 2008, the county’s unemployment rate and the number of unemployed was the lowest in 2000 (3.9 percent), whereas the unemployment rate was the highest at 8.7 percent in 1994.
- The number of individuals unemployed within this time period dropped to a low of 637 in 2000, then peaked at 1,244 in 2003 and has since stayed around 900 people.

Table 7.6: Average Civilian Labor Force Estimates, 1990-2008, Door County

Year	Labor Force	Unemployed	Labor Force	Employed
1990	14,834	981	6.6	13,853
1991	14,662	1,118	7.6	13,544
1992	14,767	1,149	7.8	13,618
1993	14,606	1,176	8.1	13,430
1994	14,952	1,304	8.7	13,648
1995	15,036	1,019	6.8	14,017
1996	15,572	991	6.4	14,581
1997	15,754	907	5.8	14,847
1998	15,730	806	5.1	14,924
1999	15,643	680	4.3	14,963
2000	16,510	637	3.9	15,873
2001	17,133	787	4.6	16,346
2002	17,272	873	5.1	16,399
2003	17,038	1,244	7.3	15,794
2004	16,776	1,010	6.0	15,766
2005	16,919	915	5.4	16,004
2006	16,714	901	5.4	15,813
2007	16,706	928	5.6	15,778
2008	17,140	898	5.2	16,242

Source: Wisconsin Department of Workforce Development, Civilian Labor Force Estimates, for years cited; and Bay-Lake Regional Planning Commission, 2008.

Figure 7.2: Unemployment Rate, 1990-2007, Door County



Source: Wisconsin Department of Workforce Development, Civilian Labor Force Estimates, 1990-2007; and Bay-Lake Regional Planning Commission, 2008.

Labor Participation Rate

According to the Wisconsin Department of Workforce Development, approximately 60 percent of Door County's population, 16 years of age and older, are in the labor force. This percentage is referred to as the labor force participation rate (LFPR). The LFPR is a strong economic measure that is sometimes a better indicator of the vitality of the area's labor market than its unemployment rate. Door County's LFPR is currently about the same as Wisconsin's and higher than the national rate. Like the state and nation, the county's LFPR is projected to decrease over the coming decades due to an aging, retiring population.

As outlined in the Population and Housing element (Chapter 6) of this comprehensive plan, Door County currently has an older than average population, which will continue to mature as the younger portion of the population becomes smaller. From a labor market perspective, the implications of declining labor force participation in a growing and aging population point to labor shortages in certain industries and occupations.

Industry and Employment Forecast

Industry and employment projections have been developed for the ten county Bay Area Workforce Development Areas consisting of Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Shawano, and Sheboygan Counties. According to the Wisconsin Department of Workforce Development:

- Overall total non-farm employment in the region will increase by 12 percent or 35,980 new jobs.
- Manufacturing is currently the largest employing industry sector in the region and will remain the largest industry sector through 2012. Although manufacturing jobs will continue to increase, the rate of increase will slow down.
- Occupations in manufacturing are expected to move away from general labor positions to more semi-skilled and skilled operator and technician jobs. This is due primarily to production processes that are more efficient and new available technology.
- The education and health services sector is projected to show the largest numeric employment growth adding 12,620 jobs from 2002 to 2012.
- Goods producing industry sectors including construction, mining, natural resources, and manufacturing will decline slightly from 31 percent total employment to 29 percent by 2012.
- The leisure and hospitality industry will demonstrate strong growth by adding nearly 3,600 new jobs by 2012.

Local Employment Forecast

- From 1990 to 2000, the manufacturing and services industries continued to have the largest share of employment for residents of the Town of Gardner and Door County (Table 7.4). This trend follows the regional trend and is expected to continue for the town and county.
- According to the Wisconsin Department of Workforce Development, there are a number of occupations that will be in great demand by the year 2012 including:

1. Teachers
2. Waiters and Waitresses
3. Machinists
4. Welders, Cutters, Solders, and Braziers
5. Registered Nurses
6. Nursing Aids, Orderlies, and Attendants

ECONOMIC BASE

Revenue by Industry

Table 7.7 provides an overview of how much each industry contributes to the overall Door County economy.

In 1980, the manufacturing industry was Door County's top industry by providing over \$66 million towards the total income of all seven industry sectors. By 2000 the services industry had become the leading industry contributing \$148 million to Door County's economy. The services industry has grown by almost 400 percent followed by the construction industry (341 percent) in the last 20 years.

Table 7.7: Income by Industry Type*, 1980-2000, Door County

Area	1980	1990	2000	Percent Change
Mining	\$1,246	\$345	NA	NA
Construction	\$12,118	\$21,295	\$53,451	341.1%
Manufacturing	\$66,018	\$78,437	\$75,131	13.8%
Transportation and Public Utilities	\$3,853	\$6,671	NA	NA
Trade	\$26,273	\$45,692	\$75,966	189.1%
Services	\$29,920	\$67,495	\$148,269	395.6%
Government	\$18,749	\$40,490	\$58,382	211.4%
Total	\$158,177	\$260,425	\$411,199	160.0%

*Figures in thousands

Source: Wisconsin Department of Commerce 2006; and Bay-Lake Regional Planning Commission, 2007.

Major Employers

Door County boasts a variety of large employers from both the public and private sectors (Table 7.8). The public sector employers include the School District of Sturgeon Bay and Southern Door Public School. The private industries are from a number of different sectors including manufacturing, health, and food services. The size and diversity of these employers provide a solid economic foundation for the county and its many communities. Residents in the Town of Gardner have a number of employment opportunities within the county and its closest metropolitan area, Green Bay.

Table 7.8: Top Ten Employers, 2006, Door County

Establishment	Service or product	(Dec. 2006)
Manitowoc Marine Group	Ship building & repairing	500-999 employe
Door County Memorial Hospital	General medical & surgical hospitals	500-999 employe
County of Door	Executive & legislative offices, combined	250-499 employe
Hatco Corp	Other commercial & service machinery mfg.	250-499 employe
Palmer Johnson Yachts	Boat building	250-499 employe
School District of Sturgeon Bay	Elementary & secondary schools	250-499 employe
Door County YMCA	Civic & social organizations	100-249 employe
Southern Door Public School	Elementary & secondary schools	100-249 employe
Baylake Bank	Commercial banking	100-249 employe
N E W Industries Inc	Machine shops	100-249 employe

Source: DWD, Bureau of Workforce Information, July 2007; and, Bay-Lake Regional Planning Commission, 2008.

Employment by Economic Division

The future of the Town of Gardner requires an understanding of the local and county economies. The Economic Base Analysis technique divides the economy into basic and non-basic sectors.

Basic Sector is made up of local businesses that are dependent on external factors. Manufacturing and local resource-oriented firms depend principally upon non-local factors and usually export their goods.

Non-basic Sector is comprised of those firms that depend largely upon local business conditions.

Location Quotient Analysis

In order to strengthen and grow the local economy, it is important to develop and enhance the basic sector. The Location Quotient analysis technique compares the local economy of Door County, and Wisconsin to the United States (Table 7.9).

The LQ technique is used to identify the basic and non-basic sectors of a local economy. LQs highlight how the balance of employment in a local economy compares to the balance in employment in the region as a whole. The proportion of jobs in each local industrial sector is measured, as a ratio, against its corresponding sector at the regional level.

- If the LQ is less than 1.0, all employment is considered non-basic, therefore that industry is not meeting local demand and implies that the goods or services of that sector are being “imported” into the locale from somewhere else within the region.
- An LQ equal to 1.0 suggests that the local employment is exactly sufficient to meet the local demand for a given good or service, employment is still considered non-basic.
- An LQ greater than 1.0 suggests that local employment produces more goods and services than the local economy can use, therefore these goods and services are exported to non-local areas, which makes them basic sector employment.

Table 7.9: Employment by Industry Group, 2001-2007, Door County and Wisconsin, Location Quotient Analysis

Industry	Door County		Wisconsin	
	2001	2007	2001	2007
Base Industry: Total, all industries				
Agriculture, forestry, fishing and hunting	ND	ND	0.68	0.81
Mining	ND	ND	0.24	0.20
Utilities	ND	ND	1.05	0.96
Construction	1.40	1.13	0.87	0.79
Manufacturing	1.15	1.61	1.60	1.72
Wholesale trade	0.27	0.34	0.94	0.97
Retail trade	1.23	1.13	1.01	0.96
Transportation and warehousing	ND	ND	1.02	1.05
Information	0.41	0.52	0.70	0.79
Finance and insurance	0.59	0.57	1.01	1.04
Real estate and rental and leasing	0.97	0.99	0.61	0.62
Professional and technical services	0.35	0.32	0.61	0.61
Management of companies and enterprises	0.11	0.07	0.76	1.12
Administrative and waste services	0.24	0.37	0.72	0.78
Educational services	0.20	0.20	0.61	0.61
Health care and social assistance	0.84	0.81	1.07	1.06
Arts, entertainment, and recreation	1.79	1.84	0.85	0.88
Accommodation and food services	2.60	2.16	0.96	0.94
Other services, except public administration	1.47	1.51	0.92	0.92
Unclassified	NC	NC	0.47	1.12

(ND) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

(NC) Not Calculable, the data does not exist or it is zero.

Source: U.S. Department of Labor, Bureau of Labor Statistics, 2007; and Bay-Lake Regional Planning Commission, 2007.

Threshold Analysis

Export Base (Basic Employment)

There are seven areas within the 2007 Door County economy that can be considered basic employment areas: Accommodation and food services; Arts, entertainment, and recreation; Other services, except public administration; Manufacturing; Construction; Retail trade; and Real estate and rental and leasing. These seven areas produce more goods and services than the local economy can use. When LQs increase over time, this suggests that the economy is getting closer to reaching and exceeding local demand. For example, manufacturing has gone from 1.15 in 2001, to 1.61 in 2007. Having basic employment typically suggests that if a downturn in the local economy occurs, these sectors will not be strongly affected because they are dependent more on non-local economies. In Door County, this is less true because the strongest basic sectors are service based providing products to a more transient population of tourist. Having strong basic sector employment and industry will strengthen the local economy. At the state level Transportation and Warehousing is also considered a Basic Sector industry.

Non-Basic Employment Industry

Private employment areas that can be considered non-basic include: Health care and social assistance; Information; Finance and insurance; Administrative and waste services; Professional and technical services; Wholesale trade; Educational services; and Management of companies and enterprises. These industries are not meeting local demand for a given good or service. For example, the Professional and Technical Services industry LQ actually decreased 2001 to 2007;

however, the Door County economy could support more of this industry. There is currently no industry with an LQ equal to one to indicate that local demand is being met and services are not being exported.

Community Finances

In order to provide the types and levels of services for the Town of Gardner, it must be able to generate sufficient public revenues. Tables 7.10 and 7.11 provide a history of the taxes levied and collected in the Town of Gardner.

- The town's full value increased by 102 percent for the period 1999 to 2008. The total property tax only increased by 68 percent for the same period.

Table 7.10: Comparative Tax Appropriations, 1999-2008, Town of Gardner.

Year Levied	Full Value	Percent Assm't Level	Total Property Tax	State Tax Credit	Full Value Rate		Taxing Jurisdiction Share				
					Gross	Effective	School	Vocational	County	Local	Other*
1999	\$ 116,350,900	95.48	\$ 1,908,877	\$ 144,915	0.01640	0.01516	\$ 625,176	\$ 84,459	\$ 361,841	\$ 202,249	\$ 11,791
2000	\$ 132,471,800	85.90	\$ 2,118,842	\$ 155,473	0.01599	0.01482	\$ 1,102,068	\$ 184,261	\$ 453,288	\$ 352,731	\$ 26,494
2001	\$ 149,765,800	80.99	\$ 2,439,781	\$ 168,434	0.01629	0.01516	\$ 1,299,675	\$ 242,781	\$ 533,587	\$ 333,786	\$ 29,953
2002	\$ 170,694,300	73.62	\$ 2,779,916	\$ 182,116	0.01628	0.01521	\$ 1,535,963	\$ 276,011	\$ 621,387	\$ 312,417	\$ 34,139
2003	\$ 172,414,500	71.65	\$ 2,725,957	\$ 200,342	0.01581	0.01464	\$ 1,514,462	\$ 269,460	\$ 603,251	\$ 304,302	\$ 34,483
2004	\$ 172,712,200	103.08	\$ 2,685,776	\$ 211,194	0.01555	0.01432	\$ 1,514,298	\$ 264,123	\$ 581,457	\$ 291,355	\$ 34,542
2005	\$ 188,086,700	91.90	\$ 2,675,827	\$ 209,839	0.01422	0.01311	\$ 1,449,532	\$ 281,892	\$ 611,604	\$ 297,518	\$ 35,281
2006	\$ 206,896,400	85.19	\$ 2,767,592	\$ 250,264	0.01337	0.01216	\$ 1,480,927	\$ 303,464	\$ 641,384	\$ 305,484	\$ 36,333
2007	\$ 222,809,900	79.44	\$ 3,092,598	\$ 270,936	0.01387	0.01266	\$ 1,689,172	\$ 326,083	\$ 722,256	\$ 317,274	\$ 37,812
2008	\$ 234,851,900	77.66	\$ 3,215,191	\$ 300,628	0.01369	0.01241	\$ 1,768,888	\$ 347,676	\$ 730,331	\$ 328,440	\$ 39,856

Source: Wisconsin Department of Revenue, City, Village and Town Taxes, for years cited; and Bay-Lake Regional Planning Commission, 2009.

The ability to finance community projects is calculated by general obligation debt capacity. The aggregate amount of indebtedness, including existing indebtedness of any municipality, shall not exceed five percent of the value of the taxable property located in the municipality.

- As of December 31, 2006, the Town of Gardner did not have an existing debt, leaving a debt margin of \$10,344,820 (Table 7.11). This means the town has money to access for future projects to include emergency infrastructure or facilities improvements, if necessary.

Table 7.11: Public Indebtedness, 1998-2007, Town of Gardner.

Year	Full Value	Debt Limit*	Existing	
			Debt	Debt Margin
1998	\$ 106,332,900	\$ 5,316,645	\$ -	\$ 5,316,645
1999	\$ 116,350,900	\$ 5,817,545	\$ -	\$ 5,817,545
2000	\$ 132,471,800	\$ 6,623,590	\$ -	\$ 6,623,590
2001	\$ 149,765,800	\$ 7,488,290	\$ -	\$ 7,488,290
2002	\$ 170,694,300	\$ 8,534,715	\$ -	\$ 8,534,715
2003	\$ 172,414,500	\$ 8,620,725	\$ -	\$ 8,620,725
2004	\$ 172,712,200	\$ 8,635,610	\$ -	\$ 8,635,610
2005	\$ 188,086,700	\$ 9,404,335	\$ -	\$ 9,404,335
2006	\$ 206,896,400	\$ 10,344,820	\$ -	\$ 10,344,820
2007	\$ 222,809,900	\$ 11,140,495	\$ -	\$ 11,140,495

*Debt Limit equals five percent of the full value.

Source: Wisconsin Department of Revenue, Bureau of Local Finance Assistance, Equalized Value and Debt Limit Value, for years cited; and Bay-Lake Regional Planning Commission, 2009.

SITES FOR BUSINESS AND INDUSTRIAL DEVELOPMENT

Existing Site Inventory and Analysis

As a rural town, the town of Gardner has little industry or business. The largest employer in the town is the Southern Door School District.

Evaluation of Environmentally Contaminated Sites for Commercial and Industrial Uses

The WDNR and EPA have been urging the clean up of contaminated commercial or industrial sites so they may be utilized for more productive uses. According to the WDNR list of Leaking Underground Storage Tanks (LUST) sites, the Town has three closed sites as well as one tank site where no action was required (Table 7.12).

Refer to the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the WDNR website <http://www.dnr.state.wi.us/org/aw/rr/brrts/>, or contact the WDNR for more information.

Table 7.12: Contaminated Commercial or Industrial Sites, Town of Gardner.

Status	Activity Number & Name Address Municipality	Type	Juris	County	Region
CLOSED	03-15-102818 BOB & LINDAS LITTLE STURGEON INN 3596 CTH CC GARDNER TN	LUST	DNR	DOOR	NORTHEAST
CLOSED	03-15-152420 LAVIOLETTE PROPERTY 9901 CTH N GARDNER TN	LUST	DCOM	DOOR	NORTHEAST
CLOSED	04-15-549075 JOHN CROKE 9186 CTH K GARDNER TN/ BRUSSELS	SPILL	DNR	DOOR	NORTHEAST
NOACTN	09-15-294360 GOETZ, LUCILLE 3482 HWY CC GARDNER	NAR	DNR	DOOR	NORTHEAST

Source: WDNR, 2008.

Designation of Business and Industrial Development

The Town of Gardner has designated areas in Little Sturgeon and adjacent to Highway 57 as possible future business areas to capitalize on access to the major highway corridors in the town.

Chapter 8 - TRANSPORTATION

INTRODUCTION

This chapter provides an inventory of the existing transportation facilities that serve the Town of Gardner in Door County. The inventory includes descriptions of the various modal elements of the town's transportation system. Those elements are: the town's road and highway system, public transit systems (where applicable), elderly and disabled transportation services, intercity bus, bicycle transportation, water, rail, air, and commercial trucking service. The detailed description of the highway and road system includes the functional classification of roads within the town, traffic counts, traffic flow capacity, vehicle crashes, access controls, and an evaluation of the current internal traffic circulation system.

In addition, this chapter includes an inventory and analysis of applicable transportation plans, including county functional and jurisdictional studies, transportation corridor plans, rural transportation plans, state and local airport plans, state railroad plans, state, regional and local bicycle plans, state and local pedestrian plans, state and local transit plans, as well as any other special transportation plans that are applicable to the town.

WHAT IS IN THIS CHAPTER

- I. Summary
- II. Inventory of Transportation Facilities and Services
 - A. Highways and Roads
 - B. Elderly and Disabled Transportation
 - C. Intercity Bus
 - D. Bicycle Transportation
 - E. Rail Service
 - F. Air Service
 - G. Ports and Marinas
- III. Applicable Transportation Plans
- IV. Transportation Program Funding

SUMMARY

The Town of Gardner seeks to establish a safe and efficient transportation system for motor vehicles, pedestrians, and bicycles that is compatible with the Town's adopted 20 Year Comprehensive Plan through its comprehensive planning program.

The transportation facility inventory conducted for the Town of Gardner has established that the town currently has jurisdiction over and responsibility for approximately 49 miles of local roads. The town's jurisdictional responsibility relative to its local roads includes maintenance, repair and reconstruction of the roads as needed.

INVENTORY OF TRANSPORTATION FACILITIES

HIGHWAYS AND ROADS

There are several basic considerations useful in assessing the road system within a community. Those considerations include the functional classification of the existing road system, the annual average daily traffic on roads within the town, and an evaluation of the system's capability to handle present and projected future traffic volumes. In addition, vehicle crash data is useful in determining problem areas relative to road safety. This information can provide an indication of the road improvements that may be needed during the planning period.

There are slightly more than 49 miles of roads in the Town of Gardner that are under local control. Additionally, the local road system is complimented by 1.25 miles of (four-lane, divided) state highway (STH 57) and nearly 23 miles of road under the county's jurisdiction.

The primary funding source for maintaining, rehabilitating and reconstructing the local road system in the Town of Gardner is local property taxes. The state's disbursement of general transportation aids also provides the town with partial funding for roads from collected revenues of fuel taxes and vehicle registration fees. The state provides a payment of about 30 percent to the town for costs associated with activities such as road and street reconstruction, filling potholes, snow removal, grading shoulders, marking pavement and other transportation related costs.

The town is responsible for maintenance and construction work on the local road system while the Door County Highway Department maintains the county trunk highway system. General maintenance includes: patching, crack-filling and seal-coating of pavement, shoulder maintenance and vegetation control, bridge and culvert maintenance, litter pickup, guard rail installation and maintenance, signage, pavement marking, and traffic control. Winter maintenance includes plowing, shoveling bridges, and application of salt to local roads and county trunk Highways and bridges. In addition, the town and county provide road construction, pavement resurfacing (black-topping), bridge repair, culvert repair and installation, and gravel crushing, as required.

The primary funding source for maintaining, rehabilitating, and reconstructing the local road and county highway system is the state's disbursement of general transportation aids (GTA). This is the program, which provides payments to the counties for costs associated with such activities as road reconstruction, filling potholes, snow removal, and marking pavement.

The Door County Highway Department also provides for the general maintenance of the state highways, under contract with the state. Additionally, the Highway Department provides maintenance and construction work on local roads and streets under agreements with various local municipalities.

Functional Class

Roads, which are the principal component of the circulation system, may be divided into three categories: arterial, collector and local. The three categories of roads are determined by the function that the road serves in relation to traffic patterns, land use, land access needs and traffic

volumes. The road system for the Town of Gardner is shown on Map 8.1 and has been functionally classified based on criteria identified in Table 8.6 in the back of the chapter tables.

Arterial Roads

The function of an arterial road is to move traffic over medium to long distances, often between regions as well as between major economic centers, quickly, safely and efficiently. Arterial roads are further categorized into either “major” or “minor” arterial roads based on traffic volumes. STH 57 is the only arterial road located within the Town of Gardner.

Collector Roads

The primary function of roads classified as “collectors” is to provide general "area to area" routes for local traffic. Collector roads serve to distribute traffic between local and arterial roads, between home and the work place, home and the place of worship, home and school, and between the home and those places where business and commerce are conducted. Collector roads typically serve low-to-moderate vehicle volumes and medium trip lengths between commercial centers at moderate speeds. County Highway C, CTH CC; CTH N and CTH DK (former STH 57) comprise the “collector” road system in the Town of Gardner. Although CTH K is a county highway (and under the jurisdiction of Door County) it is functionally classified as a “local” road. Table 8.1 illustrates the collector roads and mileage for each in the Town of Gardner.

Table 8.1: Road/Highway, Functional Classification and Percent of Total Road Mileage, Town of Gardner, 2008

Highway/Road	Functional Classification	Mileage	Percent of Total
STH 57	Primary Arterial	1.25	1.89
CTH C	Major Collector	6.57	9.92
CTH CC	Minor Collector	2.22	3.35
CTH K	Local	2.66	4.02
CTH N	Minor Collector	4.08	6.16
CTH DK	Major Collector	1.60	2.42
Local Roads		49.07	74.12
Total		66.20	100.00

Source: WisDOT, *Town Plat Record*, 2008; Bay-Lake Regional Planning Commission; 2008.

Local Roads

The primary and most important function of local roads is to provide direct access to land adjacent to the road. Local roads are constructed to serve individual parcels of land and properties. They also tend to serve the ends of most trips within the rural area. All roads that are not classified as arterial or collector facilities within the town are classified as local roads.

Ideally, local roads should be designed to move traffic from an individual lot (more often than not, a person's home, cottage or farm) to collector roads that, in turn, serve areas of business, commerce and employment. Local roads should not be designed or located in such a manner that they would or might be utilized by through traffic.

- In the Town of Gardner, there are 46 local roads that consist of approximately 49 miles. The local roads comprise more than 74 percent of the total road mileage located within the town.

Traffic Counts

An analysis of past and present traffic volumes is beneficial in determining the traffic conditions in a community. Traffic volumes are usually presented as an Annual Average Daily Traffic (AADT) figure, and are calculated for a particular intersection or segment of roadway. In the past, the Wisconsin Department of Transportation, as part of its traffic count program, provided highway traffic volumes from selected highways and roads for all state communities on a rotating basis, providing these counts for a county and each of its communities once every three years. For the Town of Gardner and Door County, traffic volumes were last counted (at a limited number of locations) in 2006, with counts also taken in 2003 and 2001. The daily traffic counts are taken for 48 hours, and are reported as a 24 hour average weekday count for a specific data collection period.

Beginning in 2006, principal arterials and minor arterials over 5,000 AADT will continue to be counted by WisDOT every three years. Minor arterials under 5,000 AADT and collectors over 5,000 AADT will be counted every six years. Collectors under 5,000 AADT are to be counted every ten years. Special counts can be requested for highways where significant projects are planned. These statewide policy changes occurred because of cutbacks in the traffic counting program in 2005.

- For the county trunk “collector” roads in the Town of Gardner, traffic volumes were last counted in 2003 and, prior to that, 2001. The average daily traffic volumes on the roads within the town for those years are listed in Table 8.2, and are shown on Map 8.2. The daily rural traffic counts are taken for 48 hours, and are reported as a 24-hour average weekday count for a specific data collection period.

Table 8.2: Annual Average Daily Traffic, Town of Gardner, 2001, 2003 and 2006

2001-2003					2003-2006		
			2001-2003	Percent	2003-2006		Percent
Annual Average Daily Traffic	2001 No.	2003 No.	No. Change	Change	2006 No.	No. Change	Change
CTH C							
North of CTH K	1,100	910	(190)	(17.27)			
North of Fox Lane	630	920	290	46.03			
East of Lime Kin Road	890	1,000	110	12.36			
East of CTH CC	1,200	1,400	200	16.67			
CTH N							
South of CTH K	230	260	30	13.04			
West of CTH C	120	200	80	66.67			
CTH CC							
North of CTH C	570	760	190	33.33			
STH 57							
Northeast of CT K	7,700	8,400	700	9.09	9,100	700	8.33

Source: Wisconsin Department of Transportation, Wisconsin Highway Traffic Volume Data, 2001, 2003; and 2006 and, Bay-Lake Regional Planning Commission, 2008.

Traffic Flow Capacity

The roads that serve the state, the region and the local community are designed and engineered to accommodate a maximum level of traffic (Table 8.3). The maximum total capacity of a two-lane, two-way highway (such as CTH C, CTH DK, CTH N, CTH CC, and CTH K) under ideal conditions is 2,000 vehicles per hour in each traffic lane, as determined by the Peak Hourly Traffic (PHT), regardless of traffic distribution by direction. The maximum capacity values given in Table 8.3 should be considered as the average maximum volume on various types of roads under ideal conditions.

Table 8.3: Uninterrupted Traffic Flow Capacities Under Ideal Conditions

Highway Type	Capacity Peak Hourly Traffic
Multi-Lane and Divided Highways	2,000 vehicles per lane
Two-Lane, Two-Way Highways	2,000 vehicles both lanes
Three-Lane, Two-Way Highways	4,000 vehicles both lanes

Source: *Highway Capacity Manual*, Highway Research Board of the Division of Engineering and Industrial Research, 1985; Bay-Lake Regional Planning Commission, 2008.

As the comparison of the recorded average annual daily traffic, peak hourly traffic and the traffic flow capacities indicate, at present, there are no roads or road segments located within the town that has approached or appear to be approaching the roads design capacity.

Traffic Crashes

Vehicle crash reports, filed with the Door County Sheriff's Department and also with the Wisconsin Department of Transportation, provide the detail of the time, location, type and severity of the accident that has occurred. These reports are often excellent indicators of problems with road alignments, roadway construction, and geometric design of the road. The number, location and severity of accidents can often indicate problem areas (in terms of traffic safety) which may be alleviated through a variety of measures. Alterations in the road geometry, enlargement of the intersection turning radii, and placement of more prominent signs, relocation of access drives and speed changes are just a few of the physical alterations and adjustments that can be made to make a specific intersection or area safer.

Table 8.4: Vehicle Crashes by Crash Type, Town of Gardner, 2006 and 2007

Crash Type (2006 and 2007)	Percent of Total	
	Number	Crashes
Deer	47	61.8
Ditch	5	6.6
Embankment	1	1.3
Mailbox	3	3.9
Other Animal or Object	2	2.6
Overtaken	2	2.6
Pedestrian	1	1.3
Parked Vehicle	2	2.6
Traffic Sign	1	1.3
Tree	2	2.6
Utility Pole	1	1.3
Other Vehicle(s)	9	11.8
Total Crashes	76	100.0

Source: Wisconsin Department of Transportation, 2008; Bay-Lake Regional Planning Commission, 2008

Crash Severity

Of the 76 crashes reported in the Town of Gardner in 2006 and 2007, there was one head on crash that resulted in a fatality. Additionally, a total of 20 persons were injured in 15 of the reported crashes. Sixty one of the crashes (approximately 80 percent of the total crashes reported) resulted in property damage to vehicles only.

Access Controls

Access management is a means to maintain the safe and efficient movement of traffic along arterial highways by controlling the number and location of intersecting roads and driveways. State statutes allow counties, cities and villages (through an adopted ordinance) to control access on county highways that have traffic counts in excess of 1,000 vehicles daily.

- Door County does not have nor does it plan to adopt a Controlled Access Ordinance at this time.

Driveway Permits

Driveways to local roads and streets may impair vehicle safety if improperly sited and/or designed. The town of Gardner issue permits for all new driveways, including the size and location of culverts and the size and design of driveways under its Highway Design Standards Ordinance.

Door County has a Uniform Addressing Ordinance which gives the Door County Planning Department authority to assign new addresses and to oversee the naming of roads in all unincorporated areas, including the town of Gardner. The appropriate municipality should be contacted for further information.

Elderly and Disabled Transportation System

Door County Transportation Consortium

The impetus for starting the Door County Transportation Consortium came when the Door County Community Foundation instituted its Community Impact Grant program. The Foundation sent out requests for applications from community nonprofits, seeking projects which would have a significant and positive impact on those who live in and visit Door County. The projects were to be beyond the usual scope of the applying nonprofit, collaborative with other community organizations, be creative, and cross disciplinary. The Door County Community Foundation provided the initial funds for these projects.

The United Way of Door County answered the call. Their needs assessments of 1998 and 2005, and focus groups formed in 2006 all indicated that lack of transportation services was the most significant need for Door County. A transportation steering committee made up of nonprofits, for-profits, and government agencies was formed. That committee determined that there are plenty of vehicles and drivers available. However, they are not coordinated and are not capable of adequately communicating with each other.

Under the direction of the steering committee, the Door County Transportation Consortium was formed. Its task was to form a communication and coordination center. Transportation needs will be filled if the current available services can provide them. Unmet needs will be recorded and evaluated, surveys will be completed. To date, forty-three members have signed on. The membership is made up of nonprofit providers, for-profit providers, nonprofits, businesses, and government agencies.

In October 2007, the Door County Transportation Consortium (DCTC) launched Door-Tran, a transportation information and referral call center/clearinghouse. Since Door-Tran's implementation, over 170 calls have been received. A part-time Mobility Manager operated this phone system funded by the Door County Community Foundation and later became full-time and funded by WisDOT with New Freedom funds. The Mobility Manager refers callers to providers who may be able to meet their needs based on affordability, availability and accessibility. Any unmet needs continue to be tracked and are being used to research and implement transportation services in the future to meet unmet needs.

DCTC and University of Wisconsin - Green Bay Social Work program partnered to develop and implement a survey instrument which was mailed to 13,000 Door County Residents in November 2007. These results were released in March 2008. The results of the survey recognized that respondents were willing to share a ride for a fee or to car pool. DCTC continues to review these results and base some future services on this.

With fuel costs continuing to rise, DCTC will be encouraging people to car pool. By October 2008, car pool marketing materials will be available to the public with the option of Door-Tran staff to assist residents to find car pool match options that may be available to them.

Lack of affordable transportation is something that was apparent in the UW-Green Bay survey as well as Door-Tran clearinghouse tracking. DCTC is currently soliciting for funding to begin a voucher system as early as November 2008 and will be requesting WisDOT funds to continue this system through 2009 and beyond. This program will allow any resident of Door County to

purchase vouchers at half the cost, therefore allowing them to take a ride with an approved provider for half price. The provider will be reimbursed through transportation funds obtained.

The Consortium is currently researching the possibility of implementing a fixed route system with priority stops within the city of Sturgeon Bay. Riders from rural areas would be able use other providers to get into the city and then use the fixed route system.

The above mentioned vouchers would be available for these services.

Ongoing goals for DCTC are:

- Continue fundraising and grant writing to make transportation affordable in Door County
- Continue marketing efforts to make people aware of Door-Tran
- Continue to seek members for DCTC
- Maintain staffing with full time Mobility Manager
- Increase staffing with the addition of a part time program assistant

At this time, DCTC is working on Door-Tran becoming a 501(c)(3) entity. The Door County Community Foundation will be funding this project and the process. It is planned that Door-Tran will be a 501(c)(3) by August 2009.

Door County Senior Resource Center Bus Service

The Senior Resource Center provides service with a 12-passenger 2 (two-wheelchair) bus and paid staff. Service is provided by the Door County Senior Resource Center. Door to door service is provided in Sturgeon Bay on Monday, Wednesday, Thursday and Friday; and in northern portions of the county on Tuesdays.

Ride request are made through the Resource Center. Any persons 55 years old or older are eligible for service. Co-payments of \$1.00 are requested in Sturgeon bay and \$4.00 per trip from southern and northern Door County. The fare is waived if a hardship exists.

Sunshine House

The Sunshine House Inc. provides employment and social services for citizens with special needs and/or disabilities. Services that are offered include personal care, transportation, work services, supported employment and activities. The organization's history has been one of increasing services to its growing constituent population. In 1971, a group of concerned Door County citizens founded Sunshine House and offered services to eight people with special needs. Today services are provided to 70 people. Fixed route transportation services are provided on a daily basis (door-to-door) with seven wheelchair accessible vehicles.

Red Cross Transportation

Red Cross of Door County – Lakeland Chapter provides door-to-door, on-demand service with volunteer drivers. Six vehicles including two wheelchair accessible vans (four cars) provide the service. In addition to in-county trips, trips are also made to the City of Green Bay twice weekly. Passengers (60-years old or older and persons with disabilities) are eligible for service. Fares range between \$4.00 per round-trip per person in the Sturgeon Bay area, \$8.00 per person in Door County and \$25.00 per person (round-trip) to Green Bay. Rides are also available to

Milwaukee and Cleveland, Wisconsin. No persons are denied access if they are unable to pay the fare.

Intercity Bus

In the past, nearly every small community in the state was connected by an intercity bus service which traditionally served the elderly, those who could not drive, students, and those individuals unable to afford alternative forms of transportation. Following World War II, intercity bus systems helped to fill a void for “affordable transportation” that was created by the decline of passenger rail service. Unfortunately, intercity bus service suffered the same fate as passenger rail; as intercity bus ridership decreased, the number of intercity bus routes operating within the state also declined drastically. Today, intercity bus routes tend to serve only the largest urban centers and those smaller urban areas that just happen to be adjacent to a route that connects two larger cities.

The nearest intercity bus service to the Town of Gardner is in the City of Green Bay with service provided to Milwaukee and Chicago, Madison, and Minneapolis/St. Paul.

Bicycle Transportation System

There are no bicycle paths or marked bicycle routes located within the Town of Gardner. The state bicycle plan did however; assess conditions for bicycling in Door County and has developed county-level maps that identify “bicycling conditions” on all county highways and other state and interstate highways (Map 8.3).

These county maps come from the Wisconsin State Bike Map. Each county map highlights the most favorable bicycling conditions while presenting the full continuum of roadways - from narrow town roads to US Highways. This approach enables cyclists of all abilities to select their own routes to meet their individual transportation and recreational needs.

- In the Town of Gardner, CTH N, CTH CC and CTH K are classified to have the “Best Conditions for Bicycling.” CTH C is classified as having “Moderate Conditions for Bicycling”. STH 57 is determined to have “Unsuitable Conditions for Bicycling”.
- Local roads were not assessed as part of this process and are generally considered to have suitable conditions for bicycling.

Rail Service

There are no rail services located within the Town of Gardner. The nearest rail service to the town is located in the village of Luxemburg in Kewaunee County and at Green Bay in Brown County. The village of Luxemburg is serviced by the Canadian National Rail Company and the city of Green Bay is serviced by the Escanaba & Lake Superior and the Canadian National rail companies.

Air Transportation

The inventory of air transportation systems and facilities includes both public airports that service the region and also the private or semi-public airport facilities that service private commercial and recreational interest.

In the Town of Gardner, there is no air transportation facility. However, there are 6 private or semi-public airport facilities in the county (Table 8.6).

There are four public-use airports that service the region, three of which are located in Door County: Door County Cherryland, Ephraim-Gibraltar, and Washington Island. The fourth, Austin-Straubel International, is located near the City of Green Bay.

Door County Cherryland Airport, owned and maintained by the County of Door, is located on a 402-acre parcel one mile west of the City of Sturgeon Bay along Park Road and CTH C. The airport is classified as a Transport/Corporate airport, serving corporate jets, small passenger and cargo jet aircraft used in regional service, and small airplanes (piston or turboprop) used in commuter air service. These aircraft generally have a gross takeoff weight of less than 60,000 pounds, with approach speeds below 141 knots and wingspans of less than 118 feet. In Wisconsin, airports in this category normally have a primary runway length of 4,800 – 6,800 feet.

Cherryland's existing airfield configuration consists of two runways. Runway 2/20 is the primary runway with a length of 4,600 feet. Runway 10/28 serves as a secondary or crosswind runway with a length of 3,200 feet. Both runways have medium-intensity runway lights, four unit precision approach path indicators, and runway-end identification lights. Cherryland's primary runway length of 4,600 feet and pavement strength ratings -- 16,000 pounds single-wheel and 22,000 pounds dual-wheel -- restrict the size and types of aircraft able to safely use the airport. A feasibility study was conducted by the airport in 2003 regarding lengthening the east/west runway, but the proposal was met with great opposition.

The Airport Director and staff, the Fixed Base Operator (FBO), and Avis Car Rental Agency occupy the 2,600 square foot terminal. Orion Flight Services is the fixed-base operator offering aircraft charter services. Services provided at the airport include aircraft maintenance, flight instruction, scenic air rides, charter services, and fueling (7 a.m. – 4 p.m.). The tie-down area has 33 paved tie-downs, with additional space available. There are a total of 60 hangar buildings on the airport property, with sizes ranging from 100' x 120 to 42' x 32'. There is no scheduled passenger service and none likely in the future due to security requirements put in place by the Federal Aviation Administration for all airports since September 11, 2001. The terminal does not have a flight planning area and does not have 24-hour accessibility to fuel.

Ephraim-Gibraltar Airport is owned and maintained by the Village of Ephraim and the Town of Gibraltar. The airport is located on Maple Grove Road in the north central portion of the Town of Gibraltar. It is classified as a Basic Utility-A airport facility designed to accommodate aircraft of less than 12,500 pounds gross weight, with approach speeds below 121 knots and wingspans of less than 49 feet. Such aircraft can be either single-engine or twin-engine piston. The facility has one 2,700-foot asphalt runway and one 2,364-foot turf runway.

This airport has a 330 square-foot building, car rental service, car parking, aviation fueling, and airport management services. Vehicle parking facilities are available at 20 short-term and 23 long-term spots. The site has 16 hangars and parking for 24 airplanes (16 on pavement and 8 on grass). There are currently 15 people on a waiting list for hangar space.

Washington Island Airport is owned by the Town of Washington and located on Airport Road in the northwest portion of the Island. It is classified as a Basic Utility-A airport designed to accommodate aircraft of less than 6,000 pounds gross weight, with approach speeds below 91 knots and wingspans of less than 49 feet. Such aircraft are typically single-engine piston and typically seat two to six people. The facility has one 2,230-foot turf runway and one 1,300-foot turf runway. No fuel service is available.

Austin-Straubel International Airport is owned by Brown County and located on Airport Drive, just west of the City of Green Bay. It is classified as an Air Carrier/Cargo airport, designed to accommodate virtually all aircraft including wide body jets and large military transports. The airport has two concrete runways with lengths of 8,701 feet and 7,700 feet. Austin Straubel is currently served by four passenger airlines serving five destinations: Chicago, Illinois; Detroit, Michigan; Marquette, Michigan; Milwaukee, Wisconsin; and Minneapolis, Minnesota. The Door County-Green Bay Shuttle provides year-round transportation between Austin-Straubel Airport and Door County.

Table 8.5: Private/Semi-public Airport Facilities, Door County

Name	Location
Door County Cherryland Airport	Sturgeon Bay West
Door County Memorial Hospital Heliport	Sturgeon Bay East
Foscoro Airport	Forestville
Ephraim-Fish Creek Airport	Ephraim
Hill Road Airport	Sister Bay
Washington Island Airport	Washington Island NW

Source: Door County, 2007; Bay-Lake Regional Planning Commission, 2008

Harbors and Marinas

There are no commercial harbors or publicly owned recreational marinas located within the Town of Gardner. The closest commercial harbor to the Town of Gardner is located in the City of Sturgeon Bay.

Trucking

There are no commercial trucking terminals located within the Town of Gardner.

INVENTORY AND ANALYSIS OF APPLICABLE TRANSPORTATION PLANS AND PROGRAMS

The following section of this chapter presents information on existing state, regional, county, and local transportation related plans that apply within the town.

Wisconsin State Highway Plan

The Wisconsin State Highway Plan 2020 states that, “Wisconsin's State Trunk Highway system, consisting of approximately 11,800 miles of roads, is aging and deteriorating at the same time traffic congestion is increasing.” In response to this critical issue, WisDOT, in partnership with its stakeholders, has developed the *State Highway Plan 2020*, a 21-year strategic plan which considers the highway system's current condition, analyzes future uses, assesses financial constraints and outlines strategies to address Wisconsin's preservation, traffic movement, and safety needs. The plan will be updated every six years to reflect changing transportation technologies, travel demand and economic conditions in Wisconsin.

The *Wisconsin State Highway Plan 2020* addresses three key elements or issues of concern relative to the State Highway System:

- Preserving the system by improving or replacing aging pavements and bridges,
- Facilitating movement of people and goods through an efficiently designed system, and with programs that reduce traffic congestion; and
- Improving highway safety through combined strategies of engineering, education and enforcement.

Six-Year Highway Improvement Plan

The Wisconsin Department of Transportation develops a *Six-Year Highway Improvement Plan* which addresses the *rehabilitation* of Wisconsin's state highways. Rehabilitation falls into three major categories (*resurfacing, reconditioning and reconstruction*) giving it the often used abbreviation 3-R Program.

- *Resurfacing* entails provision of a new surface for a better ride and extended pavement life.
- *Reconditioning* entails addition of safety features such as wider lanes, or softening of curves and steep grades.
- *Reconstruction* entails complete replacement of worn roads, including the road base and rebuilding roads to modern standards.

State Airport Plans

The Wisconsin State Airport System Plan 2020 (SASP 2020) provides a framework for the preservation and enhancement of the system of public-use airports adequate to meet current and future aviation needs of Wisconsin. The plan determines the number, location and type of aviation facilities required to adequately serve the state's aviation needs over a 21-year planning

period, 2000 through 2020. The plan defines the State Airport System and establishes the current and future role of each airport in the system.

Wisconsin State Railroad Plans

Due to the increased utilization of inter-modal shipment of goods, manufacturers can locate virtually anywhere within a short driving distance of a rail facility and still benefit from the reduced costs afforded by rail transportation.

State, Regional and Local Bicycle Plans

State Bicycle Plan

The *Wisconsin Bicycle Transportation Plan 2020* has as its two primary goals

- Increase levels of bicycling throughout Wisconsin, doubling the number of trips made by bicycles by the year 2010 (with additional increases achieved by 2020).
- Reduce crashes involving bicyclists and motor vehicles by at least 10 percent by the year 2010 (with additional increases achieved by 2020)

Recommended actions include 1) developing local bicycle transportation plans; 2) providing suitable space for bicyclists when designing roadway projects; 3) following accepted bikeway guidance and standards; and 4) routinely considering bicyclists when developing roadway projects. The Wisconsin Department of Transportation produced a set of maps that identified bicycle conditions on major routes and roads for Door County. The maps assessed and identified bicycling conditions, planned state highway priority corridors and key linkages between major destination points.

Regional Bicycle Plan

The *Bicycle Facility Transportation Plan for the Bay-Lake Region (adopted 2002)* identified a system of connecting routes and needed improvements connecting all municipalities and major destination points throughout the eight-county region including Door County and the Town of Gardner. The regional plan proposes transportation facility improvements (paving road shoulders to a width of four or five feet) to provide safe and efficient travel paths between communities located within Door County and the adjoining communities in Brown and Kewaunee counties. In the Town of Gardner the regional plan recommends paving road shoulders (four to five feet in width) on CTH DK, CTH C, CTH CC and CTH N.

TRANSPORTATION FUNDING AND TECHNICAL SUPPORT PROGRAMS

The following are a brief description of transportation related funding programs that are administered by the Wisconsin Department of Transportation (WisDOT). The programs are divided into two categories: 1) formula driven programs for which funding is based on population and/or road mileage; and 2) competitive funding programs.

Wisconsin Department of Transportation

General Transportation Aid (GTA)

Town road improvements, construction and maintenance is funded, in part, through the state's disbursement of general transportation aids. The state provides a payment to each county and municipality in the state that pays a portion of local governments' costs for such activities as road and street reconstruction, filling potholes, snow removal, grading shoulders, marking pavement, and repair of curb and gutters. The statutory "rate per mile" is \$1,825 for 2004. Beginning in 2000, each municipality was required to establish and administer a separate segregated account from which moneys may be used only for purposes related to local highways and must deposit into that account all state or federal money for local highway purposes.

Local Mileage Certification

Each local government that increased or decreased the mileage of its roads is required to file a certified plat with DOT by December 15 of each year. Local governments that have no changes in total local road miles are required to file a certified plat or a certified statement that no mileage increases have occurred. Beginning in 2001, the requirement for local governments to file certified plats with county clerks is eliminated and the mileage certification process was changed from an every other year activity to an annual activity. State GTA payments is based on the certified mileage of each local unit of government.

Local Roads Improvement Program (LRIP)

This program provides funding to local units of government for the costs associated with improving seriously deteriorating county highways, town roads, and municipal streets in cities and villages under the authority of the local unit of government. Projects are required to have a minimal design life of 10 years. This a biennial program and all funds are distributed the first year. Applications are submitted through the county highway commissioners by November 15 of the odd numbered years.

There are three entitlement components for funding road improvements: 1) County Highway Improvement component (CHIP); 2) Town Road Improvement component (TRIP); and 3) cities and villages under Municipal Street Improvement component (MSIP).

In addition LRIP funds three statewide discretionary programs; CHIP-D County Highway Discretionary Improvement Program; 2) Trip-D Town road Discretionary Improvement Program; and 3) MISP-D Municipal Street Discretionary Improvement Program for cities and villages.

All LRIP projects are locally let, with up to 50 percent of the costs reimbursed by WisDOT upon completion, and the remainder matched by the local unit of government. Eligible projects

include, but are not limited to design and feasibility studies, bridge replacement or rehabilitation, reconstruction, and resurfacing. Ineligible projects include, but are not limited to new roads, seal coats, ditch repair, and/or curb and gutter construction.

Local Bridge Program

This program includes two separate programs 1) a statewide local bridge entitlement program and 2) a high cost local bridge program (high cost bridges are those that cost more than \$5 million and exceed 475 feet in length).

This program funds 80 percent of project costs to replace and rehabilitate structures on the Federal Bridge Register in excess of 20 feet. Bridges with sufficiency ratings less than 50 are eligible for replacement and those with sufficiency ratings less than 80 are eligible for rehabilitation.

Counties set priorities for funding within their area, with projects funded on a statewide basis.

Local bridge projects are solicited by local WisDOT transportation office (District 3) staff in winter of the odd numbered years, with program approval in summer of the odd numbered years. The program has a three-year cycle.

Flood Damage Aids

This program provides local governments with financial assistance for replacing or improving roads or roadway structures that have had major damages caused by flooding.

County Forest Aid Program

This program provides assistance to counties that have eligible roads located within county forests. It is intended to defray the costs for the improvement and maintenance of public roads within a county forest.

Rural and Small Urban Area Public Transportation Assistance Program - Section 5311

Allocations to the State are set at the federal level. Funds may be used for operating assistance, and capital assistance. Eligible public transportation services include public transportation service operating or designed to operate in non-urbanized areas (a non-urbanized area is one that has a population of 50,000 or less).

Specialized Transportation Assistance Program for Counties - Section 85.21

Allocations under this formula program are based upon the proportion of the state's elderly and disabled population located in each county, subject to two minimums: no county can receive less than a ½ percent of the total annual appropriation; and no county can receive an allocation smaller than they received in 1992. A local match of 20 percent is required.

Eligible expenditures include:

- Directly provided transportation service for the elderly and disabled;
- Purchase of transportation service from any public or private organization;

-
- A user-subsidy for the elderly or disabled passenger for their use of the transportation service;
 - Volunteer driver escort reimbursement;
 - Performing or purchasing planning or management studies on transportation;
 - Coordinating transportation services;
 - Performing or purchasing in-service training relating to transportation services; and/or
 - Purchasing capital equipment (buses, vans, etc.) for transportation services.

The following provides a brief description of competitive (transportation related) grant programs that are federally and state funded:

Local Transportation Enhancement Program (TE)

Administered by WisDOT the TE program provides funding to local governments and state agencies for projects that enhance a transportation project. There are 12 eligible project categories;

- Providing facilities for bicycles and pedestrians;
- Providing safety and educational activities for pedestrians and bicyclists;
- Acquiring scenic easements and scenic or historic sites;
- Sponsoring scenic or historic highway programs; including the provision of tourist and welcome centers;
- Landscaping and other scenic beautification;
- Preserving historic sites;
- Rehabilitating and operating historic transportation buildings and structures;
- Preserving abandoned railway corridors;
- Controlling and removing outdoor advertising;
- Conducting archaeological planning and research;
- Mitigating water pollution due to highway runoff or reducing vehicle caused wildlife mortality; and
- Establishing transportation museums.

Federal funds will cover up to 80 percent of the project, while the project sponsor is responsible for providing at least a 20 percent match.

Surface Transportation Program - Discretionary (STP-D)

This program encourages projects that foster alternatives to single occupancy vehicle trips. Such as rehabilitation and purchase of replacement vehicle for transit systems, facilities for pedestrians and bicycles, system-wide bicycle planning, and a wide range of transportation

demand management (TDM) projects. Communities over 5,000 are eligible to apply for the funds through the competitive application process.

Transportation Demand Management Programs

Transportation Demand Management consists of policies and programs designed to reduce the number of single occupant vehicles (SOV) trips in a region, especially during peak travel periods. There are two grant programs: TDM Grant Program; and Wisconsin Employment Transportation assistance Program (WETAP).

- *TDM Grant Program* - The TDM Grant program provides funding to successful grant recipients to implement projects that encourage innovative solutions and alternatives to reducing SOV trips. WisDOT accepts applications annually. Eligible applicants may include local governments, chambers of commerce, and others as defined by the program. The required local match is 20 percent of the project costs.
- *Wisconsin Employment Transportation Assistance Program (WETAP)* - As a joint program between the Wisconsin Department of Workforce Development (DWD) and WisDOT, it provides funding to help low-income people access, or retain or advance in employment with the goal of meeting the entire population's transportation needs. This program is funded with combined federal and state dollars, and requires a local match.

Application requirements include the development of regional job access plans that identify the need for transportation services and illustrate the alternatives proposed for the program. Plans should be developed between public transit providers, local units of government, transportation planners, human service agencies, low-income individuals and other interested parties

Transportation Economic Assistance (TEA Grant) Program

This program provides a 50 percent state grant to governing bodies, private businesses, and consortiums for road, rail, harbor and airport projects that are necessary to help attract employers to Wisconsin, or to encourage business and industry to remain and expand in Wisconsin.

Table 8.6: County Certified Mileage List, January 1, 2008, Town of Gardner

Road Name	Gross Miles	County Miles	Municipal Miles	County Jurisdiction			Municipal Jurisdiction		
				Arterial	Collector	Local	Arterial	Collector	Local
Apple Tree Rd	0.37		0.37						0.37
Bay Rd	0.24		0.24						0.24
Big Rock Pl	0.14		0.14						0.14
Bonis Pl	0.10		0.10						0.10
Brush Rd	0.50		0.50						0.50
Brussels Rd	1.50		1.50						1.50
Cedar Ln	2.00		2.00						2.00
Charleys Rd	0.46		0.46						0.46
Circle Ridge Rd	3.06		3.06						3.06
Claflin Rd	0.53		0.53						0.53
CTH C	8.92	8.92			8.92				
CTH CC	2.22	2.22			2.22				
CTH K	6.92	6.92				6.92			
CTH N	4.88	4.88			4.88				
Debroux Rd	0.72		0.72						0.72
Elm Ln	1.00		1.00						1.00
Four Corners Rd	2.09		2.09						2.09
Fox Ln	2.89		2.89						2.89
Garden Bluff Rd	0.56		0.56						0.56
E Gardner Rd	1.26		1.26						1.26
Gravel Pit Rd	1.06		1.06						1.06
Hickory Hill Ln	0.26		0.26						0.26
Hilly Ridge Rd	1.00		1.00						1.00
Joannes Rd	0.06		0.06						0.06
Kluth Rd	0.50		0.50						0.50
Landing Rd	0.09		0.09						0.09
Lime Kiln Rd	3.31		3.31						3.31
Lovers Ln	3.30		3.30						3.30
Maple Ln	0.50		0.50						0.50
Meadow Lark Rd	0.75		0.75						0.75
Pickeral Rd	1.12		1.12						1.12
Pine Ln	1.51		1.51						1.51
Polish Ln	0.12		0.12						0.12
Poplar Ln	0.95		0.95						0.95
Rileys Bay Rd	2.97		2.97						2.97
Rileys Point Rd	0.83		0.83						0.83
Robillard Rd	0.25		0.25						0.25
School Ln	0.51		0.51						0.51
Scrub Oak Rd	0.42		0.42						0.42
Squaw Island Rd	0.82		0.82						0.82
Stevenson Pier Rd N	2.36		2.36						2.36
Stevenson Pier Rd S	4.45		4.45						4.45
Sugar Creek Dr	0.26		0.26						0.26
Tornado Rd	0.50		0.50						0.50
Twin Harbor Rd	0.16		0.16						0.16
Wells Ln	0.22		0.22						0.22
White Star Rd	2.43		2.43						2.43
Wilcox Rd	0.13		0.13						0.13
Willow Rd	0.11		0.11						0.11
Wood Lane Rd	0.70		0.70						0.70
Total Miles	72.01	22.94	49.07	0.00	16.02	6.92		0.00	49.07

Source: Wisconsin Department of Transportation, 2008.

Table 8.7: Functional Classification Criteria for Streets and Highways in Rural Areas

RURAL PRINCIPAL ARTERIALS					
Basic Criteria				Supplemental Criteria	Mileage Percent of System Range
Must meet any two of the criteria below				None	2.0% to 4.0% statewide
Population Service*	Land Use Service	Spacing	Current ADT		
Connect places $\geq 50,000$ with other places $\geq 50,000$ Connect places 5,000 - 49,999 with places $\geq 50,000$	Provide access to major recreation areas of the state.	Maximum: 30 miles between Principal Arterials	$\geq 6,000$		
*A place is considered served by a principal arterial if the principal arterial either penetrates its boundary or comes within 10 miles of the center of the place and penetrating service is provided by a minor arterial.					
RURAL MINOR ARTERIALS					
Basic Criteria				Supplemental Criteria	Mileage Percent of System Range
Must meet any two of the criteria below				Must meet both of the criteria below plus 90% of Current ADT	4.0% to 8.0% statewide
Population Service*	Land Use Service	Spacing	Current ADT		
Connect places 1,000 - 4,999 to places $\geq 50,000$ Connect places 5,000 - 49,999 to other places 5,000 - 49,999 Connect places 1,000 - 4,999 to places 5,000 - 49,999, or with principal arterials	Serve all traffic generating activities with an annual visitation of 300,000, if not served by a principal arterial.	Maximum: 30 miles between Arterials	$\geq 2,000$	1. Alternate population connection 2. Major river crossing/ restrictive topography	
*A place is considered served by a minor arterial if the minor arterial either penetrates its boundary or comes within two miles of the center of the place and a major collector provides penetrating service.					

Table 8.7: Functional Classification Criteria for Streets and Highways in Rural Areas (cont.)

RURAL MAJOR COLLECTORS*					
Basic Criteria				Supplemental Criteria	Mileage Percent of System Range
Must meet any two of the criteria below or the Parenthetical Current ADT Alone				Must meet two of the criteria below plus 90% of Current ADT	
Population Service**	Land Use Service	Spacing	Current ADT***		
Connect places 1,000 - 4,999 to other places 1,000 - 4,999	Land Use Service Index ≥ 16 .	Maximum: 10 Miles between Major Collectors or Higher Function Routes	$\geq 1,000$ ($\geq 4,000$)	1. Alternate population connection 2. Major river crossing 3. Restrictive topography 4. Interchange with a freeway 5. Parallel to a principal arterial	5.0% to 18.0% countywide Most counties should be at 7.0% to 14.0%
Connect places 500 - 999 to places $\geq 50,000$					
Connect places 500 - 999 to places 5,000 - 49,999					
Connect places 500 - 999 to places 1,000 - 4,999					
Connect places 500 - 999 to other places 500 - 999					
Connect places 100 - 499 to places $\geq 50,000$					
Connect places 100 - 499 to places 5,000 - 49,999					
Connect places 100 - 499 to places 1,000 - 4,999					
Connect places 100 - 499 to places 500 - 999, or with higher function routes					
*Loop routes and stub ended routes less than five miles long and meeting the basic criteria for a major collector should be limited to a minor collector classification. **A place is considered served by a major collector if the major collector comes within a half mile of the center of the place. ***The roadway or highway segment must be a minimum of a half mile long.					

Table 8.7: Functional Classification Criteria for Streets and Highways in Rural Areas (cont.)

RURAL MINOR COLLECTORS					
Basic Criteria				Supplemental Criteria	Mileage Percent of System Range
Must meet any two of the criteria below or the Parenthetical Current ADT Alone				Must meet two of the criteria below plus 90% of Current ADT	
Population Service*	Land Use Service (served if within one half mile of place)	Spacing	Current ADT**		
Connect places 100 - 999 to other places 100 - 999	Land Use Service Index ≥8	Maximum: 10 Miles between Minor Collectors or Higher Function Routes	≥400 (≥1,600)	1. Alternate population connection 2. Major river crossing 3. Restrictive topography 4. Interchange with a freeway 5. Parallel to a principal arterial	5.0% to 10.0% countywide
Connect places 50 - 99 to places ≥50,000					
Connect places 50 - 99 to places 5,000 - 49,999					
Connect places 50 - 99 to places 1,000 - 4,999					
Connect places 50 - 99 to places 500 - 999					
Connect places 50 - 99 to places 100 - 499, or with higher function routes					
*A place is considered served by a minor collector if the minor collector comes within a half mile of the center of the place.					
**The roadway or highway segment must be a minimum of a half mile long.					
RURAL LOCAL ROADS					
All public roads not classified as arterials or collectors.			65.0% to 75.0% countywide		
			Most counties should be at 68.0% to 72.0%		
Source: Wisconsin Department of Transportation, <i>Functional Classification Criteria</i> , 2003; and Bay-Lake Regional Planning Commission, 2006.					




Table 8.8: Crashes, Town of Gardner, 2006 and 2007

Crash Date	On Highway	Intersection or Nearest Intersecting Highway	Intersection Direction	Intersection Distance	Crash Type	Manner of Collision	Fatalities	Injured
1/14/2006	CEDAR LN	STH 57	N	50	Deer	NO	0	0
7/9/2007	CEDAR RD	CTH DK	N	20	Deer	NO	0	0
6/3/2006	CTH C	CTH N	N	20	Ditch	NO	0	0
8/11/2006	CTH C	CIRCLE RIDGE RD		0	Utility Pole	NO	0	0
10/23/2006	CTH C	CTH K	N	50	Deer	NO	0	0
12/7/2006	CTH C	STEVENSON PIER RD	E	20	Deer	NO	0	0
1/21/2007	CTH C	LIME KILN RD	E	25	Mailbox	NO	0	0
1/29/2007	CTH C	CTH CC	W	20	Deer	NO	0	0
2/8/2007	CTH C	RILEYS BAY RD	W	100	Other Object	NO	0	0
5/11/2007	CTH C	KLUTH RD	W	20	Deer	NO	0	0
5/21/2007	CTH C	RILEYS BAY RD		0	Tree	NO	0	1
6/9/2007	CTH C	CTH CC	E	20	Other Vehicle(s)	HEAD	0	3
7/14/2007	CTH C	FOX LN	S	10	Deer	NO	0	0
8/11/2007	CTH C	CIRCLE RIDGE RD	S	1	Other Vehicle(s)	HEAD	1	2
8/22/2007	CTH C	KLUTH RD	W	10	Mailbox	NO	0	1
10/9/2007	CTH C	LIME KILN RD		0	Deer	NO	0	0
10/22/2007	CTH C	KLUTH RD	E	20	Deer	NO	0	0
10/30/2007	CTH C	CTH N	S	50	Deer	NO	0	0
11/8/2007	CTH C	MEADOW LARK RD	S	1	Deer	NO	0	0
11/9/2007	CTH C	PINE LN	W	10	Deer	NO	0	0
11/11/2007	CTH C	PICKERAL RD	E	10	Deer	NO	0	0
12/12/2007	CTH C	STEVENSON PIER RD N	W	10	Deer	NO	0	0
12/29/2007	CTH C	CTH K	S	2	Tree	NO	0	1
7/14/2006	CTH CC	POLISH LN	N	10	Deer	NO	0	0
3/5/2007	CTH CC	CTH C	N	20	Ditch	NO	0	1
6/25/2007	CTH CC	CIRCLE RIDGE RD	S	10	Deer	NO	0	0
7/3/2007	CTH CC	WILLOW RD	N	10	Deer	NO	0	0
7/4/2007	CTH CC	POLISH LANE	N	0	Mailbox	NO	0	0
10/23/2007	CTH CC	CIRCLE RIDGE RD	S	10	Other Animal or Object	NO	0	0
11/3/2007	CTH CC	CIRCLE RIDGE RD		0	Pedestrian	NO	0	1
11/28/2007	CTH CC	CTH C	N	100	Deer	NO	0	0
12/15/2007	CTH CC	LIME KILN RD	S	10	Deer	NO	0	0
12/30/2007	CTH CC	POLISH LN	N	1	Deer	NO	0	0
9/28/2007	CTH DK	SCHOOL RD		0	Other Vehicle(s)	ANGL	0	1
6/2/2006	CTH K	BRUSSELS RD	W	50	Deer	NO	0	0
6/21/2006	CTH K	BRUSSELS RD	W	20	Deer	NO	0	0
6/28/2006	CTH K	LOVERS LN		0	Deer	NO	0	0
9/1/2006	CTH K	LOVERS LN	E	20	Deer	NO	0	0
12/18/2006	CTH K	Southbound STH 57		1	Other Vehicle(s)	REAR	0	0
2/23/2007	CTH K	LOVERS LN	E	1	Deer	NO	0	0
3/15/2007	CTH K	LOVERS LN	N	60	Deer	NO	0	0
6/28/2007	CTH K	CTH DK	S	1	Deer	NO	0	0
7/8/2007	CTH K	LOVERS LANE RD	E	6	Overturned	NO	0	1
10/22/2007	CTH K	CTH N	E	20	Deer	NO	0	0
11/7/2007	CTH K	CTH N	E	10	Deer	NO	0	0
11/20/2007	CTH K	LOVERS LN	E	40	Deer	NO	0	0
12/4/2007	CTH K	STEVENSON PIER RD S		0	Overturned	NO	0	1
7/18/2006	CTH N	OEPREY RD	S	10	Ditch	NO	0	1
10/5/2007	CTH N	FOUR CORNERS RD	N	20	Deer	NO	0	0
2/6/2007	FOUR CORNERS RD	CTH C	E	30	Deer	NO	0	0
12/22/2007	FOX LN	PICKERAL RD	E	30	Deer	NO	0	0
5/24/2006	GRAVEL PIT RD	CTH C	E	60	Ditch	NO	0	2
1/28/2006	Northbound STH 57			0	Other Vehicle(s)	ANGL	0	1
3/2/2006	Northbound STH 57	SCHOOL LN	W	4	Traffic Sign	NO	0	0
5/19/2006	Northbound STH 57	TORNADO RD		0	Deer	NO	0	0
5/24/2006	Northbound STH 57	STEVENSON PIER RD		0	Deer	NO	0	0
7/14/2006	Northbound STH 57	STEVENSON PIER RD	S	10	Deer	NO	0	0
6/9/2007	Northbound STH 57	STEVENSON PIER RD	E	10	Deer	NO	0	0
8/14/2007	Northbound STH 57	STEVENSON PIER RD S	N	9	Deer	NO	0	0
2/4/2007	PARKING LOT	CTH DK		0	Parked Vehicle	NO	0	0
8/21/2007	PARKING LOT	CTH C		0	Other Vehicle(s)	BLNK	0	0
1/15/2006	PRIVATE PROPERTY	CIRCLE RIDGE CT	S	0	Embankment	NO	0	0
11/10/2006	RILEYS BAY RD	ELM LN	W	20	Deer	NO	0	0
7/25/2007	RILEYS BAY RD	CTH C	N	50	Deer	NO	0	0
11/27/2006	S STEVENSON PIER RD	CTH K	N	110	Deer	NO	0	0
5/16/2007	SCHOOL LN	CTH DK	N	10	Other Vehicle(s)	REAR	0	0
10/8/2006	Southbound STH 57	STEVENSON PIER RD		0	Other Vehicle(s)	ANGL	0	1
3/10/2007	STEVENSON PIER	CTH C	S	3	Parked Vehicle	NO	0	0
3/20/2006	STEVENSON PIER RD	RILEYS BAY RD	S	10	Deer	NO	0	0
5/26/2006	STEVENSON PIER RD	WOODEN LN	S	50	Deer	NO	0	0
9/26/2006	STEVENSON PIER RD	POPLAR LN	S	40	Other Vehicle(s)	REAR	0	2
7/18/2007	STEVENSON PIER RD	WOOD LANE RD	S	20	Deer	NO	0	0
11/22/2007	STEVENSON PIER RD	DEER TRACK RIDGE RD	S	1	Ditch	NO	0	0
6/29/2007	STEVENSON PIER RD N	POPLAR LANE	S	20	Deer	NO	0	0
12/3/2007	STEVENSON PIER RD N	MAPLE LANE	S	2	Deer	NO	0	0
10/27/2006	STH 57	STEVENSON PIER RD	S	100	Deer	NO	0	0







Source: Wisconsin Department of Transportation, 2008.

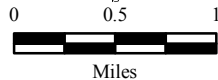
Map 8.1

Functional Classification Town of Gardner Door County, Wisconsin

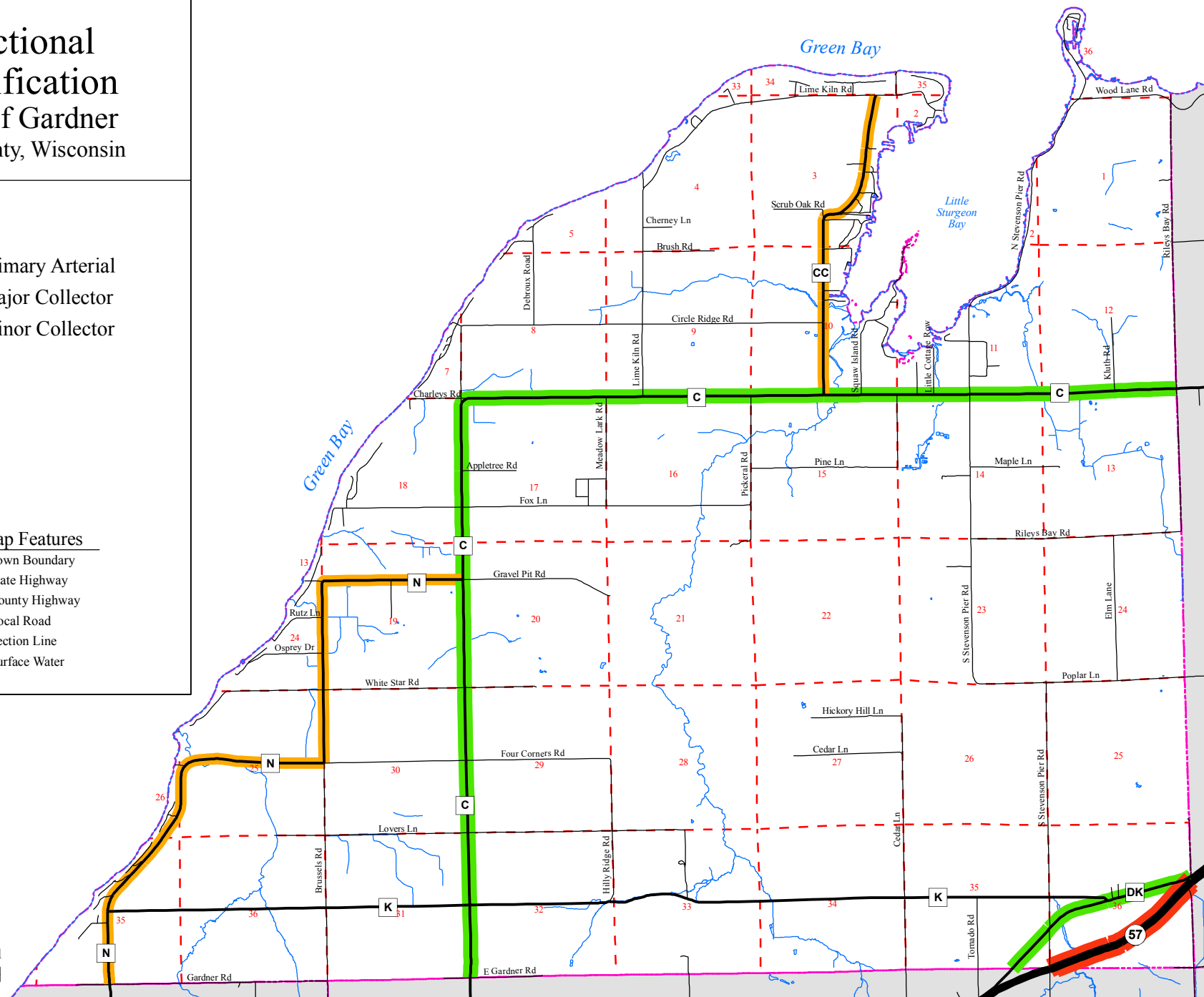
-  Primary Arterial
-  Major Collector
-  Minor Collector

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water









Source: WDOT, 2001, 2003, 2006; Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Annual Average Daily Traffic Town of Gardner Door County, Wisconsin

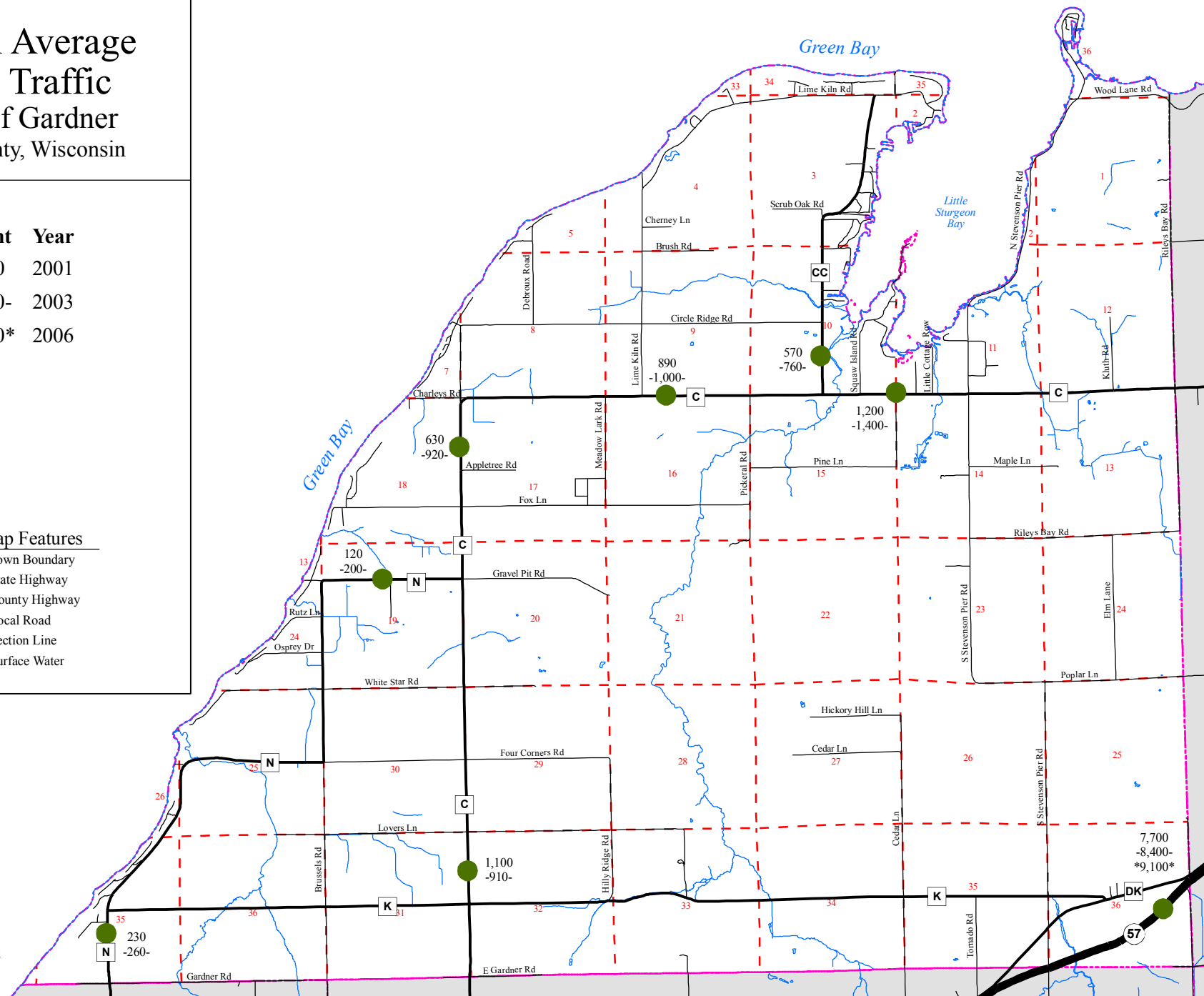
Count	Year
0000	2001
-0000-	2003
0000	2006

Basemap Features

- | | |
|---|----------------|
|  | Town Boundary |
|  | State Highway |
|  | County Highway |
|  | Local Road |
|  | Section Line |
|  | Surface Water |



Source: WDOT, 2001, 2003, 2006; Town of Gardner, Door County; Bay-Lake Regional Planning Commission, 2009.









Map 8.3

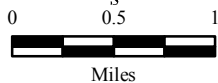
Recommended Regional Bicycle Facilities Town of Gardner Door County, Wisconsin

Proposed Bicycle
Accommodations Associated
with Highway Rights-of-Way

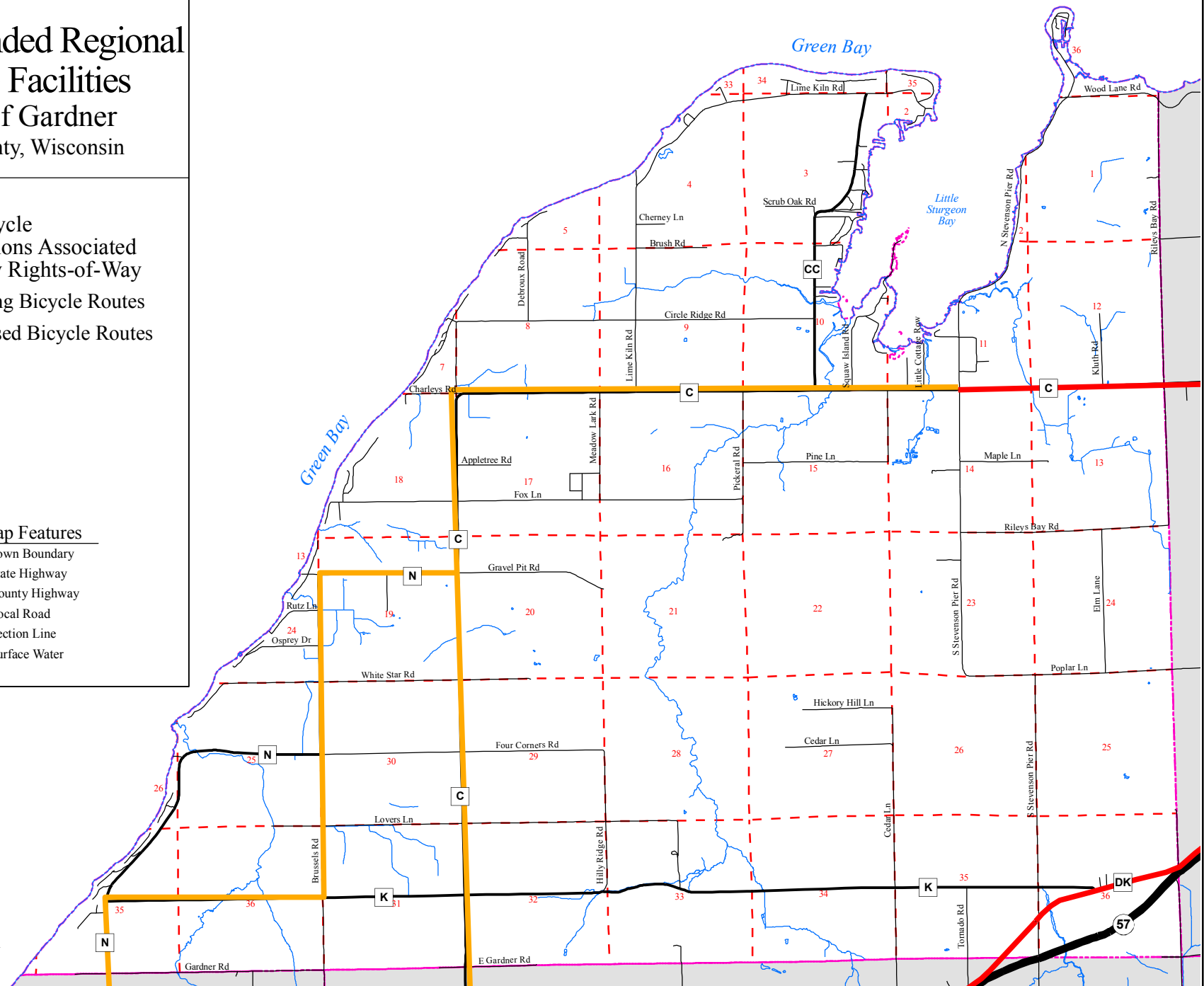
-  Existing Bicycle Routes
-  Proposed Bicycle Routes

Basemap Features

-  Town Boundary
-  State Highway
-  County Highway
-  Local Road
-  Section Line
-  Surface Water



Source: Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Chapter 9 - UTILITIES AND COMMUNITY FACILITIES

INTRODUCTION

This section provides an inventory of the public facilities in the town of Gardner. Public facilities such as fire and police stations, libraries, government buildings, and public utilities, such as water, sewer, natural gas, electricity, and cable television are identified. These facilities contribute to the attractiveness of a community and its surrounding area.

It is important to identify community facilities to better serve the residents of the town of Gardner since utilities and community facilities are important components to promoting a healthy and safe environment for individuals to live, work and raise a family. Knowing the facilities and its existing conditions can help the town plan for growth. The town can determine any deficiencies and ensure their adequacy to meet the town's present and future development needs.

WHAT IS IN THIS CHAPTER

The Utilities and Community Facilities Element of the comprehensive plan contains the following information:

- I. Town Officials and Committees
- II. Utilities Inventory and Analysis - Location, Use and Capacity
 - A. Electric Service
 - B. Telecommunications
 - C. Cable Television
 - D. Natural Gas
 - E. Public Water System
 - F. Aquifer Recharge Area
 - G. Sanitary Sewer Service
 - H. Storm Sewer System
- III. Community Facilities and Services
 - A. Administrative Facilities
 - B. Solid Waste Disposal and Recycling Facilities
 - C. Road and Other Maintenance
 - D. Postal Services
 - E. Protective and Emergency Services
 - F. Education
 - G. Library
 - H. Health Care
 - I. Child Care
 - J. Adult Care
 - K. Cemeteries
 - L. Recreation

TOWN OFFICIALS AND COMMITTEES

Gardner Town Board

The Gardner Town Board members include the Town Chairperson and four Supervisors along with the Clerk and the Treasurer. *The Town Board should work for the benefit of the public, recognizing that public interests must be their prime concern.*

Town Staff

The town staff includes an elected clerk, treasurer, constable and an assessor and building inspector hired by the town.

Plan Commission

The Plan Commission is a group consisting of members from the town of Gardner formed to work on comprehensive planning issues. This Commission is responsible for:

- Development of Comprehensive Plans.
- Discussing border issues along with potential conflict resolution options.
- Exploring plan implementation methods that continue to promote town/village cooperative planning along with input from other neighboring jurisdictions.
- Recommending adoption of the plans to the town of Gardner Plan Commission.

UTILITIES INVENTORY AND ANALYSIS

Electric Service

Electric services are provided by the Wisconsin Public Service Corporation (WPS). The primary source of electricity for the Gardner area is transmitted from the Kewaunee Nuclear Plant, Pulliam Plant in Green Bay, and Sky Gen of De Pere. Voltage capacity of the present system is 24.9 KV out of Rosiere, and 12.5 KV out of Brussels. Approximately 1,500 to 1,750 customers in the Gardner area are being served with electricity. Future improvements include Wisconsin Public Service's plan to upgrade all primary power out of the Brusbay substation over the next 10-year period.

Telecommunication Facilities

Local telephone service is provided by Century-Tel while long distance providers include AT&T, Sprint, MCI and many others. The nearest telephone facility is located on County Highway C in the town of Brussels. This facility does not have an open office; it contains a drop box for payments only. Cellular service for the town is provided by Cellcom, Sprint, US Cellular and Verizon. The telephone service in the community is considered adequate at this time.

Cable Television

There is no cable television provided in the town of Gardner; however, internet wireless connection is provided to residents through satellite and telecommunication.

Natural Gas

WPS provides natural gas service to southern Door County including the towns of Brussels, Forestville, Gardner, Nasewaupee, Sevastopol, Sturgeon Bay, and Union. Residents and businesses without natural gas service have individual on-site tanks for heating oil, for which

they purchase liquid propane or fuel oil directly from private vendors. Wood stoves and pellet stoves have also become increasingly popular with higher energy costs and greater interest in renewable energy sources. The pellets are made from recycled sawdust, wood shavings, corn, walnut and peanut shells, and similar biomass wastes that are ground up, compressed, and extruded. Residents in the town also use electric and solar as an energy source for heating.

Public Water System

The town of Gardner does not have a public water system. Residents in the town have individual wells that are owned and maintained by the property owner relying on groundwater to meet their water supply needs. Currently the town has no plans to develop a public water system.

Protecting the groundwater aquifer for future use is a concern of the town. Long-term drinking water supply and quality become more of an issue as aquifer levels lessen. Water quality should be protected through erosion controls and best management practices for farming.

Aquifer Recharge Area

The Silurian dolomite system, containing the Niagaran and Alexandrian aquifers, is the major source of groundwater in the area. Well yields are highly variable and the primary problems are hardness, locally high iron concentrations, and contamination from surface sources.

Private Onsite Wastewater Treatment Systems

All onsite wastewater treatment in the town is provided by privately owned, wastewater septic systems. A septic permit, obtained from the county, is required for the installation, modification, or addition of systems; and the permit must be obtained prior to issuance of a building permit.

Storm Sewer System

Stormwater in the town drains through a series of ditches and culverts along the town roads and other major highways. The town does not have any improvement plans for storm water drainage.

Polluted stormwater runoff should be controlled through best management practices, performance standards, regulations, permit issuance, etc. that farms and construction sites are required follow.

Administrative Facilities

Gardner Town Hall

The Gardner Town Hall is located at the southeast corner of the intersection of County Highway C and Four Corners Road. The building is owned by the town of Gardner and is used for community meetings and elections. The structure is handicapped accessible and parking is adequate. The town is currently investigating the need for a future Community Center/Senior Center/Town Hall as part of its long-range facilities planning.

Solid Waste Disposal and Recycling Facilities

The town of Gardner has a solid waste and recycling program. The town provides road-side garbage and recycling pickup services through private haulers.

The existing services for the town of Gardner are adequate and will continue to be monitored for satisfaction and cost effectiveness.

Road and Other Maintenance

Maintenance for the town's road network, such as blacktopping, drainage work, etc., is primarily done by private contractors. The Door County Highway Department also provides some road maintenance for the town.

Postal Services

Postal service for the town of Gardner is provided by a facility located at 9771 Highway 57 in the town of Brussels. The post office was built in 1963 and presently contains 100 lock boxes and approximately 966 sq. ft. of space. The facility lacks adequate parking as more space is needed. The present facility is considered inadequate for future use as more building space will likely be needed.

Fire Services

The town of Gardner shares fire services with the towns of Brussels and Union. The main fire station is located at 9683 Highway 57 in Brussels while a second station is located on Stevenson Pier Road in Little Sturgeon. The B.U.G. was built and established in 1968 and contains 55 volunteers from the towns of Brussels, Union and Gardner. Special services provided by the fire department include a rescue sled for off-road use. Fire services are accessed by calling the 911 system, which in turn pages the volunteers. The Fire Department serves the towns of Brussels, Union and Gardner and has mutual aid agreements with the Southern Door Fire Department, and other fire departments throughout Door and Kewaunee County. The Southern Door Fire Department is automatically paged for structural fires while other Door and Kewaunee County departments are available upon request. For every fire, the department has the following major equipment:

- 1968 Chevrolet pumper
- 1969 Chevrolet tanker
- 1974 Chevrolet tanker
- 1983 Ford pumper
- 1995 Freightliner pumper
- 1999 over 2009 brush truck
- 1995 Freightliner tanker
- 2000 Freightliner pumper
- 2000 Freightliner tanker
- 2000 Dodge brush pick-up truck.
- 2006 pumper truck
- 2 - 2010 tanker trucks

Presently, the B.U.G. Fire Department facilities are seen as being adequate for the community.

Insurance Service Office (ISO) Grading

The adequacy of fire protection within the town is evaluated by the Insurance Service Office (ISO) through the use of the *Grading Schedule for Municipal Fire Protection*. The schedule provides criteria to be used by insurance grading engineers in classifying the fire defenses and physical conditions of municipalities. Grading obtained under the schedule are used throughout the United States in establishing base rates for fire insurance. While ISO does not presume to dictate the level of fire protection services that should be provided, it generally identifies serious deficiencies found, and over the years has been accepted as a guide by many municipal officials in planning improvements to their fire fighting services.

The grading is obtained by ISO through its Municipal Survey Office based upon their analysis of several components of fire protection including:

- Fire department equipment
- Alarm systems
- Water supply system
- Fire prevention programs
- Building construction
- Distance of potential hazard areas from a fire station

In rating a community, total deficiency points in the areas of evaluation are used to assign a numerical rating of one to ten, with one representing the best protection and ten representing an unprotected community. The town of Gardner ISO fire rating is a nine.

Emergency Services

The town of Gardner does not provide its own ambulance service. This service is provided by Door County Emergency Services located in Sturgeon Bay. The ambulance service is provided to all of Door County and was established in 1971 in Sturgeon Bay and in 1983 in Brussels. The ambulance in Brussels is located at the B.U.G. Fire Station. The vehicles are advanced life support modular ambulances with advanced life support and basic life support equipment.

The Gardner First Responders volunteer group equipped with defibrillators, oxygen and first aid supplies, supports and assists County emergency medical personnel. There are 13 full-time paramedics and 15 on-call emergency medical technicians. There are no future improvement plans for the emergency service at this time. The service is considered adequate for the community.

Library

The town of Gardner does not have any library facilities. However citizens of the town can utilize the Door County Library system with the nearest branches located in Forestville and Sturgeon Bay. Door County Library is a member of the Nicolet Federated Library System, a state funded agency that provides services to its member libraries. It also belongs to the OWLSnet Consortium; sharing materials with other public libraries in Shawano, Marinette, Florence, Kewaunee, Menomonee, Oconto, Outagamie, and Waupaca counties and the Oneida Nation. The Forestville Library is located east of the town, at 123 State Highway 42 in Forestville, and the Sturgeon Bay Library is located at 107 South 4th Ave.

Public Schools

The town of Gardner is located within the Southern Door school district. The school, located at 8240 State Highway 57 in the town of Gardener, provides facilities for grades K-12 and has a student enrollment of approximately 1,220. The schools are considered adequate at this time; however, there are future improvement plans for the educational facilities. The improvement plans are to build a new high school library, increase science lab area in the old library, new middle school band and chorus rooms, new administrative offices for the middle school, convert old offices to special education areas and develop a new health and nurse area.

Child Care Facilities

The town of Gardner does not contain any public child care facilities; however, several private child care facilities are available in the area.

1. Abel's Child Care Plus, 1514 Dump Road
2. Adventures Child Care, Inc., 1645 Tee Off Lane

Abel's Child Care Plus currently has 8 children enrolled, whereas Adventures Child Care, Inc. has an enrollment of 39 children. The present private facilities are not adequate for the community because both providers have waiting lists for new enrollment.

Health Care Facilities

There are no existing hospital facilities within the town of Gardner. The nearest hospital and medical facilities are located in Sturgeon Bay. Door County Memorial Hospital/Ministry Health Care, located in the City of Sturgeon Bay, is the only hospital in the county. Serving Door County since 1943, it is a fully accredited, acute care hospital and outpatient medical center with 25 licensed beds, a cancer center, and an outpatient center. The hospital provides an array of services and specialties that include home health care, a skilled nursing facility for long-term care and rehabilitation services, a rehabilitation services department, and the North Shore Medical Clinic. Major hospital facilities can also be found nearby in the city of Green Bay (Bellin Medical Center, St. Mary's Hospital, St. Vincent Hospital, Aurora Medical Center).

There are no dental facilities found within the town. The nearest dental facilities can be found in Sturgeon Bay.

Adult Care

There are no adult care facilities in the town; however, there are several long-term care and elder care facilities located in the city of Sturgeon Bay in the area including nursing homes, Adult Day Care (ADC), Adult Family Homes (AFH), Community Based Residential Facilities (CBRF), and assisted rental housing.

The town does not view itself as an area that could support adult care facilities; therefore it should monitor the needs of senior residents in the town and direct them to communities that have adequate public services and facilities.

Cemeteries

According to *Cemetery Locations in Wisconsin*, the town of Gardner contains six cemeteries:

- Stevenson Pier Cemetery, County Highway CC, Little Sturgeon
- St. Joseph Catholic, Fox Lane near Meadowlark Road
- Precious Blood Episcopal, County Highway C at Gravel Pit Road
- St. John the Baptist Catholic, County Highway K (stones gone)
- White Star Spiritualist, County Highway K
- Geise Family Cemetery, County Highway K, just west of Highway 57, southwest of Southern Door School.

The local cemeteries have space to meet future needs for the next 20 years. Town residents may also utilize public and private cemeteries located in other surrounding communities.

Recreation

Gardner Town Park

The Gardner Town Park is located on Little Sturgeon Bay in the northern part of the town of Gardner. It is a 1.58 acre undeveloped park providing access to the bay.

Claflin Memorial County Park

Claflin Memorial County Park is located at the northwest tip of Henderson Point on Little Sturgeon Bay and is less than 0.02 acres in size. The site contains a stone monument within a low rail fenced-in square and an historical marker commemorating Increase Claflin, the first white settler in Door County. The Door County Historical Society has officially recognized the area as an historical site.

Robert M. Carmody Park is an extensive facility that is open daily one-half hour before sunrise until 11pm. Over 100 combined parking spaces within two lots are included, along with six boat slips on site that carry a daily launching fee of \$5.00. The park/boat launch is well maintained and includes a bench near the water, and three picnic tables centrally located around a grill. Garbage and recycling receptacles are located in a couple of areas near the restrooms, which could serve as a shelter. Lighting is provided near the launch areas, and in both parking lots.



Sugar Creek County Park

Sugar Creek County Park is located along the bay of Green Bay on County Highway N in the town of Gardner where Sugar Creek empties to the bay. This 37-acre park features a boat launch, fishing, picnicking, parking, restrooms, and volleyball courts.

Public Access

Including the town and county parks, there are 14 sites within the town of Gardner allowing public access to the bay of Green Bay. Many are road ends or areas where there is little distance between the road edge and the water.

Table 9.1: Public Access Sites to Green Bay

Access Site	Location (T/R)	Section
Sugar Creek County Park	T27N R23E	Sections 25 & 26
Wilcox Road	T27N R23E	Section 24
Fox Lane	T27N R24E	Section 18
Johannes Road	T27N R24E	Section 7
Boni's Place	T27N R24E	Section 4
Big Rock Place	T28N R24E	bordering sections 34 & 35
Claflin Memorial Park	T27N R24E	Section 2
Robert M. Carmody County Park Boat Launch	T27N R24E	Section 3
Landing Road	T27N R24E	Section 3
Polish Lane	T27N R24E	Section 10
Squaw Island Road	T27N R24E	section 10
N. Stevenson Pier Road	T27N R24N	section 2
Wood Lane Road	T27N R24E	bordering sections 1 & 36
Riley's Bay Road	T28N R24E	Section 36

Source: Bay-Lake Regional Planning Commission, 2008.

Map 9.1

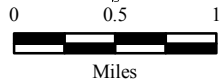
Community Facilities

Town of Gardner
Door County, Wisconsin

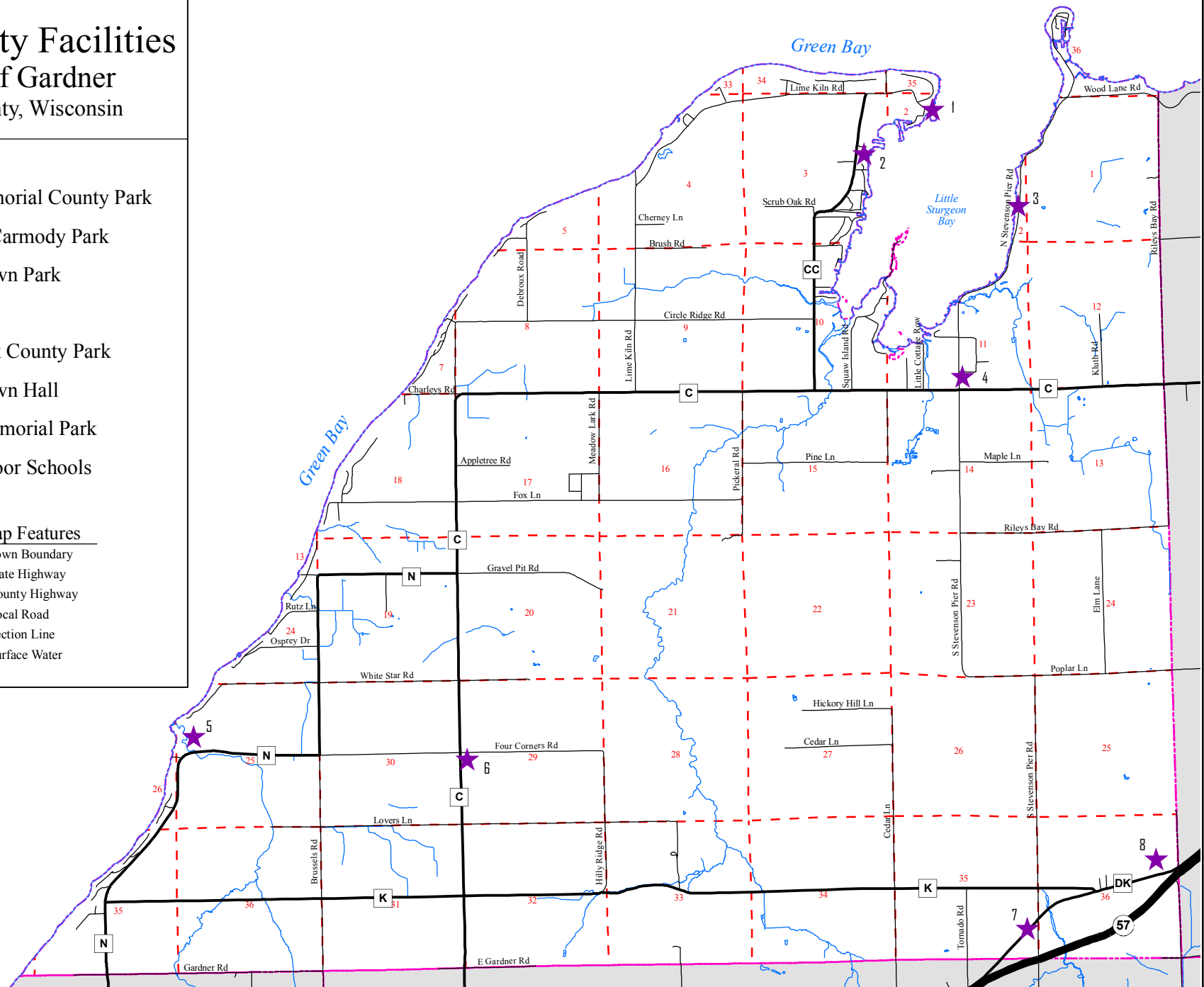
- 1 - Claflin Memorial County Park
- 2 - Robert M. Carmody Park
- 3 - Gardner Town Park
- 4 - Fire Station
- 5 - Sugar Creek County Park
- 6 - Gardner Town Hall
- 7 - Tornado Memorial Park
- 8 - Southern Door Schools

Basemap Features

- Town Boundary
- State Highway
- County Highway
- Local Road
- Section Line
- Surface Water



Source: Town of Gardner; Door County; Bay-Lake Regional Planning Commission, 2009.



Chapter 10 - INTERGOVERNMENTAL COOPERATION

INTRODUCTION

The Intergovernmental Cooperation chapter examines the working relationship the town of Gardner maintains with the neighboring towns of Jacksonport, Sevastopol, Bailey's Harbor and Gibraltar; Door County and its various departments; Sevastopol and Gibraltar Area School Districts, Northeast Technical College; Regional Planning Commission; and state and federal governments.

This chapter stresses the importance of the town working cooperatively with neighboring jurisdictions by identifying existing or potential conflicts; communicating visions; and coordinating plans, policies and programs. These joint efforts will lead to accomplishing goals of mutual interest and promoting consistency between planning efforts. An inventory of formal intergovernmental agreements, shared resources, and consolidated services are also discussed. Through formal identification and review of these important shared issues and conflicts, mutually beneficial opportunities may be brought about and potential problems may be resolved.

EXISTING INTERGOVERNMENTAL ACTIVITIES

Adjacent Governmental Units

The town of Gardner is bordered by the town of Gibraltar on the northeast, village of Gardner on the northwest, towns of Bailey's Harbor and Jacksonport on the east, and the town of Sevastopol on the south.

Relationships

The town maintains a good working relationship with its neighboring towns and Door County. The towns of Brussels, Nasewaupée and Union have completed their comprehensive plans and are compliant with the Smart Growth requirements. With the town completing its comprehensive plan, this is a good opportunity to conduct some joint planning within the area. Stronger working relationships through more regional planning efforts will result in the preservation of farmland and natural features that comprise the area's rural character, providing more and better services to their respective residents, and retaining and attracting employers to strengthen and diversify the local economy.

Town Facilities

The Gardner Town Hall is located at the southeast corner of the intersection of County Highway C and Four Corners Road. The building is owned by the town of Gardner and is used for community meetings and elections.

Sharing Public Services

The towns of Brussels, Union and Gardner share one fire department with locations in Brussels and in Little Sturgeon on Stevenson Pier Road.

School Districts

The town of Gardner is located within the Southern Door School District. The town is part of the Northeast Wisconsin Technical College (NWTC) District of The Wisconsin Technical College System.

Relationship

The town's relationship with Northeast Technical College is considered amenable. The town has a good working relationship with the Southern Door School District. Residents of the district are able to provide input for school activities, future development projects, etc.

Sharing School Facilities

Though the Southern Door School is located in the town of Gardner, there are no formal agreements between the town and school district for shared use of facilities. However, the town utilizes the school facilities on an as needed basis with appropriate prior notice and scheduling.

County

Since the town of Gardner is located within Door County, the County has some jurisdiction within the town. This includes controls on land divisions, on-site sanitary systems, and shoreland zoning within the town.

The Door County Highway Department also performs repairs and maintenance for some town roads and all county highways. Law enforcement is provided by the Door County Sheriff's Department and emergency service is provided by the Door County Services which is located in Sturgeon Bay.

Region

Door County, including the town of Gardner, is a member of the Bay-Lake Regional Planning Commission (Bay-Lake RPC) through the end of 2009. The Bay-Lake RPC has developed a regional comprehensive plan that incorporated Door County and its communities into the 20-year plan.

State

The town's relationship with the State of Wisconsin primarily centers on issues related to transportation (WisDOT) and natural resources with the WDNR maintaining/monitoring several conservation areas within the town and its planning area. Relationships with other state agencies have been limited.

INVENTORY OF PLANS AND AGREEMENTS UNDER S. 66.0301, S. 66.0307 OR S. 66.0309

Cooperative Boundary Plan

State Statutes 66.0301 and 66.0307 allow municipalities to enter into agreements regarding the location of municipal boundaries. The Cooperative Boundary Plan is any combination of cities, villages, and towns that may determine the boundary lines between themselves under a cooperative plan approved by the Wisconsin Department of Administration (WDOA). The cooperative plan must be made with the general purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory covered by the plan which will, in accordance with existing and future needs, best promote public health, safety, morals, order, convenience, prosperity or general welfare. Cooperative boundary plans cover at least a 10-year period. Additionally, cooperative boundary agreements are a tool that could also be used for service sharing between local units of government.

Opportunities for Cooperation

On April 18, 2007 the Town of Gardner was part of a meeting coordinated by the Door County Planning Department and UW-Extension to guide development of the Door County Smart Growth Plan. The town also was a participant in work groups helping to formulate Intergovernmental Cooperation policies for the County plan. The opportunities and conflicts that were identified included:

Intergovernmental Cooperation Issues

1. State-level conflicts, issues, mandates
 - ◇ Re-organization/regionalization of social services (“Family Care” program/effort)
 - County will be told what services to provide, to whom, at what cost
 - Will affect County Community Programs and Public Health Departments, too
 - Aging and Disability Resource Center – to be created in next few years
 1. Will provide services for seniors and physically and/or mentally disabled
 2. Services for kids and AODA services may be added eventually
 - ◇ Regionalization of economic development programs; e.g., revolving loan funds
 - ◇ Planning Department staff and Department of Natural Resources staff don’t always agree on interpretation/administration of NR 115
 - ◇ Department of Transportation-initiated projects
 - Are the projects being planned for us the ones we really want and need?
2. Conflicts within the county
 - ◇ Comprehensive planning and zoning issues
 - Need county-wide framework for planning and conflict resolution
 - Zoning regulations/restrictions
 1. Single-family zoning – allow “in-law”/caregiver apartments?
 2. Will we at some point disallow development in agricultural areas?
 3. Zoning now segments/separates/sprawls uses – we used to build housing around/intertwined with schools and commercial uses
 - ◇ Coordination of county agencies/committees with towns and their needs – is the county set up to be user-friendly, efficient, cooperative?
 - ◇ Turf wars – between county and city, county and towns, school districts, etc.
3. Demographic issues
 - ◇ Aging population – long-term care and other services, schools and funding, etc.
 - ◇ Income separation in the county – most are either low or high income; no middle
4. Need better telecommunications/internet access in most areas of the county
5. School consolidation/service sharing and funding
 - ◇ Sturgeon Bay and Sevastopol consolidation should be explored further
 - ◇ Regional (county-level) administration should be considered/pursued such as sharing superintendent(s), services
 - ◇ School funding system needs to be revised
6. Government service provision
 - ◇ Increasing costs – collective bargaining, insurance
 - Leading to privatization of services/departments
 - ◇ Bureaucratic mindset
 - Government has no incentive to be proactive – change is foisted on you

Intergovernmental Cooperation Opportunities

1. Telecommunications options are/will improve and costs are decreasing
2. We have the chance to say what/how we want our programs/infrastructure/services to be set up, since some of these initiatives are just beginning

-
- ◇ Can bring community members into what's happening in the community with regard to planning and other issues
 - 3. Intergovernmental cooperation in Door County is good with regard to telecommunications and emergency/rescue services – lessons there might be helpful to other issue areas

Summary and Conclusions

The town has good relationships with the state, county and adjoining local units of government. The town works with the Door County Planning Department in the administration of the county's shoreland and floodplain ordinance.

Relative to the town's relationship to the adjoining communities, the southern towns in Door County (Brussels, Union, Gardner, Forestville and Clay Banks) have been meeting periodically with each other and with County planning representatives to discuss mutual issues, conflicts, and concerns.

Chapter 11 - LAND USE CONTROLS AND INVENTORY

INTRODUCTION

This element of the comprehensive plan provides an inventory of land use controls and existing (2007) land uses within the town of Gardner. This data is used to analyze the current pattern of land use and serves as the framework for creating the town's future land use plan (Chapter 2 of this document).

WHAT IS IN THIS CHAPTER

The Land Use Controls and Inventory element of the comprehensive plan contains the following information:

- I. Existing Land Use Controls
 - A. Planning Documents
 - B. Land Use Regulations
- II. Current Land Use Inventory
 - A. Planning Area
 - B. Land Use Types and Amount

EXISTING LAND USE CONTROLS

This section inventories and discusses the land use controls (e.g., development plans, zoning ordinances, etc.) that may affect or restrict the use of land for specific purposes within the town of Gardner. These controls should be reviewed periodically to make certain that they assist in implementing the future development plan of the town.

Planning Documents

Door County Comprehensive Plan

The *Door County Development Plan* was adopted in March 1994, and applies to unincorporated areas of Door County. The plan separates the county into twelve general land use categories, each with different land use/development objectives. Those categories include:

- Development Core Area
- Crossroads Communities
- Business Development Area
- Resort/Residential Area
- Shoreline Residential Area
- Rural Residential Area
- Suburban Residential Area
- Open Agricultural Area
- Open/Rural Area
- Natural Area
- Airport Area
- Highway Corridor Area

Chapter Five of the plan details the natural resources of the county including wetlands, woodlands and unique geologic features. Protection of natural resources was identified as a high priority item for the plan; therefore, this section provides a description of the threats and guidelines for the air, groundwater, surface water, wetlands, woodlands, topographic features and natural areas of the county. Several specific topographic features are discussed, the most relevant being the ‘line of limestone bluffs which run along the west side of the peninsula and Washington Island.’ The plan state that because some of the most prominent bluff areas are located in county and state parks this indicates the value of these features for public preservation.

The plan recommends maintaining the “residential character” of the developed shoreline areas, and preserving the parks and wetlands as natural areas. Nearly all of the Green Bay shoreline of the county including Washington Island falls into the Shoreline Residential Area category with a majority of the land immediately adjacent Rural Residential Area. Areas adjacent to the incorporated communities of the county and those areas with dense development are considered Development Core Areas while the smaller unincorporated communities are identified as Crossroads Communities which the plan identifies as focal points for future commercial, residential or mixed-use developments. Resort/Residential Areas are identified on the north and south shores of Washington Island and along the east and west shores of Little Sturgeon Bay. The Open/Agricultural Area and Open/Rural Area districts contain the largest portions of the county and are intended to promote and maintain the rural character of the county. The Open/Rural Area district covers much of the undeveloped open space in the northern portion of the county, north of a line from Baileys Harbor to Sister Bay. The Highway Corridor Area follows State Highway 57, State Highway 42 and County Highway S throughout the county and promotes limiting access points to the highway, encourages new development within communities rather than in strip developments along the highway, and attempts to maintain the rural character of the corridor.

The plan is currently being updated and is expected to be completed in 2009.

Door County Park and Outdoor Recreation Plan

In 1969, a detailed document entitled "*Door County, Wisconsin, Outdoor Recreation Plan*" was produced by the Wisconsin State Department of Local Affairs and Development under contract to Door County. The report, which served Door County for five years, detailed the recreational opportunities, needs and potential of the county and provided a specifically stated recreation action program. Six subsequent five-year outdoor recreation plans were developed in 1974, 1979, 1987, 1994, 2000 and 2006. The most recent *Door County Parks and Open Space Plan* covers the period from 2006 through 2010.

The objectives of the plan are to:

1. Provide a basic document which identifies and details a coordinated park and outdoor recreation program to meet the needs and demands of Door County residents and visitors.
2. Promote and encourage the development of sufficient park and recreational facilities of high quality.
3. Identify and preserve sites of significant scenic, historical, archaeological, and natural characteristics.

The preparation of the plan continues the County's eligibility for the state Stewardship Fund. It is important for the town to have identified their planning initiatives within this outdoor recreation plan in order for park and recreation projects to be eligible for funding assistance.

Door County Land and Water Resource Management Plan

The Door County Soil & Water Conservation Department is created under the authority of Chapter 92 of Wisconsin Statutes to halt and reverse the depletion of the State's soil resources and pollution of its waters.

The *Door County Land and Water Resource Management Plan* was developed to identify the resource needs of Door County, establish goals to meet these needs, and to initiate a course of action to attain these goals. The intent of this plan is to form strategies and methods that discern the correct management plans to properly manage the landscape and protect and improve water and other resources in Door County.

Door County Comprehensive Forestry Plan

The *Comprehensive Forestry Plan for Door County* is intended to supplement the individualized forestry plan/recommendations. It is intended to provide an understanding of sustainable forestry and help individual landowners meet land stewardship goals. The comprehensive plan provides a broad overview of the regional history, landscape and ecology of the area as well as depth and detail on forestry topics & issues relevant to Door County. It also provides background information on forest descriptions and management recommendations.

Land Use Regulations

The town of Gardner does not currently have a zoning or subdivision ordinance. Only the shorelands (as shown on Map 5.8) of the town are covered under the Door County Zoning Ordinance. The town does administer a Highway Design Standards Ordinance that governs the minimum width and surface requirements for all roads in the town.

Door County Farmland Preservation Plan

The *Door County Farmland Preservation Plan*, adopted November, 1983, identifies areas which are of prime agricultural importance for which the landowners may partake in allowable tax credits under the Farmland Preservation Program.

Agricultural Preservation Areas

Areas that are currently cultivated (in agricultural use) that are part or wholly consist of 100 contiguous acres at a minimum. This definition is intended to include all types of farmland and agricultural uses in order to provide the option of participating in the preservation program to the greatest number of farmers as possible. Farmers in agricultural preservation areas are eligible to sign contracts for ten to twenty years.

Transitional Areas

Transitional areas are those areas that are currently in agricultural use, but in the short-term are expected to convert to non-farm uses, such as residential, commercial or industrial uses. Transitional areas include incorporated areas in agricultural use and areas around developed unincorporated areas that are serviced by existing roads and public services. Transitional areas

must be a minimum of 35 acres in size. Farmers whose lands are in a transitional area may sign a contract agreeing not to develop their lands for a period of five to twenty years.

Environmental Areas

The following areas are considered to be environmental areas: wetlands, woodlands, cultural, historic, or archaeological sites, the 100 year floodplain, public lands, lakes, rivers, and streams. Environmental areas are eligible for Wisconsin Farmland Preservation tax credits if the cultivated area of the farm unit, of which they must be a part of, are eligible for a tax credit.

Excluded Areas

Excluded areas are considered ineligible for the Wisconsin Farmland Preservation Program. They include airports, landfills, quarries, developed incorporated and unincorporated areas, platted subdivisions, quasi-public lands (gun clubs, golf courses, etc.) cemeteries, transitional areas under 35 acres, all ten acre or larger non-agricultural related uses, and all land zoned for non-agricultural use.

Door County Zoning Ordinance

In February of 1995, Door County developed and adopted a comprehensive revision to its 1968 zoning ordinance to implement the *Door County Development Plan*. The town of Gardner did not adopt the revised *Door County Zoning Ordinance*.

In shoreland areas of the town, the *Door County Zoning Ordinance* is in force. Shoreland zones are those areas within 300 feet of a navigable river or stream, 1,000 feet of a navigable lake, pond or flowage or to the landward side of the 100-year floodplain, whichever distance is greater (see Map 5.8). The purpose of the ordinance is to promote and protect public health, safety, aesthetics, and other aspects of the general welfare of the County. In order to accomplish this purpose, the ordinance regulates and restricts the use of property. The ordinance divides the county, and therefore the shoreland areas of the town of Gardner, into districts for the purpose of regulating: 1) the location and use of land, water, buildings, and structures, 2) the height and size of building structures, 3) the percentage of a lot that may be occupied, 4) the density of the population, and 5) the size of lots.

As stated, the purpose of the *Door County Zoning Ordinance* is to promote and protect public health, safety, aesthetics, and other aspects of the general welfare. In addition, further purposes of the Ordinance are stated as follows:

- Aid in implementing the county development plan.
- Promote planned and orderly land use development.
- Protect property values and property tax base.
- Fix reasonable dimensional requirements to which buildings, structures, and lots shall conform.
- Prevent overcrowding of the land.
- Advance uses of land in accordance with its character and suitability.
- Provide property with access to adequate sunlight and clean air.
- Aid in protection of groundwater and surface water.
- Preserve wetlands.
- Protect the beauty of landscapes.

-
- Conserve flora and fauna habitats.
 - Preserve and enhance the county's rural characteristics.
 - Protect vegetative shore cover.
 - Promote safety and efficiency in the county's road transportation system.
 - Define the duties and powers of administrative bodies in administering this Ordinance.
 - Prescribe penalties for violations of the Ordinance.

Chapter 3 of the *Door County Zoning Ordinance* requires that the setback from all navigable water shall be 75 feet from the ordinary high water mark. Navigable waters which the setback ordinance regulates include lakes, rivers, ponds, sloughs, flowages, and other waters which have a level of flow sufficient to support navigation by a recreational craft on an annually recurring basis.

Chapter 5 of the *Door County Zoning Ordinance* provides for the protection and preservation of interesting geological features, wild flora and fauna, and the natural beauty of the county as well as preventing soil erosion and groundwater contamination. Natural resources which are covered under this section of the Ordinance include: escarpments, drumlins, dunes, rockholes, woodlands, ridges and swale complexes, and shoreland vegetation. The *Door County Natural Features* map and the *Door County Escarpment Protection Areas* map delineate features covered by the ordinance. Escarpment protection areas generally include lengthy slopes of 20 percent and greater, and areas associated with the crest of the escarpment.

Door County Floodplain Ordinance

Floodplains within Door County are under the jurisdiction of Chapter 15.02 *Door County Floodplain Zoning Ordinance*. The areas regulated by this ordinance include all areas within the unincorporated portions of Door County which would be covered by the regional (100-year) flood. The areas within the regional flood are designated as such, on F.E.M.A. Flood Insurance Rate Maps, *100-Year Dam Failure Map* by Mead and Hunt Consulting Engineers, and the revisions in the Door County Floodplain Appendix. Uses within areas designated as the regional floodplain are regulated through a permitting process.

Door County Subdivision Ordinance

The *Door County Land Division Ordinance* was adopted in April 2006, and regulates the division of land to promote public health, safety, aesthetics, and general welfare. The ordinance provides for minor land divisions, major land divisions, design standards and the dedication and improvement of a parcel of land to be developed. The town has the authority, under statutes, to develop and implement its own subdivision controls, if it so chooses.

Door County Private Sewage System Ordinance

Chapter 21 of the Door County Code establishes minimum standards and criteria for the design, installation, inspection and management of a private onsite wastewater treatment system, ("POWTS"), so that the system is safe and will protect public health and the waters of the state. The Ordinance regulates the installation, maintenance and upgrading of on-site waste systems in unincorporated areas of the county, along with their responsibilities in the areas of solid waste management and recycling.

The ordinance regulates septic systems, holding tanks, mound systems, privies, and other alternative sewage systems. The ordinance requires a sanitary permit from the county for any private sewage systems. No person shall install, perform work on, or reconnect a structure to a private sewage system unless the owner of the property holds a valid sanitary permit.

Nonmetallic Mining Reclamation Ordinance

Chapter 36 of the Door County Code contains the County's *Nonmetallic Mining Reclamation Ordinance*. The purpose of this chapter is to establish a local program to ensure the effective reclamation of nonmetallic mining sites on which nonmetallic mining takes place in the County.

Official Map

An Official Map is intended to implement a town, village, or city master plan for streets, highways, parkways, parks and playgrounds, and drainageways. Its basic purpose is to prohibit the construction of buildings or structures and their associated improvements on land that has been designated for current or future public use.

The town of Gardner does not maintain an Official Map.

CURRENT LAND USE INVENTORY

Planning Area

The town of Gardner's planning area consists of 21,968 acres of land. Approximately 20,504 acres or 93.3 percent of the town's land is undeveloped. The vast majority of the undeveloped acreage in the town consists of agricultural areas and woodlands.

Land Use Types & Amount

A detailed field inventory of land uses in the town of Gardner was completed by the Bay-Lake Regional Planning Commission in 2005 and updated by Door County in 2008. Map 11.1 displays the land uses within the town.

The following list of land use categories is based on a methodology created by the Bay-Lake Regional Planning Commission for conducting land use inventory only. This list is *not* intended to create specific definitions for regulatory purposes.

Residential--Use of land for non-transient-occupant dwelling units, both transportable and permanent structures. Uses are broken into the following subcategories: *Single Family, Two Family, Multi-Family, Mobile Home* and *Group Quarters*.

Commercial--Use of land for retail sales or trade of goods and/or services, including enclosed participatory sports, lodging, and commercial head offices.

Industrial--Use of land for fabrication of products, for wholesaling of products, for long-term storage of products and for extraction (mining) or transformation of materials.

Transportation-- Use of land corridors for the movement of people or materials, including related terminals and parking facilities. Uses include motor vehicle, air, marine, rail and non-motorized-related transportation.

Communication/Utilities--Use of land for generation, processing, and/or transmission of electronic communication or of water, electricity, petroleum or other transmittable products, and for the disposal, waste processing and/or recycling of byproducts.

Institutional/Governmental Facilities--Use of land for public and private facilities for education, health, or assembly; for cemeteries and related facilities; and for all government facilities used for administration or safety except public utilities and areas of outdoor recreation.

Outdoor Recreation--Use of land for out-of-doors sport and general recreation facilities, for camping or picnicking facilities, for nature exhibits, and for the preservation or protection of historical and other cultural amenities.

Agriculture/Silviculture--Use of land for growth or husbandry of plants and animals and their products and for associated facilities such as sheds, silos and other farm structures. This category also includes the cropland and pasture areas which is land primarily used for the cultivation of plants in addition to grasses for grazing.

Natural Areas--Water areas; land used primarily in a natural state for their natural functions including wetlands, grasslands and prairies, and woodlands; land undergoing change from natural areas to another land use; and conservancy areas.

Other Natural Areas--Wetlands, grassland/prairies, and woodlands not categorized elsewhere.

Water--Open water areas, including natural and impounded lakes and streams.

A breakdown of the town of Gardner land uses and acreages is shown on Table 11.1 (Appendix E contains the town's detailed land use calculations).

- Of the 93 percent of undeveloped land in the town, 57 percent is covered by croplands/pasture while 42 percent is wooded.
- Nearly 80 percent of the developed land in the town is residential development and agricultural structures. Recreational and institutional uses account for an additional 12 percent of developed town land.

Table 11.1: 2008 Land Use Summary, Town of Gardner

Land Use Type	Total Acres	Percentage Total Land	Percentage Developed Land
DEVELOPED			
Residential	1,052.1	4.8%	71.90%
Single Family	1,001.9	4.6%	68.47%
Mobile Homes	46.3	0.2%	3.16%
Vacant Residential	3.9	0.0%	0.27%
Commercial	52.3	0.2%	3.57%
Industrial	18.7	0.1%	1.28%
Transportation	16.7	0.1%	1.14%
Communications/Utilities	10.8	0.0%	0.74%
Institutional/Governmental	81.6	0.4%	5.58%
Recreational	100.5	0.5%	6.86%
Agricultural Structures	130.7	0.6%	8.93%
Total Developed Acres	1,463.3	6.7%	100.0%
UNDEVELOPED			
			Percentage Undeveloped Land
Croplands/Pasture	11,801.7	53.7%	57.56%
Woodlands	8,608.5	39.2%	41.98%
Other Natural Areas	65.9	0.3%	0.32%
Water Features	28.6	0.1%	0.1%
Total Undeveloped Acres	20,504.6	93.3%	100.00%
Total Land Area	21,968.0	100.0%	

Source: Door County, 2008; Bay-Lake Regional Planning Commission, 2008.

2007 Land Use

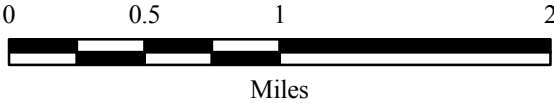
Town of Gardner

Door County, Wisconsin

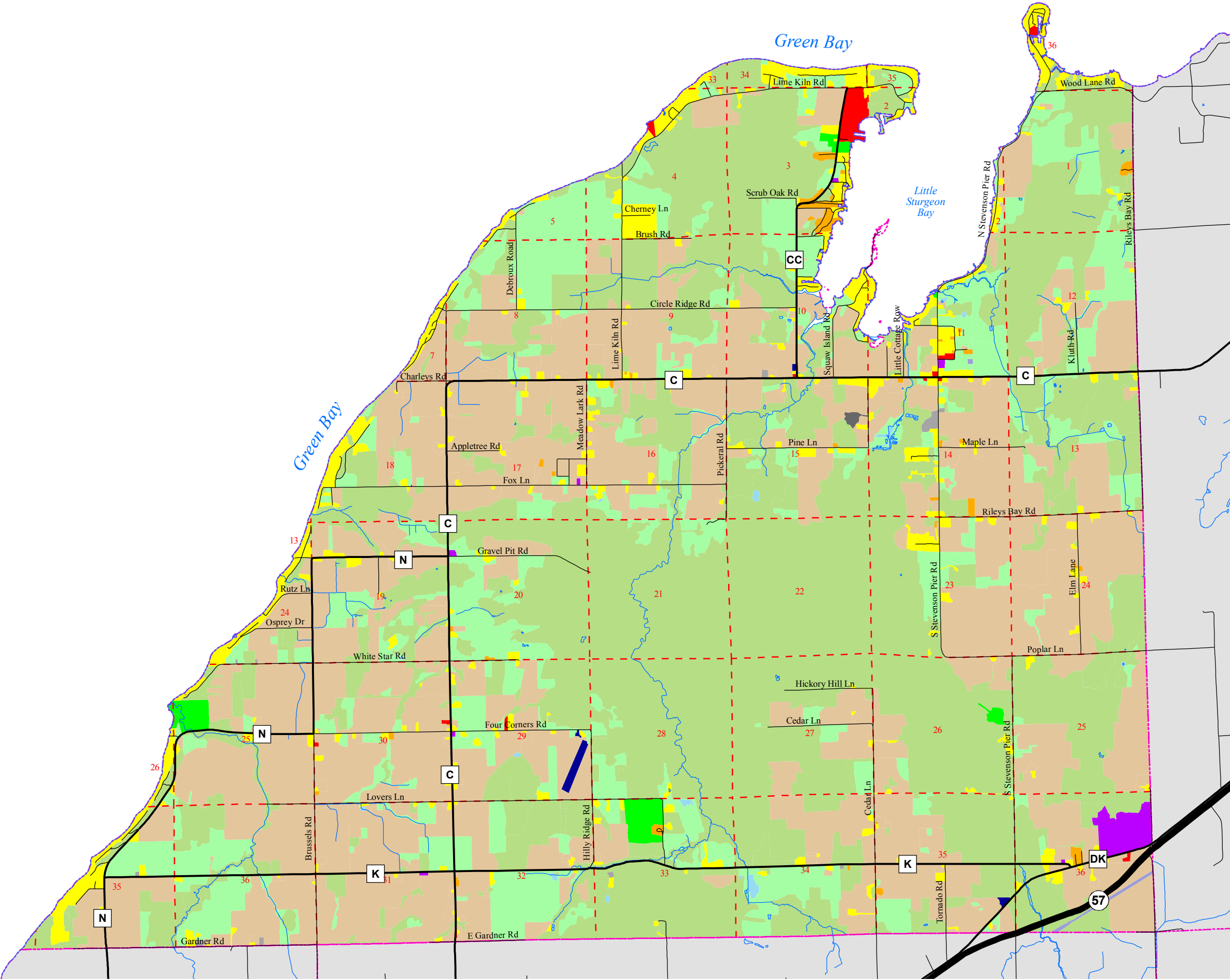
- Residential
- Mobile Homes
- Commercial
- Industrial
- Extractive Mining
- Transportation
- Communications/Utilities
- Governmental/Institutional
- Parks and Recreation
- Open Space/Fallow Fields
- Agricultural
- Water Features
- Woodlands/Natural Areas

Basemap Features

- Town Boundary
- State Highway
- County Highway
- Local Road
- Section Line
- Surface Water



Source: Town of Gardner; Door County;
Bay-Lake Regional Planning Commission, 2009.



APPENDIX A
WRITTEN PROCEDURES TO FOSTER PUBLIC
PARTICIPATION

**TOWN OF GARDNER
COMPREHENSIVE PLAN
“WRITTEN PROCEDURES TO FOSTER PUBLIC PARTICIPATION”**

PURPOSE

In accordance with Wisconsin State Statute 66.1001(4), which defines “Procedures For Adopting Comprehensive Plans”, these adopted written procedures will be followed in order to involve the public in the comprehensive planning process to the greatest extent practicable. These procedures are designed to foster public participation, including open discussion, communication programs, information services, and public meetings and shall apply to the adoption and any amendments to the comprehensive plan.

PLAN COMMITTEE AND COMMITTEE MEETINGS

The Town of Gardner has established a Comprehensive Plan Committee to develop and review a comprehensive plan. This body will adopt the plan by resolution and petition the Town Board to adopt the plan by ordinance.

All meetings of the Comprehensive Plan Committee will be posted in advance and open to the public in accordance with Wisconsin law. The agenda shall provide for comments from the public. To foster intergovernmental cooperation, copies of the agenda will be sent in advance to adjacent municipalities and to Door County.

The duties of the Comprehensive Plan Committee may be assumed by the Town Plan Commission.

COMMUNITY SURVEY AND NOMINAL GROUP EXERCISE

The Town Wide Survey that was conducted with the assistance of the Door County UW Extension will guide the Comprehensive Plan Committee and Town in developing the comprehensive plan and each of its components. The Town will conduct a nominal group exercise as part of the preparation and update of the Comprehensive Plan and any subsequent updates to the plan as appropriate.

OPEN HOUSES

A minimum of two (2) “Open Houses” shall be held during the development of the comprehensive plan in order to present information regarding the comprehensive plan and to obtain public comment. One shall be held at the “midway” point to present background information, and the second open house will be held near the end of the planning process to present the plan prior to the required public hearing. The open houses shall be noticed in a local newspaper. In addition, the open houses will be noticed and posted in three locations by the Town Clerk. The open houses will provide the public with an opportunity to review and comment on work that has been accomplished by the Comprehensive Plan Committee and the Bay-Lake Regional Planning Commission.

PUBLIC ACCESS AND PUBLIC COMMENT ON DRAFT DOCUMENT

In all cases Wisconsin's open records law will be complied with. During the preparation of the comprehensive plan, a copy of the draft plan will be kept on file at the Town Hall and will be available for public inspection during normal office hours. The public is encouraged to submit written comments on the plan or any amendments of the plan. Written comment should be addressed to the Town Clerk who will record the transmittal and forward copies of the comments to the Town Board for consideration.

The Town Board shall respond to written comments either individually or collectively by type of comments. Town Board responses may be in the form of written or oral communication, or by a written summary of the town's disposition of the comments in the comprehensive plan.

COMPREHENSIVE PLAN COMMITTEE ADOPTION OF PLAN BY RESOLUTION

The Comprehensive Plan Committee may recommend the adoption or amendment of the comprehensive plan only by the adoption of a resolution by a majority vote of the entire Committee at a regularly scheduled and publicly noticed meeting of the Comprehensive Plan Committee in accordance with s. 66.1001 (4) b. The vote shall be recorded in the official minutes of the Comprehensive Plan Committee. The resolution shall refer to maps and other descriptive materials that relate to one or more elements of the Comprehensive Plan.

DISTRIBUTION OF THE ADOPTED PLAN

In accordance with State Statute 66.1001(4), *Procedures for Adopting Comprehensive Plans*, one copy of the adopted plan or amendment shall be sent to the following:

1. Every governmental body that is located in whole or in part within the boundaries of the local governmental unit.
2. Every local governmental unit that is adjacent to the local governmental unit which is the subject of the plan.
3. The Wisconsin Land Council
4. The Wisconsin Department of Administration
5. The Bay-Lake Regional Planning Commission
6. The public library that serves the Town of Gardner.

ADOPTION OF COMPREHENSIVE PLAN BY TOWN BOARD

After adoption of a resolution by the Comprehensive Plan Committee, the Town Board will adopt the Comprehensive Plan by ordinance only after holding at least one public hearing at which the ordinance relating to the Comprehensive Plan is discussed. A majority vote of the members-elect is necessary for adoption. That hearing will be preceded by a Class 1 notice under ch. 985 that is published at least 30 days before the hearing is held. The Class 1 notice shall contain at least the following information:

1. The date, time, and place of the hearing.
2. A summary, which may include a map, of the proposed Comprehensive Plan.

3. The name of an individual employed by the Town of Gardner who may provide additional information regarding the proposed ordinance.
4. Information relating to where and when the proposed comprehensive plan may be inspected before the hearing, and how a copy of the plan may be obtained.

Upon the day of publication of the public hearing notice, copies of the plan will be made available for public review at the nearest local library of the community and at the Town Hall. Written comments on the plan from members of public will be accepted by the town board at any time prior to the public hearing and at the public hearing.

ADDITIONAL STEPS FOR PUBLIC PARTICIPATION

The Town reserves the right to execute additional steps, means, or methods in order to gain additional public participation and or additional understanding of the Comprehensive Plan and the process of its development and adoption. These optional steps may include informational memos, postcards, letters, posters, fliers, or WEB site.

STATE STATUTES

Where there is a conflict with these written procedures and provisions of s. 66.1001 (4) Procedures for Adopting a Comprehensive Plan, the state statutes shall apply.

AMENDMENTS

The Town Board may amend these procedures from time to time.

APPENDIX B
COMMUNITY SURVEY &
NOMINAL GROUP RESULTS

Town of Gardner Community Land Use Survey - May 2008.

Question	Responses		
	Number	Percent	1998 Survey %
Q.1 The Town of Gardner should pass and enforce a Nuisance Ordinance (prohibiting accumulation of unused appliances, automobiles, construction debris, trash, ect.) on one's property.	Total		
Not Sure	5	1%	
Strongly Disagree	38	7%	
Disagree	23	4%	
Neutral	41	8%	
Agree	103	20%	
Strongly Agree	302	59%	
Grand Total	512		
2. Open spaces should be preserved.	Total		
Not Sure	19	4%	4%
Strongly Disagree	27	5%	5%
Disagree	27	5%	11%
Neutral	112	22%	21%
Agree	116	23%	31%
Strongly Agree	203	40%	27%
Grand Total	504		
3. Policies should be implemented to ensure that there will be affordable housing in Gardner.	Total		
Not Sure	35	7%	4%
Strongly Disagree	53	10%	10%
Disagree	78	15%	16%
Neutral	148	29%	23%
Agree	109	21%	33%
Strongly Agree	84	17%	12%
Grand Total	507	100%	
4. The majority of the Green Bay shoreline should be single-family residential uses.	Total		
Not Sure	20	4%	3%
Strongly Disagree	26	5%	7%
Disagree	34	7%	10%
Neutral	87	17%	17%
Agree	143	28%	30%
Strongly Agree	199	39%	30%
Grand Total	509		
5. The Little Sturgeon Bay area should be a recreational area with mixed uses and high-density residential development.	Total		
Not Sure	29	6%	5%
Strongly Disagree	93	18%	27%
Disagree	84	16%	20%
Neutral	128	25%	18%
Agree	119	23%	22%
Strongly Agree	59	12%	7%
Grand Total	512		
6. Commercial uses should be located near other commercial uses.	Total		
Not Sure	17	3%	4%
Strongly Disagree	18	4%	2%
Disagree	22	4%	6%
Neutral	71	14%	13%
Agree	202	39%	47%
Strongly Agree	184	36%	25%
Grand Total	514		

7. Drinking water safety should be a concern of town government.		Total		
	Not Sure	17	3%	1%
	Strongly Disagree	32	6%	4%
	Disagree	35	7%	5%
	Neutral	63	12%	7%
	Agree	139	27%	33%
	Strongly Agree	225	44%	47%
Grand Total		511		
8. Areas that are especially sensitive to development due to their capacity to easily contaminate groundwater should be protected from development		Total		
	Not Sure	24	5%	3%
	Strongly Disagree	13	3%	2%
	Disagree	20	4%	3%
	Neutral	43	8%	8%
	Agree	153	30%	34%
	Strongly Agree	254	50%	47%
Grand Total		507		
9. Groundwater recharge areas, such as the Gardner Swamp, should be protected.		Total		
	Not Sure	13	3%	3%
	Strongly Disagree	11	2%	2%
	Disagree	9	2%	1%
	Neutral	41	8%	6%
	Agree	164	32%	39%
	Strongly Agree	269	53%	47%
Grand Total		507		
10. Policies should be implemented to identify and repair or replace unsafe drinking water sources.		Total		
	Not Sure	21	4%	4%
	Strongly Disagree	23	5%	3%
	Disagree	32	6%	4%
	Neutral	80	16%	8%
	Agree	171	34%	43%
	Strongly Agree	177	35%	34%
Grand Total		504		
11. The environmental conditions supporting existing plant and animal life should be maintained		Total		
	Not Sure	21	4%	4%
	Strongly Disagree	20	4%	3%
	Disagree	12	2%	2%
	Neutral	79	16%	12%
	Agree	190	38%	38%
	Strongly Agree	181	36%	39%
Grand Total		503		
12. Development that will make Gardner look like Northern Door is undesirable.		Total		
	Not Sure	17	3%	3%
	Strongly Disagree	37	7%	8%
	Disagree	34	7%	7%
	Neutral	68	13%	7%
	Agree	108	21%	21%
	Strongly Agree	241	48%	51%
Grand Total		505		

13. A large increase in population in Gardner is undesirable.		Total		
	Not Sure	11	2%	3%
	Strongly Disagree	23	5%	4%
	Disagree	53	11%	9%
	Neutral	114	23%	15%
	Agree	128	25%	24%
	Strongly Agree	174	35%	42%
Grand Total		503		
14. I want the Town of Gardner to be responsible for the administration, enforcement, and associated costs of any land use regulations it adopts.		Total		
	Not Sure	59	12%	10%
	Strongly Disagree	47	9%	6%
	Disagree	39	8%	11%
	Neutral	116	23%	19%
	Agree	142	28%	32%
	Strongly Agree	98	20%	14%
Grand Total		501		
15. I want the county to be responsible for the administration, enforcement, and associated costs of any land use regulations the Town of Gardner adopts.		Total		
	Not Sure	66	13%	11%
	Strongly Disagree	60	12%	13%
	Disagree	63	13%	13%
	Neutral	119	24%	16%
	Agree	122	24%	31%
	Strongly Agree	74	15%	17%
Grand Total		504		
16. Land use policies in Gardner should require a buffer area between agricultural land and residential land to reduce complaints about farming operations.		Total		
	Not Sure	30	6%	7%
	Strongly Disagree	67	13%	13%
	Disagree	77	15%	18%
	Neutral	125	25%	23%
	Agree	130	26%	26%
	Strongly Agree	73	15%	15%
Grand Total		502		
17. I would prefer seeing future homes built on smaller lots and having an increased number of homes as opposed to larger residential lots and fewer homes.		Total		
	Not Sure	24	5%	6%
	Strongly Disagree	170	34%	34%
	Disagree	126	25%	25%
	Neutral	91	18%	18%
	Agree	53	11%	10%
	Strongly Agree	40	8%	7%
Grand Total		504		

State if you feel that in Gardner in the following areas we need a lot of improvement, a little improvement, or no improvement.

18.a Improvement: Supply of homes that people can afford to buy		Total	
	Need a lot of improvement	52	10%
	Needs a little improvement	107	22%
	Needs no improvement	190	38%
	No opinion	147	30%
Grand Total		496	
18.b Improvement needed in: Parks/outdoor recreation areas?		Total	
	Need a lot of improvement	76	15%
	Needs a little improvement	183	37%
	Needs no improvement	207	41%
	No opinion	34	7%
Grand Total		500	
18.c Improvement on roads to handle current and planned development		Total	
	Need a lot of improvement	43	9%
	Needs a little improvement	190	38%
	Needs no improvement	206	41%
	No opinion	63	13%
Grand Total		502	
18.d Improvement needed in: Having high quality drinking water		Total	
	Need a lot of improvement	109	22%
	Needs a little improvement	167	34%
	Needs no improvement	139	28%
	No opinion	78	16%
Grand Total		493	
18.e Improvement needed in: High quality health care facilities		Total	
	Need a lot of improvement	94	19%
	Needs a little improvement	128	26%
	Needs no improvement	215	43%
	No opinion	62	12%
Grand Total		499	
18.f Improvement needed in: Nearby job opportunities		Total	
	Need a lot of improvement	133	26%
	Needs a little improvement	129	26%
	Needs no improvement	131	26%
	No opinion	109	22%
Grand Total		502	
19.a More Single-family homes for first time buyers?		Total	
	We need a lot more	52	11%
	We need a little more	120	25%
	We don't need any more	164	34%
	No opinion	153	31%
Grand Total		489	
19.b More Senior Housing?		Total	
	We need a lot more	68	14%
	We need a little more	123	25%
	We don't need any more	161	33%
	No opinion	139	28%
Grand Total		491	

19.c More Rental housing?	Total		
We need a lot more	19	4%	
We need a little more	70	14%	
We don't need any more	260	53%	
No opinion	141	29%	
Grand Total	490		
19.d More Moderately priced homes?	Total		
We need a lot more	42	9%	
We need a little more	211	43%	
We don't need any more	123	25%	
No opinion	115	23%	
Grand Total	491		
19.e More Higher priced homes?	Total		
We need a lot more	20	4%	
We need a little more	73	15%	
We don't need any more	268	54%	
No opinion	132	27%	
Grand Total	493		
19.f More Condominiums?	Total		
We need a lot more	8	2%	
We need a little more	58	12%	
We don't need any more	335	68%	
No opinion	95	19%	
Grand Total	496		
19.g More Townhouses and duplexes?	Total		
We need a lot more	10	2%	
We need a little more	67	14%	
We don't need any more	310	63%	
No opinion	106	22%	
Grand Total	493		
20. Conservation Subdivisions	Total		
Support Mandatory	100	20%	
Support encouraging them	193	39%	
Do not support	112	23%	
No opinion/Don't Know	88	18%	
Grand Total	493		
21. On protecting the environment	Total		
We need to do a lot more to protect our local environment even if it means an increase in our taxes	152	31%	
The quality of our local environment is very good, and we don't need to spend more on the environment.	332	68%	
Grand Total	485		
22. Do you think that existing farmland in the Town of Gardner should be kept as farmland or do you think farmers should be able to use it for other purposes.	Total		
Kept as farmland	181	37%	
Use for other purposes	225	46%	
Not Sure	83	17%	
Grand Total	489		
22a. a. How strongly would you agree or disagree with the following alternate use for farmland in the Town of Gardner: Housing	Total		
No opinion	18	5%	
Strongly Disagree	23	6%	
Disagree	27	8%	
Neutral	98	27%	
Agree	142	40%	
Strongly Agree	49	14%	
Grand Total	357		

22a. b How strongly would you agree or disagree with the following alternate use for famrland in the Town of Gardner: Commercial/Business uses		Total	
No opinion	17		5%
Strongly Disagree	49		14%
Disagree	66		19%
Neutral	96		28%
Agree	90		26%
Strongly Agree	30		9%
Grand Total	348		
22a.c How strongly would you agree or disagree with the following alternate use for famrland in the Town of Gardner: Industrial uses		Total	
No opinion	16		5%
Strongly Disagree	96		28%
Disagree	94		27%
Neutral	72		21%
Agree	48		14%
Strongly Agree	22		6%
Grand Total	348		
22a.d How strongly would you agree or disagree with the following alternate use for famrland in the Town of Gardner: Parkland/Outdoor Rec. area		Total	
No opinion	13		4%
Strongly Disagree	8		2%
Disagree	18		5%
Neutral	55		16%
Agree	159		45%
Strongly Agree	99		28%
Grand Total	352		
22a.e How strongly would you agree or disagree with the following alternate use for famrland in the Town of Gardner: Trails (hiking/biking)		Total	
No opinion	14		4%
Strongly Disagree	10		3%
Disagree	17		5%
Neutral	46		13%
Agree	158		44%
Strongly Agree	112		31%
Grand Total	357		
22a. f How strongly would you agree or disagree with the following alternate use for famrland in the Town of Gardner: Wildlife area		Total	
No opinion	12		3%
Strongly Disagree	11		3%
Disagree	9		3%
Neutral	45		13%
Agree	143		40%
Strongly Agree	134		38%
Grand Total	354		
22a. g Other Uses For Farmland:			
No Trailers			
Nuisance Ordinance			
ATV			
Farming			
hunting			
Private Storage Bldg			
Small Subdivisions			
water access			
Whatever he wants, it is his land			
Grand Total			

23. How strongly would you agree or disagree with each of the following statements

23. a It is very important to attract new businesses to Gardner.		Total	
No opinion	14	3%	
Strongly Disagree	41	8%	
Disagree	98	20%	
Neutral	148	30%	
Agree	137	28%	
Strongly Agree	58	12%	
Grand Total	496	100%	

23. b New housing development should include green space even if it means houses will cost more to buy.		Total	
No opinion	15	3%	
Strongly Disagree	26	5%	
Disagree	72	15%	
Neutral	108	22%	
Agree	190	38%	
Strongly Agree	84	17%	
Grand Total	495		

23. c Limit new home construction and business development to preserve undeveloped areas		Total	
No opinion	17	3%	
Strongly Disagree	40	8%	
Disagree	87	18%	
Neutral	95	19%	
Agree	157	32%	
Strongly Agree	101	20%	
Grand Total	497		

23. d We should invest in alternate transportation means (bike/walk paths)		Total	
No opinion	19	4%	
Strongly Disagree	52	10%	
Disagree	81	16%	
Neutral	127	25%	
Agree	118	24%	
Strongly Agree	104	21%	
Grand Total	501		

24. How strongly would you agree or disagree that the following places are essential to the identity of Gardner.

24.a Essential to the identity of Gardner: Bluffs		Total		
No opinion	21	4%	4%	
Strongly Disagree	7	1%	2%	
Disagree	9	2%	4%	
Neutral	55	11%	12%	
Agree	168	34%	35%	
Strongly Agree	234	47%	38%	
Grand Total	494			

24.b Essential to the identity of Gardner: Brussels bluffs and hill along K and 57		Total		
No opinion	26	5%	5%	
Strongly Disagree	7	1%	1%	
Disagree	14	3%	5%	
Neutral	80	16%	14%	
Agree	160	32%	35%	
Strongly Agree	206	42%	34%	
Grand Total	493			

24. d Essential to the identity of Gardner: Claflin Park and end of Claflin Park Road (site of shipyard, barracks, and indian burial grounds)		Total		
No opinion	31	6%	4%	
Strongly Disagree	4	1%	2%	
Disagree	6	1%	2%	
Neutral	64	13%	9%	
Agree	154	31%	34%	
Strongly Agree	234	47%	41%	
Grand Total	493			
24.e Essential to the identity of Gardner: Gardner swamp		Total		
No opinion	13	3%	3%	
Strongly Disagree	6	1%	2%	
Disagree	13	3%	2%	
Neutral	48	10%	7%	
Agree	161	33%	33%	
Strongly Agree	254	51%	46%	
Grand Total	495			
24. f Essential to identity of Gardner: Green Bay shoreline		Total		
No opinion	14	3%	2%	
Strongly Disagree	9	2%	2%	
Disagree	5	1%	3%	
Neutral	66	13%	11%	
Agree	170	34%	35%	
Strongly Agree	232	47%	40%	
Grand Total	496			
24.g Henderson Point		Total		
No opinion	44	9%	9%	
Strongly Disagree	4	1%	2%	
Disagree	9	2%	3%	
Neutral	102	21%	14%	
Agree	154	31%	31%	
Strongly Agree	176	36%	32%	
Grand Total	489			
24. h Lime Kiln remnants along Green Bay shore		Total		
No opinion	25	5%	6%	
Strongly Disagree	8	2%	3%	
Disagree	17	3%	5%	
Neutral	84	17%	15%	
Agree	158	32%	33%	
Strongly Agree	201	41%	31%	
Grand Total	493		0%	
24.i Little Sturgeon area		Total		0%
No opinion	17	4%	2%	
Strongly Disagree	5	1%	3%	
Disagree	17	4%	5%	
Neutral	87	18%	15%	
Agree	167	35%	32%	
Strongly Agree	190	39%	36%	
Grand Total	483			
24.j Public shore access Boney's Road		Total		
No opinion	74	15%	12%	
Strongly Disagree	9	2%	3%	
Disagree	12	2%	3%	
Neutral	88	18%	16%	
Agree	142	29%	30%	
Strongly Agree	160	33%	26%	
Grand Total	485			

24.j Public shore access Riley's Bay Rd.		Total		
	No opinion	48	10%	
	Strongly Disagree	5	1%	
	Disagree	13	3%	
	Neutral	68	14%	
	Agree	170	35%	
	Strongly Agree	184	38%	
Grand Total		488		
24.j Public shore access Rite's Cove (CTH N) Ernjoys?		Total		
	No opinion	48	10%	9%
	Strongly Disagree	9	2%	3%
	Disagree	16	3%	4%
	Neutral	79	16%	14%
	Agree	158	32%	31%
	Strongly Agree	178	36%	29%
Grand Total		488		
24.j Public shore access End of Circle Ridge Road		Total		
	No opinion	71	15%	12%
	Strongly Disagree	8	2%	3%
	Disagree	16	3%	4%
	Neutral	94	20%	17%
	Agree	135	28%	28%
	Strongly Agree	157	33%	26%
Grand Total		481		
24.j Public shore access Wood Lane		Total		
	No opinion	77	16%	
	Strongly Disagree	11	2%	
	Disagree	15	3%	
	Neutral	92	19%	
	Agree	138	28%	
	Strongly Agree	153	31%	
Grand Total		486		
24.j Public shore access Polish Lane (road past CTH CC		Total		
	No opinion	70	14%	10%
	Strongly Disagree	12	2%	3%
	Disagree	22	5%	5%
	Neutral	89	18%	16%
	Agree	140	29%	29%
	Strongly Agree	152	31%	27%
Grand Total		485		
24.k Southern Door schools area (woods and cave)		Total		
	No opinion	29	6%	4%
	Strongly Disagree	7	1%	2%
	Disagree	12	2%	3%
	Neutral	70	14%	14%
	Agree	179	36%	33%
	Strongly Agree	196	40%	36%
Grand Total		493		
24.l Sugar Creek and Park		Total		
	No opinion	26	5%	3%
	Strongly Disagree	5	1%	1%
	Disagree	4	1%	2%
	Neutral	45	9%	9%
	Agree	176	36%	36%
	Strongly Agree	239	48%	42%
Grand Total		495		

Demographics

Gender		Total	
	Male	341	69%
	Female	152	31%
Grand Total		493	
Age		Total	
	Under 35	22	5%
	35 - 64	296	64%
	65 - Over	143	31%
Grand Total		461	
Residency		Total	
	Year Round	229	46%
	Business property owner	23	5%
	Seasonal	170	34%
	Property Owner but no Residence or Business	79	16%
Grand Total		501	
Number of years owned property in Gardner		Total	
	0 - 10	138	27%
	11 to 20	136	27%
	21 +	203	40%
	Not Applicable	25	5%
Grand Total		502	
Year Round Residents: # of years you have been a year-round resident		Total	
	0 - 10	111	42%
	11 to 20	51	19%
	21 +	101	38%
Grand Total		263	
Seasonal Residents: # of years you have been a seasonal resident		Total	
	0 - 10	71	31%
	11 to 20	64	28%
	20 +	96	42%
Grand Total		231	
Residential property located on the water off the water, or both		Total	
	On the Water	213	45%
	Off the Water	219	46%
	Both	38	8%
Grand Total		471	
Number of persons in your Gardner household		Total	
	1	49	13%
	2	249	65%
	3	33	9%
	4	31	8%
	5	7	2%
	6	10	3%
	7	5	1%
Grand Total		384	
Number of Children under 18		Total	
	0	23	24%
	1	28	29%
	2	32	33%
	3	8	8%
	4	3	3%
	5	2	2%
Grand Total		96	

Monday, August 11, 2008
TOWN OF GARDNER
NOMINAL GROUP SURVEY RESULTS

Background

On Monday, August 11, 2008 13 citizens of the town of Gardner, members of the Town Plan Committee and Town Board were involved in a Nominal Group Process at the Southern Door High School Auditorium in order to produce a list of issues and concerns regarding the future of the town of Gardner. The following is an explanation of the Nominal Group Process and the final list of issues and concerns as they were ranked and voted on by the group.

The list is important to the planning process as it will be used in formulating goals and objectives for the Town of Gardner Comprehensive Plan. In addition, the issues identified will be used as a checklist to ensure that they are addressed within the plan, and discussed by the Planning Committee during the planning and research phase.

Nominal Group Process

The Nominal Group Process is a technique intended to facilitate a comprehensive exploration of ideas within a group by providing mechanisms to ensure that all participate, whether they are inclined to be vocal or not. This is achieved by having ideas evolve from each individual within the group (thus the term nominal) and prohibiting the group from debating or ridiculing any idea. The group action takes the form of voting to decide which of the ideas have the greatest merit in the eyes of the entire group. The steps in the process are:

1. The Silent Generation of Ideas in Writing - Each member of the group was asked to write down, in silence, as many ideas as possible in response to the basic question “What characteristics of your community should be maintained, enhanced, added, or eliminated?”
2. Round Robin Recording of Ideas on a Flip Chart – One idea from each member of the group was solicited and recorded on a flip chart in order. The ideas of each member of the group were then posted for everyone in the group to see. No discussion or debate was allowed during this process so that everyone had a fair chance to express their ideas. After all ideas were listed, the group facilitator eliminated duplicate ideas and combine similar ideas with the consent of the author(s).
3. Preliminary Vote on Items of Importance - On a sheet handed out by the facilitator, each member of the group was asked to identify their top five choices from among the ideas that were generated in steps 1 and 2.
4. Tally the Sheets to Determine the Top Three Choices of the Group - Each member of the group was then asked to identify their top three choices in no particular order using a dot provided by the facilitator. These scores were then recorded and tallied to identify the top issues facing the town of Gardner, as well as other issues that need to be addressed in the plan.

The following lists identify every issue or concern that was brought up by the group and voted on in rank order.

5	Need to make an eccentric, economic, social, recreational center near Stevenson Pier and 'C'. Encourage new commercial development there. Make it a place for bicyclists.
4	The two Squaw Islands should be acquired for a town park
3	Develop a senior center/town hall
3	Develop and support a county-wide telecommunications network
3	Recognize junk and nuisance on property and have a way of enforcing and removing it
2	Need to improve runoff into bay by eliminating farm waste from outside the town coming into the town
2	No mega-farms in Gardner
2	Preserve Little Sturgeon Bay like an inland lake. Consider no-wake zones
2	Promote low environmental impact "green" type of business
1	Identify and maintain, promote, preserve historically significant properties
1	Improved accessibility to and in Gardner Swamp – preserve public access forever
1	Monitoring of water clarity and cleanness – drinking water and surface water and sewage systems
1	Need some commercial development to create jobs
1	Need to develop a land use process to balance property independence and avoidance of unfettered change
1	Two acre lot size off of farmland
1	Upgrade town roads for boats/campers and farm equipment with marked bike lanes. Also make access to farmland driveways > 20'
	Anticipate future municipal sewer/water
	Development of a bike/hike trail with Nasewaupee and Sturgeon Bay area
	Ensure financial (security) bond for proposed development as well as good business plan, market study
	Keep existing boat ramps open and improve on them so they are useable
	Limit growth to maintain our rural character
	More controls on applying chemicals on large rented acreages
	Opportunity to look at Little Sturgeon landing for a town park and beach
	Park and ride lot in Brussels
	Town should address loud noises
	Trailers in trailer parks need setbacks and screenings
	Work toward good land use planning

APPENDIX C
ECONOMIC DEVELOPMENT PROGRAMS AND RESOURCES

ECONOMIC DEVELOPMENT PROGRAMS AND RESOURCES

This section briefly explains the programs and resources available on each government level that are designed to help build economic development capacity through infrastructure expansion and to offer resources necessary to develop and grow businesses.

Federal

US Department of Commerce, Economic Development Administration (EDA)

EDA was established to work with states and regional planning commissions (economic development districts) to generate new jobs, retain existing jobs, and stimulate industrial and commercial growth in economically distressed areas and regions of the United States. The purpose of its program investments is to provide economically distressed communities with a source of funding for planning, infrastructure development, and business financing that will induce private investment in the types of business activities that contribute to long-term economic stability and growth. EDA's investments are strategically targeted to increase local competitiveness and strengthen the local and regional economic base. There are a number of investment programs offered by EDA.

The Public Works Program to empower distressed communities to revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term, private sector jobs and investment. **Economic Adjustment Assistance Program** assists state and local interests to design and implement strategies to adjust or bring about change to an economy. The program focuses on areas that have experienced or are under threat of serious structural damage to the underlying economic base. **The Research and Technical Assistance Program** supports research of leading edge, world class economic development practices as well as funds information dissemination efforts. **The Technical Assistance Program** helps fill the knowledge and information gaps that may prevent leaders in the public and nonprofit sectors in distressed areas from making optimal decisions on local economic development issues. **EDA's Partnership Planning Programs** help support local organizations (Economic Development Districts, Indian Tribes, and other eligible areas) with their long-term planning efforts and their outreach to the economic development community on EDA's programs and policies. (source:www.eda.gov)

US Department of Housing and Urban Development

CDBG Entitlement Communities Grants are annual grants given on a formula basis to entitled cities, including the City of Green Bay, and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for low- and moderate-income persons. Entitlement communities develop their own programs and funding priorities. Focus is on serving low-and moderate-income persons, and prevention and elimination of blight. Eligible activities include relocation and demolition; construction of public facilities; and assistance to profit-motivated businesses to carryout economic development and job creation/retention activities. To receive its annual CDBG entitlement grant, a grantee must develop and submit to HUD its Consolidated Plan.

Economic Development Initiative (EDI) provides grants to local governments to enhance both the security of loans guaranteed through Section 108 Loan Program and the feasibility of the economic development and revitalization projects they finance. EDI has been the catalyst in the expanded use of loans through the Section 108 Program by decreasing the level of risk to their CDBG funds or by paying for some of the project costs. There are congressionally earmarked and competitive BDI grants. Competitive EDI grants can be only be used in projects also assisted

by the Section 108 Loan Program. Eligible activities include property acquisition, rehabilitation of public owned property, and economic development activities.

Brownfields Economic Development Initiative (BEDI) is a key competitive grant program HUD administers to stimulate and promote economic and community development. BEDI is designed to assist cities with the redevelopment of abandoned, idled, and underused industrial and commercial facilities where expansion and redevelopment is burdened by real or potential environmental contamination. The purpose of the BEDI program is to spur the return of brownfields to productive economic use through financial assistance to public entities in the redevelopment of brownfields, and enhance the security or improve the viability of a project financed with Section 108- guaranteed loan authority. Therefore, BEDI grants must be used in conjunction with a new Section 108-guaranteed loan commitment.

Section 108 Loan Guarantee Program loan guarantee provision of the CDBG program. It provides communities with a source of financing for economic development, housing rehabilitation, public facilities, and large-scale physical development projects. Eligible applicants include entitlement communities. Activities eligible for Section 8 financing include economic development activities eligible under CDBG, acquisition of real property, rehabilitation of public property, installation of public facilities. As an entitlement community, Green Bay may apply for up to five times the latest approved CDBG entitlement amount minus any outstanding Section 108 commitments and/or principal balances of Section 108. The principal security for the loan guarantee is a pledge by the applicant public entity of its current and future CDBG funds. The maximum repayment period for a Section 8 loan is twenty years. (source: www.hud.gov)

USDA Rural Development

The office offers a variety of funding options for many types of business ventures to include agriculture, manufacturing, processing, services, commercial, and retail. Rural Development is also instrumental in providing much needed financial resources to communities for infrastructure improvements and expansions primarily for waste water and water treatment facilities. They have direct and guaranteed loans for businesses and communities in addition to a number of grants.

The **Rural Business Opportunity Grant Program** provides technical assistance, training, and planning activities that improve economic conditions in rural areas of 50,000 people or less. A maximum of \$1.5 million per grant is authorized. **Rural Utilities Service (RUS) Grant Program** is designed to promote economic development and/or job creation projects including, but not limited to: project feasibility studies, start-up costs, incubator projects, and other reasonable expenses. Grants can be provided to rural communities through RUS borrowers to be used for revolving loan funds for community facilities and infrastructure, and for assistance in conjunction with rural economic development loans.

Rural Business Enterprise Grants Program (RBEG) to public bodies, private nonprofit corporations, and federally-recognized Indian Tribal groups to finance and facilitate development of small and emerging private business enterprises located in areas outside the boundary of a City, or unincorporated areas of 50,000 or more and its immediately adjacent urbanized or urbanizing area. The small, or emerging business to be assisted must have less than 50 new employees, less than \$1 million in gross annual revenues, have or will utilize technological innovations and commercialization of new products and/or processes to be eligible for assistance. Funds can be used for a variety of things including, but not limited to: construction of buildings and plants, equipment, access streets and roads, parking areas, utility and service extensions, and a variety of other costs.

The Intermediary Relending Program money is lent to private non-profit organizations, any state or local government, an Indian Tribe, or a cooperative that is relented to by the intermediary to the ultimate recipients. The ultimate recipient must not be able to receive financing at reasonable rates or terms. (Source: www.rurdev.usda.gov)

US Department of Commerce National Oceanic and Atmospheric Administration (NOAA)

Coastal Zone Management Program (CZMP) assists local and state governments in managing and revitalizing coastal areas for mixed-use development. The competing goals of commercial and industrial development, tourism, environmental protection, transportation and recreation are discussed in coastal management plans. The CZMP seeks to maintain the economic welfare of coastal communities and ecosystems through intergovernmental cooperation. The CZMP supports states through financial contributions, technical advice, participation in state and local forums, and through mediation. Wisconsin CZMP programs currently protect wetland ecosystems, reduce non-point pollution sources, reduce erosion and assist in meeting state and regional coastal goals. (source: www.coastalmanagement.noaa.gov/czm)

US Environmental Protection Agency

Brownfields Assessment and Cleanup Cooperative Agreements objectives are to provide funding to inventory, characterize, assess, and conduct planning and community involvement related to brownfield sites; to capitalize a RLF fund; and to carry out cleanup activities at brownfield sites that are owned by the grant recipient. Eligibility for the assessment, RLF, and cleanup grants includes a general purpose unit of local government. This is a competitive grant program. There are separate guidelines for each of the three areas. Grant amounts are based on size and type of contamination, ranging from \$200,000 to \$350,000. (source: www.epa.gov)

US Department of the Interior - National Park Service

Land and Water Conservation Fund (LWCF) is a visionary and bipartisan program, established by Congress in 1964 to create parks and open spaces, protect wilderness, wetlands, and refuges, preserve wildlife habitat, and enhance recreational opportunities. States receive individual allocations of LWCF grant funds based on a national formula. Then states initiate a statewide competition for the amount available to award via matching grants. (source: www.nps.gov)

Small Business Administration (SBA)

The **SBA** provides financial, business counseling and training, and business advocacy to foster the development and success of small businesses. Financial assistance comes in the form of loans and grant programs including the 7(a) Loan Guarantee, Prequalification Loan, 7(m) Micro Loan, CDC/504 Loan, CAPLines Program, and 8(a) Business Development Program. (source: www.sba.gov)

State

Wisconsin Department of Commerce

The federally funded **Community Development Block Grant (CDBG)** program can be used for housing, economic development and public facility improvements. The program is designed to assist economically distressed smaller communities with improvements to such things as utilities and streets, fire stations, community centers, and housing rehabilitation, as well as many other improvements needed by a community. The **CDBG-Economic Development (ED)** program assists large businesses that will invest substantial private funds and create approximately 100

jobs as they expand or relocate in Wisconsin. Funds are awarded to a community, which then loans the funds to a business. The **Major Economic Development (MED) Program** is designed to assist businesses that will invest private funds and create jobs as they expand in or relocate to Wisconsin. The **Rural Economic Development (RED) Program** provides working capital or fixed asset financing for businesses with fewer than 50 employees.

Specifically, the **CDBG-Public Facilities for Economic Development (PFED)** program is designed to assist communities with expanding or upgrading their infrastructure to accommodate businesses that have made a firm commitment to create jobs and invest in the community. The **CDBG-Public Facilities (PF)** component helps eligible local governments upgrade community facilities, infrastructure, and utilities for the benefit of low- to moderate-income residents. The **Main Street Program** offers a variety of resources to include façade grants and technical and financial assistance to stimulate the revitalization of their respective areas. The **Brownfields Initiative** provides grants to persons, businesses, local development organizations, and municipalities for environmental remediation activities for brownfield sites where the owner is unknown, cannot be located or cannot meet the cleanup costs. The **Community-Based Economic Development Program (CBED)** is designed to promote local business development in economically-distressed areas. The program awards grants to community-based organizations for development and business assistance projects and to municipalities for economic development planning. The program helps community-based organizations plan, build, and create business and technology-based incubators, and can also capitalize an incubator tenant revolving-loan program. The **CDBG-Blight Elimination and Brownfield Redevelopment Program (BEBR)** can help small communities obtain money for environmental assessments and to remediate brownfields. The **CDBG-Emergency Grant Program** can help small communities repair or replace infrastructure that has suffered damages as a result of catastrophic events. Call 608-266-8934.

Community Development Zone (CDZ) designation is a tax credit program for businesses planning to expand, relocate or start in the designated Community Development Zones (CDZ). CDZs in the BLRPC district include the Cities of Green Bay, Sturgeon Bay, Two Rivers, and Manitowoc; and the Counties of Florence, Marinette, and Oconto. These tax credits are to be applied against a company's Wisconsin income tax liability. These credits are based on the number of new jobs that a company creates, and the wage level and benefit package that are offered to the employees. The Enterprise Development Zone (EDZ) program provides tax incentives to new or expanding businesses whose projects will affect distressed areas. Based on the economic impact of a proposed business project, the Department of Commerce will be able to designate an enterprise development zone. A zone is "site specific" and applies to only one business.

To complement the bricks and mortar component of Commerce, there is funding specifically earmarked for employee training. Eligible businesses looking to train a significant number of its current or incoming workforce can apply for and receive a direct grant from Commerce for **Customized Labor Training (CLT)**. Companies with a few employees seeking training are eligible for the **Business Employees Skills Training (BEST)** program. The focus of both programs is on the training or retraining of employees to incorporate new technologies or manufacturing processes.

Commerce provides financial resources to encourage the development of small businesses. Potential entrepreneurs can access an **Early Planning Grant (EPG)** of up to \$3,000 to obtain professional services necessary to evaluate the feasibility of a proposed start-up or expansion or develop a business plan. The **Entrepreneurial Training Grant Program (ETG)** is a

comprehensive course designed to provide hands-on assistance in the writing of a business plan. The technical assistance can be provided by the *Small Business Development Center (SBDC)* at *UW-Green Bay* or the regional *Service Core of Retired Executives (SCORE)* office.

Other programs offered by Commerce include: the **Employee Ownership Assistance Loan (EOP) Program**, can help a group of employees purchase a business by providing individual awards up to \$15,000 for feasibility studies or professional assistance. The business under consideration must have expressed its intent to downsize or close. **Industrial Revenue Bonds (IRB)** are municipal bonds whose proceeds are loaned to private persons or to businesses to finance capital investment projects. All Wisconsin municipalities, cities, villages, and towns are authorized to issue IRBs. The **Technology Development Fund (TDF)** program helps Wisconsin businesses research and develop technological innovations that have the potential to provide significant economic benefit to the state. The **Technology Development Loan (TDL)** program helps Wisconsin businesses develop technological innovations that have the potential to provide significant economic benefit to the state. This program is designed to help businesses commercialize new technology.

The **Minority Business Development (MBD) Loan Program** provides low interest loans to assist minority-owned companies with land and equipment purchase, working capital, and construction. The **Wisconsin Trade Project Program** can help small export-ready firms participate in international trade shows. The **Milk Volume Production (MVP) Loan Program** enables farmers to increase milk production by offering loan interest loans to purchase additional dairy cattle. The **Dairy 20/20 Early Planning Grant Program** covers third party services to assist the applicant with start-up, modernization, or expansion of a dairy operation. (source: www.commerce.state.wi.us)

Wisconsin Department of Transportation

The **Transportation Economic Assistance (TEA)** grants provide up to 50% of costs to governing bodies, private businesses, and consortiums for road, rail, harbor, and airport projects that help attract employers to Wisconsin, or encourage business and industry to remain and expand in the state. Grants up to \$1 million are available for transportation improvements that are essential for an economic development project. The amount of WisDOT provided funding is dependent on the number of jobs being created or retained. The 50% local match portion can come from a combination of local, federal, state, or in-kind services.

In 1979, the **Harbor Assistance Program (HAP)** was created to assist harbor communities along the Great Lakes and Mississippi River in maintaining and improving waterborne commerce. Port projects typically include dock reconstruction, mooring structure replacement, dredging, and construction of facilities to hold dredged materials. The **Freight Rail Infrastructure Improvement program (FRIP)** and **Freight Rail Preservation program (FRPP)** were created to maintain and improve rail services throughout Wisconsin.

The **State Infrastructure Bank (SIB) program**, similar to a private bank, offers a range of loans and credit options to help finance eligible surface transportation projects. The money can be used in conjunction with other programs. SIBs offer Wisconsin the ability to undertake transportation projects that would otherwise go unfunded or experience substantial delays. Communities can borrow the money to provide needed transportation infrastructure improvements to help preserve, promote, and encourage economic development and/or promote transportation efficiency, safety, or mobility. The Wisconsin SIB program is a revolving loan program providing capital for transportation projects from loan repayments and interest earned from money remaining in the bank. Eligible projects include constructing or widening a road

linking an intermodal facility and providing better access to commercial and industrial sites. WisDOT charges 2 percent interest on the loan principal, with projects amortized up to 25 years. Eligible applicants are local units of government, Amtrak Railroad, private non-profit organizations, and Transit Commissions. (source: www.dot.wisconsin.gov)

Wisconsin Department of Tourism

Funding is available for local communities and regions to design their own marketing effort. The most popular and utilized program is the **Joint Marketing Grant (JEM)**. The grants are to assist in paying for the costs associated with developing a stronger advertising and public relations campaign to promote tourism. (source: <http://agency.travelwisconsin.com>)

Wisconsin Department of Agriculture, Trade, and Consumer Protection

Financial resources are provided to help grow and diversify the state's agriculture industry. The **Agricultural Development and Diversification (ADD)** grant is awarded to projects that may create new opportunities within agriculture through new value-added products, new market research, new production or marketing techniques, or alternative crops or enterprises. Maximum grants are \$50,000. Eligible applicants are individuals, associations, agri-businesses, and industry groups. (source: <http://datcp.state.wi.us>)

Wisconsin Department of Administration

Wisconsin Coastal Management Program was established in 1978 under the Federal Coastal Zone Management Act. Coastal management is defined as achieving a balance between natural resource preservation and economic development along our Great Lakes coasts. All counties adjacent to Lakes Superior and Michigan are eligible to receive funds. Coastal Management Grants are available for coastal land acquisition, wetland protection and habitat restoration, non-point source pollution control, coastal resources and community planning, Great Lakes education, and public access and historic preservation. (source: www.doa.state.wi.us)

Wisconsin Department of Natural Resources

Brownfields, Green Space and Public Facilities grants help local governments clean-up brownfield sites intended for long-term public benefit, including green spaces, development of recreational areas or other uses by local governments. A city, village, town, county, redevelopment authority, community development authority, or housing authority is eligible to apply for funds. Eligible costs include remedial action plans and/or costs to develop a Remedial Action Plan. No grant may exceed \$200,000. The match requirement (20-50 percent) is determined by the amount of the grant. Site access and completed Phase I and II Environmental Site Assessments are required to receive a grant. Application deadline has been each year in January. (source: www.dnr.state.wi.us)

Wisconsin Housing and Economic Development Authority (WHEDA)

WHEDA is responsible for a number of housing and economic development functions. WHEDA works with local and state economic development professionals, businesses, and lending institutions to help an individual expand or modernize a farm or business. **Loan Guarantees, direct loans, New Market Tax Credits, and interest rate subsidies** are utilized within a financial package to help ensure the project has the best chance for long term success. (source: www.wheda.com)

Other state resources include: *Impact Seven, Inc.*, is one of more recognizable statewide organizations that provide micro-loans for small business start-ups and expansions. (source: www.impactseven.org) The *Wisconsin Women's Business Initiative Corporation (WWBIC)* also provides micro-loans to predominately women, people of color, and those of lower incomes. (source: www.wwbic.com) The *Wisconsin Business Development Finance Corporation* provides financial assistance and resources to business and lenders throughout the state. (source: www.wbd.org)

Regional

The Bay-Lake Regional Planning Commission (BLRPC)

The Bay-Lake Regional Planning Commission serves as an economic development district for the US Department of Commerce-Economic Development Administration. Potential EDA funded projects must be reviewed by the BLRPC for eligibility of federal funding. The BLRPC also provides technical assistance to local ED organizations and offers grant writing and administration services for various state and federal funding sources. (source: www.blrpc.org)

Northeast Wisconsin Regional Economic Partnership (NEWREP)

All eight counties of the BLRPC are part of Commerce's ***Eastern Wisconsin Technology Zone***. The program provides income tax incentives for high-tech development in the region. The zone is designed to enhance the region's attractiveness to high-tech businesses and workers, build on the success of the biotechnology and manufacturing companies in the region, attract auxiliary companies and help existing companies increase productivity. (source: www.northeastwisconsin.org)

Small Business Development Centers (SBDC)

SBDCs are located within the eleven 4-year universities. The SBDCs counselors offer advice, training, and resources to promote entrepreneurship and small business growth. Programs focus on minority entrepreneurship, startup business solutions, and established business solutions. Specific programs include business plan reviews and one-to-one business counseling. (source: www.wisconsinsbdc.org)

SCORE

SCORE is more than 11,500 member volunteer association sponsored by the U.S. Small Business Administration. It matches volunteer business-management counselors with present and prospective small business owners in need of expert advice. **SCORE** has experts in virtually every area of business management. Local SCORE chapters offer workshops and no cost one-to-one counseling. (source: www.sba.gov)

Community Action Agencies

The purpose of **Community Action Agencies**, as stated in the Economic Opportunity Act (EOA of 1964), is to stimulate a better focusing of all available local, state, private and federal resources upon the goal of enabling low-income families, and low-income individuals of all ages in all geographic areas, to attain the skills, knowledge, and motivations, and secure the opportunities needed, for them to become fully self-sufficient. CAAs operate a variety of programs. CAAs are known statewide for their operation of Head Start, weatherization, housing, employment and training programs, family development, economic development, commodity distribution, senior and youth services, and many other valuable programs. In addition to providing direct services, CAAs often serve as program sponsors or grantees overseeing, although not necessarily directly operating programs. (source: www.wiscap.org)

Utilities

Area utilities to include **Wisconsin Public Service Corporation, Alliant Energy, Rural Energy Cooperatives**, and **SBC** offer economic development assistance to communities and businesses in a number of ways to include the development of business plans, making available grants and loans, providing loan guarantees, and facilitating educational forums.

County and Local

University of Wisconsin Extension Office

Community Resource Development Agent/Educator offers small business management assistance workshops or one-on-one counseling, as well as information on county revolving loan funds and other sources of financing. (source: www.uwex.edu)

County Economic Development Officials/Contacts

Seven of the eight counties within the Bay-Lake Region have established programs to promote economic development within each of their respective county. The counties of Florence, Marinette, Oconto, Brown, Kewaunee, Manitowoc, and Door each have a specific economic development organization that focuses on job creation, job retention, and the overall economic well-being of the county. These organizations also promote existing businesses in the community, offer a marketing outlet for their respective municipality, and establish events that are unique to the community to benefit the area economically.

APPENDIX D
RARE, THREATENED, AND ENDANGERED SPECIES AND
NATURAL COMMUNITIES IN DOOR COUNTY

Door County Threatened and Endangered Species

GROUP	SCIENTIFIC NAME	COMMON NAME	DATE	SRANK	GRANK	WI STATUS	USES STATUS
Animal	<i>Glyphyalinia rhoadsi</i>	Sculpted glyph	1997	S2	G5	SC/N	
Animal	<i>Glyphyalinia wheatleyi</i>	Bright glyph	1995	S1	G5	SC/N	
Animal	<i>Hendersonia occulta</i>	Cherrystone drop	1998	S3	G4	THR	
Animal	<i>Paravitrea multidentata</i>	Dentate supercoil	1998	S2S3	G4G5	SC/N	
Animal	<i>Striatura ferrea</i>	Black striate	1997	S2	G4G5	SC/N	
Animal	<i>Striatura milium</i>	Fine-ribbed striate	1995	S4	G4	SC/N	
Animal	<i>Succinea bakeri</i>	A land snail	1997	SU	G?	SC/N	
Animal	<i>Vertigo elatior</i>	Tapered vertigo	1997	S3	G?	SC/N	
Animal	<i>Vertigo hubrichti</i>	Midwest pleistocene vertigo	1998	S1	G2	END	
Animal	<i>Vertigo iowaensis</i>	Iowa pleistocene vertigo	1998	S1S2	G2	SC/N	
Animal	<i>Vertigo nylanderi</i>	Deep-throated vertigo	1997	S1	G?	SC/N	
Animal	<i>Vertigo paradoxa</i>	Mystery vertigo	1997	S1	G2G4	SC/N	
Animal	<i>Zoogenetes harpa</i>	Boreal top	1997	S1	G?	SC/N	
Animal	<i>Catinella exile</i>	Pleistocene catinella	1995	S2	G1G2	SC/N	
Animal	<i>Cionella morseana</i>	Appalachian pillar	1997	S2	G4G5	SC/N	
Animal	<i>Guppya sterkii</i>	Brilliant granule	1997	S2S3	G4G5	SC/N	
Animal	<i>Orconectes propinquus</i>	Northern clearwater crayfish	1999	SU	G5	SC/N	
Animal	<i>Somatochlora hineana</i>	Hine's emerald	2001	S1	G2G3	END	LE
Animal	<i>Vitrina angelicae</i>	Transparent vitrine snail	1996	S1	G?	SC/N	
Animal	<i>Accipiter gentilis</i>	Northern goshawk	2000	S2N,S2B	G5	SC/M	
Animal	<i>Acipenser fulvescens</i>	Lake sturgeon	1914	S3	G3G4	SC/H	
Animal	<i>Acris crepitans blanchardi</i>	Blanchard's cricket frog	1983	S1	G5T5	END	
Animal	<i>Aeshna clepsydra</i>	Mottled darner	1991	S2	G4	SC/N	
Animal	<i>Ammodramus henslowii</i>	Henslow's sparrow	1994	S2S3B,SZN	G4	THR	
Animal	<i>Ammodramus leconteii</i>	Le Conte's sparrow	1993	S2B,SZN	G4	SC/M	
Animal	<i>Ammodramus savannarum</i>	Grasshopper sparrow	1998	S3B,SZN	G5	SC/M	
Animal	<i>Bartramia longicauda</i>	Upland sandpiper	1984	S2B,SZN	G5	SC/M	
Animal	<i>Botaurus lentiginosus</i>	American bittern	1998	S3B,SZN	G4	SC/M	
Animal	<i>Bucephala clangula</i>	Common goldeneye	1997	S2B,SZN	G5	SC/M	
Animal	<i>Buteo lineatus</i>	Red-shouldered hawk	1998	S1N,S3S4B	G5	THR	
Animal	<i>Caenis youngi</i>	A caenid mayfly	1999	S2S3	G4	SC/N	
Animal	<i>Charadrius melodus</i>	Piping plover	1948	S1	G3	END	LE
Animal	<i>Chromagrion conditum</i>	Aurora damselfly	1991	S3	G5	SC/N	

GROUP	SCIENTIFIC NAME	COMMON NAME	DATE	SRANK	GRANK	WI STATUS	USES STATUS
Animal	<i>Cicindela hirticollis rhodensis</i>	Beach-dune tiger beetle	1999	S2	G5T4	SC/N	
Animal	<i>Cordulegaster obliqua</i>	Arrowhead spiketail	1999	S3	G4	SC/N	
Animal	<i>Coregonus artedi</i>	Lake herring	1914	S3	G5	SC/N	
Animal	<i>Coturnicops noveboracensis</i>	Yellow rail	1989	S1B,SZN	G4	THR	
Animal	<i>Cymbiodyta acuminata</i>	A water scavenger beetle	1999	S3	G?	SC/N	
Animal	<i>Dendroica caerulescens</i>	Black-throated blue warbler	1997	S3B,SZN	G5	SC/M	
Animal	<i>Dendroica tigrina</i>	Cape May warbler	1999	S3B,SZN	G5	SC/M	
Animal	<i>Diadophis punctatus edwardsii</i>	Northern ringneck snake	1991	S3?	G5T5	SC/H	
Animal	<i>Emydoidea blandingii</i>	Blanding's turtle	1990	S3	G4	THR	
Animal	<i>Epiaeschna heros</i>	Swamp darner	1993	S2S3	G5	SC/N	
Animal	<i>Euphyes bimacula</i>	Two-spotted skipper	1982	S2S3	G4	SC/N	
Animal	<i>Euphyes dion</i>	Dion skipper	1990	S3	G4	SC/N	
Animal	<i>Fundulus diaphanus</i>	Banded killifish	1965	S3	G5	SC/N	
Animal	<i>Grammia oithona</i>	Oithona tiger moth	1991	S2	G4	SC/N	
Animal	<i>Grammia phyllira</i>	Phyllira tiger moth	1991	S2	G4	SC/N	
Animal	<i>Hydrobius melaenum</i>	A water scavenging beetle	1999	SU	G?	SC/N	
Animal	<i>Hydrometra martini</i>	A water measurer	1999	S3	G5	SC/N	
Animal	<i>Hydroporus vittatus</i>	A predaceous diving beetle	1999	S3	G?	SC/N	
Animal	<i>Ilybius ignarus</i>	Diving beetle	1999	S3	G?	SC/N	
Animal	<i>Ischnura hastata</i>	Citrine forktail	1991	S2	G5	SC/N	
Animal	<i>Lanius ludovicianus</i>	Loggerhead shrike	1983	S1B,SZN	G4	END	
Animal	<i>Lestes eurinus</i>	Amber-winged spreadwing	1992	S3	G4	SC/N	
Animal	<i>Luxilus chrysocephalus</i>	Striped shiner	1962	S1	G5	END	
Animal	<i>Lycaena dorcas</i>	Dorcas copper	2000	S2	G5	SC/N	
Animal	<i>Matus bicarinatus</i>	A predaceous diving beetle	1999	S2S3	G?	SC/N	
Animal	<i>Melanerpes erythrocephalus</i>	Red-headed woodpecker	1982	S3B,SZN	G5	SC/M	
Animal	<i>Mergus merganser</i>	Common merganser	1998	S3B,SZN	G5	SC/M	
Animal	<i>Mergus serrator</i>	Red-breasted merganser	1998	S3B,SZN	G5	SC/M	
Animal	<i>Nycticorax nycticorax</i>	Black-crowned night-heron	1979	S2B,SZN	G5	SC/M	
Animal	<i>Somatochlora elongata</i>	Ski-tailed emerald	1990	S2S3	G5	SC/N	
Animal	<i>Somatochlora forcipata</i>	Forcinate emerald	1990	S2S3	G5	SC/N	

GROUP	SCIENTIFIC NAME	COMMON NAME	DATE	SRANK	GRANK	WI STATUS	USES STATUS
Animal	<i>Somatochlora franklini</i>	Delicate emerald	1991	S2S3	G5	SC/N	
Animal	<i>Sturnella neglecta</i>	Western meadowlark	1992	S3S4B,SZN	G5	SC/M	
Animal	<i>Thamnophis sauritus</i>	Northern ribbon snake	1963	S1?	G5	END	
Animal	<i>Trimerotropis huroniana</i>	Lake Huron locust	1999	S1	G2G3	END	
Animal	<i>Vermivora peregrina</i>	Tennessee warbler	1994	S1B,SZN	G5	SC/M	
Animal	<i>Vertigo morsei</i>	Six-whorl vertigo	1997	S1	G?	SC/N	
Animal	<i>Wilsonia citrina</i>	Hooded warbler	1995	S2B,SZN	G5	THR	
Community	<i>Alvar</i>		2000	S1	G2	NA	
Community	<i>Great Lakes alkaline rockshore</i>		2000	S2	G3	NA	
Community	<i>Moist cliff</i>		2000	S4		NA	
Community	<i>Springs and spring runs, hard</i>		1976	S4	GU	NA	
Community	<i>Talus forest</i>		1999	S1		NA	
Community	<i>Alder thicket</i>		1976	S4	G4	NA	
Community	<i>Boreal forest</i>		2000	S2	G3?	NA	
Community	<i>Boreal rich fen</i>		2000	S2	G4G5	NA	
Community	<i>Emergent aquatic</i>		2000	S4	G4	NA	
Community	<i>Forested ridge and swale</i>		2001	S2	G3	NA	
Community	<i>Forested seep</i>		1998	S2		NA	
Community	<i>Great lakes beach</i>		1999	S2	G3	NA	
Community	<i>Great lakes dune</i>		2001	S2	G3	NA	
Community	<i>Hardwood swamp</i>		1999	S3	G4	NA	
Community	<i>Interdunal wetland</i>		1988	S1	G2?	NA	
Community	<i>Lake--shallow, hard, drainage</i>		2000	SU	GU	NA	
Community	<i>Lake--shallow, hard, seepage</i>		1998	SU	GU	NA	
Community	<i>Lake--shallow, very hard, drainage</i>	marl	1988	S2	GU	NA	
Community	<i>Northern dry-mesic forest</i>		1999	S3	G4	NA	
Community	<i>Northern mesic forest</i>		2000	S4	G4	NA	
Community	<i>Northern sedge meadow</i>		2000	S3	G4	NA	
Community	<i>Northern wet forest</i>		1976	S4	G4	NA	
Community	<i>Northern wet-mesic forest</i>		2001	S3S4	G3?	NA	
Community	<i>Open bog</i>		1976	S4	G5	NA	
Community	<i>Shore fen</i>		2000	S2		NA	
Community	<i>Shrub-carr</i>		1999	S4	G5	NA	
Community	<i>Southern hardwood swamp</i>		1999	S2	G4?	NA	
Community	<i>Southern mesic forest</i>		1998	S3	G3?	NA	

GROUP	SCIENTIFIC NAME	COMMON NAME	DATE	SRANK	GRANK	WI STATUS	USES STATUS
Community	<i>Southern sedge meadow</i>		2000	S3	G4	NA	
Other	<i>Bat hibernaculum</i>		1986	S3		SC	
Plant	<i>Draba arabisans</i>	Rock whitlow-grass	2000	S1	G4	SC	
Plant	<i>Draba lanceolata</i>	Lanceolate whitlow-cress	1934	S1	G3G5	END	
Plant	<i>Acer pensylvanicum</i>	Striped maple	1998	S1	G5	SC	
Plant	<i>Asplenium viride</i>	Green spleenwort	1999	S1	G4	END	
Plant	<i>Botrychium spathulatum</i>	Spoon-leaf moonwort	1982	S1	G3	SC	
Plant	<i>Carex concinna</i>	Beautiful sedge	1999	S1	G4G5	THR	
Plant	<i>Carex garberi</i>	Elk sedge	2000	S1	G4	THR	
Plant	<i>Carex platyphylla</i>	Broad-leaf sedge	2000	S2	G5	SC	
Plant	<i>Cirsium pitcheri</i>	Dune thistle	2001	S2	G3	THR	LT
Plant	<i>Festuca occidentalis</i>	Western fescue	2000	S1S2	G5	THR	
Plant	<i>Iris lacustris</i>	Dwarf lake iris	2000	S2	G3	THR	LT
Plant	<i>Parnassia parviflora</i>	Small-flower grass-of-parnassus	1995	S1	G4	END	
Plant	<i>Pteropora andromedea</i>	Giant pinedrops	1999	S1	G5	END	
Plant	<i>Selaginella selaginoides</i>	Low spike-moss	1994	S1	G5	END	
Plant	<i>Tanacetum huronense</i>	Lake Huron tansy	1982	S1	G4G5	END	
Plant	<i>Trisetum melicoides</i>	Purple false oats	1997	S1	G4	END	
Plant	<i>Viola rostrata</i>	Long-spur violet	2000	S2	G5	SC	
Plant	<i>Adlumia fungosa</i>	Climbing fumitory	2000	S3	G4	SC	
Plant	<i>Amerorchis rotundifolia</i>	Round-leaved orchis	1985	S1	G5	THR	
Plant	<i>Arethusa bulbosa</i>	Swamp-pink	1996	S3	G4	SC	
Plant	<i>Asplenium trichomanes</i>	Maidenhair spleenwort	2000	S3	G5	SC	
Plant	<i>Astragalus neglectus</i>	Cooper's milkvetch	2000	S1	G4	END	
Plant	<i>Botrychium lunaria</i>	Moonwort grape-fern	1997	S1	G5	END	
Plant	<i>Botrychium minganense</i>	Mingan's moonwort	1998	S2	G4	SC	
Plant	<i>Cakile edentula</i>	American sea-rocket	2000	S3	G5	SC	
Plant	<i>Calamagrostis stricta</i>	Slim-stem small-reedgrass	2000	S3	G5	SC	
Plant	<i>Calamintha arkansana</i>	Low calamint	2000	S2	G5	SC	
Plant	<i>Calamovilfa longifolia</i> var <i>magna</i>	Sand reed-grass	2000	S2	G5T3T5	THR	
Plant	<i>Calypso bulbosa</i>	Fairy slipper	1973	S3	G5	THR	
Plant	<i>Cardamine pratensis</i>	Cuckooflower	2000	S3	G5	SC	
Plant	<i>Carex backii</i>	Rocky Mountain sedge	1916	S2	G4	SC	
Plant	<i>Carex capillaris</i>	Hair-like sedge	2000	S1	G5	SC	
Plant	<i>Carex crawei</i>	Crawe sedge	2000	S3	G5	SC	
Plant	<i>Carex exilis</i>	Coast sedge	1998	S1	G5	THR	

GROUP	SCIENTIFIC NAME	COMMON NAME	DATE	SRANK	GRANK	WI STATUS	USES STATUS
Plant	<i>Carex formosa</i>	Handsome sedge	2000	S2	G4	THR	
Plant	<i>Carex gynocrates</i>	Northern bog sedge	2000	S2	G5	SC	
Plant	<i>Carex livida</i> var <i>radicaulis</i>	Livid sedge	2000	S2	G5T5	SC	
Plant	<i>Carex prasina</i>	Drooping sedge	1999	S2S3	G4	THR	
Plant	<i>Carex richardsonii</i>	Richardson sedge	2000	S3	G4	SC	
Plant	<i>Carex vaginata</i>	Sheathed sedge	2000	S1	G5	SC	
Plant	<i>Corallorhiza odontorhiza</i>	Autumn coral-root	1998	S3	G5	SC	
Plant	<i>Cypripedium arietinum</i>	Ram's-head lady's-slipper	1997	S2	G3	THR	
Plant	<i>Cypripedium parviflorum</i>	Small yellow lady's-slipper	1999	S3	G5	SC	
Plant	<i>Cypripedium reginae</i>	Showy lady's-slipper	2000	S3	G4	SC	
Plant	<i>Deschampsia cespitosa</i>	Tufted hairgrass	2000	S3	G5	SC	
Plant	<i>Deschampsia flexuosa</i>	Crinkled hairgrass	2000	S3	G5	SC	
Plant	<i>Drosera linearis</i>	Slenderleaf sundew	1995	S1	G4	THR	
Plant	<i>Dryopteris expansa</i>	Spreading woodfern	1997	S1	G5	SC	
Plant	<i>Eleocharis quinqueflora</i>	Few-flower spikerush	2000	S2	G5	SC	
Plant	<i>Elymus lanceolatus</i> ssp <i>psammophilus</i>	Thickspike	2000	S2	G5T3	THR	
Plant	<i>Epilobium palustre</i>	Marsh willow-herb	1983	S3	G5	SC	
Plant	<i>Epilobium strictum</i>	Downy willow-herb	1926	S2S3	G5?	SC	
Plant	<i>Equisetum palustre</i>	Marsh horsetail	1983	S2	G5	SC	
Plant	<i>Equisetum variegatum</i>	Variegated horsetail	2000	S3	G5	SC	
Plant	<i>Euphorbia polygonifolia</i>	Seaside spurge	2000	S2	G5?	SC	
Plant	<i>Gentianopsis procera</i>	Lesser fringed gentian	2000	S3	G5	SC	
Plant	<i>Geocaulon lividum</i>	Northern comandra	1999	S1	G5	END	
Plant	<i>Gymnocarpium robertianum</i>	Limestone oak fern	1979	S2	G5	SC	
Plant	<i>Leucophysalis grandiflora</i>	Large-flowered ground-cherry	2001	S2	G3?	SC	
Plant	<i>Malaxis brachypoda</i>	White adder's-mouth	2000	S3	G4Q	SC	
Plant	<i>Medeola virginiana</i>	Indian cucumber-root	1931	S3	G5	SC	
Plant	<i>Ophioglossum pusillum</i>	Adder's-tongue	1950	S3	G5	SC	
Plant	<i>Orobanche uniflora</i>	One-flowered broomrape	2001	S3	G5	SC	
Plant	<i>Osmorhiza chilensis</i>	Chilean sweet cicely	1999	S3	G5	SC	
Plant	<i>Platanthera dilatata</i>	Leafy white orchis	1999	S3	G5	SC	
Plant	<i>Platanthera flava</i> var <i>herbiola</i>	Pale green orchid	1987	S2	G4T4Q	THR	

GROUP	SCIENTIFIC NAME	COMMON NAME	DATE	SRANK	GRANK	WI STATUS	USES STATUS
Plant	<i>Platanthera hookeri</i>	Hooker orchis	1998	S3	G5	SC	
Plant	<i>Platanthera orbiculata</i>	Large roundleaf orchid	2000	S3	G5?	SC	
Plant	<i>Polystichum acrostichoides</i>	Christmas fern	1975	S2	G5	SC	
Plant	<i>Primula mistassinica</i>	Bird's-eye primrose	2000	S3	G5	SC	
Plant	<i>Ranunculus gmelinii</i>	Small yellow water crowfoot	1938	S1	G5	END	
Plant	<i>Rhynchospora fusca</i>	Brown beakrush	1999	S2	G4G5	SC	
Plant	<i>Ribes hudsonianum</i>	Northern black currant	1999	S3	G5	SC	
Plant	<i>Ribes oxycanthoides</i>	Canada gooseberry	1926	S1	G5	THR	
Plant	<i>Scirpus cespitosus</i>	Tufted club-rush	1999	S2	G5	THR	
Plant	<i>Senecio congestus</i>	Marsh ragwort	1935	SH	G5	SC	
Plant	<i>Solidago ohioensis</i>	Ohio goldenrod	2000	S3	G4	SC	
Plant	<i>Solidago simplex</i> var <i>gillmanii</i>	Sticky goldenrod	2000	S2	G5T3?	THR	
Plant	<i>Tofieldia glutinosa</i>	Sticky false-asphodel	1999	S3	G5	THR	
Plant	<i>Triglochin maritima</i>	Common bog arrow-grass	2000	S3	G5	SC	
Plant	<i>Triglochin palustris</i>	Slender bog arrow-grass	2000	S3	G5	SC	
Plant	<i>Utricularia geminiscapa</i>	Hidden-fruited bladderwort	1972	S3	G4G5	SC	

Scientific Name: Scientific name used by the Wisconsin Natural Heritage Inventory Program.

Common Name: Standard, contrived, or agreed upon common names.

Global Rank: Global element rank. Refer to the Rank Definition Sheet.

State Rank: State element rank. Refer to the Rank Definition Sheet.

US Status:

Federal protection status in Wisconsin, designated by the Office of Endangered Species, U.S. Fish and Wildlife Service through the U.S. Endangered Species Act:

LE = listed endangered

LT = listed threatened

XN = non-essential experimental populations

LT,PD = listed threatened, proposed for de-listing

C = candidate for future listing

WI Status:

Protection category designated by the Wisconsin DNR:

END = endangered

THR = threatened

SC = Special Concern

WDNR and federal regulations regarding Special Concern species range from full protection to no protection. The current categories and their respective level of protection are:

SC/P = fully protected

SC/N = no laws regulating use, possession, or harvesting

SC/H = take regulated by establishment of open closed seasons

SC/FL = federally protected as endangered or threatened, but not so designated by WDNR

SC/M = fully protected by federal and state laws under the Migratory Bird Act

Special Concern species are those species about which some problem of abundance or distribution is suspected but not yet proved. The main purpose of this category is to focus attention on certain species before they become threatened or endangered.

GLOBAL ELEMENT RANKS:

G1 = Critically imperiled globally because of extreme rarity 5 or fewer occurrences or very few remaining individuals or acres or because of some factors making it especially vulnerable to extinction.

G2 = Imperiled globally because of rarity 6 to 20 occurrences or few remaining individuals or acres or because of some factors making it very vulnerable to extinction throughout its range.

G3 = Either very rare and local throughout its range or found locally even abundantly at some of its locations in a restricted range e.g., a single state or physiographic region or because of other factors making it vulnerable to extinction throughout its range; in terms of occurrences, in the range of 21 to 100.

G4 = Apparently globally secure, though it may be quite rare in parts of its range, especially at the periphery.

G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

GH = Of historical occurrence throughout its range, i.e., formerly part of the established biota, with the expectation that it may be rediscovered.

GU = Possibly in peril range-wide, but their status is uncertain. More information is needed.

GX = Believed to be extinct throughout its range e.g. Passenger pigeon with virtually no likelihood that it will be rediscovered.

G? = Not ranked.

Species with a questionable taxonomic assignment are given a "Q" after the global rank. Subspecies and varieties are given subranks composed of the letter "T" plus a number or letter. The definition of the second character of the subrank parallels that of the full global rank. Examples: a rare subspecies of a rare species is ranked G1T1; a rare subspecies of a common species is ranked G5T1.

STATE ELEMENT RANKS:

S1 = Critically imperiled in Wisconsin because of extreme rarity 5 or fewer occurrences or very few remaining individuals or acres or because of some factors making it especially vulnerable to extirpation from the state.

S2 = Imperiled in Wisconsin because of rarity 6 to 20 occurrences or few remaining individuals or acres or because of some factors making it very vulnerable to extirpation from the state.

S3 = Rare or uncommon in Wisconsin 21 to 100 occurrences.

S4 = Apparently secure in Wisconsin, with many occurrences.

S5 = Demonstrably secure in Wisconsin and essentially ineradicable under present conditions.

SA = Accidental occurring only once or a few times or casual occurring more regularly although not every year; a few of these species typically long-distance migrants such as some birds and butterflies may have even bred on one or more of the occasions when they were recorded.

SE = An exotic established in the state; may be native elsewhere in North America.

SH = Of historical occurrence in Wisconsin, perhaps having not been verified in the past 20 years, and suspected to be still extant. Naturally, an element would become SH without such a 20-year delay if the only known occurrence were destroyed or if it had been extensively and unsuccessfully looked for.

SN = Regularly occurring, usually migratory and typically non-breeding species for which no significant or effective habitat conservation measures can be taken in Wisconsin. This category includes migratory birds and bats that pass through twice a year or, may remain in the winter or, in a few cases, the summer along with certain lepidoptera which regularly migrate to Wisconsin where they reproduce, but then completely die out every year with no return migration. Species in this category are so widely and unreliably distributed during migration or in winter that no small set of sites could be set aside with the hope of significantly furthering their conservation.

SZ = Not of significant conservation concern in Wisconsin, invariably because there are no definable occurrences in the state, although the taxon is native and appears regularly in the state. An SZ rank will generally be used for long-distance migrants whose occurrence during their migrations are too irregular in terms of repeated visitation to the same locations, transitory, and dispersed to be reliably identified, mapped, and protected. Typically, the SZ rank applies to a non-breeding population.

SR = Reported from Wisconsin, but without persuasive documentation which would provide a basis for either accepting or rejecting the report. Some of these are very recent discoveries for which the program hasn't yet received first-hand information; others are old, obscure reports that are hard to dismiss because the habitat is now destroyed.

SRF = Reported falsely in error from Wisconsin but this error is persisting in the literature.

SU = Possibly in peril in the state, but their status is uncertain. More information is needed.

SX = Apparently extirpated from the state.

APPENDIX E
DETAILED LAND USE

CODE	LAND USE CLASSIFICATION	ACRES
100	RESIDENTIAL	
110	Single Family Residential	1,001.9
180	Mobile Homes	46.3
199	Vacant Residence	3.9
200	COMMERCIAL	
210	Retail Sales	3.3
250	Retail Services	49.0
300	INDUSTRIAL	
310	Manufacturing	0.3
340	Wholesaling	2.2
360	Extractive	6.2
380	Storage	7.7
382	Enclosed Storage	2.3
400	TRANSPORTATION	
417	Off-Street Parking	2.6
460	Air Related	14.1
500	COMMUNICATION/UTILITIES	
514	Telephone Center	0.3
541	Major Electric Power Transmission Line	9.7
586	Auto Salvage/Recycling/Disposals	0.8
600	INSTITUTIONAL/GOVERNMENTAL FACILITIES	
610	Administrative Institutions/Governmental Facilities	
611	Administrative Buildings	0.8
630	Safety Institutions/Governmental Facilities	
631	Police/Fire Stations/Offices	1.9
640	Educational Institutions/Governmental Facilities	73.9
690	Religious and Related Facilities	0.8
691	Churches/Temples/Synagogues	1.7
694	Cemeteries	2.6
700	OUTDOOR RECREATION	
730	Land Related Activities	
731	Campgrounds	49.1
736	Parks/Parkways/Forest-Related Picnic Areas	34.0
766	Archery/Gun/Skeet Ranges	8.9
781	Boat Launching Sites/Areas	8.4
800	AGRICULTURE/SILVICULTURE	
805	Open Space	3,809.5
810	Croplands/Pastures	7,379.4
830	Long-Term Specialty Crops	124.1
835	Tree Plantations	483.3
850	Animal Husbandry	5.5
870	Farm Buildings/Accessories	130.7
900	NATURAL AREAS	
910	Water	
912	Reservoirs and Ponds	28.6
950	Other Natural Areas	5.6
951	Woodlands	8,608.5
953	Grasslands	60.3
TOTAL		21,968.0

APPENDIX F
GLOSSARY OF TERMS

Planning and Zoning Definitions

Alley: a permanently reserved public or private secondary means of access to an abutting property.

Accessory Structure: a detached subordinate structure located on the same lot as and incidental to the principal structure.

Accessory Use: a use incidental to and on the same lot as a principal use. *See also* “accessory structure” and “principal building”.

Acre: a unit of area used in land measurement and equal to 43,560 square feet. This is approximately equivalent to 4,840 square yards, 160 square rods, 0.405 hectares, and 4,047 square meters.

Administrative Appeal (Appeal): a quasi-judicial* process before the local zoning board to review a contested ordinance interpretation or an order of an administrative zoning official.

Adverse Impact: a negative consequence to the physical, social, or economic environment.

Affordable Housing: housing that has its mortgage, amortization, taxes, insurance, and condominium and association fees constituting no more than 30% of the gross household income per housing unit. If the unit is rental, then the rent and utilities constitute no more than 30% of the gross household income per rental unit. *See s. COMM 202.01, Wis. Admin. Code.*

Agriculture: the use of land for farming, dairying, pasturage, apiculture (bees), aquaculture (fish, mussels), horticulture, floriculture, viticulture (grapes), or animal and poultry husbandry; this includes the necessary accessory uses for packing, treating, or storing the produce from these activities. *See also ss. 30.40(1) and 91.01(1), Wis. Stats.*

Amendment: a local legislative act changing a zoning ordinance to make alterations, to correct errors, or to clarify the zoning ordinance. A class 2 notice must be published and a public hearing must be held before a county board may adopt a proposed amendment. *See s. 59.69, Wis. Stats.*

Amenities: features that add to the attractive appearance of a development, such as underground utilities, buffer zones, or landscaping.

Americans with Disabilities Act (ADA): a congressional law passed in 1990, which provides a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities as well as clear, strong, consistent, enforceable standards addressing discrimination against individuals with disabilities.

Amortization: a method of eliminating nonconforming uses (usually minor structures) by requiring the termination of the nonconforming use after a specified period of time, which is generally based on the rate of economic depreciation of the use or structure.

Annexation: the process of incorporating an area of land in a township into a municipality. *See ch. 66, subch. II, Wis. Stats.*

Appellate Body: a body authorized to review the judgments made by administrative officers. For example, a board of adjustment hears appeals of the decisions of a county zoning administrator.

Aquatic and Terrestrial Resources Inventory (ATRI): a public and private partnership to gather, link, and make available data used for decisions affecting Wisconsin’s landscape; a systematic and comprehensive information management system developed by the Wisconsin DNR to improve environmental and resource management decisions.

Aquifer: a geologic formation, usually comprised of saturated sands, gravel, and cavernous and vesicular rock, that carries water in sufficient quantity for drinking and other uses.

Aquifer Recharge Area: the surface area through which precipitation passes to replenish subsurface water bearing strata of permeable rock, gravel, or sand.

Architectural Control/ Review: regulations and procedures requiring the exterior design of structures to be suitable, harmonious, and in keeping with the historic character or general style of surrounding areas.

Area Variance (Variance): the relaxation of a dimensional standard in a zoning ordinance decided by a local zoning board. *See ss. 59.69, 60.61, 60.62 and 62.23, Wis. Stats.*

Arterial: a major street, which is normally controlled by traffic signs and signals, carrying a large volume of through traffic.

Benchmark: a performance-monitoring standard that allows a local government to periodically measure the progress of a local comprehensive plan’s goals and policies; also, a fixed and recorded elevation point from which another, relative elevation can be surveyed.

Berm: A low earthen ridge constructed as a landscaping feature or to direct runoff or deflect noise.

Best Management Practices (BMPs): the conservation measures and management practices intended to lessen or avoid a development’s impact on surrounding land and water.

Billboard: a sign that identifies or communicates a message related to an activity conducted, a service rendered, or a commodity sold at a location other than where the sign is located.

Block: a unit of land or contiguous lots or parcels bounded by a roadway or other barrier.

Board of Appeals/ Board of Adjustment (BOA): a board of appointed individuals that hears appeals on variances and exceptions. Board of Appeals applies to cities, villages, and towns, whereas Board of Adjustment applies to counties.

Brownfields: lands contaminated by spills or leaks and that are perceived to be unsuitable for future development due to its hazardous nature or owner liability concerns.

Buffer Area: an area separating two incompatible types of development or a development and sensitive natural resources.

Build Out: the maximum, theoretical development of land as permitted under zoning regulations.

Build Out Analysis: a projection, based on the maximum, theoretical development of all lands, of the impact of a community's cumulative growth.

Building Line: the line parallel to the street line that passes through the point of the principal building nearest the front lot line.

Building Scale: the relationship between the volume of a building and its surroundings, including the width of street, amount of open space, and volume of surrounding buildings. Volume is determined by the three- dimensional bulk (height, width, and depth) of a structure.

Bulk Regulations: standards that establish the maximum size of structures on a lot and the location where a building can be, including coverage, setbacks, height, impervious surface ratio, floor area ratio, and yard requirements.

Business Improvement Districts (BID): an area within a municipality consisting of contiguous parcels subject to general real-estate taxes other than railroad rights- of-way and that may include railroad rights- of- way, rivers, or highways continuously bounded by the parcels on at least one side. *See s. 66.1109(1)(b), Wis. Stats.*

Business Incubator: retail or industrial space, which may offer shared or subsidized management support such as information and advice on regulations, advertising, promotion, marketing, inventory, labor relations, and finances and facility support such as clerical staff, security, electronic equipment, and building maintenance that is affordable to new, low profit- margin businesses.

By Right: a use that complies with all zoning regulations and other applicable ordinances and that is permitted without the consent of a review board.

Capital Improvement: a physical asset that is large in scale or high in cost.

Capital Improvements Plan/ Capital Improvements Program (CIP): a city's or county's proposal of all future development projects and their respective cost estimates listed according to priority.

Census Tract: a relatively permanent county subdivision delineated to present census data.

Central Business District (CBD): the primary, downtown commercial center of a city.

Certificate of Appropriateness: a permit issued by a historic preservation review board* approving the demolition, relocation, or new construction in a historic district.

Certificate of Compliance: an official document declaring that a structure or use complies with permit specifications, building codes, or zoning ordinances.

Clear Zone: an area within a roadway right- of- way that is free of any obstructions, thus providing emergency vehicle access.

Closed (Executive) Session: a governmental meeting or portion closed to everyone but its members and members of its parent body for purposes specified in state law. Governmental meetings are subject to Wisconsin's 'Open Meetings Law.' *See s.19.81- 19.98, Wis. Stats .*

Cluster Development Zoning (Clustering): concentrating the total allowable dwelling units on a tract of land into higher densities on a smaller portion of the tract, leaving the remaining land as open space. For example, in a five- acre minimum lot zoned area, 10 units would be constructed on 50 acres; however, 10 units could also be 'clustered' on 20 acres (allowing minimum two- acre lots), leaving the remaining 30 acres as common open space.

Collector: a street designed to carry a moderate volume of traffic from local streets to arterial* streets or from arterial streets to arterial streets.

Combination Zones: a zone that is placed over another, now underlying zone and that adds or replaces existing requirements of the underlying zone.

Common Open Space: squares, greens, parks, or green belts intended for the common use of residents.

Community Development Block Grant (CDBG): a grant program administered by the U.S. Department of Housing and Urban Development (HUD), the state departments of Administration and Commerce, and the Wisconsin Housing and Economic Development Authority (WHEDA) that provides money for community rehabilitation and development. *See s.16.358 and 560.045, Wis. Stats.*

Community Development Zone: Zones meeting certain requirements and designated by the state Department of Commerce for the purpose of administering tax benefits designed to encourage private investment and to improve both the quality and quantity of employment opportunities. The Community Development Zone Program has more than \$38 million in tax benefits available to assist businesses that meet certain requirements and are located or willing to locate in one of Wisconsin's 21 community development zones. *See s.560.70, Wis. Stats. See also "enterprise development zone".*

Comprehensive Plan: a county development plan or city, village, town, or regional planning commission master plan prepared under and meeting the content requirements outlined in s.66.1001, *Wis. Stats.* Comprehensive plans provide a vision and general idea of how land should be used to assure public health, safety, and welfare.

Concurrency Management System: the process used to determine that needed public services are concurrent with a development's impacts.

Concurrency Test: an analysis of public facilities' ability to accommodate a development; in other words, adequate capacity of facilities must precede or be concurrent with a development's demand.

Conditional Use: a land use, construction activity, or structural development, which must be tailored to the site conditions and adjacent property uses through a public and technical review process, that is listed as a conditional use in a zoning district.

Conditional Use Permit: a permit issued by a zoning administrator, if the applicant meets certain additional requirements, allowing a use other than a principally permitted use.

Conditional Zoning: special conditions an owner must meet in order to qualify for a change in a zoning district designation.

Condominium: real estate and improvements where portions are designated for separate ownership and the remainder for common ownership. *See* s.703.02, *Wis. Stat.*

Conservation Areas: environmentally sensitive and valuable lands protected from any activity that would significantly alter their ecological integrity, balance, or character except in cases of overriding public interest.

Conservation Development Zoning: a type of cluster development zoning that emphasizes a planned unit development for preserving open space, wetlands, natural landscaping, floodplains, or other prioritized resources as well as for preventing stormwater runoff.

Conservation Easement: a recorded legal agreement between a landowner and a qualified conservation agency that transfers development rights from the owner to the agency to protect natural or historic features. *See* s. 700.40, *Wis. Stats.*

Contested Case: a hearing similar to a court proceeding where parties have a right to review and object to evidence and cross-examine witnesses who testify.

Contiguous Properties: properties sharing a property line.

Cooperative Agreement: an agreement between two or more organizations to share in the financing or managing of a property, providing of services, or some other joint venture. *Also see* ss. 66.0307, 150.84, and 299.80, *Wis. Stats. for specific examples of authorized agreements.*

Dedication: the transfer of property from private to public ownership.

Deed Restriction: a limitation, which is recorded with the county register of deeds and to which subsequent owners are bound, on development, maintenance, or use of a property.

Design Guideline: an activity standard that preserves the historic or architectural character of a site or building.

Design Review/ Control: an aesthetic evaluation, considering landscape design, architecture, materials, colors, lighting, and signs, of a development's impact on a community

Design Standards: criteria requiring specific dimensional standards or construction techniques. *See also "performance standards".*

Detachment: the transposition of land from a municipality back into a township. *See* s. 66.0227, *Wis. Stats.*

Developer: a person or company that coordinates the ownership, financing, designing, and other activities necessary for the construction of infrastructure or improvements.

Development: an artificial change to real estate, including construction, placement of structures, excavation, grading, and paving.

Development Values: the economic worth of land based upon the fair market price after residential, commercial, or industrial structures have been added.

District: a part, zone, or geographic area within the municipality where certain zoning or development regulations apply.

Down Zoning: a change in zoning classification that permits development that is less dense, intense, or restrictive. *See also "up zoning".*

Dwelling Unit: the space in a building that comprises the living facilities for one family. *See also "multifamily," "single-family attached," and "single-family detached dwelling".*

Easement: written and recorded authorization by a property owner for the use of a designated part of the property by others for a specified purpose. *See also "conservation easement".*

Ecological Impact: a change in the natural environment that could disrupt wildlife habitat or vegetation, or that could cause air, water, noise, or soil pollution.

Economic Unit: units of land that, although they may be separated from one another physically, are considered one economically.

Eminent Domain: the right of a government unit to take private property for public use with appropriate compensation to the owner. *See* ch. 32, *Wis. Stats.*

Enabling Act: legislation authorizing a government agency to do something that was previously forbidden. *See also "takings".*

Enterprise Development Zone: zones meeting certain statutorily defined criteria and designated by the state Department of Commerce for providing tax incentives to new or expanding businesses whose projects will affect distressed areas. An enterprise development zone is "site specific," applying to only one business, and is eligible for a maximum of \$3.0 million in tax credits. The department can designate up to 79 zones, which can each exist for up to seven years. The department is

allowed to vary zone benefits to encourage projects in areas of high distress. *See s.560.70, Wis. Stats. See also “community development zone”.*

Environmental Corridors: linear areas of natural resources that are critical to maintaining water quality and quantity and to providing habitat linkages that maintain biological diversity. Environmental corridors are often associated with rivers and streams.

Environmental Impact Ordinance: a local legislative act requiring an assessment of the potential harmful environmental effects of a pending development so that steps to prevent damage can be taken.

Environmental Impact Report (EIR): a report that assesses an area’s environmental characteristics and then determines the impact that a proposed development will have.

Environmental Impact Statement (EIS): a statement prepared under the National Environmental Policy Act (NEPA) or Wisconsin Environmental Policy Act (WEPA) predicting the impacts a proposed government action is likely to have on the environment and describing the affected environment and the alternative actions considered. *See s.1.11, Wis. Stats., P.L.91-190, 42 USC 4331, NR 150, Wis. Admin. Code.*

Environmental Nodes: discrete, inherently non- linear areas of natural resources that are sometimes isolated from areas with similar resource features. Planning objectives often include linking environmental nodes.

Environmentally Sensitive Areas: areas such as wetlands, steep slopes, waterways, underground water recharge areas, shores, and natural plant and animal habitats that are easily disturbed by development.

Esplanade: waterfront area intended for public use.

Estate Management Strategies: strategies enacted during a landowner’s lifetime or upon her death to help preserve family lands and farms.

Ex parte Contact: communication, which is normally prohibited, with a decision maker in a quasi- judicial proceeding, which is not part of a public hearing or the official record in a matter.

Exactions: compensation, which may take the form of facilities, land, or an actual dollar amount, that a community requires from a developer as condition of the approval of a proposed development project. Exactions may be incorporated into the community’s zoning code or negotiated on a project- by- project basis; but, they must reflect the type and extent of the expected adverse impacts of the development.

Executive Session: *See “closed session”.*

Extraterritorial Zoning: a local government’s authority to zone areas outside its boundaries. Under Wisconsin law, the extraterritorial zone for 1 st , 2 nd , and 3 rd class cities extends 3 miles beyond the corporate limits. The limit extends 1-½ miles beyond the municipal boundary for 4 th class cities and villages. *See s.62.23(7a), Wis. Stats .*

Exurban Area: the area beyond a city’s suburbs.

Fee Simple Acquisition: the purchase of property via cash payment.

Fee Simple Interest in Property: absolute ownership of and with unrestricted rights of disposition to land. This describes the possession of all rights to property except those reserved to the state. *See “rights”.*

Fiscal Impact Analysis: the projection of the costs and benefits of additional or new facilities, rentals, or remodeling of existing facilities, including data relative to increased instructional, administrative, maintenance, and energy costs and costs for new or replacement equipment.

Fiscal Impact Report: a report projecting the costs and revenues that will result from a proposed development.

Floating Zone: an unmapped zoning district that is described in ordinance and on the zoning map only when an application for development is approved.

Floodplains: land that has been or may be covered by flood water during a ‘regional flood’ as is defined in NR 116, Wis. Adm. Code. The floodplain includes the floodway and floodfringe, and is commonly referred to as the 100- year floodplain.

- *Floodfringe:* that portion outside of the floodway covered by water during a regional flood.

This term is generally associated with standing water, but may under local floodplain zoning ordinances, be developed for specified purposes if development is protected from flooding.

- *Floodway:* the channel of a river or stream and those portions of the floodplain adjoining the channel required to discharge a regional flood.

This term is generally associated with flowing water and is required by local floodplain zoning ordinances to remain undeveloped and free of obstructions.

Front Lot Line: the lot line separating an interior lot from the street, or the shortest lot line of a corner lot to a street.

Gentrification: the resettlement of low and moderate- income urban neighborhoods by middle and high- income professionals.

Geographic Information System (GIS): computer technology, tools, databases, and applications that provide spatial (geographic) data management, analysis, and mapping capabilities to support policy evaluation, decision- making, and program operations.

Geologic Review: an analysis of geologic features on a site, including hazards such as seismic hazards, surface ruptures, liquefaction, landslides, mud slides, erosion, and sedimentation.

Gift Credit: a dollar or in-kind matching amount (labor, supplies, land donation, etc.) required to secure funds for a development.

Global Positioning System (GPS): a computerized tool for determining longitudinal and latitudinal coordinates through the use of multiple orbiting satellites.

Green Spaces: *See* “open spaces”.

Growth Management: the pacing of the rate or controlling of the location of development via law enactment to manage a community’s growth.

Hamlet: a predominantly rural, residential settlement that compactly accommodates development.

Hamlet Lot: a small residential lot in a contiguous group with adjacent and fronting lots oriented toward each other in some ordered geometric way and forming a boundary with the surrounding countryside.

Hazardous Substance: any substance or combination of substances, including solid, semisolid, liquid or gaseous wastes, which may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration, or physical, chemical, or infectious characteristics. This term includes irritants, strong sensitizers, explosives, and substances that are toxic, corrosive, or flammable. *See* s.292.01(5), *Wis. Stats.*

Heavy Industry: the basic processing and manufacturing of products from raw materials; or, a use engaged in the storage or manufacturing processes using flammable or explosive materials or those that potentially involve offensive conditions. *See also* “light industry”.

Highly Erodible Soils: soils highly susceptible to erosion as determined by an equation that considers soil type, slope, and amount of rainfall but does not consider current land management or vegetative cover. These soils are often identified in county soil survey books.

Historic Area: an area designated by an authority, having buildings or places that are important because of their historical architecture or relationship to a related park or square or because those areas were developed according to a fixed plan based on cultural, historical, or architectural purposes.

Historic Preservation: the research, protection, restoration, and rehabilitation of historic properties.

Historic Property: a building, structure, object, district, area, or site, whether on or beneath the surface of land or water, that is significant in the history, prehistory, architecture, archaeology, or culture of Wisconsin, its rural and urban communities, or the nation. *See* s.44.31(3), *Wis. Stats.* *See* s.13.48(1m)(a), *Wis. Stats.*

Homeowner’s Association: a nonprofit organization made up of property owners or residents who are then responsible for costs and upkeep of semiprivate community facilities.

Home Rule: constitutional provisions in some states that give local units of government substantial autonomy. Wisconsin is a “strong” home rule state.

Incorporation: orderly and uniform development of territory from town to incorporated status. *See* ch. 66, subch. II, *Wis. Stats.*

Impact Fees: cash contributions, contributions of land or interests in land, or any other items of value that are imposed on a developer by a political subdivision to offset the community’s costs resulting from a development. *See* s. 66.0617, *Wis. Stats.*

Impervious Surface: a ground cover such as cement, asphalt, or packed clay or rock through which water cannot penetrate; this leads to increases in the amount and velocity of runoff and corresponds to increases in soil erosion and nutrient transport.

Improvements: the actions taken to prepare land, including clearing, building infrastructure such as roads and waterlines, constructing homes or buildings, and adding amenities.

Incentive Zoning: the granting of additional development possibilities to a developer because of the developer’s provision of a public benefit.

Industrial District: a district designated as manufacturing, research and development, or industrial park.

Infill: the development of the last remaining lots in an existing developed area, the new development within an area already served by existing infrastructure and services, or the reuse of already developed, but vacant properties. *See also* “redevelopment”.

Infrastructure: public utilities, facilities, and delivery systems such as sewers, streets, curbing, sidewalks, and other public services.

Installment Sale: a real estate transaction in which the landowner and the recipient negotiate terms for the property to be transferred over an extended period of time rather than all at once.

Intermodal Surface Transportation Efficiency Act, 1991 (ISTEA): a federal transportation act that authorized the first 23 “high priority corridors” of the total 42 authorized by the ISTEA, the National Highway System Designation Act (1995), and the Transportation Equity Act for the 21st Century.

Intelligent Transportation System (ITS): a system of technologies, including traveler information systems to inform motorists of weather and road conditions, incident management systems to help emergency crews respond more efficiently to road incidents, and commercial vehicle operations to increase freight transportation efficiency, intended to relieve state highway congestion.

Interim Zone of Influence: a procedure for the exchange of information or resolution of conflicts on certain proposed land- uses between a city or town and the county.

Interim Zone/ Development Controls: *See “moratorium”.*

Judicial Appeal: the review of a local zoning decision by the state judicial system.

Land: soil, the ground surface itself, a subdivision, a tract or parcel, a lot, an open space, or the physical elements below ground.

Land Banking: the obtaining, holding, and subsequent release of lands by a local government for controlled development or conservation.

Land Exchange: a transaction where a public agency or nonprofit organization exchanges a land parcel for another land parcel with high conservation value.

Land- use Intensity System (LUI): a comprehensive system created in the mid- 1960s by the U.S. Federal Housing Administration for determining or controlling the intensity of land development.

Land- use Inventory: a study, cataloging the types, extent, distribution, and intensity of current and future uses of land in a given area.

Land- use Plan: the element of a comprehensive plan that designates and justifies the future use or reuse of land. *See s.66.1001, Wis. Stats.*

Landfill: a disposal facility for solid wastes. *See ch.289, Wis. Stats .*

Land Trust: a private, nonprofit organization that protects natural and cultural resources through conservation easements, land acquisition, and education.

Large- Lot Zoning: a requirement that each new house be constructed on a minimum number of acres (generally, five or more acres). Developments that feature large- lot zoning may include the dispersal of some impacts, less efficient infrastructure, and greater areas of land use.

Leapfrog Development: new development separated from existing development by substantial vacant land.

Leaseback: *See “purchase/ leaseback”.*

Level of Service (LOS): a measurement of the quantity and quality of public facilities.

Light Industry: the manufacture and distribution of finished products, including processing, fabrication, assembly, treatment, packaging, incidental storage, and sales. *See also “heavy industry”.*

Limited Development: the development of one portion of a property to finance the protection of another portion.

Lot: a parcel of land that is occupied or intended for occupancy, including one main building and any accessory buildings, open spaces, or parking spaces. *See also “through lot”.*

Lot Area: the area of a horizontal plane bounded by the vertical planes through front, side, and rear lot lines.

Lot Averaging: the design of individual adjoining lots within a residential subdivision where the average lot is the minimum prescribed area for the zoning district.

Lot- by- Lot Development: a conventional development approach where each lot is treated as a separate development unit conforming to all land- use, density, and bulk requirements.

Lot Coverage: the total when an area of a lot covered by the total projected surface of all buildings, impervious surfaces, or vegetative coverage is divided by the gross area of that lot.

Lot Depth: the average horizontal distance between the front and rear lot lines.

Lot Line: the property lines at the perimeter of a lot.

Lot Width: the distance between side lot lines. This is generally measured at the front setback, but the specific protocol varies between jurisdictions.

LULU: a locally unwanted land use. *See also “NIMBY,” “NIABY,” and “NIMTOO”.*

Main Street Program: a comprehensive revitalization program established in 1987 to promote and support the historic and economic redevelopment of traditional business districts in Wisconsin. The Main Street Program is administered by the state Department of Commerce.

Manufactured Housing: a structure, containing within it plumbing, heating, air- conditioning, and electrical systems, that is transportable in one or more sections of certain sizes and is built on a permanent chassis, and when connected to the required utilities, is designed to be used as a dwelling with or without a permanent foundation. Such housing must comply with the standards established under the National Manufactured Housing Construction and Safety Standards Act. *See 42 USC 5401 to 5425 and ch.409, Wis. Stats.*

Map: a drawing or other representation that portrays the spatial distribution of the geographic, topographic, or other physical features of an area.

Mini- Lot Development: a development containing lots that do not meet the minimum size or other requirements.

Mitigation: the process of compensating for the damages or adverse impacts of a development.

Mitigation Plan: imposed development conditions intended to compensate for the adverse impacts of the development.

Mixed-Use Development: a development that allows multiple compatible uses to be in close proximity to one another in order to minimize transportation infrastructure impacts and to create a compact, efficient neighborhood; for example, single family, multifamily, commercial, and industrial uses are located within a reasonable proximity to each other.

Modernization: the upgrading of existing facilities to increase the input or output, update technology, or lower the unit cost of the operation.

Moratorium: a temporary development freeze or restriction pending the adoption or revision of related public policies or provisions of public infrastructures or services.

Multifamily Dwelling: a building or portion occupied by three or more families living independently of each other.

Multimodal Transportation: an integrated network of various transportation modes, including pedestrian, bicycle, automobile, mass transit, railroads, harbors, and airports.

Multiple Occupancy Development (MOD): A development on a single lot wherein a building is provided with 3 or more occupancy units, or wherein 2 or more detached buildings are provided with 2 or more occupancy units, regardless of the characteristics of the user(s) of the occupancy units and regardless of the ownership of the building(s) or of the occupancy units.

Municipality: a city, village, town, or other unit of local government. The application of this term varies and it often has specific legal meanings.

National Environmental Policy Act (NEPA): a congressional act passed in 1969, establishing a national environmental policy. NEPA requires federal agencies to consider the environmental effects of decisions early in their decision-making processes and to inform the public of likely impacts. Environmental impact statements (EISs) are prepared consistent with this law. The act also established the Council on Environmental Quality. *See* P.L. 91- 190, 42 U.S.C. 4321- 4347. *See also* “environmental impact statement” and “Wisconsin Environmental Policy Act (WEPA)”.

National Register of Historic Places in Wisconsin: places in Wisconsin that are listed on the national register of historic places maintained by the U.S. Department of the Interior, National Park Service.

Neighborhood Plan: a plan that provides specific design or property- use regulations in a particular neighborhood or district.

Neighborhood Unit: the model for American suburban development after World War II based around the elementary school with other community facilities located at its center and arterial streets at its perimeter.

Neotraditional Development: a land- use approach that promotes neighborhoods with a variety of housing and architectural types, a central gathering point, and interconnecting streets, alleys, and boulevards edged with greenbelts.* *See also* “New Urbanism” and “smart growth”.

Net Acre: an acre of land excluding street rights- of- way* and other publicly dedicated improvements such as parks, open space, and stormwater detention and retention facilities.

New Urbanism: an approach to development that includes the reintegration of components such as housing, employment, retail, and public facilities into compact, pedestrian- friendly neighborhoods linked by mass transit. *See also* “Neotraditional development” and “smart growth”.

NIABY: Not in anyone’s backyard. *See also* “LULU,” “NIMBY,” and “NIMTOO”.

NIMBY: Not in my backyard. *See also* “LULU,” “NIABY,” and “NIMTOO”.

NIMTOO: Not in my term of office. *See also* “LULU,” “NIMBY,” and “NIABY”.

Nonconforming Activity: an activity that is not permitted under the zoning regulations or does not conform to off- street parking, loading requirements, or performance standards.

Nonconforming Building: any building that does not meet the limitations on building size or location on a lot for its use and district.

Nonconforming by Dimension: a building, structure, or parcel of land that is not compliant with the dimensional regulations of the zoning code.

Nonconforming Lot: a use or activity which lawfully existed prior to the adoption, revision, or amendment of an ordinance but that fails to conform to the current ordinance.

Nonconforming Use: a use (or structure) that lawfully existed prior to the adoption or amendment of an ordinance but that fails to conform to the standards of the current zoning ordinance.

Noncontributing Building: a building or structure that does not add to the historic architecture or association or cultural values of the area.

Office Park: a large tract that has been planned and developed as an integrated facility for a number of separate office buildings and that considers circulation, parking, utilities, and compatibility.

Open Session: a meeting that is in accordance with Wisconsin’s ‘Open Meetings Law.’ *See* s.19.85- 19.98, *Wis. Stats* .

Open (Green) Spaces: a substantially undeveloped area, usually including environmental features such as water areas or recreational facilities. *See also* “common open spaces”.

Ordinance: a local law; a legislative enactment of a local governing body.

Orthophoto Quad: an aerial photograph that has been adjusted, via the correcting of distortions and inaccuracies due to plane tilt, elevation differences, or the curvature of the earth's surface, to reflect as accurately as possible the actual topography of the earth's surface.

Outright Donation: the donation of land to a unit of government or a qualified charitable land conservation management organization.

Outright purchase: the acquisition of land for the benefit of the public.

Overlay Zone: an additional land use or zoning requirement that modifies the basic requirements of the underlying designation.

Parcel: *See "lot".*

Pedestrian Friendly: a development that is primarily accessible to pedestrians rather than automobiles and with an emphasis on street sidewalks rather than parking.

Performance Standards: general criteria established to limit the impact of land uses or development. *See also "design standards".*

Pervious Surface: a ground cover through which water can penetrate at a rate comparable to that of water through undisturbed soils.

Planned Unit Development: land under unified control to be developed in a single development or a programmed series of phases. A planned development includes the provisions, operations, maintenance, facilities, and improvements that will be for the common use of the development districts, but which will not be maintained at general public expense.

Plan Commission: an appointed local government commission authorized to make and adopt a master plan, consistent with s.66.1001, *Wis. Stats.*, for the physical development of the city. *See s.62.23, Wis. Stats.*

Plat: a map of a lot, parcel, subdivision, or development area where the lines of each land division are shown by accurate distances and bearings.

Point System: numerical values assigned to a development's impacts on a community's resources.

Political Subdivision: a city, village, town, county, sanitary district, school district, inland lake protection and rehabilitation district, or other special purpose unit of government.

Pre-acquisition: a technique where one organization (usually a private land trust) purchases a property and holds it until another organization (usually a government agency) can allocate the funds to purchase it.

Preservation: leaving a resource undisturbed and free from harm or damage. While 'preservation' is often used interchangeably with 'conservation,' the latter entails a connotation of prudent resource use.

Primary Metropolitan Statistical Area (PMSA): a statistical area defined by the U.S. Census; an area within a consolidated metropolitan statistical area consisting of a large urbanized county or cluster of counties that demonstrates very strong internal economic and social links, in addition to close ties to other portions of the larger area. *See also "metropolitan statistical area" and "consolidated metropolitan statistical area".*

Prime Agricultural Land: land determined by local governments to be important for sustaining agricultural operations and that are often protected from conversion to other uses. *See ch.91, Wis. Stats.*

Prime Farmland: farmland classified by the Natural Resources Conservation Service as best for the crop production of row, forage, or fiber because of level topography, drainage, moisture supply, soil texture and depth, and susceptibility to erosion and runoff. Ideally, prime farmland allows least cost to both the farmer and the natural resources. *See ch.91, Wis. Stats.*

Principal Building: the building, including all parts connected, where the primary use of the lot is conducted.

Private Road: a way open to traffic, excluding driveways, established as a separate tract for the benefit of adjacent properties.

Privately Owned Waste- Treatment Systems (POWTS): sewage treatment and disposal systems, which are also called on- site sanitary systems, that are not connected to sewer lines or wastewater treatment plants.

Public Dedication: reserving land in a subdivision for public use such as a school or park.

Public Road: public property dedicated and reserved for street traffic.

Purchase of Development Rights (PDR): a public or private government initiative that acquires the development rights of property to limit development and protect natural features or open space. *See also "rights" and "transfer of development rights".*

Purchase/ Leaseback: an arrangement where a community purchases a natural area and then either leases it back with special lease restrictions or sells it back with deed restrictions designed to protect the natural features of the property.

Quarter, Quarter Zoning: a development standard that limits nonfarm development to one house per 40 acres (¼ of ¼ of the original 640- acre section).

Quasi- Judicial Decisions: "resembling a court;" quasi- judicial decision making must follow rules of due process and is midway between legislative and administrative functions. Examples of quasi- judicial decisions include variances, appeals, and conditional- use permits.

Quasi- Public Use/ Facility: a use conducted or a facility owned or operated by a nonprofit or religious institution that provides public services.

Rear- lot Line: a lot line, opposite the front lot line, that generally does not abut a public roadway.

Redevelopment: any proposed replacement of existing development. *See also* “infill”.

Redevelopment Authority: an authority, known as the “redevelopment authority of the city of [city name],” created in every city with a blighted area. This authority, together with all the necessary or incidental powers, is created to carry out blight elimination, slum clearance, and urban renewal programs and projects as set forth in Wisconsin Statutes. *See* s.66.1333 (3)(a) 1, *Wis. Stats* .

Reforestation: the planting or replanting of forest plants.

Regional Plan: a plan that covers multiple jurisdictions, often within the administrative area of a regional planning commission, and that can be prepared jointly by cooperating municipalities, regional planning commissions, state agencies, or other entities.

Requests for Proposals (RFP): a document describing a project or services and soliciting bids for a consultant’s or contractor’s performance.

Requests for Qualifications (RFQ): a document describing the general projects, services, and related qualifications of bidding consultants or contractors.

Reservation of Site: *See* “public dedication”.

Reserved Life Estate: an arrangement where a landowner sells or donates property to another party (for example, a conservation organization) while retaining the right to lifetime use.

Revolving Fund: a conservation fund, replenished through donations or selling of the land to another conservation organization or a government agency, used to purchase land or easements.

Rezoning: an amendment to a zoning map or zoning ordinance that changes the zoning- district designation and use or development standards.

Right of First Refusal: an agreement between a landowner and another party (for example, a land trust) that gives the other party a chance to match any third- party offer to purchase lands.

Right of Way (ROW): a strip of land occupied by or intended to be occupied by a street, crosswalk, walkway, utility line, or other access.

Riparian Areas: the shore area adjacent to a body of water.

Roadway Setback: the required or existing minimum distance between a public roadway (measured from the centerline or edge of right- of- way) and the nearest point on a structure.

Scenic Corridor: a linear landscape feature that is visually attractive (for example, stream corridors or blufflines).

Scenic Easement: an easement* intended to limit development in order to preserve a view or scenic* area.

Seasonal Dwelling: a dwelling not used for permanent residence or not occupied for more than a certain number of days per year. The standard varies between jurisdictions.

Secondary Dwelling Unit: an additional dwelling unit in a freestanding building or above a residential garage and located within or on the same lot as the principal dwelling unit.

Sense of Place: the constructed and natural landmarks and social and economic surroundings that cause someone to identify with a particular place or community.

Set Back: the minimum distance a building, structure, or activity can be separated from a designated feature such as a waterway or bluffline.

Shoreland: a state mandated water resource protection district that Wisconsin counties must adopt.

Shorelands include lands adjacent to navigable waters within 1,000 feet of the ordinary high- water mark of a lake, pond, or flowage and within 300 feet of the ordinary high- water mark or floodplain of a river or stream.

Shoreland- Wetland: shorelands that are designated as wetlands on Wisconsin Wetlands Inventory maps. *See Wis. Stats*.

Shoreline Stabilization: the placement of structural revetments or landscaping practices to prevent or control shoreline erosion.

Side Lot Line: a lot line that is neither a front lot line nor a rear lot line.

Single- family Attached Dwelling: one of two or more residential buildings having a common wall separating dwelling units.

Single- family Detached Dwelling: a residential building containing not more than one dwelling unit surrounded by open space.

Sign: any device that is sufficiently visible to persons not located on the lot that communicates information to them.

Site Plan: a scaled plan, which accurately and completely shows the site boundaries, dimensions and locations of all buildings and structures, uses, and principal site development features, proposed for a specific lot.

Sliding Scale Zoning: a ratio of dwelling units to land acreage that concentrates development on smaller lots by increasing the minimum lot size for houses built on larger parcels.

Smart Growth: an approach to land- use planning and growth management that recognizes connections between development and quality of life. The features that distinguish smart growth approaches vary. In general, smart growth invests time, attention, and resources in restoring community and vitality to center cities and older suburbs. In developing areas, the approach is more town- centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial, and retail

uses. Smart- growth approaches preserve open space and other environmental amenities. The term is also used to refer to Wisconsin's comprehensive planning law. *See* s.66.1001, *Wis. Stats.* *See also* "New Urbanism" and "Neotraditional development".

Special Designation: the protection of scenic river corridors and other valuable resources through state or federal means such as recognition, acquisition, or technical assistance.

Special District/ Special Purpose Unit of Government: a government entity that is responsible for performing specific tasks and oversight essential to a community's or region's well being. Special districts include sanitary districts, metropolitan sewerage districts, drainage districts, inland lake protection and rehabilitation districts, business improvement districts, tax incremental financing districts, architectural conservancy districts, and port authorities.

Special Exception: *See* "conditional use".

Spot Zoning: a change in the zoning code or area maps that is applicable to no more than a few parcels and generally regarded as undesirable or illegal because it violates equal treatment and sound planning principles.

Stand: a number of plants growing in a continuous area. Examples include 'a stand of hardwood' or 'a stand of timber.'

Stewardship Program: a state bonding program established by the Wisconsin Legislature in 1989 and re- authorized in 1999 that provides funds to protect environmentally sensitive areas and to maintain and to increase recreational opportunities across the state.

Stormwater Detention/ Stormwater Retention: the storage of stormwater runoff.

Stormwater Management: the reduction of the quantity of runoff, which affects flooding, or of pollutants generated at a development site and carried in stormwater.

Story: a space in a building between the surface of any floor and the surface of the next above floor or roof.

Subdivision: the description (usually by survey) and recording of separate land parcels or lots.

Summary Abatement: a legal action taken to suppress the continuation of an offensive land use. *See also* "tax abatement".

Sustainability: long- term management of ecosystems intended to meet the needs of present human populations without compromising resource availability for future generations.

Sustainable Development: development that meets the needs of the present generation without compromising the needs of future generations.

Takings: government actions that violate the Fifth Amendment to the U.S. Constitution, which reads in part, "nor shall private property be taken for public use, without just compensation." Such actions include regulations that have the effect of "taking" property. The Supreme Court has established four clear rules that identify situations that amount to a taking and one clear rule that defines situations that do not.

The court has found "takings" in the following circumstances:

- where a landowner has been denied "all economically viable use" of the land;
- where a regulation forced a landowner to allow someone else to enter onto the property;
- where the regulation imposes burdens or costs on a landowner that do not bear a "reasonable relationship" to the impacts of the project on the community; and
- where government can equally accomplish a valid public purpose through regulation or through a requirement of dedicating property, government should use the less intrusive regulation, for example, prohibiting development in a floodplain property.

The Supreme Court has also said that where a regulation is intended merely to prevent a nuisance, it should *not* be considered a taking.

Tax Abatement: a release of a certain tax liability for a specific period of time and under certain circumstances. *See also* "summary abatement".

Tax Increment: additional tax revenue resulting from a property- value increase; the amount obtained by multiplying the total of all property taxes levied on all taxable property within a tax- incremental district in a year by a fraction having as a numerator the value increment for that year in the district and as a denominator that year's equalized value of all taxable property in the district. In any year, a tax increment is "positive" if the value increment is positive and "negative" if the value increment is negative. *See* s.66.1105, *Wis. Stats.*

Tax Increment Financing (TIF): a local governmental financing of private- sector redevelopment, anticipating the additional revenues of the tax increment.* *See* s.66.1105, *Wis. Stats.*

Town: the political unit of government; a body corporate and politic, with those powers granted by law. *See* ch. 60, *Wis. Stats.*

Township: all land areas in a county not incorporated into municipalities (cities and villages).

Tract: an indefinite stretch or bounded piece of land; in subdivisions, a tract is often divided into individual lots.

Traditional Neighborhood: a compact, mixed- use neighborhood where residential, commercial, and civic buildings are within a close proximity. *See also* "Neotraditional development" and "New Urbanism".

Traffic Calming: the process of increasing pedestrian safety via decreasing automobile speed and volume.

Traffic Impact Analysis: an analysis of the impacts of traffic generated by a development.

Traffic Impact Mitigation Measure: an improvement by a developer intended to reduce the traffic impact created by a development.

Transfer of Development Rights: a technique, involving the designation of development (receiving) zones and protected (sending) zones, for guiding growth away from sensitive resources and toward controlled development centers by transferring development rights from one area to another via local law authorization such as a deed or easement. *See also* “rights” and “purchase of development rights”.

Transit- Oriented Development (TOD): moderate or high- density housing concentrated in mixed- use developments* that encourages the use of public transportation.

Transitional Use: a permitted use or structure that inherently acts as a transition or buffer between two or more incompatible uses.

TRANSLINKS 21: a statewide transportation system plan prepared by the Wisconsin Department of Transportation in response to federal and state laws.

Transportation Demand Management (TDM): a strategy that alleviates roadway stress by reducing vehicle density via the increasing of passengers per vehicle.

Transportation enhancements (ISTEA & TEA- 21): funds contributed by the federal highway transportation program to enhance cultural, aesthetic, and environmental aspects of local transportation and transit systems.

Underlying Zoning District: a term referring to a zoning district when it is affected by an overly district.

Undevelopable: an area that cannot be developed due to topographic or geologic soil conditions.

Unified Development Code: the combining of development regulations into a single zoning code.

Universal Transverse Mercator Grid (UTM): a civilian grid system, which uses only numbers and can be handled by digital mapping software and Geographic Information Systems.

Unnecessary Hardship: a unique and extreme inability to conform to zoning ordinance provisions due to physical factors; and, one of three tests a property must meet in order to qualify for a zoning variance.

Up Zoning: changing the zoning designation of an area to allow higher densities or less restrictive use. *See also* “down zoning”.

Urban Area: the area within a municipal boundary that is serviced by infrastructure; an intensively developed area with a relatively large or dense population.

Urban Forest: all trees and associated vegetation in and around a city, village, or concentrated development.

Urban Growth Area: an area designated for urban development and usually designed to protect open space or resources beyond its boundaries.

Urban Growth Boundary: the perimeter of an urban growth area.

Urban Sprawl: low- density, automobile- dependent, and land- consumptive outward growth of a city; the spread of urban congestion and development into suburban and rural areas adjoining urban areas.

Utility Facilities: any above ground structures or facilities used for production, generation, transmission, delivery, collection, or storage of water, sewage, electricity, gas, oil, or electronic signals.

Variance: a relaxation of dimensional standards by a local zoning board in compliance with statutory criteria. *See* s.59.99(7), *Wis. Stats.*

Vehicle Miles Traveled (VMT): a measure of automobile and roadway use.

Village: an incorporated area with a population under 5,000. *See* ch. 61, *Wis. Stats.*

Watershed: the area where precipitation drains to a single body of water such as a river, wetland, or lake.

Wellhead Protection: a plan to determine the water collecting area for a public well, identify the pollution sources within that area, and detect, prevent, and remedy potential contamination to the collecting area.

Wetlands Inventory Map: a map of wetlands classified according to their vegetation, hydrology, and types of human influence, developed by the Wisconsin Department of Natural Resources, used to identify wetlands for protection.

Wetlands Reserve Program: a federal program with state partnering to restore the functions and values of wetlands and to preserve riparian areas through conservation easements and wetland reconstruction.

Wildlife Habitat Incentives Program: a program that awards landowners federal cost- sharing funds after the installation of improvements to wildlife or fishery habitat.

Wisconsin Administrative Code (Wis. Admin. Code): a component of state law that is a compilation of the rules made by state agencies having rule- making authority. These rules provide the detailed provisions necessary to implement the general policies of specific state statutes

Wisconsin Environmental Policy Act (WEPA): a state law establishing a state environmental policy. WEPA requires state agencies to consider the environmental effects of decisions early in their decision-making processes and to inform the public of likely impacts and alternatives that were considered. Environmental impact statements (EISs) are prepared consistent with

this law. *See also* “environmental impact statement” and “National Environmental Policy Act (NEPA)”. *See* NR 150, Wis. Admin. Code, and s.1.11, *Wis. Stats.*

Wisconsin Register of Historic Places: a listing of districts, sites, buildings, structures, and objects that are significant in national, state, or local history, architecture, archaeology, engineering and culture. The Wisconsin register of Historic Places is maintained by the Wisconsin State Historical Society. *See* s. 44.36, *Wis. Stats.*

Zero Lot Line: the location of a building in such a manner that one or more of its sides rests directly on its lot line.

Zone: an area designated by an ordinance where specified uses are permitted and development standards are required.

Zoning Inspector: an appointed position to administer and enforce zoning regulations and related ordinances.

Zoning Permit: a permit issued by the land- use or zoning administrator authorizing the recipient to use property in accordance with zoning- code requirements.

Source: *Land-Use Lingo: A Glossary of Land-Use Terms*, WDNR, 2001.

Note: All references are to 1999-2000 Wisconsin Statutes.

Source: Bay-Lake Regional Planning Commission, 2007.

APPENDIX G
CONSERVATION SUBDIVISION GUIDELINES

THE CONSERVATION SUBDIVISION DESIGN PROCESS

Conservation subdivisions, sometimes called cluster developments, maintain a significant portion of a development site in common open space by minimizing individual lot sizes, while maintaining the overall density of development specified by a local master plan or zoning ordinance. Conservation subdivisions should be designed around the area proposed to be preserved in open space; that is, the areas for open space preservation should be set aside before the streets and lots are laid out. The design process for conservation subdivisions should follow three basic steps while taking into consideration applicable local regulations, such as zoning, official mapping, and land division control provisions; and pertinent adopted planning recommendations, such as recommended streets, parks, greenways, and recreational trails. The recommended three-step process is:

1. Identification and analysis of existing conditions, or site analysis;
2. Delineation of preservation areas; and
3. Layout of dwelling locations and street and lot pattern.

STEP ONE: SITE ANALYSIS

The design of a conservation subdivision around the area to be preserved first requires a proper site analysis. The analysis should identify existing features that determine the landscape character of a site and analyze those features to determine the desirability of preserving them. A site analysis should also identify features that present obstacles that must be considered and overcome in the design.

The inventory of existing conditions should include all natural and human-made features of a site. Some of these will be natural areas protected by law, such as floodplains, wetlands, shoreland areas, and water bodies. Other areas that are developable, but contain certain features that may lend character to the rural landscape (see Figures 1 and 2), should also be identified. Such areas could include hedgerows along an abutting road or dividing two fields; a healthy stand of trees atop a rise in terrain; diverse woodlands; wildflower meadows; fallow farm fields; wildlife habitats; areas that afford good views; historic buildings or ruins; fencerows; and even lone specimen trees. Other site features that must be accommodated in the design may include power line rights-of-way, transmission towers, utility easements, and drainage ways.

It should be noted that a site analysis completed for the sketch-plan layout of a conservation subdivision is not usually as technically comprehensive as those required for engineered preliminary plats. Although the engineering constraints on a site should be generally considered, the site analysis for the purposes of designing a sketch plan for conservation subdivision layout is intended primarily to identify landscape character, preservation areas, and building areas. While some of the elements required for sketch plans and typical preliminary plats will be the same (topography, for instance), the level of detail and accuracy required for documenting conditions for engineering purposes is not needed at the sketch-plan level. The elements of a site analysis for the purposes of conservation subdivision design would supplement and precede the site information normally required for conventional subdivision design. When the approval process moves on to the preliminary-plat stage, complete documentation and analysis oriented toward proper engineering practices would then be needed. The conservation subdivision layout would then be adjusted, if necessary, to accommodate engineering considerations.

Figure 1



Woodlands, hedgerows, and large single trees are important landscape elements to identify in a site analysis and to preserve in a final design.

Source: SEWRPC.

Figure 2



Ruins, such as this old stone silo, are strong rural landscape elements which may be worthy of preservation.

A good site analysis done for the purpose of conservation subdivision sketch-plan layout will include field investigations and should, at a minimum, consist of a map, or set of maps, showing the following:

1. A topographic analysis identifying slopes over 12 percent and under 2 percent. The topographic map should have a scale of one inch equals 100 feet or more, with a vertical contour interval of two feet or less. Hilltops and ridge lines should be highlighted.
2. An analysis of drainage patterns. The management of stormwater runoff from a site depends largely upon the existing drainage patterns which, for greatest economy and site preservation, generally should not be altered. Onsite drainage patterns are part of a larger drainage network and connect to the drainage patterns of adjacent sites. The role a particular site plays in the overall watershed should be recognized.
3. A vegetation analysis, identifying woodlands, hedgerows, specimen trees, meadows, prairie remnants, pastures, and active or fallow farm fields. Vegetation should be identified as evergreen or deciduous. The health and condition of each vegetative type should be identified. Predominant species in hedgerows and woodlands should be identified. Specimen trees should be identified by species, size, and health. Unique or endangered plant species should be noted.
4. A delineation of soil types and identification of selected soil characteristics, as provided by the information in the regional soil survey completed for the Regional Planning Commission by the U. S. Natural Resources Conservation Service. Such characteristics would include, for example, suitability of soils for crops, pasture, woodland, wildlife habitat, and recreation, as well as for building foundations, roadways, and onsite sewage-disposal systems. Prime agricultural soils and alluvial floodplain soils should be noted.

5. Shoreland protection areas, including the minimum 75-foot building setback from the ordinary high-water mark of navigable waters, the 100-year recurrence interval floodplain boundaries, and lakes, ponds, streams, and wetlands. Significant groundwater recharge or well-head protection areas, if such information is available.
6. Boundaries and characteristics of primary and secondary environmental corridors, and isolated natural resource areas, as identified in the adopted regional plans or local comprehensive or master plans. Natural areas and critical species habitat sites.
7. Wildlife habitat, whether in fields, wetlands, or woodlands. Predominant species of birds, mammals, amphibians, reptiles, and fish should be identified when possible. The presence of rare or endangered species should be noted.
8. Historic or cultural features, including ruins and stone fencerows.
9. Other existing buildings and structures. All buildings in a farm complex should be located and identified as to their use, as well as the locations of existing wells and onsite sewage-disposal systems.
10. Scenic vistas, both into the site from adjacent roads, trails, and hilltops and outward from the site.
11. Classifications of existing streets and highways adjacent to the development parcel as well as desirable or undesirable points of entry into the parcel. Street connections required by the local official map should be noted.
12. Existing physical conditions surrounding the development parcel within 200 feet. These might include such notes as “adjacent residential homes,” “connection to county trail,” or “view to historic barn.” The size and extent of existing adjacent open space areas should be noted, as well as any further open space connections these spaces may have.
13. Future areawide plans that may affect the physical layout of the site should also be taken into account. These could include, among others, plans for future parks; open space, trail, and bikeway systems; agricultural preservation areas; arterial and other street networks; stormwater management facilities and other utilities; and general land use plans.

Figure 3 is an example of a typical site analysis. This is often accompanied by a written narrative that further explains the existing conditions on the site.

STEP TWO: DELINEATION OF PRESERVATION AREAS

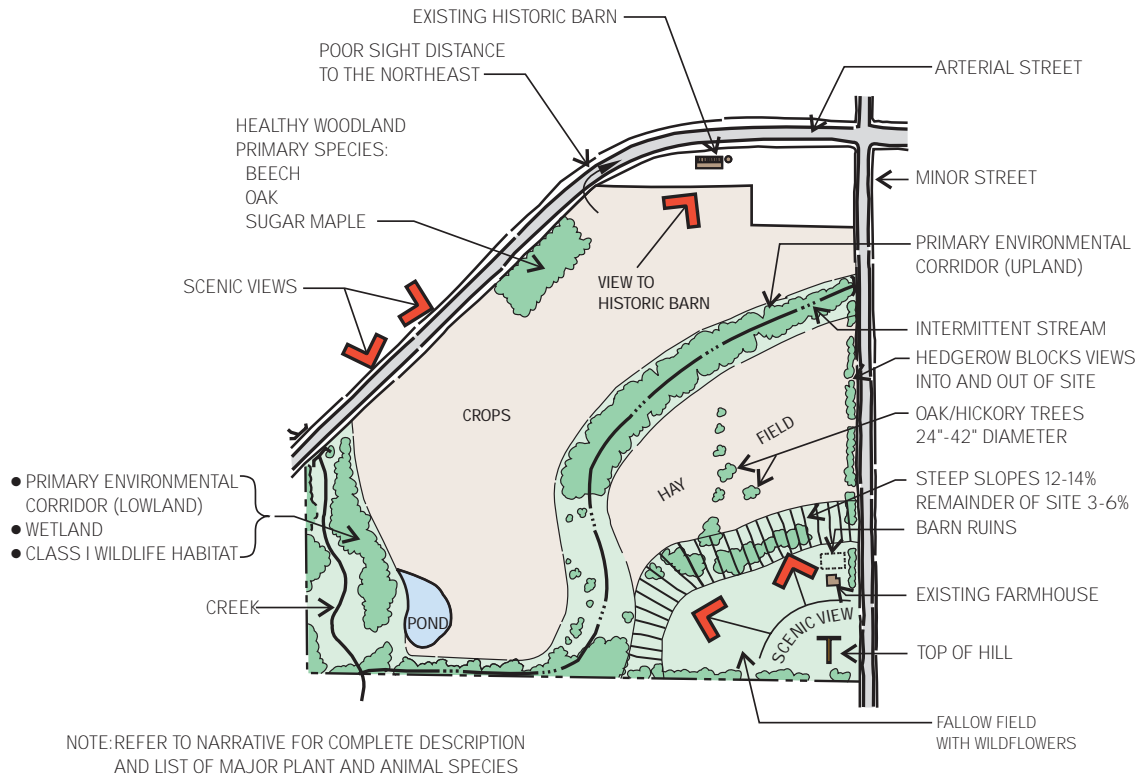
After determining the existing conditions on a site, the next step is to determine which areas should be preserved, as shown in Figure 4. Areas of first and second priority for preservation should be identified.

Areas of first priority will include two types of areas: those protected through State and Federal regulations, such as floodplains, wetlands, and shorelands, and those connecting to larger municipal, county, or regional park and greenway systems, such as primary environmental corridors. The more open space areas are connected, the more valuable they become. The concept of connectedness is very important when trying to preserve meaningful open space. Fragmented open space areas lead to disrupted wildlife migration paths, nonfunctional wildlife corridors,

Figure 3

CONSERVATION SUBDIVISION DESIGN: STEP 1

INVENTORY AND ANALYSIS OF LANDSCAPE CHARACTER



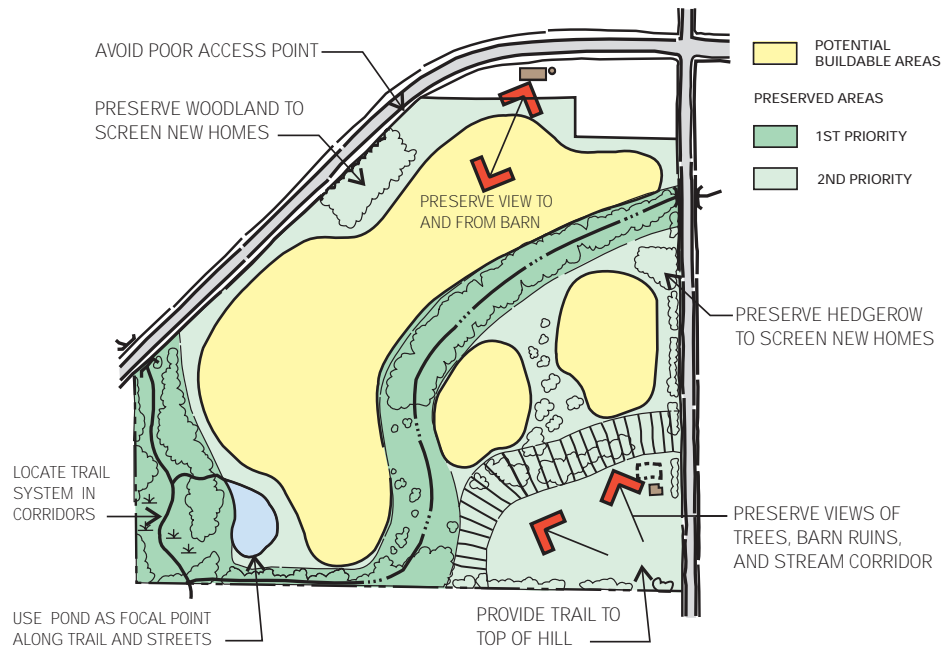
A site analysis for the purpose of conservation subdivision design would supplement and precede the engineering information normally required for a conventional subdivision. When the approval process moves to the preliminary plat stage, the conservation subdivision layout would then be adjusted to accommodate engineering considerations.

Source: SEWRPC.

inefficient farming operations, and piecemeal trail systems. Areas of disconnected open space preserved on a variety of development parcels, while valuable to some degree, cannot have the same impact on preservation of landscape character as continuous open space does. When areas of open space in conservation subdivision developments on adjacent parcels abut each other, the impact on landscape character is greater than if they are separated by visible development.

The goal of connectedness in open space should always be kept in mind, not only in terms of the importance of connecting onsite open space with offsite open space, but also in terms of connecting all onsite open space as much as possible. While the opportunity to connect areas of onsite open space with adjacent offsite areas is not always available, areas of open space within the site can and should be connected. In this way, it may even be

Figure 4
CONSERVATION SUBDIVISION DESIGN: STEP 2
PRESERVED AREAS PLAN



Areas of first and second priority for preservation should be identified and preservation areas should be connected.

Source: SEWRPC.

possible to restore key gaps between presettlement vegetation relicts, which were separated by agricultural operations. Zoning ordinance regulations should require that acceptable open space parcels be of a specified minimum size and that areas of open space be connected as much as is practicable.

After designating first priority areas for preservation, regulated environmentally constrained areas and areas that provide connections to offsite open space, areas of second priority are added. These would include other developable areas with natural features that have been identified as contributing to the particular rural landscape character of the site, as seen from adjacent roads and other public ways, as well as from within the site. Some judgments may have to be made at this stage as to the desirability of preserving certain areas of marginal value. For example, a hedgerow with weak-wooded or diseased trees may not be desirable for preservation, while retaining open areas to eventually be landscaped to screen new homes is desirable.

Not all the open space will be environmentally constrained land, nor should it be. On parcels that have a great deal of environmentally constrained land, not all of it may be accepted as meeting the open space requirement of the zoning ordinance. In part, this is because development may be precluded anyway, such as in floodways; and, in part, the fact that such open space may not be considered publicly usable, such as with certain wetlands. On parcels with few constraints, much of the open space will be in well-drained upland areas that would be

Figure 5
CONSERVATION SUBDIVISION DESIGN: STEP 3
STREET AND LOT LAYOUT



After areas for preservation are identified, specific locations for building lots and streets are determined.

Source: SEWRPC.

considered buildable. Decisions would have to be made as to which portions of these areas should be used for lots and which should be saved for open space. These decisions should be based on the overriding objective of preserving rural landscape character.

In the process of determining the preservation areas, the areas available for buildings, streets and lots are, by default, also identified. These are the “left over” areas. This process is the opposite of that often used in the design of a conventional subdivision, where the leftover areas are the areas considered unsuitable for building. Often the areas with the most attractive natural amenities in a conventional subdivision are set aside first to be included in a few prime lots that can be sold at a premium price. By contrast, all of the lots within a conservation subdivision may become more valuable, leveraged upward by the presence of open space amenities.

STEP THREE: CONCEPTUAL DELINEATION OF STREET AND LOT LAYOUT (SKETCH PLAN)

When preservation areas are set aside, their outlines give shape to the building areas. On many development parcels, the areas available for building will be larger than the area needed to accommodate the permitted number of lots. Thus, the third step in the conservation subdivision design process is to determine more specifically the preferred locations of building lots and how best to provide access to them with streets (see Figure 5).

The street and lot layout at this stage in the design process is conceptual only. Because of the large variety of street layouts that are possible through the flexibility permitted by conservation subdivision regulations, agreement on the general acceptability of a plan should be reached before the plan is more precisely detailed. While general municipal engineering principles should be followed, no detailed site engineering is done at this stage, although all zoning and subdivision regulations should be met consulted to determine achievability of the proposed development concepts. It is beneficial for both the developer and the municipality to reach a consensus on a conceptual sketch plan before the developer incurs the costs of preliminary engineering. During review of the sketch plan, design changes can be made at little cost to the developer, lesser review time to the municipality, and with frustrations minimized. Thus, before the preparation of a preliminary plat is initiated, both the developer and the municipality should have agreed upon a conceptual layout.

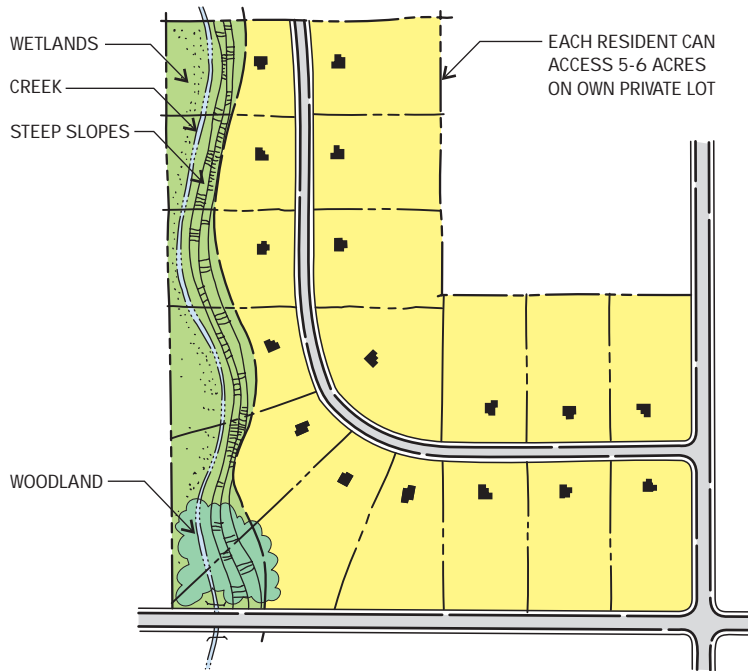
The result of this process will be that streets and houses blend into the landscape in a natural way that protects the character of the site as seen within the site and from adjacent streets. This is again the opposite of houses being forced onto the landscape in a form determined by rigid lot sizes and the configuration of parcel boundaries, as is often the case in conventional subdivision design and development.

EXAMPLES OF CONSERVATION SUBDIVISION DESIGNS

Hypothetical examples of conservation subdivision designs, contrasted with conventional designs for the same site, are presented in Figures 6, 7, and 8. Additional examples of conservation subdivision designs, along with means for implementing the conservation subdivision design concept, are presented in SEWRPC Planning Guide No. 7, *Rural Cluster Development*, December 1996.

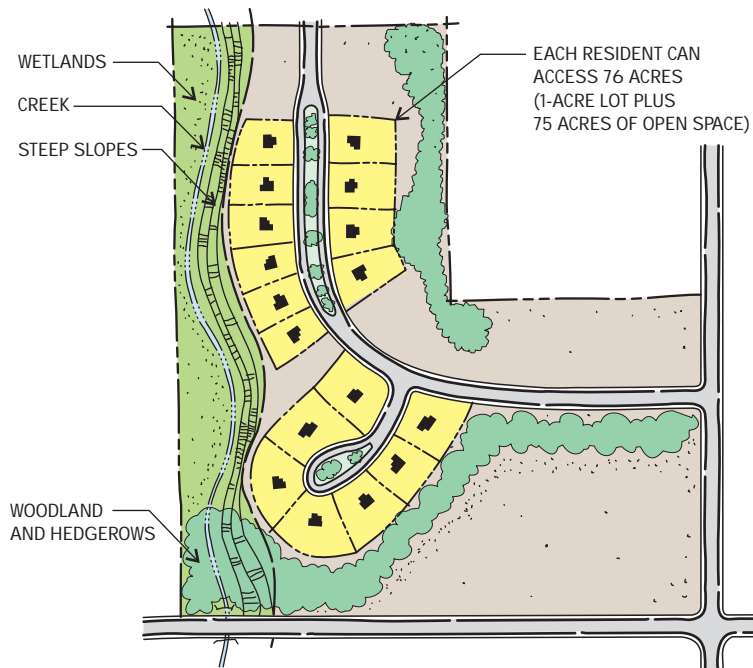
Figure 6

CONVENTIONAL SUBDIVISION DESIGN



Acres: 104
Lots: 17
Density: 1 Dwelling Unit / 6 Acres
Average Lot Size: 5 Acres
Common Open Space: 0%

CONSERVATION SUBDIVISION DESIGN



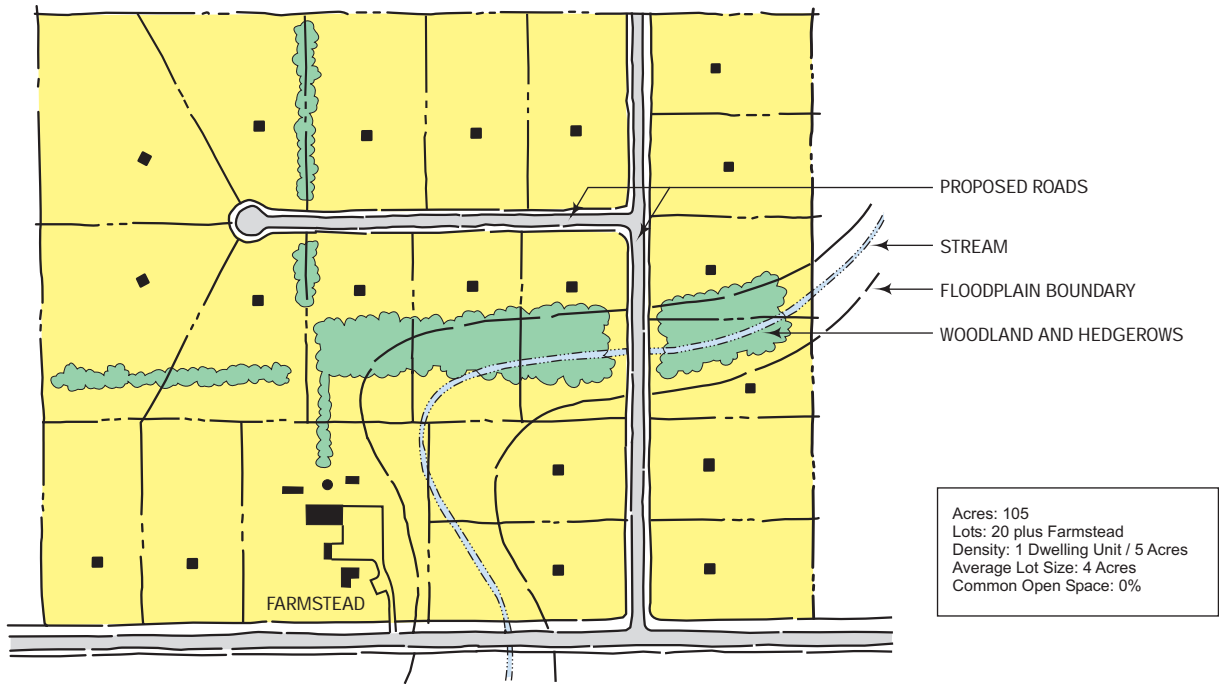
Acres: 104
Lots: 17
Density: 1 Dwelling Unit / 6 Acres
Average Lot Size: 1 Acre
Common Open Space: 75%

Through a reduction in lot size, open space can be created without losing density.

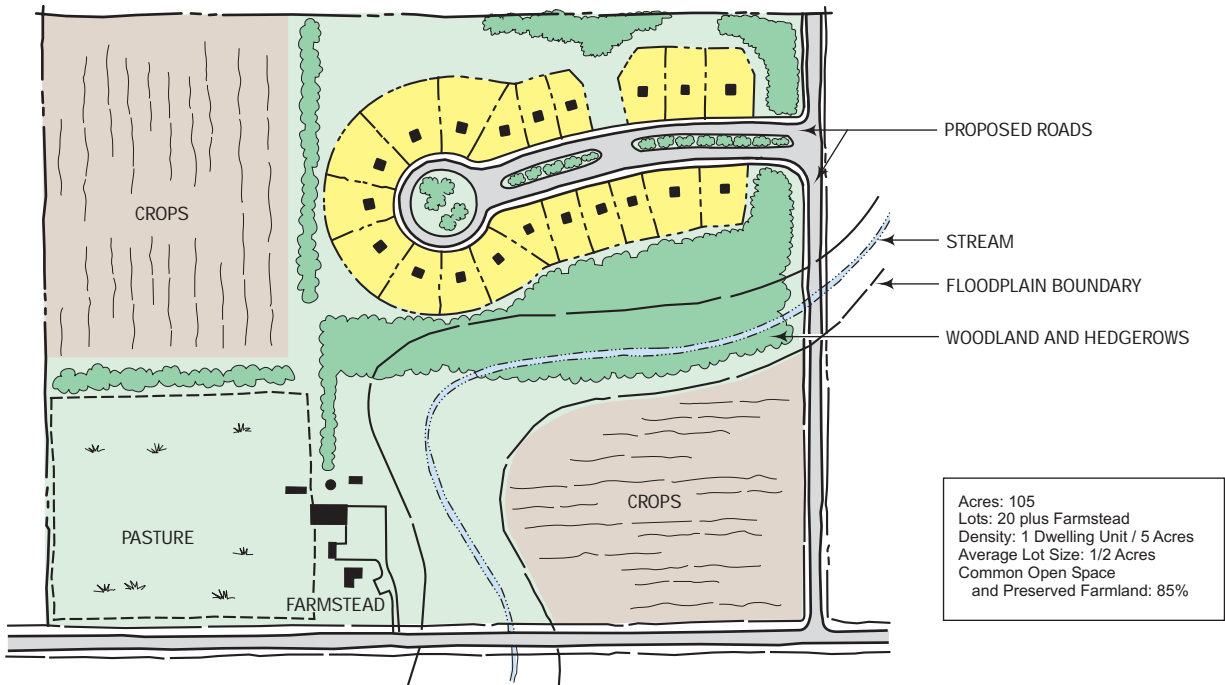
Source: SEWRPC.

Figure 7

CONVENTIONAL SUBDIVISION DESIGN



CONSERVATION SUBDIVISION DESIGN

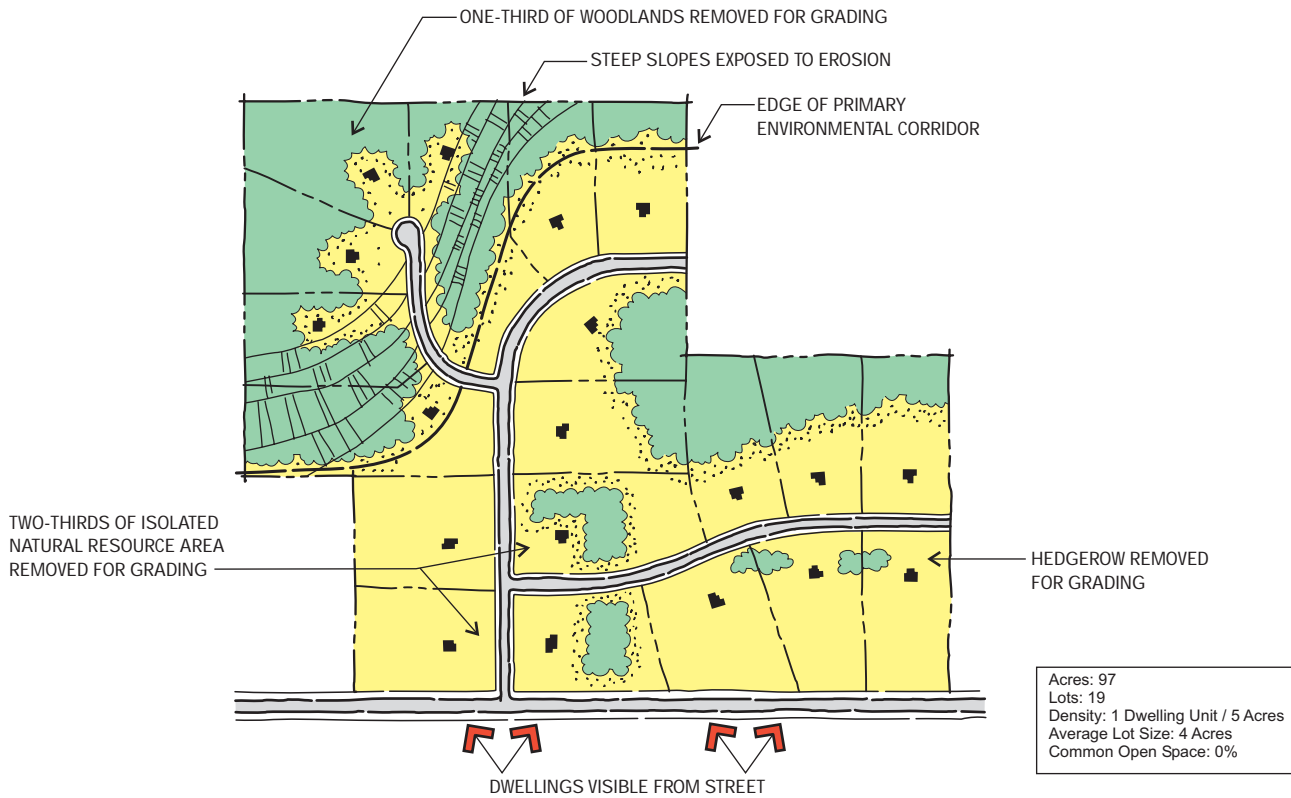


Conservation subdivision development can help preserve farming activities.

Source: SEWRPC.

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Figure 8

CONVENTIONAL SUBDIVISION DESIGN



CONSERVATION SUBDIVISION DESIGN



Conservation subdivisions can preserve environmental features and views.

Source: SEWRPC.

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