

8. Sand Bay Town Park 6.4 Acres  
Facilities -- Excellent sand beach; eight picnic tables; six grills; toilets (pump out); and parking  
Features of note -- Wooded and brushed out; marked at entrance and at Sand Bay Road and Water's End Road intersection; view of Spider Island and Newport State Park
9. Isle View Park 0.5 Acres  
Facilities -- One small picnic table and viewing bench  
Features of note -- Distant view of lighthouses

**Public Access Sites to Water:**

10. Garrett Bay - Boat Launch and Historical Marine State Trail Site  
11. East End of Isle View Road  
12. East End of Europe Lake Road - Boat Launch  
13. Waters End Road- East and West Ends  
14. Winding Lane - North Bay - Boat Launch  
15. North Bay Drive - North End  
16. West End of Porcupine Bay Road  
17. East End of Appleport Road  
18. South End of North Bay Road - Boat Launch

**County Parks**

19. Door Bluff Headlands County Park 155 Acres  
Facilities--Small Parking Lot  
Features of note-- This park is maintained as a wilderness area, and is not developed for recreational use. The park is characterized by vertical bluffs rising from the Bay of Green Bay, a variety of tree and ground species, and varied topography.
20. Ellison Bay Bluff County Park 160 Acres  
Facilities--Two picnic tables; two fire rings; a well; toilets; parking lot for about 15 cars  
Features of note-- The drive to the park features a three-quarter mile drive with woods on one side and a stone fence and open field on the other. A stairway to a viewing area features spectacular views of Green Bay waters. Access to the water from the park is not possible due to the high bluff separating the two.

**State Parks and Open Space**

21. Newport State Park 2,440 Acres  
Facilities -- Over 40 miles of trails for hiking; biking; skiing; snow shoeing; 16 primitive camp sites; picnic area with shelter; and toilets (pump-out)  
Features of note -- The park features 11 miles of Lake Michigan Shoreline, a nature center, year round naturalist, guided hikes and activities, and school programs. The park is designated as a wilderness area with minimal development.

22. Mud Lake State Natural Area

340 Acres

Facilities -- None

Features of note -- The site contains a shallow, hard, drainage lake surrounded by northern wet-mesic forest, the extent of which depends on water levels. Reiboldts Creek, which runs from Mud Lake to Lake Michigan, has been stocked with trout and supports a trout spawning run. Waterfowl use is occasionally heavy. Nesting has been confirmed for pied-billed grebe, American bittern, common golden eye, mallard, pintail, blue-winged teal, wood duck, and Virginia rail. Uses include: group use, research use, individual nature study, hunting, fishing, boating or canoeing.

**SCIENTIFIC AND NATURAL AREAS**

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.

Within the Town, there are two state-designated natural areas. They are Newport Conifer Hardwoods and Mud Lake. Mud Lake was previously discussed in the park and recreation section of this chapter. The Newport Conifer Hardwoods contain diverse northern mesic, northern wet-mesic, and boreal forest communities located in Newport State Park. The 140 acre site is composed of white birch, sugar maple, beech, and ash. A three to eight foot high wall of dolomite traverses the site. The natural area is accessible via hiking trails in the state park (Map 2.14).

In addition to the State natural areas described above, the WDNR also completed a natural area inventory in 1980. This study inventoried potential areas of natural significance based on plant and animal diversity, natural area community structure, and the extent of human disturbance. These areas are placed into the following five categories:

- SA    State Scientific Areas - those natural areas of at least State significance which have been designated by the Scientific Areas Preservation Council.
- NA-1    Natural Areas - tracts of land and/or water so little modified by man's activity, or sufficiently recovered, that they contain nearly intact native plant and animal communities believed to be representative of the pre-settlement landscape.
- NA-2    Natural Areas - tracts of land and/or water slightly modified by man's activities or insufficiently recovered from past disturbances such that they are of county or multi-county natural area significance because of one or more of the following reasons: the degree of quality is less than level of grazing, water level manipulation or pollution, etc.; the type may be the most abundant or a very common type in the region, only the very best of which might qualify for state scientific area recognition; or the area may be too small.

NA - 3 Natural History Areas - tracts of land/or water modified by man's activities, but which retain a moderate degree of natural cover and often would be suitable for educational use. Such exclusions from a natural area inventory would be an oversight. Two or more of the identifying natural area criteria may be substandard in natural history areas, but in time and with protection, most natural history areas will increase in "naturalness". Natural history areas may reflect patterns of former vegetation or show the influence of settlement on vegetation. An important value of some of the larger NA-3 sites is their role in watershed protection and environmental corridors.

NA-1 (RSH) Rare Species Habitats - sites where the primary natural value is the presence of one or more rare, threatened, or endangered species of plants or animals.

In addition to the two state natural areas listed above, the Town of Liberty Grove has five areas designated in this natural area inventory. They are:

#### **Sister Islands**

T32N R28E Sec 30

2 to 15 acres depending on water level

Code: SA

Ownership: DNR

Two low-lying dolomite gravel islands in the Bay of Green Bay considered to be important gulleries. An estimated 1,350-1,650 breeding pairs of herring gulls were present in 1964. Bird banding and several research projects on gulls have taken place on the islands. Vegetation is primarily composed of pioneering weedy herbs and shrubs.

#### **Marshall's Point**

T31N R28E Sec 23, 24, 25

About 600 Acres

Code: NA-2

Ownership: Private and Trust Lands (114 Acres)

An outstanding area exhibiting Lake Michigan rocky shore and boreal forest of white cedar, balsam fir and other conifers and hardwoods over dolomite bedrock. The soil is a raw humus rendzina, which is an undecomposed organic soil over calcareous rock. Numerous critical plant species have been documented from this area, and it contains a rich bryophyte community.

#### **Mink River Marsh**

T32N R28E Sec 13, 14, 24 (Ellison Bay)

1,100 Acres

Code: NA-1

Ownership: Private

A two mile wide spread of the Mink River subject to the water level fluctuations of Lake Michigan. Extensive sedge meadows line the periphery, while aquatics abound in the marsh. Numerous springs feed into the marsh, and extensive shrub and conifer swamps surround the wetland. The area has high furbearer and waterfowl significance. The Nature Conservancy owns 60 acres on the edge of the marsh.

#### **Hotz Tract-Europe Lake**

T32N R29E Parts of Sec 4 and 9  
130 Acres between Europe Lake and Lake Michigan  
Code: NA-1  
Ownership: DNR and Private

A state significant isthmus between Lake Michigan and Europe Lake features over a mile of undeveloped low dunes and limestone frontage on the former and cobblestone frontage on the latter. Virgin red pine groves and excellent beech-sugar maple mesic forest are additional features. Critical plant species are present. The southern half of the area is in Newport State Park.

#### **Door Bluff Park**

T33N R28E Sec 35  
50 Acres  
Code: NA-2  
Ownership: Door County

A very high Niagara dolomite bluff overlooking Lake Michigan, with terraced lower levels indicating former wave-cut beaches. It is forested with second growth American beech-sugar maple white birch on the summit, with large trees and white cedar on the cliffs. Critical plant species are present. Most of the area falls within the boundaries of Door Bluff Headlands County Park.

#### **ENVIRONMENTAL CORRIDORS**

Environmental corridors serve many purposes. They protect local water quality and wildlife habitat through identification and preservation of environmentally sensitive areas. They can be used as a means of controlling, moderating, and storing floodwaters while providing nutrient and sediment filtration. Environmental corridors can provide fish and wildlife habitat, recreational opportunities, and serve as buffers between land uses while improving the aesthetics of the community. As part of its on-going effort to complete a regional master plan, the Bay-Lake Regional Planning Commission has begun to compile and delineate region-wide data needed for land use planning within the region. The environmental corridor process is also used as part of the planning process for making planning and zoning decisions at the local level.

After reviewing existing definitions and regulations from federal, state and local levels, the Bay-Lake Regional Planning Commission determined a need to define two sets of criteria for environmental feature delineation: one set for delineating "Environmentally Sensitive Areas" for

sewer service area planning under NR 121; and, one set for delineating "Environmental Corridors" for all other community planning work.

For community planning work, the Bay-Lake Regional Planning Commission has defined its Environmental Corridors to include the following set of uniformly available information: Wisconsin Department of Natural Resources wetlands; 100-year 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 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. Within the Town, there are 6,740 acres of environmental corridors. (Map 2.15).

### **OTHER LOCAL KEY NATURAL FEATURES**

One key local feature within the Town of Liberty Grove is the Niagara Escarpment. The Niagara Escarpment is an observable geologic landform throughout the Great Lakes from New York to Wisconsin that, because of the unique habitat areas associated with it, is an important natural resource area in both the United States and Canada. The escarpment forms much of the western edge of the Town and is readily apparent as the bluffs overlooking the Bay of Green Bay provide the type of view that attract visitors to the area.

### **HISTORIC/CULTURAL AND ARCHEOLOGICAL RESOURCES**

According to the *History of Door County*, in 1859, Liberty Grove Township became the northernmost territory organized on the Door peninsula. Norwegian Moravians from the Town of Gibraltar initiated the creation due to the need of a Norwegian from Ephraim who felt he needed to relocate because he felt that Gibraltar's increasing population of settlers undermined his liberty. This new Town was named "Liberty" Grove.

There are many buildings of historical importance within the Town of Liberty Grove. Most of these buildings are old farmhouses and barns. Others are old commercial buildings, schools, and churches. A large number of these sites are located in Ellison Bay and along the shoreline. One of these historic sites is called The Clearing and is on the National Registry of Historic Places. It is located along the shoreline in Ellison Bay. This site is a 128 acre school and is considered an outstanding example of landscape architecture design including rustic structures in woods and meadows overlooking the Bay of Green Bay.

A historical and architectural resources survey regarding Door County's historical and architectural resources completed in 1998 provides several recommendations for additional sites that are eligible for National Register designation. The study entitled *Historical and Architectural Resources Survey, Selected Unincorporated Communities of Door County* recommended that the Rowleys Bay Pier, the Pioneer Store in Ellison Bay and the collection of structures in Gills Rock associated with the Weborg Pier could all be considered eligible sites.

There are also numerous archeological sites within the Town. Again, these are scattered along the shoreline of the Town with a small concentration in Ellison Bay. Two of these sites are on the National Registry of Historic Places. They are Bohjanen's Door Bluff Pictographs and the Porte des Morts site. The Porte des Morts site is an old village site of the Oneotas. The Door Bluff Pictographs show figures of Indians and canoes painted in the rock face. Care should be taken when excavation is done within the Town of Liberty Grove, since there is the possibility of disturbing a historical or archeological site. The State of Wisconsin requires any findings of human bones to be reported (*Wisconsin Statute 157.70*) so the State Historical Society can do an investigation. Also, 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. Map 2.16 shows the approximate locations of these historic and archeological sites.

### **METALLIC AND NON METALLIC MINING RESOURCES**

Metallic mining in Wisconsin has occurred since the time it was settled. Metals mined in the state include copper, lead, iron, and zinc. Mining has economic value to multi-regional areas, but also has the ability to potentially harm natural resources. Any new mines need to have a permit granted by the WDNR, which includes a reclamation plan. This plan is a detailed technical document designed to meet the goals which lead to successful reclamation and will help reduce the effects to the environment once the mine is abandoned. The plan has minimum standards that must be met in order to be accepted. 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". There is currently no metallic mining in the Town. Sand, gravel, and crushed stone are nonmetallic resources, which are the most likely nonrenewable resources to be mined in the Town since no metallic mines have existed in Door County.

Sand, gravel, and crushed stone are needed as sub-base materials for road construction, and are major components of concrete for foundations, basement walls, sidewalks, etc. 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.

Non-metallics are currently regulated by the Door County Zoning Ordinance, which requires a site plan, an operational plan, a reclamation plan and a copy of the lease for all non-metallic mining operations. The land use map of the Town (Map 8.4) indicates the locations of the existing non-metallic mines in the Town.

### **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. An evaluation of community design is often subjective and requires personal judgment. In an effort to remove this subjectivity, the community design resources of the Town of Liberty Grove 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 a community.

- Boat Ramps
- Cemeteries
- Churches
- Klenkes Garage
- Marinas
- Parks
- Road Crossings
- School Houses
- Town Hall

#### **Pathways**

Pathways are linear features that represent both vehicular and pedestrian movement. Pathways provide connections between places, as well as along them. Whether a major arterial, local street, or undefined woodland trail, pathways are hierarchical and represent a degree of usage.

##### **Major Pathways:**

- County Highway ZZ
- County Highway Q
- Old Stage Road
- Mink River Road
- State Highway 42
- State Highway 57

##### **Secondary Pathways:**

- Appleport Road
- Beach Road
- Garrett Bay Road
- Timberline Road
- Waters End Road

### **Minor Pathways:**

- Town Road network

### **Edges**

Like pathways, edges are linear. Edges are important organizing elements that represent boundaries that can be soft or hard, real or perceived. They become increasingly important as a community grows to visually distinguish the edges of the community. These edges do not necessarily coincide with jurisdictional boundaries.

- Bay of Green Bay
- Country Lane
- Flint Ridge Road
- Grove Road
- Hill Road
- Lake Michigan
- Pebble Beach Road
- Town Line Drive/Stock Road
- Woodcrest Road

### **Districts**

Districts encompass areas of commonality. Examples of districts may include a residential district or central business district. These areas represent buildings and spaces where clearly defined and separate types of activities take place.

- Ellison Bay
- Gills Rock
- Highway 42 Business District - Sister Bay
- Highway 57 and Hwy Q Business District
- Northport
- Rowleys Bay

### **Nodes**

Nodes are specific points of recognition. 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. An example of nodes within a district may include separate areas for government functions versus entertainment activities within a central business district.

- Old Stage Road/CTH ZZ intersection
- 3 Light Industrial Districts on Old Stage Road

### **Community Entryways**

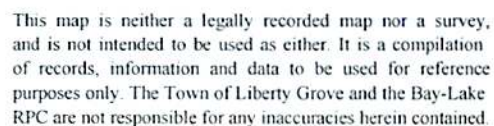
Community entryways are associated with edges in that the entryway begins at an edge. Entryways can be unique and are very valuable assets for they help define a community to those using the entryway. In many cases, these entryways are more correctly described as "Doorways" to a community. They help 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 Liberty Grove should be protected and enhanced. High quality public entry signs and or public art may be used to formally announce entry to the village. Around the Town's periphery, these entrances include:

- State Highway 42 entering from the north at the Washington Island Ferry
- State Highway 42 entering from the village of Ephraim
- State Highway 57 entering from the south

The **Secondary** entryways into the Town of Liberty Grove 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:

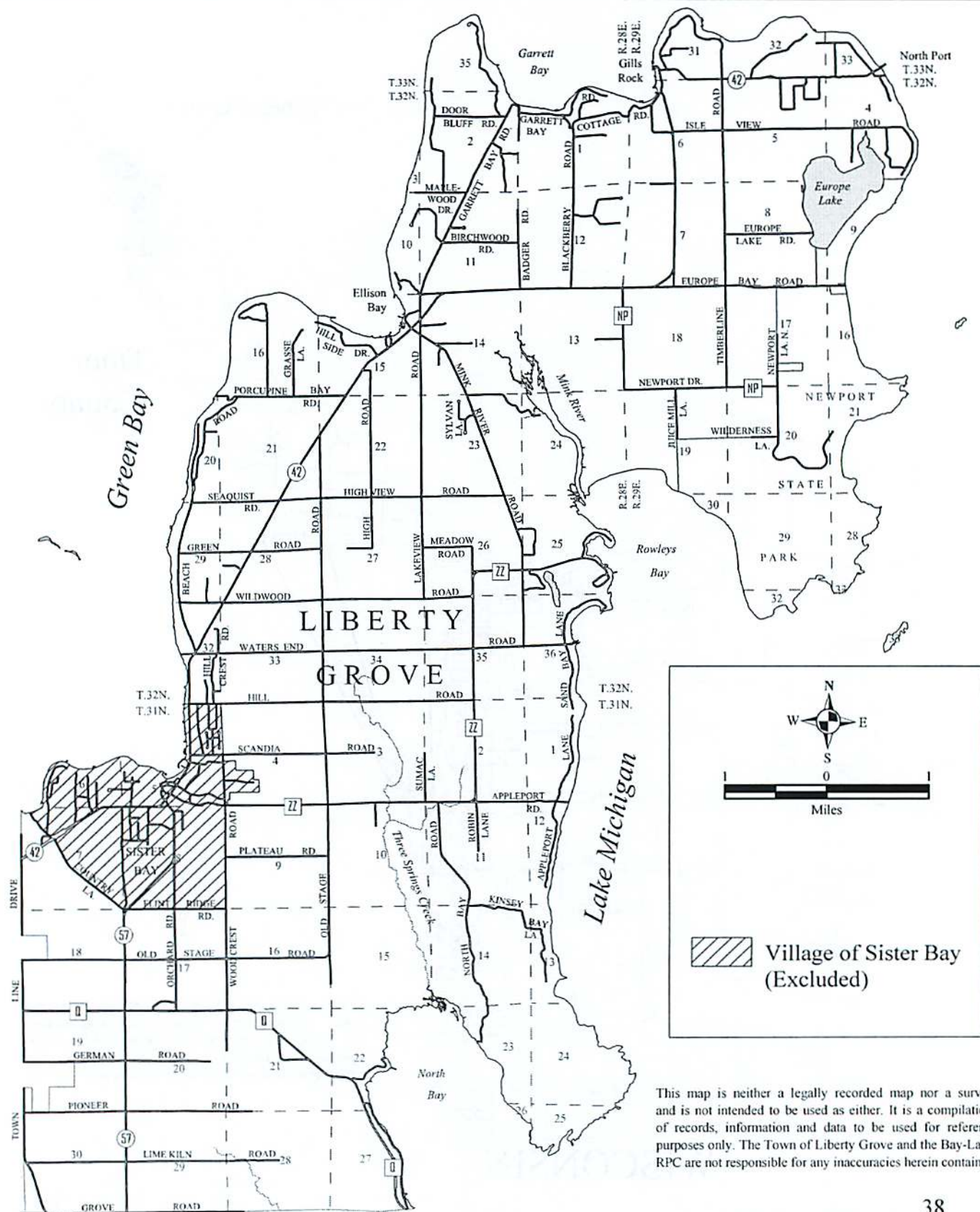
- County Highway Q
- Settlement Road entering from the west
- Town Line Drive
- Woodcrest Road entering from the south



# Planning Area

## Town of Liberty Grove

### Door County, Wisconsin



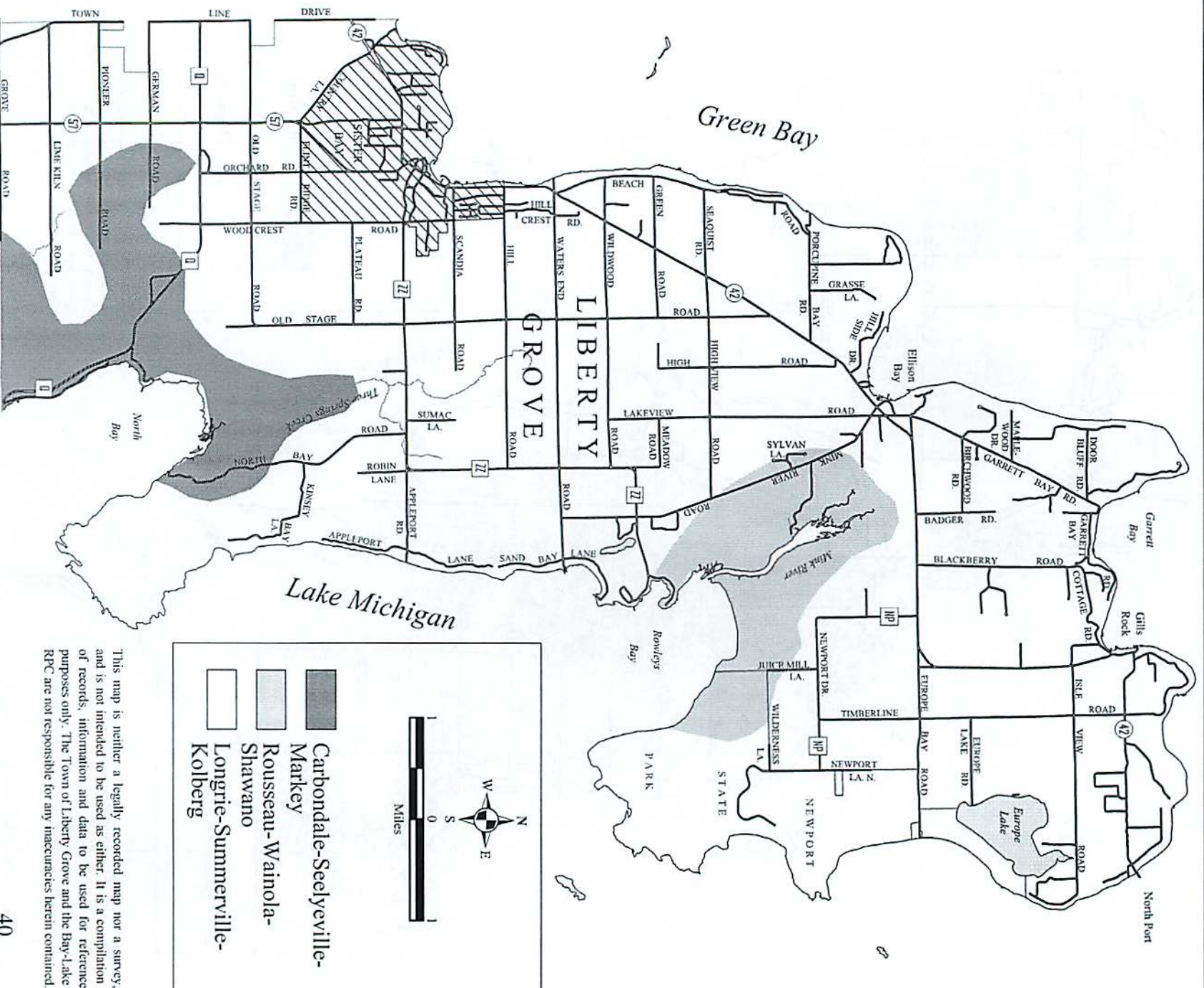
This map is neither a legally recorded map nor a survey and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

39

# General Soil Associations

## Town of Liberty Grove

### Door County, Wisconsin

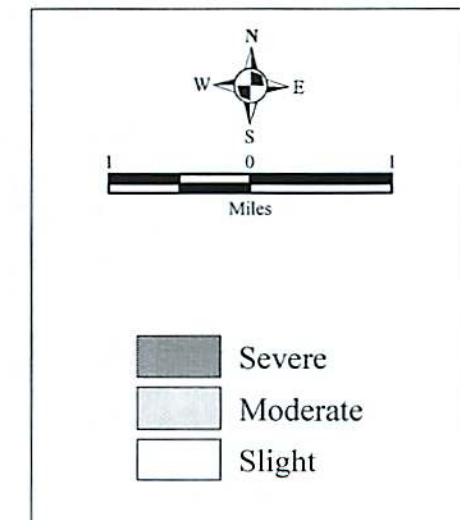


Source: NRCS: Bay-Lake Regional Planning Commission, 2004.

This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

## Map 2.5

Door County, Wisconsin

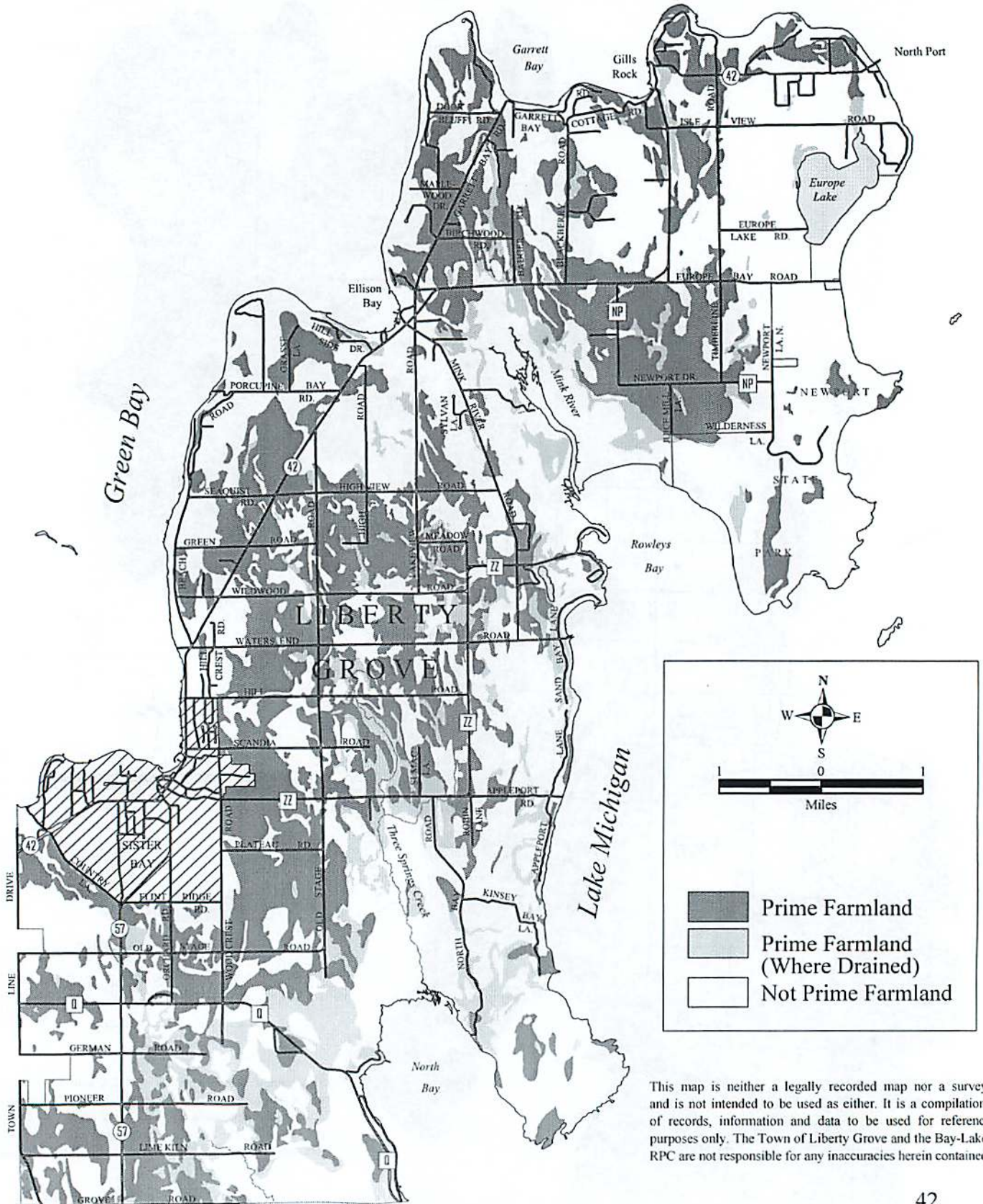


This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Prime Farmlands

## Town of Liberty Grove

### Door County, Wisconsin



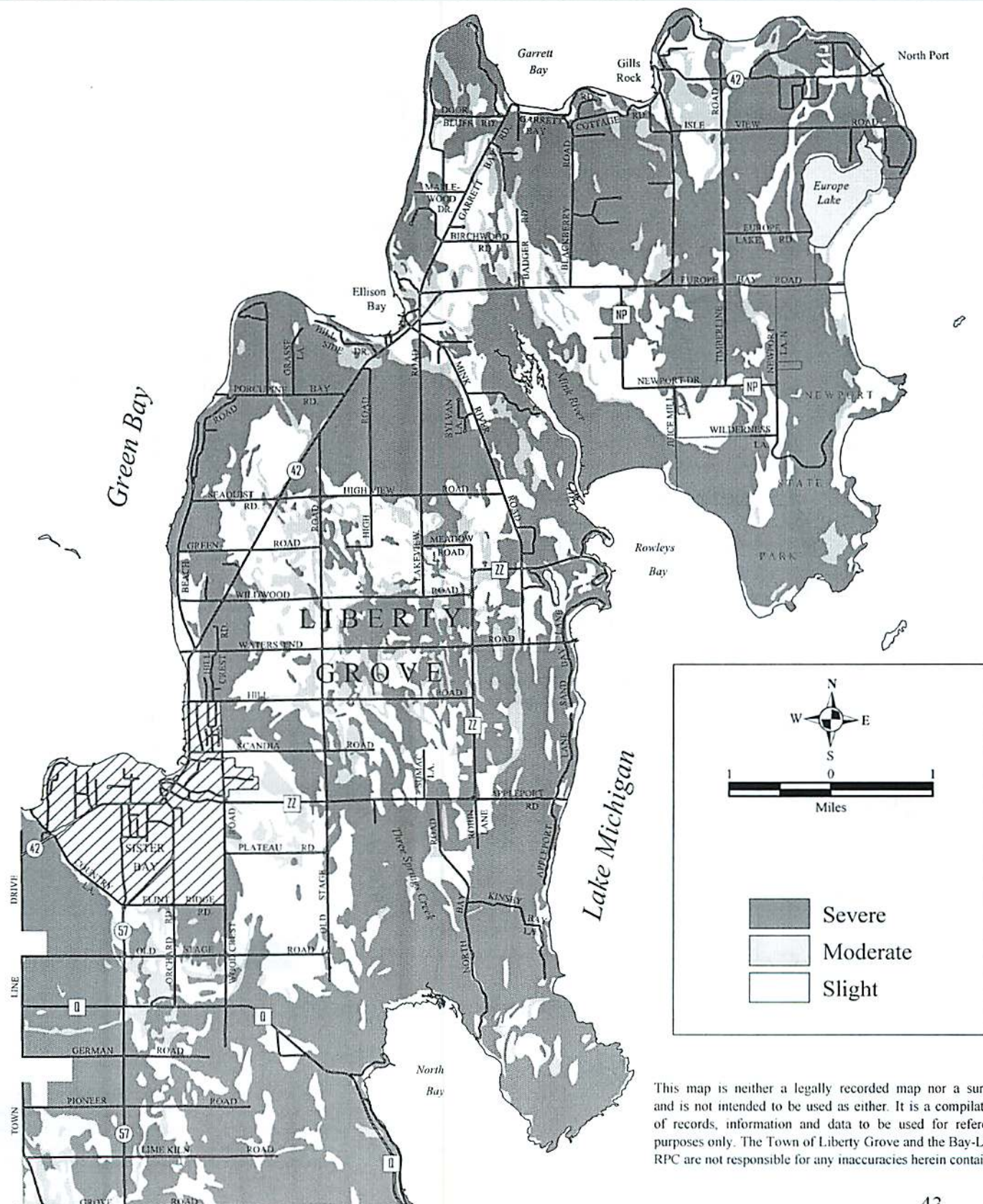
This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Soil Limitations for Dwellings With Basements

## Town of Liberty Grove

### Door County, Wisconsin

Map 2.7



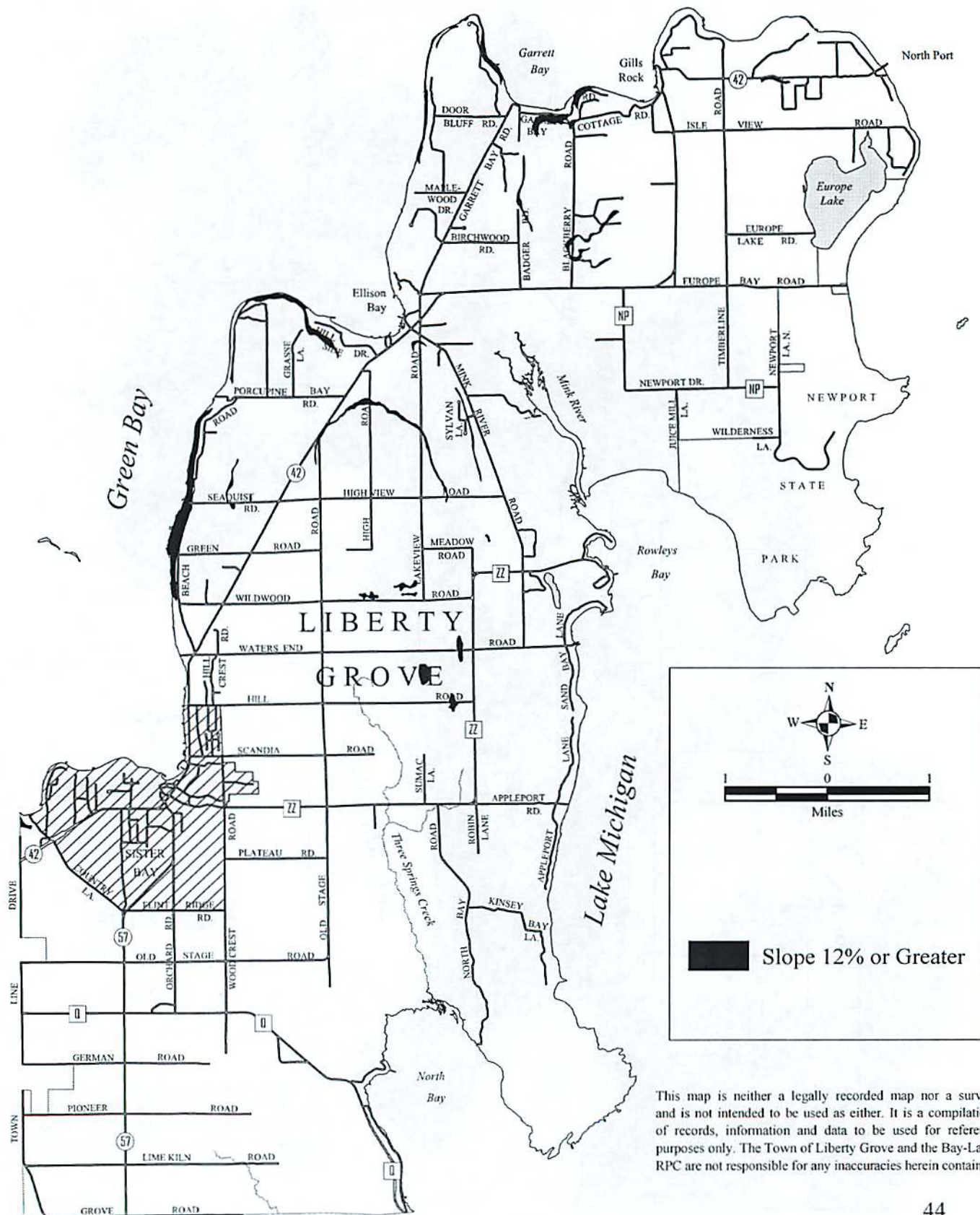
This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Steep Slope

## Town of Liberty Grove

### Door County, Wisconsin

Map 2.8

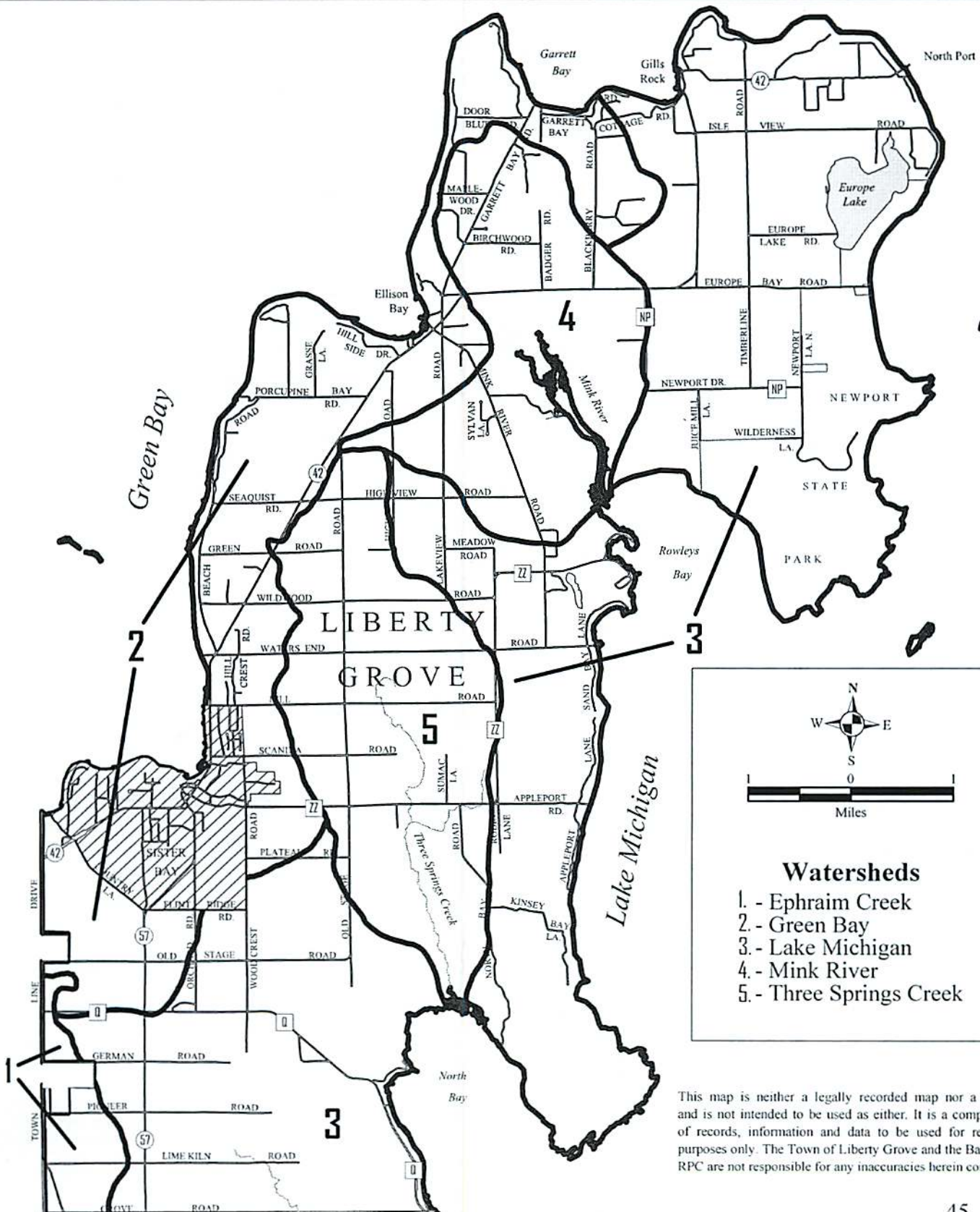


Source: USDA; NRCS; Bay-Lake Regional Planning Commission, 2004.

This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Watersheds & Surface Water Features Map 2.9

## Town of Liberty Grove Door County, Wisconsin

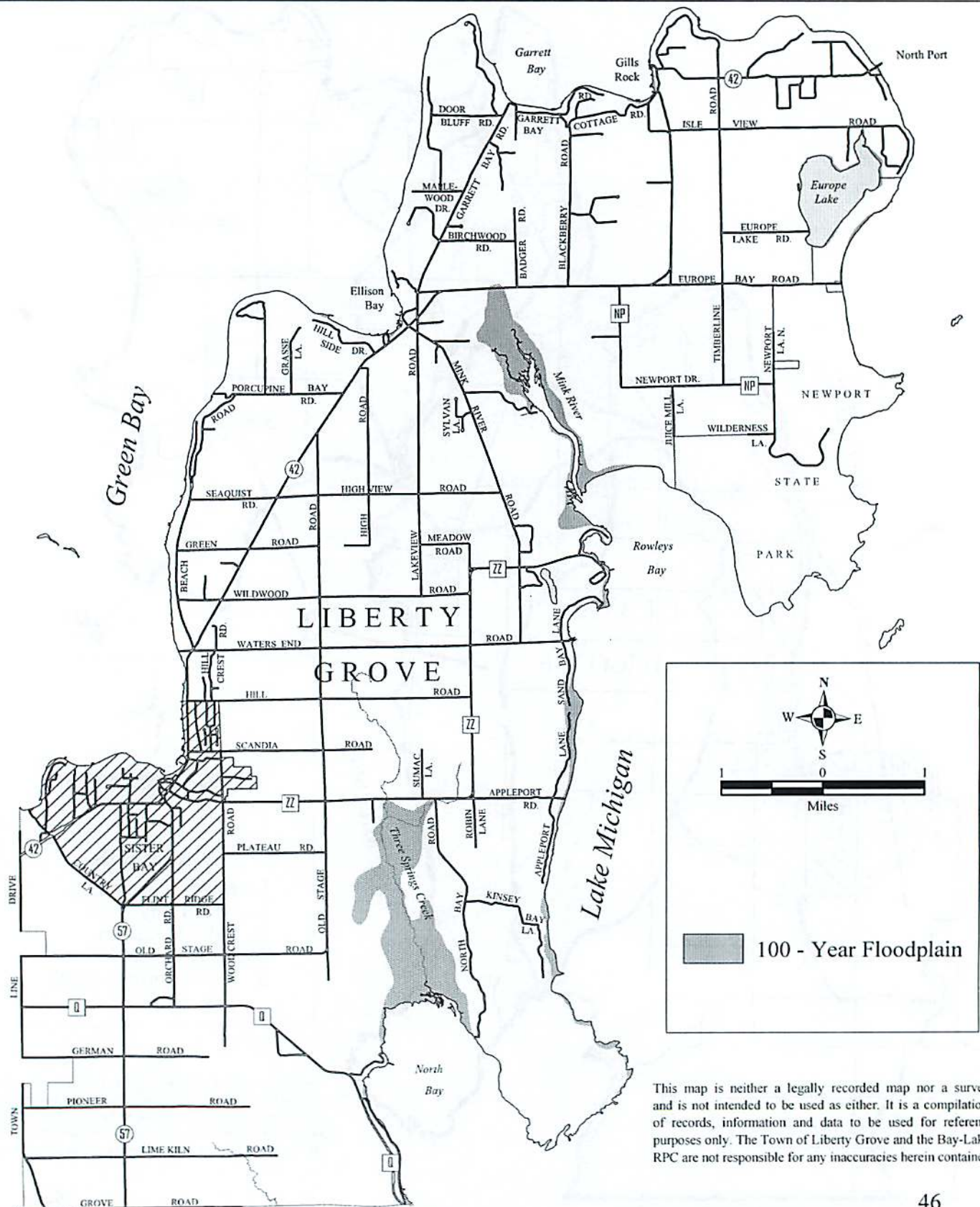


This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Floodplains

## Town of Liberty Grove

### Door County, Wisconsin

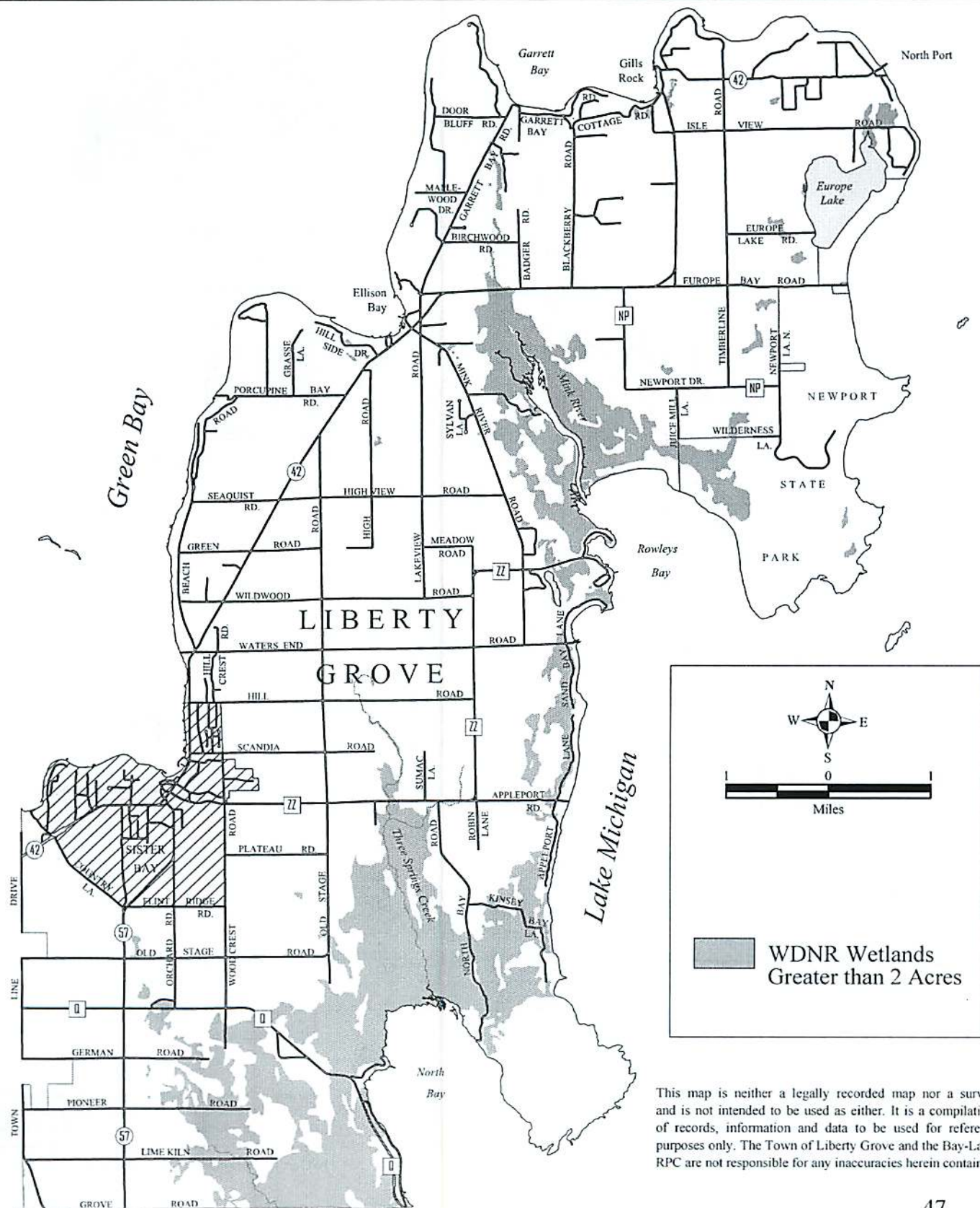


This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Wetlands

## Town of Liberty Grove

### Door County, Wisconsin

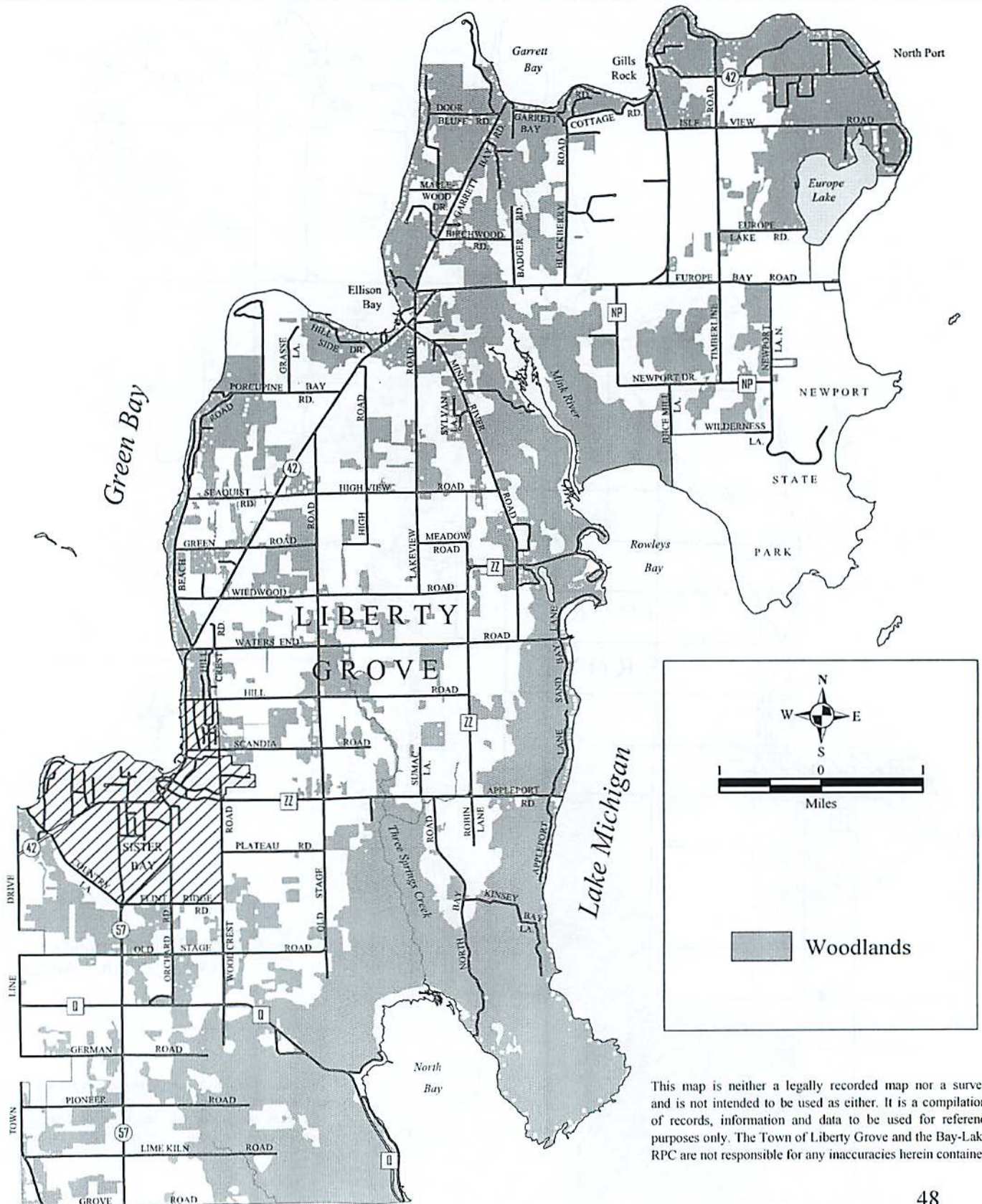


# Woodlands

## Town of Liberty Grove

### Door County, Wisconsin

Map 2.12



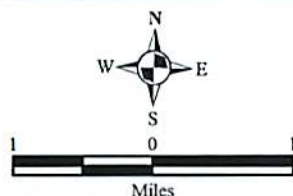
This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Park, Recreation, & Water Access Sites

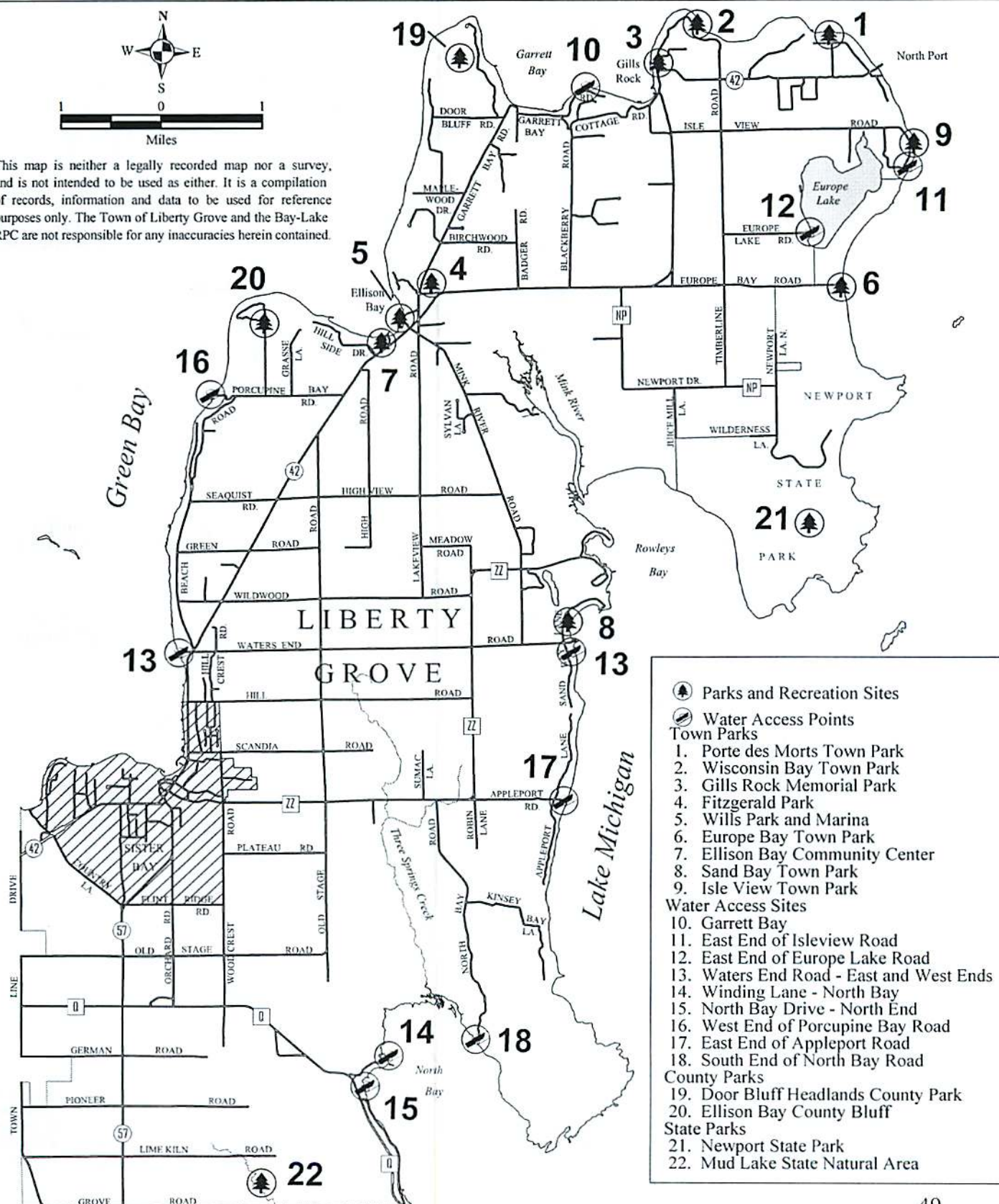
## Town of Liberty Grove

### Door County, Wisconsin

Map 2.13



This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

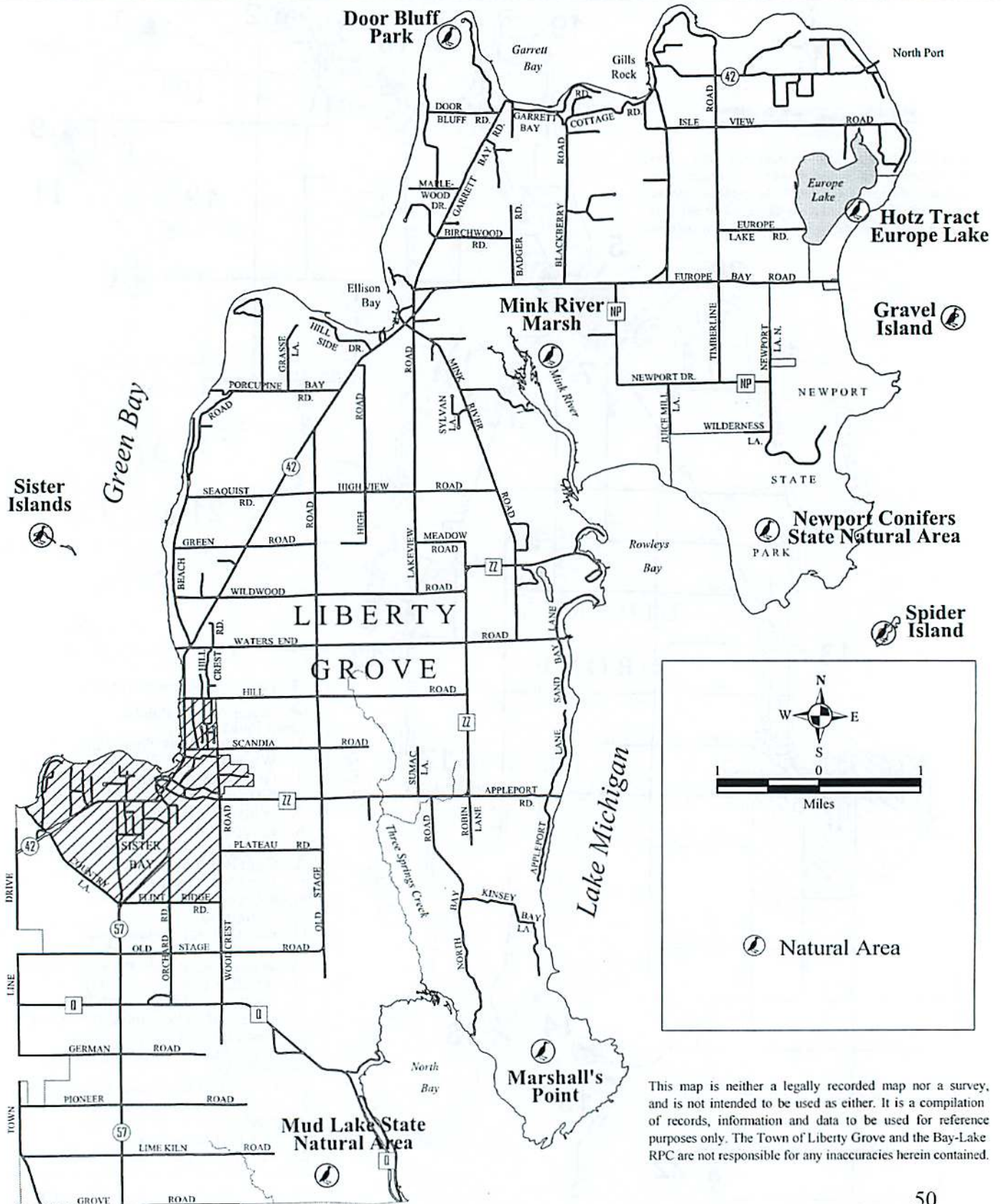


# Natural Areas

## Town of Liberty Grove

### Door County, Wisconsin

Map 2.14

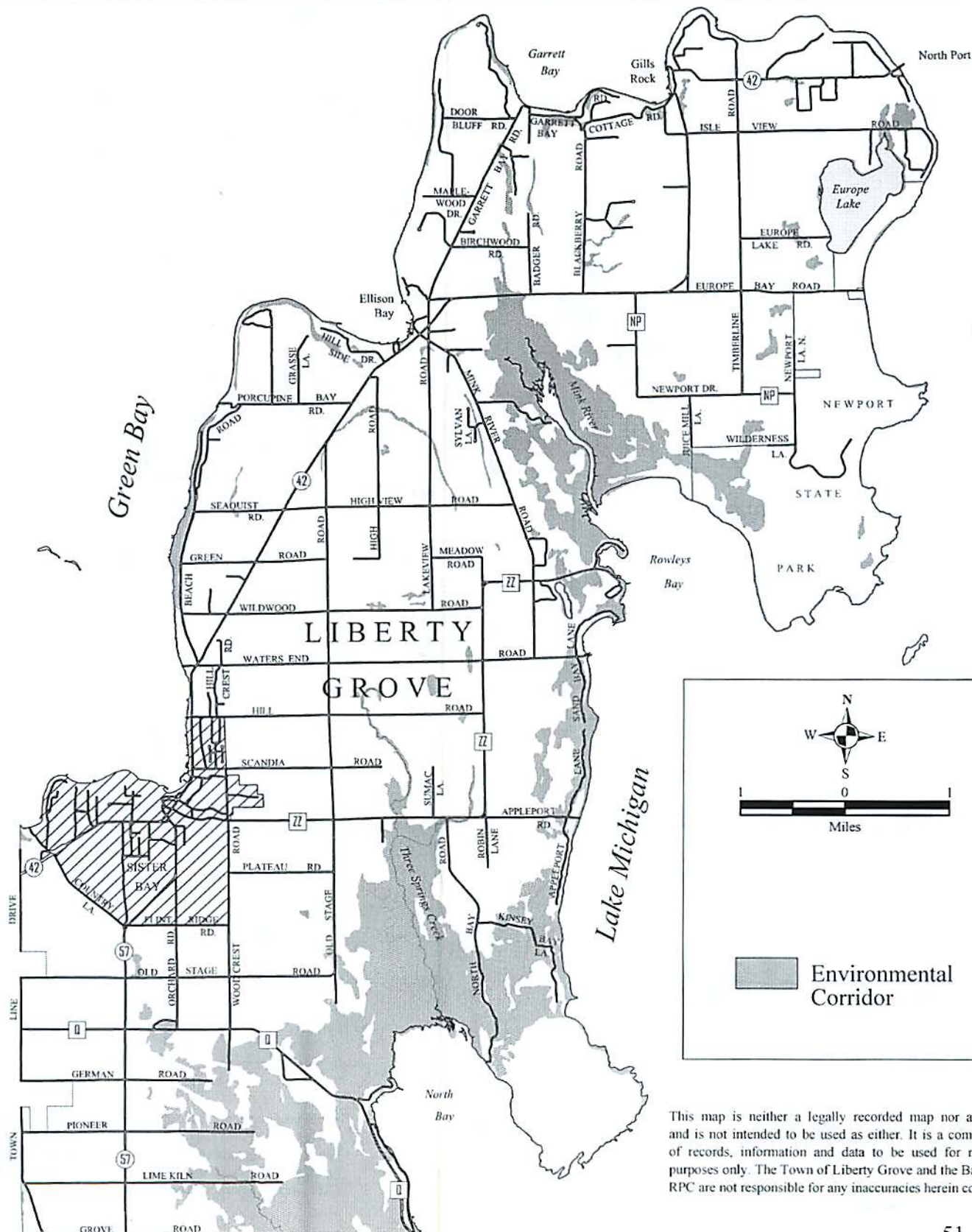


This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Environmental Corridors

Map 2.15

## Town of Liberty Grove Door County, Wisconsin

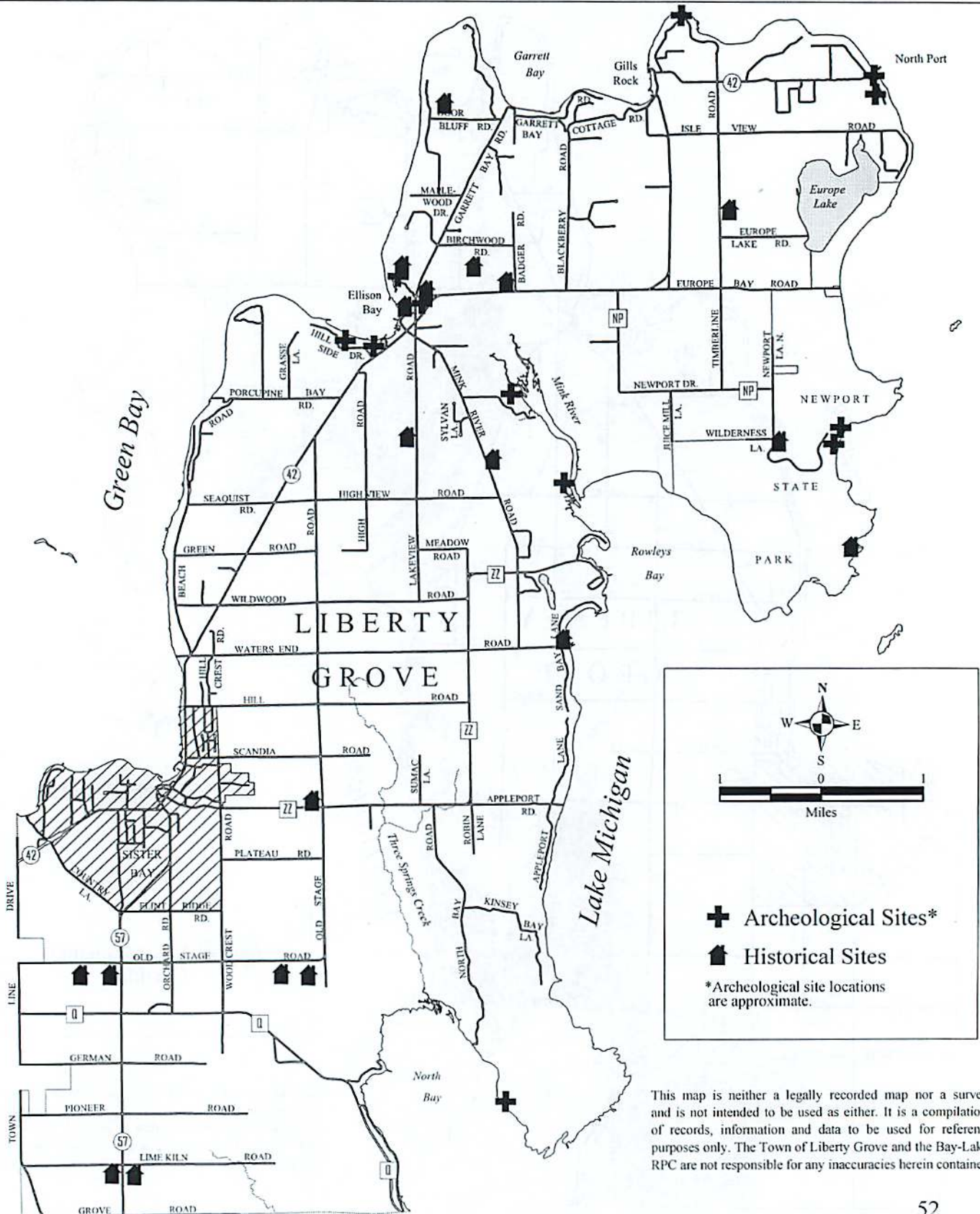


This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. The Town of Liberty Grove and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

# Historical & Archeological Sites

Map 2.16

## Town of Liberty Grove Door County, Wisconsin



## **Chapter 3 - HOUSING AND POPULATION**

### **INTRODUCTION**

Population change is the primary component in tracking the past growth of an area as well as predicting future population trends. Population characteristics relate directly to the Town's housing, educational, community and recreational facility needs, and to its future economic development. It should be noted that over time, there are fluctuations in the local and regional economy and population which generally cannot be predicted. These fluctuations and changes may greatly influence the Town's population growth and characteristics. This chapter will identify population and housing trends which may affect the future of Liberty Grove.

### **SUMMARY AND IMPLICATIONS**

1. Between 1990 and 2000, the Town population increased 23.4 percent, or 352 persons, for a total population in 2000 of 1,858 persons. (In 2002, the Department of Administration estimated 1,905 persons.)
2. According to official population projections from the Wisconsin Department of Administration (WDOA) released in 1993, the Town's population was projected to increase from 1,506 in 1990 to 1,703 persons by 2015, which would represent an 8.3 percent decrease from 2000. Modified population projections based on 2000 Census population counts project an increase in the Town's population to between 2,179 and 2,448 by the year 2020.
3. The largest age group is between 45 and 54 years old. This is followed by the 65-74 year old age group, which contributes to a statistically biased median income figure.
4. The Town's median age in 2000 was 49 years which indicates an aging adult population. Implications are that an aging community will need additional specialized services to accommodate these age groups in the future.

The Town's population has risen markedly over the course of the last four decades. Projections developed after the 1990 Census indicate that the Town's population was likely to increase through 2015 though at a slower rate than has been seen from the 2000 Census. The Town has experienced (over the past three decades) an age structure shift towards the older age groups. This may lead the Town to spend more on services to accommodate an aging population over the next twenty years. Likewise, the aging population can also mean additional business opportunities, especially for a rural Town like Liberty Grove. The elderly have been shown to import income into a community; living on prior savings or investments in the form of social security, private pensions, stocks, etc. This aging population requires basic services such as groceries, housing, home maintenance and health care, but they tend to spend their incomes locally. Well planned and financed services and programs directed towards the elderly can go a long way in keeping the buying power of the retired community within the Town.

5. The number of housing units in the Town of Liberty Grove and the surrounding communities in Door County have seen a steady increase from 1990 to 2000. Liberty Grove has had a 76 percent increase in housing units since 1970.

6. The household size for the Town is expected to decline over the next 20 years from 2.52 to 2.24 persons per household.
7. At approximately 2.24 persons per household, the Town can expect a housing projection of approximately 500 to 700 new housing units by 2020.

Throughout the planning period there will be a demand for additional housing units within the Town. An increased population, a demand for larger lot sizes and a trend of smaller household sizes will increase the demand for residential developments. The Town will need to adequately identify areas to accommodate this change in land use while ensuring adequate services are provided. Additional housing does not always lead to a community making money. In most cases it can be shown that housing (though most preferred in many communities) is the most costly development based on the supporting services needed to accompany it. The Town will need to monitor costs of future housing on the Towns' budget to control future property taxes.

8. Of the 2,000 housing units in the Town, 24 percent (481 structures) were built before 1940.
9. In 2000, approximately 15 percent of renters were living in "non-affordable" housing, due to their paying 30 percent or more of their incomes towards rent.
10. In 2000, 46 percent of home owners were paying 30 percent or more of their incomes towards housing payments.
11. According to the Wisconsin Department of Commerce the median income for the Town in 1998 was \$37,868 while the 2000 Census reported the 1999 median household income at \$43,472.

Approximately 96 percent of the housing within the Town of Liberty Grove is residential single family, with many homes 40 to 60 years old. Because of the above, it is likely that residents will need additional assistance regarding loans for housing rehabilitation as well as affordable housing. The Town will need to support assistance efforts as well as look into actions that promote a mix of housing choices.

Due to the Town experiencing an increase in population and because the Town experienced 250 new housing units constructed within the last ten years, this plan's future land use is projecting a range in the number of new housing units to be between 500 and 700 new units over the twenty year planning period. Sufficient vacant land does exist (allowing for a mix in densities and services provided) within the Town to accommodate these growth forecasts.

The Town supports the ideals of promoting housing for all residents, encouraging a mix in housing, working to obtain more financial assistance for its residents for rehabilitation of housing and rental assistance, by working with county, state, federal agencies, and private organizations.

## **HOUSING STRATEGY**

The current legislation on comprehensive plans under s66.1001 requires that the housing element will need to be integrated and made consistent with the other nine elements of the comprehensive plan. For example, implementing the goals and policies of the housing element will need to correspond to actions undertaken in other elements such as land use, economic development, transportation, and community facilities.

The following stated Goals, Objectives, Policies, and Programs are based on the information provided and detailed later within this chapter of the comprehensive plan.

### **Goal:**

Provide Affordable Housing

#### **Objective:**

1. Encourage overall atmosphere and policies for affordable housing

#### **Policies:**

- A. Provide zoning districts allowing adequate areas for smaller lot sizes at higher densities where infrastructure is planned or currently exists. Where practicable, provide for smaller lot sizes of one-quarter (1/4) acre or less.
  - B. Consider innovative standards in zoning and subdivision techniques including, but not limited to, zero lot lines, cluster developments, and inclusionary zoning.
  - C. Consider using property owned by the Town for affordable housing.
  - D. Work with private and/or nonprofit organizations to assist in creating more affordable housing.
  - E. Create a committee to explore policies and programs that promote year-round, affordable and seasonal housing.
2. Encourage policies for seasonal employee housing

#### **Policy:**

Work with the County, other municipalities, and private businesses and organizations to encourage development of seasonal housing by employers, either individually or by cooperative efforts.

3. Encourage continued use and reuse of existing housing stock

#### **Policies:**

- A. Promote older homes as starter homes.
- B. Encourage the renovation and upgrading of existing residential properties.
- C. Consider adaptive reuse of affordable housing.
- D. Explore the possibilities for residential use and/or re-use of existing nonconforming housing stock.

### **Goal:**

Work to mitigate property tax impact on residents.

**Objective:**

1. Work independently and intergovernmentally to cause legislative change and to formulate policies to reduce property taxes

**Policies:**

- A. Consider options to reduce reliance on property tax, including but not limited to:
    - i. Expanded County and State Sales Tax
    - ii. Room Tax
    - iii. User Tax
    - iv. Real Estate Transfer Tax
    - v. Premier Resort Tax District
  - B. Continue working to change the funding mechanism for the Wisconsin Technical College system
2. Obtain an equitable return of tax revenue and services to Liberty Grove

**Policy:**

- A. Develop effective communication between Town, County, and State regarding tax revenue generated and returned to Liberty Grove, including but not limited to:
  - i. Shared Revenue
  - ii. General Transportation Aid
  - iii. County Services
  - iv. DNR Lieu Tax
  - v. Fire Dues Distribution
  - vi. Forest Crop Payment
  - vii. Payment of Municipal Services

**Goal:**

Manage, through planning, high density development to preserve rural, open, and natural character of the Town of Liberty Grove.

**Objective:**

1. Manage, through planning, development of multi-unit housing

**Policies:**

- A. Concentrate multi-unit housing in areas classified as high density residential and general commercial on the General Plan Design Map.
- B. Concentrate multi-unit housing to areas with the appropriate infrastructure; for example, the present population centers and/or existing or future sanitary districts.
- C. Work with Door County Planning Department to periodically review ordinances for density standards.

2. Minimize environmental impact of multi-unit housing

**Policies:**

- A. Concentrate multi-unit housing to areas with the appropriate infrastructure, for example, the present population centers and/or existing or future sanitary districts.
- B. Utilize the environmental corridor/wetlands classification of the General Plan Design to minimize the impact of multi-unit housing.
- C. Encourage compatibility of multi-unit housing with natural and cultural surroundings to minimize the environmental impact.
- D. Encourage cooperation with other governmental units to protect the environment through the use of storm water run off plans.
- E. Encourage down lighting whenever practicable.
- F. Encourage the use of low wattage, high efficiency lighting fixtures when practicable.

3. Minimize visual impact of multi-unit housing.

**Policies:**

- A. Encourage design standards that minimize the visual impact of multi-unit housing.
- B. Encourage design limitations for multi-unit housing pertaining to the number of units per building and overall square footage of multi-unit buildings.

4. Minimize social impact of multi-unit housing.

**Policy:**

Encourage the use of a broad set of design standards to accommodate the different types of multi-unit housing, including, but not limited to, attainable housing, seasonal housing, residential housing, and commercial housing.

**Goal:**

Retain natural and rural character of Town, while providing sufficient land area for development of residential needs to meet population projections for the next 20 years.

**Objective:**

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 for both existing and future residents.

**Policies:**

- A. Utilize the General Plan Design Map as an illustration of the Town's overall development policy to provide sufficient land area for projected residential needs.
- B. Encourage future development within and towards population centers to facilitate controlled residential growth.
- C. Encourage utilization of conservation based subdivision guidelines to preserve rural and natural areas.
- D. Encourage the use of ecologically and geologically sound practices in residential development (refer to Chapter 2).

- E. Utilize the General Plan Design Map as an illustration of the Town's overall development policy to minimize the impact of housing on Liberty Grove's infrastructure.
- F. Work with the County and neighboring towns and villages to ensure compatible residential growth.

## **POPULATION CHARACTERISTICS**

### **Historical Population Levels**

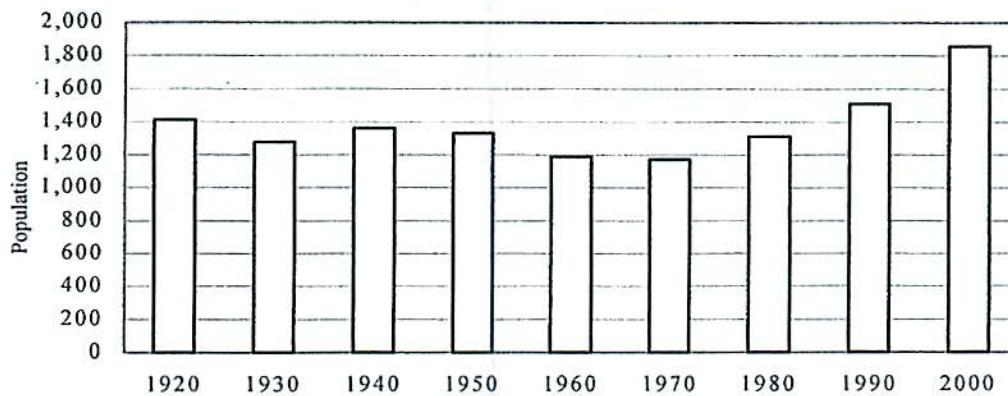
Table 3.1 displays the historic population trends for the Towns of Liberty Grove and Baileys Harbor, the Village of Sister Bay, and Door County. The Town of Liberty Grove did not surpass its 1900 population level until 2000. In 1900, the Town of Liberty Grove had a population of 1,550 persons, in 2000 the population was 1,858. In 1970, the population reached its lowest point and has been increasing at a steady pace since then. Figure 3.1 displays the increases and decreases that Liberty Grove's population has experienced since 1900.

Table 3.1: Historic Population Levels, 1900-2000, Town of Liberty Grove & Selected Areas

Year	Town of Liberty Grove		Town of Baileys Harbor		Village of Sister Bay		Door County	
	No.	Annual Change	No.	Annual Change	No.	Annual Change	No.	Annual Change
1900	1,550		645		NA		17,583	
1910	1,529	-1.4%	628	-2.6%	NA	NA	18,711	6.4%
1920	1,410	-7.8%	679	8.1%	190	NA	19,073	1.9%
1930	1,275	-9.6%	641	-5.6%	238	25.3%	18,182	-4.7%
1940	1,358	6.5%	677	5.6%	309	29.8%	19,095	5.0%
1950	1,332	-1.9%	715	5.6%	429	38.8%	20,870	9.3%
1960	1,190	-10.7%	654	-8.5%	520	21.2%	20,685	-0.9%
1970	1,174	-1.3%	615	-6.0%	483	-7.1%	20,106	-2.8%
1980	1,313	11.8%	799	29.9%	564	16.8%	25,029	24.5%
1990	1,506	14.7%	780	-2.4%	675	19.7%	25,690	2.6%
2000	1,858	23.4%	1,003	28.6%	886	31.3%	27,961	8.8%

Source: General Population Characteristics 1840-1970, Bay-Lake Regional Planning, December 1975; 1980 and 1990 U.S. Census; and Bay-Lake Regional Planning Commission, 2001.

Figure 3.1: Historic Population Levels, 1900-2000, Town of Liberty Grove



Source: General Population Characteristics 1840-1970, Bay-Lake Regional Planning, December 1975; 1980 and 1990 U.S. Census; and Bay-Lake Regional Planning Commission, 2001.

### **Population Trends and Forecasts**

All areas that are shown in Table 3.2 have been increasing in population since 1970, except Baileys Harbor which experienced a slight decrease from 1980 to 1990. For the period 1970 to 1980, Door County and the communities shown had a substantially higher percentage of population growth when compared to the State and also the region. In the next decade, 1980 to 1990, the Town of Liberty Grove and the Village of Sister Bay still had a high percentage of population growth. Door County and Baileys Harbor rate of growth decreased substantially for the same period. For the period 1990 to 2000, Liberty Grove experienced a growth of 23.4 percent, Baileys Harbor increased 28.6 percent, and the Village of Sister Bay grew by 31.3 percent.

In 1993, the Wisconsin Department of Administration (WDOA) Demographic Services Center prepared population projections to the year 2015 for the communities and counties of the state, utilizing a projection formula that calculates the annual population change over three varying time spans. From this formula, the WDOA projections indicated that the Town of Liberty Grove has already surpassed its projected year 2015 population. The Town of Baileys Harbor and the Village of Sister Bay have also exceeded their projected year 2015 population.

Table 3.2: Population Trends, 1970-2015, Town of Liberty Grove & Selected Areas

Year	Geographic Location					
	Town of Liberty Grove	Town of Baileys Harbor	Village of Sister Bay	Door County	Bay-Lake Region	State of Wisconsin
<b>Actual Population</b>						
1970	1,174	615	483	20,106	440,926	4,417,731
1980	1,313	799	564	25,029	476,134	4,705,767
1990	1,506	780	675	25,690	498,824	4,891,769
2000	1,858	1,003	886	27,961	554,565	5,363,675
<b>Population Projections</b>						
2005	1,661	844	796	26,967	539,948	5,409,536
2010	1,685	853	817	27,101	546,261	5,512,313
2015	1,703	858	836	27,070	550,833	5,603,528
<b>Number Change</b>						
1970-1980	139	184	81	4,923	35,208	288,036
1980-1990	193	-19	111	661	22,690	186,002
1990-2000	352	223	211	2,271	55,741	471,906
2000-2015	-155	-145	-50	-891	-3,732	239,853
<b>Percent Change</b>						
1970-1980	11.8%	29.9%	16.8%	24.5%	8.0%	6.5%
1980-1990	14.7%	-2.4%	19.7%	2.6%	4.8%	4.0%
1990-2000	23.4%	28.6%	31.3%	8.8%	11.2%	9.6%
2000-2015	-8.3%	-14.5%	-5.6%	-3.2%	-0.7%	4.5%

Source: U.S. Bureau of the Census, Census of Population and Housing, 1970-2000; Wisconsin Department of Administration, Official Population Estimates and Projections, for years cited; and Bay-Lake Regional Planning Commission, 2001.

### **Seasonal Population**

The estimated seasonal population was found by multiplying the number of seasonal housing units by the average number of persons per household (see Table 3.3). In 1990, the Town of Liberty Grove had 1,100 seasonal housing units. The 2000 estimated seasonal population for Liberty Grove was 2,475 persons. The Town of Liberty Grove had the greatest percentage of its population as being seasonal among those compared at 133.2 percent.

Table 3.3: Estimated Seasonal Population, 2000, Liberty Grove & Selected Areas

	Geographic Location			
	Town of Liberty Grove	Town of Baileys Harbor	Village of Sister Bay	Door County
Population	1,858	1,003	886	27,961
Persons Per Household	2.24	2.08	1.78	2.33
Total Housing Units	2,000	1,029	945	19,587
Total Seasonal Housing Units*	1,100	546	499	6,970
Percent of Housing Units Seasonal	55.0%	53.1%	52.8%	35.6%
Estimated Seasonal Population**	2,464	1,136	888	16,240
Percent Population Seasonal	132.6%	113.2%	100.3%	58.1%

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

\*\*Estimated Seasonal Population = Seasonal Housing Units x Persons Per Household

Source: U.S. Bureau of the Census, 2000; and Bay-Lake Regional Planning Commission, 2001.

### **Revised Population Projections**

An area's future population provides an important basis for planning and public policy making. 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. Given the discrepancy between the Wisconsin Department of Administration (WDOA) population projections, the 2000 census count, and the fact that the WDOA projections do not go beyond the year 2015 to include the 2020 planning period, the Commission has prepared alternative population projections to determine an approximate growth rate for the Town of Liberty Grove.

Projections were found by using a ratio methodology, termed share-of-the-county, to distribute county projections to the Town level. The limitations of population projections should be recognized. Population projections are not predictions, rather they extend past growth trends into the future and their reliability depends on the continuation of these past growth trends. Smaller communities are also subject to more error because even minor changes in the community can result in significant changes in population projection estimates.

A "Low Growth" projection was created from the share-of-the-county methodology. According to Commission projections, the projected 2005 population for Liberty Grove will be 2,009 persons. The projected 2010 population is 2,083 persons, the projected year 2015 population is 2,145, and the 2020 projected population is 2,179 persons. The projected 2020 population is a 17.3 percent increase from the actual 2000 population. It should be noted that small changes in the community or the region in the future may cause significant changes to these projections.

A "High Growth" projection was developed by using the 1970, 1980, 1990 and 2000 Census figures and creating a growth trend series to the year 2020. This method identified a projected year 2005 population of 1,941 persons, a projected year 2010 population of 2,104 persons, a projected 2015 population of 2,136, and a projected year 2020 population of 2,448.

According to this “High Growth” projection, the Town of Liberty Grove’s 2000 population will increase by 31.8 percent by the year 2020.

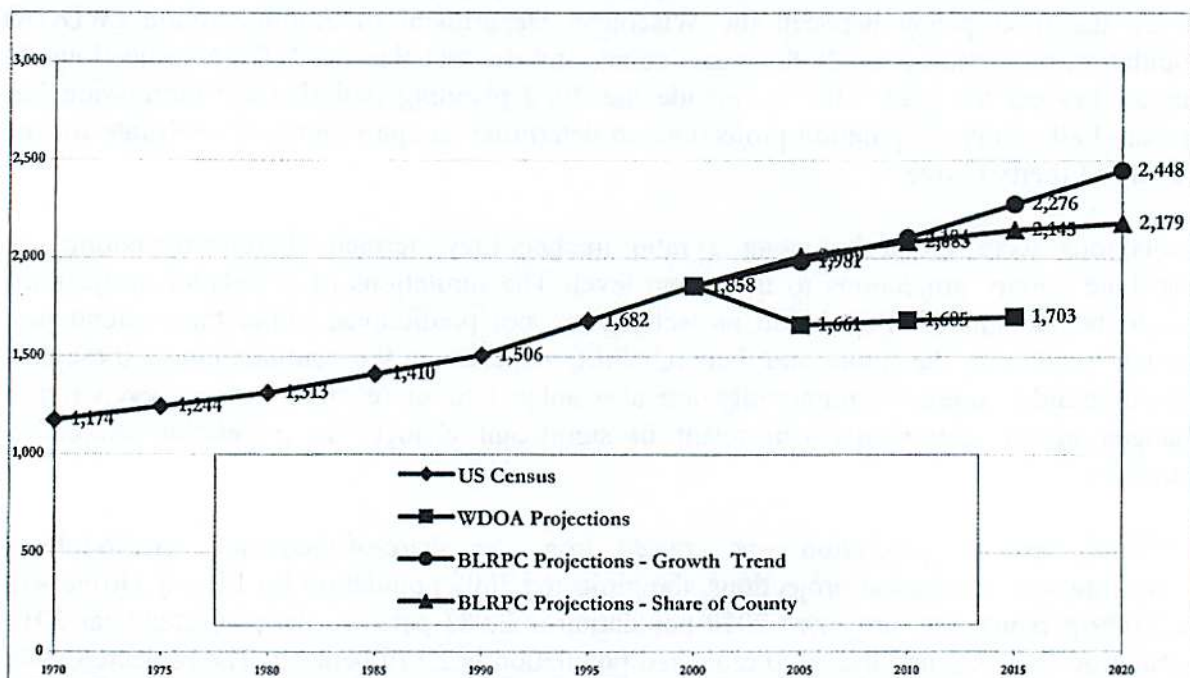
Table 3.4 and Figure 3.2 display the actual U.S. Census counts, WDOA projections, the “High Growth” growth series based off the Census counts, and the “Low Growth” BLRPC projections.

Table 3.4: Revised Population Projections, Town of Liberty Grove, 2005-2020

	1970	1980	1990	1995	2000	2005	2010	2015	2020
US Census:	1,174	1,313	1,506	1,682	1,858				
WDOA Projections					1,858	1,661	1,685	1,703	
BLRPC Projections - Share of County					1,858	2,009	2,083	2,145	2,179
BLRPC Projections - Growth Trend					1,858	1,981	2,104	2,276	2,448
BLRPC Projections - Linear Trend					1,858	1,941	2,024	2,136	2,249

Source: U.S. Department of Commerce, Bureau of the Census, 1970, 1980, 1990, 2000; Wisconsin Department of Administration, *Official Population Estimates*, for years cited; Bay-Lake Regional Planning Commission, 2000.

Figure 3.2: Revised Population Projections, Town of Liberty Grove, 2005-2020



Source: U.S. Department of Commerce, Bureau of the Census, 1970, 1980, 1990, 2000; Wisconsin Department of Administration, *Official Population Estimates*, for years cited; Bay-Lake Regional Planning Commission, 2000.

### Population By Age and Sex

From 1980 to 2000, there have been moderate shifts in the distribution of the male and female population within age groups in the Town of Liberty Grove (see Table 3.5). Table 3.5 is also represented in Figure 3.3.

Table 3.5: Male and Female Distribution by Age and Sex, Town of Liberty Grove, 1980-2000

1980								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	54	8.6%	4.1%	61	8.9%	4.6%	115	8.8%
65-74	91	14.5%	6.9%	98	14.3%	7.5%	189	14.4%
60-64	62	9.9%	4.7%	64	9.3%	4.9%	126	9.6%
55-59	25	4.0%	1.9%	51	7.4%	3.9%	76	5.8%
45-54	52	8.3%	4.0%	64	9.3%	4.9%	116	8.8%
35-44	60	9.6%	4.6%	62	9.1%	4.7%	122	9.3%
25-34	113	18.0%	8.6%	85	12.4%	6.5%	198	15.1%
20-24	27	4.3%	2.1%	44	6.4%	3.4%	71	5.4%
15-19	48	7.6%	3.7%	48	7.0%	3.7%	96	7.3%
10-14	34	5.4%	2.6%	28	4.1%	2.1%	62	4.7%
5-9	27	4.3%	2.1%	33	4.8%	2.5%	60	4.6%
under 5	35	5.6%	2.7%	47	6.9%	3.6%	82	6.2%
TOTAL	628	100.0%	47.8%	685	100.0%	52.2%	1,313	100.0%

1990								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	63	8.5%	4.2%	67	8.7%	4.4%	130	8.6%
65-74	89	12.1%	5.9%	115	15.0%	7.6%	204	13.5%
60-64	63	8.5%	4.2%	64	8.3%	4.2%	127	8.4%
55-59	31	4.2%	2.1%	42	5.5%	2.8%	73	4.8%
45-54	79	10.7%	5.2%	78	10.1%	5.2%	157	10.4%
35-44	133	18.0%	8.8%	112	14.6%	7.4%	245	16.3%
25-34	87	11.8%	5.8%	94	12.2%	6.2%	181	12.0%
20-24	22	3.0%	1.5%	18	2.3%	1.2%	40	2.7%
15-19	41	5.6%	2.7%	27	3.5%	1.8%	68	4.5%
10-14	33	4.5%	2.2%	54	7.0%	3.6%	87	5.8%
5-9	55	7.5%	3.7%	51	6.6%	3.4%	106	7.0%
under 5	41	5.6%	2.7%	47	6.1%	3.1%	88	5.8%
TOTAL	737	100.0%	48.9%	769	100.0%	51.1%	1,506	100.0%

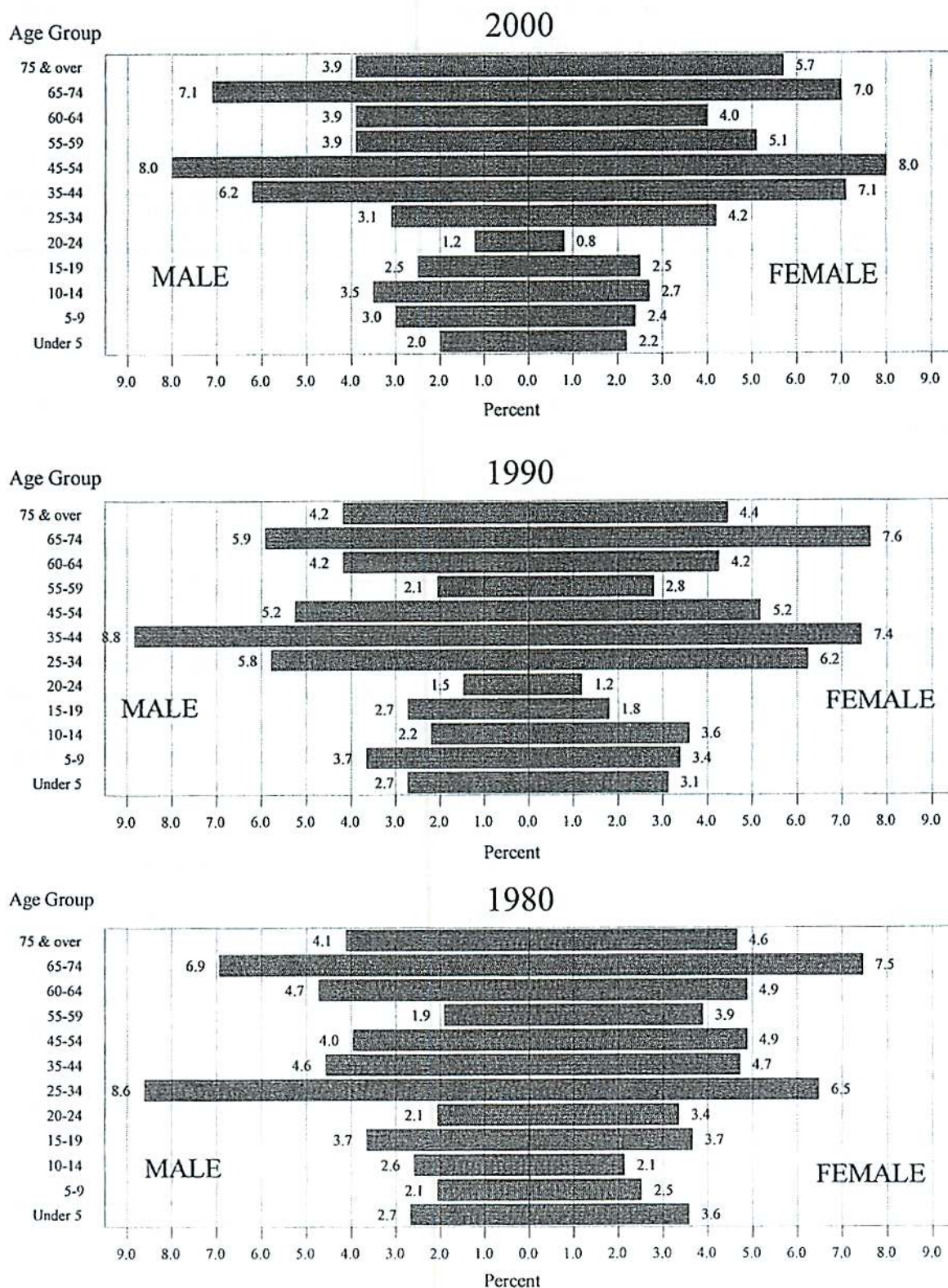
2000								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	72	8.0%	3.9%	106	11.0%	5.7%	178	9.6%
65-74	132	14.7%	7.1%	130	13.5%	7.0%	262	14.1%
60-64	73	8.1%	3.9%	74	7.7%	4.0%	147	7.9%
55-59	73	8.1%	3.9%	95	9.8%	5.1%	168	9.0%
45-54	149	16.6%	8.0%	148	15.4%	8.0%	297	16.0%
35-44	115	12.8%	6.2%	132	13.7%	7.1%	247	13.3%
25-34	58	6.5%	3.1%	78	8.1%	4.2%	136	7.3%
20-24	22	2.5%	1.2%	15	1.5%	0.8%	37	2.0%
15-19	46	5.1%	2.5%	46	4.7%	2.5%	92	5.0%
10-14	65	7.2%	3.5%	51	5.3%	2.7%	116	6.2%
5-9	55	6.1%	3.0%	45	4.6%	2.4%	100	5.4%
under 5	37	4.1%	2.0%	41	4.2%	2.2%	78	4.2%
TOTAL	897	100.0%	48.3%	961	89.8%	51.7%	1,858	100.0%

Source: U.S. Bureau of the Census, 1980 Census of Population and Housing, STF 3A, Table 15; 1990 Census of Population and Housing, STF 1A, Table P012 and General Profile; 2000 Census of Population and Housing, SF-1; Bay-Lake Regional Planning Commission, 2002.

### **Decade Population Pyramids**

Figure 3.3 represents the distribution of the age and sex of the population of Liberty Grove for 1980, 1990 and 2000. The number of persons under the age of 20 has continually been a decreasing segment of Liberty Grove's population. The middle age group, approximately age 25 to age 55, has continually been increasing since 1980. If trends continue, and the middle age group remains a large segment of the population, as indicated by the 2000 Census figures, then the aging of this group will continue to be seen as an increasing number of individuals in older age groups. This aging of the baby-boomers is a trend found in many areas. Anticipating this demographic change will require planning for the different needs of an older population.

Figure 3.3: Population Pyramids, 1980-2000, Town of Liberty Grove



Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF-1; 1990 Census of Population and Housing, STF 1A, Table P012 and General Profile; 1980 Census of Population and Housing, STF 3A, Table 15; and Bay-Lake Regional Planning Commission, 2001.

### **School Age, Working Age, and Retirement Groups**

In 2000, approximately 49.8 percent of the Town of Liberty Grove's population was male, while 50.2 percent was female (see Table 3.6). Some notable features of Liberty Grove's population include lower percentages of school age children and a higher percentage of retirement age persons when compared to the County and the State.

Table 3.6: Population by Age Groups and Sex, 2000, Town of Liberty Grove & Selected Areas

Age Groups	Male	Town of Liberty Grove Female	Total	Percent	Door County Percent	Wisconsin Percent
<b>School Age</b>						
5-11	77	60	137	7.4%	8.9%	10.1%
12-14	43	33	76	4.1%	4.2%	4.5%
15-17	28	38	66	3.6%	4.4%	4.5%
<b>Working &amp; Voting Age</b>						
16+	730	824	1,554	83.6%	80.8%	77.5%
16-64	526	574	1,100	59.2%	62.1%	64.4%
18+	712	799	1,511	81.3%	77.9%	74.5%
18-64	520	563	1,083	58.3%	59.2%	61.4%
<b>Retirement Age</b>						
65+	204	250	454	24.4%	18.7%	13.1%
<b>Total</b>	<b>897</b>	<b>961</b>	<b>1,858</b>			

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF-1; and Bay-Lake Regional Planning Commission, 2002.

### **Household Relationship**

In 2000, 100 percent of the people in Liberty Grove lived in a household (see Table 3.7). The trend in Liberty Grove is different from Baileys Harbor with somewhat less than one-half of householders being present in the home, while in Baileys Harbor, more than 73 percent of the households had a householder present. The householder refers to the person in whose name the housing unit is owned or rented. In Sister Bay, more than 10 percent of the households were in group quarters indicating a population needing more care.

Table 3.7: Household Relationship, 2000, Town of Liberty Grove & Selected Areas

Units	Town of Liberty Grove		Town of Baileys Harbor		Village of Sister Bay		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Persons	1,858	100.0%	1,003	100.0%	886	100.0%	27,961	100.0%
In Households	1,858	100.0%	1,003	100.0%	793	89.5%	27,580	98.6%
Householder	824	44.3%	483	73.1%	446	50.3%	11,828	42.3%
Spouse	530	28.5%	263	39.8%	205	23.1%	6,867	24.6%
Child	427	23.0%	206	31.2%	109	12.3%	7,329	26.2%
Other Relative	38	2.0%	13	2.0%	12	1.4%	545	1.9%
Non Relative	39	2.1%	38	5.7%	21	2.4%	1,011	3.6%
In Group Quarters	—	—	—	—	93	10.5%	381	1.4%
Institutionalized	—	—	—	—	80	9.0%	323	1.2%
Other	—	—	—	—	13	1.5%	58	0.2%

Source: U.S. Bureau of the Census, 2000 Census; and Bay-Lake Regional Planning Commission, 2001.

### **Median Age**

For the period 1970 to 2000, the median age for the areas shown has been steadily increasing. In general, the population of the entire U.S. is expected to continue to shift to an increasingly

older population. The Town of Liberty Grove has recently experienced an increase in median age, with a median age substantially higher than the region and State median age (Table 3.8). The Village of Sister Bay showed a very high median age in 1990 and again in 2000, with 51.5 years and 61.4 years of age respectively, nearly 20 years older than the 1980 median age of 41.2. This national trend, which can be seen in Door County and its communities, should be noted when planning for future needs for the area. There will most likely need to be adjustments in the housing stock, labor force, transportation, health care, as well as many other areas.

Table 3.8: Median Age, 1970-2000, Town of Liberty Grove & Selected Areas

Geographic Area	1970	1980	1990	2000
Town of Liberty Grove	43.9	42.3	42.2	49.1
Town of Baileys Harbor	42.5	39.7	40.9	47.0
Village of Sister Bay	40.1	41.2	51.5	61.4
Door County	33.8	31.4	36.5	42.9
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 44; 1990 STF 1A, General Profile, Census 2000; and Bay-Lake Regional Planning Commission, 2001.

## **HOUSING INVENTORY**

### **Total Housing Unit Levels by Decade**

The total number of housing units within the Town of Liberty Grove has steadily been increasing since 1970 (Table 3.9). Between 1970 and 1980, the rate of housing unit growth ranged from 26.6 percent for the state to 80.4 percent in Baileys Harbor. For the period 1980 to 1990, the Village of Sister Bay had the greatest percentage of housing unit growth, 74.2 percent. The Town of Liberty Grove had the smallest percent increase in housing units for the period 1970 to 2000, however, the growth that was experienced was still greater than the region and the State. If these trends continue in the County and its communities, planning will become increasingly important to ensure a wise use of land and resources.

Table 3.9: Total Housing Units, 1970-2000, Town of Liberty Grove & Selected Areas

Area	Year				Percent Change			
	1970	1980	1990	2000	1970-80	1980-90	1990-00	1970-00
Village of Sister Bay	292	493	859	945	68.8%	74.2%	10.0%	223.6%
Town of Baileys Harbor	475	857	954	1,029	80.4%	11.3%	7.9%	116.6%
Town of Liberty Grove	1,136	1,463	1,750	2,000	28.8%	19.6%	14.3%	76.1%
Door County	10,779	15,324	18,037	19,587	42.2%	17.7%	8.6%	81.7%
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, STF1A, Census 2000; and Bay-Lake Regional Planning Commission, 2001.

### **Housing Unit Additions and Deletions**

The Town of Liberty Grove has had a total of 362 housing unit additions for the period 1990 to 1999 (Table 3.10). For the same period, the Town of Baileys Harbor had 311 housing unit additions, but also 23 housing unit deletions. The Village of Sister Bay had 236 additions and 2 deletions from their housing units stock. The number of housing unit additions which occur in Liberty Grove appear to fluctuate from year to year. In 1998, the Town reached a high of 62 additions in one year and then barely achieved half of that number the following year.

Table 3.10 Housing Unit Additions and Deletions, Town of Liberty Grove & Selected Areas

Year	Town of Liberty Grove	Town of Baileys Harbor	Village of Sister Bay	Door County
1990	27	44	17	257
1991	18	17	9	201
1992	26	19	36	252
1993	31	25	18	253
1994	44	55	12	301
1995	29	40	32	301
1996	40	29	48	360
1997	48	31	21	329
1998	62	17	19	360
1999	37	34	24	486
Total Additions	362	311	236	3,100
Total Deletions, 1990-1999	0	23	2	185
Net Change, 1990-1999	362	288	234	2,915

Source: State of Wisconsin Demographic Services Center, Annual Housing Unit Surveys, July 18, 2000; and Bay-Lake Regional Planning Commission, 2001.

### **Historic and Projected Household Size**

According to Wisconsin Department of Administration household projections for Door County, several trends are projected to occur from 1990 to 2015 (Table 3.11). The population is expected to continue to increase while the number of persons per household is projected to decrease to 2.24 by 2015. For the period 1990 to 2015, the greatest change in household type is expected in the living alone/older than 65 male householder category; projections indicate a 32.5 percent increase in this household type for Door County.