TOWN OF KNOWLTON

COMPREHENSIVE PLAN

2005

Town of Knowlton Town Board

Marathon County Conservation, Planning & Zoning Department

URS, Inc.
MSA

September 2005

Town of Knowlton
Conditions and Issues

2005

Town of Knowlton
Conditions and Issues

Elements

1. Introduction and Summary 1
2. Demographics..... 2
3. Natural Resources 7
4. Land Use..... 11
5. Transportation..... 18
6. Utilities 24
7. Housing 27
8. Cultural Resources..... 33
9. Community Facilities 36
10. Parks..... 40
11. Economic Development 42
12. Intergovernmental Cooperation..... 46

List of Tables

Table 2-1: Demographic Change, 1970-2000.....2
Table 2-2: Population by Age Group, 2000.....3
Table 2-3: Population Projections – 2000-2030.....3
Table 2-3b: Population Projections – 2000-2030.....3
Table 2-4: Household Projections – 2000-2030 4
Table 2-4b: Household Projections – 2000-2030 4
Table 2-5: Educational Attainment 4
(population age 25 and over) 4
Table 2-6: Household Income Levels, 2000.....5
Table 2-7: Occupation by Sector, 2000.....5
Table 2-8: Employment Projections – 2000-2030 6
Table 4-1: Land Use Cover Classification, 2000.....12
Table 4-2: Land in Forest Preservation Programs (in acres), 1998 – 2002 14
Table 4-3: Public Owned Land (in acres), 1998-200214
Table 4-4: Per Acre Assessed Land Values (in dollars), 1998 – 2002, Town of Knowlton.....16
Table 5-3: Summary of Pavement Conditions 21
Table 7-1: Number of Housing Units by Type and Tenure 27
Table 7-2: Changes in Housing Stock 28
Table 7-3: Age of Community Housing Stock 28
Table 7-4: Physical Housing Stock.....29
Table 7-5: Median Housing Value 29
Table 7-6: Range of Housing Values.....29
Table 7-7: Housing Affordability.....30
Table 8-1: Known Cemeteries.....34
Table 9-1: Mosinee School District Enrollment.....36
Table 9-2: Child Care Referrals.....39

Table 11-1: Top 10 Industry Groups Based on Number of Employees Marathon County (March 2001) 44
Table 11-2: Population and Employment by Sector, 2000 44
Table 11-3: Employment Projections in 5-Year Increments.....45
Table 11-4: Percent Change in Employment, 2000-2030 45

List of Figures

Figure 3-1: Rivers and Floodplains
Figure 3-2: Wetland Types
Figure 3-3: Soil Association
Figure 3-4: Prime Farm Soils
Figure 3-5: Slopes
Figure 4-1: Existing Land Use/ Land Cover
Figure 4-2: Existing Zoning
Figure 4-3: Farmland Preservation Contracts and Exclusive Agricultural Zoning
Figure 5-1: Functional Classification
Figure 5-2: WISLR Ratings
Figure 5-3: WISLR Road Surface
Figure 5-4: Trails and Regional
Figure 6-1: Depth to Bedrock
Figure 6-2: Suitable Soils for Septic Tank Absorption
Figure 6-3: Depth to Groundwater
Figure 6-4: Watersheds
Figure 6-5: Proposed Powerline Route
Figure 9-1: School Library Facilities
Figure 9-2: Police Service Districts
Figure 9-3: Fire Service Districts
Figure 9-4: Hospitals and Clinics
Figure 10-1: Regional Recreation Facilities

List of Acronyms

303 (d) list—waters designated as "impaired" under section 303 (d) of the U.S. Clean Water Act.

AADT—Annual Average Daily Traffic

AHI—Architecture & History Inventory (a database of the Wisconsin Historical Society).

BMPs—Best Management Practices

CCC—Civilian Conservation Corps (a 1930s construction and conservation program).

CCR&R—Child Care Resource and Referral Network

CDBG—Community Development Block Grant

CN—Canadian National Railroad, the primary rail provider in Marathon County with their purchase of the Wisconsin Central Railroad.

Comm 83—Chapter 83 of the Wisconsin Administrative Code under the Department of Commerce, setting standards for regulation of private sewage systems.

CRP—Conservation Reserve Program

CTH—County Trunk Highway

CWA—Central Wisconsin Airport

DCPZ—Department of Conservation, Planning and Zoning (Marathon County)

DWD—Department of Workforce Development

EMS—Emergency Medical Services

ERW—Exceptional Resource Waters, a designation by the Wisconsin Department of Natural Resources.

FCL—Forest Crop Law

HOME—Home Investment Partnerships Program

HUD—U.S. Department of Housing and Urban Development

LHOG—Local Housing Organization Grant

LWRMP—Land and Water Resource Management Plan (Marathon County)

MFL—Managed Forest Law

MPO—Wausau Area Metropolitan Planning Organization

NCHC—North Central Health Care

NCWRPC—North Central Wisconsin Regional Planning Commission

NRHP—National Register of Historic Places

NTC—Northcentral Technical College

ORW—Outstanding Resource Waters, a designation under the U.S. Clean Water Act.

PASER—Pavement Surface Evaluation Rating

PMP—Pavement Management Plan

SHPO—State Historic Preservation Office

STF Data—Summary Tape File, referring to data files of the 2000 U.S. Census.

STH—State Trunk Highway

TIP—Transportation Improvement Program (Marathon County)

USDA—United States Department of Agriculture

USH—U.S. Highway

UW-MC—University of Wisconsin—Marathon County

WDA—Wisconsin Department of Agriculture

WDNR—Wisconsin Department of Natural Resources

WDOA—Wisconsin Department of Administration

WDOT—Wisconsin Department of Transportation

WHEDA—Wisconsin Housing and Economic Development Authority

WISLR—Wisconsin Information System for Local Roads

WPS—Wisconsin Public Service Corporation

1. Introduction and Summary

The Town of Knowlton Conditions and Issues Report documents existing conditions in the Town and identifies primary issues or concerns the Town may need to address in the future. It includes information on the Town's demographics, natural resources, land use, transportation, utilities, housing, cultural resources, community facilities, parks, economic development, and intergovernmental cooperation. This report provides a backdrop for the development of the final plan, which will outline policies and actions the Town can take to address identified issues and guide future growth in Knowlton. Some key findings include:

- The Town of Knowlton is located in the south central portion of Marathon County, Wisconsin. The Town has increased in total population by 127 percent since 1970, with a 19 percent increase during the last decade, the total population for the Town was 1688 in 2000. The increase is likely due to the addition of more permanent residents to the area, which previously contained more seasonal residents, and the proximity of Knowlton to I-39.

- The landscape of the Town is rural with over 45 percent of the total land area covered by water or forest. There is a significant amount of land around Lake DuBay that is privately owned. Marathon County regulates zoning within Town borders.

- Major highways within the Town include Interstate 39, which provides major access to the Wausau area. The Central Wisconsin Regional Airport is located immediately north of the Town.

- The Town of Knowlton does not provide public sewer or water service. All development is on private wells and septic systems.

- Recent housing growth from the 1990s added 171 homes to the total housing stock for a total of 761 units. Housing stock in the Town is virtually all single-family. The Town would like to see some develop additional housing-types developed to accommodate a more diverse population.

- The Town's economy relies primarily upon agriculture. In the coming years, it is predicted that the agricultural economy will continue to decline in the Town, as well as the State as a whole.

- The Town has a good relationship with the surrounding communities, and shares fire and EMS services through a joint district with the City of Mosinee, the Town of Mosinee, and the Town of Bergen.

2. Demographics

This analysis is intended to describe the existing demographics of the Town of Knowlton and identify the major demographic trends impacting Knowlton over the next few decades. Both Marathon County and the State of Wisconsin are also listed for comparison.

Population and Households

Historical Trends

The total population for the Town of Knowlton increased by 127percent between 1970-2000. From 1990-2000, population increased by 19 percent. Total households increased by 34 percent during this same period.

The increase in total households over the past 30 years was substantially higher than the increase in population. This is likely due to a decrease in household size of 12%, which reflects the national trend toward more households comprised of singles, couples without children, and widows or widowers.

Table 2-1: Demographic Change, 1970-2000

	1970	1980	1990	2000	% Change 1970 to 2000	% Change 1990 to 2000
Total Population						
Knowlton	742	1153	1414	1688	+127%	+19%
County	97,457	111,270	115,400	125,834	+29%	+9%
State	4417821	4705767	4891769	5363675	+21%	+10%
Total Households						
Knowlton	255	449	491	657	+57%	+34%
County	29,771	37,865	41,534	47,402	+59%	+14%
State	1328804	1652261	1822118	2084544	+57%	+14%
Average Household Size						
Knowlton	2.90	2.56	2.86	2.57	-12%	-11%
County	3.27	2.9	2.75	2.6	-20%	-5%
State	3.22	2.35	2.68	2.50	-22%	-7%

Source: Wisconsin Department of Administration, 2000

The population of Marathon County grew from 115,400 in 1990 to 125,834 in 2000, an increase of 9% compared to a 10% increase in the State and 8.7% in the U.S. The most recent estimates (Wisconsin Department of Administration [WDOA], Demographic Services, 2002) show an annual growth rate of 0.7% in all three jurisdictions. Population growth in Marathon County has been concentrated in the urbanized area surrounding Wausau.

Table 2-2 shows the Median age for the Town is 39.3, which is higher than the State overall, at 36.0 years and the County at 36.3.

Table 2-2: Population by Age Group, 2000

Age Group	Percent of Population		
	Knowlton	County	State
Under 5 years	4.3	6.4	6.4
5 to 9 years	7.2	7.5	7.1
10 to 14 years	6.6	8.0	7.5
15 to 19 years	6.8	7.7	7.6
20 to 24 years	4.3	5.4	6.7
25 to 34 years	12.7	13.0	13.2
35 to 44 years	20.1	16.5	16.3
45 to 54 years	16.6	13.9	13.7
55 to 59 years	6.5	4.8	4.7
60 to 64 years	4.8	3.8	3.8
65 to 74 years	5.7	6.4	6.6
75 to 84 years	3.6	4.8	4.7
85 years and over	0.7	1.7	1.8
Median Age	39.3	36.3	36.0

Source: Wisconsin Department of Administration, 2000

Population Forecasts

The following projections for population were determined by the North Central Wisconsin Regional Planning Commission (NCWRPC) in 2003. The projections are based upon the percentage change (growth) in total population between 1980-2000 for each planning sub-area (Highway 51, Eastern Municipalities, North-Western, South-Central, and South-Western). Table 2-3 below illustrates population projections for the Town and the County using a moderate growth rate.

Looking at Table 2-3, the Town is expected to increase in total population by 304 persons by year 2030. This is an 18 percent increase. The County is expected to increase by 13 percent overall.

Table 2-3: Population Projections – 2000-2030

	Total Population by Year							
	2000	2005	2010	2015	2020	2025	2030	% change
Knowlton	1688	1739	1789	1840	1891	1941	1992	+18
County	125,834	128,632	131,430	134,217	137,022	139,820	142,618	+13

Source: Marathon County 2030 Population and Employment Projections Methodology Report, NCWRPC, 6/03

Table 2-3b: Population Projections – 2000-2030

	Total Population by Year							
	2000	2005	2010	2015	2020	2025	2030	% change
Knowlton	1,688	1,815	1,940	2,065	2,191	2,316	2,365	+40%
County	125,834	130,242	134,504	138,836	143,308	147,112	150,255	+19%

Source: Wisconsin Department of Administration
2030 numbers projected from 2025 DOA estimates based on countywide growth rate rates

Table 2-3b shows population projections completed by the WDOA, Demographic Services Center. The WDOA population projections are recognized as Wisconsin's official population projections in accordance with Wisconsin Statue 16.96. These projections are based on the same historical time period as those developed by NCWRPC, however more recent years carry a greater weight in the WDOA's projected populations. Additionally, the WDOA projections are based on the historical population trends of individual communities, whereas the NCWRPC projections are based on trends in the planning sub-areas.

The NCWRPC projections provide a baseline to determine trends in the sub-area. They are useful in identifying future population beyond the borders of individual communities. The WDOA projections are more useful at the local municipality level.

Household Forecasts

Like population, household projections were completed in 5-year increments between 2000 and 2030. The number of households was calculated by dividing the average persons per household into the total population for each 5-year increment. Assuming a moderate rate of growth, the number of households is estimated to increase by 34, or 18 percent between 2000 and 2030. This is slightly higher than the County increase of 13 percent. As shown in Table 2-1, the average household size was estimated to be 2.87 persons in 2000.

Table 2-4: Household Projections – 2000-2030

	Total Households by Year							
	2000	2005	2010	2015	2020	2025	2030	% change
Knowlton	657	677	696	716	736	755	775	+18
County	48,585	49,665	50,745	51,821	52,904	53,985	55,065	+13

Source: Marathon County 2030 Population and Employment Projections Methodology Report, NCWRPC, 6/03

Like the population projection, the WDOA household projections are recognized as Wisconsin's official population projections in accordance with Wisconsin Statue 16.96. and are based on the historical population trends of individual communities. Table 2-4b includes household projections completed by the WDOA.

Table 2-4b: Household Projections – 2000-2030

	Total Households by Year							
	2000	2005	2010	2015	2020	2025	2030	% change
Knowlton	657	719	785	852	918	981	1,010	+54%
County	47,702	50,109	52,902	55,589	58,181	60,283	62,035	+30%

Source: Wisconsin Department of Administration
2030 numbers projected from 2025 DOA estimates based on countywide growth rate rates

Education and Income Levels

According to 2000 Census data, 85.2 percent of Town residents have a high school education or higher. This compares to 83.8 percent for the County, and 85.1 percent for the State. In the Town, 18.7 percent of residents have a bachelor's degree or higher. This is higher than the number of persons with a bachelor's degree or higher in the County at 18.3 percent, but lower than the State with and 22.4 percent.

Table 2-5: Educational Attainment (population age 25 and over)

	Knowlton		County	State
Educational Attainment	**Number**	**Percent**	**Percent**	**Percent**
Less than 9th Grade	86	7.1	8.2	5.4
9th to 12th Grade, No Diploma	93	7.7	8.0	9.6
High School Graduate	514	42.6	38.0	34.6
Some College, No Degree	170	14.1	18.3	20.6
Associates Degree	118	9.8	9.2	7.5
Bachelor's Degree	154	12.8	12.6	15.3
Graduate or Professional Degree	71	5.9	5.7	7.2
Percent high school graduate or higher		85.2	83.8	85.1
Percent bachelor's degree or higher		18.7	18.3	22.4

Source: Wisconsin Department of Administration, 2000

Median household income for Town residents was $56,187in 2000. This compares as higher than Marathon County with a median of $45,165, and higher than the State overall at $43,791.

Table 2-6: Household Income Levels, 2000

	Knowlton		County	State
Income Level	**Number**	**Percent**	**Percent**	**Percent**
Less than $10,000	37	5.5	5.9	7.1
$10,000 - $14,999	15	2.2	5.4	5.8
$15,000 - $24,999	44	6.6	12.3	12.7
$25,000 - $34,999	58	8.7	13.1	13.2
$35,000 - $49,999	120	17.9	19.4	18.1
$50,000 - $74,999	231	34.5	25.2	22.7
$75,000 - $99,999	89	13.3	10.5	10.9
$100,000 - $149,000	52	7.8	5.4	6.4
$150,000 - $199,999	9	1.3	1.3	1.5
$200,000 or More	14	2.1	1.6	1.5
Total Households	669	100.0	100.0	100.0
Median Household Income		56187	45,165	43,791

Source: Wisconsin Department of Administration, 2000

Employment Characteristics

Table 2-7 illustrates the breakdown of the employed population of the Town in 2000 by occupation. The "employed population" is defined as people living in the Town who are 16 years and older and had a job at the time of the Census. In 2000, the Town had an employed population of 1010. Most residents were employed in management, professional and related with almost 32 percent. Production, transportation, and material moving was second, and sales and office third.

Table 2-7: Occupation by Sector, 2000

Sector	Number	Percent
Management, professional, and related occupations	319	31.6
Service occupations	86	8.5
Sales and office occupations	256	25.3
Farming, fishing, and forestry occupations	6	0.6
Construction, extraction, and maintenance occupations	70	6.9
Production, transportation, and material moving occupations	273	27.0
Total Employed*	1010	100

Source: Wisconsin Department of Administration
** "Total Employed" represents employed civilian population 16 years and over*

An employment forecast completed by the NCWRPC in 2003 indicates continued employment growth for the Town. By the year 2030, it is estimated that the Town will provide employment to 252 workers. This estimate is based on the rate of change in employment between 1990-2000 for non-farm employment.

Table 2-8: Employment Projections – 2000-2030

	Total Employment by Year							
	2000	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**	**% change**
Knowlton	228	232	236	240	244	248	252	11%
County	72,508	75,625	78,742	81,859	84,976	88,093	91,210	26%

Source: Marathon County 2030 Population and Employment Projections Methodology Report, NCWRPC, 6/03

Demographic Trends

- The total population for the Town of Knowlton increased by 127 percent between 1970-2000. From 1990-2000, population increased by 19 percent
- Median age for the Town is 39.3, which is higher than the State overall, at 36.0 years.
- 85.2 percent of Town residents have a high school education or higher. This compares to 83.8 percent for the County, and 85.1 percent for the State
- In 2000, most people were employed in the self-employed/farm sector, with 161 employees.
- Commercial is the second largest employment sector with 23 workers.

Issues

- **Bedroom Community** - Population growth is influenced by location and proximity to I-39 and Wausau metro area, including Lake DuBay. As a result, there are increasing service demands overall especially among commuting populations. In addition, there are few local jobs or commercial centers.

- **Approaching Build Out** – The available land near Lake DuBay is mostly developed indicating a possible leveling of population growth.

- **Seasonal Residents** - Lake DuBay attracts vacation-home buyers from outside the area. This leaves many properties only partially utilized during the year, with seasonal spikes in service demand.

3. Natural Resources

Because natural resource features do not follow geo-political boundaries, it is important to consider their patterns and inter-relationships on a broader scale. In addition, many of the programs for protecting or mitigating impacts to natural resources are administered at the County, State or Federal level. Thus, an overview of recent county-wide natural resource planning efforts is described below, followed by a description of local natural resource conditions. Of particular interest are geographic areas of the landscape encompassing valued natural resources features grouped below by resource type, including water, soil and biological resources.

Maps for the Natural Resources element include Figures: 3-1, Rivers and Floodplains; 3-2, Wetland Types; 3-3, Soil Associations; 3-4, Prime Farm Soils; 3-5, Slopes. All Figures are located at the end of this section.

Recent Planning Efforts Related to Natural Resources

In the last decade, several plans were prepared by the County specifically to address protection and management of natural resources. These plans may be used as resources to guide local policy and decision- making regarding resource management and protection. In addition to the plans listed below, Marathon County and several local communities have adopted park and outdoor recreation plans that discuss natural resource based recreational facilities and protection strategies. These are described in more detail in the Parks section.

- **Marathon County Land and Water Resource Management Plan (LWRMP)** - In 2001, Marathon County adopted a LWRMP in accordance with Wisconsin Statutes (Wisconsin Act 27, Chapter 92.10). The primary intent of this plan is to identify a vision for natural resource management in Marathon County and outline strategies to protect the quality and quantity of soil and water resources. Marathon County encompasses portions of 22 watersheds. The Wisconsin Department of Natural Resources (WDNR) has ranked these watersheds according to water pollution impacts and designated five as "priority" watersheds to receive special planning and funding through the voluntary, State-funded Priority Watershed Program. The County's Department of Conservation, Planning and Zoning (DCPZ) works with the WDNR to implement the program. Program funding is used to hire staff to assist in developing management plans for each watershed and to provide cost sharing to landowners for implementation of "best management practices" (BMPs) to achieve the program objectives.

- **Marathon County 2001 Groundwater Protection Guide** – This guide is an extension of the efforts established with adoption of the Marathon County Groundwater Plan in 1988. It is intended to guide local and County officials in setting policy. It also serves as a resource of information about groundwater and other natural resources and recommends strategies to address issues related to groundwater protection.

- **Marathon County Forest Ten-Year Comprehensive Land Use Plan, 1996-2005** – This plan includes recommendations to guide management of forest land in Marathon County in accordance with the County Forestry Department's mission to manage and protect the County forest on a sustainable basis for ecological, economic, educational, recreational, and research needs of present and future generations. It provides substantial information on existing forest resources and as well as information regarding the roles of the various agencies and regulatory framework related to forest management.

Water Resources

Marathon County contains abundant water resources. Many have remained in a fairly pristine state and others are in need of focused efforts to improve water quality. Outstanding Resource Waters (ORW) and Exceptional Resource Waters (ERW) designations are derived from an amendment to the U.S. Clean Water Act, which directed states to identify waters that were largely unaffected by pollution and should remain that way. States were required to develop "anti-degradation" policies to protect these waters from pollution. As a result, wastewater entering an ORW must be as clean as the water in the "outstanding" water body. The anti-degradation policies only apply to point sources of pollution, such as an industrial discharge pipe. However, Wisconsin has other programs in place to control non-point source pollution, such as animal waste and pesticides in farm runoff, urban runoff, and failing septic systems.

The Wisconsin Natural Resources Board also wanted to extend higher levels of protection to top trout waters. As such, the WDNR established a second category of waterways to be protected under the anti-degradation policy; these are the ERW. Wastewater entering ERW must meet minimum clean water standards, although higher standards are encouraged where feasible.

There are no ORW or ERW in the Town of Knowlton.

Water resources that have been significantly degraded are identified as "impaired waters". Four of the 22 watersheds in Marathon County have been identified as "impaired waters" on the "303 (d) list" of the U.S. Clean Water Act. The list identifies waters that do not meet current water quality standards and merit water quality improvement and protection. Impaired Waters in the Town of Knowlton include:

- Upper Big Eau Pleine in western Marathon County
- Lower Big Eau Pleine in the south-central part of the County.

Resource management plans for these watersheds, plus the Lower Big Rib River watershed are currently being done as part of the Priority Watershed Program, a State-funded, voluntary program administered by the County. The County's resource management planning efforts are described in more detail in the *Marathon County Land and Water Resource Management Plan* (2001).

Streams/Rivers – The two main creeks are Peplin and Johnson Creeks with their tributaries that flow into Lake Du Bay, which is part of the Wisconsin River within this Town.

Floodplains – Areas within the 100-year floodplain are located adjacent to the two creeks and Lake Du Bay.

Wetlands – There are several types of wetlands located in the Town of Knowlton, which are concentrated adjacent to the various water bodies. Most wetlands are forested with some scrub/shrub and emergent wet meadows scattered throughout the Town.

Groundwater— Depth to groundwater varies from shallow to moderately deep. Half of the Town has an adequate supply of groundwater at current development and land use. The remainder of the Town may suffer from a short supply of groundwater.

Soil Resources

Prime Farm Soils – There are some prime farmland soils through the center and along the eastern border of the Town. The "prime farm soils" designation simply indicates that these soils are good productive farmland.

Steep Slopes -- Erosion is varied from low for most of the Town to high in the western portion of the Town. The soil loss for the Town of Knowlton is 2.0 – 3.0 tons/acre/year. Susceptibility for soil erosion is similar to the average soil loss experienced by Marathon County as a whole and is not a major concern.

Biological Resources

Vegetation – Most of the Town is forestland. The remainder of the Town is residential and cropland with some scattered commercial developments.

Wildlife Resources and Habitat – Wildlife resources include a variety of game and non-game species of birds, mammals, fish, reptiles and amphibians that typically live in Marathon County. Common types of wildlife include deer, wild turkeys, raccoon, squirrels, songbirds, waterfowl, bear, badger, wolf and raptors. Wildlife resources are abundant in the many undisturbed sanctuaries, refuges, reserves, and scattered habitats located throughout the County. Numerous other species of migrating birds use habitat in Marathon County for food, shelter, and resting stops during seasonal migration.

There is a significant amount of wildlife habitat in Marathon County. In addition to County parks and forest units, major wildlife habitat areas include: the George W. Mead Wildlife Area, the McMillan Marsh State Wildlife Management Area, and Rib Mountain State Park.

Threatened and Endangered Species – Both Terrestrial and Aquatic Endangered, Threatened, or Special Concern species are within the Town. Endangered resources that may be identified at the local level include:

- Red-shouldered Hawk (Bureo lineatus)
- Osprey (Pandion haliaetus)
- Pale Beard Tongue (Penstemon pallidus)
- Blanding's Turtle (Emydoidea blandingii)

Issues

- **Landfill** - There may be future issues surrounding the Fly Ash Landfill in the center of the Town and groundwater resources.

- **Loss of Habitat** - Most land surrounding Lake DuBay is privately owned. Some of these property owners are destroying local habitat in favor of large lawns and decks.

- **Preservation** - Residents would like to preserve farmland but it is not economically viable. Preservation of forested areas is also a desire for a majority of residents.

4. Land Use

The Town of Knowlton consists of large areas of forested lands. Interstate 39/US 51 running North and South, splits the Town roughly in half. There is a large amount of vacation property located on Lake Du Bay. Land set aside for recreation is located north of Sandy Creek Road. The Wisconsin River and Lake Du Bay, west of I 39/US 51, runs north and south through the Town roughly parallel to the highway.

Maps for the Land Use element include Figures: 4-1, Existing Land use/Land cover; 4-2, Existing Zoning; 4-3, Farmland Preservation Contracts and Exclusive Agricultural Zoning. All Figures are located at the end of this section.

Current Pattern of Land Use

Residential
Residential development is mainly concentrated in the western segment of Knowlton. Much of the development is situated around the Wisconsin River and Lake Du Bay. One multi-family development is located on Old Hwy 51.

Commercial
Nineteen commercial sites are located in Knowlton. They are scattered throughout the Town, with the majority adjacent to or near USH 51/39. The Central Wisconsin Airport (CWA) is located on USH 51/39 just north of Town.

Industrial and Office
One industrial parcel is located on STH 34 in the western portion of Knowlton. Another is located on Seagull Drive.

Parks and Recreational Open Space
The Wisconsin River and Lake Du Bay take up a large amount of acreage through the western segment of Knowlton. Ashley Park is in the southeast of the Town bisected by Johnson Creek. The Park is maintained by Marathon County. Lion's Park is located on CTH DB.

Agricultural
Agricultural land is mainly concentrated in the east. This land is designated as general agricultural, other crops and specialty crops. Small scatterings of agriculture run along the north and east Town border.

Public
Publicly owned areas are located in the south central portion of Knowlton on CTH C. There is also one small parcel located on CTH X and Sandy Creek Road in the southeastern corner.

Mineral Excavation
There are three quarries/gravel pits. They are all on the western edge of Knowlton, at the north and south ends of Old Dancy Road.

Existing Land Use - For purposes of this report, existing land cover was used to represent existing land use. Table 4-1 describes the various land use categories and Figure 4-1 illustrates the existing land use. Note, the acreage and percentage of land shown on Table 4-1 were determined from

aerial photos and are not intended to be accurate to the parcel level.

Table 4-1: Land Use Cover Classification, 2000

Land Cover Category	Description	Acres	% of Total Land Area
Single Family Residential	One family structures, farm residences, mobile homes	737	3
Multi-Family Residential	Multiple family structures with three or more households, condos, duplexes, apartments	10	--
Commercial Services	Retail stores, taverns, restaurants, truck stops, gas stations, farm coops, farm implement dealerships, automobile dealerships, business offices, motels/hotels, offices, telephone/gas company	61	--
Industrial	Saw/paper/lumber mills, dairies, industrial parks, trucking operations, distribution centers	23	--
Quarries/ Gravel Pits	Mining operations	144	1
Cropland	Tilled agriculture, prime farmland	3316	15
Specialty Crops	Ginseng, orchards, vineyards, nurseries, groves, cranberries, etc.	134	1
Other Agriculture	Fallow, pasture and undetermined agriculture, power lines and towers, water towers, municipal wells	697	3
Public/Quasi-Public	Schools, churches, cemeteries, town halls, fire departments, National Guard	21	--
Recreation	Ball fields, golf courses, playgrounds, parks, trails, camp grounds, shooting ranges	127	1
Woodlands	Forested land	6258	29
Water	Open waters, such as lakes, ponds, streams, rivers, creeks, reservoirs, etc.	3519	16
Transportation	Airports, highways, road right-of-ways, railroads, logging roads	1162	5
Barren Land	Unused open land in wooded areas, along streams, along roadsides	911	4
Total Land Area		21933	100%

Source: Marathon County Land Use Cover Database

Current Land Use Plans and Regulations

Land Use Plan(s) – The Town of Knowlton does not currently have a land use plan in place.

Zoning – Marathon County regulates zoning within the Town of Knowlton. See Figure 4-2.

Shoreland Zoning – Shoreland, shoreland wetlands, and floodplain regulations are applicable in all geographic areas of the County. Wisconsin law mandates Counties to adopt and administer a zoning ordinance that regulates land use in shoreland/wetland and floodplain areas for the entire area of the County outside of villages and cities. This ordinance supersedes any Town ordinance, unless a Town ordinance is more restrictive. The shoreland/wetland and floodplain area covered under this zoning is the area that lies within 1,000 feet of a lake and within 300 feet of a navigable stream or to the landward side of a floodplain, whichever distance is greater.

Farmland Preservation Program– The State of Wisconsin has a Farmland Preservation Tax Credit Program. The goals of the program are twofold: to preserve Wisconsin farmland by means of local land use planning and soil conservation practices and to provide property tax relief to farmland owners. Landowners keeping land in agricultural use can claim a credit on their State income tax by obtaining a zoning certificate, if the land is exclusive agriculture zoned (8 towns in Marathon County), or sign contract with the State. The program requires that a landowner be a Wisconsin resident, own a minimum of 35 or more acres of contiguous land, and produce gross farm receipts of $6,000 or more in the last year, or $18,000 in the last three years. The income requirement can be satisfied with having 35 acres or more enrolled in the Conservation Reserve Program (CRP). Landowners must also comply with County soil and water conservation standards. Contracts can range from 10 to 25 years, and remain in effect regardless of change in ownership.

As shown on Figure 4-3, there are several blocks of land under Farmland Preservation Contracts just north of the Town border.

Forest Crop Law (FCL) and Managed Forest Law (MFL) In the State, over 2.6 million acres are enrolled under the FCL and the MFL. Because high taxes had encouraged the cutting of timber for revenue, the laws were developed to encourage better forest management and provide tax relief to the woodland owners. Land set aside under the FCL (which was combined into the MFL in 1986) required at least 40 acres in one quarter-quarter section, set aside under a 25- or 50-year contract, and public access for hunting and fishing activities. Current contracts will continue until their expiration dates. This land is typically shown in plat books to identify locations. Land set aside under the FCL in Marathon County is often owned by forest products companies, although many individuals also own large enough parcels to participate.

The MFL was enacted in 1985 and requires at least 10 acres of contiguous forest land. Because of the smaller acreage requirement, many individual landowners take advantage of the MFL. Landowners may close to the public up to 80 acres of their forest lands set aside under MFL. The remaining program acres must be open to public access for hunting, fishing, hiking, sight-seeing and cross-country skiing. Landowners

must choose a 25- or 50-year contract. The landowner pays an Acreage Share Amount as part of their tax bill in lieu of taxes. Current rates through 2007 are $0.83 per acre for land open to the public and $1.95 per acre for closed land.

Table 4-2 shows current estimates of land set aside under the FCL and MFL programs. It is noted that information on MFL land is not readily available since landowners select various acreage amounts and may have both closed or open land. These acreages do not correspond with the parcel boundaries, and thus are not mapped.

As shown in Table 4-2, there are zero acres of land estimated to be currently enrolled in the FCL program and about 1967 acres enrolled in MFL programs in the Town.

Table 4-2: Land in Forest Preservation Programs (in acres), 1998 – 2002

Year	Forest Crop Law (FCL)	Managed Forest Law (MFL) open	Managed Forest Law (MFL) closed
1998	121	286	958.3
2002	0	286	1,681.3
Change	-121	0	+723
% Change	-100	0	+75.4

Source: Data compiled by local assessors with Municipal Board of Review

Development Trends

Land Supply – Estimates indicate the Town of Knowlton has 11,316 acres of land available and 10,616 acres of land unavailable. This was calculated using North Central Wisconsin Regional Planning Commission (NCWRPC) data. Available land was considered to be cropland, special cropland, woodlands, and barren / vacant lands. All other types were considered "unavailable". It is noted that some of this "available" land may be in public ownership, as shown in Table 4-3, thus making it essentially "unavailable" for development.

Development is somewhat limited by the enrollment of properties into tax incentive programs to maintain existing use/cover under the managed forest law, the forest crop law, and farmland preservation.

Table 4-3: Public Owned Land (in acres), 1998-2002

Year	County Owned	State Owned	Federal Owned
1998	355.6	0	0
2002	347.9	0	0
Change	-7.7	0	0
% Change	-2.2	0	0

Source: Data compiled by local assessors with Municipal Board of Review

Land Demand – An estimate of land needed for future residential development was based on projected new dwelling units between 2000 and 2030 derived from WDOA household projections and the average density of dwelling units per acre in the community. The average density was calculated using the total acres of residential land on the 2000 land use/cover

map divided by the number of households according to the 2000 Census. It was assumed that the density would remain constant between 2000 and 2030. Future acres needed for residential development were then estimated by multiplying the projected number of households in 2030 by the average density. In the Town of Knowlton, is estimated that 401 acres of land will be needed to accommodate new residential development through 2030.

The NCWRPC estimated land demand for future non-residential development based on projected changes in local employment and estimated current average density of employees per acre. In the Town of Knowlton, it is estimated that sixteen acres will be needed to accommodate new non-residential development through 2030.

Land Values – Table 4-4 indicates the change in assessed land values between 1998 and 2002 for various types of land use in the Town of Knowlton. It also indicates percent change in acreage and land value for the Town compared to Marathon County. Between 1998 and 2002 the number of acres in residential land use increased by almost 133. At the same time, the amount of land in Agriculture decreased by 211 acres and the amount of land classified as Swamp & Waste Land increased by 99 acres. This likely reflects the conversion of some farmland to rural residential uses and changes made in the classification of land from Agriculture to Swamp & Waste. The acreage of land classified as Forest decreased by 36 acres, while land value for Forest land increased by $21. In Marathon County, land classified as Swamp & Waste Land had the highest percent increase in acreage of all categories (74.8%) and land classified as Forest had the highest percent increase in value per acre (almost 92%).

Table 4-4: Per Acre Assessed Land Values (in dollars), 1998 – 2002, Town of Knowlton

Year	Residential		Commercial		Manufacturing		Agriculture		Swamp & Waste Land		Forest	
	Acres	Land Only	Acres	Land Only	Acres	Land Only	Acres	Land Only	Acres	Land Only	Acres	Land Only
1998	1,015	$21,093	199	$4,664	49	$1,020	4,317	$468	867	$129	7,051	$534
2002	1,148	$19,604	239	$4,178	54	$1,493	4,106	$139	966	$143	7,015	$555
Chg.	+133	$-1,489	+40	$-486	+5	$473	-211	$-329	+99	$14	-36	$21
Percent Change Comparison												
	Acres	Land ($)	Acres	Land ($)	Acres	Land ($)	Acres	Land ($)	Acres	Land ($)	Acres	Land ($)
Town	+13.1	-7.1	+20.1	-10.4	+10.2	+46.4	-4.9	-70.3	+11.4	+10.9	-0.5	+3.9
County	+21.2	+5.6	+38.4	-4.0	-0.5	+34.4	-11.2	-47.6	+74.8	+137.0	+1.0	+91.8

Source: Data compiled by local assessors with Municipal Board of Review

Major Opportunities and Constraints

- The relocation or expansion of the CWA on the northeastern edge of the Town may have impact the community in the future.
- The airport provides the Town with a buffer from the City of Mosinee.
- There is some development pressure along Old 51. The Town would like to see development in this area to be orderly and controlled.
- There is a desire to preserve some open space corridors in the Town.

Issues

- **Industrial Uses** – The County approved a gravel pit in the Town, even though the Town recommended against its approval. The Town wishes to provide essential services to residents, but does not want industrial uses.

- **Limit Commercial Development** - Additional commercial development beyond small convenience stores is not desired.

5. Transportation

Maps for the Transportation element include Figures: 5-1, Functional Classification; 5-2, Trails and Regional Transportation. All Figures are located at the end of this section.

Background

Interstate 39 is a principal arterial that traverses the Town of Knowlton. The only interchange access within the Town is at STH 34/Balsam Road. STH 34 is designated as a principle arterial that provides access to I-39 to the north and U.S 10 to the south. Old 51 Road is a major collector that is a northern extension of CTH DB. Prior to the interstate being built, Old 51 was the main north-south highway through the area. The road provides convenient access to Mosinee to the north and an alternative route to I-39.

Recent Transportation Plans

Transportation planning in Marathon County is coordinated between Marathon County Planning Department staff and the Wausau Area Metropolitan Planning Organization (MPO); the body designated by the Federal Department of Transportation to be responsible for transportation planning in the metropolitan area. The Marathon County Planning Department provides staff for the Wausau Area MPO. The County's planning department also does transportation planning for areas outside the Wausau metropolitan area.

County transportation planning efforts are presented in various plans and studies. Findings and recommendations presented in these plans should be integrated into local community planning efforts when relevant and appropriate. Recent transportation plans prepared by Marathon County include:

- ***Transportation Improvement Program (TIP)*** – The TIP includes all programmed transportation projects receiving Federal and/or State funds. The TIP was adopted in October 2001 and is updated every two years.

- ***State Trunk Highway 29 Corridor Land Use Review (1997)*** – This plan was prepared by a multi-departmental team working with communities along the STH 29 corridor in the western part of Marathon County. The primary goal was to identify recommendations to allow local communities to protect STH 29 from impacts related to unplanned growth.

- ***Marathon County Functional / Jurisdictional Highway Classification Study (1998)*** –This plan identifies and groups classes of roadways that provide similar levels of service. The plan recommended that the unit of government having the greatest basic interest in the roadway's function would carry out the operation, maintenance, and improvement of the classified roadways.

Road Network

Functional Classification of Roads/Jurisdiction

(Source: WDOT Facilities Development Manual)

A functionally classified road system is one in which streets and highways are grouped into classes according to the character of service they provide, ranging from a high degree of travel mobility to land access functions. At the upper limit of the system (principal arterials, for example), are those facilities that emphasize traffic mobility (long, uninterrupted travel), whereas at the lower limits are those local roads and streets that emphasize access.

The functional classifications are generally defined as:

Principal Arterials serve corridor movements having trip length and travel density characteristics of an interstate or interregional nature. These routes generally serve all urban areas with populations greater than 5,000 or connect major centers of activity. They carry the highest traffic volumes and are designed to accommodate longer trips.

Minor Arterials, like principal arterials, minor arterials also serve cities, large communities, and other major traffic generators providing intra-community continuity and service for trips of moderate length, with more emphasis on land access than principal arterials.

Collectors provide both land access service and traffic circulation within residential neighborhoods, commercial areas, and industrial areas. The collector system distributes trips from the arterials through the area to the local streets. The collectors also collect traffic from the local streets and channel it onto the arterial system.

Local Streets comprise all facilities not on one of the higher systems. They serve primarily to provide direct access to abutting land and access to higher order systems. Local streets offer the lowest level of mobility, and through-traffic movement on these streets is usually discouraged.

Jurisdiction - Roads are commonly classified in one of two ways: by ownership or by purpose. Jurisdictional responsibility refers to ownership of a particular road, while functional classification, as describe above, identifies the road by the level of service it provides.

Jurisdiction refers to governmental ownership, not necessarily responsibility. For example, some State owned roads are maintained by local jurisdictions. Additionally, the designation of a public road as a "Federal-aid highway" does not alter its ownership or jurisdiction as a State or local road, only that its service value and importance have made that road eligible for Federal-aid construction and rehabilitation funds.[1]

Ownership is divided among the Federal, State, and local governments. States own over 20 percent of the national road network. The Federal Government has responsibility for about 5 percent, primarily in national parks, forests, and Indian

[1] U.S Department of Transportation, Federal Highway Administration Conditions and Performance Report.

reservations. Over 75 percent of the road system is locally controlled.

In some cases, local municipalities are responsible for conducting routine maintenance and minor repairs on State and Federal highways within their jurisdictional boundaries. In return, the State generally provides financing to those jurisdictions. However, major repairs and reconstruction are generally still the responsibility of the State Department of Transportation. Roadway jurisdictions (i.e. U.S., State, and County highways) are indicated in Figure 5-1.

Major Road Facilities

Following is a brief description of the major road facilities located in the Town. All major roads are summarized below by Functional classification, jurisdiction, and Annual Average Daily Traffic (AADT), when available.

- **Interstate 39** is a principal arterial that traverses the Town of Knowlton. The only interchange access within the Town is at STH 34/Balsam Road. Overpasses provide east-west access over the interstate at Ridge Road/Cessna Road, Locker Road, and CTH C. The I-39 AADT volume north of the STH 34 interchange was 19,700 in 1998 and 21,700 in 2001. South of the STH 34 interchange the AADT was 17,400 in 1998 and 20,700 in 2001. The on-ramp and off ramp, which serve traffic going to and coming from the north, had AADT volumes of 2,700 and 2,600, respectively in 2001. The on and off ramps, which serve traffic going to and coming from the south, had AADT volumes of 310 and 2,50, respectively in 2001.

- **STH 34** is designated as a principle arterial that provides access to I-39 to the north and US Highway (USH) 10 to the south. STH 34 had an AADT volume west of the I-39 interchange of 5,200 in 1998 and 5,400 in 2001. North of the intersection with CTH C, STH 34's AADT volume was 3,900 in 1998 and 5,300 in 2001.

- **CTH DB** is a major collector that runs about four miles between STH 34 near the STH 34 and I-39 interchange and nest the I-39 interchange to the south. CTH DB appears to serve as a frontage road for those land uses between the interstate and the Eau Pleine Reservoir.

- **CTH C** is a major collector that enters from the west at the far south eastern corner of Knowlton where it merges to STH 34, diverts to CTH DB and continues eastward through Knowlton. West of STH 34, the AADT volume was 1,500 in 1998 and 1,600 in 2001. The closest AADT count on the eastern portion of CTH C is on the eastern edge of the Town of Guenther. This location had a 2001 AADT volume of 510.

- **Old Highway 51** is a major collector that is a northern extension of CTH DB. Prior to the interstate being built, Old 51 was the main north-south highway through the area. The road provides convenient access to Mosinee to the north and an alternative route to I-39.

- **Du Bay Drive, Alicia Lane, and Johns Lane** are designated as minor collectors that create a loop along the shoreline of Lake Du Bay and connect to STH 34.

Road Maintenance

The Town does provide snowplowing service as well as seal coating and other maintenance. The community has completed a Pavement Surface Evaluation Rating (PASER) analysis, which is incorporated into the capital improvement plan.

PASER – The Wisconsin Department of Transportation (WDOT) requires all incorporated communities to prepare a Pavement Management Plan (PMP) using a pavement rating system for their local roads. These plans were to be submitted for review by December 2001. The data from these plans is intended to provide the foundation for the Wisconsin Information System for Local Roads (WISLR), which is a computer resource that will enable communities and the State to begin to assess Wisconsin's local roadway system.

The PASER system, which was designed by the Transportation Information Center of the University of Wisconsin-Madison, is the rating system used most by Wisconsin communities. PASER rates road surfaces on a scale of 1 to 10. This scale is broken down as follows:

- "1" and "2" = very poor condition
- "3" = poor condition
- "4" and "5" = fair condition
- "6" and "7" = good condition
- "8" = very good condition
- "9" and "10" = excellent condition

In addition to its use in the new WISLR, the rating system gives communities a detailed assessment of the appropriate maintenance method for each road segment under their jurisdiction. This assessment is then incorporated into the community's PMP.

Table 5-3: Summary of Pavement Conditions

Surface Type Code (miles)						
Unimproved Road	Graded Earth Road	Gravel Road	Wearing Surface	Cold Mix Asphalt on Concrete	Cold Mix Resurfacing with < 7" Base	Cold Mix Resurfacing with > 7" Base
0.67	0.45	12.45	25.97		0.33	
Cold Mix Asphalt Base < 7"	Cold Mix Asphalt Base > 7"	Hot Mix Asphalt on Concrete	Hot Mix Resurfacing	Hot Mix Asphalt Pavement	Concrete Pavement	Brick or Block Pavement
1.04	11.34	3.15		7.22	0.85	

Surface Condition Rating - WISLR Data						
No Data	Failed	Poor	Fair	Good	Very Good	Excellent
0.39		1.82	13.72	18.27	15.28	13.99

Source: WDOT (WISLR), 8/10/04

Roads exhibiting a surface condition rating at or below "Fair" must be examined to determine what type of reconstruction or strengthening is necessary. The road segments classified as unimproved or graded earth roads provide the potential for safety concerns to arise and should be examined to determine the appropriate measures to ensure safe travel. The roads that display a surface rating of "Good" or better will only require minimal preventative maintenance to promote safe travel conditions. Further information is necessary for those roads that display no surface rating data.

Land Use and Transportation

Access Management – Wisconsin was one of the first states to recognize the relationship between highway operations and the use of abutting lands. Under Chapter 233, the WDOT was given the authority to establish rules to review subdivision plats abutting or adjoining State trunk highways or connecting highways. Regulations enacted by WDOT establish the principles of subdivision review. They require new subdivisions to: (1) have internal street systems; (2) limit direct vehicular access to the highways from individual lots; (3) establish building setbacks; and (4) establish access patterns for remaining unplatted land.

Marathon County issues driveway permits and implements access restrictions on all properties fronting a lettered County road. The *County Trunk Highway Access-Driveway Policy* addresses the requirements regarding culverts, access width, slope, visibility and spacing. The policy is available through the Marathon County Highway Department.

Trip Patterns -- The Town serves as primarily a residential "bedroom" community to surrounding cities, like the City of Mosinee. A small amount of housing is for recreational purposes, most notably adjacent to Lake DuBay. However, there has been some development along Old Highway 51 and throughout the Town.

Other Transportation Modes

Airport – The Central Wisconsin Regional Airport in Mosinee is just north of the Town of Knowlton. Airport zoning restrictions are enforced within a three-mile radius of the airport, which would include areas of the Town of Knowlton. The Central Wisconsin Airport (CWA) is a joint venture of Marathon and Portage Counties. It is the only airport within Marathon County or neighboring counties that provides scheduled air passenger services. The CWA is located east of Mosinee and accessible via I-39. The terminal has been modernized and highway access reconstructed to be more convenient. Since 1982 more than $24,000,000 has been spent to keep the airport ready to serve the needs of the region. Service is provided through Mesaba/Northwest, United/United Feeder Service and Skyway/Midwest Express, offering 24 flights per day that connect through Minneapolis, Chicago, Detroit and Milwaukee. There are also nine air freight and express flights daily

Pedestrian – There are no sidewalks in the Town. Pedestrian travel is limited to road shoulders.

Bicycle – The *Marathon County Bicycle and Pedestrian Plan* identified STH 13, CTHs X and C, and Locker Road as suggested bicycle routes.

Transit -- There is no transit service currently available in the Town of Knowlton. There is limited elderly and disabled transport service available through North Central Health Care (NCHC).

Rail -- The Wisconsin Central (Canadian National [CN]) Railroad runs parallel to I-39 and the Wisconsin River through the Town. The railroad crosses the Wisconsin River in the southwest corner of Knowlton. The rail line connects with Mosinee, Wausau and Tomahawk to the north and Wisconsin Rapids to the south.

Issues

- **Funding** - Determining, prioritizing, and funding road maintenance and road improvements is a difficult process.

- **Airport Impacts** –There is pressure to development more housing in areas near the airport, which could conflict with airway approach setbacks. Noise impacts from aircraft also present conflicts with residential development. In addition, a new interchange at I-39 near the north edge of Town would move parking away from the airport terminal.

6. Utilities

This section describes the existing conditions and issues relative to utilities available to the Town, including sewage disposal, water supply, power supply, and telecommunication facilities and services. It also describes existing conditions with regard to surface water management.

Maps for the Utilities element include Figures: 6-1, Depth to Bedrock; 6-2; Suitable Soils for Septic Tank Absorption; 6-3, Depth to Groundwater; 6-4, Watersheds; 6-5, Proposed Weston-Arrowhead Powerline. All Figures are located at the end of this section.

Private Utilities

Most unincorporated areas of Marathon County use private on-site waste disposal systems for sewage disposal and obtain potable water from private wells. The Town of Knowlton does not provide public sewer or water service. All development is on private wells and septic systems.

On-Site Waste Disposal Systems

Chapter 15 of the *General Code of Ordinances for Marathon County* requires private sewage systems on all premises intended for human habitation or occupancy that are not served by public sewer. The County Code incorporates by reference rules, regulations, and laws in the Wisconsin Statutes and Wisconsin Administrative Code governing private sewage systems, including:

- **Comm 83** – This refers to Chapter 83 in the Wisconsin Administrative Code under the Department of Commerce. It sets standards for regulation of private sewage systems. This code was updated in 2000 now allows the use of new concepts and technologies through a system of individual component approval. Standards for effluent are based on a drinking water standard, although nitrates are generally exempted.

Types of Systems – Under the revised Comm 83 standards, property owners have a wider array of system options than previously available. Septic tanks can be steel, concrete, fiberglass or plastic, but they all must now be equipped with a filter to prevent the movement of solids out into the soil absorption component. In addition, rock in drainfields may now be substituted with specifically engineered foam peanuts bound in mesh or plastic chambers.

On-site waste disposal systems generally fall into four categories:

- **Conventional Systems** – these systems include an absorption field that is buried under the natural ground level. These systems cannot be built in areas where soils do not allow percolation due to high clay content or bedrock where groundwater is too near the surface, or where soils percolate too rapidly and thus pose problems for groundwater contamination.

- **Mound Systems** – these systems include an absorption field that is constructed above ground, creating a "mound". This type of system is generally used where clay soils, groundwater, rapid permeability or bedrock prevent construction of conventional systems.

- **Mechanical Treatment Components** – these generally replace or augment the septic tank component and may include aerobic treatment tanks and/or self -contained artificial media or sand filters to clean the effluent prior to its discharge into the soil absorption component.

- **Holding Tanks -** Holding tanks are considered the system of last resort and are only allowed if other types of septic systems cannot be used. Temporary holding tanks (e.g., less than 2 years) are sometimes allowed in areas where public sewer is approved for installation in the near future.

Permit Requirements – The Marathon County Department of Conservation, Planning and Zoning (DCPZ) reviews and issues permits for private sewage systems. Soil and site evaluations are required to determine if the proposed septic system is suitable for the specific property and location before a permit will be issued. If deemed necessary, floodplain and/or wetland delineation may also be required prior to permit issuance. In addition, a maintenance agreement must be submitted prior to permit issuance. All septic tanks installed on or after July 1, 1980, are required to be pumped at least once every three years.

Water Supply

Water Wells: All development in Knowlton receives water from private wells.

Surface Water Management

In 2001, Marathon County adopted a Land and Water Resource Management Plan (LWRMP) in accordance with Wisconsin Statutes (Wisconsin Act 27, Chapter 92.10). The primary intent of this plan is to identify a vision for natural resource management in Marathon County and outline strategies to protect the quality and quantity of soil and water resources.

The County is particularly concerned about nonpoint sources of pollution, including failing septic systems, urban runoff, and issues often identified with rural areas such as soil erosion, animal waste and pesticides. Nonpoint pollution is best addressed by watershed. Marathon County encompasses portions of 22 watersheds as shown in Figure 6-4. The Wisconsin Department of Natural Resources (WDNR) has ranked these watersheds according to water pollution impacts and designated five as "priority" watersheds to receive special planning and funding through the voluntary, State-funded Priority Watershed Program. Preparation of resource management plans for the following watersheds is currently underway:

- Springbrook in the Town of Harrison;
- Upper Yellow River in the Town of Spencer
- Upper Big Eau Pleine in western Marathon County
- Lower Big Eau Pleine in the south-central part of the County
- Lower Big Rib River

Electrical Utilities and Natural Gas

The Town of Knowlton receives electric power from Wisconsin Public Service Corporation (WPS) and REA. Natural gas is contracted for privately to some residences.

Telecommunication Facilities and Services

- Television/Cable providers: none
- Telephone/Fiber Optics: Mosinee Telephone, and TDS
- Cell towers: there are 3 towers in the Town
- Radio: none

Solid Waste Management

The Town contracts with a private company for waste management. Municipal, commercial and industrial waste is accepted at the Marathon County Landfill in Ringle. User fees collected at the landfill defray the cost of landfill operations.

The Marathon County Solid Waste Management Department is in charge of waste management for non-hazardous solid waste. It consists of the 575-acre landfill, recycling programs, composting, and waste-to-energy. The Department opened a Household Hazardous Waste Collection Facility in May 1997, where County residents can drop off hazardous waste free of charge.

Recycling

Recycling pick-up is provided by a private contractor on a bi-weekly basis.

Issues:

- **Septic Tanks** - There are questions on the types of septic systems that are allowed under Comm 83. Many residents are concerned about new development occurring on lands that were previously vacant, but now may be developed because of the new regulations.

- **Cellular Towers** – Cellular towers do not fit the natural landscape of the area, and once land is rezoned to accommodate a cell tower, the land can be sold as commercial. Residents feel additional commercial lands are not necessary.

7. Housing

Housing is a significant aspect of any comprehensive planning effort. This section is an inventory and analysis of housing conditions in the Town of Knowlton.

Data contained in this section reflect two methodologies of data collection employed by the U.S. Census. Data in the first table, labeled as "2000 Census: STF [Summary Tape File]-1 Data" are collected through a household-by-household census and represents responses from every household within the country. To get more detailed information, the U.S. Census also randomly distributes a long-form questionnaire to 1 in 6 households throughout the nation. Tables utilizing this sample data are identified in the footnote below each table and are labeled "STF-3 Data". Tables are labeled as either STF-1 or STF-3 data because numbers may differ for similar statistics between each method, due to survey limitations, non-response, or other attributes unique to each form of data collection.

Housing Inventory

Housing Type and Tenure

The 2000 Census shows the Town of Knowlton has 657 occupied housing units. 588 (or 90%) of these units are owner-occupied. The Town has an average household size of 2.57 persons. 17% of all households are classified as being "1 person households". Approximately 16% of Town households have a householder 65 years or older.

Table 7-1: Number of Housing Units by Type and Tenure

Area	Knowlton	Marathon County	Wisconsin
Total Occupied Housing Units	657	47,702	2,084,544
Owner Occupied Units	588	36,091	1,426,361
Renter Occupied Units	69	11,611	658,183
Average Household Size	2.57	2.6	2.50
% Owner Occupied	89.5	75.7	68.4
% 1 Person Households	16.9	23.6	26.8
% With Householder 65 years or older	16.1	21.7	21.5

2000 Census: STF-1 Data

Changes in Housing Stock

Table 7-2 notes changes in the housing stock between 1990 and 2000 according to U.S. Census Data. Total housing units have increased by 171 while the number of occupied housing units rose by 170. Vacancy decreased from 17% to 13%. The number of owner-occupied housing units increased by 181 or 43%. The census reports increases in the number of single-family units while duplex units remained constant.

Table 7-2: Changes in Housing Stock

	1990	2000	# Change	% Change
Total Housing Units	590	761	171	29%
Occupied Housing Units (Households)	491	661	170	35%
Vacancy %	17%	13%	--	--
Owner Occupied Housing Units	421	602	181	43%
Renter Occupied Housing Units	70	59	-11	-16%
Owner Occupied Housing Units as percent of Total	86%	91%	--	--
Number of Homes for Seasonal/Rec Use	63	79	16	25%
Number of Single Family Homes	486	666	180	37%
*Detached	486	661	175	36%
**Attached	0	5	5	--
Number of Duplexes	5	5	0	0%
Multi Family Units 3-9 units	0	0	0	--
Multi Family Units 10+	0	0	0	--

1990, 2000 Census: STF-3 Data
** This is a 1-unit structure detached from any other house*
***In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.*

Housing Age

The age of a community's housing stock typically reflects several important factors including size, offered amenities, and overall maintenance costs. Age of the home often also reflects different regional and national trends in housing development. Housing predating the 1940s, for example, was typically smaller and built on smaller lots. In subsequent decades, both average lot and home sizes have increased. For example, average homes constructed in the 1980s and 1990s are typically much larger than housing built in previous decades. This can be seen in both the rural and more urban environments of Marathon County. Additional bedrooms, bathrooms, and attached garage space are among the amenities found in newer housing units.

Table 7-3: Age of Community Housing Stock

Total Units	Year Built								
	1999 to March 2000	1995 to 1998	1990 to 1994	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or earlier
761	28	106	101	138	114	72	57	43	102
100%	4%	14%	13%	18%	15%	9%	7%	6%	13%

2000 U.S. Census: STF-3 Data

The above table shows housing age for the community. In the Town of Knowlton, data shows that significant portions of the local housing stock were built after 1970. Recent housing growth from the 1990s makes up approximately 31 percent of the total housing stock. That is higher than overall percentages for the County. The Census reports that homes built in the 1990s make up 13 percent of the County's overall housing stock.

Physical Housing Stock

The following table looks at several select measures of physical condition and compares them to figures for Marathon County and Wisconsin. The median home size in the Town of Knowlton is similar in size when compared to the overall figures for the County and State, when measured by number of

rooms. Over 87% of the community's housing stock is classified as being a single family home. This is higher than the overall figures for the County or State. At the time of the 2000 census, no housing in the Town of Knowlton was within structures with more than 10 units. Census data indicates that the Town has a higher percentage of homes lacking complete plumbing and kitchen facilities than the County or State.

Table 7-4: Physical Housing Stock

Community	Median Rooms	Characteristic (%)			
		1 unit, detached or attached	In buildings with 10 or more Units	Lacking complete plumbing facilities	Lacking complete kitchen facilities
Knowlton	5.7	87.52%	0.00%	1.58%	1.58%
Marathon County	5.8	76.10%	4.50%	0.90%	0.90%
Wisconsin	5.4	69.30%	9.40%	1.40%	1.50%

2000 Census: STF-3Data

Housing Values

Median Value

Table 7-5 shows home value statistics for the community, County and State. Specifically, the column to the right shows the median (or middle value) of select owner-occupied homes for each specified area. This value includes only single-family houses that are located on less than 10 acres. Additionally, this statistic only considers homes without a business or medical office on the property. Census data indicates that the Town of Knowlton has a median home value higher that of the County or State.

Table 7-5: Median Housing Value

	Median Value (dollars)
Knowlton	$132,700
Marathon County	$95,800
Wisconsin	$112,200

2000 Census: STF-3 Data

Range of Values

The following table shows the range of housing values that exist in the community. Compared to overall percentages for Marathon County, the Town of Knowlton has a higher percentage of homes valued above $150,000.

Table 7-6: Range of Housing Values

Number of Houses per Housing Value Category	Knowlton	Marathon County
< $49,999	11	1,459
%	3%	5%
$50,000 to $99,999	123	13,405
%	29%	49%
$100,000 to $149,999	118	8,220
%	28%	30%
$150,000 to $199,999	66	2,368
%	15%	9%
$200,000 or more	110	1,714
%	26%	6%

2000 Census: STF-3 Data

Housing Affordability

Several factors impact the varied levels of housing affordability in Marathon County. These factors include rent and mortgage payments, maintenance expenses, lot size, and required or desired amenities for the home. Household size and income are also key factors contributing to what housing options are available and accessible to residents.

Statistically speaking, those spending in excess of 35% of their total household income on housing costs may be facing affordability difficulties. The U.S. Department of Housing and Urban Development (HUD) recommends that rental-housing costs not exceed 30% of the monthly income. HUD also indicates that mortgage lenders are more willing to make loans if the scheduled mortgage payment is less than 29% of the monthly household income. The percentage of households in the Town of Knowlton that pay more than 35% of their income on housing costs is similar to that of the County and State among owner and renter-occupied households.

Additionally, the above table shows that select Town median owner-occupied costs, both with and without a mortgage, are similar to median figures for Marathon County. Median renter costs are also consistent between the Town and County. Technical documentation from the Census states that contract rent is the monthly rent agreed to or contracted for, regardless of any furnishings, utilities, fees, meals, or services that may be included. For vacant units, it is the monthly rent asked for the rental unit at the time of enumeration. Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by or for the renter. *(U.S. Census STF 3 Technical Documentation Guide)*

Table 7-7: Housing Affordability

	Owner Occupied			Renter Occupied		
	Median selected monthly owner costs[1]			Median Selected monthly renter costs[1]		
	With Mortgage	No Mortgage	%[2]	Median Contract rent	Median Gross rent	%[2]
Knowlton	$1,082	$332	11%	$444	$488	23%
Marathon County	$916	$295	10%	$423	$484	20%
Wisconsin	$1,024	$333	9%	$473	$540	25%

[1]In dollars
[2]Percent paying over 35% of household income on housing
2000 U.S. Census: STF-3 Data

Special Housing

Senior Housing

In Marathon County, housing for seniors and populations with special needs is primarily provided in the urbanized areas in and around Wausau. The Marathon County Aging and Disability Resource Center, the Wisconsin Department of Health and Family Services, and the Marathon County United Way all maintain a list of these housing options throughout the County. As the number of elderly persons increases in the coming years, there will most likely be an increased need for these types of housing options. This trend will be seen

throughout Marathon County, the State of Wisconsin, and the Nation.

The senior housing needs in the South-Central region of Marathon County are met in several areas throughout the County. The Village of Edgar is home to the Eastside Apartments, and the Heide Apartments. The Eastside Apartments currently have a waiting list, indicating that there may be a need for adding additional senior housing in this region. The Wausau region (including Mosinee, Wausau, Rothschild, Weston, and Schofield), as well as the Village of Stratford and the Village of Athens, all have senior housing options that help meet the senior housing needs of South-Central region of Marathon County.

Assistance Programs

There are a variety of State and Federal housing programs geared at addressing housing issues. Grants and low interest loans are available for counties, communities, or individual homeowners. The following housing resources are available to participants as specified by program.

- **Community Development Block Grant (CDBG)-Small Cities Housing**

- **Home Investment Partnerships Program (HOME)**
  --Rental Rehabilitation Program
  --Home Owner and Accessibility Rehabilitation Program
  --Home Ownership Program
  --Wisconsin Fresh Start Initiative provides at-risk young people with education, skills, and career direction leading to economic self-sufficiency.

- **Homeless Programs (Wisconsin Department of Administration [WDOA])**
  --HUD Emergency Shelter Grants
  --State Shelter Subsidy Grants
  --Transitional Housing

- **Local Housing Organization Grant (LHOG)**
  State grants are available to enable community-based organizations, tribes and housing authorities to increase their capacity to provide affordable housing opportunities and services.

- **HOME Loans and Home Improvement Loans (Wisconsin Housing and Economic Development Authority [WHEDA])**

- **Housing-Related Consumer Protection Services (Wisconsin Department of Agriculture [WDA])**
  The Trade and Consumer Protection Division is responsible for the investigation of unfair and deceptive business practices and handles individual consumer complaints involving landlord/tenant complaints, and home improvement transactions.

Trends

- The 2000 Census shows the Town of Knowlton has 657 occupied housing units. 588 (or 90%) of these units are owner-occupied.
- Total housing units have increased by 171 while the number of occupied housing units rose by 170.
- Recent housing growth from the 1990s makes up approximately 31 percent of the total housing stock.
- Census data indicates that the Town of Knowlton has a median home value higher that of the County or State.

Housing Issues in the Town of Knowlton

- **Limited Housing Options** - There is a need for the development of a variety of housing options to accommodate people who have different income levels or are in different phases of life.

8. Cultural Resources

Cultural resources is a broad term that can encompass many aspects of our heritage. Cultural resources may include archaeological sites and cemeteries, historic buildings and landscapes, historic transportation routes, or traditional cultural properties important to American Indians or other cultural groups. Cultural resources are those elements around us that signify our heritage and help to evoke the sense of place that makes an area distinctive. Cultural resources include buildings, sites and landscapes that help communities retain their sense of identity in an increasingly homogenized society.

Brief History of the Town of Knowlton

Among the earliest settlers in the vicinity of Knowlton was John Baptiste DuBay, who operated a trading post on the east bank of the Wisconsin River, an area now covered by Lake DuBay. By the 1850s, Knowlton was known as the location of a mill run by Thomas Stark and his three sons. The Stark mill operated until 1899, when the timber was exhausted in the area. Another early landmark was the Knowlton House tavern and hotel operated by Leonhard Guenther, who had married a daughter of Thomas Stark. Located on the Wausau and South Line Road, the tavern was a primary traveler's stopping point until the arrival of the Wisconsin Valley Railroad changed the mode of travel. Guenther had four sons who succeeded him in farming and land development in Knowlton.

Knowlton was created as a town in 1859, and included Guenther to the east until 1909 when it was split off. The Town included both the settlement of Knowlton, and Dancy, on the southern County line and along the Wisconsin Valley Railroad. Prior to the railroad, Dancy had a saw mill and planing mill, with logs supplied from land west along the Little Eau Pleine. The settlement of Knowlton was located in section 21. By 1912, the little community contained a saw mill and a grist mill owned by Charles Guenther, a store operated by C. Guenther & Sons, a Catholic Church, Methodist Church and a creamery. At that time, much of the land east of the settlement was still uninhabited.

Knowlton has experienced major changes as a result of hydropower improvements along the Wisconsin River. The system includes 21 water storage reservoirs, both natural-lake, and man-made, along the Wisconsin River. Lake DuBay, constructed in 1942, covered 6,700 acres in Knowlton and Portage County, including the site of DuBay's trading post. The Big Eau Pleine Reservoir, created in 1937 in Bergen, is also part of the system of reservoirs affecting flood control of the Wisconsin River in the area.

Properties Listed on the National Register of Historic Places (NRHP) in the Town of Knowlton

There are no properties in Knowlton currently listed on the NRHP. The Town does not have a local historic preservation commission.

The Wisconsin Historical Society maintains the Wisconsin Architecture & History Inventory (AHI) that identifies any

properties that may have been surveyed in the past; the Inventory does not convey special status and may not be current. The inventory may be reviewed at www.wisconsinhistory.org/ahi/index.html. There is one (1) historic property in Knowlton that has been previously surveyed and included in the AHI.

The State Historic Preservation Office (SHPO) has identified 17 archaeological sites and historic cemeteries in Knowlton.

Cemeteries, Burial Mounds, Other Burials – Wisconsin Statute 157.70 provides for the protection of all human burial sites, including all marked and unmarked burials and cemeteries. There are currently 133 cemeteries and burial areas identified in Marathon County, and it is likely that other cemeteries and burials may be present. Suspected burial mounds or unmarked burials must be reported to the State Burial Sites Preservation Office. If human remains are uncovered during excavation, all work must cease pending review of the Burial Sites Preservation Office. All cemeteries and burials in Marathon County should be catalogued under Wis. Stat. 157.70 to provide maximum protection of these sites.

Table 8-1: Known Cemeteries

Cemetery Name	Location	Section
St. Francis Xavier - new	Co. C., Knowlton	22
St. Francis Xavier - old	Old 51, across from Knowlton Cemetery	28
Knowlton	Old 51, across from St. Francis (old) Cemetery	28

Source: http://www.rootsweb.com/~wimarath/CemLocations.htm

Issues

- **Lack of Current Information --** Although a brief countywide historic properties survey was carried out in 1975-77, there has been no update. Many properties identified at that time may be gone, while other properties not previously surveyed may now be evaluated in a new context. It is necessary for the community to have current information about cultural resources in order to maximize planning and make the best use of historic properties.

- **No Recognition Process --** Outside the City of Wausau, there is no process to recognize historic buildings or begin to plan for their protection. Once historic properties are identified, towns and villages do not have an established mechanism for recognizing them or integrating them into ongoing planning processes.

- **Rural Character and Historic Resources --**In Marathon County, residents have expressed a strong desire to preserve the rural character of the County and raised concerns about increasing ex-urban development and the decline of working farms. An important part of rural character is the rural landscape and the buildings that convey that sense of place. While it is important to address the location and type of new development, there is also a need to preserve some visible reminders of rural character, including working farms. Without preserving some of the existing resources, including farmsteads and farmlands, the very characteristics that attracted residents will increasingly be lost.

- **Protection of Archaeological Sites and Cemeteries –** Cultural resources planning includes identification and protection of archaeological sites and historic cemeteries. The Wisconsin Historical Society maintains a list of reported sites and cemeteries, representing a fraction of sites that are actually present. This information is often overlooked and should be incorporated into the planning process for local communities.

- **Loss of Barns and Other Farm Buildings –** The residents of the Town of Knowlton are concerned with the loss of farm buildings, as these represent the heritage of the community.

9. Community Facilities

This section describes the schools, libraries, and other community facilities for the Town of Knowlton.

Maps for the Community Facilities element include Figures: 9-1, School Facilities; 9-2 Police; 9-3 Fire; 9-4, Hospitals and Clinics. All Figures are located at the end of this section.

Schools

Primary and Secondary Schools

The Town of Knowlton is served by the Mosinee School District. The Mosinee School District has an elementary school (K –3), a middle school (4-8), and a high school. All three schools are located in the City of Mosinee. The district is anticipating slow to moderate growth of 5 to 20 students per year. Current facilities are not meeting current needs due to an overcrowded elementary school, which has forced the district to create a school within a school for fourth and fifth graders at the middle school. Portable buildings house the kindergarten at the elementary school. The district has asked residents to fund construction of a new elementary school along Rangeline Road, however referenda to fund the project failed in 1999, 2000, and 2001. The district is now studying the expansion of the elementary school, which would also be put to a referendum.

Table 9-1: Mosinee School District Enrollment

Year	Enrollment PreK-12
1996-1997	2,000
1997-1998	2,021
1998-1999	2,002
1999-2000	1,975
2000-2001	2,014
2001-2002	2,041

Source: State of Wisconsin, Department of Public Instruction

Post-Secondary Educational Facilities

University of Wisconsin – Marathon County (UW-MC) - UW-MC, located in Wausau, offers lower level (freshman/sophomore) college classes, leading to a baccalaureate degree. Associate Degrees are offered in Arts & Sciences, and Bachelor's Degrees (through collaborative degree programs with UW Oshkosh and UW Stevens Point) offered in Business Administration, General Studies, and Nursing. Enrollment in 2002-2003 was approximately 1,300 students.

Northcentral Technical College (NTC) - NTC, located in Wausau, offers 40 one- and two-year programs and certificates in business, technical, health and industrial fields. Approximately 2,300 full- and part-time students attend classes, although more than 16,000 people take at least one class annually.

Libraries

The Town of Knowlton is served by the Marathon County Public Library system. The Mosinee Branch-Joseph Dessert Library located on Main Street in Mosinee has a new addition

expanding its space to 18,913 square feet, containing over 18,900 volumes, including books, magazines, and other materials. The Wausau Headquarters Library, located on First Street in downtown Wausau, completed an expansion to 82,000 square feet in 1995. The new main Wausau Library is open seven days a week and offers over 555,800 volumes, as well as facilities including Internet access.

Police

The Town of Knowlton is served by the Marathon County Sheriff's Department.

Fire and Emergency Response

Fire and Emergency Medical Services (EMS) are provided through a joint district with the City of Mosinee, the Town of Mosinee, and the Town of Bergen. Mutual aid is provided through the Village of Kronenwetter, Rudolf, and the Town of Dewey.

E-911 Dispatch Service

The Marathon County Sheriff's Department Communications Division provides E-911 Dispatch for all Police, Fire, and EMS agencies in Marathon County. The Communications Division services 85 user agencies and also provides alert paging support for the Emergency Management Office, District Attorney, and Medical Examiners Office.

The users are served by a microwave linked voted repeater radio system, consisting of a control center at the Sheriff's Department, and nine remote radio tower sites spread throughout the County. The system is also utilized by the Marathon County Highway Department and the Wausau Fire Department to support their radio communications. The 37 base radio transmitters and 479 mobile radios that make up the integrated system are maintained and serviced by the Sheriff Department's radio technician.

Hospitals

The major hospital in Marathon County is Wausau Hospital at 425 Pine Ridge Boulevard in Wausau. Wausau Hospital was created in the 1970s from a merger of St. Mary's Hospital and Memorial Hospital. A new building was completed in 1979 and expansions followed in 1982 and 1992. The 321-bed facility is a multi-specialty regional health center serving a 12-county region in north central Wisconsin. Annual admissions in 2001 totaled 13,631.

Wausau Hospital and its parent corporation, Community Health Care, and other nearby hospitals are part of the Wisconsin Valley Health Network.

St. Joseph's Hospital is located at 611 Saint Joseph Avenue in Marshfield and offers a full array of services, specialty services and a complete rehabilitation unit.

Some residents also report receiving care at St. Michaels Hospital in Stevens Point.

Ministry Health Care announced plans in July 2002 to construct a 104-bed, $100 million hospital and medical office complex in Weston near the intersection of STH 29 and CTH X. The hospital is planned to open in 2004.

North Central Health Care (NCHC) – In addition to the hospitals and clinics described above, Marathon County is served by NCHC, a public agency, that also serves Langlade and Lincoln counties. The NCHC main campus is located at 2400 Marshall Street in Wausau. Additional offices are located in Antigo (Langlade Health Care Center) and Merrill and Tomahawk (Lincoln Health Care Center). According to their web site, NCHC offers outpatient, day hospital, community support and inpatient services for mental/emotional problems; vocational, life skill training, early intervention, housing and care management services for the developmentally disabled; and assessment, individual and outpatient group counseling, intensive programming, day hospital, referral for residential and inpatient treatment, and education for alcohol and other drug problems. Services for detoxification and for persons suffering from problems with gambling addiction are also offered.

NCHC operates a nursing home (Mount View Care Center) that offers skilled nursing services at the main campus in Wausau. This facility has a licensed capacity of 320 and serves persons requiring either short term or long term skilled nursing care because of complex physical needs, psychiatric and neurological diseases, dementia or behavior problems

Child Care

The Wisconsin Child Care Resource and Referral (CCR&R) Network is a membership organization made up of 17 community-based CCR&R agencies serving the State of Wisconsin.

CCR&R agencies assist parents in selecting quality childcare, help to increase the supply of childcare in areas that may be lacking sufficient care, offer information and technical support to potential child care providers, and give technical assistance and support to existing childcare programs.

Each agency manages a database of existing childcare providers and programs, collects data about childcare rates, provider and teacher salaries, the number of parents and children using their services, the type of care requested and the children's ages.

The community-based CCR&R agencies that provide services to Marathon and adjacent counties are:

Table 9-2: Child Care Referrals

Counties	Agency	Contact Information
Langlade, Lincoln, Marathon, Taylor	Child Care Connection	http://www.childcareconnectionrr.org/ (800) 848-5229
Portage	Mid Wisconsin Child Care Resource & Referral	715-342-0788
Wood	Child Care Resource & Referral of Central WI	800-628-8534

Issues:

- **New Fire Station Location** - A new regional headquarters is planned for the fire district in a location further away from the Town than its current location. This new location is causing some concern among residents that response times could be longer as a result of the greater distance.

10. Parks

Maps for the Parks element include Figure: 10-1, Recreation Facilities. All Figures are located at the end of this section.

Existing Parks, Trails and Open Space

Local Parks, Trails and Open Space

Ashley Park: Marathon County owns and maintains Ashley Park located in the southeast part of the Town of Knowlton off Sandy Creek Road. Ashley Park is a 160-acre County park located on Lake DuBay. Currently, Ashley Park is undeveloped. Boat access is provided. The Marathon County Comprehensive Outdoor Recreation Plan 1999-2004 (p. 8-3) identifies the Knowlton/Lake DuBay area as having a service deficiency. The County would like to acquire more land and improve the Ashley Park.

County or State Parks, Forest and Trails

Big Eau Pleine Park: Big Eau Pleine is the County's largest park at 1,450 acres, located on a peninsula on the north shore of the Big Eau Pleine Reservoir in Green Valley and Bergen. Active recreation areas are concentrated in two main sites on the shores of the reservoir. Park facilities include: campgrounds, picnic tables, grills, restrooms, Civilian Conservation Corps (CCC)-era shelters, drinking fountains, boat launches, swimming beaches, play equipment. The extensive trail system allows for cross-country skiing, hiking, and nature walks. Fishing is a popular activity.

Mission Lake Park: Mission Lake is a 122-acre park located on the west bank of Mission Lake in the Town of Reid. Facilities include three shelters, restrooms, picnic tables, grills, children's play equipment, and drinking fountains. The main features are a sand beach and boat launch, with fishing a popular activity. A planned segment of the Ice Age Trail will also be constructed in the park.

George W. Mead Wildlife Area: The George W. Mead Wildlife Area is a 20,000-acre Wisconsin Department of Natural Resources (WDNR) conservation and recreation area that is comprised of land south of CTH C in the towns of Bergen, Green Valley and Day. Much of the area is wetland surrounding a series of lakes and flowages connected by the Little Eau Pleine River. Portions of the Mead Wildlife Area are open for hiking, hunting, and fishing.

Nine Mile Forest Unit: Nine Mile Forest, located in Rib Mountain and the Town of Mosinee, is known as a recreation area with many miles of hiking, mountain biking, and cross-country ski trails. Skiing is promoted with a ski chalet and over 25 kilometers of one-way loops. The forest is open to hunting and snowmobiling. Nine Mile has 4,755 acres of mixed uplands, marshes, and water impoundments. The Kronenwetter and Leather Camp Forests are located in portions of the Town of Reid, Village of Kronenwetter and Town of Guenther. Together these County forests are nearly 10,000 acres in size. The land is a mix of upland forests and marsh. The unit is open to recreational hunting, snowmobiling, and hiking. Improved and woods trails are maintained for access.

Rib Mountain State Park: Rib Mountain State Park is located within the Town of Rib Mountain. The park's main feature is Rib Mountain, which at 1,924 feet above sea level is one of the highest elevations in the State of Wisconsin. The park surrounds the mountain and has the following facilities: a picnic area with 65 tables, a camping area with 31 developed sites, 3 hiking trails, a nature trail, and a downhill skiing area.

Park System Needs

The Community does not have any park needs as it is well served by County recreational facilities.

Issues

There were no significant issues identified.

11. Economic Development

The condition of the local economy directly influences local growth and development, and therefore must be considered when planning for a community's future. Employment patterns and economic trends generally occur on a regional scale. Oftentimes residents of one community work in another. Similarly changes in a major industry can impact jobs and growth far beyond the community where the business is physically located.

It is therefore important to understand a local community's economy in light of its regional context. The following section provides a brief overview of the economy in Marathon County, in terms of key economic sectors and the regional labor force. Potential economic development opportunities and/or issues regarding the local economy are also identified.

County Economic Environment

Originally, the Marathon County economy was based on forest resources and diversified agriculture. Increased population and infrastructure – railroads, roads and dams for power enabled the area to evolve beyond simple agricultural and logging operations. Resources that once left the area unprocessed were now transformed into finished products in the County, providing employment opportunities and adding value in forest products and agricultural processing. A number of related manufacturing operations grew up in the area, some based on forest products and agricultural products, others supplying the existing industries with fabricated metal products. As these industries progressed, so did industries such as transportation, communications, public utilities, government, trade, finance, insurance and real estate. The County now enjoys a well-diversified economy.

Agricultural Economy

The agricultural economy is subject to national and international pressures, creating challenges for rural areas seeking to adapt to the changing economic environment and preserve their rural agricultural heritage.

The Marathon County agricultural economy is in a depressed state due to a downturn in prices for agricultural goods such as milk and ginseng. At the same time that prices for farm commodities are low, cash rents for Wisconsin farmland has increased, and the percentage of farm equity associated with real estate values have increased significantly. The average cost for agricultural land being converted to non-farm uses has increased from $544 per acre in 1990 to nearly $1,200 per acre in 2000; this compares with the average cost for agricultural land continuing in agricultural use, which has increased from $612 per acre in 1990 to nearly $1,000 per acre in 2000. When farms are not profitable, and the value of land rises farmers have a harder time competing for the land base.

Other forces that create an environment of change in the rural area:

- Net farm profits are increasingly a function of Federal United States Department of Agriculture (USDA) support payments.
- The average age of the current agricultural owner/operator is nearly 55; a large number are nearing retirement.
- The low entry rate into agriculture reflects the high capital investment and low profit margins.
- The number of dairy herds decreased by 10% (1565 to 951 farms) in the past 13 years, and the total number of cows decreased from 77,000 in 1990 to 64,000 in 2000, a decrease of 17%.
- Dairy production is now more concentrated; the average size of dairy herds increased from 42 cows in 1990 to 62 cows in 2001. Nearly 50 dairies have over 300 animal units (200 cows), and 12 dairies have more than 1,000 animal units (more than 700 cows.)
- Local milk production is not sufficient to reliably meet the demand of local dairy processors.
- Crop land and open space are being broken up into smaller fields by rural residences.
- Crop land production is being concentrated into fewer, larger operations.
- Soil erosion is increasing and soil organic matter content is decreasing.
- Environmental regulation of farms by the State and Federal government continues to increase. Agriculture is identified as a major non-point source of water pollution (sediment and nutrients) in the U.S.
- Larger farm equipment damages local roads and farm traffic is increasing.
- Conflicts between various land uses in rural areas are increasing.

** Source: Marathon County Task Force on the Rural Economy, Agricultural Issues in Marathon County ,January 10, 2003 and Report of the Marathon County Task Force on the Rural Economy, April 2003.*

Key Economic Sectors

Key sectors of a regional economy can be identified by size; by growth or decline in employment; by a concentration of the industry in the local area exceeding the national concentration. An industry that shows a higher concentration of employment than the national average is considered a "basic industry" and is identified by a technique called "Location Quotient" analysis. Basic industries are those sectors that export a product or service from the local community into the national or international economy. They are a critical part of the "economic engine" for a region, affecting the growth and health of many dependent sectors such as retail, transportation, construction, and local services.

Table 11-1: Top 10 Industry Groups Based on Number of Employees Marathon County (March 2001)

Industry Group	Employers	Employees	Numeric change	
			1-year	5-year
Health Services	139	4,646	251	-276
Lumber & Wood Products	41	4,438	-30	253
Educational Services	22	3,792	108	243
Eating and Drinking Places	192	3,554	219	335
Fabricated Metal Products	32	3,458	-184	168
Insurance Carriers	24	3,339	-171	*
Miscellaneous Retail	120	3,142	206	1,206
Paper and Allied Products	11	2,649	4	*
Industrial Machinery & Eqmt	37	2,642	41	697
Wholesale Trade – Durable	164	2,521	-89	63

***data suppressed to maintain confidentiality**

Source: Wisconsin Department of Workforce Development, ES-202, December 2001

Local Economic Environment

Table 11-2 shows a breakdown of employment by industry in the Town of Knowlton. Data show that most people were employed in the self -employed/farm sector, with 161 employees. Commercial is the second largest employment sector with 23 workers.

Table 11-2: Population and Employment by Sector, 2000

POPULATION	**1688**
EMPLOYMENT:	
Commercial	23
Manufacturing	18
Service	12
Other	14
Self-Employed/Farm	161
TOTAL	**228**

Source: Marathon County 2030 Population and Employment Projections Methodology Report, NCWRPC, 6/10/03

Employment Projections

Information on employment in Marathon County is gathered separately for non-farm and farm employment. The Wisconsin Department of Workforce Development (DWD) collects data on non-farm employment. The DWD estimated non-farm employment in Marathon County to be 49,407 in 1990 and 65,630 in 2000. This represents about a 33 percent increase over ten years. Data on farm employment is collected by the Census of Agriculture and consists of hired farm labor and operators. In 1987, farm employment in Marathon County was estimated to be 11,643 and in 1997 it was estimated to be 8,298. This represents a decrease of almost 29 percent.

The North Central Wisconsin Regional Planning Commission (NCWRPC) computed employment projections, based on the assumption that the historical growth rates described above would continue through 2030. These projections are shown in Table 11-3.

Table 11-3: Employment Projections in 5-Year Increments

	Total Employment by Year						
	2000	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Knowlton	228	232	236	240	244	248	252
County	72,508	75,625	78,742	81,859	84,976	88,093	91,210

Source: Marathon County 2030 Population and Employment Projections Methodology Report, NCWRPC, 6/03

The employment forecast in Table 11-3 indicates increased employment for the Town of Knowlton. By the year 2030, it is estimated that the Town will provide employment to 252 workers. This represents an employment increase of 11% and assumes a moderate growth rate based on the rate of change in employment between 1990-2000 for non-farm employment. The estimates suggest an overall increase in employment by 2030 between 7% if a lower than expected growth rate occurs and 24% if a higher growth rate occurs.

Table 11-4: Percent Change in Employment, 2000-2030

	Percent Change in Employment by Growth Rate		
	Low Growth	**Moderate Growth**	**High Growth**
Knowlton	+7	+11	+24
Marathon County	+21	+26	+34

Source: Marathon County 2030 Population and Employment Projections Methodology Report, NCWRPC, 6/03

Major Local Employers

The area is largely agricultural with most jobs located on local farms.

Issues

None identified.

12. Intergovernmental Cooperation

This analysis presents an inventory of existing mechanisms that the Town of Knowlton uses to coordinate with other units of government, including: Marathon County, adjacent towns, the school district, the State of Wisconsin and the Federal government. The purpose of this analysis is to identify the existing cooperative mechanisms and summarize the major challenges and issues regarding intergovernmental cooperation and regional planning, including

- Opportunities to reduce or eliminate duplication of services;
- Incompatible goals, policies and development;
- Mechanisms for conflict resolution;
- Opportunities for joint planning and decision-making.

Mechanisms for cooperation and coordination primarily take the form of intergovernmental agreements, leases and contracts, and regulatory authority. These can occur between the Town of Knowlton and other local, regional, State or Federal entities. Following is a brief description of the various functional areas and services that require intergovernmental coordination at various levels.

Local and Regional Level Cooperation

Shared Services

Fire and Emergency Response- Fire and Emergency Medical Services (EMS) are provided through a joint district with the City of Mosinee, the Town of Mosinee, and the Town of Bergen. Mutual aid is provided through the Village of Kronenwetter.

Cooperative Practices

- **City of Mosinee** - Fire and EMS services are provided through a joint district with the City of Mosinee, the Town of Mosinee, and the Town of Bergen.

Surrounding Towns-

- **Town of Bergen** – Fire and EMS services are provided through a joint district with the City of Mosinee, the Town of Mosinee, and the Town of Bergen. Road agreements also exist.

- **Town of Mosinee** – Fire and EMS services are provided through a joint district with the City of Mosinee, the Town of Mosinee, and the Town of Bergen.

- **Village of Kronenwetter** – Mutual aid is provided through the Village of Kronenwetter.

Marathon County- The County provides several services to the Town including: law enforcement through the Sheriff's

Department, 911 dispatch service, access permits, maintenance and improvement of County Highways, planning and permitting oversight regarding shoreland, wetland and floodplain regulation, private sewage system regulation, and animal waste and manure management. The County also provides oversight on compliance with County soil and water conservation policy for the Farmland Preservation Program.

Regional Agencies- The North Central Wisconsin Regional Planning Commission (NCWRPC) provides planning and mapping assistance

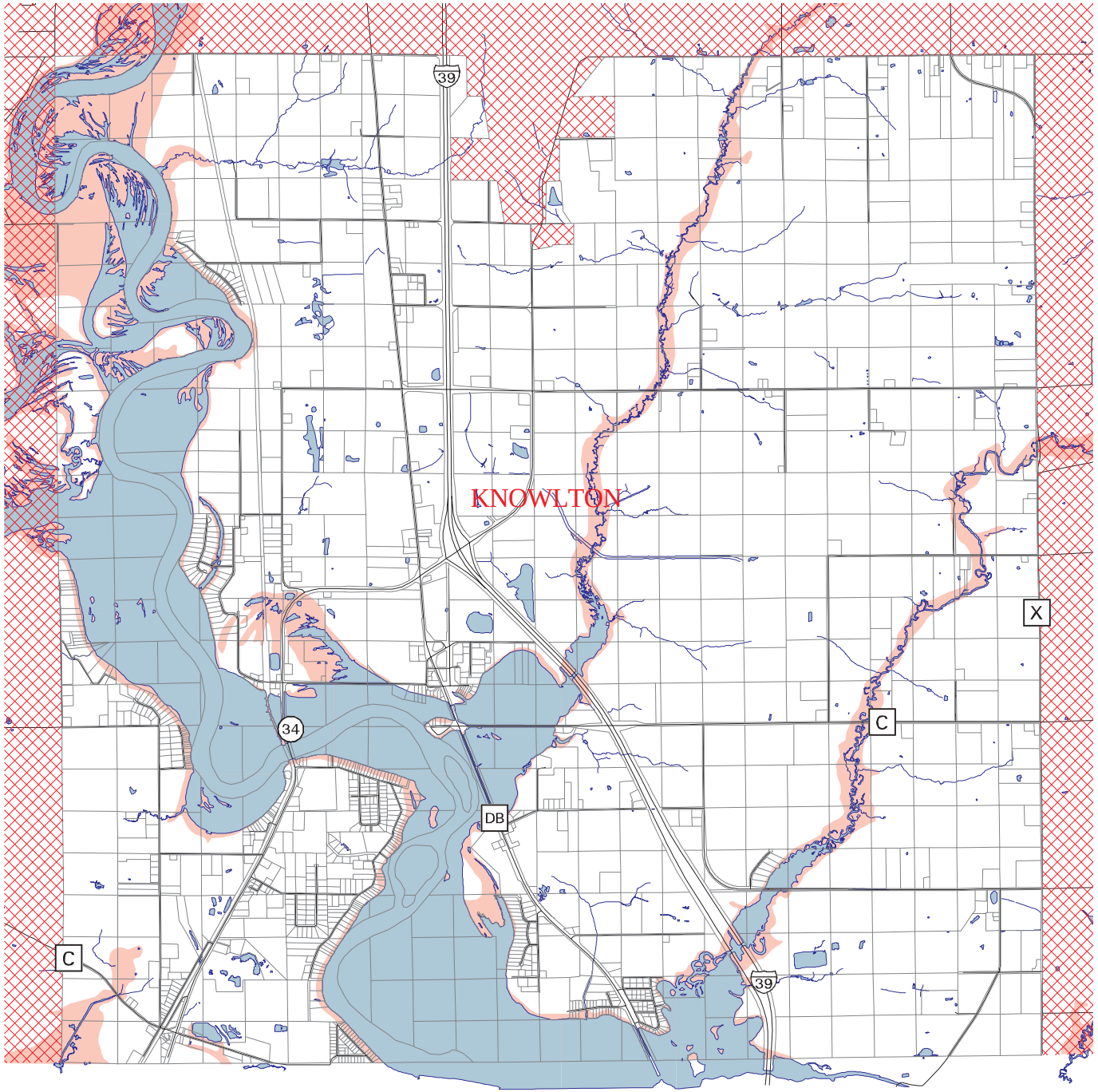
State and Federal Level Cooperation

State and Federal Agencies- The Town has little direct contact with State or Federal agencies. However State agencies regulate certain activities such as access onto State roads, shoreland, floodplain and wetland zoning oversight, navigable waters protection, compliance with water quality standards, farmland preservation tax credits and managed forest tax credit programs.

Issues

- **Airport Expansion** - The relocation or expansion of the Central Wisconsin Airport (CWA) on the northern edge of the Town may impact the community in the future.

- **County Zoning** - The Town would like its recommendations on zoning to be better utilized by the County.



FEMA Floodplain

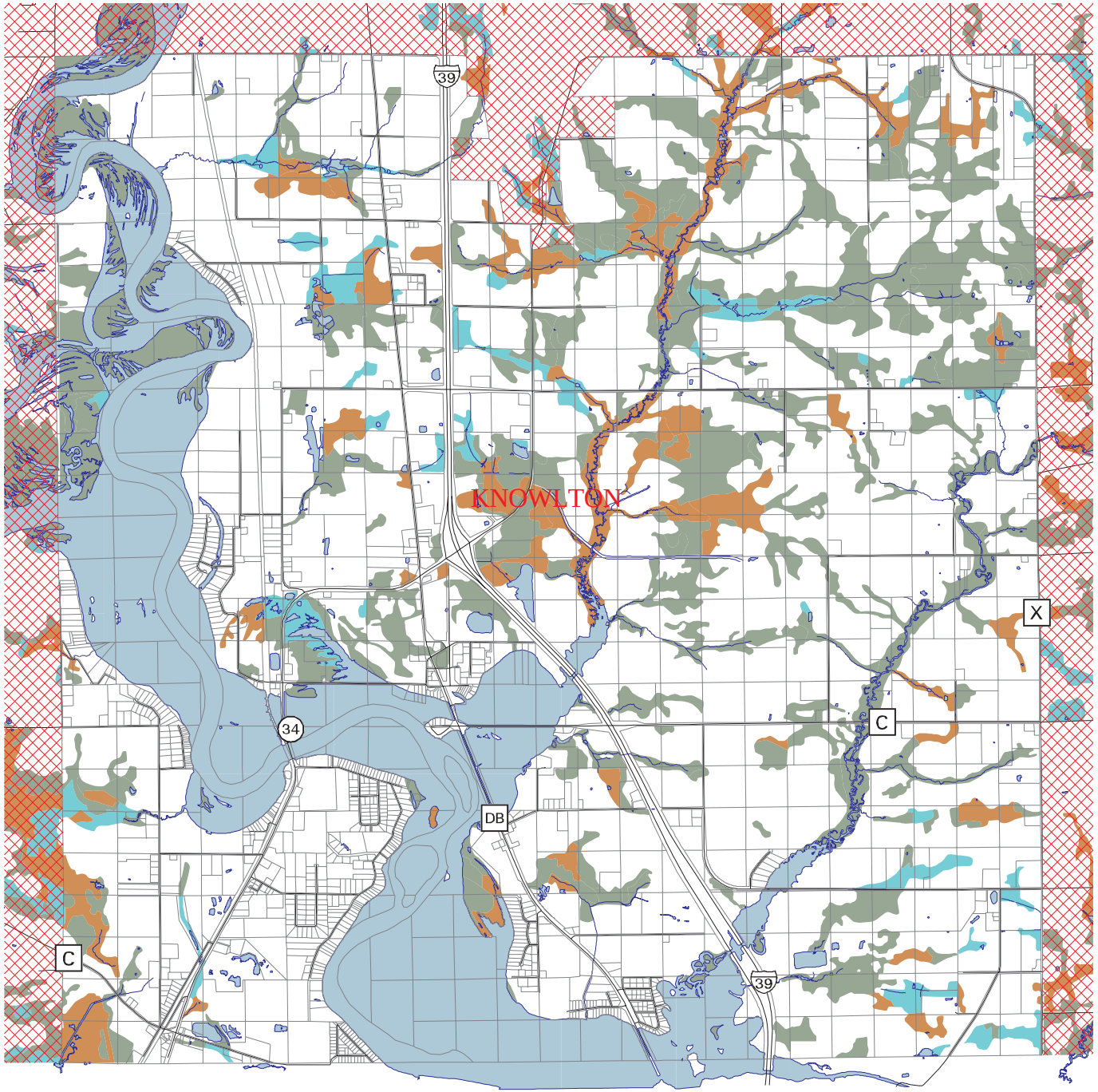
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 3-1

100 Year Floodplain

KNOWLTON

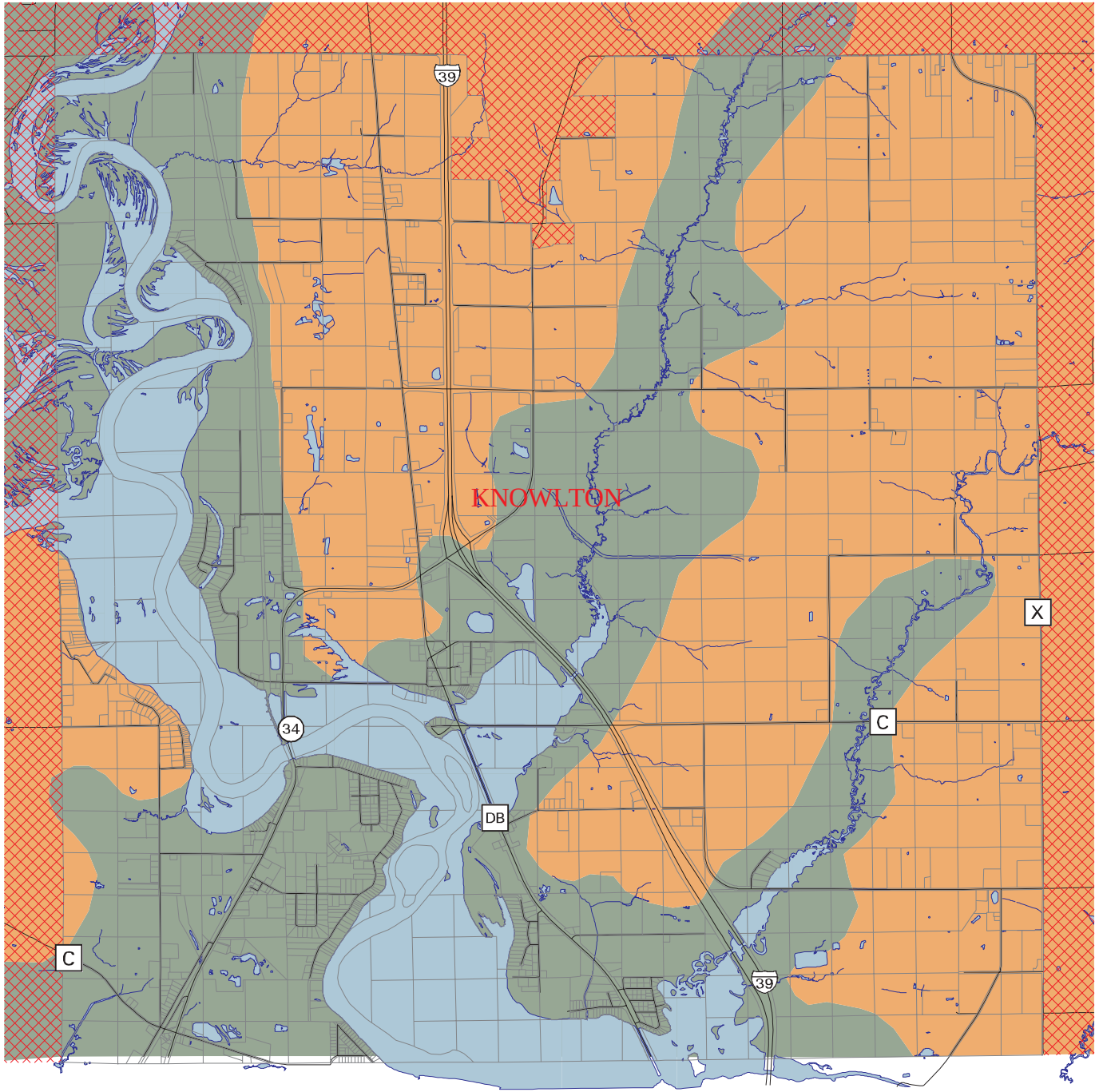


Aquatic beds
Emergent/wet meadow
Filled/drained wetland
Flats/unvegetated wet soil
Forested
Scrub/shrub

N

Indicates other Municipality
Map Developed by Marathon County CPZ & GIS 2005

Figure 3-2
Wetland Types
KNOWLTON



Magnor-Cable
Loyal-Withee-Marshfield
Kennan-Hatley
Marathon-Mylrea-Moberg
Fenwood-Rietbrock-Rozellville
Mosinee-Meadland-Dancy
Mahtomedi-Fordum-Sturgeon
Chetek-Rosholt-Oesterle
Mahtomedi-Graycalm-Meehan
Cathro-Seelyeville

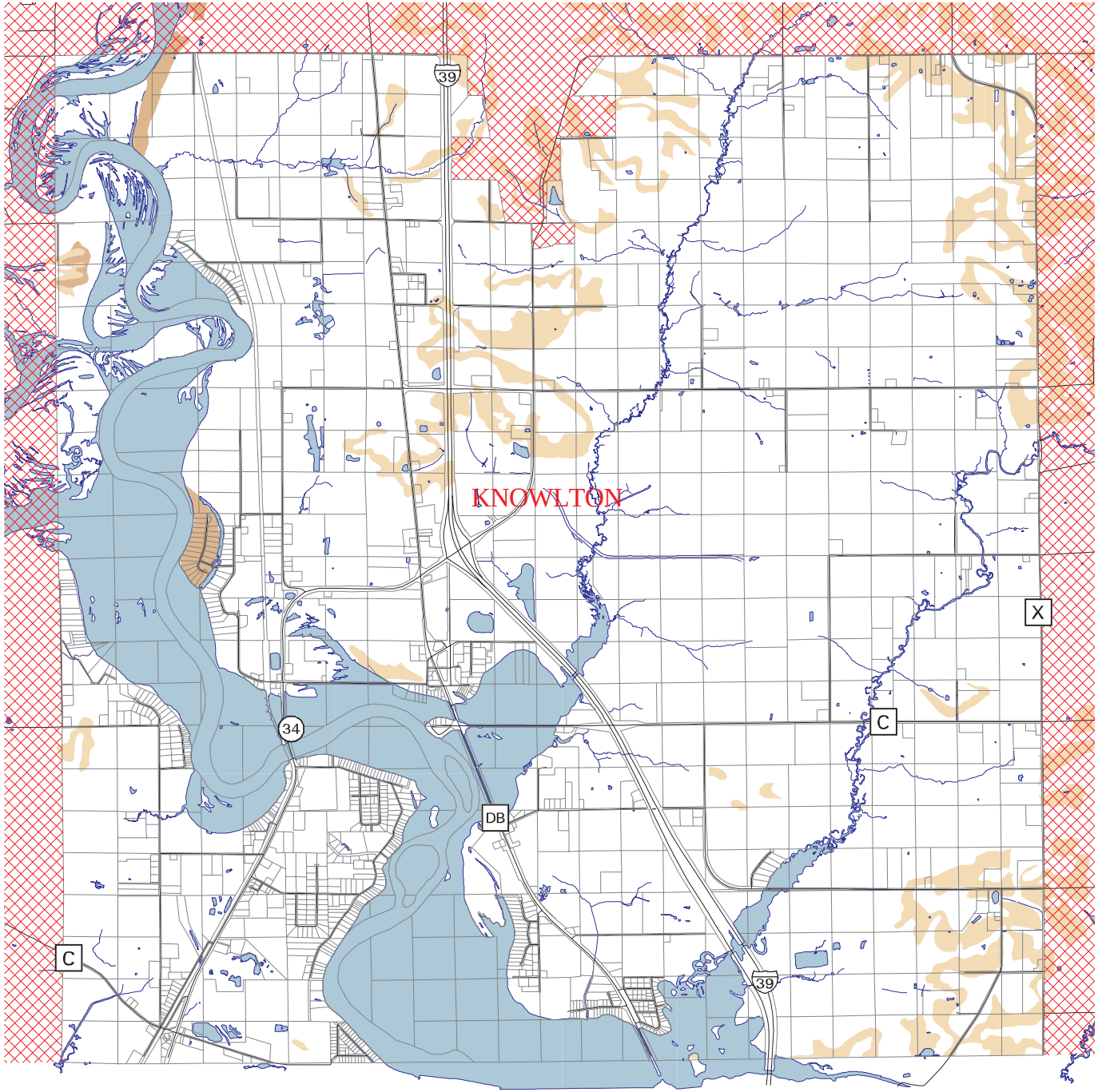
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 3-3

Soil Associations

KNOWLTON



Group 1: The soils in this group are the very best in Marathon County. The USDA classification for these soils are prime farmland Class 2 due to climate and growing season length. They are well suited for growing all crops.

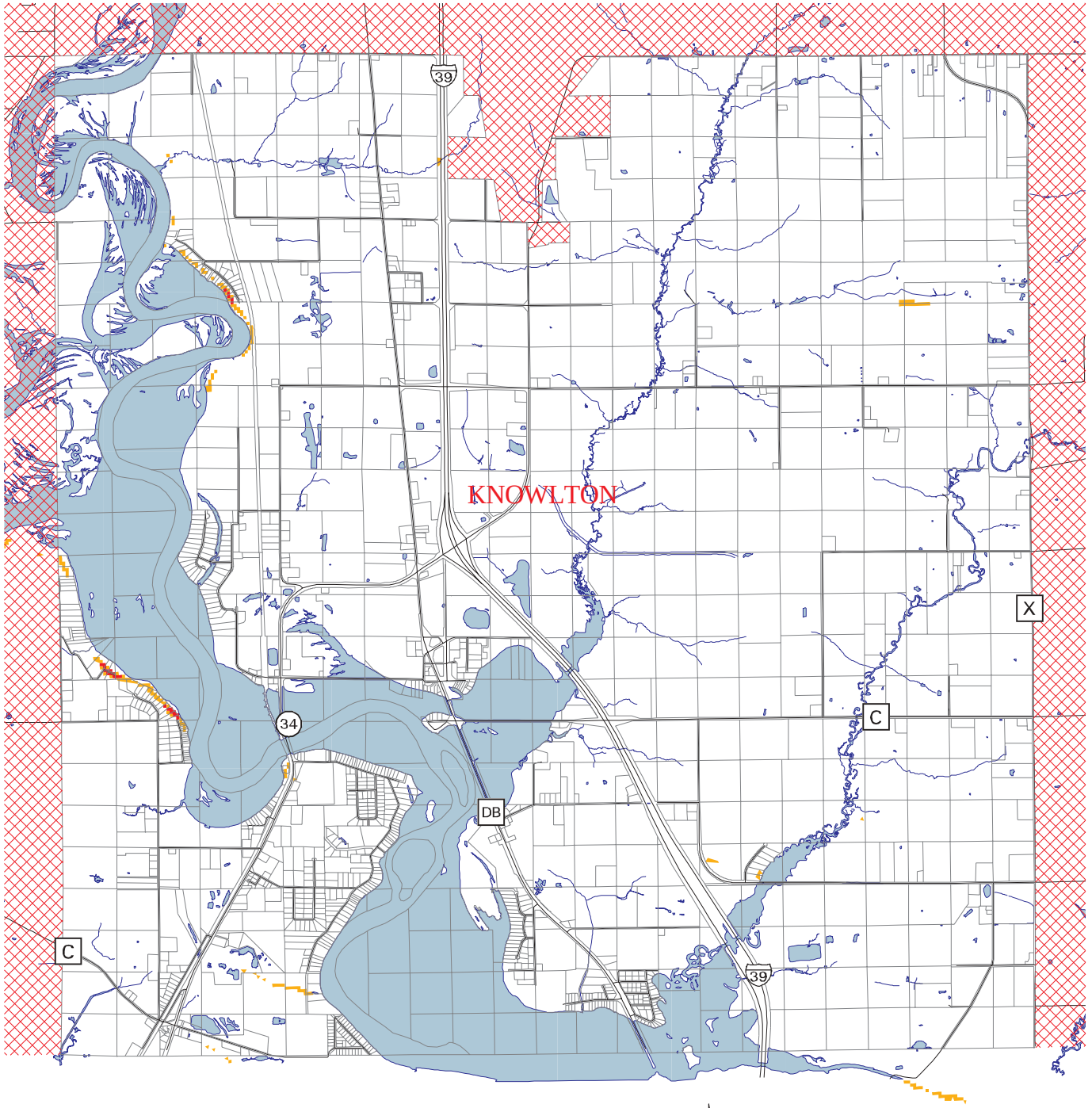
Group 2: The soils in this group are very good agricultural soils. They also are designated as prime farmland Class 2. These soils differ by having restricted drainage. In wet years they are more difficult to work and crops needing well drained condition (alfalfa, ginseng) do very poorly.

Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 3-4

Prime Farm Land
KNOWLTON



D - generally 12-20% slopes

E - generally greater than 15% slopes.

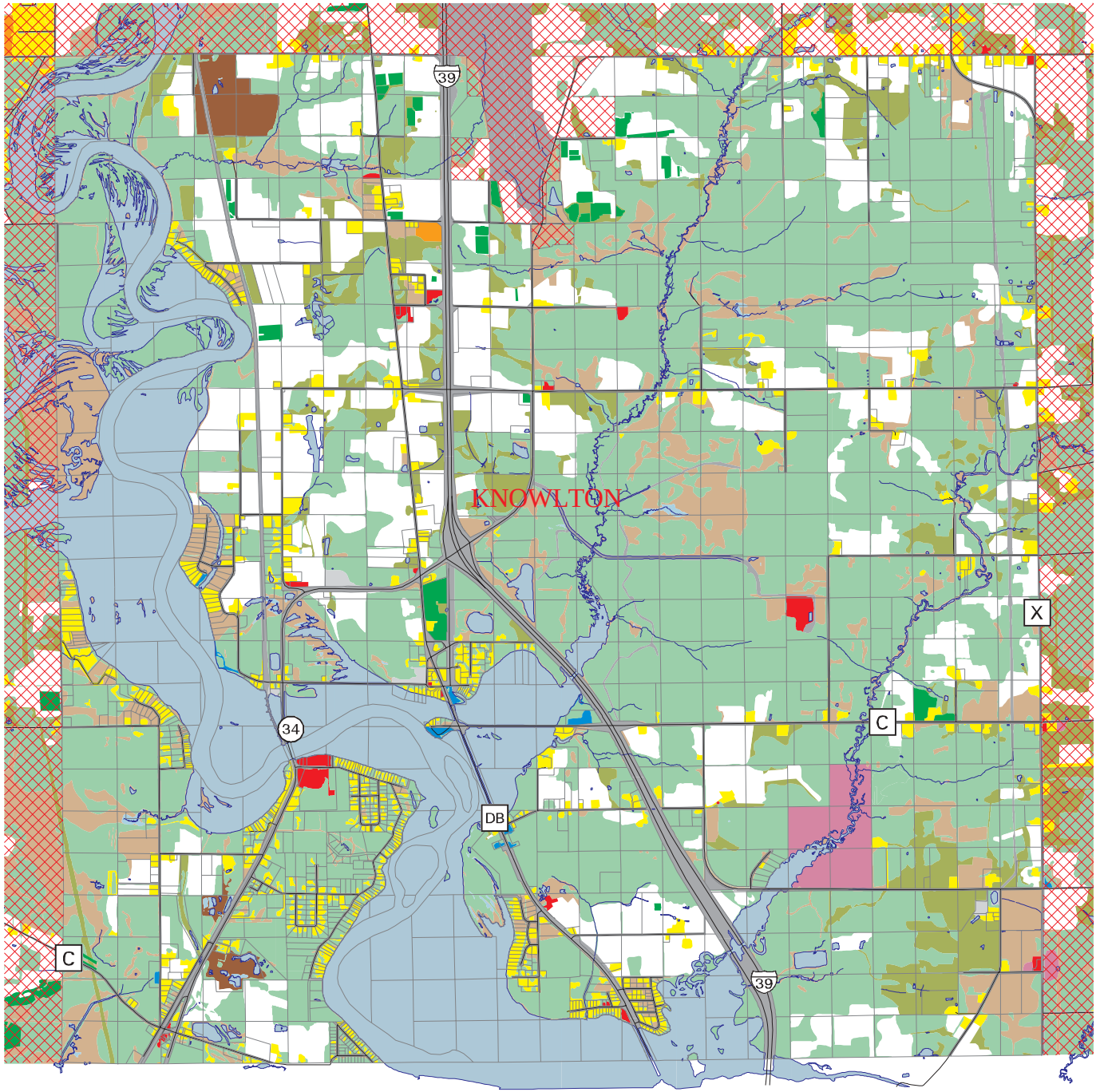
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 3-5

Slopes

KNOWLTON



Single Family Residential
Multi-Family Residential
Commercial Services
Industrial
Quarries/Gravel Pits
Crop Land
Specialty Crops
Other Agriculture
Public/Quasi-Public
Recreation
Woodlands
Water
Transportation
Vacant/Barren Land

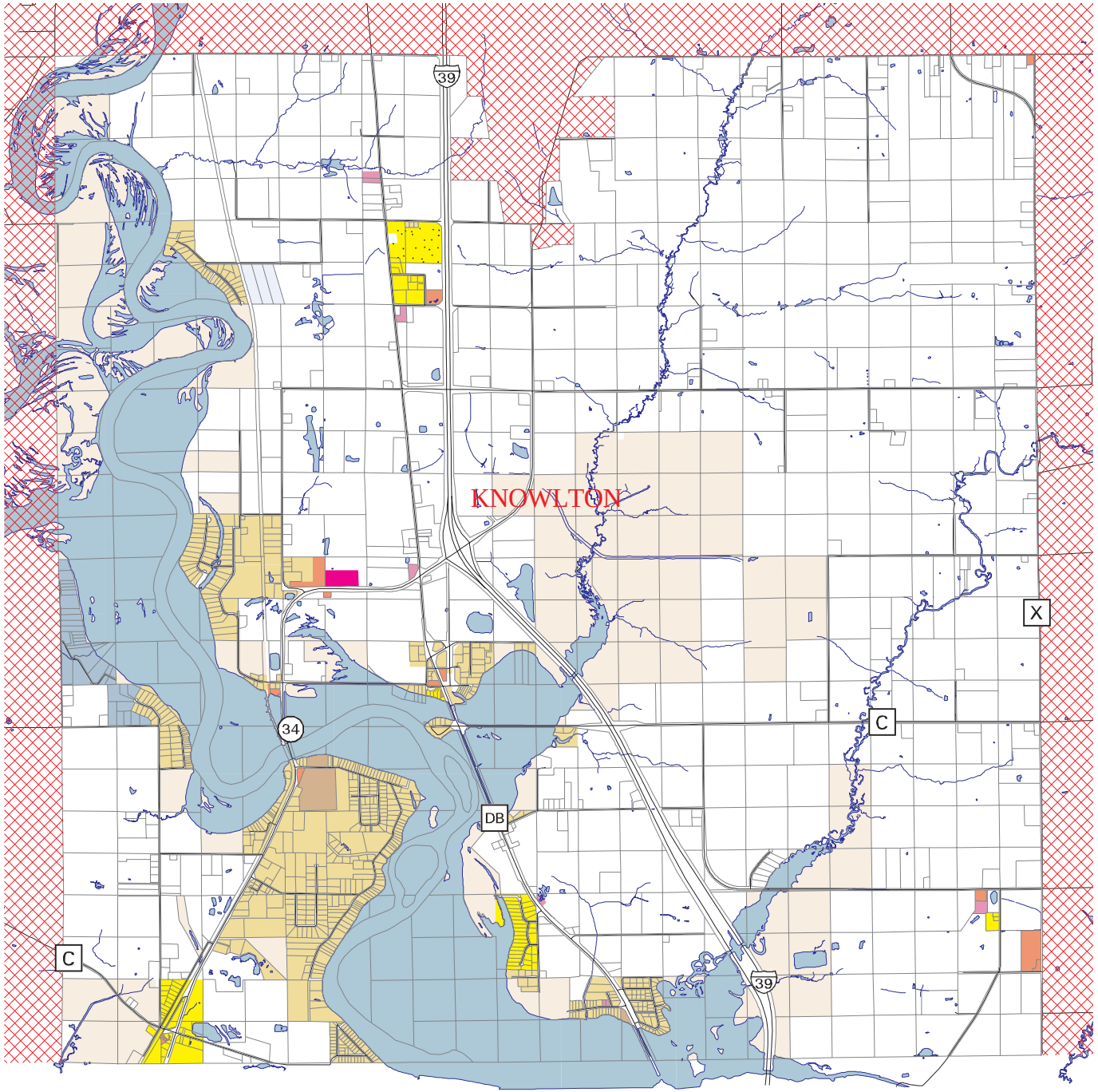
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 4-1

2000 Landuse/Landcover

KNOWLTON



RS-1/20 RM RC A-3 A-4-M AE C-1 UV WP-C
RS-1/40 RP A-1/1 A-3-M AR AE/M M-1 WP-A
RS-2 CV A-2 A-4 AR/M HI M-2 WP-B

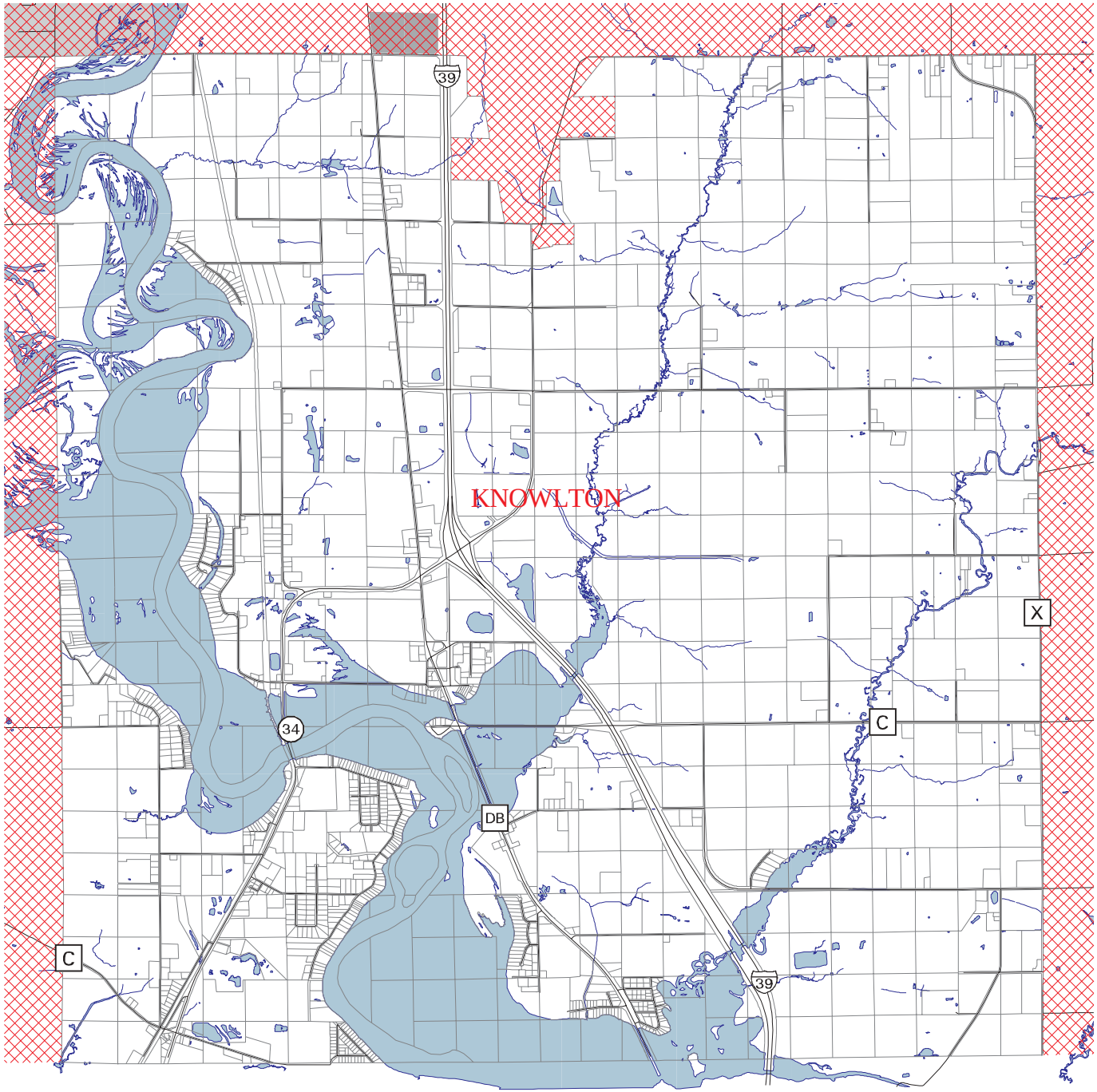
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 4-2

County Zoning

KNOWLTON



Exclusive ag zoning

Farmland pres contracts

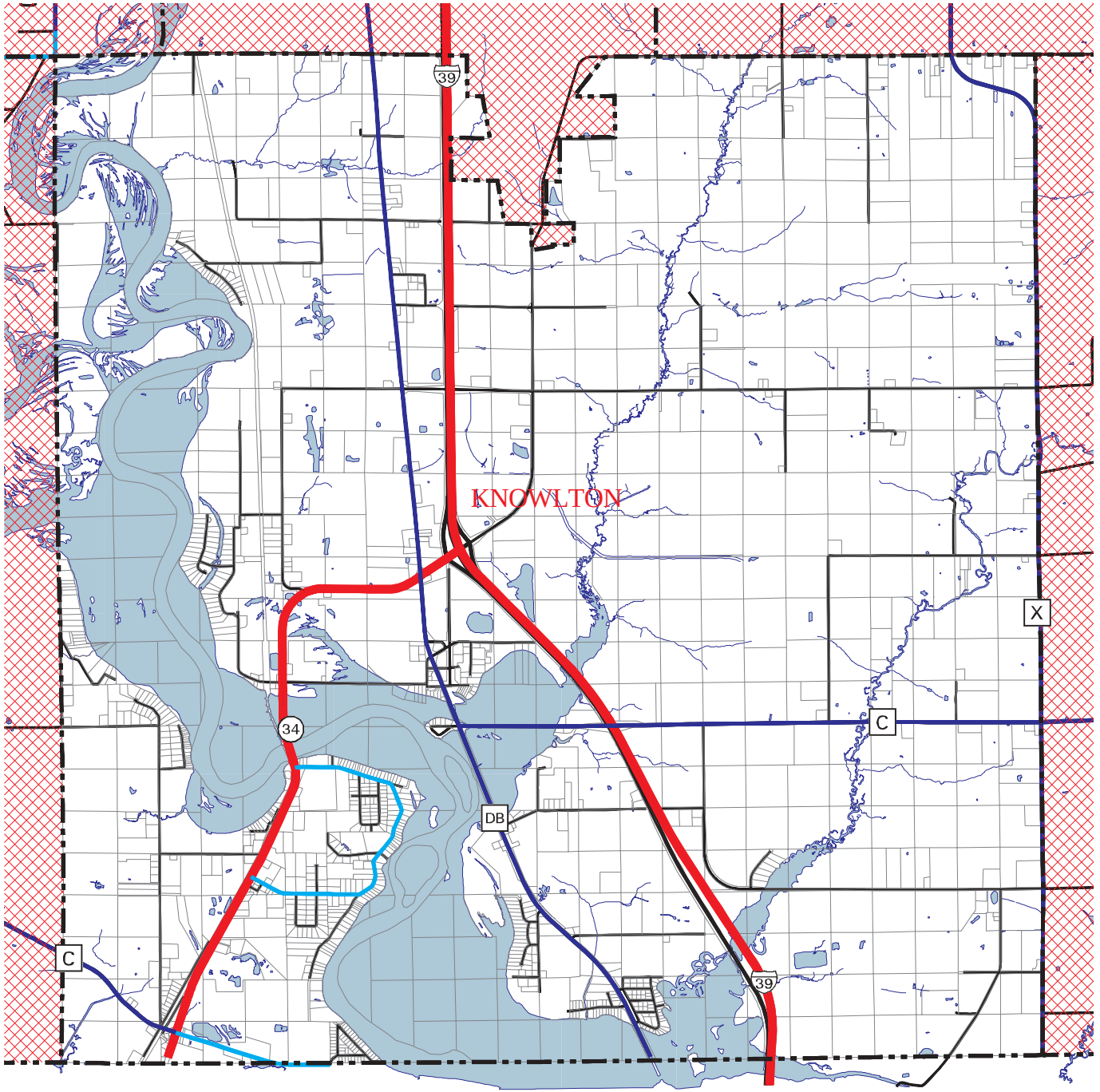
Figure 4-3

Exclusive Ag & Farmland Preservation

KNOWLTON

Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005



Principal Arterial
Minor Arterial
Major Collector
Minor Collector

F County Highways
52 State Highways
51 US Highways
39 Interstate

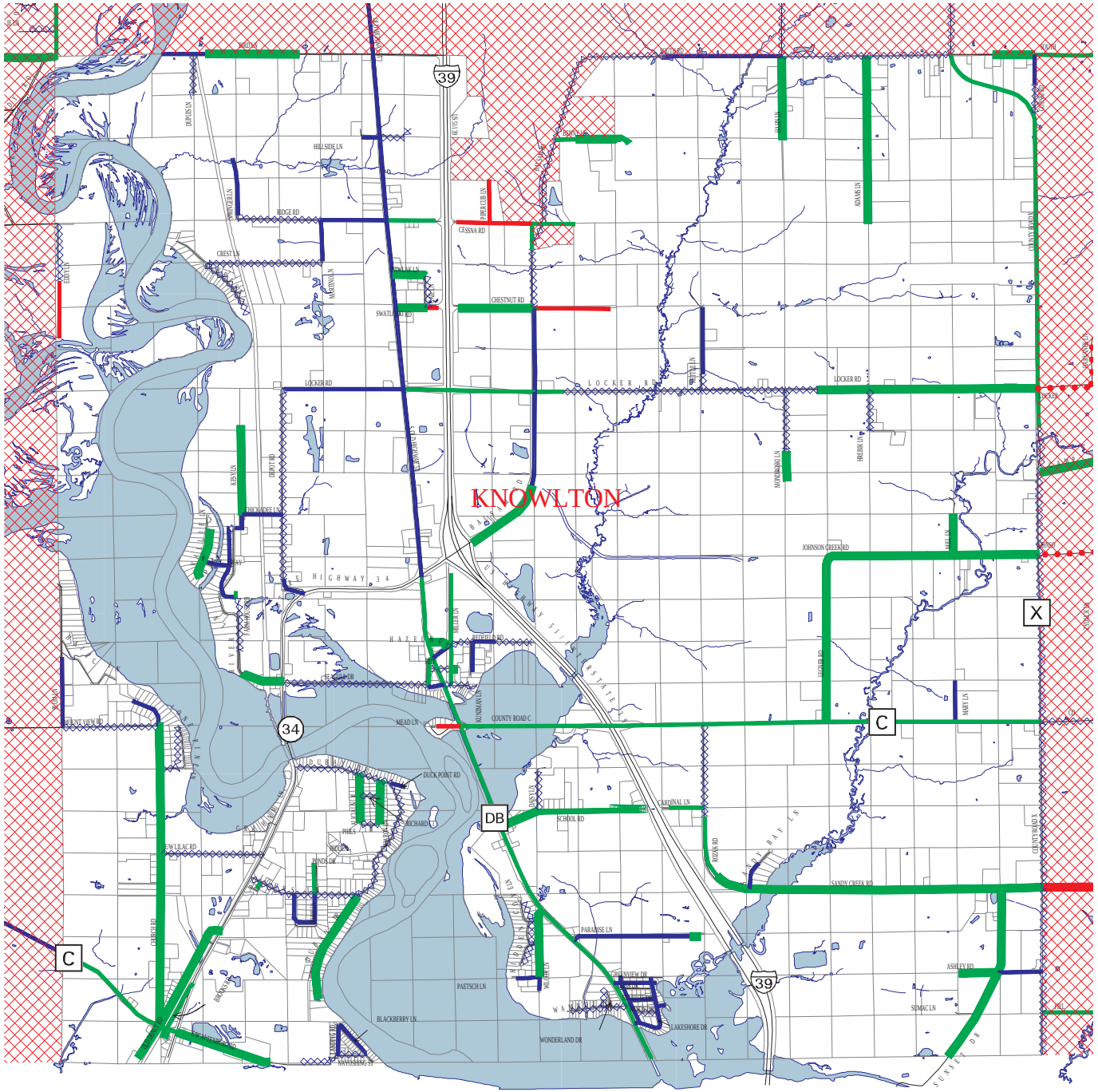
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 5-1

Functional Classification of Roads

KNOWLTON

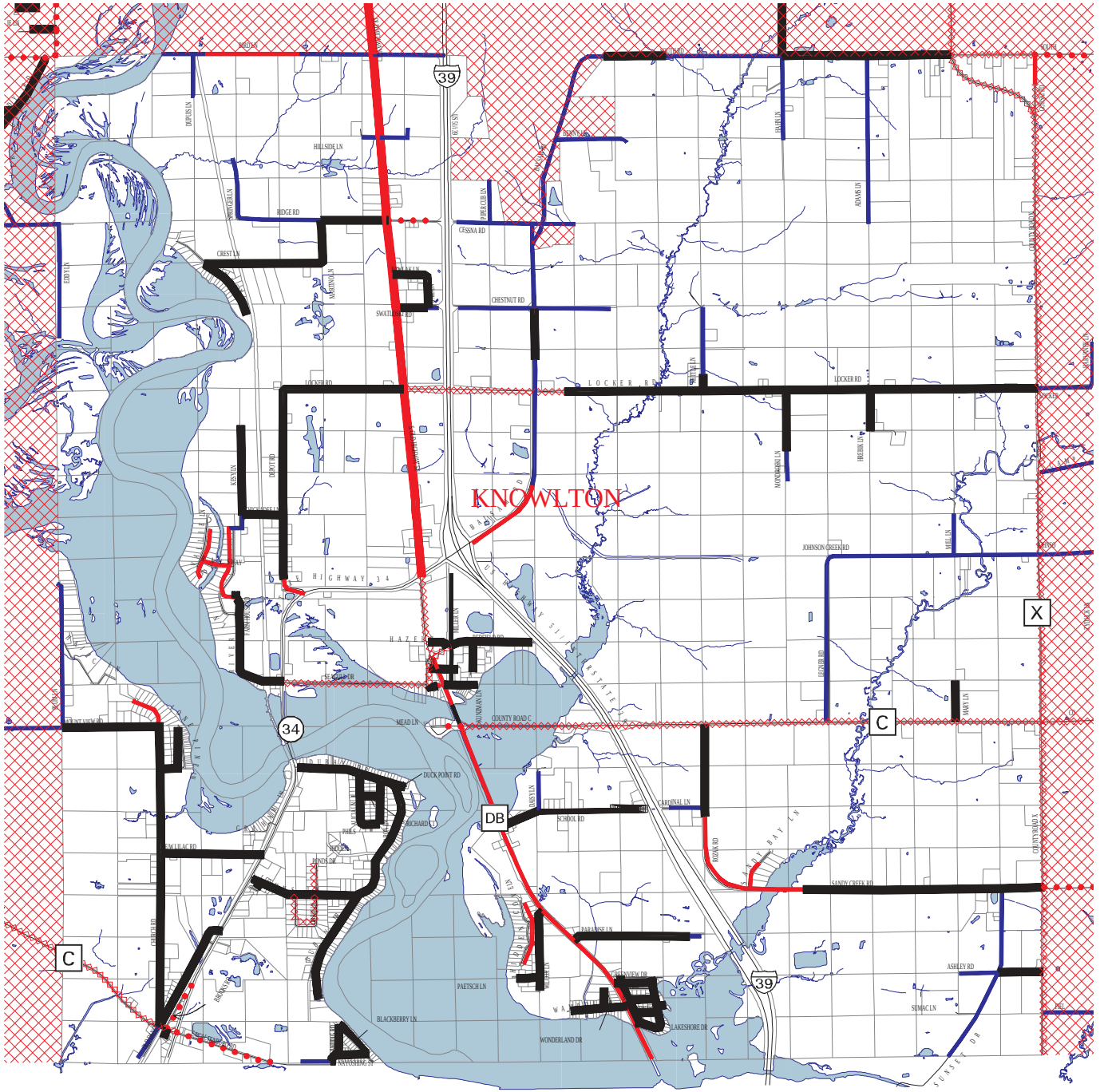


No Data
Failed
Very Poor
Poor
Fair
Good
Very Good
Excellent

Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 5-2
Road Surface Rating
KNOWLTON



No Data
Concrete Pavement
<1" Wearing Surface
Asphalt Pavement
Asphalt Pavement on Concrete
Asphalt Pavement with Base >7"
Asphalt Pavement With Base <7"
Unimproved Road
Brick or Block Pavement

N

Indicates other Municipality

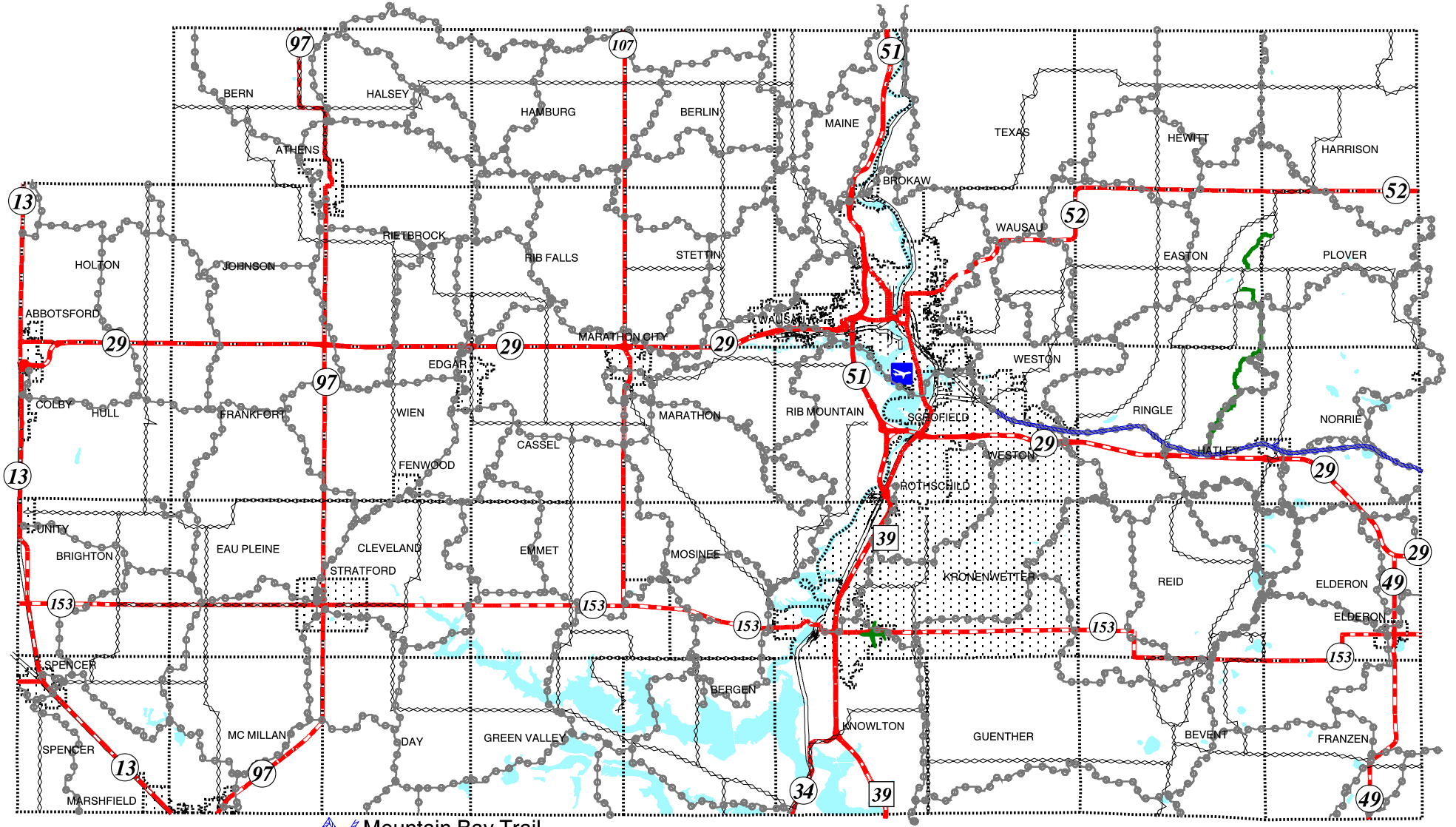
Map Developed by Marathon County CPZ & GIS 2005

Figure 5-3

Road Surface Types

KNOWLTON

MARATHON COUNTY
REGIONAL TRAILS & TRANSPORTATION

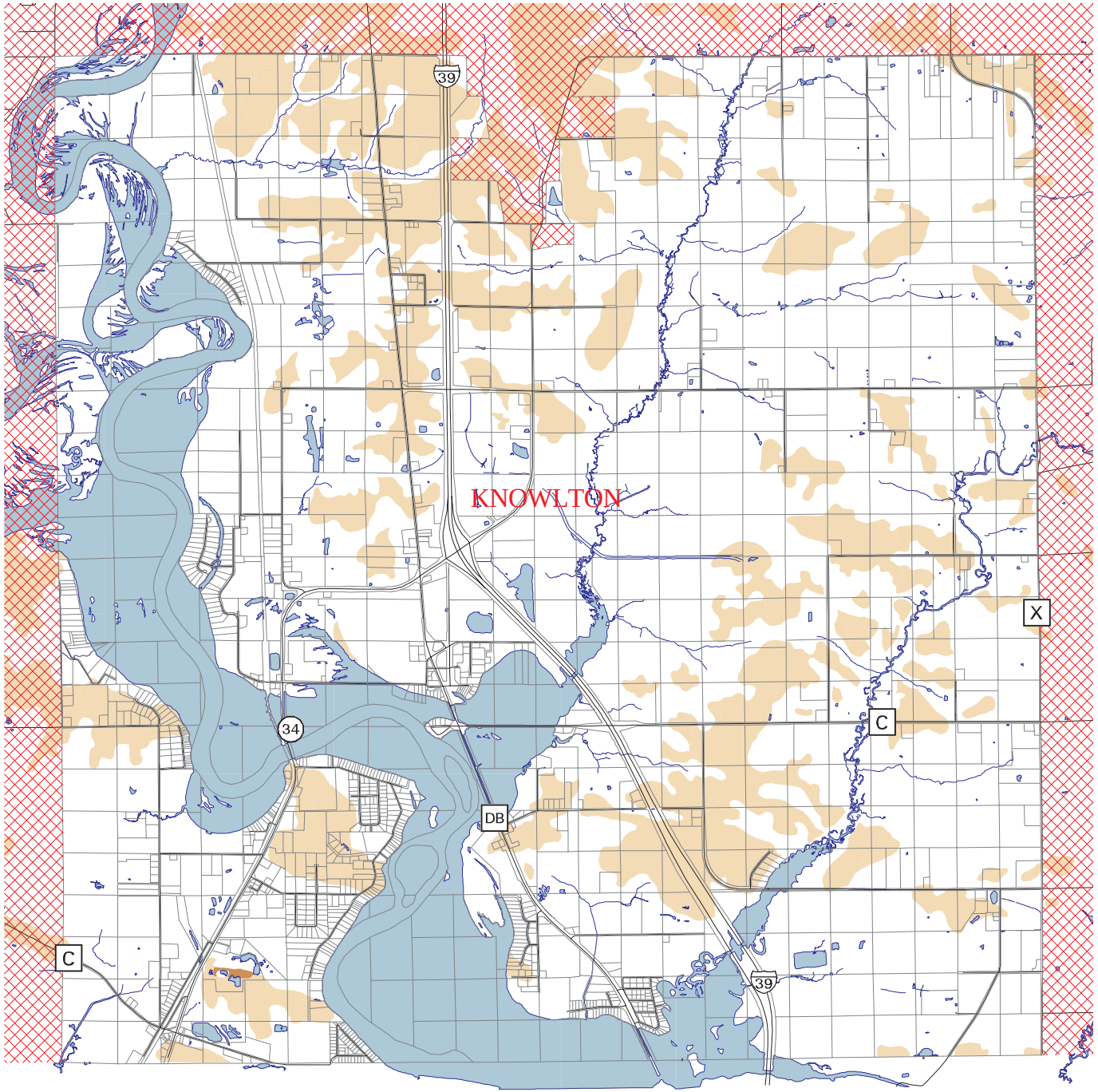


Mountain Bay Trail
2001 Snowmobile Trails
Ice Age Trail
Suggested Bike Routes
Wausau City Airport
Central Wisconsin Airport (Mosinee)

N

State & Us Highways
Railroads (Active)
Municipal Boundary
Water Features
Incorporated Municipality

Figure 5-4



0 - 20" (Quarries)
20 - 40 "
40-60"
>60"

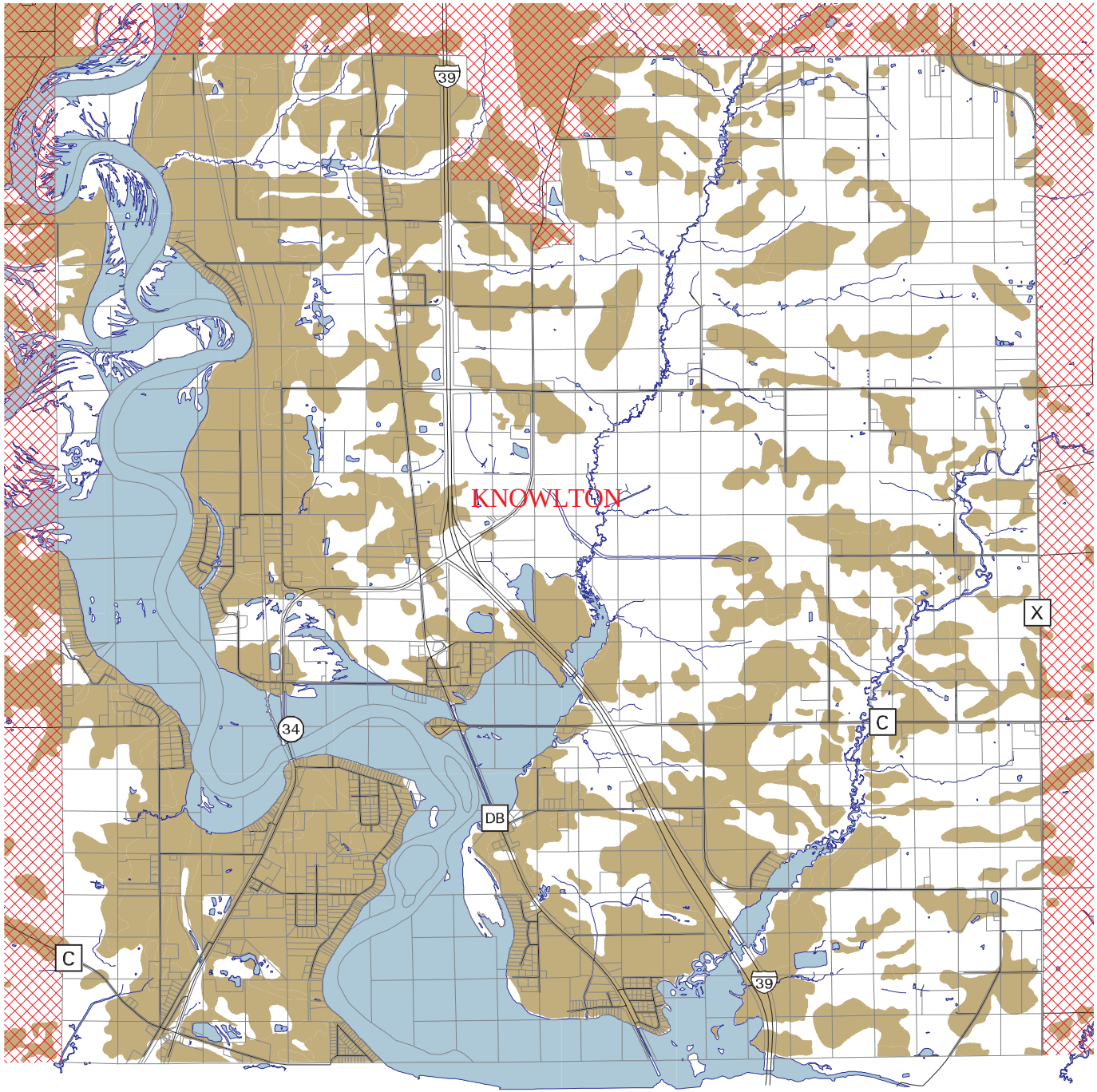
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 6-1

Depth To Bedrock

KNOWLTON



Soils suitable for septic systems w/soil absorption component

Indicates other Municipality

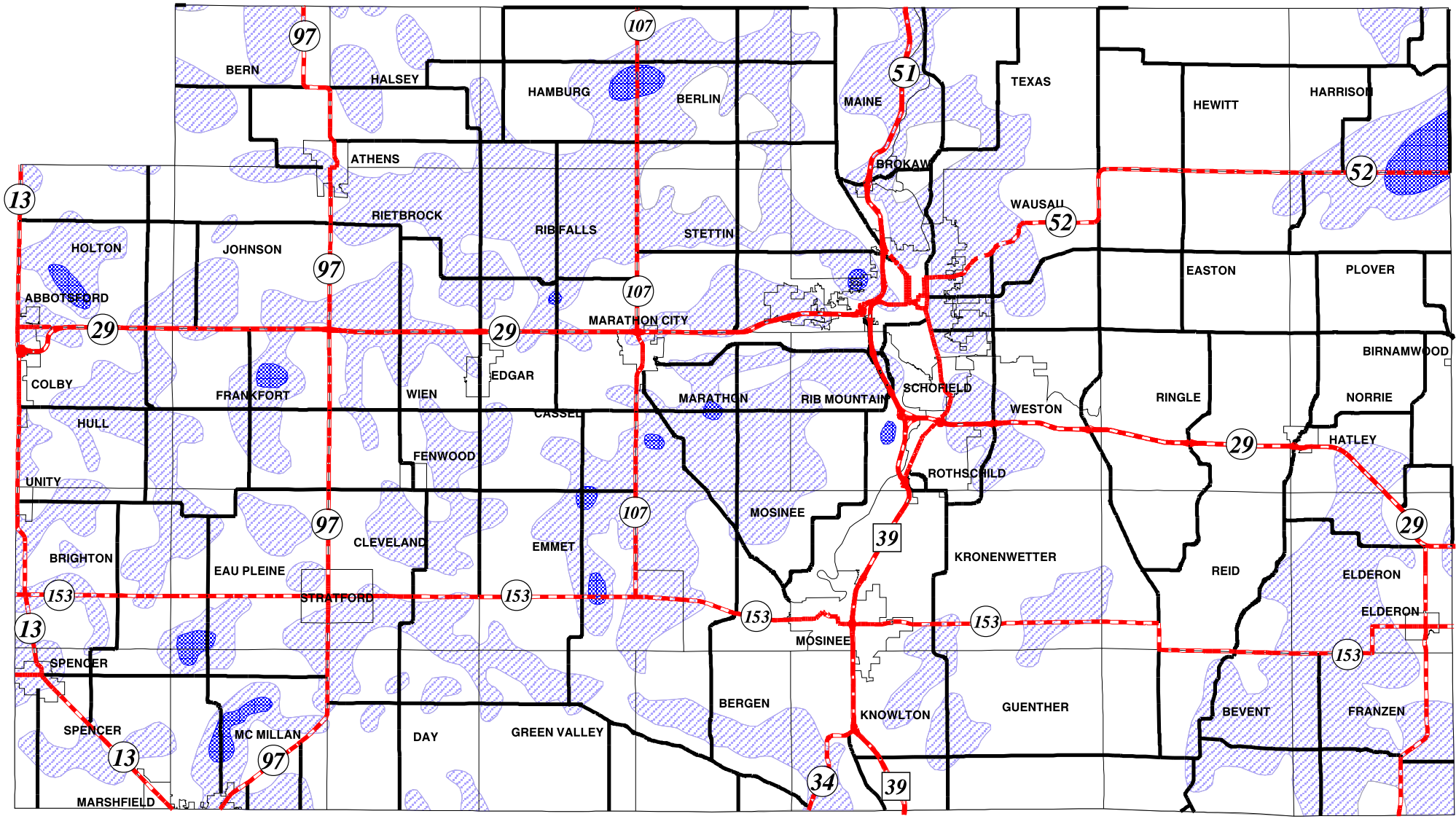
Map Developed by Marathon County CPZ & GIS 2005

Figure 6-2

Suitable Soils-Septic Tank Absorption

KNOWLTON

MARATHON COUNTY
DEPTH TO GROUND WATER



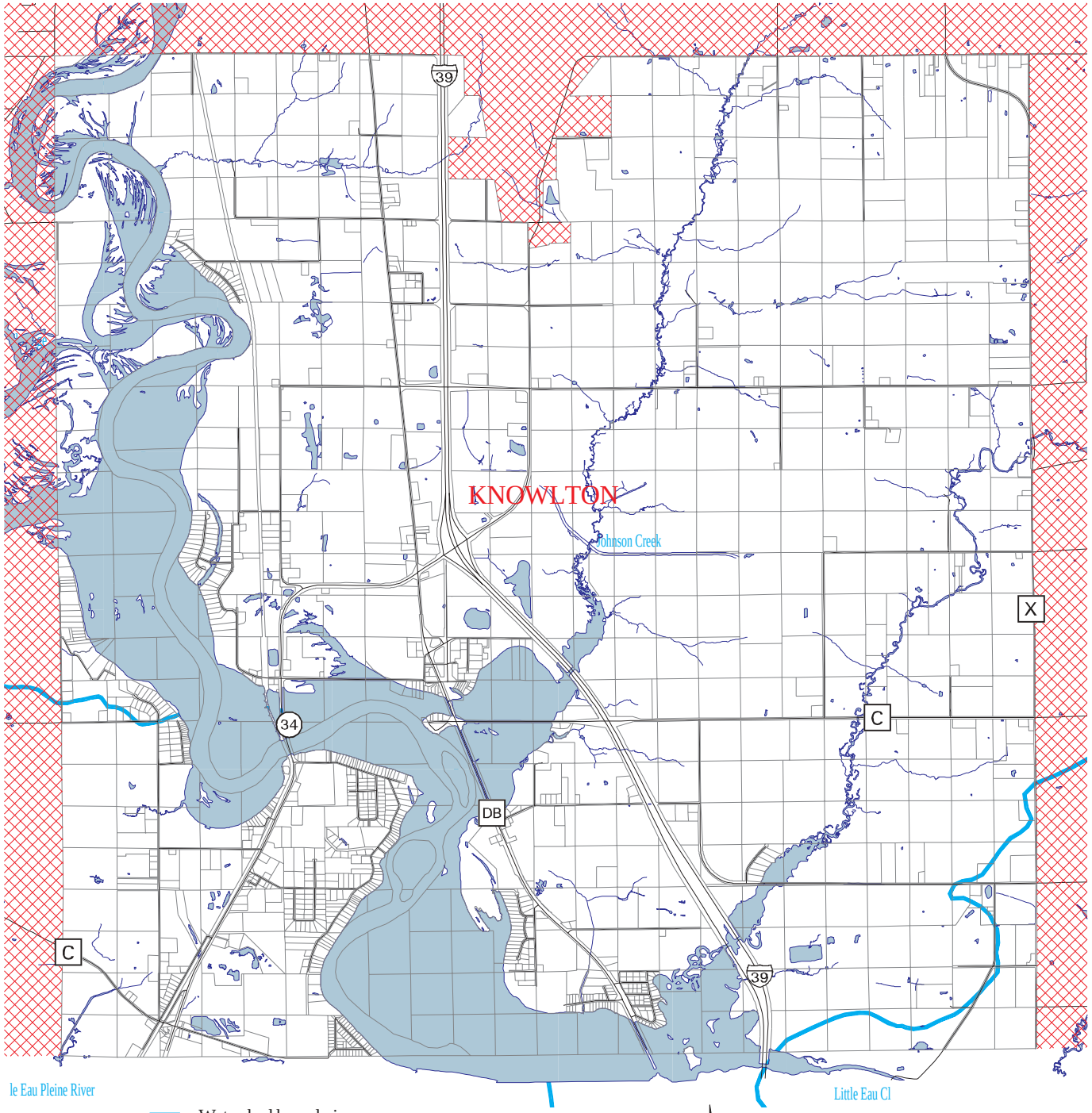
State & Us Highways
County Roads
Municipal Boundary
Ground Water Depth
0-20 feet
20-50 feet
>50 feet

N

Map Developed by Marathon County CPZ & GIS 2005

Source: "Irrigable Lands Inventory --- phase 1 Groundwater and Related Information", I.D. Lippelt and R.G. Hennings, MP -81-1, WGNHS 1981.

Figure 6-3



Prioirty Watersheds
as identified in the Marathon County
Land & Water Resource Management Plan

Watershed boundaries

Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 6-4

Major Watersheds
KNOWLTON

MARATHON COUNTY
PROPOSED WESTON - ARROWHEAD LINE

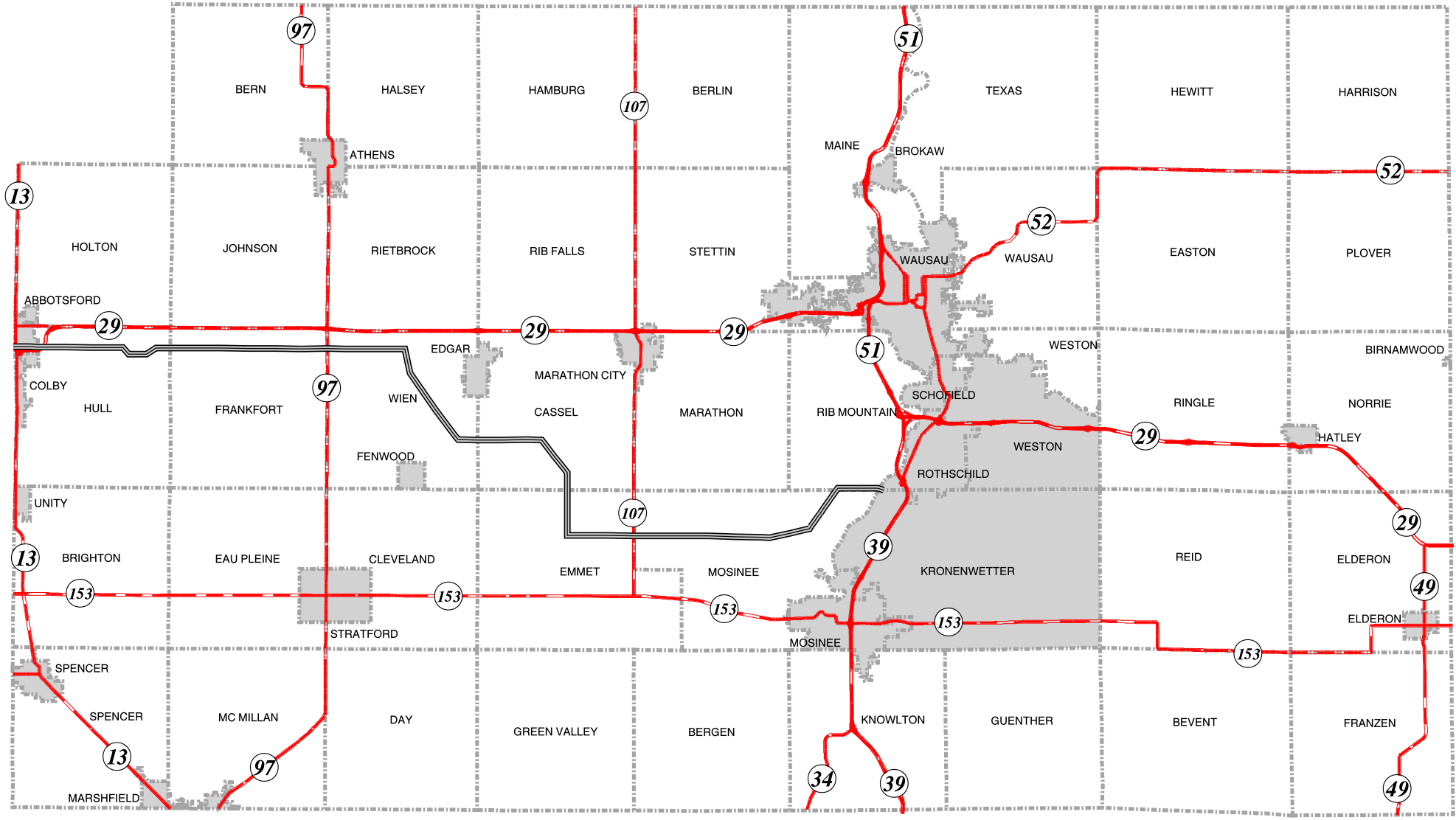
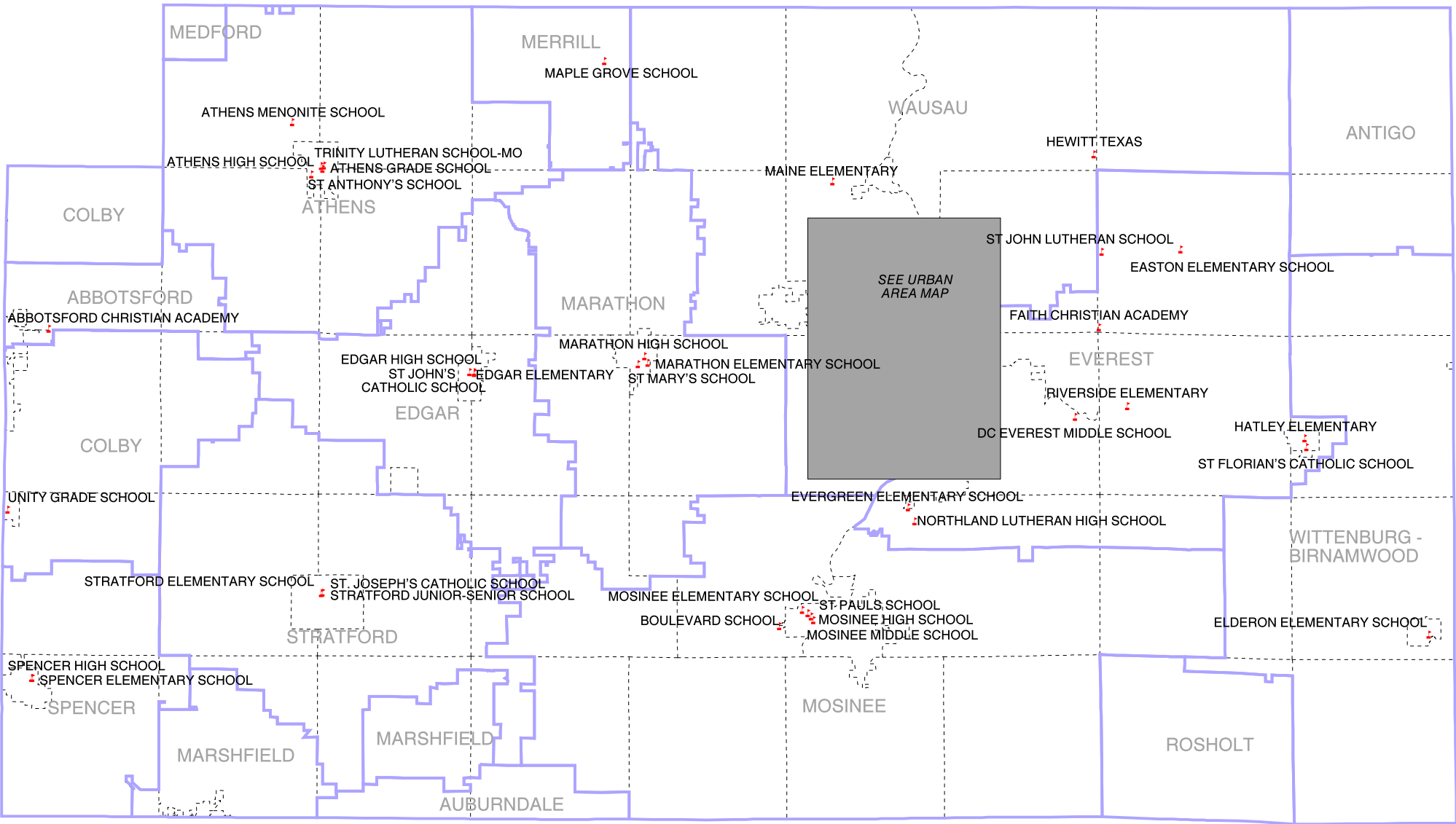


Figure 6-5

MARATHON COUNTY SCHOOL DISTRICTS AND SCHOOLS
RURAL AREA MAP



School Locations

School District Boundary

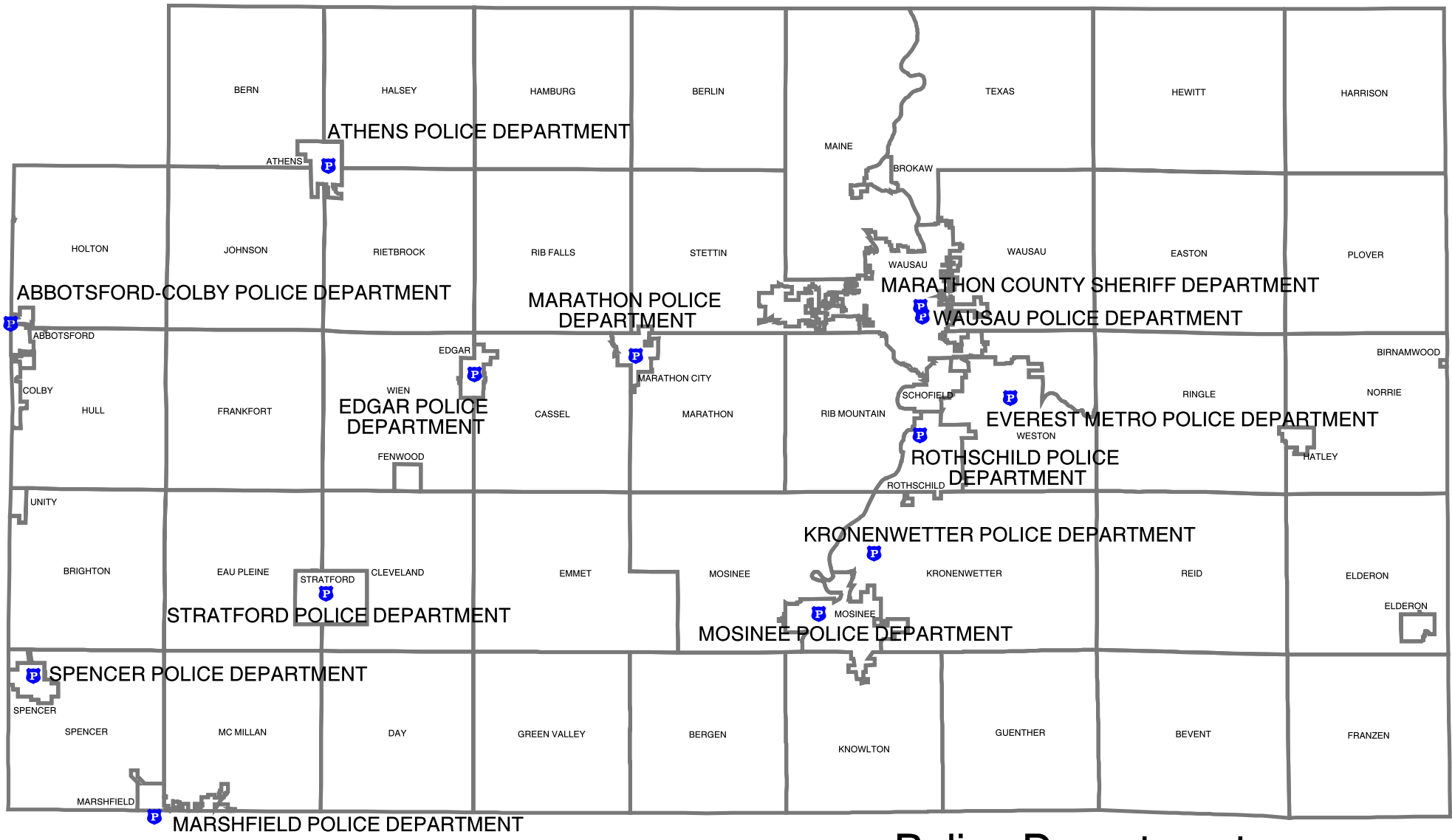
Municipal Boundary

N

Map Developed by Marathon County CPZ & GIS 2005

Figure 9-1

MARATHON COUNTY LAW ENFORCEMENT



Map Developed by Marathon County CPZ & GIS 2005

Figure 9-2

FIRE DEPARTMENTS & SERVICE AREAS

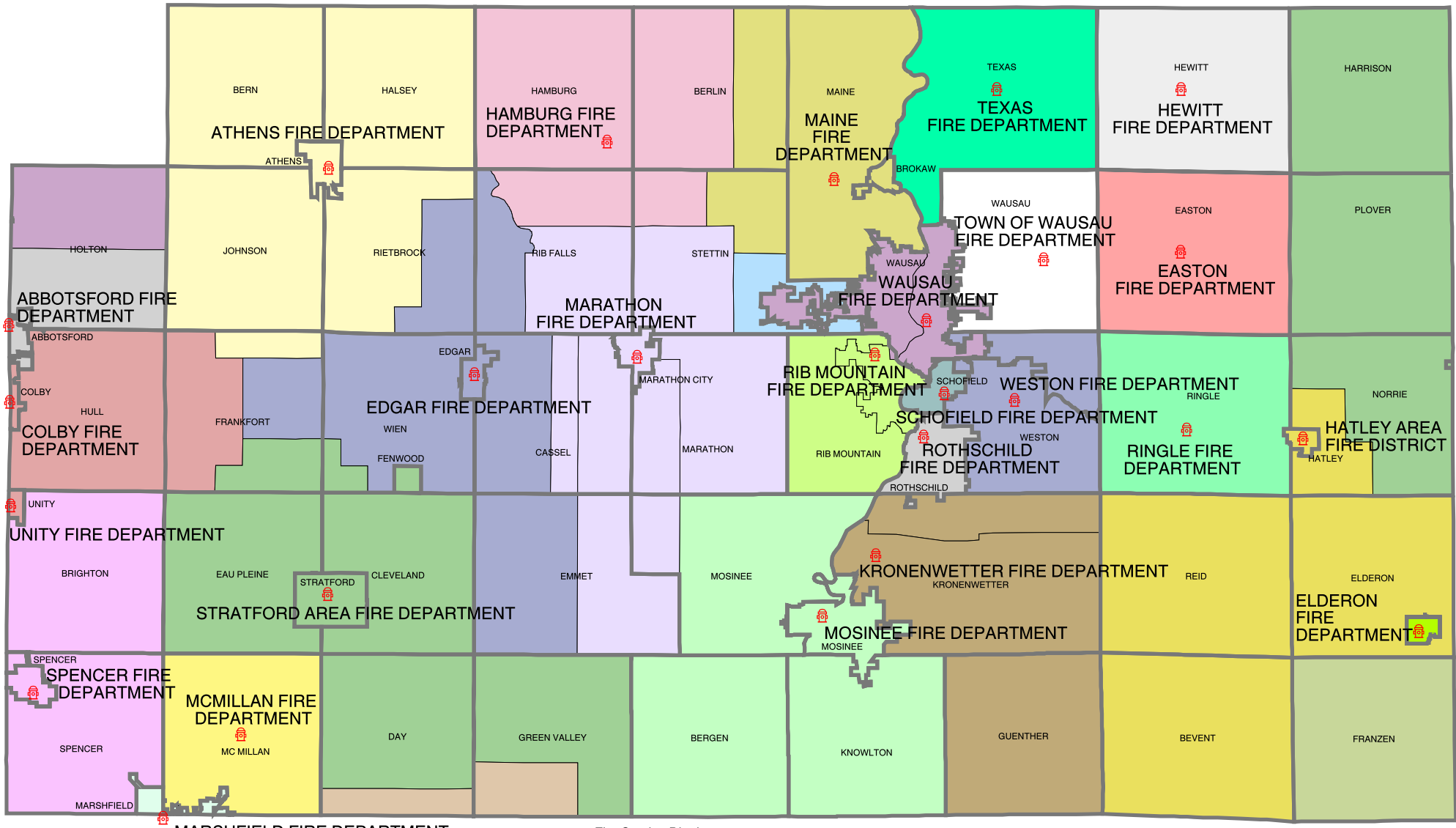
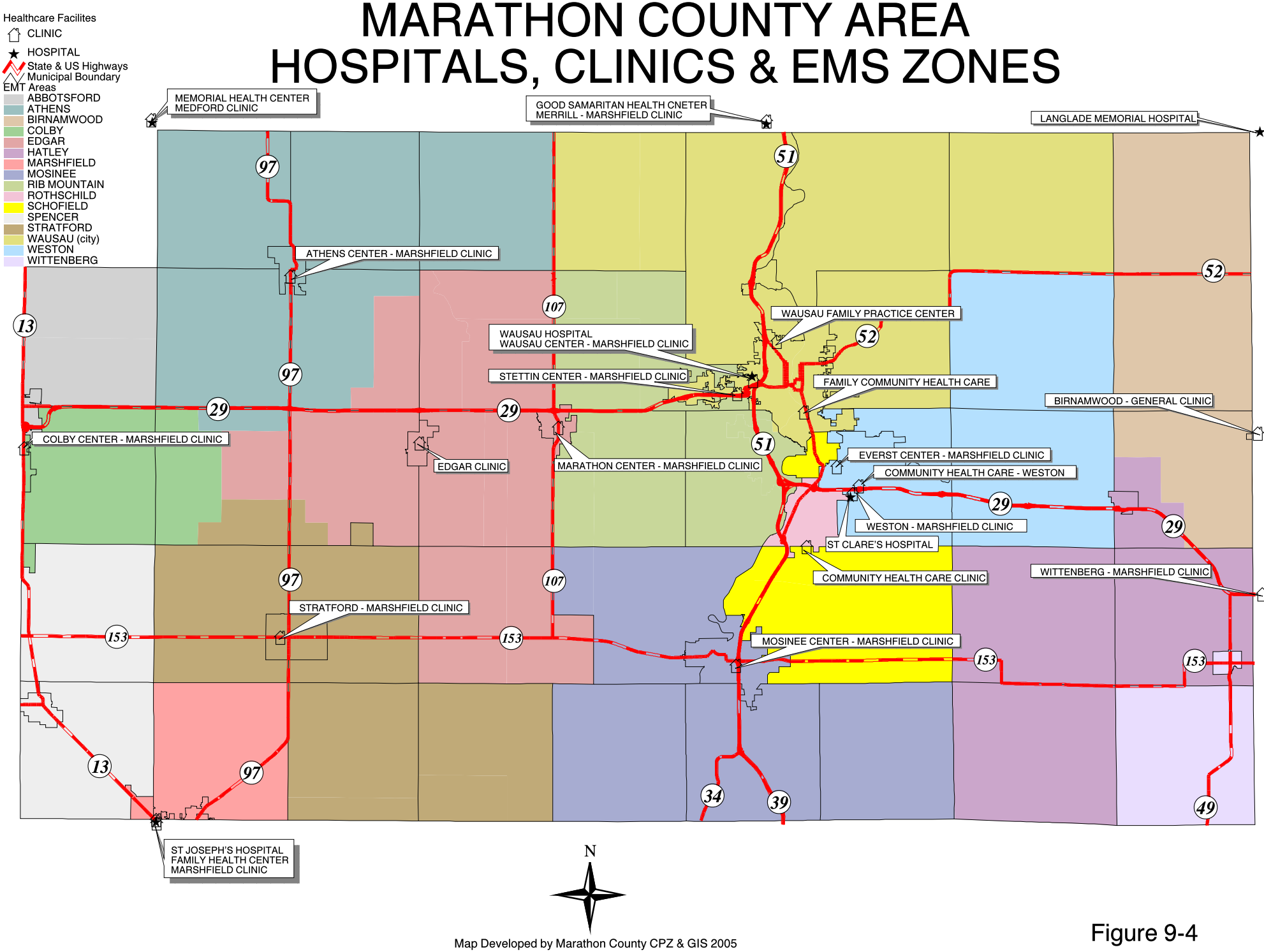


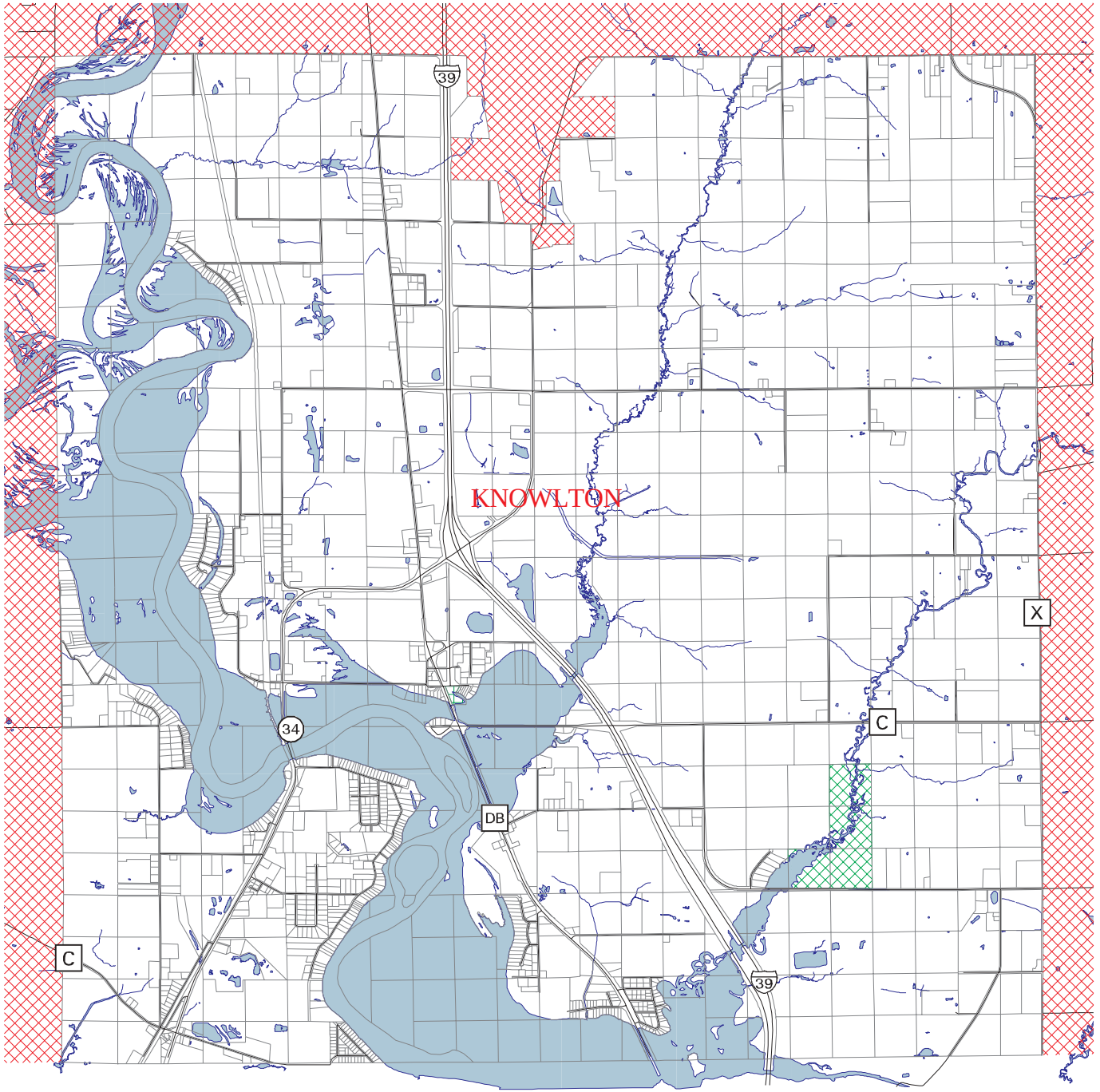
Figure 9-3

MARATHON COUNTY AREA HOSPITALS, CLINICS & EMS ZONES



Map Developed by Marathon County CPZ & GIS 2005

Figure 9-4



Municipal Parks
County Forest Units
County Parks
State Parks

Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 10-1
Recreation Facilities
KNOWLTON

Town of Knowlton

Comprehensive Plan

Goals, Objectives, Policies & Implementation

Table of Contents

1. Introduction 1
2. Natural Resources Element 4
3. Land Use Element.....6
4. Transportation Element.....9
5. Utilities Element..... 12
6. Housing Element 13
7. Cultural Resources Element 14
8. Community Facilities Element..... 15
9. Parks Element 16
10. Economic Development Element..... 18
11. Intergovernmental Cooperation Element..... 20
12. Implementation Element 22

Appendices

A. State Comprehensive Planning Goals
B. Marathon County Guiding Principles
C. Ordinances and Resolutions for Adoption
D. Public Participation Plan
E. Bibliography of Related Studies and Plans
F. Road Paving Criteria

List of Tables

Table 3-1: Future Land Use, 2005 7
Table 3-2: Acreage Projections, 2000-2030..... 8
Table 4-1: Summary of Pavement Conditions..... 11
Table 12-1: Criteria to Consider When Reviewing Plan Changes 25
Table 12-2: Implementation Plan Actions..... 27

List of Figures

Figure 3-1: Future Land Use
Figure 3-2: Existing Zoning
Figure 3-3: Development Constraints
Figure 4-1: Functional Classification
Figure 4-2: WISLR Ratings
Figure 4-3: WISLR Road Surface Type

List of Acronyms

303 (d) list—waters designated as "impaired" under section 303 (d) of the U.S. Clean Water Act.

AADT—Annual Average Daily Traffic

AHI—Architecture & History Inventory (a database of the Wisconsin Historical Society).

BMPs—Best Management Practices

CCR&R—Child Care Resource and Referral Network

CDBG—Community Development Block Grant

CES—Cropland Evaluation System (Marathon County)

CIP—Capital Improvement Program

Comm 83—Chapter 83 of the Wisconsin Administrative Code under the Department of Commerce, setting standards for regulation of private sewage systems.

CRP—Conservation Reserve Program

CTH—County Trunk Highway

CWA—Central Wisconsin Airport

DWD—Department of Workforce Development

EMS—Emergency Medical Services

EMT—Emergency Medical Technician

ERW—Exceptional Resource Waters, a designation by the Wisconsin Department of Natural Resources.

FEMA—Federal Emergency Management Agency

FIRM—Flood Insurance Rate Maps

HOME—Home Investment Partnerships Program

HUD—U.S. Department of Housing and Urban Development

LHOG—Local Housing Organization Grant

LRTP—Long Range Transportation Plan (Prepared by the Wausau Metro Planning Organization for the Metro area).

LWRMP—Land and Water Resource Management Plan (Marathon County)

MPO—Wausau Area Metropolitan Planning Organization

NCHC—North Central Health Care

NCWRPC—North Central Wisconsin Regional Planning Commission

NRHP—National Register of Historic Places

NTC—Northcentral Technical College

ORW—Outstanding Resource Waters, a designation under the U.S. Clean Water Act.

PASER—Pavement Surface Evaluation Rating

PMP—Pavement Management Plan

SHPO—State Historic Preservation Office

STF Data—Summary Tape File, referring to data files of the 2000 U.S. Census.

STH—State Trunk Highway

TDP—Transit Development Plan (Wausau Area Transit System)

TIP—Transportation Improvement Program (Marathon County)

USDA—United States Department of Agriculture

USH—U.S. Highway

UW-MC—University of Wisconsin—Marathon County

WATS—Wausau Area Transit System

WDA—Wisconsin Department of Agriculture

WDNR—Wisconsin Department of Natural Resources

WDOA—Wisconsin Department of Administration

WDOT—Wisconsin Department of Transportation

WHEDA—Wisconsin Housing and Economic Development Authority

WISLR—Wisconsin Information System for Local Roads

WPD—Wetland Protection District

WPS—Wisconsin Public Service Corporation

1. Introduction

This document represents the core of the Knowlton Comprehensive Plan. It outlines the community's goals and objectives to address the issues and opportunities identified in the *Conditions and Issues Report* and guide future growth. Goals and objectives have been developed relative to each of the required plan elements. For each of the goals and objectives, specific policies, strategies and/or actions are recommended to enable the community to achieve them. The Implementation Element at the end of this document compiles and prioritizes all the recommended action steps and identifies who is responsible for implementation.

Coordinating planning efforts with other jurisdictions was integral to the local comprehensive planning process. By working in sub-area groups, participating in county-wide planning workshops, and directly communicating with neighboring communities, all participating local municipalities have taken steps to foster intergovernmental cooperation and land use coordination. To achieve a level of broad consistency, all participating municipalities worked together to identify common likes, dislikes and concerns impacting their respective sub-areas. These were distilled into ten countywide guiding principles that describe a broad, shared vision of the future of Marathon County.

Local plans must also address the State's fourteen planning goals outlined in Wisconsin Statutes 66.1001, to the extent applicable. The sub-area concerns are summarized below and the State planning goals and countywide guiding principles are summarized in Appendix A and B, respectively.

Sub-Area Concerns

Following is a list of concerns shared by the four rural planning sub-areas outside of the Wausau metropolitan area. These were developed through a Strengths, Weaknesses, Opportunities, and Threats (SWOT) exercise to identify aspects of the sub-areas that participants liked, disliked, or had concerns about. Because many of the concerns were shared by all the rural sub-areas, they were consolidated into one list as follows:

General Concerns:

Local Development Control

- Maintain local control of development regulation
- Private property rights

Degree of Regulation

- Prefer minimal development regulation, but open to some regulation to protect prime farmland, rural character, natural resources and water quality
- Managed development preferred

Land Use and Development:

Preserve Rural Character

- Rural settings (small farms dotting landscape)
- Low population density (1, 2 and 5 acre lots)
- Ample open space, woodlands, natural areas, etc.
- Small town living – familiar, friendly, safe
- Concentrate commercial and industrial development in cities or villages

Farm/Non-farm Conflicts
- Increased demand (from new residents) for higher level of service, paved roads, etc.
- Traffic conflicts between passenger vehicles and farm equipment
- Road paving and dust control – Costs? Benefits?
- Road damage from heavy farm equipment
- Increased complaints about farm smells, dust, noise

Urban Fringe Development
- Annexation - lack of control over where, when and what might develop
- Some support for cooperative boundary agreements to manage growth at urban edge
- Planned development preferred - but wary of over regulation

Identity and Appearance
- Lack of design/aesthetics control for commercial and industrial development (buildings, landscaping, signs)
- Cluttered appearance of major road corridors (signs, power lines, no landscaping)
- Improve housing maintenance in some neighborhoods
- Land use conflicts – i.e. old industrial adjacent to residential

Preservation and Protection of Resources:

Preserve/Protect Natural Resources
- Preserve woodlands (highest ratings in survey responses), wetlands, rivers
- Protect/maintain natural character and scenic quality
- Maintain access to natural areas

Fiscal/Economic:

Strong and Diverse Tax Base
- Loss of land, jobs and population due to annexation
- Loss of taxable land due to public purchase (e.g. County Forests)
- Redevelop under-utilized land, particularly along Wisconsin River
- Maintain/foster diverse mix of land uses
- Competition for industrial development – particularly between urban and fringe areas

Farmland Preservation (primarily economic issue)
- Loss of small/family farms to development or larger farms
- Mega farms [also concerns about environmental impacts]
- Decreasing number of active farms
- Conversion of farms to non-farm development
- Land value inflation (high taxes)

Infrastructure:

Traffic and Transportation System
- Too many driveway openings on busy road corridors
- Lack of future street planning
- Limited river crossings
- New interchange locations and loss of highway access
- Highway frontage roads – access limitations

Protect Water Supply
- Depletion or degradation due to high volume users (mega farms, new high school, industry)
- Limited access to water for wells in some areas (bedrock, etc.)

Sewer and Septic System Availability

- Poor soil drainage limits suitability for on-site waste treatment systems in some areas
- "Comm83" opens more areas for on-site treatment systems
- Interest in looking at alternatives to centralized wastewater treatment

Cost Efficient Community Services

- Shared services generally good – fragmentation an issue in some areas
- Maintain and improve services w/o increasing taxes
- How/who will pay for increased services
- Lack of transit access in rural and fringe areas

20-Year Community Vision Statement

The Town of Knowlton will protect the rural character and natural resources of the town while recognizing the economic needs and ownership rights of property owners.

Goals, Objectives, Policies, Strategies & Actions

This document describes a variety of goals, objectives, policies, strategies and actions the Town has identified to help it respond to issues and opportunities identified in the *Issues and Conditions* report. Definitions are provided below to clarify the purpose and intent of each category.

Definitions:

- **Goal:** A goal is a statement that describes a desired future condition. The statement is broad in scope and describes general concepts or things the community hopes to accomplish.
- **Objective:** An objective is a statement that describes a specific course of action to achieve a goal or address an issue.
- **Policy:** A policy is a general course of action or rule of conduct to be followed to achieve community goals and objectives.
- **Strategies**: As the name implies, strategies are strategic approaches that may involve a series of individual actions to achieve a specific goal or objective.
- **Actions:** An action describes a specific effort that will be undertaken to achieve a specific goal or objective.

2. Natural Resources Element

Goal 1: Maintain excellent groundwater quality.

- **Objective: To monitor the fly ash landfill for seepage outside the landfill site.**
- **Objective: To periodically test groundwater resources in different parts of the Town.**
- **Objective: To monitor the groundwater quality by the mine located in the northwest corner of the Town.**

Policies

- The Town will enact appropriate measures to ensure good groundwater quality.

Strategies and Actions

- Evaluate water quality levels on a periodic basis.
- Report instances of possible groundwater contamination to the WDNR.
- Obtain educational materials from the Wisconsin Bureau of Drinking Water and Groundwater for local distribution.
- Enhance monitoring efforts in areas thought to contain possible contamination hazards.

Goal 2: Protect shore land areas from the encroachment of development.

- **Objective: To work with the County to regulate guidelines for development located near shore land areas especially land surrounding Lake DuBay.**
- **Objective: To work with the County to discuss perimeters that are more strict than current shore land regulations around wetland areas to discourage development.**

Policies

- The Town will encourage developers to consult with WDNR officials before submitting development proposals.

Strategies and Actions

- Communicate the desire for wetland protection to Marathon County and the WDNR.
- Report instances of possible regulation infraction to the WDNR.
- Obtain a main contact person from each agency the Town communicates with at the County, and WDNR.
- Discuss adopting local regulations that are at least as restrictive as current measures, but better suit area needs.
- Gather examples of local shore land restrictions used in other communities and adapt for possible local use.

Goal 3: Preserve forestland.

- **Objective: Encourage private participation in programs, such as the Managed Forest Law, to preserve forests.**

Policies

- The Town will inform property owners of state and local programs that preserve forestlands.

Strategies and Actions

- Send owners of private forestland information on preservation programs.
- Encourage developers to maintain as much forestland as possible in new developments. Promoting conservation subdivisions or other preservation techniques.

Goal 4: Preserve natural viewsheds.

- **Objective: Discourage additional development of roadside advertising boards.**

- **Objective: Explore development of a local sign and lighting ordinance.**

Policies

- The Town will preserve natural vistas.
- The Town will discourage installation of large advertising signs in natural areas and on roads controlled by the Town.

Strategies and Actions

- Work with Marathon County to identify restrictive ordinances, such as sign ordinances that limit square footage, for possible implementation.
- Discourage the rebuilding/reuse of deteriorating signs, or signs that are not used.

3. Land Use Element

Goal 1: Discourage industrial development within the township.

- **Objective: To develop a long-term land use plan that encourages compatible uses.**
- **Objective: To remain active in attending Marathon County Forestry, Recreation and Zoning Committee hearings.**

Policies

- Knowlton opposes the development of large industry within the jurisdiction.

Strategies and Actions

- Discuss adopting a resolution against the development of industry.
- Work with Marathon County to maintain residential as the primary land use with limited commercial development.
- Explore developing an ordinance that limits the dimensions of non-residential buildings.

Goal 2: Preserve prime agricultural land.

- **Objective: To discourage conversion of active farmland to rural residential lots.**
- **Objective: Explore programs, such as the Conservation Reserve Program, that seek to maintain prime soils and cropland.**

Policies

- The Town will support the preservation of active agricultural lands.

Strategies and Actions

- Contact local agencies, including UW-Extension, to acquire pamphlets and other informational materials on agricultural preservation tools.
- Explore working with Marathon County, or local communities to host a workshop on agricultural preservation.

Goal 3: Discourage cellular tower development within the town.

- **Objective: To adopt ordinances that discourages building large towers in residential or natural areas.**

Policies

- Knowlton opposes the development of cellular towers within the jurisdiction.

Strategies and Actions

- Discuss adopting a resolution against the development of cellular towers.
- Work with Marathon County to identify ordinances to restrict tower sizes.

Goal 4: To better manage new residential growth.

- **Objective: To revise local subdivision regulations.**
- **Objective: To attend regular meetings of the Marathon County Forest, Recreation and Zoning Committee.**

Policies

- Knowlton will support development that improves the livability and appeal of the Town.

Strategies and Actions

- Explore updating the subdivision ordinance to improve regulations on design, lot size, and access.
- Work with Marathon County to present arguments for or against proposed development projects.
- Strengthen developing regulations that transfer the cost of all development to the developer.

Future Land Use – The Town of Knowlton Future Land Use map, shown in Figure 3-1 illustrates the anticipated future pattern of land uses. The map includes fourteen land use categories to guide where new residential and non-residential development should be encouraged to locate or where development should be discouraged. Descriptions of each land use category and the number of acres within each category are provided in Table 3-1. Figure 3-3 shows areas with development constraints due to environmental conditions such as wetlands and floodplains, or policy constraints such as restrictive zoning or other programs (i.e., Exclusive Agriculture, Forest Crop Law). Areas where existing development precludes additional development are also shown.

Table 3-1: Future Land Use, 2005

Land Cover Category	Description	Acres	% of Total Land Area
Single Family Residential	One family structures, farm residences, mobile homes	3268	15
Single Family with forest	One family structures with forestland	102	<1
Multi-Family Residential	Attached residential structures containing more than one unit	13	<1
Commercial Services	Retail stores, taverns, restaurants, truck stops, gas stations, farm coops, farm implement dealerships, automobile dealerships, business offices, motels/hotels, offices, telephone/gas company	192	<1
Industrial	Saw/paper/lumber mills, dairies, industrial parks, trucking operations, distribution centers, mining	240	1
Quarries	Mining operations	148	<1
Farm	Tilled agriculture, prime farmland	3380	15
Public/ Quasi-Public	Schools, churches, cemeteries, libraries, government buildings, National Guard, utility facilities.	26	<1
Park and Recreation	Public and private parks, trails, ball fields, golf courses, playgrounds, camp grounds, shooting ranges, etc.	108	<1
Woodlands	Privately-owned forested land,	4778	22

	including nurseries, paper mill forests, etc.		
Water	Open waters, such as lakes, ponds, streams, rivers, creeks, reservoirs, etc.	3247	15
Wetlands	Wet bogs, marshes, etc.	4175	19
Floodplain	Areas within 100-year floodplain	1232	6
Transportation	Airports, highways, road right-of-ways, railroads, logging roads	1024	5
Total Land Area		21933	100%

Source: Future Land Use map

As indicated in the table, a majority of the land will be used for wetlands (19%) or woodlands (22%). This is primarily due to the nature of the topography along the Lake DuBay. An additional 15% of the total land area is consumed by water. Single-family residential is forecast to occupy 15 percent of the total acreage within the town (3268 acres).

Land Needs – Projections of future population and employment growth in Knowlton are provided in the *Issues and Conditions* report. These were used to estimate the amount of land needed to accommodate future residential and non-residential development over the next 20 years. Acreage projections were based on assumptions about density of houses per acre and employees per acre.

It is estimated over the next 20 years, 401 acres will be needed to accommodate future residential development and 16 acres are needed for future non-residential development. Potential locations for these land uses are identified on the Future Land Use Map.

Table 3-2: Acreage Projections, 2000-2030

	Estimated Total Acreage Needed by Year						
	2000	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Agricultural	11316	11249	11178	11108	11038	10968	10899
Residential	747	814	881	948	1015	1082	1148
Industrial	128	128	130	132	133	135	137
Commercial	100	100	102	103	105	106	107

Source: determined from NCWRPC and Marathon County projections

Consistency between Land Use and Zoning – Land use and zoning designations are related, but not necessarily identical. Land use categories tend to be fairly general whereas zoning districts regulate specific land uses and development requirements. Because the land use categories are general it is common for more than one zoning district to correspond to each land use category. It is also possible that some zoning districts might be consistent with more than one land use designation.

Achieving consistency between land use and zoning is required by State Statutes. This generally occurs when a community is considering a proposed zoning change. The decision to approve a zoning change must be based on the adopted comprehensive plan, and specifically, the future land use map. Generally, if the requested zoning is consistent with the land use designation on the property it should be approved, unless unique circumstances indicated the rezoning would negatively impact surrounding properties or the community. If a rezoning request is not consistent with the land use designation, the community should consider denying the rezoning request.

In situations where a rezoning request is not consistent with the land use designation - but the community believes the requested zoning is appropriate in the specific location and would benefit the community - the zoning change can be approved, however, the land use map should be amended accordingly to establish land use and zoning consistency. The process for amending the land use map is discussed in greater detail in the Implementation Element.

4. Transportation Element

Goal 1: Utilize a formal process for road maintenance.

- **Objective: To continue to use an annual process of roadway analysis, such as PASER, to prioritize maintenance scheduling.**

- **Objective: To develop a retainer system for road or other capital repairs that occur as a direct result of operating large farm equipment, or other heavy vehicles on local roadways.**

Policies

- The Town will continue to maintain and update current transportation facilities.

Strategies and Actions

- Perform biennial roadway evaluation.
- Develop a plan that prioritizes transportation improvements over time and includes a budget schedule for upgrades.
- Hold public hearings to discuss roadway condition and determine in-need areas.
- Work with WDOT to identify grant funding opportunities.
- Communicate with Marathon County Highway Department on a periodic basis.
- Determine local authority to levy fees against individual property owners for excessive roadway damage.

Goal 2: Plan appropriate access connections to roadways.

- **Objective: To determine appropriate locations for residential driveway connections to local roadways.**

- **Objective: To encourage proper subdivision design that will accommodate resident needs and allow for future expansion.**

Policies

- The Town will promote safe access from public roadways to private property.

Strategies and Actions

- Collect examples of driveway ordinances from other communities.
- Determine local standards for setbacks, distances from other driveways, and other key features of the ordinance.
- Solicit public input concerning proposed regulations.
- Include access requirements for new subdivisions in the subdivision code.

Goal 3: Encourage carpooling.

- **Objective: To encourage carpooling to the area metro locations by developing a park and ride lot.**

- **Objective: To explore state funding for site acquisition and development of a park and ride lot.**

Policies

- The Town encourages carpooling.

Strategies and Actions

- Work with the WDOT to establish a park and ride lot, or other service from the Knowlton area.
- Collect carpooling information for local distribution.
- Work with local and state transportation officials to identify groups that promote carpooling for technical assistance and support.
- Identify appropriate locations for a park and ride lot within the jurisdiction.

Goal 4: Lessen impacts of Central Wisconsin Regional Airport on Knowlton residents.

- **Objective: To ensure residential development observes airport setbacks.**

- **Objective: To help guide airport development away from existing residences within the Town.**

Policies

- The Town will lobby for residentially-sensitive improvements to the airport.
- The Town will observe airport regulatory authority in recommending residential development projects.

Strategies and Actions

- Communicate with other communities with airports as neighbors to identify good policies for cooperation.
- Inform residents and developers of airport regulations within the Town jurisdiction.
- Communicate with airport authorities to increase working relationships.
- Encourage sensitive design and development of airport grounds.

Road Improvements

The Wisconsin Department of Transportation (WDOT) requires all incorporated communities to prepare a Pavement Management Plan (PMP) using a pavement rating system for their local roads. These plans were to be submitted for review by December 2001. The data from these plans is intended to provide the foundation for the Wisconsin Information System for Local Roads (WISLR), which is a computer resource that will enable communities and the State to begin to assess Wisconsin's local roadway system.

The PASER system, which was designed by the Transportation Information Center of the University of Wisconsin-Madison, is

the rating system used most by Wisconsin communities. PASER rates road surfaces on a scale of 1 to 10. This scale is broken down as follows:

- "1" and "2" = very poor condition
- "3" = poor condition
- "4" and "5" = fair condition
- "6" and "7" = good condition
- "8" = very good condition
- "9" and "10" = excellent condition

In addition to its use in the new WISLR, the rating system gives communities a detailed assessment of the appropriate maintenance method for each road segment under their jurisdiction. This assessment is then incorporated into the community's PMP.

Table 4-1: Summary of Pavement Conditions

Surface Type Code (miles)						
Unimproved Road	Graded Earth Road	Gravel Road	Wearing Surface	Cold Mix Asphalt on Concrete	Cold Mix Resurfacing with < 7" Base	Cold Mix Resurfacing with > 7" Base
0.67	0.45	12.45	25.97		0.33	
Cold Mix Asphalt Base < 7"	Cold Mix Asphalt Base > 7"	Hot Mix Asphalt on Concrete	Hot Mix Resurfacing	Hot Mix Asphalt Pavement	Concrete Pavement	Brick or Block Pavement
1.04	11.34	3.15		7.22	0.85	

Surface Condition Rating - WISLR Data						
No Data	Failed	Poor	Fair	Good	Very Good	Excellent
0.39		1.82	13.72	18.27	15.28	13.99

Source: WDOT (WISLR), 8/10/04

Roads exhibiting a surface condition rating at or below "Fair" must be examined to determine what type of reconstruction or strengthening is necessary. The road segments classified as unimproved or graded earth roads provide the potential for safety concerns to arise and should be examined to determine the appropriate measures to ensure safe travel. The roads that display a surface rating of "Good" or better will only require minimal preventative maintenance to promote safe travel conditions. Further information is necessary for those roads that display no surface rating data.

Paving Gravel Roads – Twelve miles of roads within the Town remain unpaved. When paving gravel roads, there are many factors that should be taken into consideration. Appendix F outlines some general guidelines to help the Town decide if or when to pave gravel roads.

5. Utilities Element

Goal 1: Maintain current provision of Town services.

- **Objective: To perform annual budget allocations to fund public services.**

- **Objective: Continue to find methods of cost sharing, such as equipment sharing, with surrounding municipalities to increase the efficiency by which services are provided.**

Policies

- The Town will continue to provide sufficient utilities as desired by a majority of local residents.

Strategies and Actions

- Perform annual review of service provision costs.
- Communicate with surrounding communities the willingness to share costs.
- Determine feasibility for updating or installing utilities and earmark funding for incremental improvement.

6. Housing Element

Goal 1: Locate new residential development in appropriate areas.

- **Objective: To discourage development in natural, sensitive areas.**
- **Objective: To guide new housing to locations where the extension of service provision will be easiest to deliver.**

Policies

- The Town will direct new housing developments to the most appropriate areas for residential development.

Strategies and Actions

- Observe land use plan in siting new residential development.
- Explore adopting a planned unit development (PUD) ordinance to allow for concentrated multi-use development.
- Determine limits of service provision on a per-unit basis.
- Determine the extent of growth desired by the community and explore exacting development fees, or incentives, to achieve desired outcomes.

Goal 2: Increase housing options for seniors.

- **Objective: To encourage the development of senior housing.**
- **Objective: To identify appropriate sites for higher-density development (such as senior housing).**

Policies

- The Town will work with developers who are interested in developing senior housing within the jurisdiction.

Strategies and Actions

- Identify the best areas for senior housing developments geographically on a map.
- Communicate the desire for senior housing development to members of the County Forestry, Recreation, and Zoning Committee to increase speed of proposal approval.
- Establish a senior housing committee as required to communicate with interested developers, and to determine needed capacities for the facility.

7. Cultural Resources Element

Goal 1: Preserve historically significant buildings and sites.

- **Objective: To work with the County Historical Society to identify historic resources so they may be considered in future planning.**

- **Objective: To explore creation of a local chapter of the Wisconsin Historical Society.**

- **Objective: To ensure that any known cemeteries, human burials or archaeological sites are protected from encroachment by roads or any development activities.**

Policies

- The Town will encourage individuals to preserve historically significant structures and locales within the jurisdiction.

Strategies and Actions

- Contact the Marathon County Historical Society for tips on how to inventory significant structures.
- Consider teaming with other local communities to form a local chapter of the Historic Society.
- Help interested properties owners obtain information on their property if they feel it is historically significant.
- Celebrate historic local sites with a pamphlet or other materials for dissemination.

8. Community Facilities Element

Goal 1: Provide effective public safety services.

- **Objective: Work with the Marathon County Sheriffs Department to increase local police protection.**

- **Objective: Explore developing a local police district with the City of Mosinee.**

- **Objective: Work with the Village of Kronenwetter and Mosinee Fire District to continue to provide effective fire and EMS services and maintain First Responder levels.**

- **Objective: To ensure sufficient delivery of fire protection services by remaining active in fire station relocation, satellite station and personnel recruitment discussions.**

Policies

- Knowlton will contract with appropriate entities to provide sufficient emergency service delivery.

Strategies and Actions

- Participate in long-term facilities and equipment planning with service-providing entities.
- Annually review contracts with service providers and evaluate delivery of services.
- Participate in recruitment efforts, especially concerning fire and emergency response, with providing agencies.
- Communicate needs for service increases when they arise.
- Start planning for increased service delivery, especially for police services, with other local communities.

9. Parks Element

Goal 1: Develop a local park.

- **Objective: To plan for site acquisition and facilities development of a local park.**

- **Objective: To identify funding for park development.**

Policies

- The Town of Knowlton will develop appropriate levels of local parks and open spaces.

Strategies and Actions

- Announce future plans to develop a park.
- Advertise willingness of the Town of accept donations of private land for public use.
- Work with the WDNR to identify sources of funding to help with site acquisition or facilities development costs.
- Seek private donations for local park development.

Goal 2: Enforce parkland dedication requirements established in the subdivision ordinance.

- **Objective: To ensure parkland dedication requirements, or fee in lieu of dedication standards for new residential development are adhered to.**

Policies

- The Knowlton will use the parkland dedication ordinance to help appropriate resources for parks development.

Strategies and Actions

- Provide developers with the parkland dedication fee schedule.
- Include requirements for parkland dedication in the development recommendations passed along to the County Forestry, Recreation, and Zoning Committee.

Goal 3: Support Marathon County park system.

- **Objective: To assist in future facilities development in Ashley Park.**

- **Objective: To encourage proper funding for maintenance of local Marathon County parks.**

Policies

- The Town of Knowlton will encourage appropriate development of public spaces throughout the region.

Strategies and Actions

- Encourage proper maintenance and upkeep of the existing County park system.
- Communicate desires for recreational facilities and uses to Marathon County Parks, Recreation, and Forestry Department.

10. Economic Development Element

Goal 1: Encourage appropriate retail/convenience business development to serve the local population.

- **Objective: To identify sites where commercial development would have little impact on surrounding land uses (STH 34).**

- **Objective: To support development of businesses that provide services desired by residents.**

Policies

- The Town supports the development of a local convenience store.

Strategies and Actions

- Establish a committee that is charged with actively recruiting developers for construction of a local convenience store.
- Hold public discussions to decide upon appropriate sites for commercial uses.
- Determine feasibility of developing a site so that it is ready for building.
- Work with McDEVCO and other local economic development entities to discuss possible funding programs and to market Knowlton.

Goal 2: Discourage industrial development.

- **Objective: To encourage future development that complements living in a residential community (i.e. low environmental impact, quiet).**

Policies

- Knowlton will work to prevent the development of industry within the jurisdiction.

Strategies and Actions

- Discuss adopting a resolution against the development of industry.
- Work with Marathon County to maintain residential as the primary land use with limited commercial.
- Explore developing an ordinance that limits the dimensions of non-residential buildings.

Marathon County Strengths and Weaknesses for Economic Development

Strengths

- Many acres of land zone Exclusive Agriculture, which strengthens the retention of the agricultural industry.

- Ample open space, woodlands, and natural areas, which adds to the small town living environment sought after by existing/future businesses and their employees.

- A strong base economy made up of a variety of businesses including leaders in papermaking, lumber, insurance, and dairy products.

- Strong support for economic development from the community and economic development organizations

Weaknesses

- The agricultural economy is declining, and exclusive agricultural zoning prevents other industry development in the community.

- Access limitations along highways and frontage roads.

- Lack of design/aesthetics control for commercial and industrial development.

- Competition for industrial development – particularly between urban and fringe areas.

11. Intergovernmental Cooperation Element

Goal 1: Improve relationship with Marathon County boards and commissions.

- **Objective: To attend regular meetings of County boards and commissions where local issues are discussed.**

- **Objective: Invite County officials to local meetings where topics discussed will be submitted to the County for final approval.**

Policies

- The Town of Knowlton will engage in regular communication with Marathon County boards and commissions.

Strategies and Actions

- Establish regular meeting dates with decision-making bodies.
- Provide all governing bodies with regular updates, or meeting minutes, from official Town meetings.

Goal 2: Coordinate development around town boundaries.

- **Objective: To increase communication concerning development proposals located near or adjacent to surrounding communities.**

- **Objective: To explore border development procedures.**

Policies

- The Town will communicate development proposals for lands located near other jurisdictions with those jurisdictions.

Strategies and Actions

- Establish regular meeting dates with adjacent communities to discuss local development.
- Provide all governing bodies with regular updates, or meeting minutes, from official Town meetings.
- Request regular updates from official meetings of adjacent communities.

Goal 3: Increase communication with the Central Wisconsin Airport (CWA).

- **Objective: To attend regular meetings of the CWA.**

- **Objective: To monitor airport expansion plans for local impact.**

Policies

- The Town of Knowlton will engage in regular communication with the Central Wisconsin Airport.

Strategies and Actions

- Establish regular meeting dates with the CWA.
- Request minutes from all official CWA meetings.
- Participate in public comment sessions for airport proposals to voice concerns and represent resident viewpoints.

12. Implementation Element

The primary reason a community prepares a comprehensive plan is to establish a framework to influence decisions regarding management of growth and regulation of development to maintain the desired community character, and to set priorities for public expenditures. To be effective, this plan should be actively used as a tool to guide decisions concerning:

- The implementation and enforcement of regulatory ordinances based on the goals and objectives identified in this plan.
- The development of programs and support systems that further the goals and objectives set forth in this plan.
- The implementation of specific community improvements as identified in the comprehensive plan.
- The establishment and support of a continued planning process providing for periodic review and updates to this plan and other land use control measures.

Implementation Tools

Having the appropriate tools to implement the recommendations in this comprehensive plan is critical. The most common implementation tools are the Town official controls or regulatory codes. In particular, the zoning ordinance and subdivision (or land division) regulations comprise the principal regulatory devices used to protect existing development and guide future growth and development as identified in this comprehensive plan. There are also non-regulatory approaches to implementing the comprehensive plan; these generally involve decisions about how the community will spend its limited funding resources on capital improvements and staffing.

The State planning law requires that by January 1, 2010 certain programs and/or actions that affect land use must be consistent with the locally adopted comprehensive plan. To meet this deadline, Knowlton should update related ordinances on or before the year 2010. The Town Board officially adopts these regulatory and land use control measures as ordinances (or as revisions to the existing ordinances).

- **Zoning Ordinance and Map:** Zoning is used to manage and control how land is used and developed. Zoning ordinances typically establish detailed regulations concerning how land may be developed, including setbacks, the density or intensity of development, and the height and bulk of building and other structures. The general purpose of zoning is to minimize undesirable side effects resulting from development by segregating and/or buffering incompatible uses and by maintaining standards that ensure development will not negatively impact the community's character or environment.

  The establishment of zoning districts and the zoning map indicates where specific types of development can and should be located. Zoning districts shown on the zoning map should be coordinated with the land use plan and map. While the zoning map and land use map do not need to directly match at the time the land use map is adopted, the intent is that the land use map will serve as a guide indicating how the property should eventually be zoned. Therefore, indiscriminate zoning changes may result in weakening of the comprehensive plan. In fact, changes to zoning district boundaries should only be made if they are consistent with the adopted land use map.

  However, there may be situations where changing the zoning district boundary makes sense and is in the best interest of the

community. If changing the zoning would result in a conflict with the future land use map, the land use map should also be changed. However, the future land use map should only be changed if it does not accurately reflect the community's desired land use pattern. Achieving consistency between zoning and land use designation is also discussed in the Land Use Element.

As discussed below, the comprehensive plan (and future land use map) should be periodically reviewed and updated to adjust for unforeseen changes or events that were not considered at the time the initial plan and land use map were developed.

The Town Board makes the final decisions regarding changes to the content of the zoning ordinance and the district map. These decisions are preceded by public hearings and recommendations of the plan commission.

- **Subdivision (Land Division) Ordinance:** Subdivision regulations serve as an important function by ensuring the orderly development of unplatted and/or undeveloped land. These regulations may set forth reasonable regulations for lot sizes, road access, street design, public utilities, storm water drainage, parks and open space, and other improvements necessary to ensure that new development will be an asset. The Board makes the final decisions on the content of the subdivision ordinance. These decisions are preceded by public hearings and recommendations of the plan commission.

- **Capital Improvement Plan (CIP):** This is an ongoing financial planning program that allows local communities to plan ahead for capital expenditures and minimize unplanned expenses. A capital improvement plan consists of a list of proposed projects according to a schedule of priorities over a four-to-six year period. It identifies needed public improvements, estimates their costs, and identifies financing methods and sources. Public improvements or expenditures typically considered in a CIP include:

  - Public buildings (i.e., fire and police stations)
  - Park and trail acquisition and development
  - Roads and highways (maintenance and new construction/paving)
  - Utility system construction/expansion, treatment plants, water towers, wells, etc.
  - Joint school and other community development projects
  - Fire and police protection equipment

  A CIP is simply a method of planning for and scheduling expenditures for public improvements over a period of several years in order to maximize the use of limited public funds. Each year the CIP should be reviewed and extended one year to compensate for the previous year that was completed. This keeps the improvement program current and allows for modifications to meet the community's changing needs.

  The preparation of a CIP is normally a joint responsibility between the town board, plan commission, staff, and citizen commissions. The preparation of a capital improvement program may vary from community to community depending on local preferences, the local form of government and available staff. The proposed capital improvement plan should be reviewed in light of the priorities outlined in the comprehensive plan.

Plan Adoption, Monitoring, and Amendments

While this comprehensive plan is intended to provide a long-term framework to guide development and public spending decisions, it must also respond to the continuous stream of changes that occur in the community and/or region that may not have been foreseen when the plan was initially adopted. It is appropriate that some elements of the plan are rarely amended while others are subject to updating on a more regular basis. Plan maps should also be updated periodically. In general, key maps, such as the future land use map, should be reviewed annually to make sure they are still current.

Plan Adoption: The first step in implementing this plan involves adoption of the plan by local officials. The formal review and adoption process involves plan review by the Plan Commission (or other planning committee) who must adopt the plan by resolution of majority vote. The Plan Commission recommendation is forwarded to the Town Board who must adopt the plan by ordinance (of majority vote). A public hearing is required to allow public comment on the ordinance prior to Board final action to adopt the plan. Adoption formalizes the plan document as the framework to guide local development decisions over the next 20 years. The adopted plan should also be recognized as a tool for communicating the community's land use policy and goals and objectives regarding coordination of growth and development.

Plan Use, Monitoring and Evaluation: The adopted plan should be used as a tool by Knowlton when making land use and development decisions. Decisions concerning private development proposals, public investments, regulations, incentives, and other actions should be consistent with the goals, objectives, policies, and recommendations outlined in this plan.

Although this plan describes policies and actions for future implementation, it is impossible to predict the exact future condition of Knowlton**.** As such, the goals, objectives, and actions in this plan should be monitored on a regular basis to maintain concurrence with changing conditions and respond to unanticipated events.

This plan should be evaluated at least every 5 years, and updated at least every 10 years. Members of the Town Board, Plan Commission, and any other local decision-making bodies should periodically review the plan and identify areas that might need to be updated. The evaluation should involve first reviewing the goals and objectives to ensure they are still relevant and reflect current community desires. Then the strategies and actions should be reviewed and refined to eliminate completed tasks and identify new approaches if appropriate. The evaluation should also include an updated timetable of actions to clarify priorities.

Plan Amendments: The Knowlton Comprehensive Plan may be amended at any time by the Town Board following the same process described above for initial Plan adoption, regardless of how minor the proposed amendment or change. Amendments may be appropriate throughout the lifecycle of the plan, particularly if new issues emerge or trends change. These amendments will typically consist of minor changes to the plan text or maps. Large-scale changes or frequent amendments to meet individual development proposals should be avoided or the plan loses integrity. A list of criteria to determine the merits of proposed amendments is included in Table 12-1.

As noted above, proposed amendments must be reviewed by the Plan Commission prior to final action and adoption by the Town Board. The public should be notified of proposed Plan changes and allowed an opportunity for review and comment. For major amendments, the Town might consider soliciting public opinion through surveys and/or community meetings prior to the official public hearing.

Plan Updates: According to the State comprehensive planning law, comprehensive plans must be updated at least once every ten years. As opposed to the more routine amendments described above, plan updates often involve re-writing of whole sections of the plan document and significant changes to supporting maps. A plan update should include a thorough examination of the community's goals and objectives based on an analysis of current growth trends and major changes that have occurred since the plan was initially adopted or last amended. Plan updates must be formally adopted following the same procedure described above for initial plan adoption.

Table 12-1: Criteria to Consider When Reviewing Plan Changes

1. The change is consistent with the overall goals and objectives of the Knowlton Comprehensive Plan.
2. The change does not create an adverse impact on public facilities and services that cannot be mitigated.
3. Development resulting from the change does not create an undue impact on surrounding properties. Such development should be consistent with the physical character of the surrounding neighborhood or would upgrade and improve its viability.
4. The change allows a more viable transition to the planned uses on adjacent properties than the current land use.
5. The change does not have a significant adverse impact on the natural environment including trees, slopes and groundwater, or the impact could be mitigated by improvements on the site or in the same vicinity.
6. There is a change in Town actions or neighborhood characteristics that would justify a change.
7. The change corrects an error made in the original plan.
8. There is a community or regional need identified in the comprehensive plan for the proposed land use or service.
9. The change does not adversely impact any landmarks or other historically significant structures or properties unless mitigated through relocation, commemoration or dedication.

Consistency Among Plan Elements

The State of Wisconsin planning legislation requires that the Implementation Element describe how each of the required elements will be integrated and made consistent with the other elements of the plan. Since Knowlton completed all planning elements simultaneously, no known inconsistencies exist. It is noted that some overlap naturally exists between the nine plan elements. Where deemed appropriate, goals, objectives, and actions have been repeated under all applicable elements to ensure they do not get "lost".

This Comprehensive Plan also references previous and concurrent related planning efforts (e.g, LRTP, Groundwater Study) to ensure they are considered in planning decisions in conjunction with the recommendations of this Plan. Summary descriptions of recent and concurrent planning efforts are provided in the *Conditions and Issues Report*. Recommendations from other plans have been summarized and incorporated in this plan as deemed appropriate, to foster coordination and consistency between plans. Some related plans, such as the *Marathon County Hazard Mitigation Plan*, are incorporated by reference in this plan and are essentially considered appendices of this plan even though they are separate documents. Appendix E provides a bibliography of other plans and studies relevant to comprehensive planning.

Action Plan

The table below provides a detailed list of major actions to complete in order to implement this comprehensive plan. It compiles the major short, mid, and long-term priorities described in each of the nine plan elements. It also identifies the parties that will play key roles in implementing the actions.

Table 12-2 is intended to be used by local officials in setting priorities for capital budgeting and project assignment. It is expected that this table will be reviewed annually and revised, as necessary, to respond to changing priorities, financial limitations, and other unforeseen events. It should be noted that many of the actions require considerable cooperation with others, including the citizens of Knowlton, committees, and other local/county/state agencies.

Priority ranking is defined as follows:

- Immediate = ASAP
- Short-term = 1-4 years
- Mid-term = 5-9 years
- Long-term = 10+ years
- On-going = Current activities that should continue indefinitely

Table 12-2: Implementation Plan Actions

Action	*Who is responsible?*	*Priority*
Natural Resources Actions		
Evaluate water quality levels on a periodic basis.	Town Board WDNR	Immediate
Report instances of possible groundwater contamination to the WDNR.	Town Board	Ongoing
Obtain educational materials from the Wisconsin Bureau of Drinking Water and Groundwater for local distribution.	Town Board	Immediate
Enhance monitoring efforts in areas thought to contain possible contamination hazards.	Town Board	Immediate
Communicate the desire for wetland protection to Marathon County and the WDNR.	Town Board	Immediate
Obtain a main contact person from each agency the Town communicates with at the County, and WDNR.	Town Board	Immediate
Discuss adopting local regulations that are at least as restrictive as current measures, but better suit area needs.	Town Board	Short-Term
Gather examples of local shore land restrictions used in other communities and adapt for possible local use.	Town Board	Short-Term
Send owners of private forestland information on preservation programs.	Town Board	Short-Term
Encourage developers to maintain as much forestland as possible	Plan Commission	Immediate
Work with Marathon County to identify restrictive ordinances, such as sign ordinances that limit square footage, for possible implementation.	Plan Commission	Immediate
Discourage the rebuilding/reuse of deteriorating signs, or signs that are not used	Town Board	Immediate

Land Use Actions	**Who is responsible?**	**Priority**
Discuss adopting a resolution against the development of industry.	Town Board	Short-Term
Work with Marathon County to maintain residential as the primary land use with limited commercial development.	Town Board	Ongoing
Explore developing an ordinance that limits the dimensions of non-residential buildings.	Plan Commission	Short-Term
Contact local agencies to acquire informational materials on agricultural preservation tools.	Town Board	Short-Term
Explore working with Marathon County, or local communities to host a workshop on agricultural preservation.	Town Board	Short-Term
Discuss adopting a resolution against the development of cellular towers.	Plan Commission	Short-Term
Explore updating the subdivision ordinance to improve regulations on design, lot size, and access.	Plan Commission	Immediate
Work with Marathon County to present arguments for or against proposed development projects.	Plan Commission	Immediate
Strengthen developing regulations that transfer the cost of all development to the developer.	Plan Commission	Immediate
Transportation Actions	**Who is responsible?**	**Priority**
Perform biennial roadway evaluation.	Town Board	Ongoing
Develop a plan that prioritizes transportation improvements over time and includes a budget schedule for upgrades.	Town Board	Short-Term
Hold public hearings to discuss roadway condition and determine in-need areas.	Town Board	Immediate

Work with WDOT to identify grant funding opportunities.	Town Board	Immediate
Communicate with Marathon County Highway Department on a periodic basis.	Town Board	Immediate
Determine local authority to levy fees against individual property owners for excessive roadway damage.	Town Board	Short-Term
Determine local standards for setbacks, distances from other driveways, and other key features of a driveway ordinance.	Town Board Plan Commission	Short-Term
Include access requirements for new subdivisions in the subdivision code.	Plan Commission	Short-Term
Work with the WDOT to establish a park and ride lot, or other service from the Knowlton area.	Plan Commission	Short-Term
Communicate with other communities with airports as neighbors to identify good policies for cooperation.	Town Board	Short-Term
Communicate with airport authorities to increase working relationships.	Town Board	Immediate
Utilities Actions	**Who is responsible?**	**Priority**
Perform annual review of service provision costs.	Town Board	Ongoing
Communicate with surrounding communities the willingness to share costs.	Town Board	Immediate
Determine feasibility for updating or installing utilities and earmark funding for incremental improvement.	Town Board	Short-Term
Housing Actions	**Who is responsible?**	**Priority**
Observe land use plan in siting new residential development.	Plan Commission	Immediate
Explore adopting a planned unit development (PUD) ordinance to allow for concentrated multi-use development.	Plan Commission	Short-Term
Determine limits of service provision on a per-unit basis.	Plan Commission	Short-Term
Determine the extent of growth desired by the community and explore exacting development fees, or incentives, to achieve desired outcomes.	Town Board	Short-Term
Identify the best areas for senior housing developments geographically on a map.	Plan Commission	Short-Term
Communicate the desire for senior housing development to members of the County Forestry, Recreation, and Zoning Committee to increase speed of proposal approval.	Town Board	Immediate
Cultural Resources Actions	**Who is responsible?**	**Priority**
Contact the Marathon County Historical Society for tips on how to inventory significant structures.	Town Board	Short-Term
Consider teaming with other local communities to form a local chapter of the Historic Society.	Town Board	Mid-Term
Help interested properties owners obtain information on their property if they feel it is historically significant.	Town Board	Immediate
Celebrate historic local sites with materials for dissemination.	Town Board	Long-Term
Community Facilities Actions	**Who is responsible?**	**Priority**
Participate in long-term facilities and equipment planning with service-providing entities.	Town Board	Immediate

Annually review contracts with service providers and evaluate delivery of services.	Town Board	Ongoing
Participate in recruitment efforts, especially concerning fire and emergency response, with providing agencies.	Town Board	Immediate
Start planning for increased service delivery, especially for police services, with other local communities.	Town Board	Short-Term
Parks and Recreation Actions	**Who is responsible?**	**Priority**
Announce, plan for, and identify funding for development of a park.	Town Board	Mid-Term
Provide developers with the parkland dedication fee schedule.	Plan Commission	Short-Term
Include requirements for parkland dedication in the development recommendations passed along to the County Forestry, Recreation, and Zoning Committee.	Plan Commission	Short-Term
Encourage proper maintenance and upkeep of the existing County park system.	Town Board	Ongoing
Economic Development Actions	**Who is responsible?**	**Priority**
Establish a committee that is charged with actively recruiting developers for construction of a local convenience store.	Town Board	Short-Term
Work with McDEVCO and other local economic development entities to discuss possible funding programs and to market Knowlton.	Town Board	Short-Term
Discuss adopting a resolution against the development of industry.	Town Board	Short-Term
Work with Marathon County to maintain residential as the primary land use with limited commercial.	Plan Commission	Ongoing
Explore developing an ordinance that limits the dimensions of non-residential buildings.	Plan Commission	Short-Term
Intergovernmental Cooperation Actions	**Who is responsible?**	**Priority**
Establish regular meeting dates with decision-making bodies.	Town Board	Immediate
Provide all governing bodies with regular updates, or meeting minutes, from official Town meetings.	Town Board	Immediate
Establish regular meeting dates with adjacent communities to discuss local development.	Town Board	Immediate
Establish regular meeting dates with, and receive minutes from the CWA.	Town Board	Immediate
Participate in public comment sessions for airport proposals	Town Board	Ongoing

Appendix A

State Comprehensive Planning Goals

Wisconsin Statutes 66.1001 requires that the goals, objectives, policies, and programs of local governmental units be consistent with the fourteen planning goals in the State planning legislation, which include:

1. Promote the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial, and industrial structures.

2. Encourage neighborhood designs that support a range of transportation choices.

3. Protect natural areas, including wetlands, wildlife habitats, lakes and woodlands, open spaces, and groundwater resources.

4. Protect economically productive areas, including farmland and forests.

5. Encourage land uses, densities, and regulations that promote efficient development patterns and relatively low municipal, state government, and utility costs.

6. Preserve cultural, historic, and archaeological sites.

7. Encourage coordination and cooperation among nearby units of government.

8. Build community identity by revitalizing main streets and enforcing design standards.

9. Provide an adequate supply of affordable housing for all income levels throughout each community.

10. Provide adequate infrastructure and public services and a supply of developable land to meet existing and future market demand for residential, commercial, and industrial uses.

11. Promote 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.

12. Balance individual property rights with community interests and goals.

13. Plan and develop land uses that create or preserve varied and unique urban and rural communities.

14. Provide an integrated, efficient, and economical transportation system that provides mobility, convenience, and safety, which meets the needs of all citizens including transit-dependent and disabled.

Appendix B

Marathon County Guiding Principles

Participants in the Marathon County comprehensive planning process worked cooperatively, through several meetings with sub-area groups, to develop a set of guiding principles that describe broad characteristics of a desired future for their communities and Marathon County. The guiding principles consist of a series of statements that reflect shared values and priorities regarding future growth and development. These principles were used to provide a general frame of reference for developing local goals and objectives. The ten guiding principles include:

1. **Respect Local Governance -** Planning in Marathon County should build on local town, village and city government as a system that is unique, has served residents well, and is a strong component of local identity.

2. **Preserve Working Agriculture -** Agriculture has been central to the culture and economy of Marathon County for over 100 years. Farming has been a way of life for generations of county residents and is fundamental to both community and individual identity. Efforts such as protecting prime farmland from development, exploring niche markets, and supporting cooperative practices can be implemented at the local level to help maintain and preserve working agriculture.

3. **Maintain a Sense of Place -** As Marathon County's population grows and changes, communities will need to ensure that important physical features, buildings, and landscapes that exemplify their local identity are retained. These features provide a sense of heritage and continuity that contribute to a community's identity and sense of place.

4. **Preserve Rural Character -** Shifts in the farm economy and urban expansion are altering the County's rural landscape characterized by working farms, woodlands, rolling hills, marsh areas, and plentiful water bodies. As open spaces, farms, and woodlands are being lost or fragmented by development, Marathon County communities will need to make some important choices in order to preserve the qualities and character of the rural landscape.

5. **Safeguard Natural Resources -** Marathon County is graced with abundant natural resources including numerous rivers, wetlands, forests, and wildlife. Careful stewardship of natural resources is essential to protect against fragmentation and degradation and ensure these resources continue to contribute to the ecology, character, quality of life, and economy of Marathon County into the future.

6. **Foster Managed Growth and Coordinated Development -** Managing growth is important to ensure that no area is overwhelmed by development, land use conflicts are minimized, and development occurs in a quality manner that minimizes impacts on natural resources. Managing growth requires coordination of land uses and infrastructure, within and between communities, and recognizes that high quality growth in any one community will benefit surrounding communities as well.

7. **Cost-Effective and Efficient Provision of Public Services -** Marathon County residents are clear in their desire to keep local taxes reasonable. One of the most effective

means to keep taxes under control is to ensure that public services are efficiently organized to provide the best service possible for the taxpayer dollar. Communities have a responsibility to provide the highest level of services possible given limited resources. To ensure cost-effective public services, local communities may want to consider options such as greater coordination, cost-sharing and consolidation if such efforts improve access to services and service delivery.

8. **Build Social and Civic Capacity -** Marathon County residents take pride in their long tradition of local government. Ideally, participation in community affairs embraces and builds upon the diversity of cultures and values present in the community. Providing opportunities to share ideas and participate in community decision-making is essential to building and maintaining a strong sense of local community.

9. **Support Rural Service Centers -** Rural centers are part of a web of services that support residents, give local identity and are part of the rural way of life that residents want to preserve. Most villages in the County grew as centers to provide goods and services for nearby farmers, but have evolved as rural activity centers including the local school, churches, and some goods and services. Just as city neighborhoods are stronger with nearby commercial services, rural areas are stronger with nearby villages that provide a central meeting place to connect with other rural residents. As more people move to rural areas, it makes sense to concentrate new development in areas that can efficiently provide utilities and other services.

10. **Preserve and Enhance Local Tax Base -** A strong tax base allows a community to deliver needed services to residents while helping to keep taxes low. Erosion of local tax base is a concern for many communities, often as a result of annexation, increases in public land ownership, and shifting economic markets. Efforts to attract additional revenue generators and coordinate with adjacent municipalities can help communities protect and preserve their local tax base.

TOWN OF KNOWLTON, MARATHON COUNTY, WISCONSIN
ORD. #2005-3
ADOPT COMPREHENSIVE PLAN OF TOWN OF KNOWLTON

The Town Board of the Town of Knowlton, Marathon County Wisconsin, do ordain as follows:

Section 1. Pursuant to section 60.22(3) of the Wisconsin Statutes, the Town of Knowlton is authorized to prepare and adopt a comprehensive plan as defined in section 66.1001(1)(a) and 66.1001(2) of the Wisconsin Statutes.

Section 2. The Town Board of the Town of Knowlton, Marathon County Wisconsin, has adopted written procedures designed to foster public participation in every stage of the preparation of a comprehensive plan as required by section 66.1001(4)(a) of the Wisconsin Statutes.

Section 3. The plan commission of the Town of Knowlton, by a majority vote of the entire commission recorded in its official minutes, has adopted a resolution recommending to the Town Board the adoption of the document entitled "Comprehensive Plan of the Town of Knowlton," containing all of the elements specified in section 66.1001(2) of the Wisconsin Statutes.

Section 4. The Town has held at least one public hearing on this ordinance, in compliance with the requirements of section 66.1001(4)(d) of the Wisconsin Statutes.

Section 5. The Town Board of the Town of Knowlton, Marathon County, Wisconsin, does, by enactment of this ordinance, formally adopt the document entitled, "Comprehensive Plan of the Town of Knowlton," pursuant to section 66.1001(4)(c) of the Wisconsin Statures.

Section 6. This ordinance shall take effect upon passage by a majority vote of the members-elect of the Town Board and posting as required by law.

Adopted this 14th day of November, 2005

Jim Morris Chairman, Jim Morris

Kevin Brown Supervisor, Kevin Brown

Brian Feit Supervisor, Brian Feit

Attest: Sandy Morris Town Clerk, Sandy Morris

Town of Knowlton Comprehensive Plan
Public Participation Plan

Introduction

Public participation is the process which people who will be affected by or interested in a decision by a governmental body have an opportunity to influence its content before the decision is made.

Wisconsin's Comprehensive Planning statute recognizes the necessity of effective public participation and requires the adoption of a written public participation plan as stated in Chapter 66.1001(4)(a).

"The governing body of a local government unit shall adopt written procedures that are designed to foster public participation, including open discussion, communication programs, information services, and public meetings for which advance notice has been provided, in every stage of the preparation of a comprehensive plan. The written procedures shall provide an opportunity for written comments on the plan to be submitted by members of the public to the governing body and for the governing body to respond to such written comments".

In preparation of the Comprehensive Plan for the Town of Knowlton, the Town Board and Town Planning Commission are committed to providing on-going opportunities for public participation throughout the planning process. The Town of Knowlton is therefore committed to completing the following tasks in order to provide opportunities for public participation.

1. **Posting/Notification of all planning commission meetings**.
   Public notification for Plan Commission meetings will be posted at the following locations:
   - Knowlton Town Hall
   - Mullin's Cheese Factory
   - Cyran's DuBay Pitstop

   Town Board and Plan Commission members will regularly check these sites to see that posted notifications are replaced if removed. These notifications will be posted during the entire Comprehensive Planning process until the adoption of a comprehensive plan by the Town of Knowlton.

2. **Town Meetings**
   The Town of Knowlton Planning Commission will hold public informational hearings/input sessions for each of the phases of the planning process. These phases are as follows:
   - Issues and Conditions
   - Goals and Objectives
   - Conceptual Plan

- Implementation

In addition, the Planning Commission will hold two public hearings as required by Chapter 66.1001(4)(d). These meetings will be held upon the completion of the Knowlton Comprehensive Plan and prior to Town Board voting to accept or deny the Comprehensive Plan. A notice of the hearing must be published at least 30 days before the hearing in a newspaper likely to give notice in the area. The notice will meet the requirements for proper notification regarding date, time, location, etc.

3. **Sub-Area / Consultant Meetings**
   All meetings conducted Marathon County or the Consultant will be open to the public and posted similar to planning commission meetings.

4. **Town Newsletters**
   The Town Board of Supervisors along with the Planning Commission will prepare a newsletter for property owners and residents in the Town of Knowlton. This newsletter will be sent with property tax bills. The newsletter will include important news and updates about the comprehensive planning process.

5. **Newspaper Notices**
   The Town of Knowlton Planning Commission will prepare notices of meetings in the Mosinee Times.

6. **Public Comments**
   The Knowlton Town Board and the Planning Commission will always welcome written comments regarding issues presented. Direct written responses will be made where a response is appropriate. Comments will always be addressed and discussed at meetings.

7. **Other**
   Planning is a continuous process that does not end with the adoption of the plan. Unforeseen issues at the time this document was prepared, or as future issues arise, the planning commission may organize additional public participation activities or as it considers specific planning issues and amendments to the comprehensive plan. The topics of the meetings or open houses will depend on these issues and will be designed to feature opportunities for public education, input, and interaction.

Appendix E – Bibliography of Planning Related Studies, Regulations and Resources

Natural Resources

- **Marathon County Land and Water Resource Management Plan (LWRMP)** - In 2005, Marathon County adopted the LWRMP in accordance with Wisconsin Statutes (Wisconsin Act 27, Chapter 92.10). The primary intent of this plan is to identify a vision for natural resource management in Marathon County, to outline strategies to protect the quality and quantity of soil and water resources and to ensure compliance of state agricultural performance standards and local ordinances.

- **Marathon County 2001 Groundwater Protection Guide** – This guide is an extension of the efforts established with adoption of the *Marathon County Groundwater Plan* in 1988. It is intended to guide local and County officials in setting policy to safeguard groundwater resources. It also serves as a resource of information about groundwater and other natural resources and recommends strategies to address issues related to groundwater protection.

- **Marathon County Forest Ten-Year Comprehensive Land Use Plan, 2006 - 2015** This plan includes recommendations to manage and protect the county forest on a sustainable basis for ecological, economic, educational, recreational, and research needs of present and future generations. It provides substantial information on existing forest resources and information regarding the roles of the various agencies and regulatory framework related to forest management. The Marathon County Board of Supervisors will consider approval of the plan in September 2005 and the DNR will do so in December 2005.

- ***Soil Survey for Marathon County***, published in 1990 by the U.S. Soil Conservation Service and updated in 2003.

- ***Marathon County Cropland Evaluation System (CES)* -** This system rates soils on their ability to produce food, feed, forage, and fiber crops. The system is non-biased, defendable, and can be consistently applied.

- ***Farm Preservation Program*** is an income tax credit program administered by the Wisconsin Department of Agriculture (WDA), Trade & Consumer Protection. The goals of the program are twofold: to preserve Wisconsin farmland by means of local land use planning and soil conservation practices and to provide property tax relief to farmland owners. Landowners keeping land in agricultural use can claim a credit on their state income tax by obtaining a zoning certificate (if the land is zoned "exclusive agriculture") or by signing a contract with the State.

- ***Marathon County Farmland Preservation Plan,*** adopted in 1982, eight towns have adopted Exclusive Agriculture Zoning. These include: Stettin, Marathon, Mosinee, Hull, Brighton, Eau Pleine, McMillan, and Day. The intent of this zoning classification is to minimize fragmentation of farmland by imposing a minimum lot size of 35 acres. In order to adopt Exclusive Agriculture zoning, a municipality must be enrolled in the Farmland Preservation Program.

- ***Marathon County Non-metallic Mining Ordinance,*** adopted in 1989 requires reclamation of these sites to a purposeful and acceptable landscape appearance and use. The program is administered by the County DCPZ and includes incentives to reclaim abandoned excavations.

- ***Natural Heritage Inventory (NHI) maps*** provided by the State of Wisconsin include general information on endangered resources are appropriate for general planning and assessment purposes only. The locations of endangered resources that are not considered vulnerable to collection are identified at the town level in Marathon County. Locations of more vulnerable species are generalized to minimize the potential for collection or disruption.

Land Use

- ***General Code of Ordinances for Marathon County*** includes several sections that specifically address land use and various development activities. Some of these include:

    - **Chapter 11 (Animal Waste and Manure Management)** includes regulations to prevent animal waste material from entering water bodies through issuance of construction permits for new and modified manure storage facilities. The ordinance also regulates the closure of abandoned manure storage facilities, mismanaged manure storage facilities and the application of manure onto cropland.
    - **Chapter 17 (Zoning Code)** includes development restrictions in shoreland and wetland areas and a wellhead protection overlay district that encompasses recharge areas for municipal water supply wells. Local communities in Marathon County may adopt their own zoning code, adopt the County zoning code, or choose to have no zoning.
    - **Chapter 16 (County Forests)** prescribes rules and regulations for the administration of County forests in cooperation with the Department of Natural Resources. Provides for the establishment, protection, development and management of County forests to provide sustained yield of forest products for commercial use and the associated benefits of soil and water conservation, scenic and recreational values, fish and game resources, multiple-use purposes and related uses.
    - **Chapter 18 (Land Division)** The County's land division regulations apply in all unincorporated areas of the County. However, where a town has land division regulations that are more restrictive than the County's, the local regulations apply. Chapter 18 includes regulations for minimum lot sizes, street design and access requirements, land dedication, surface drainage and erosion control.
    - **Chapter 19 (Parks and Recreation)** includes regulations regarding use and management of all lands and water previously and subsequently acquired by the County for park or recreational purposes or placed under the jurisdiction of the Park Commission and including without limitation, parks, beaches, swimming pools and privately owned lands, the use of which has been granted or leased to the County for park, recreational or like public purposes.
    - **Chapter 21 (Non-metallic Mining)** includes requirements for reclamation that minimize impacts on groundwater quantity and quality.

- ***Marathon County Hazard Mitigation Plan (2005)*** – This plan, prepared in accordance with Federal Emergency Management Administration (FEMA) directives of the Disaster Mitigation Act of 2000, outlines strategies for pre-disaster planning and hazard mitigation. The intent is to minimize the effects of potential disasters and help streamline the administration of disaster relief.

- ***Forest Crop Law (FCL) and Managed Forest Law (MFL) -*** the FCL and the MFL programs were developed to encourage better forest management and provide tax relief to woodland owners. Land set aside under the FCL (which was combined into the MFL in 1986) required at least 40 acres in one quarter-quarter section, set aside under a 25- or 50-year contract, and public access for hunting and fishing activities. The MFL was enacted in 1985 and requires at least 10 acres of contiguous forest land. Landowners may close to the public up to 80 acres of their forest lands set aside under MFL. The remaining program acres must be open to public access for hunting, fishing, hiking, sight-seeing and cross-country skiing. Landowners must choose a 25- or 50-year contract. The landowner pays an Acreage Share Amount as part of their tax bill in lieu of taxes.

Transportation

Studies related to transportation are listed below under the jurisdiction who prepared the plan.

1. Marathon County (Conservation, Planning, and Zoning Department (CPZ) and/or Highway Department) is responsible for completing/updating/assisting with several plans/policies/studies relating to transportation including:

- ***State Trunk Highway 29 Corridor Land Use Review (1997)***
    - Recommends actions or measures local communities can make to protect areas within the STH 29 corridor from the negative impacts related to unplanned growth.
- ***Marathon County Functional / Jurisdictional Highway Classification Study (1988)***
    - Identifies and groups classes of roadways that provide similar levels of service. The plan recommended that the unit of government having the greatest basic interest in the roadway's function would carry out the operation, maintenance, and improvement of the classified roadways.
- ***Marathon County Program Evaluation Team (P.E.T.) Transportation Services Recommendations (2002)***
    - These recommendations, under direction of the Marathon County Human Services Committee, are intended to address issues related to specialized transportation services provided by various Marathon County Departments, including issues related to overlapping services.
- ***Bicycle & Pedestrian Plan for the Non-Urbanized Area of Marathon County, Wisconsin (1996)***
    - Identifies suggested bicycle routes in Marathon County outside the Wausau area. Routes were based on traffic counts and condition of pavement. Formal action has not occurred to adopt these as officially designated bicycle routes.
- ***Marathon County Paratransit Study (2001)***
    - Studied paratransit services within the Wausau area provided primarily by Wausau Area Transit System Plus (WATS+). Identified issues with regard to

providing demand responsive services for persons in the Greater Wausau Area and Marathon County. Provides a plan for enhancing paratransit services over a five-year period primarily geared toward controlling costs and increasing efficiency and trip sharing on the WATS+ system.

- ***County Trunk Highway Access-Driveway Policy***
    - Available through the Marathon County Highway Department, addresses the requirements regarding culverts, access width, slope, visibility and spacing. Marathon County issues driveway permits and implements access restrictions on all properties fronting a lettered county road.

2. Wausau Metropolitan Area Planning Commission (MPO) - The MPO is responsible for completing/updating/assisting with several plans relating to transportation in the metropolitan area including:

- ***Long Range Transportation Plan (LRTP) for the Wausau Metropolitan Area (1996)***
    - The LRTP addresses needed improvements to the transportation system serving the Wausau urbanized area. LRTP recommendations are based on the relationship between land use policy and transportation facilities and services, including roadways, transit, bikeways, pedestrian ways, air, inter-city bus, and the movement of goods by air, rail, and truck. The 1996 plan was reaffirmed in 2001 and will be updated by 2005.
- ***Local Arterial Circulation Plan (2000)***
    - The purpose of this plan was to guide public and private sector decisions concerning the infrastructure, right-of-way, Level of Service (LOS), land use compatibility, and safety needs of the local arterial transportation system over the next 20 to 30 years.
- ***Transportation Improvement Program (TIP)***
    - The TIP includes all programmed transportation projects receiving federal and/or state funds. The TIP for 2005 – 2007 was adopted in 2005 and is updated every two years.
- ***Wausau Area Transit System (WATS) Transit Development Plan (TDP) (1999)***
    - The TDP is updated every five years and provides a five-year capital improvement program and service recommendation plan. This plan is being updated in 2005.

3. Wisconsin Deportment of Transportation (WDOT) – WDOT has completed several statewide plans relating to most modes of transportation, including:

- ***Wisconsin State Highway Plan 2020***
    - 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 is updated every six years to reflect changing transportation technologies, travel demand and economic conditions in Wisconsin.
- ***Wisconsin Pedestrian Policy Plan 2020***
    - Outlines statewide and local measures to increase walking and promote pedestrian safety. The plan also clarifies the WDOT role in addressing

pedestrian issues and meeting pedestrian needs by establishing policies for better integrating pedestrian travel into the transportation system.

- **Wisconsin Bicycle Transportation Plan 2020**
  - Presents a blueprint for improving bicycling conditions and encouraging bicycling in the state and calls for the implementation of metropolitan area bicycle plans that have been prepared by Metropolitan Planning Organizations (MPOs).
- ***Wisconsin State Airport System Plan 2020***
  - Developed by WDOT, identifies information related to the state's aviation system. The plan is used by WDOT's Bureau of Aeronautics to pre-qualify airport improvement projects submitted by airport sponsors for funding consideration.
- ***Wisconsin Rail Issues and Opportunities Report (2004)***
  - Developed by WDOT, summarizes critical rail transportation issues, suggests opportunities for public sector involvement, and points out areas where additional research is needed. This report reflects input and guidance from a variety of sources including a State Rail Advisory Committee and a Rail Industry and Shippers' Advisory Group. The information in this report was originally intended for a State Rail Plan 2020. WDOT decided to incorporate the rail planning efforts into *Connections 2030*, WDOT's long-range all-mode transportation plan, and release the Issues and Opportunities Report in the interim. *Connections 2030* is currently being developed by WDOT, and is scheduled to be completed by Spring 2006.

4. Federal Highway Administration:

- ***Federal Highway Administration's Highway Functional Classification: Concepts, Criteria and Procedures***
  - Outlines Federal regulations that States must follow to classify roadways.

Utilities

- **Sewer Service Area "208" Plans** - Section 208 of the Clean Water Act passed in 1972 required the preparation of area-wide water quality management plans. This was translated at the State level through NR 121 of the Wisconsin Administrative Code, which requires that water quality management plans also address sanitary sewer service needs for 20 years into the future. These requirements form the basis of Sewer Service Area "208" Plans. The Wisconsin Department of Natural Resources (WDNR) has review and approval authority over Sewer Service Area plans; however, the technical work to prepare the plan is typically done by local government staff.

  - Wausau Urban Area Sewer Service Plan for the Year 2000 (1981) – initial "208" Plan
  - Major Amendment to the Wausau Sewer Service Area Boundary completed in 1992 (City of Wausau) and 1998 (Towns of Kronenwetter and Rib Mountain, Villages of Weston and Rothschild).
  - Current amendment in progress; with all communities in the sewer service area participating. It is anticipated that the plan will be approved by the DNR in December, 2005.

- ***Chapter 15 - General Code of Ordinances for Marathon County*** incorporates by reference rules, regulations, and laws in the Wisconsin Statutes and Wisconsin Administrative Code governing private sewage systems.

- ***Wellhead Protection Plans*** - The State of Wisconsin mandates that **wellhead protection plans** be developed for any municipal well proposed after May 1, 1992. These plans must be approved by the WDNR before a community can use the new well. Section NR 811.16(5) of the Wisconsin Administrative Code defines specific requirements for required wellhead protection plans.

Parks and Recreation

- ***Marathon County Comprehensive Outdoor Recreation Plan for 1999-2004***, completed in May 1999, this plan identifies several needs related to parks and recreation and outlines several actions to address those needs.
    - The plan has received a one-year extension from the State of Wisconsin, and is in the process of being updated with a completion date in spring of 2006.

- ***The Rivers Edge Master Plan,*** adopted in June 1995, outlines a long-range (20-30 year) framework for improving access to the riverfront and enhancing the riverfront environment and provides a master plan to establish a bicycle/pedestrian trail along the banks of the Wisconsin River through the City of Wausau.

Economic Development

- ***Marathon County Workforce Profile,*** Wisconsin Department of Workforce Development (DWD), annually in October.

- ***Final Report***, Marathon County Task Force on the Rural Economy, April 2003.

- ***Agricultural Impacts in Marathon County***, University of Wisconsin – Extension (UWEX), Ken Barnett and Steve Deller, February 2003.

- ***Status of Wisconsin Agriculture***, 2003, UWEX, Mike Wildeck and Ed Jesse, April 2003.

- ***Comprehensive Economic Development Strategy 2002-2003***, North Central Wisconsin Regional Planning Commission (NCWRPC), June 2002.

Appendix F: Guidelines for Paving Gravel Roads[1]

When a local government considers paving a road, it is usually with a view toward reducing road maintenance costs and providing a smooth riding surface. But paving may not be the right answer. After all, paving is expensive. Municipalities should consider the following factors to help them make the most cost-effective decision. Taken together, these factors provide a framework for careful decision-making.

Traffic Demand

The number and weight of vehicles affects a roads lifespan. Generally speaking, the more vehicles using a road, the faster it will deteriorate. The average daily traffic volumes (ADT) used to justify paving generally range from a low of 50 vehicles per day (vpd) to 400 or 500 vpd. When traffic volumes reach this range, serious consideration should be given to some kind of paving. However, traffic volumes alone are merely guides.

Types of traffic should also be considered. Different types of traffic (and drivers) make different demands on roads. Will the road be used primarily by standard passenger cars or will it be a connecting road with considerable truck traffic or heavy farm equipment? Overloaded trucks are most damaging to paved roads. The functional importance of the road should also be considered. Generally speaking, a major road should probably be paved before residential or side roads are paved. On the other hand, a residential street may be economically sealed or paved while a road with heavy truck or farm equipment usage may best be surfaced with gravel and left unpaved until sufficient funds are available to place a thick load-bearing pavement on the road.

Maintenance Considerations

The following questions should be considered when assessing costs associated with maintaining existing gravel roads:

- How often must new gravel be applied to the gravel road? (Some roads require more than others do.)
- How many times per year must the gravel road be graded?
- How often and in what locations should calcium chloride or other road stabilizers be applied?
- What is the plan for ditching and shouldering?

Base and Drainage Needs

"Build up the road base and improve drainage before paving." This cardinal rule cannot be stressed enough. If the foundation fails, the pavement fails. If water is not drained away from the road, the pavement fails. Paving a road with a poor base or inadequate drainage is a waste of money. It is far more important to ask, "Does this road need strengthening and drainage work?" than it is to ask, "Should we pave this gravel road?"

---

[1] "When to Pave a Gravel Road" Gravel Roads Maintenance and Design Manual (2001); Kentucky Transportation Center, University of Kentucky at Lexington, KY, adapted from an article from the Vermont Local Roads Program, Saint Michael's College; posted by Local Technical Assistance Program and the National Local Technical Assistance Program Association and sponsored by the US Department of Transportation's Federal Highway Administration.

Safety and Design Considerations

Paving a road tempts drivers to drive faster. As speed increases, the road must be straighter, wider, and as free as possible from obstructions for it to be safe. Paving low volume roads before correcting safety and design inadequacies encourages speeds that are unsafe, especially when the inadequacies "surprise" the driver. In areas with a large number of miles of low volume roads, it is difficult to reduce speeds by enforcement.

Poorly designed and hazardous roads – Roads must be designed to provide safe travel for the expected traffic volume at the design speed. To do this a number of physical features must be considered:

- Sight Distance
- Design Speed
- Alignment and Curves
- Surface Friction
- Lane Width
- Superelevation

Some engineers insist that no road should be paved that is less than 22 feet wide. If this standard is accepted, gravel roads may need to be widened prior to paving. Likewise, bridges along these roads may need widening. It may also be necessary to remove trees or other obstructions such as boulders from the road edge. Considering these and other safety and design factors in the early stages of decision-making can help to achieve the most cost-effective road design that meets desired transportation needs.

Geometric Guidelines for Very Low-Volume Local Roads (< 400 ADT): The American Association of State Highway and Transportation Officials (AASHTO) publishes road design guidelines, including Geometric Guidelines for Very Low-Volume Local Roads (those with <400 ADT). Less stringent design criteria are generally acceptable on these low volume roads because:

- Lower traffic volumes present substantially reduced opportunities for multiple vehicle collisions, and
- Most drivers are familiar with the roadway design characteristics.

The guidelines offer more flexibility for road designers to maintain existing geometric features, which have not been shown to be a safety problem. Allowing less stringent design standards for very low volume roads provides an opportunity to reduce improvement costs, which may be better utilized elsewhere.

Costs

The decision to pave a gravel road involves determining when it becomes economical to pave; and ultimately when the benefits of paving exceed the costs.

Road Preparation Costs – Road preparation costs related to road bed construction activities that occur before paving actually takes place. Costs will vary greatly from project to project depending on topography, types of soils, and availability of good crushed stone or gravel, traffic demands and other factors. Road design should comply with standards in the municipality's road policy; which is one reason to carefully consider, and routinely update, what is contained in the road policy. For larger projects it may be desirable to hire an engineering consulting firm (another cost) to design the road and make cost estimations. For smaller projects construction costs can be fairly closely calculated by adding the estimated costs of materials, equipment and labor required to complete the job.

Maintenance Costs – Another financial consideration is to compare maintenance costs of a paved road to maintenance costs of a gravel road. To make a realistic comparison, estimate the years of pavement life (how long the pavement will be of service before it requires treatment or overlay) and the actual cost of paving. Then compare those costs with those associated with gravel roads as noted above.

User Costs – Not all road costs are directly reflected in a road budget. There is a significant difference in the cost to the user between driving on a gravel surface and on a paved surface. It costs more to operate vehicles on gravel surfaces than on paved surfaces, often 2 or 3 times greater than for bituminous or concrete roads in the same locations. There is greater rolling resistance and less traction, which increase fuel consumption. The roughness of the surface contributes to additional tire wear and influences maintenance and repair expenses. Dust causes extra engine wear, oil consumption and maintenance costs.

By including vehicle-operating costs with construction and maintenance costs, a more comprehensive total cost can be derived.

Public Opinion

Public opinion as to whether to pave a road can be revealing, but it should not be relied upon to the exclusion of any one of the factors already discussed. If a decision to pave is not based on facts, it can be very costly. Public opinion should not be ignored, of course, but there is an obligation by government leaders to inform the public about other important factors before making the decision to pave.

Staged Construction

Local government may consider using "stage construction design" as an approach to improving roads. This is how it works: A design is prepared for the completed road, from base and drainage to completed paving. Rather than accomplishing all the work in one season, the construction is spread out over three to five years. Paving occurs only after the base and drainage have been proven sufficient over approximately one year. Crushed gravel treated with calcium chloride serves as the wearing course for the interim period. Once all weak spots have been repaired, the road can be shaped for paving.

Following are some advantages to keeping a road open to traffic for one or more seasons before paving:

1. Weak spots that show up in the sub-grade or base can be corrected before the hard surface is applied, eliminating later expensive repair;
2. Risky late season paving is eliminated;
3. More mileage is improved sooner;
4. The cost of construction is spread over several years.

Note: Advantages may disappear if timely maintenance is not performed. In addition, the surface may deteriorate more rapidly because it is thinner than a designed pavement.

Summary

Some existing local roads are not engineered to accommodate the traffic they receive. Larger volumes of heavy trucks and other vehicles are weakening these roads at a fast rate. Paving roads as a sole means of improving them without considering other factors can be a costly mistake. Careful consideration of the factors described above will help to assure local government officials that they are making the right decision before paving a gravel road.

Appendix G: Economic Development Programs

The following list provides a summary of the major programs and resources available to assist with economic development efforts. This is not an exhaustive list and local officials are encouraged to contact Marathon County and MCDEVCO for more complete and current information.

Federal Programs

U.S. Department of Agriculture, Rural, Development: Provides a wide range of programs aimed at farming and rural areas, including:

- **Business and Industry (B&I) Guaranteed Loan Program:** Provides financial backing for rural businesses to create and maintain employment. Assistance includes loans for working capital, machinery and equipment, buildings and real estate, and certain types of debt refinancing.
- **Rural Business Enterprise Grants (RBEG) Program:** Provides grants to public entities, private nonprofit corporations, and Federally-recognized Indian Tribal groups to finance and facilitate small and emerging private businesses located outside a city or urbanizing area.
- **Rural Business Opportunity Grant (RBOG) Program**: Provides grants to promote sustainable economic development in rural communities with exceptional needs.

Economic Development Administration (EDA): Provides a variety of assistance programs focusing on long-term economic growth targeted to areas with demonstrated need or economic distress, including:

- **Public Works Program:** Investments aimed at revitalization, expansion, and upgrades to physical infrastructure specifically to attract new businesses and generate private sector jobs. Examples: water and sewer facilities, rail spurs, port improvements, access improvements.
- **Economic Adjustment Program:** Assistance to mitigate local economic changes resulting from corporate restructuring, natural disasters, depletion of natural resources, or new federal laws or requirements.
- **Technical Assistance Program (Local):** Assistance to help fill knowledge and information gaps to help local leaders in distressed areas make informed decisions regarding economic development.

U.S. Small Business Administration (SBA): The SBA provides financial, technical, and management assistance generally aimed at business startup and growth. Some programs include:

- **Certified Development Company (504 non-profit corporation) Loan Program:** Long-term, fixed-rate financing for major fixed assets, such as land and building improvements.

Wisconsin State Programs

Most State programs are provided through the Wisconsin Department of Commerce, although other departments also offer limited programs. Primary State programs include:

- **Community Development Block Grants (CDBG):** There are several CDBG programs focusing on different aspects of economic development.

    - **Economic Development Program** – grants to establish loans for business start-up, retention, and expansion.
    - **Public Facilities for Economic Development Program:** Helps underwrite the costs of necessary public infrastructure to retain or create employment opportunities.
    - **Public Facilities Program:** Helps finance infrastructure and facilities to serve low and moderate income persons.
    - **Emergency Grant Program:** Helps restore or replace critical infrastructure damaged or destroyed as a result of natural or manmade catastrophes.

- **Community Based Economic Development Program (CBED):** Provides funding assistance to local governments and community-based organizations that undertake planning, development, and technical assistance projects supporting business development.

- **Main Street Program:** Supports efforts to help communities organize to revitalize their downtowns.

- **Wisconsin Technology Zone Program:** Offers tax-credits to high-tech firms that meet certain criteria.

- **Wisconsin Development Zone Program:** Tax benefit initiative to encourage private investment and improve both the quality and quantity of employment opportunities.

- **Enterprise Zone Program:** Provides tax incentives to new or expanding businesses whose projects will enhance distressed areas.

- **Industrial Revenue Bond (IRB) Program:** Allocation of Federal tax-exempt status on bonds that will be issued by a business to finance an expansion project. Program is limited to small and mid-size manufacturers with strong financial statements.

Wisconsin Department of Workforce Development (DWD): This department offers several programs aimed at investing in the workforce, including programs in apprenticeship, vocational rehabilitation, employee training, child care, etc.

Wisconsin Department of Natural Resources (DNR): The Bureau of Remediation and Redevelopment consolidates state and federal clean up programs and provides assistance to help businesses clean up and re-use existing brownfield sites.

Forward Wisconsin, Inc.: This is a State public-private marketing and business recruitment organization that focuses on marketing outside Wisconsin to attract new economic development to the State.

County, Regional, and Local Programs

The primary financial assistance available at the County and local level are revolving loan funds. The primary entities in Marathon County that participate in economic development related efforts include:

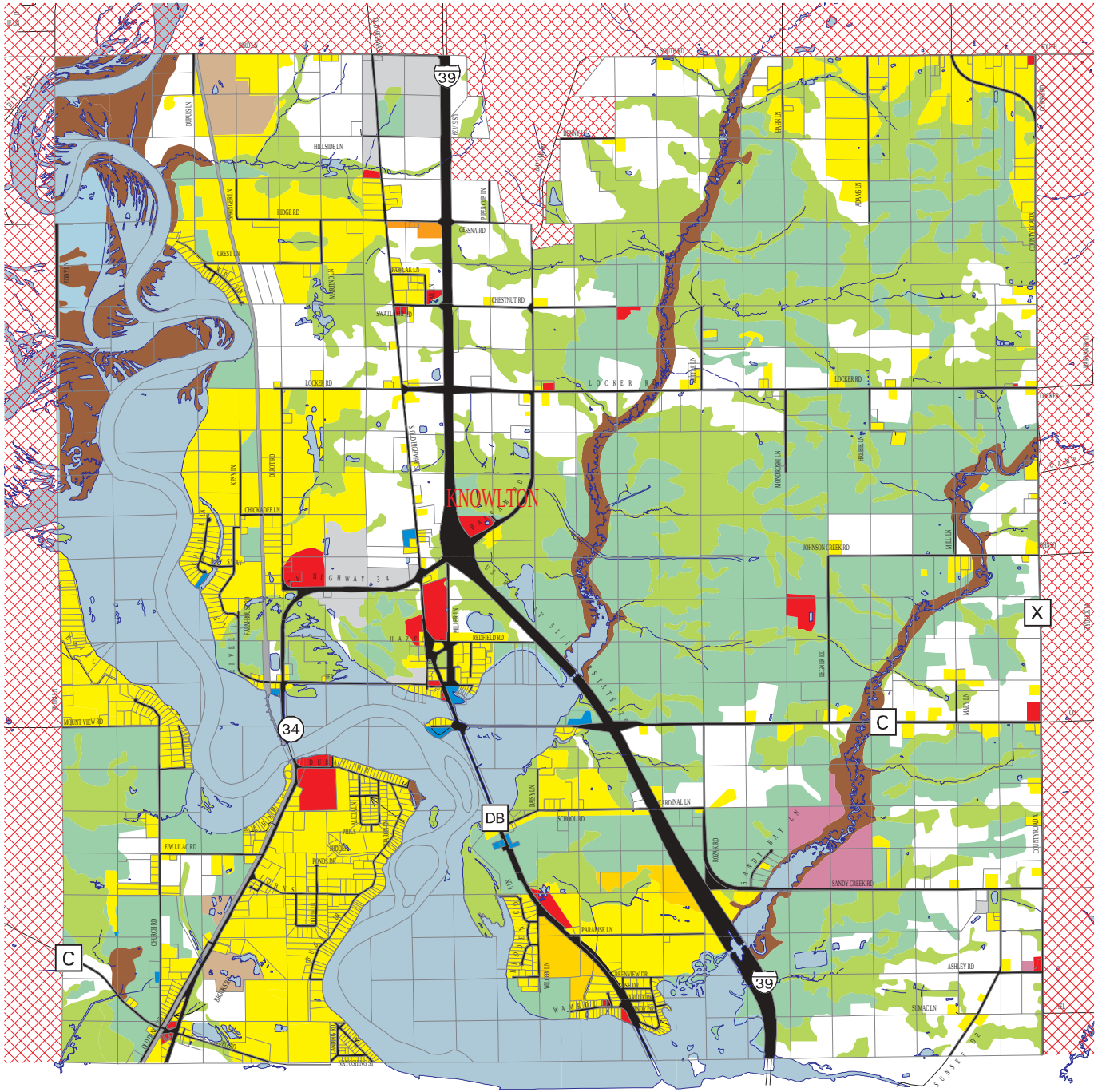
- **North Central Wisconsin Regional Planning Commission (NCWRPC):** The NCWRPC is a designated Economic Development District and provides services such as economic research, marketing, financial packaging, evaluation and analysis of public infrastructure needs that support private economic development activity. The NCWRPC also works with local units of government to maintain eligibility for certain grants.

- **North Central Wisconsin Development Corporation (NCWDC):** A regional organization created for the purpose of managing a regional revolving loan fund. The NCWDC is staffed by the NCWRPC.

- **Wausau Region/Marathon County Chamber of Commerce:** The Chamber provides leadership and support for economic development efforts in the region, including a variety of networking programs, mentoring services, workshops and business counseling services.

- **Marathon County Development Corporation (MCDEVCO):** This is the economic development arm of the Wausau Area Chamber of Commerce. MDCEVCO serves all businesses and communities in Marathon County. MCDEVCO works with individual business, municipalities, and the banking community to facilitate investment in the region. Specific programs administered by MCDEVCO include a revolving loan fund, a small business incubator, and job training funds.

- **Wausau/Central Wisconsin Convention and Visitors Bureau (CVB):** The CVB promotes the area to the business and leisure traveler and provides information on the area to visitors and residents.



- Single Family Residential
- Single Family Residential/Forest
- Multi-Family Residential
- Commercial
- Industrial
- Quarry
- Farm Land
- Forest/Agriculture
- Forest Land
- Wetlands
- Floodplain
- Public/Quasi-Public
- Recreational
- Railroad
- Transportation
- Water

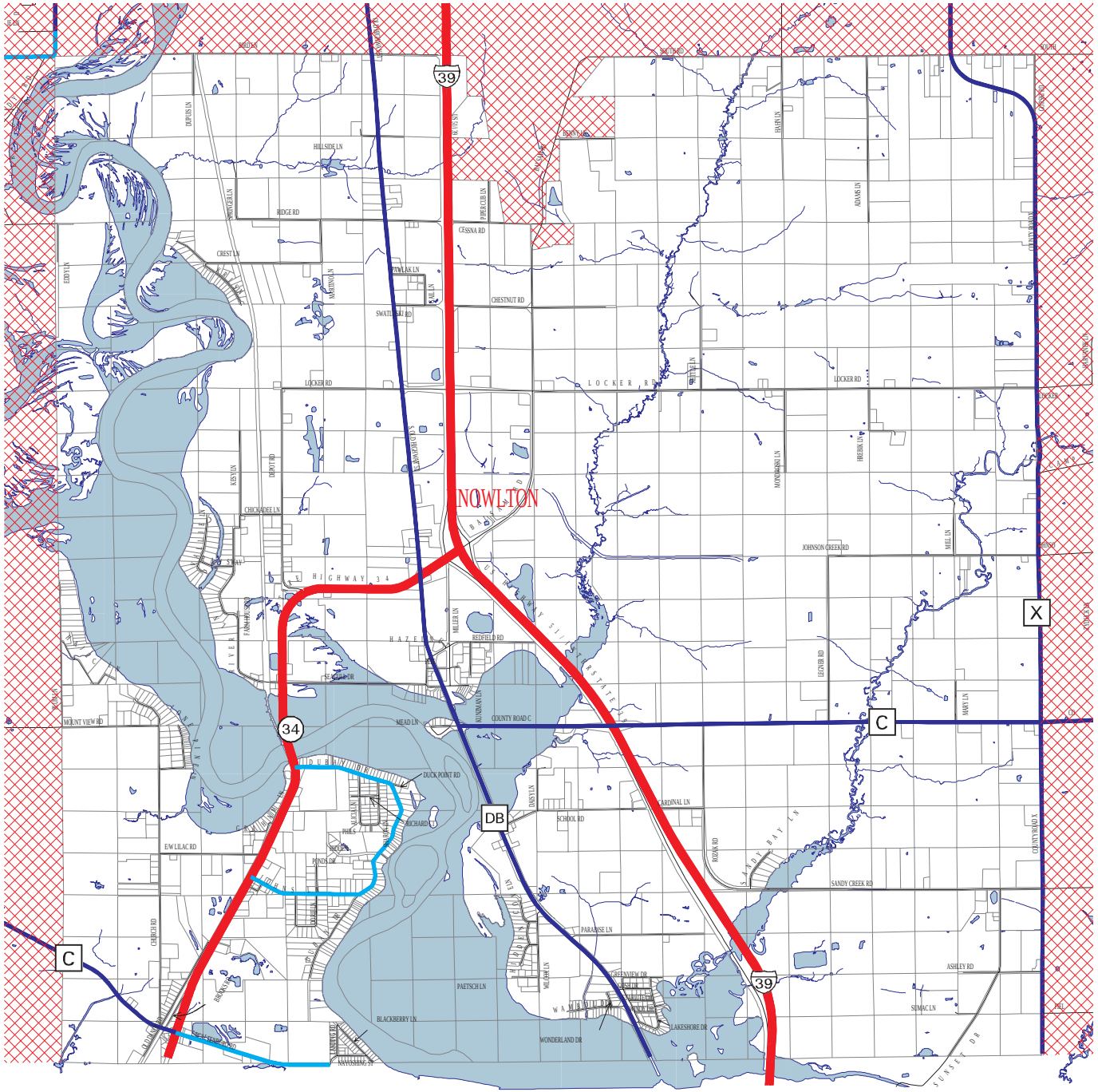
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 3-1

Future Land Use

KNOWLTON



Principal Arterial

Minor Arterial

Major Collector

Minor Collector

F County Highways

52 State Highways

51 US Highways

39 Interstate

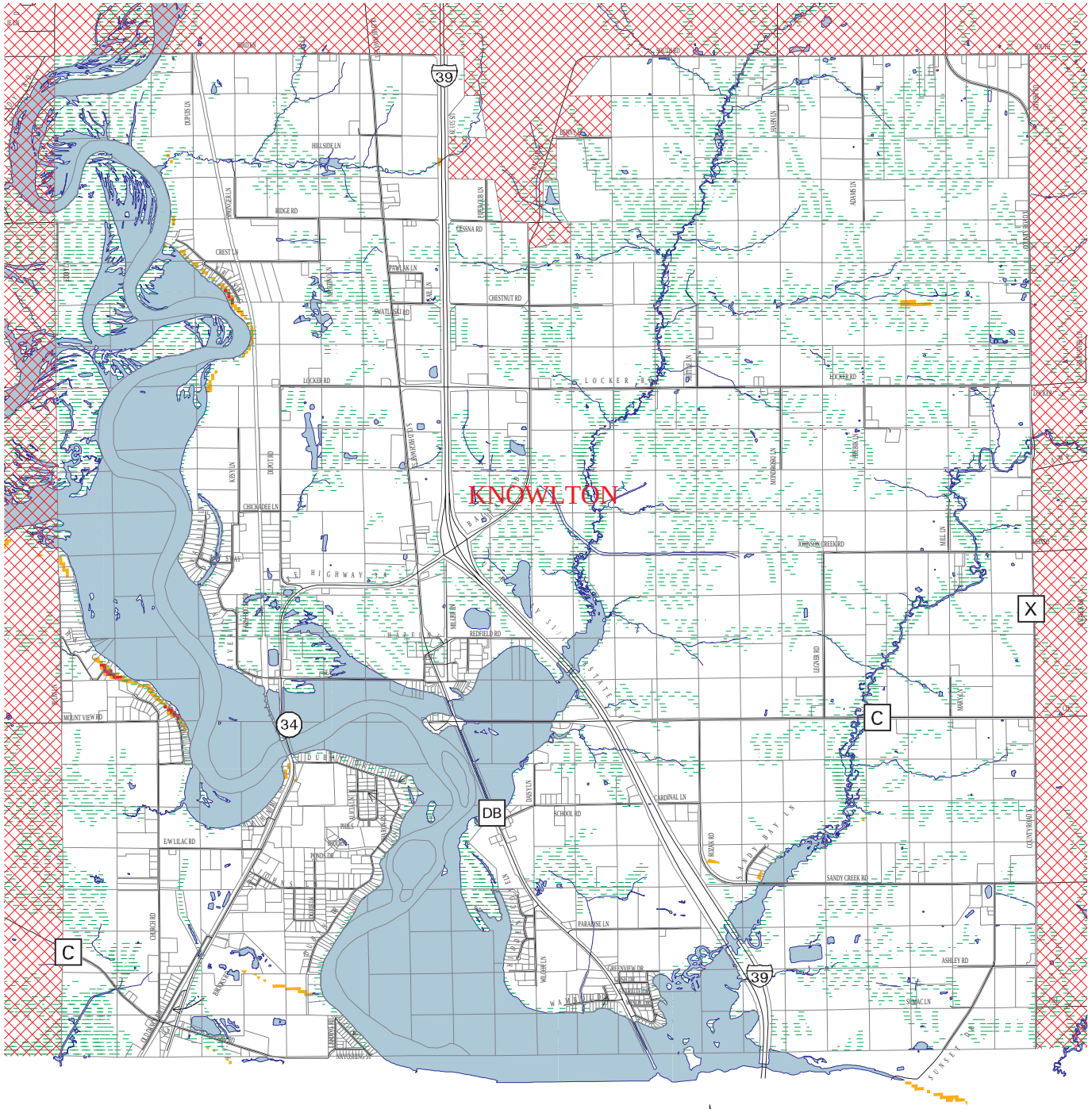
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 4-1

Functional Classification of Roads

KNOWLTON



Environmental Constraints

Slopes Generally 12-20%

Slopes generally greater than 20%

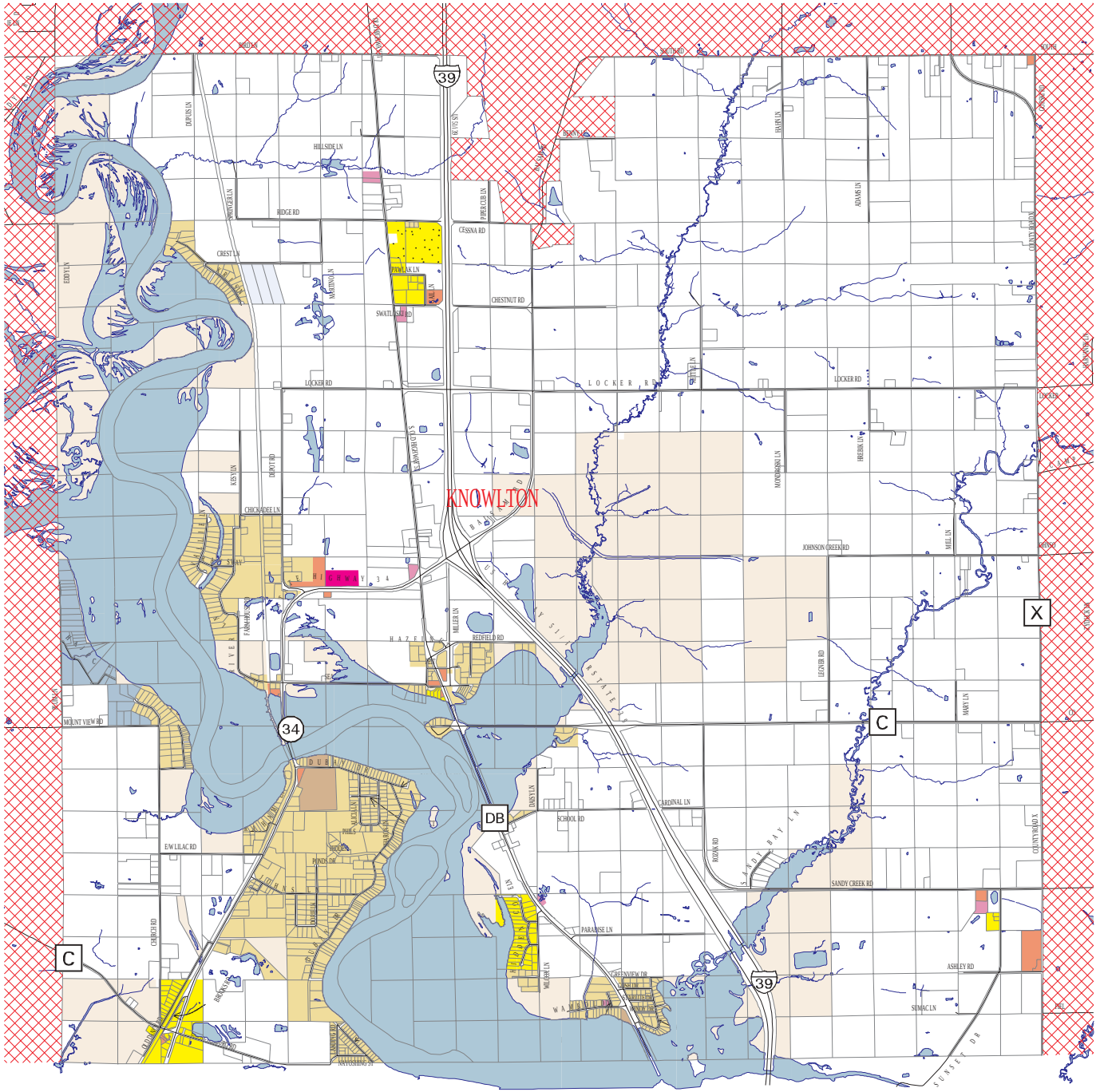
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 3-3

Development Constraints

KNOWLTON



RS-1/20 RS-1/40 RS-2 RM
RP CV RC A-1/1
A-2 A-3 A-3-M A-4
A-4-M AR AR/M AE
AE/M HI C-1 M-1
M-2 UV WP-A WP-B
WP-C

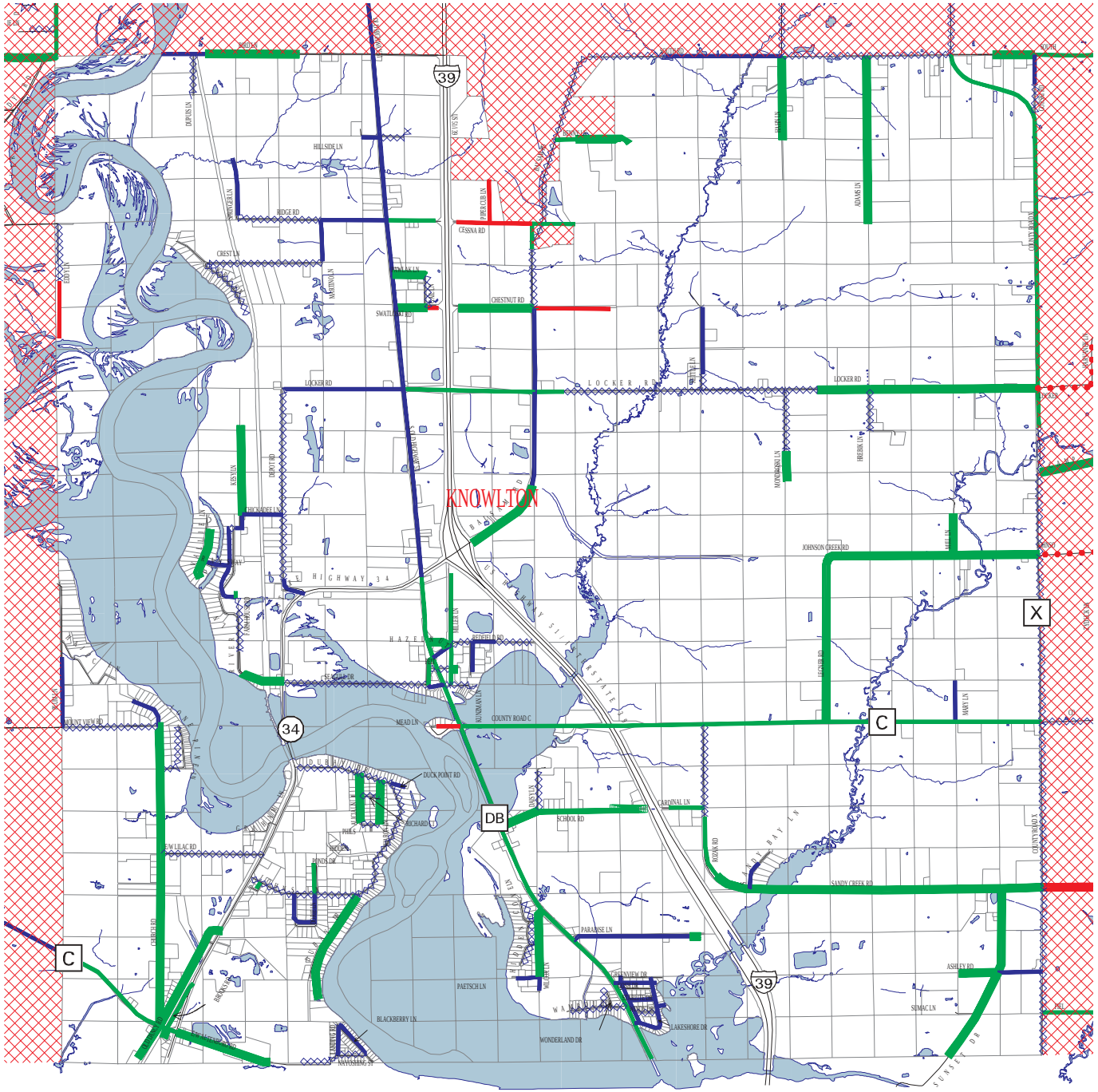
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 3-2

County Zoning

KNOWLTON



No Data
Failed
Very Poor
Poor
Fair
Good
Very Good
Excellent

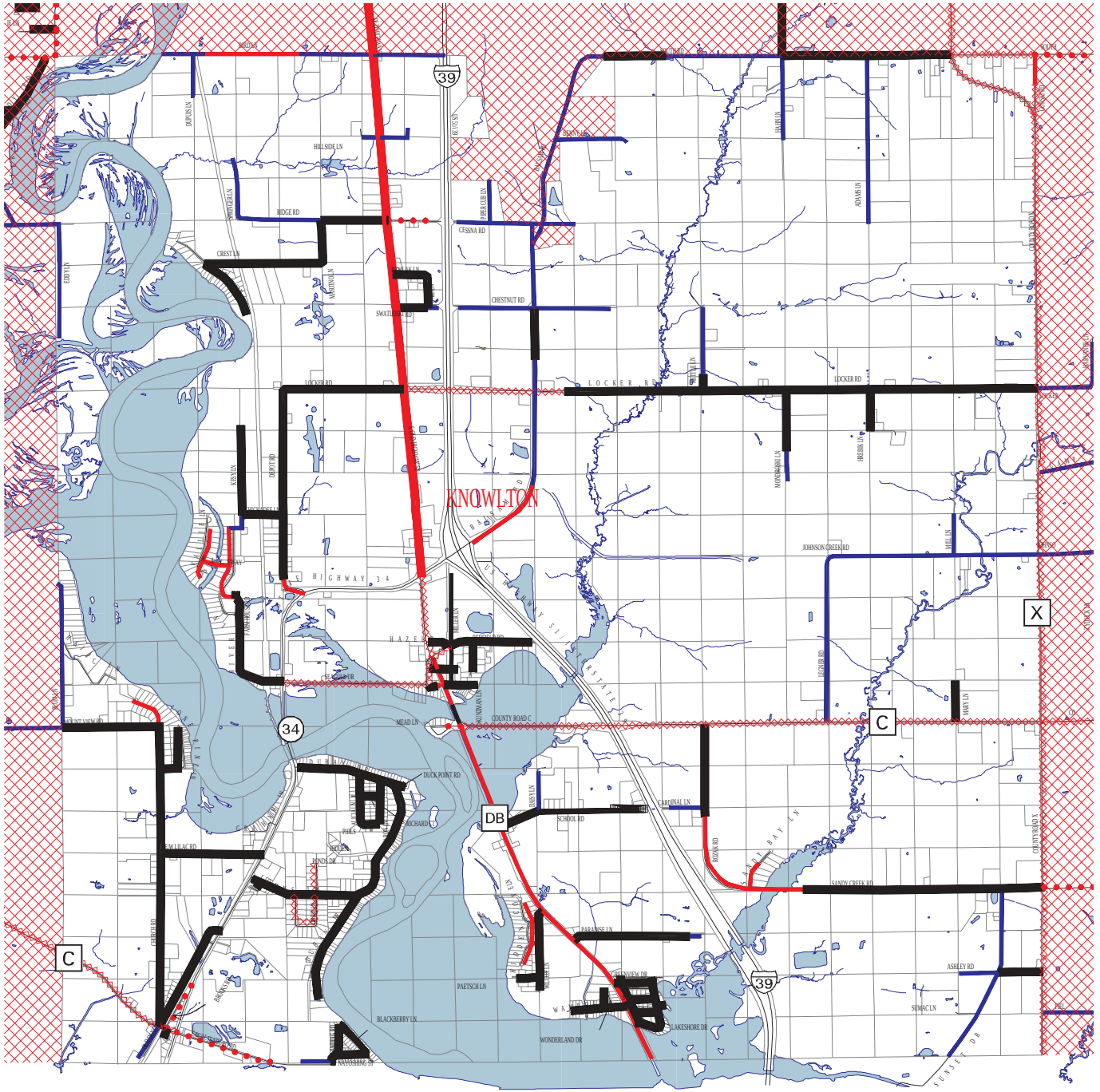
Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 4-2

Road Surface Rating

KNOWLTON



No Data
Concrete Pavement
<1" Wearing Surface
Asphalt Pavement
Asphalt Pavement on Concrete
Asphalt Pavement with Base >7"
Asphalt Pavement With Base <7"
Unimproved Road
Brick or Block Pavement

Indicates other Municipality

Map Developed by Marathon County CPZ & GIS 2005

Figure 4-3
Road Surface Types
KNOWLTON