

2010-2030

# Town of Marshfield Comprehensive Plan



Prepared under the provisions of  
Wisconsin Statute, Chapter 66.1001  
Comprehensive Planning

# **TOWN OF MARSHFIELD, WISCONSIN COMPREHENSIVE PLAN TO 2030**

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Prepared under the provisions of Wisconsin Statute,  
Chapter 66.1001 Comprehensive Planning

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## INTRODUCTION

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Chapter 66.1001, Wisconsin Statutes, requires comprehensive planning in each county, city, village and town that engages in land use regulatory activities, such as zoning or subdivision ordinances. The comprehensive plan addresses nine elements: 1) issues and opportunities, 2) housing, 3) transportation, 4) utilities and community facilities, 5) natural and cultural resources, 6) economic development, 7) intergovernmental cooperation, 8) land use, and 9) implementation. In addition, ch. 66.1001 requires that actions that come under the town zoning ordinance, subdivision ordinance, official map, or shoreland and floodplain zoning ordinance be consistent with the adopted comprehensive plan.

The Town of Marshfield first enacted a local zoning ordinance in the 1960's. A comprehensive revision to that ordinance was completed in 1990, adding such innovative and unique provisions as a 100-foot setback of structures from Wisconsin Department of Natural Resources-mapped wetlands. This protects both the wetland resources and the homes that are constructed near wetlands. During the 1990 zoning ordinance update, the town zoning committee considered planning issues related to the town's proximity to the expanding City of Marshfield and the growing Village of Hewitt, but no planning reports were developed at that time. The City of Marshfield has adopted a comprehensive plan and Hewitt's planning process coincided with that of the town. Boundary concerns of both the City of Marshfield and the village have been considered during the town's planning efforts.

The Town of Marshfield is directly affected by the expansion of the City of Marshfield, most recently with the annexation of town land for a new industrial park. The Village of Hewitt is ideally located to be a growing bedroom community, with residents commuting to the city on a daily basis for work, school, shopping and recreation. The village has grown from 670 in 2000 to 828 in the year 2010. That represents a 24 percent increase. As the village continues to grow, it will need more area for housing and local commercial support businesses. The Town of Marshfield recognizes that both the City of Marshfield and the Village of Hewitt will continue to impact the future of the town. Therefore, town officials have agreed to study those impacts and prepare a comprehensive plan, setting forth goals and objectives, policies and programs for the town to address the issues with which they are faced.

The Town of Marshfield Board chose not to apply for a state planning grant. Rather, the Wood County Planning & Zoning Office was retained to assist the town in completing a plan that meets statutory requirements. The goals and objectives that appear in this document are the result of many meetings of the Marshfield Plan Commission. Input was also solicited from town residents through a community survey. In addition, all residents and land owners in the town were invited to attend and provide their ideas and concerns, as were neighboring community leaders and the public school district administration.



## 1. ISSUES AND OPPORTUNITIES

### A. Location & Geography

The Town of Marshfield is an unincorporated town located just east of the City of Marshfield in the northwest portion of Wood County in central Wisconsin. The town is bounded on the north by Marathon County, on the west by the City of Marshfield and Town of Cameron, on the south by the Town of Richfield, and on the east by the Town of Auburndale. The Village of Hewitt is located in the center of the Town of Marshfield. Figure 1 shows the location of the Town of Marshfield in relation to the State of Wisconsin and Wood County.

Loamy soils are prevalent in Marshfield, described as being in the Withee-Marshfield-Santiago association: nearly level to moderately steep, poorly drained to well drained soils that have a heavy silt loam to silty clay loam subsoil; formed in a thin layer of loess and in loamy glacial till; on uplands.<sup>1</sup> The soils maps, presented in Chapter 5, provide more detail regarding the town's soils and help to explain development patterns and issues in Marshfield.

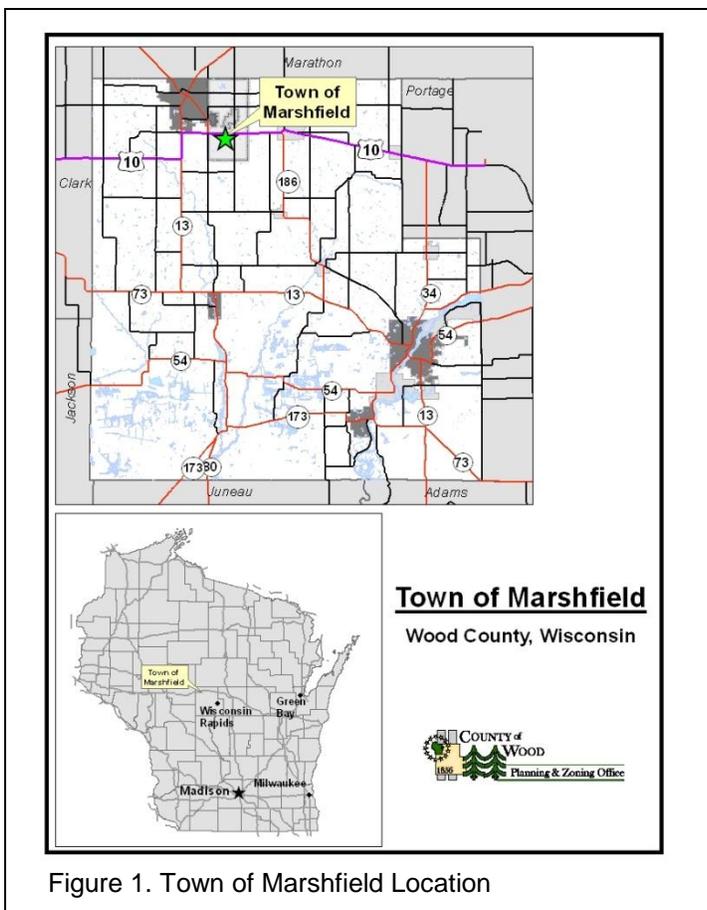


Figure 1. Town of Marshfield Location

### B. History

The Marshfield area was first settled in the 1860s and was named for one of the original owners of the town site, J. J. Marsh. In 1868, two brothers, Louis and Frank Rivers settled in the area and together with David Vaughan, they started the area's logging industry. The first real industry was a stave and spoke factory run by Stillman, Brunson and Pettingill in what was to become the City of Marshfield. The Soo Line Railroad was constructed and the first train came through the town in 1872, spurring development. In 1883, the City of Marshfield incorporated, leaving half a geographic township as the Town of Marshfield.

The Town of Marshfield is the 2<sup>nd</sup> smallest town, geographically, in

<sup>1</sup> U. S. Department of Agriculture, Soil Conservation Service, "Soil Survey of Wood County, Wisconsin," January, 1977.

Wood County. Only Cameron is smaller in size. The Town of Marshfield ranks 14<sup>th</sup> of 22 towns in the county in terms of population size, however. About 2½ percent of the people who live in Wood County's unincorporated towns live in the Town of Marshfield. The population in 2010 was 764. The town lost 47 people between 2000 and 2010. In 2000, the population was 811. That is a decline of nearly six percent in the number of town residents. The loss was due, in part, by the relocation of Highway 10.

The Town of Marshfield continues to have a mix of agricultural and non-farm residential uses. There are also some commercial and industrial uses scattered through the town.

### **C. Town Government**

The Town of Marshfield is governed by a three-member, elected board of supervisors. One member of the board serves as chairman, a position that is also elected by general ballot. The Town Board holds regular meetings once each month, all subject to Wisconsin's open meetings laws. The Board oversees a budget of \$264,218 (2011). Assessed value of the town is \$58,262,700 (2011).

In addition to the Town Board, there is an elected Town Clerk and Treasurer. The town also appoints an assessor.

Several committees and commissions are appointed to oversee policy development and operations of some town functions. The planning commission meets on an as-needed basis to consider various building and land use issues. That commission also oversees the development and implementation of the town's comprehensive plan and zoning ordinance.

### **D. Population**

Disclaimer Much of the data in this chapter is from the U.S. Census for 1990 and 2000. The amount and types of data collected in the 2010 census was greatly reduced, making more recent comparisons difficult or impossible. More current data from the U.S. Census, American FactFinder, American Community Survey, and State agency sources is used where available. Data from these other sources, however, is based on samples and may have a large margin of error. Caution is advised when citing this data. It is presented for general planning purposes only.

Figure 2 shows the population changes for the Town of Marshfield from 1920 through 2010. Between 1930 and 1950, the population dropped and then held steady until the post-World War II surge with the beginning of the baby-boomer generation and movement from the cities to the suburbs. The Town of Marshfield experienced a 35% growth between 1950 and 1960, much of that in what became the Village of Hewitt. When Hewitt incorporated in 1973, the population of the town dropped to 784 in the 1980 census. It has remained relatively stable since, with only slight fluctuations. The new growth can be attributed to the community pulling together to provide a good quality of life and good housing choices in a small, friendly community. While there is still a mix of agricultural and residential uses in the town, the Town of Marshfield has

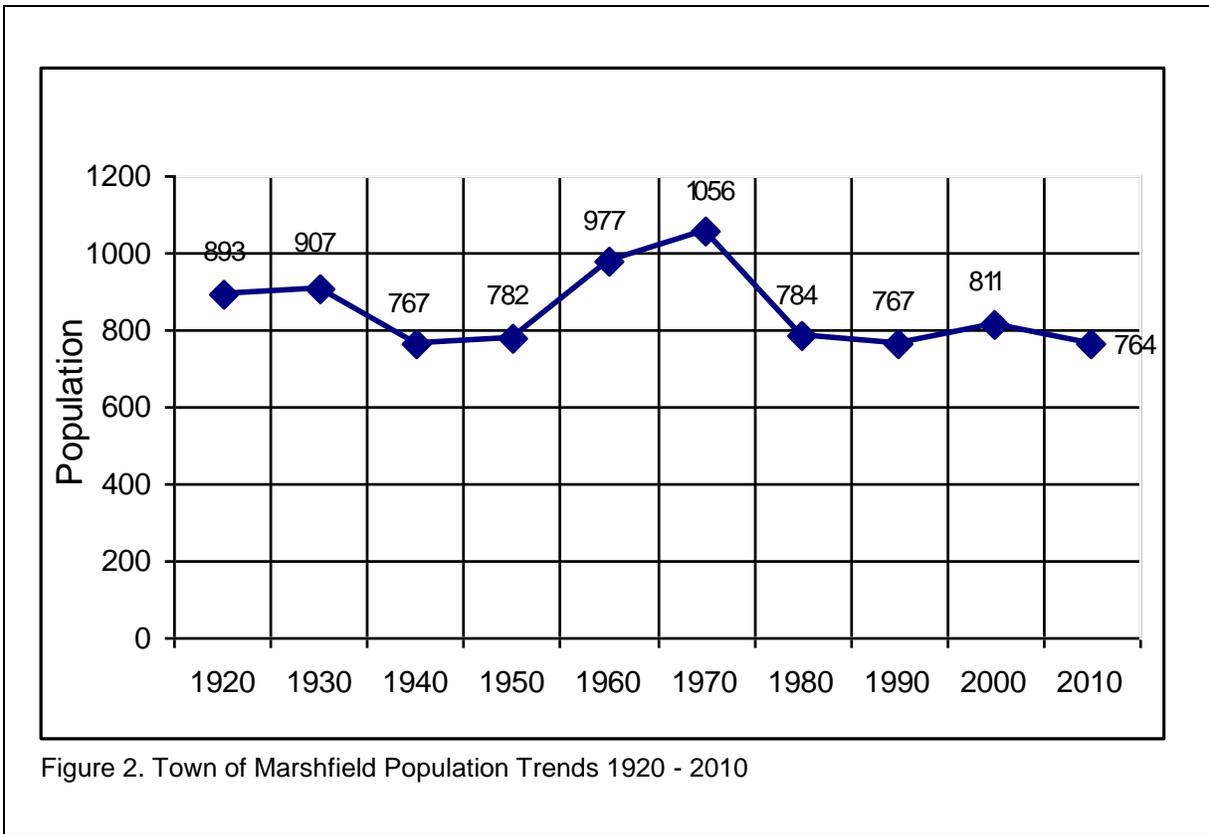


Figure 2. Town of Marshfield Population Trends 1920 - 2010

become more of a suburban community with residents commuting primarily to the City of Marshfield for jobs while attempting to escape the higher property taxes of the city by building their homes or moving to the town.

**E. Median Age and Age Distribution**

The median age of the Town of Marshfield’s population from 1980 to 2010 is illustrated in Table 1 with a comparison to Wood County and Wisconsin. The median age has risen by 5.0 years since 2000 and more than 15 years since 1980. According to the 2000 census, 11.5% of the town’s population was age 65 and over. That figure

jumped to 14.8% in 2010. Nearly 20% were age 62 and over, an increase over the nearly 14% in 2000. Marshfield’s median age of 43.5 is slightly higher than the average for Wood County as a whole.

	1980	1990	2000	2010
T. Marshfield	28.4	32.6 +4.2	38.5 +5.9	43.5 +5.0
Wood County	28.9	33.3 +4.4	38.0 +4.7	42.8 +4.8
Wisconsin	29.0	32.9 +3.9	36.0 +3.1	38.5 +2.5

Source: U. S. Census & American FactFinder (2010)

The State and County’s population has also been aging. In Wood County, the median age went up 13.9 years from 1980 to 2010 and the median age for Wisconsin went up by 9.5 years during that same period. The main reason for the older population is

the fact that the post-WWII baby-boomers are now from 55-65 years old.

The average median age for the Town of Marshfield's neighboring communities as listed in Table 2 is 42.8. Villages and cities typically have "older" populations than towns for a number of reasons, but this doesn't seem to hold true in the area around the Town of Marshfield. One reason older people tend to live in cities and villages is that they to want to live closer to shopping, churches and community activities. Condominiums and senior housing developments are popular choices for the aging who no longer want to care for lawns and homes, or who can't perform home maintenance functions. Those types of housing are almost always located in cities and villages that can provide water pressure needed to meet fire codes, can provide drinking water and can provide sanitary sewer systems. Another reason for seniors to live in cities and villages is many need the services that are offered in assisted living centers and nursing homes. Most of that type housing is in incorporated communities that have sanitary sewer and water utilities and that have other services and facilities within easy commuting distance.

Municipality	Median Age
Village of Hewitt	41.1
Town of Richfield	42.1
Town of Auburndale	41.2
<b>Town of Marshfield</b>	<b>43.5</b>
City of Marshfield	41.1
Town of McMillan	44.7
Town of Cameron	45.9
<b>AVERAGE</b>	<b>42.8</b>
Source: American FactFinder, Table DP-1	

Figure 3 provides graphic details about the town's population age groups from the 1980, 1990, 2000 and 2010 census figures. A few things stand out that help define the character of the town. First, the number of persons in the four age groups that include town residents under the age of 35 has been on the decline. This is not an unusual trend in most Wood County communities. Second, there had been an increase in the age groups that include persons who are 35 to 44 years old and up until the most recent census. In 2010, there was a 44% decrease in the number of persons in that age cohort. The 45 to 54 age group increased between 1980 and 2000, but held steady in the 2010 census. Beyond that, there has been a steady increase in the older population cohorts.

In total, the Town of Marshfield has lost over 53% of their population that is under the age of 25 since 1980. On the other end of the scale, the town’s population that is 65 years old and older has increased by 42%. The point to be taken away from this analysis is the impact the aging population will have on services in the community. Fewer school age children, for example, may result in difficulty supporting area schools. Some schools may close as the result of the declining need. At the other end of the scale, there may be a higher demand for senior housing, assisted living centers, passive recreation areas, public transportation and other such services to serve a different demographic makeup of the community.

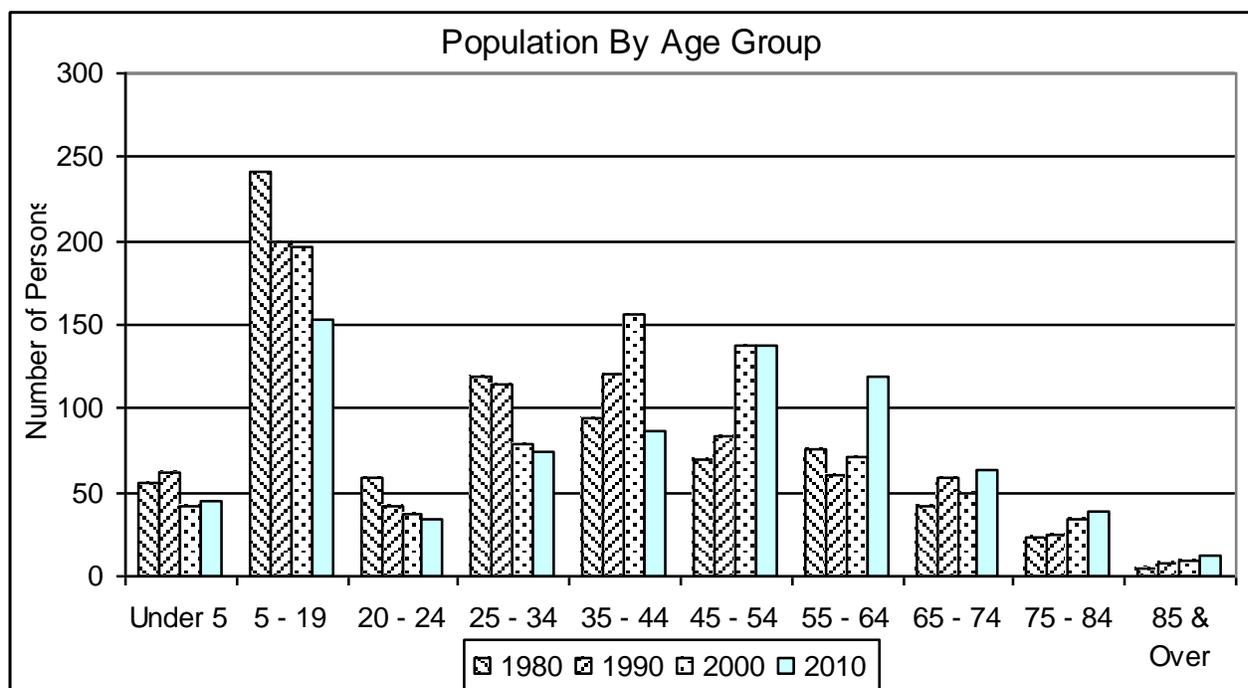


Figure 3. Population by Age Group

### F. Education

The level of education of Town of Marshfield residents age 25 and older has continued to increase since 1990. This is the result of more emphasis placed on education and the need for more education to live in a society that has much more technology and more specialties than in the past. Many of the town’s senior residents ended their educational training with high school graduation or less. Some cut their education short because of World War II and a high school education was all that was required for most manufacturing jobs in our area. Table 3 shows the change in educational levels for the Town of Marshfield, Wood County and Wisconsin. Although a consistently lower proportion of the population in Marshfield has completed a high school education or Bachelor’s degree or higher than both the county and the state, the gap has closed considerably since 1990.

Year and Educational Level	Town of Marshfield	Wood County	Wisconsin
1990			
High School	75.1	78.3	78.6
Associate Degree	9.7	8.2	7.1
Bachelor's Degree or higher	7.1	13.5	17.7
2000			
High School	81.3	84.8	85.1
Associate Degree	7.3	8.1	7.5
Bachelor's Degree or higher	11.7	16.9	22.4
2010			
High School	86.0	89.2	89.4
Associate Degree	10.1	10.9	9.0
Bachelor's Degree or higher	16.8	19.2	25.8
Source: U. S. Census.			

Today, many area businesses and industries require specialized training and a two-year Associate degree. Mid-State Technical College works closely with area businesses to provide customized training programs to meet changing needs. In addition, the U.W. Marshfield campus offers two-year degree programs. In 2010, 10.1% of Town of Marshfield residents, age 25 and older had an Associate degree. This is a good increase over the 7.3% who had an AA degree 10 years earlier and similar to the change at the county level. The proportion of county and state residents with Associate degrees was up for the same period of time, but not as much as what was seen locally. The Associate degree program of Mid-State Technical College is also very strong in Wood County, serving many businesses and industries with customized training. Associate degrees will continue to play a strong role in Wood County's businesses and industries.

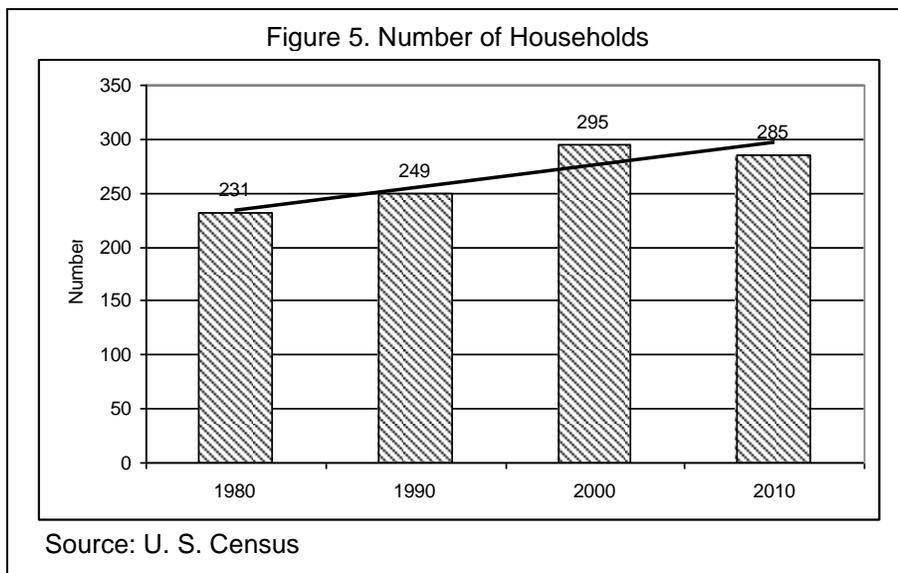
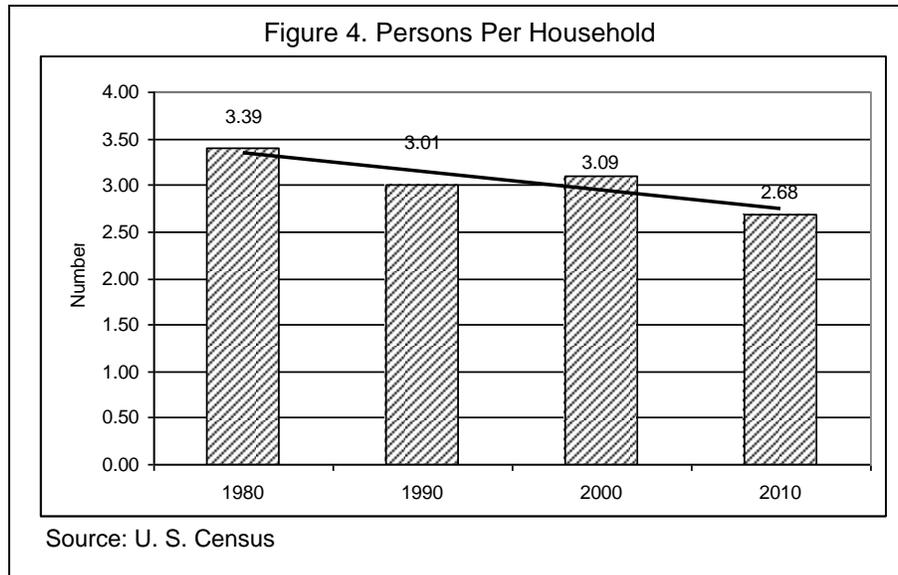
A growing number of jobs require a minimum of a Bachelor's degree and more jobs require a Master's degree. The response to those requirements can be seen in the proportion of population that has earned a Bachelor's degree or higher over the past two decades. While only 7.1% held degrees in 1980, nearly 17% did in 2010. The increase in those who have earned a Bachelor degree or higher in the Town of Marshfield is much higher than at the county or state levels. University of Wisconsin campuses in

Marshfield and Stevens Point help train people who work in our area and live in the Town of Marshfield. More will be said about the cooperation of the University system with the technical college in the Intergovernmental Cooperation chapter of this plan.

## G. Households

The household characteristics in the Town of Marshfield are changing as the age and make-up of the population changes. With fewer residents 35 years of age and

younger, there are fewer persons per household. Although there are fewer persons in each household (Figure 4, Table 4), the actual number of persons living in Marshfield is increasing, thus more housing is needed (Figure 5, Table 4). With the aging population, there may be some changes in the type of housing that residents prefer or need. They may prefer smaller homes or condominium living to get away from outdoor



maintenance chores that get more difficult with age or because of disabilities. Perhaps they will need a home that can accommodate persons with mobility impairments who need features like zero-step entrances and wide interior doorways in order to live safely and comfortably in their homes. A survey of Americans aged 45 and older found that nearly one-fourth of the respondents thought it likely that they or someone in their household would have difficulty getting around in their homes within

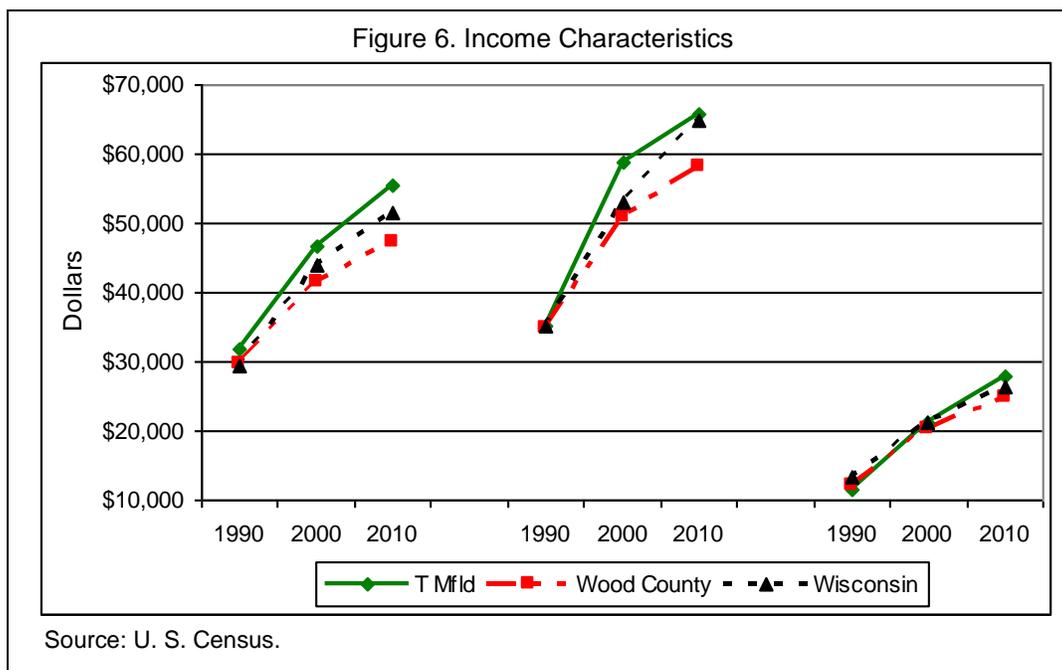
Year	T. Marshfield		Wood County	
	No. of HH	Pop./HH	No. of HH	Pop./HH
1980	231	3.39	25,067	2.87
1990	249	3.08	27,473	2.65
2000	295	2.75	30,135	2.47
2010	285	2.68	31,071	2.41

Source: U. S. Census

the next five-years.<sup>2</sup> In 2000, 17% of Town of Marshfield residents, age 65 and over, had a physical disability and 17% had self-care disabilities that could contribute to difficulty getting around in their homes or using facilities within their homes. There are many other Town of Marshfield residents who are under the age of 65 who reported some disability to the 2000 census and as many as 24 of them have a self care disability or physical impairment that could make it hard to get around their homes.

### H. Income and Poverty

Income levels in the Town of Marshfield have consistently been higher than those of the county or state in recent years. Also, income levels, particularly median household and median family income levels, increased rapidly between the years 1990



<sup>2</sup> Bayer, A.-H., & Harper, L. (2000). *Fixing to stay: A national survey of housing and home modification issues*. Washington D.C.; AARP Knowledge Management.

Income Type	Town of Marshfield	Wood County	Wisconsin
Median HH			
1990	\$31,932	\$29,735	\$29,442
2000	\$46,750	\$41,595	\$43,791
2010	\$55,313	\$47,204	\$51,598
Median Family			
1990	\$35,062	\$34,933	\$35,082
2000	\$54,844	\$50,798	\$52,911
2010	\$65,833	\$58,294	\$64,869
Per Capita			
1990	\$11,529	\$12,130	\$13,276
2000	\$21,316	\$20,203	\$21,271
2010	\$27,864	\$24,893	\$26,264
Source: U. S. Census, Table DP-03			

and 2010. As of the 2010 census, the Town of Marshfield’s median household income was estimated to be \$55,313, more than \$8,100 higher than Wood County’s \$47,204 median household income and \$3,715 higher than Wisconsin’s \$51,598 figure (see Figure 6). Per capita income is much more closely aligned than the other two methods of measuring income. Table 5 lists the median and per capita income levels for the three jurisdictions for 1990, 2000 and 2010.

The information presented in Figure 6 and Table 5 shows that the Town of Marshfield is more affluent, in general, than the rest of Wood County or Wisconsin. How is the income distributed among Town of Marshfield families though? We can see in

Income Level	T. of M'fld.	Wood County	Wisconsin
< \$10,000	0.0%	2.2%	3.5%
\$10,000 - \$14,999	0.0%	2.6%	2.6%
\$15,000 - \$24,999	10.4%	7.9%	7.2%
\$25,000 - \$34,999	4.8%	10.4%	8.8%
\$35,000 - \$49,999	10.9%	17.6%	14.0%
\$50,000 - \$74,999	31.3%	25.8%	23.0%
\$75,000 - \$99,999	20.4%	16.4%	17.6%
\$100,000 - \$149,999	13.9%	12.4%	15.7%
\$150,000 – \$199,999	4.3%	2.2%	4.2%
\$200,000 or more	3.9%	2.5%	3.6%
Median family inc.	\$65,833	\$58,294	\$64,869
Source: U. S. Census 2010, Table DP-03.			

Table 6 that the median family income in the year 2010 was \$65,833. Table 6 lists the income ranges for Town of Marshfield families. The \$50,000 to \$74,999 range seems to be the peak of the income hill, so to speak, with 31.3% of the town’s families falling in that range. That proportion of families in that range is pretty typical when compared to Wood County and Wisconsin. Over 42% of Town of Marshfield’s families had incomes of more than \$75,000, double the proportion from 2000. In 2010, 33.5% of Wood

County families and 41.1% of Wisconsin families had incomes of more than \$75,000. About a quarter of the town’s families had incomes of less than \$50,000 in 2010; about half of the 2000 percentage.

The percent of persons and families at or below the poverty level in 1999 and 2009 is shown in Table 7 for the Town of Marshfield, Wood County and Wisconsin. In 1999, the percent of families and individuals in the town that were at or below the

	Pct. Families		Pct. Individuals	
	1999	2009	1999	2009
Town of Marshfield	2.6%	(X)	3.3%	1.7%
Wood County	4.4%	5.8%	6.5%	8.4%
Wisconsin	5.6%	7.7%	8.7%	11.6%

An (x) means an estimate is not available or applicable.

Source: U. S. Census, Table DP-03.

poverty level was substantially below the figure for the county and state. In 2009, the percentage of Town of Marshfield families that were at or below the poverty level was so low as to be suppressed to avoid identification of those in this category. The poverty stricken families at the county and state level increased between 1999 and 2009.

There were 14 individuals in poverty in 2009, 1.7% of the total population in the town. A much larger percentage of individuals at the county level (8.4%) had incomes in the poverty level, as did the state (11.6%). Data for Wisconsin cannot be fairly compared to the Town of Marshfield because of the large cities that are included

in Wisconsin's data. Urban areas typically have larger concentrations of people with incomes at or below poverty levels.

### I. Employment Characteristics

The employed labor force is defined as people living in the town who are 16 years and older and had a job at the time of the census. Table 8 provides a comparison of employed labor force data for 2000 and 2010. According to this data, the employed labor force in the Town of Marshfield has declined since 2000. The decline may be attributed to "working age" people moving out of the town, to people leaving the labor force due to retirements, or other factors relative to the labor force-age population. The unemployment rate for the Town of Marshfield labor force was only 2.3% in 2000 (3.4% for Wood County), which is considered "full-employment," but was probably in the range of 8.0% or more in 2010. With the economic recession that has worsened, especially

Jurisdiction	Employed		Percent Change 1990-2000
	2000	2010	
Town of Marshfield	452	387	-14.4%
Wood County	37,345	36,924	-1.1%
Wisconsin	2,734,925	2,869,310	+4.9%

Source: U. S. Census, Table DP-03

since 2008, the unemployment rate in the town is probably substantially higher than what it had been in 2000. Unemployment numbers are not available for small municipalities. However, the rate of unemployment for Wood County for 2009 was 8.7%, compared to 3.4% in 2000.

The Town of Marshfield has been losing farms and has transitioned to more of a commuter, or bedroom, community. Today, there are only about 15 milking dairy farms in the town. Many town residents work in the City of Marshfield. The types of occupations of Town of Marshfield residents in 2000 are listed in Table 9. The most notable changes occurred in Agriculture (forestry, fishing and mining) when the proportion of town residents employed dropped from 10.8% to 1.7%. That change helps confirm the changing character of the town. Another significant change was in the retail trade sector. The proportion of the Town of Marshfield's employed labor force in retail trade dropped from 20.4% to 12.2% between 1990 and 2000.

The mean travel time to work for Town of Marshfield workers is about 16.8 minutes. This suggests that the workers are traveling to jobs outside of the town yet fairly close by, perhaps the City of Marshfield, Village of Hewitt, Town or Village of Auburndale, or City of Pittsville. Obviously, others travel to jobs in other parts of Wood County or surrounding counties as well.

Prince Corporation (120 employees) and Windy Hill Foliage (125 employees) are the major employers located in the Town of Marshfield. It is not likely that many large manufacturers or office facilities will locate here without adequate sanitary sewer and water services being available to meet fire codes and wastewater disposal needs. The Village of Hewitt and City of Marshfield each have one or both of those municipal services available, as does the Village of Auburndale to the east. It would be beneficial to the Town of Marshfield to support and promote industrial development in those communities for their job creation potential and focus town development goals toward residential development, commercial support services and small industries that do not require large amounts of water and sanitary sewer for wastewater disposal.

## **J. Growth Projections: Population and Housing**

### **(1) Population Projections**

Wisconsin law<sup>3</sup> requires the Wisconsin Department of Administration (WDOA) to make annual population estimates for each municipality and county and to periodically make projections of the anticipated future population of the state, counties and municipalities. Those projections are deemed to be the official population projections for the State. The Department of Administration's Demographic Services Center is the official agency that is responsible for the statutory mandates, in addition to

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<sup>3</sup> Section 16.96, Wisconsin Statutes, 2008-2009.

INDUSTRY Employed persons 16 years and over	2000		2010		Pct. Change 2000 - 2010
	Number Employed	Percent of Total	Number Employed	Percent of Total	
	<b>452</b>	<b>100.0%</b>	<b>387</b>	<b>100.0%</b>	
Agriculture, forestry, fishing & mining	18	1.7%	11	2.8%	-38.8%
Construction	49	10.8%	39	10.1%	-20.4%
Manufacturing	104	23.0%	78	20.2%	-25.0%
Transportation, warehousing, communications & utilities	31	6.9%	31	8.0%	0.0%
Wholesale trade	22	4.9%	10	2.6%	-54.5%
Retail trade	55	12.2%	35	9.0%	-36.4%
Finance, insurance & real estate	15	3.3%	13	3.4%	-13.3%
Personal services	22	4.9%	24	6.2%	9.1%
Entertainment & recreation services	6	1.3%	12	3.1%	100.0%
Education, health & social services	102	22.6%	121	31.3%	18.6%
Other professional & related services	19	4.2%	6	1.6%	-68.4%
Public administration	9	2.0%	7	1.8%	-22.2%
<b>OCCUPATION</b>	<b>452</b>	<b>100.0%</b>	<b>387</b>	<b>100.0%</b>	<b>-14.3%</b>
Management, professional & related	135	29.9%	129	33.3%	-4.4%
Sales & office	122	27.0%	67	17.3%	-45.1%
Service, except protective and household	39	8.6%	63	16.3%	61.5%
Farming, forestry & fishing	6	1.3%			
Construction, extraction & maintenance	58	12.8%	46	11.9%	-20.7%
Production, transportation & material moving	92	20.4%	82	21.2%	-10.9%
NOTE: Because classifications change slightly from one census reporting period to the next, caution is advised when comparing or citing these figures. This table includes sample data. It is known, locally, that some of the figures shown here are not accurate.					
Source: U. S. Census, Table DP-03.					

other census-related tasks. Although population projections are often developed by municipalities for local use, it is the WDOA projections that will be considered for any federal or state grants, for developing water quality management plans and for many other uses. The WDOA population projections, in five-year increments for the Town of Marshfield are presented in Table 10 and Figure 7.

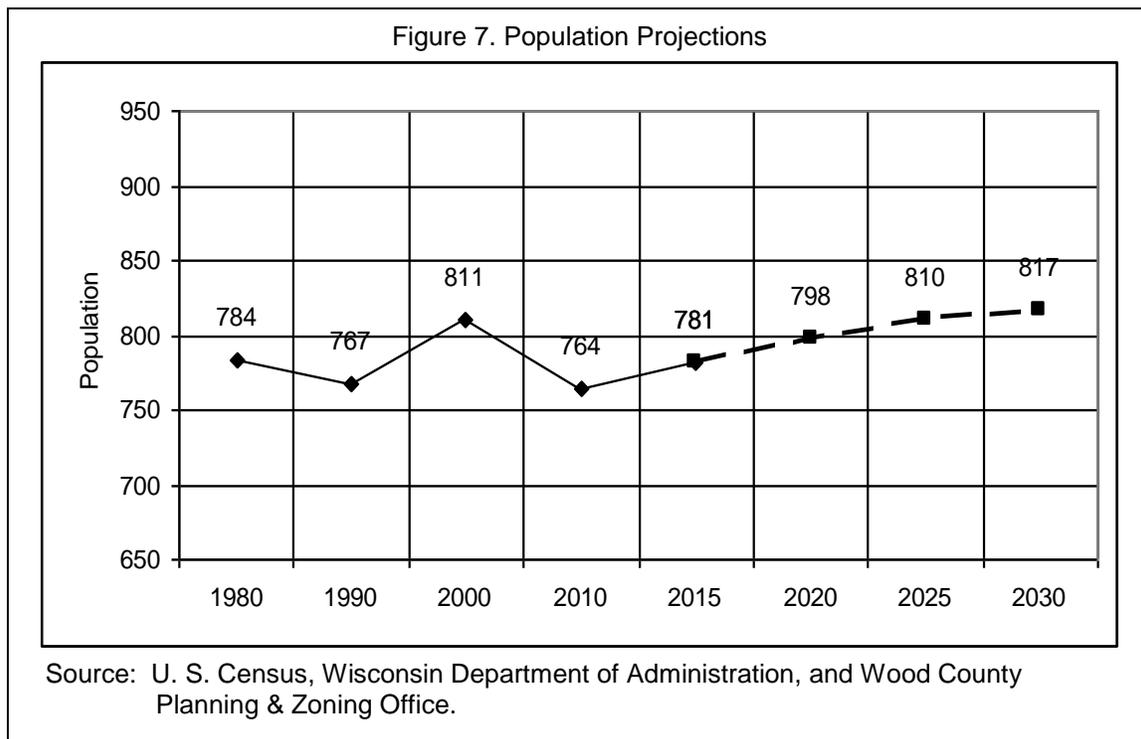
## **(2) Household Projections**

The number of households that will be needed over the planning period is driven by the projected population and the population per household. Replacement housing units will also be needed as some are destroyed by fire, wind or other means or as they become worn and dilapidated. As housing structures are added to accommodate the needs of future households, some undeveloped land will have to be converted.

Table 10. Projections of Population, Households & Population Per Household			
Year	Population	Households	Pop./HH
2000	811	295	2.75
2010	764	285	2.68
2015	781	299	2.61
2020	798	309	2.58
2025	810	317	2.56
2030	817	323	2.52

Source: Wisconsin Department of Administration and Wood County Planning & Zoning Office.

The Wisconsin Department of Administration projects the number of future households for municipalities as well as projecting population figures. In Figures 4 and 5, we saw how the number of households has continued to increase and the number of persons per household has continued to decline. Those trends are expected to continue. According to WDOA projections, the number of persons per household in the Town of Marshfield will actually increase slightly, a trend that is opposite what most communities in Wood County are expecting over the same period. With the expected increase in population, however, coupled with the slight increase in population per household, the Town of Marshfield can expect a demand for



more housing units. Projections generated by the WDOA show that the Town of Marshfield can expect to have to provide an additional 37 households by the year 2020 and 40 by 2030. Table 10 provides detail about the expected changes in population, households and population per household for each five years to the year 2030.

## **K. Summary & Conclusion**

Based on the factual data and projections presented throughout this section, the following conclusions can be drawn:

1. The Town of Marshfield experienced a large drop in population between 1970 and 1980 as the result of the incorporation of the Village of Hewitt. Between 1980 and 2000, the town slowly regained some of that loss. Between 2000 and 2010, another small loss of population occurred, partially the result of displacement of several families during the relocation of Highway 10. If state projections are accurate, the town will regain population during the planning period.

2. Although the population will continue to grow, the proportion of persons who are younger than 35 years old will decrease, possibly changing the demand for the type of services, housing and facilities in the town.

3. The median age has risen steadily as the population gets older, but the Town of Marshfield's median age is not out of line with other area communities.

4. The proportion of the Town of Marshfield's population with either a high school education or Bachelor's degree or higher has risen sharply since 1990. This trend is likely to continue. It is probable that more of the town's population will earn advanced college degrees to meet technology demands.

5. Household sizes have been getting smaller, a trend that will continue in the foreseeable future.

6. Income levels in the Town of Marshfield are slightly higher than both the county and the state and the poverty levels are considerably lower than both the others. Higher income levels are often an indication that larger, more expensive homes may be built, thus helping the town with financing of municipal facilities and services through an increased tax base.

7. The Town of Marshfield had a history of agriculture. The character of the town has been changing as those employed in agriculture declined sharply between 1990 and 2000.

## 2. HOUSING

### A. Housing Assessment

#### (1) Age of Housing Stock

Table 11 shows the age of housing in the Town of Marshfield. According to the 2010 census, there are 309 total housing units<sup>4</sup> in the town. Between 1920 and 2010, the town’s population changed very little. As shown in Figure 2 (page 3), a rapid growth in the town’s population did occur between 1950 and 1970, the result of a movement from the City of Marshfield to the town and to the area that became the Village of Hewitt. During that growth period, the population increased by 35%, but the housing stock increased by less than 29%.<sup>5</sup> A rapid decline in population occurred between 1970 and 1980 when the village incorporated (1973). The town then grew at a slow pace for the next 20-years, followed by a decline between 2000 and 2010. That decline in population was the caused, partially, by the relocation of U. S. Highway 10 and the displacement of a number of homes to accommodate the new highway location.

Table 11. Age of Housing Structures		
YEAR BUILT	HOUSING UNITS	PERCENT OF TOTAL
2000 – 2009	30	10
1990 – 1999	60	19
1980 – 1989	28	9
1970 – 1979	34	11
1960 – 1969	40	13
1940 – 1959	23	7
1939 or earlier	94	30
TOTAL HOUSING UNITS	309	100
<p><i>NOTE: Data in this table is from census sample data and, therefore, does not agree with 100% count. The actual 100% count determined that there were 297 total housing units.</i></p>		
<p>Source: U.S Census of Population, 2010, Table DP-4.</p>		

#### (2) Structural Value

The structural value of owner-occupied housing in the Town of Marshfield is listed in Table 12 for the year 2000. Only six percent of all housing units were valued at \$50,000 or less. Most homes (87%) in Marshfield are in a “middle-income” range - \$50,000 to \$149,999. Thirty-three percent of the town’s homes are valued between \$150,000 and \$199,999, and twenty-four percent is valued at over \$200,000.

<sup>4</sup> Housing units are different than “households.” A housing unit is a physical structure. It can contain one “household,” as in a single-family home, or more than one “household,” as with a duplex, four-plex or other multiple-family structure.

<sup>5</sup> Census data includes 1940 – 1959 new housing; it is not broken down in 10-year increments.

Table 12. Structural Value of Owner-Occupied Housing Units - 2010		
VALUE	NUMBER OF UNITS	PERCENT OF TOTAL
Less than \$50,000	7	2
\$50,000 - \$99,999	29	10
\$100,000 - \$149,999	89	31
\$150,000 - \$199,999	95	33
\$200,000 – \$299,999	47	16
\$300,000 or more	23	8
Median – Marshfield	\$160,200	
Median – Wood Co.	\$116,500	
Median-Wisconsin	\$169,000	

Source: U.S. Census of Population, 2010, Table DP-4.

A housing objective in the Town of Marshfield is to provide affordable housing and a wide range of housing types. The value of homes in the town illustrates opportunities for low-income housing and substantial opportunities for lower-middle to upper-middle income housing. While upper-income housing is not widely present, the town has areas that would be compatible and attractive for construction of upscale residential housing.

**(3) Occupancy Characteristics**

According to census figures, housing in the Town of Marshfield has been 95% to 96% occupied since 1990 (Table 13). Like many towns that have few multiple-family housing units (rentals), the Town of Marshfield’s housing stock is mostly owner-occupied. The proportion of owner-occupied housing in the town

drop between 1990 and 2000, but rebounded slightly in 2010. Conversely, the proportion of renter occupied housing units doubled between 1990 and 2000, but declined slightly between 2000 and 2010. Vacant units make up roughly 4% of the housing stock. That vacancy rate is considered to be good in the housing market and offers a fair share of housing to those in the rental market, supporting the town’s fair share housing objective.

Table 13. Occupancy Characteristics of Town of Marshfield Housing Stock 1980-2000				
Year	Owner Occupied	Renter Occupied	Vacant	Total Housing Units
2010	262; 88%	23; 8%	12; 4%	297
2000	263; 86%	32; 10%	12; 4%	307
1990	237; 90%	13; 5%	13; 5%	263

Source: U.S. Census of Population (Table DP-1 for Year 2000 data) & American Factfinder.

Table 14 presents the tenure of Town of Marshfield householders, or how long they have lived in their homes and provides a comparison to Wood County as a whole. Some interesting facts jump out of the table. First, fewer than 18% of Wood County householders lived in their current homes prior to 1980. That compares to over 30% in the Town of Marshfield. Second, nearly half of all householders in Wood County moved into their current homes since 2000 compared to just slightly more than 25% for the town. These two figures show more of a migration for the county and less migration, or more putting down of roots, in the town.

Table 14. Tenure by Year Householder Moved In To Unit		
YEARS	PERCENT OF TOTAL	
	TOWN OF MARSHFIELD	WOOD COUNTY
2000 - 2010	25.3	48.8
1990 – 1999	30.7	21.7
1980 – 1989	13.6	10.8
1970 – 1979	13.9	9.6
1969 or earlier	16.5	9.2
Source: U.S. Census of Population, 2010, Table DP-4.		

Often, the proportion of householders that are fairly new to their homes in communities adjacent to cities is higher than that of the Town of Marshfield. In the Town of Lincoln to the west of the City of Marshfield, for example, 35.9% of the householders moved into their current homes since 2000 compared to less than 25.3% in the Town of Marshfield. In the Town of Cameron, the figure is over 31.8% and the Towns of McMillan and Spencer are 41.0% and 44.0%, respectively. The numbers for Wood County show more movement than do town numbers, but Wood County's figures include a very large number of rental units, group homes, nursing homes, etc., that are not present in the Town of Marshfield.

#### **(4) Public Perception of Housing**

Tables and discussion in this chapter have presented data, mostly from the U. S. Census regarding housing in the Town of Marshfield. In 2003, a planning survey of the community was conducted with a 38% response rate, 99% of those coming from owner-occupied households. Sixty-five percent of the respondents have lived in the town for more than 20 years and only nine percent have lived there for 10 years or less. Most of the respondents consider the appearance and quality of housing in Marshfield to be about average (67.9%) to very good (25.5%). Compared

to the region, over half (56%) think the purchase price of housing and land is about average and over 1/3 (37%) think it is too expensive.

## **B. Highway 10 Impacts**

U. S. Highway 10 is being relocated and reconstructed through Wood County, including the Town of Marshfield. The relocation of the highway resulted in the loss of 17 housing units in the town. Of the displaced families, only two have chosen to find replacement homes in the Town of Marshfield. This is a large loss for a geographically small community. This plan sets goals to attempt to recoup some of the lost tax base, both in residential and in commercial land uses.

## **C. Goals and Objectives**

The overall housing goal for the Town of Marshfield is to encourage development of an adequate housing supply and type of housing that meets existing and forecasted demand. The housing supply is to consist of housing units, both owner- and renter-occupied, that meet the needs of Marshfield residents for both large and small families of all economic levels.

## **D. Housing Policies and Programs**

The following policies and programs will be used to promote the development of housing for residents of Marshfield.

- Establish residential zoning in areas where higher densities can be served by public sewer and water in the future in case problems arise with regard to groundwater quality or quantity.
- Be an active participant in the planning process when the Marshfield Sewer Service Area Plan is updated and work with the City of Marshfield to promote planned development in the service area of that plan.
- Provide some large lot residential areas to accommodate those with desires for more remote or more private development sites while considering the goals and objectives related to preserving the rural character of the community.

The following policies and programs are meant to provide a range of housing choices that meet the needs of persons of all income levels, all age groups and special needs.

- Review zoning standards for densities that remain attractive to those individuals and families that desire a living environment that is different that they may have in the city, yet allow for lot sizes that make the land affordable for lower-income homeowners.

- Encourage developers of rental units to build those units in areas of the town where, the housing type will be compatible with neighboring land uses.

To promote the availability of land for development or redevelopment of low- & moderate-income housing the following policies and programs will be used.

- The Town of Marshfield is a small town, geographically. It may be in the town's interest to determine what future densities should be of residential units and analyze how many additional units the town can sustain.
- Allow various lot sizes that are conducive to different housing types, as well as the densities determined above.

The following policies and programs are established as a means of maintaining or rehabilitating the existing housing stock.

- Encourage homeowners to participate in paint-up/fix-up events.
- Encourage volunteers or civic organizations to help those who are physically unable to maintain their property.
- Educate property owners about the town zoning ordinance and other ordinances that may affect them, including activities that may require permits. The town will work with Wood County to help make information available to town residents.

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### **3. TRANSPORTATION**

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Many folks take our transportation system for granted and do not usually think of the different transportation system components that we use or have available to us on a daily basis. The internal transportation system in the Town of Marshfield consists, primarily, of town roads, county highways and U. S. Highway 10. There are also short segments of a multi-use trail system in the town. The Marshfield Municipal Airport (Roy Shwery Field) is not in the Town of Marshfield, but impacts the town's economy by supporting jobs that may be held by town residents. By virtue of being part of the urban area, the Town of Marshfield has to cooperate and coordinate with other communities on regional transportation planning and expenditures.

The purpose of this section is to describe the town's transportation system components, discuss current and future changes and additions to that system, describe how the transportation system relates to other segments of the comprehensive plan, develop goals and objectives for the transportation system and establish local programs that will seek to achieve those goals and objectives.

#### **A. Road Network**

Probably the most obvious, most used, and most taken for granted component of the town's transportation system is the network of roads and highways that criss-cross through the town. Different roads are designed to serve different functions and, with good planning, those functions can be carried out and protected.

#### **(1) Functional Classifications**

An understanding of the function of different categories of roads and highways is necessary for planning an efficient road system and to protect that efficiency by protecting the function of the road network. This can be especially important in a community like Marshfield because of the significant amount of higher level county highways and the U. S. highway, roads that are designed for higher functions than are local roads. The relocation of Highway 10 will provide a new opportunity to control access and preserve the function of that facility.

Roads and highways are grouped into different classes according to the type of service they provide, ranging from a high degree of travel mobility, which is moving vehicles across a community, region or country, to a low level of mobility - providing access to land or individual lots. The functional classifications are also categorized as "urban" or "rural." All of the Town of Marshfield is "rural." The following paragraphs provide a brief description of the functions of different levels of roads and highways.

### ***Local Roads***

The primary function of local roads is to provide access to individual parcels of land. They typically offer the lowest level of mobility of all the functionally-classified roads. A typical subdivision road is an example of a “local road.” Local roads are designed to serve residential lots, have a 25 mph or lower speed limit, may have a curvilinear design to “calm” traffic or may be a cul de sac to prevent through traffic. Once you leave these roads, you may turn onto a collector road.

### ***Collector Roads***

The function of collector roads is to carry a higher volume of traffic than local roads, provide through traffic in residential, commercial and industrial neighborhoods, and distribute traffic to even higher function highways. Collector roads may be of a straighter design, often have wider pavement widths with fewer access points (driveways) and may have higher speed limits (i.e. 35 to 45 mph). Collector roads are further defined as “major” or “minor” collectors. An example of a major collector in the Town of Marshfield is County Road Y between County Road T and the City. County Road T, south of Highway 10 is classified as a minor collector.

### ***Arterials***

Traffic from collector roads may move onto even higher volume roads called “arterials.” Arterials typically have higher speed limits and often have more lanes for travel. Like collector roads, arterials are classified as either “minor arterials” or “principal arterials,” depending on the volume of traffic they serve. Minor arterials may have speeds up to 55 mph and principal arterials, like some state highways and interstate highways, will have speeds up to 65 mph. Minor arterials are designed to take the higher volumes of traffic from the collector roads and move that traffic to and from major traffic generators, such as business districts, employment centers and places of large public gatherings, like university campuses, stadiums, Saint Joseph’s Hospital, the Marshfield Clinic, and places of similar magnitude. They also provide a connection between communities. Principal arterials serve urban areas of greater than 5,000 population, usually have multiple lanes, typically carry very high traffic volumes and move traffic on longer trips. Minor arterials should have even fewer access points than collectors, but still provide land access. Principal arterials often have limited or controlled access. Highway 10 is the only principal arterial in the town.

### ***Town of Marshfield Road Classifications***

Table 15 lists the roads in the Town of Marshfield that are classified as collectors or arterials. Figure 8 is a map showing the location of those roads. Functionally classified roads are eligible for federal funding under the STP-Rural program. More information is available from the Wisconsin Department of Transportation North Central Regional Office in Wisconsin Rapids.

Table 15. Town of Marshfield Functional Classification of Roads			
	<u>Road</u>	<u>From-To</u>	<u>Approx. Mileage</u>
Major Collector:	County Road Y	Marshfield City Limit to County Road T	2.00
	County Road H	Marshfield City Limit to Town of Auburndale Limit	3.00
	County Road T	Marathon County Line to U. S. Highway 10	4.00
Minor Collector:	County Road T	U. S. Highway 10 to Town of Richfield Limit	2.00
Principal Arterial:	U. S. Highway 10	Tn. of Cameron Limit to Town of Auburndale Limit	3.00
Source: WisDOT Bureau of Planning & Economic Development Map, January 31, 2008.			

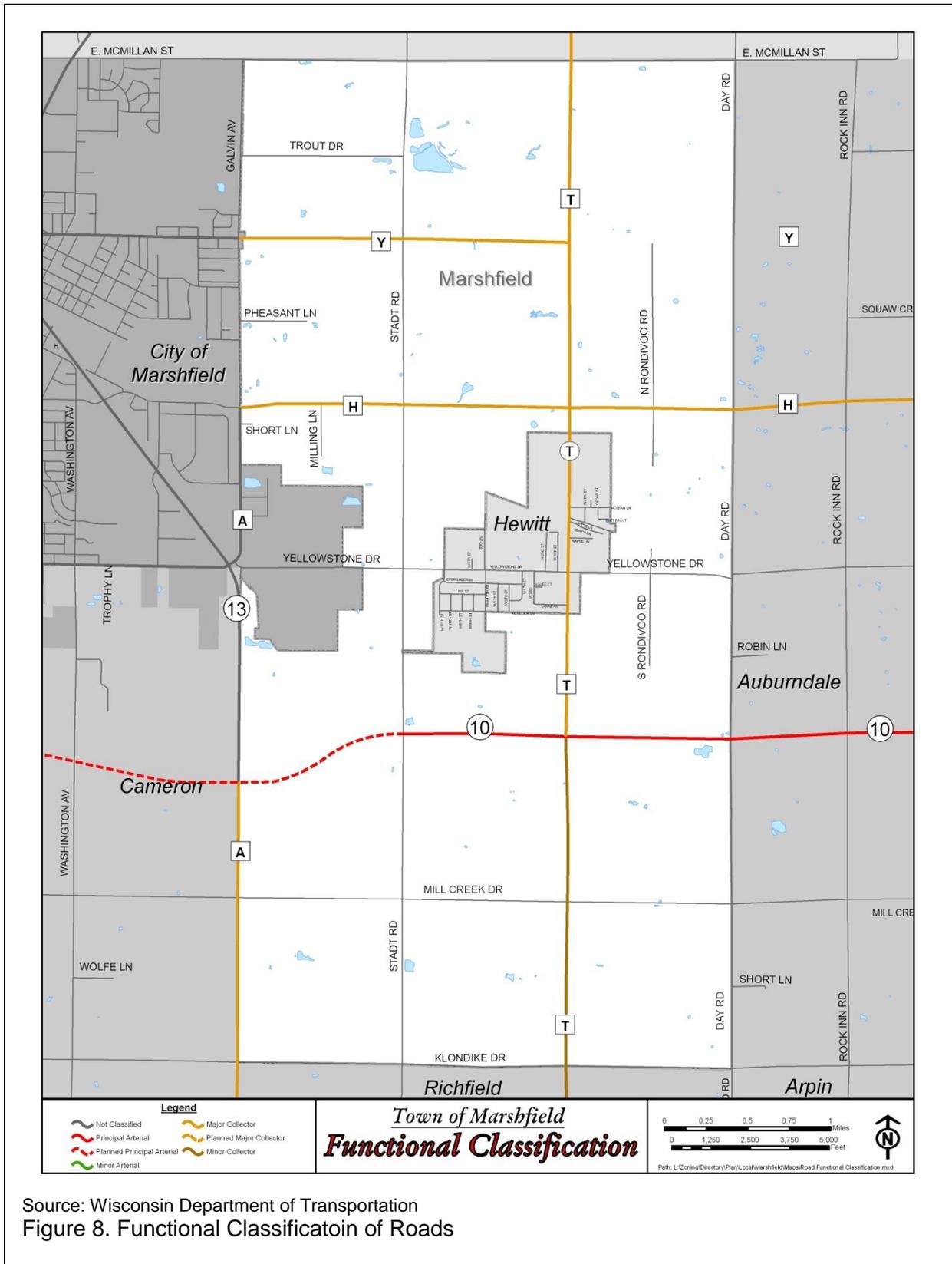
## **(2) Average Daily Traffic**

The Wisconsin Department of Transportation counts traffic and calculates average daily traffic (ADT) every few years. The most recent traffic counts in the Town of Marshfield were conducted in 2002. Highway 10 counts were taken in 2005. The map in Figure 9 shows the ADT on County Roads Y, H and T and on Highway 10. One can see that traffic increases the closer you get to the City of Marshfield. The volume of traffic from Hewitt can also be seen in these counts. There was an ADT of 1,500 on County Road T both north and south of the Village. The volume drops significantly on "T" north of County Road Y and south of Highway 10. From a wider perspective and not shown on the map, traffic on County Road H drops quite a bit east of the Marshfield-Auburndale boundary. These traffic counts show the commuting pattern of area workers and students.

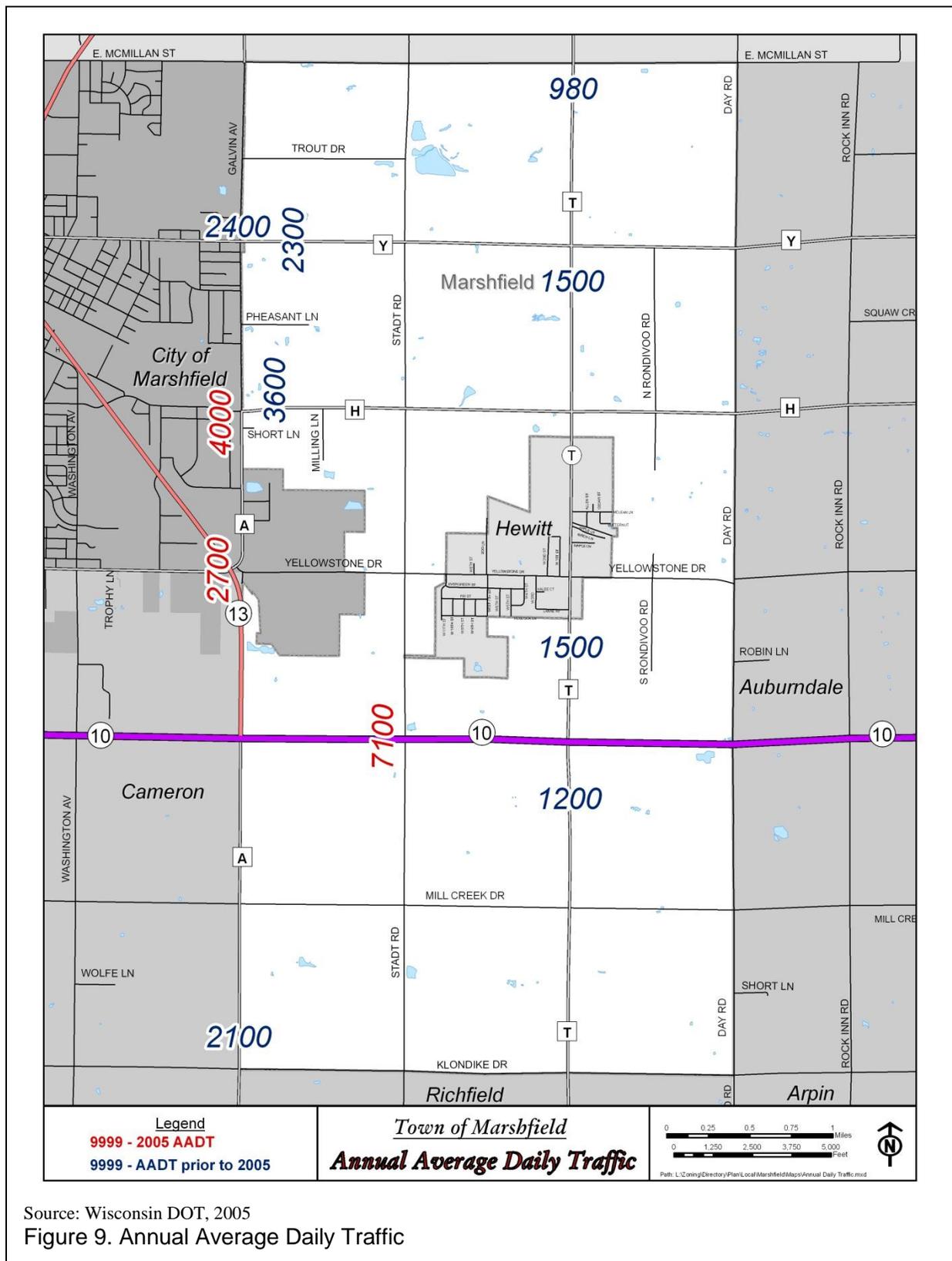
Traffic counts are important to local officials for future planning for access, for maintenance purposes and to analyze the need and timing of new local roads or county and state highways. They can be helpful to town officials when new subdivisions are proposed to review access points for alignment and safety concerns.

## **(3) Commuting Patterns**

Table 16 describes the commuting patterns of Town of Marshfield resident workers over the age of 16. A relatively high percentage of the 448 workers – 6.5% - reported that they worked at home (compares to 4.1% County wide). Of the 419 workers who did not work at home, 97.6% travel to work by automobile (or truck or van). Fewer than 8% carpooled to work and a few said they walk to work. There are no public transportation providers in the area. Although there are a few paths in the town, no one commutes by bicycle on a regular basis.



Source: Wisconsin Department of Transportation  
Figure 8. Functional Classification of Roads



Source: Wisconsin DOT, 2005  
 Figure 9. Annual Average Daily Traffic

	Number	Percent
Car, Truck, Van (drove alone)	374	83.5%
Car, Truck, Van (carpooled)	35	7.8%
Public Transportation (inc. taxi)	0	0.0%
Bicycled	0	0.0%
Walked	6	1.3%
Other Means	4	0.9%
Worked at Home	29	6.5%
<b>Total</b>	<b>448</b>	<b>100.0%</b>

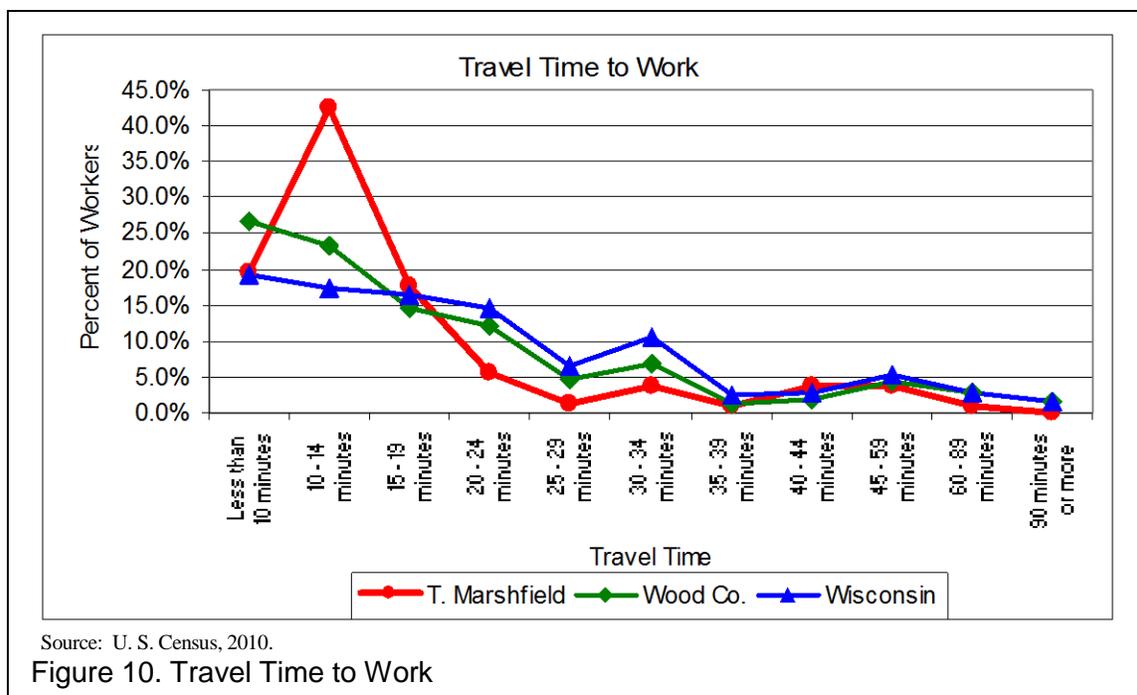
Source: U. S. Census, 2000, Table DP-3.

Nearly two-thirds of all Town of Marshfield workers have less than 15 minutes travel time to work and nearly 80% of the town’s workers travel for less than 20-minutes to their workplace. The local travel time is much shorter than the State average, where only 53% of workers travel less than 20-minutes to work (Figure 10). The short travel time is primarily because of little traffic congestion and the fact that 84.1% of the town’s workers work in Wood County, mostly the City of Marshfield (Table 17).

**(4) Highway 10 Relocation**

One of the most traveled routes in Wood County annually is U. S. Highway 10. Highway 10 is an east/west highway with regional, state and national importance. Connecting Wisconsin’s Fox Valley to the

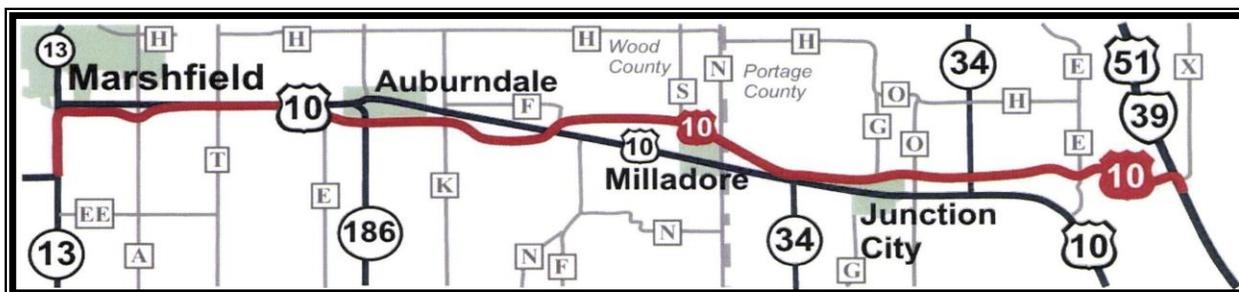
Twin Cities, this highway serves as a link for business, industry, recreation and agriculture. Highway 10 is located in the southern portion of the Town of Marshfield. To safely and efficiently handle increasing traffic volumes, Highway 10 is in the process of being realigned and widened to a four-lane facility from Stevens Point in Portage County to Marshfield. The new route is shown in Figure 11. Scheduled for completion in 2012, State Highway 13 will be then be redesignated onto the new facility, adding more traffic through the town.



	Town of Marshfield	Wood County
In County	84.1%	86.4%
Outside of County	15.9%	19.2%
Outside of State	0.0%	0.4%
Total	100.0%	100.0%

Source: U. S. Census Bureau, 2006-2010 American Community Survey.

Although the Highway 10 project will improve the safety and efficiency of the route, some communities, including the Town of Marshfield, are realizing a number of challenges. The Town of Marshfield lost 17 homes to the project. Some roads will become cul de sac roads, forcing those who use local roads to find new routes. The new highway will also likely create other changes in adjoining land uses, possibly with some commercial development. The Town of Marshfield will need to pay close attention to changes in habits and land use demands and may need to amend this plan or the local zoning ordinance to accommodate unanticipated changes.



Source: Wisconsin Department of Transportation

Figure 11. Highway 10 Relocation

**(5) Town of Marshfield Road Improvement Plan**

The Town of Marshfield Board conducts an annual review of the condition of town roads. During the budget process, decisions are made about what improvements are going to be made the following year. Those decisions rest on the availability of various sources of funding, including State road aids and local property taxes. Several comments were made in the community planning survey about the condition of various town roads. The concerns have been forwarded to the Town Board for their consideration.

**B. Airports**

The Town of Marshfield is served by two airports; The Marshfield Municipal Airport (Roy Shwery Field) and the Central Wisconsin Airport (CWA) in Mosinee. CWA provides commercial airline service to the area. Three airlines, Northwest/Mesaba Airlines, Midwest Connect/Midwest Airlines and United/Air Wisconsin, provide 18 flights

per day which connect through Minneapolis, Chicago, Detroit and Milwaukee. There are also nine air freight and express flights daily.

Central Wisconsin Airport is a joint venture of Marathon and Portage Counties. The airport opened for operation in October of 1969. The terminal has been modernized and the highway access to the airport has been improved. Additional improvements, including a possible new terminal, are being planned for the future.

CWA has two grooved concrete runways, precision instrument landing procedures to both runways for all weather operations, an air traffic control tower and all the other amenities of a modern airport. Since 1982, more than \$40,000,000 has been spent to keep the airport ready to serve the business and pleasure needs of the region.



The Marshfield Municipal Airport (Figure 12) is a local general aviation airport that has two paved runways, including a 5,000-foot concrete runway that will accommodate business jets and other private aircraft. The cross runway is 3,600 feet in length. They also offer aircraft maintenance, aircraft and jet fuel, a S.D.F. landing system, flying lessons and charter service. The airport is located on the southwest side of the City of Marshfield. Wood County contributes a small amount of funding each year to assist with operation and maintenance costs.

Like most airports, the Marshfield Airport has both direct and indirect impacts on the area's quality of life and economy. Convenient access to air transportation allows businesses to quickly move key personnel from one site to another, saving valuable time and increasing their productivity. The airport also provides facilities for emergency medical flights, law enforcement, agricultural spraying, pilot training, and recreational flying, all adding to the economy and quality of life of the area.

Direct economic impacts include jobs at the airport and sales of airport products and services. Indirect impacts include spending by visitors who arrive in the Marshfield area via the airport. That spending includes such things as lodging, meals, recreation, ground transportation and retail purchases while here. In addition, there are induced economic impacts which include the activities of suppliers to the businesses at the airport, for example electricity, office supplies, aircraft parts, and fuel for resale; and suppliers to the businesses that serve visitors, such as bedding, towels, and wholesale food suppliers. It also includes activity generated by the airport workers re-spending their income on clothing, housing, groceries, entertainment, etc. The total economic impact of the Marshfield Airport on the area was estimated to be over \$3.84 million

dollars per year, including 62 local jobs with annual wages of nearly \$1.24 million and another 15 jobs statewide pushing the wages to over \$1.6 million (2000 dollars).<sup>6</sup>

Airports, by their very nature, create planning issues and opportunities for communities. Uses near airports will differ depending on the size and function of the airport. Noise is a factor to consider, along with safety issues related to low-flying aircraft, including clear zones at the end of runway approaches and height restrictions. The Federal Aviation Administration regulates heights of structures, but the height restrictions do not impact the Town of Marshfield.

### C. Railroad Service

The Canadian National Railroad has service to industries throughout the Marshfield area with a main line that parallels U. S. Highway 10 across most of Wood County and diagonally through the Town of Marshfield. Canadian National, headquartered in Montreal, Quebec, Canada, is the largest railway in Canada and is currently Canada's only transcontinental railroad. CN also has extensive trackage in the central portion of the United States, from northern

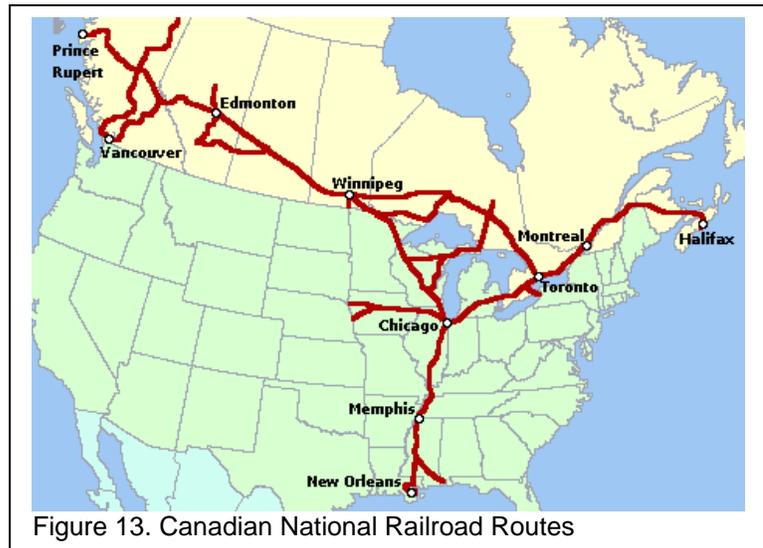


Figure 13. Canadian National Railroad Routes

Minnesota, through Wisconsin to Chicago, Memphis and New Orleans, including the Town of Marshfield. Figure 13 shows how the Canadian National Railroad travels through Wisconsin and Wood County.

### D. Bicycle/Pedestrian Trails

Bicycle/pedestrian paths and trails provide both an alternate means of travel and a quality of life facility that is important to people of all ages. High gasoline prices and the "green" movement have provided incentives to encourage more use of the bicycle trails and routes for transportation purposes. Central Wisconsin's winter climate, however, limits the extent to which trails can or will be used for commuter purposes. The Town of Marshfield has worked cooperatively with the Village of Hewitt, City of Marshfield and Wood County to provide trails to area residents. More opportunities for trails may occur in the future as the existing system is extended and with the relocation of Highway 10.

<sup>6</sup> Wisconsin Bureau of Aeronautics, "The Economic Significance of Alexander Field/South Wood County Airport to the Local Economy – Draft," October 2001.

## **E. Public Transportation**

No public transit service for the general public exists in the Town of Marshfield. Radio Cab, a shared ride taxi company, offers transportation to the public for a fee.

The Aging & Disability Resource Center (ADRC) of Central Wisconsin provides bus service for seniors and persons with disabilities. Priorities include medical appointments/treatment, nutrition, shopping and social events. Because of recent increased ridership, the ADRC has established a schedule for the Marshfield area. A fee of \$1.00 is charged per one-way trip, but some area retailers will pay the rider fee for persons who patronize their establishments.

The ADRC's Volunteer Driver program provides certified drivers to transport Wood County residents who are 60 years or older and prioritizes medical and nutritional purposes. This is a non-emergency service covering the entire State of Wisconsin for medical appointments. Riders must be ambulatory or accompanied and are billed a percentage of the cost of the trip.

The ADRC also has a staff member who coordinates transportation for disabled American veterans of the armed forces. Vans are available to ambulatory veterans only to transport them to VA medical appointments. Vans and transportation are coordinated between Wausau, Stevens Point and Wisconsin Rapids. All of Wood County is covered, as are Portage and Marathon counties. The van drivers are volunteers, but the Veterans Administration provides funding for fuel, maintenance and liability. Wood County veterans can call the ADRC office for arrangements.

During the past few decades, there has been discussion about an intercity transportation system. Options have included light rail and busses. Most recently, representatives from the cities of Marshfield and Wisconsin Rapids in Wood County; Stevens Point in Portage County; and Mosinee, Marathon City, Merrill and Wausau in Marathon County have been studying the feasibility of an intercity bus system. Such a system would have to include parking areas, convenient scheduling and other factors to be successful. The feasibility study was completed in September 2010 and recognizes that an operating plan, capital plan, financial plan and marketing plan will need to be completed before a final determination on implementing this system can be accomplished. Although an intercity bus system would not help Town of Marshfield residents commute to and from the City of Marshfield, it would provide alternative opportunities to commute to the other major communities (i.e., employment centers) in central Wisconsin.

## **F. Relationship of Transportation System to Other Comprehensive Plan Elements**

In suburban communities, like the Town of Marshfield, lifestyle choices of those working in the city, but living in the town, affect the future of surrounding unincorporated areas. As the town grows, one of the first impacts is on roads. When a new housing development is proposed in a commuter town, provisions must be made to move the

intended population to and from that development to work, school, shopping, parks and other activities. Eventually, existing local roads may become so busy that the road will have to be widened to accommodate peak traffic, speed limits may have to be lowered for safety reasons, or additional maintenance of roads may be necessary due to the increased traffic caused by the development. In some cases, the town may have to petition the county to take over jurisdiction of the road because of high traffic. Also, facilities may have to be added to provide a safe area for walkers or bikers.

Transportation system changes will also impact certain community facilities. As more roads are constructed, the demand increases for more road maintenance equipment. In addition, as the town grows and as more roads are constructed, there will come a time that the town may have to consider hiring additional full-time police officers to patrol those roads. Depending on road design (through roads versus cul de sacs), costs to provide road maintenance, school bussing and other services that use the roads, could increase. It is less expensive to continue driving through a subdivision, for example, than it is to maneuver a snowplow or school bus through a development with cul de sacs. The two newest subdivisions in the Town of Marshfield are good examples of each. Individual lots in the Nikolai subdivision on Stadt Road are accessed via a cul de sac. The Weiler subdivision on Trout Drive, on the other hand, was designed with a road that continues through the subdivision and back to Trout Drive.

Intergovernmental cooperation is essential to the development and maintenance of a transportation system. The relocation and rebuild of Highway 10 has taken the cooperation of all area communities, as well as the Wisconsin Department of Transportation. The trails, mentioned earlier, have also taken cooperation between municipalities, Wood County and private landowners to get completed.

Improvements to existing local roads should be coordinated between neighboring communities. If, for example, the City of Marshfield or Hewitt decide to add or widen roads near their borders, the Town of Marshfield should be aware of those plans so that they can plan their improvements accordingly or coordinate with their neighbors to lower costs for both. The town and its neighboring communities should benefit from cost-effective provision of future transportation facilities by working together.

## **G. Transportation Goals & Objectives**

It is the overall objective of the Town of Marshfield to provide a safe, efficient, cost-effective transportation system, including roads and highways, bike and pedestrian facilities, and air and rail facilities.

### **(1) Goal: To provide choices of transportation for town residents.**

Objectives:

- Work to develop an internal road system that will ensure smooth flow of motorized and non-motorized traffic and will enable town emergency vehicles to service local neighborhoods in the most expeditious manner.

- Continue to encourage providers of transportation for the public and those who choose not or cannot drive to provide alternatives. This includes taxi service, Aging and Disability Resource Center (ADRC) bus and driver services, and others. This also includes the possibility of bus service between major communities in Wood, Portage and Marathon counties.

- Participate with Wood County and area communities to expand and enhance the regional multi-use trail system to provide an alternate means of transportation in the urban area.

**(2) Goal: Provide interconnection of transportation systems between municipalities.**

Objectives:

- Work externally with neighboring communities to coordinate a road and highway system that creates a smooth flow between communities and the major traffic generators in them.

**(3) Goal: Provide safe transportation throughout the town.**

Objectives:

- Coordinate local road improvements with work on County and State highways.
- Carefully review land subdivision proposals to assure that proposed roads and trails are coordinated with the existing system.
- Encourage pedestrian-friendly design of new residential or commercial developments to provide for alternative modes of transportation to and from area employers and schools.
- Protect the function of various roads and highways and minimize conflicts between local land uses by monitoring the number of access points from subdivisions and higher density residential areas to higher function County and State highways.
- Through implementation of the local plan and zoning ordinance, monitor the location of access points to assure clear visibility for motorists and bicyclists and to allow sufficient maneuvering space for speed changes and turning.
- As needed, the Town Plan Commission and Town Board will discuss issues regarding access at points of high volume traffic to work towards alleviating congestion and reducing accidents at those points.

**(4) Goal: Support and encourage maintenance of local and regional air and rail transportation facilities.**

Objectives:

- Promote the Marshfield Airport as a local airport to prospective businesses that may be looking to locate in the area.
- Support movement of freight into and out of the community via rail in lieu of higher gasoline and fuel costs. Encourage railroad owners to maintain and improve the area railroads as needed to accomplish this goal.



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## 4. UTILITIES & COMMUNITY FACILITIES

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Unincorporated towns typically are not able to provide the same type utilities as do larger, more compactly developed villages or cities. Unincorporated towns do, however, have the same type utility and community facility needs as residents who live in villages and cities. The purpose of this element is twofold. First, the following paragraphs describe the existing conditions and issues relative to public and private utilities and community facilities in the Town of Marshfield. Second, goals, objectives and policies are presented regarding utilities and facilities to help guide future town-level decisions.

### A. Sewage Disposal/Sanitary Sewer

The Town of Marshfield does not have a municipally-owned sanitary sewer system. Consequently, any structure that is built with running water in the town must install a private on-site waste treatment system, also known as a “septic system.” All septic systems must be approved by the State Department of Commerce under the provisions of applicable statutes and the Wisconsin Administrative Code for both installation and maintenance. Because of the poor soil drainage and relatively high groundwater in the Town of Marshfield, most POWTS in the town are holding tanks. Although not technically a “treatment system” because waste is held and not treated, holding tanks have been and continue to be allowed as a “system of last resort”. This means that, if a “treatment system” of some type cannot be installed, the property owner can use holding tanks.

The Wood County Planning & Zoning Office administers the private sewage program, issuing permits for septic systems, inspecting them for proper installation and assuring that failing systems are replaced. Wood County has issued permits for septic systems since 1970. As the state plumbing code has changed because of more knowledge of the ability of various soil types to either treat or not treat domestic sewage, the types of systems being installed in the various soils has also changed. Even with the changes in state standards, the vast majority of septic systems installed in Marshfield is holding tanks.

The Town of Marshfield collaborated with the Towns of Lincoln, Cameron, Spencer and McMillan, the Village of Hewitt, and the City of Marshfield to develop the “Marshfield Sewer Service Area Plan Update 2010-2030” in 2010. The purpose of the plan was to “maintain a twenty year sanitary sewer service boundary for the Marshfield Urban Area and an institutional structure for implementing the Plan and managing the extension of sanitary sewage services within this urban area.”<sup>7</sup> The service boundary of that plan is shown in Figure 14. The plan identifies environmentally sensitive areas that should be protected from development and establishes a structure for reviewing

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<sup>7</sup> “Marshfield Sewer Service Area Plan Update 2010-2030,” North Central Wisconsin Regional Planning Commission, September 2010.

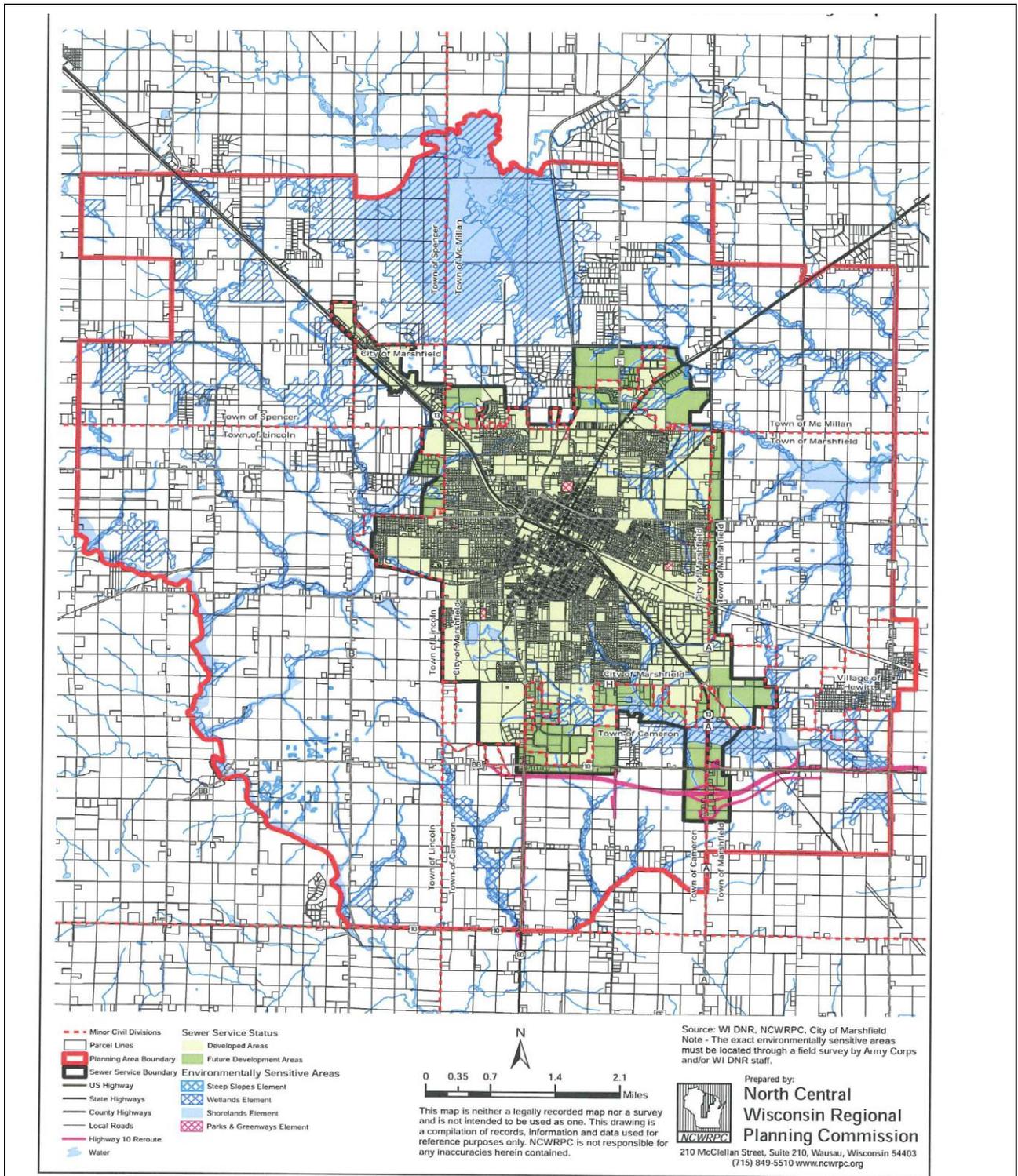


Figure 14. City of Marshfield Sewer Service Area Boundary Map

boundary amendments as needs of the community change. The plan was recently updated by the North Central Wisconsin Regional Planning Commission (NCWRPC). The five goals of the plan are:

(1) Identify water quality problems in the (central Wisconsin) basin in order to set priorities and provide guidance for management activities for specific lakes and streams.

(2) Guide and direct the public, designated management agencies, state and federal agencies, and local governments in efforts to protect and improve Wisconsin's water resources.

(3) Anticipate future management activities necessary for water quality protection.

(4) Integrate and coordinate DNR programs for managing both surface and groundwater resources in Wisconsin.

(5) Incorporate the public's concerns and increase public awareness of everyone's responsibilities to water quality protection and improvement.

Not all of the Town of Marshfield is included in the planning area boundary of the sewer service area plan. That portion of the town that is included is everything north of Highway 10 and west of County Road T and Sections 26 and 27 that lie immediately south of Highway 10. Within the planning area are designated sewer service areas, or SSAs. All proposed sanitary sewer extensions in the SSA boundary are reviewed by the Wood County Planning & Zoning Office before construction plans are submitted to the state for approval. With few exceptions, the City of Marshfield and Village of Hewitt require annexation before extending sanitary sewers to any parcels. Unless annexed, the areas of the Town of Marshfield that lie within the planning area boundary will continue to rely on private on-site waste systems, primarily holding tanks.

## **B. Water Supply**

Residential and commercial properties in the Town of Marshfield rely on groundwater and private onsite wells for drinking water and other water needs. Water quality varies based on depth of well and location in the town. Many residents treat their well water to improve the taste, smell, and overall quality. Water quality testing is also left up to the well owner. The U. S. Environmental Protection Agency (EPA) recommends that private wells be tested annually to ensure that the water is safe for drinking. Water should be tested for coliform bacteria and nitrates.

Preservation of groundwater quality is an ongoing challenge and residents who are interested in preserving groundwater quality or have concerns about their groundwater may want to contact the Groundwater Guardians of the Marshfield Area to assist with efforts to protect water quality. The Groundwater Guardian program is

sponsored by the National Groundwater Foundation, a private non-profit educational organization that informs and motivates people to care about water quality.

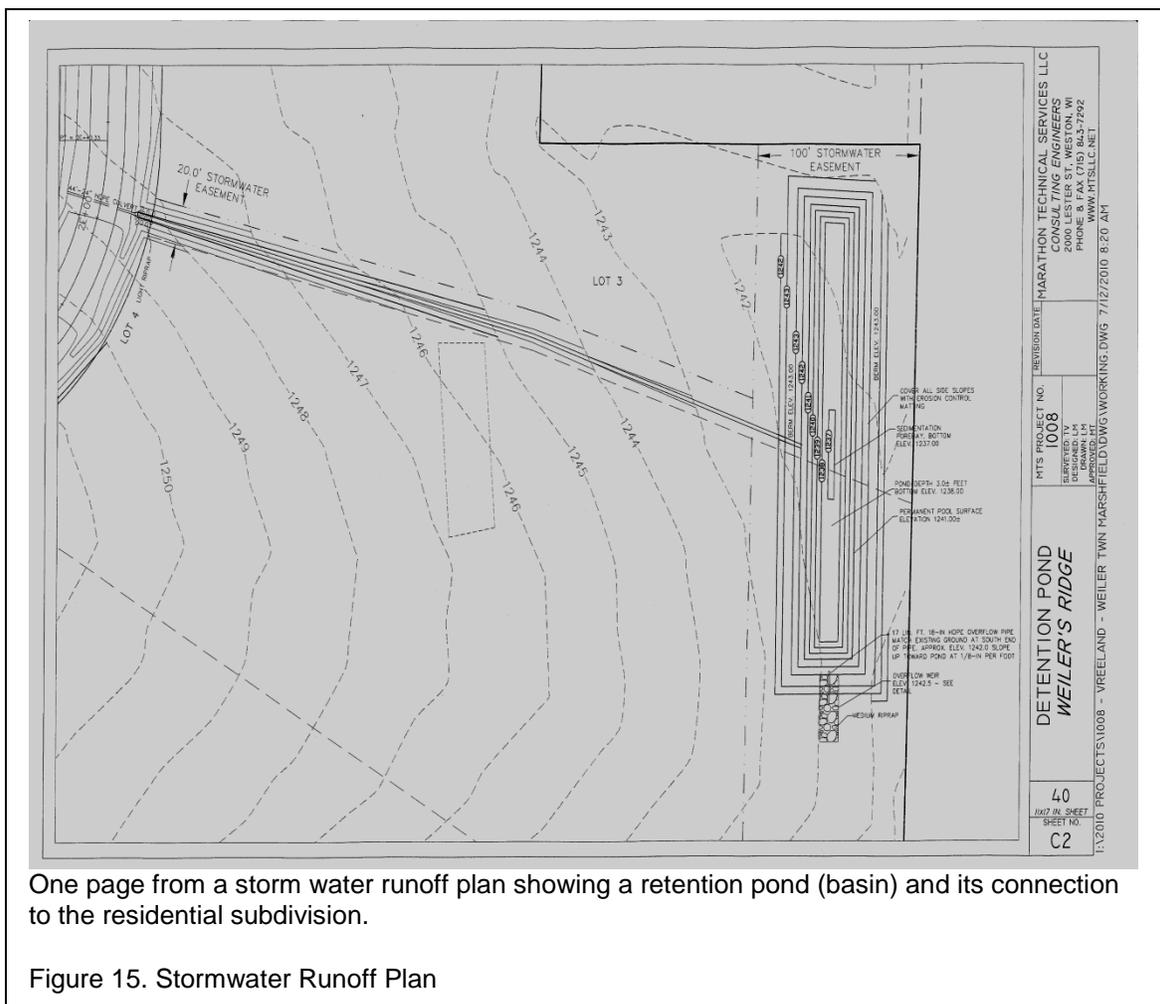
Most rural residents know something about water quality. Water quantity can also become a concern in some areas. Municipal officials should be aware of any water quality or quantity issues. The amount of water that is available (and its quality) will have a direct impact on how much development a community can sustain. The Village of Hewitt enacted a moratorium on new residential development proposals pending completion of a hydrologic study for the village. That study was completed in January 2012 and is attached to this plan as Appendix A. The study area included the Village of Hewitt and a substantial portion of the Town of Marshfield that surrounds the Village, including all or most of Sections 10, 11, 12, 13, 14, 15, 22, 23, and 24 and the northern tier of Sections 25, 26 and 27. The purpose of the study “was to collect information on Hewitt’s groundwater resource and evaluate the sustainability of the current rate of water use, considering the village’s growth trend.” The summary conclusion of the study was that the current groundwater and water use situation in the village is sustainable, “meaning that current water use is not causing significant declines in groundwater levels or degrading nearby surface water resources” and “the effect of plausible increased in water use on the elevation of the water table is not expected to be problematic.” This is good news for the Town of Marshfield because it can be safely assumed that the current use of groundwater in the town is also sustainable. If a large user of water proposes to locate in the town, however, that assumption could change.

The only large volume user of water in the Town of Marshfield today is the City of Marshfield. The city has four municipal well sites in the town. One is located in Section 1, two are located in Section 2 and the other is in Section 3. The well in Section 1 has a current flow of 1,000 gallons per minute (gpm). Those in Section 2 are capable of pumping 216,000 and 288,000 gallons per day (gpd). The rated flow at the time of this plan for each of those wells was 600 gpm each. The well in Section 3 has a capacity of 518,400 gpd and has a rated flow of 500 gpm. The city’s water utility reports that there have been no negative impacts on private wells in the area. It’s in the interest of the town that the municipal well usage be monitored at the town level for any negative impact that might occur to private wells. Protection of the city well heads through local zoning is also in the interest of the town as much as it is in the interest of the city. If the integrity of municipal wells is somehow compromised, the city may have to find new water sources. Additional municipal well sites in the town can discourage new development that the town may desire to have.

### **C. Storm Water Management**

The management of storm water is an engineering issue in cities where large expanses of land are going to be covered with roofs, parking lots and streets. These impermeable surfaces may be from large-scale development like typical big-box developments or business park-type developments, or it could be from higher density residential subdivisions. Neither of these scenarios is likely in the Town of Marshfield though because such large-scale developments also need water supplies and high

water pressure for fire protection. State codes require management of storm water runoff for large-scale developments and this can be an issue for new subdivision development in the town. Storm water runoff is usually accomplished with the use of retention ponds or basins as approved as part of the state’s site development review. Figure 15 provides an example of one page of a stormwater runoff plan. In the example, the subdivision is situated in the upper left of the drawing and the retention pond is shown on the drawing’s right side, down-slope and away from the residential development, providing homes with a safe, dry environment. In this particular subdivision, household waste water is disposed into and treated by mound systems. Each home has a private well. Site plan reviews like what was conducted for this subdivision should become the norm for the town for future residential, commercial or industrial developments



Construction projects that disturb one acre or more of land through, clearing, grading, excavating, or stockpiling of fill material require a stormwater management permit from the Wisconsin Department of Natural Resources under Chapter NR 216 of the Wisconsin Administrative Code. The stormwater management plans detail how sediment and other pollutants will be controlled until construction of the project is

completed and the site is stabilized from erosion. Practices include sediment ponds; silt fences, temporary seeding, and mulching for erosion control; and more. To control runoff when the site is complete, plans will include best management practices such as wet ponds, infiltration structures, grass swales, vegetative filter strips and vegetative structures.

Site design standards in the town zoning ordinance can help assure management of stormwater runoff. While some communities actually enact a stormwater management ordinance with detailed requirements, the site design review process is a way for the town to accommodate residential, commercial, and some light industrial growth without worsening existing drainage problems or creating new ones. Such a process can require management plans to be prepared to calculate the amount of impermeable surface of the new development, impact of grading, and incorporate retention ponds and swales to manage the runoff.

Keeping development away from the water, both surface drainage and high groundwater, is important. In periods of drought, people sometimes tend to forget the natural characteristics of a site and might want to develop it, only to regret that decision later when there is a lot of spring runoff or a rising ground water table. Residents who experience moisture problems in their homes and yards may consider some relatively low-cost solutions to moisture and drainage problems. Installation of rain gutters can direct water away from the foundation of homes and reduce the impact of water seeping into basements. Simple landscaping practices such as sloping the ground away from the house, or the creation of rain gardens, will help reduce the permeation of water along the basement foundation. Cracks in basement floors and walls should be filled to prevent water leakage.

#### **D. Solid Waste Disposal**

Curbside collection of household solid waste, or garbage, is provided by Veolia Environmental Services on a weekly basis. Final disposal is at the Viola landfill site in Wisconsin Rapids. Fees for this service are added to residential property tax bills.

Recyclables are also collected by Veolia on a monthly basis. The Town of Marshfield, with the towns of Cameron, Richfield, Lincoln, McMillan, and Rock contract for this service as a consortium. Paper, plastics, glass and aluminum are required by town ordinance to be recycled.

Town residents take advantage of a variety of programs offered by the City of Marshfield, Wood County, and area businesses to dispose of large items such as appliances, construction materials, scrap metal, and tires. There are also a variety of options for residents to dispose of computer equipment and other electronics, printer cartridges, batteries, prescription drugs, chemicals, and CFL light bulbs.

Town residents can also take yard waste, brush, branches, and Christmas trees to the City of Marshfield-Veolia Environmental Services compost site located on South Hume Street in the city.

Commercial businesses that are in the town must arrange and pay for garbage collection and recycling on their own.

## **E. Emergency Services**

Emergency services typically include police protection, fire fighting services and ambulance services. Other emergency services, not often thought of directly by those in need, include agencies that dispatch emergency vehicles and agencies that provide general information about such services. Emergency services are provided to Town of Marshfield residents and businesses by a variety of agencies not located in the town. The policy of the town with regard to protective services is to provide the most efficient police, fire and ambulance services available to town residents and the most cost-effective rates.

**(1) Police.** Police patrolling of the town and investigation of law enforcement problems are provided by the Wood County Sheriff's Department and Wisconsin State Patrol. It would not be cost-effective in the Town of Marshfield to hire town police officers. If a police department is needed in the future, the town could investigate a joint department with Hewitt and/or other adjacent towns. In the meantime, the town will continue to work with state and county law enforcement agencies to provide residents with a safe place to live.

**(2) Fire.** The Hewitt Area Volunteer Fire Department (HAFT) provides fire and first responder service to the Village of Hewitt and Town of Marshfield. Both the village and town share in all aspects of the department including day-to-day operations, staffing, and budgeting. The department is staffed by 35 volunteers and has a Class 7 rating. The HAFT participates in mutual aid agreements with other area fire departments.

**(3) Ambulance.** Ambulance service is provided to the Town of Marshfield on a contract basis by the City of Marshfield.

**(4) Shared Dispatch.** When Town of Marshfield residents dial 9-1-1 for emergency services, the call is routed to the Wood County Shared Dispatch Center in the county courthouse in Wisconsin Rapids. The center dispatches for all emergency responders in Wood County – police, fire and ambulance. The location of land-line and cell phone calls is mapped by the dispatch center to expedite emergency response. Maps of new roads and new lots are updated on a regular basis by the Wood County Planning & Zoning Office.

**(5) United Way 2-1-1.** United Way's 2-1-1 is an information referral program that maintains a database of community resources and connects callers with questions to the proper service or organization to meet their human, social and information needs. The program is available free-of-charge, 24/7 and is a partnership of United Way of Inner Wisconsin (Wisconsin Rapids) and the Marshfield Area United Way.

***Questions that United Way's 2-1-1 program can answer.***

- *Where can I find an in-patient drug rehab program for my son?*
- *I would like to volunteer my time, what organizations need help?*
- *Where is there an AA meeting tonight?*
- *Where is there a food pantry in the Marshfield area?*
- *My house is going to be foreclosed on, what can I do?*

## **F. Parks, Open Spaces and Recreational Resources**

The Central Wisconsin Sportsman's Club owns 17.73 acres in Section 3 on Stadt Road and Trout Drive. This is a private club whose members enjoy hunting privileges on the club's property. That property surrounds a 5.5 acre parcel on Trout Drive that is owned by Wood County.

The Town of Marshfield does not own any municipal parks or recreation facilities, but does cooperate with Hewitt and the City of Marshfield on some. The multi-use trail from Hewitt, through the town and to the city is an example. Another example is the village park. The Town of Marshfield has provided assistance in the construction and maintenance of that park. Also, the town hall is available for receptions, parties and other events where a lot of people are assembled. Town residents are able to make use of municipal recreation facilities owned by the City of Marshfield for a fee. There are also other privately-owned facilities like the "Y" and area golf courses.

County parks are available to Town of Marshfield residents too. The nearest county parks are what is known as the "Richfield 360 Area," North Wood County Park and Powers Bluff County Park. The Richfield 360 Area is located three miles south of the Town of Marshfield in the Town of Richfield. This is an undeveloped forestland that is used for snowmobiling and cross-country skiing in the winter and nature walks during summer months. North Wood County Park is another couple of miles south of the Richfield 360 Area. North Wood County Park has all the amenities one might be looking for, including swimming, shelters, picnic areas, camping, disk golf and more. Powers Bluff County Park lies just a few miles east of North Wood County Park. Powers Bluff is most noted for its Indian burial mounds and its snow ski and tubing facilities. Powers Bluff is the highest point in Wood County and attracts picnickers and hikers in the summertime.

In the community planning survey, several respondents indicated a desire to have more parks in the town. Eighty-four responses were received that said the town needs more bicycle/pedestrian trails. That survey was completed prior to the Hewitt-to-Marshfield trail being developed. Conversations have taken place to eventually extend

the trail from Hewitt, through the Town of Marshfield to the east, and onto Auburndale and, possibly, to the Village of Milladore.

## G. Libraries

Communities without libraries of their own pay for these services through a County assessment. The assessment is based on the town's equalized valuation. It is calculated on the basis of the non-library municipalities paying 70 percent of the costs associated with circulation to non-library-community users. The Town of Marshfield does not have its own library, but residents have access to the other libraries in the County, the closest being in the City of Marshfield. The policy of the Town Board is to continue participating in the library program to provide Town of Marshfield residents with that important resource.

## H. Schools

The Town of Marshfield is located in the Marshfield Public School District. For the 2011 – 2012 school year, there are 4,081 students enrolled (Table 18). The school district employs 282 teachers and 164 support personnel. The Early Childhood/Kindergarten through twelfth grade structure has four elementary schools within the city limits, one rural school, one middle school for grades seven and eight, one high school for grades nine through twelve, and a school forest environmental education center.

School Year	Enrollment (Pre K-12)
2007-08	4,057
2008-09	4,094
2009-10	4,084
2010-11	4,038
2011-12	4,081

Source: Wisconsin Department of Public Instruction website (<http://data.dpi.state.wi.us/data/selschool.asp>) and Marshfield Board of Education.

Some Town of Marshfield residents choose to send their children to private educational facilities in the area. According to the State Department of Public Instruction 2010 enrollment numbers, 727 students from the greater Marshfield area, including the Town of Marshfield attend one of the private schools listed in Table 19.

Mid-State Technical College (MSTC) is a leader in providing higher education in more than 50 career opportunities through associate degrees, technical diplomas and certificates. Student-focused and community-based, MSTC serves over 11,000 individuals annually. In addition to Marshfield, MSTC has campuses in Stevens Point, Wisconsin Rapids, and a learning center in Adams.

Table 19. Marshfield Area Private Schools

School	Type
Immanuel Lutheran Grade School	Elementary
Our Lady of Peace Intermediate School	Elementary
Saint John the Baptist Primary School	Elementary
Trinity Evangelical Lutheran School	Elementary
Marshfield Children's House	Elementary
Columbus Catholic Middle School	Middle School
Columbus Catholic High School	High School
Source: Wisconsin Department of Public Instruction website ( <a href="http://data.dpi.state.wi.us/data/selschool.asp">http://data.dpi.state.wi.us/data/selschool.asp</a> ).	

The University of Wisconsin has a two-year campus in the City of Marshfield. Students can complete their Associate of Arts and Science degree at a pace that is convenient for them. With major emphases in English, Engineering, Education and Pre-Nursing, students are able to fulfill their general education requirements before transferring to a four-year campus to complete their studies. Through partnerships with other institutions, the UW-Marshfield is able to offer students the flexibility to complete their bachelor's degree on the Marshfield campus, or to enroll jointly with another UW campus and/or state technical college. The UW-Marshfield also offers business training and development – an asset for existing and emerging area businesses – and

pharmacy and EKG technician certification programs, supporting the strong medical base in Marshfield and Wood County.

**I. 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 childcare 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 agency that provides services to Wood County is the Child Care Resources & Referral of Central Wisconsin.<sup>8</sup>

**J. Health Care**

Marshfield Clinic is the largest private medical practice in Wisconsin and one of the largest in the United States. The Clinic has about 780 physician specialists representing 86 medical specialties and total employment of nearly 6600 in more than

<sup>8</sup> Child Care Resources & Referral of Central Wisconsin, 210 East Jackson Street, Wisconsin Rapids, WI serves Wood, Clark and Adams counties. Contact information, in addition to the address listed here is: Phone 1-800-628-8534; email - [ccrcw@tznet.com](mailto:ccrcw@tznet.com); website - [www.ccrw.org](http://www.ccrw.org).

40 Clinic Centers in Wisconsin. Marshfield Clinic was founded in 1916 in Marshfield and its Marshfield Center is the largest center in the Clinic System. The Clinic system also includes Marshfield Clinic Research Foundation; Marshfield Clinic Education Foundation; and Security Health Plan of Wisconsin, Inc., a health maintenance organization.

Founded more than 110-years ago, Saint Joseph's Hospital is a 500-plus bed tertiary care teaching institution, one of the largest referral medical centers in Wisconsin. It is the only Level II verified trauma center in the north central part of the state. It provides health care, including all major medical and surgical specialties and subspecialties. More than 350 Marshfield Clinic physicians are on the Saint Joseph's Hospital staff, with more than 2,300 total employees.

Norwood Health Center provides residents of Wood and surrounding counties with quality treatment services which include a residential development disabilities program, acute psychiatric care and a skilled long-term care unit for the chronically mentally ill. Norwood Health Center is owned by Wood County and operated by the Wood County Unified Services Board.

Lifestyles – Marshfield Area Coalition is a grassroots movement working to address healthy eating and active living in and around Marshfield, Wisconsin.

Other health care providers in the City of Marshfield include 26 dentists and orthodontists, 9 chiropractors, and three nursing and rehabilitation centers (370+ beds). Health facilities in nearby communities include Riverview Hospital (Wisconsin Rapids), Memorial Hospital (Neillsville) and Memorial Health Center (Medford).

#### **K. Power-Generating Plants, Electric, Natural Gas, and Oil Transmission Lines**

The Town of Marshfield's electrical power is supplied by Marshfield Utilities. There are no power-generating plants in the town. There are, however, two pipelines that traverse the town. A natural gas line, owned by Viking Gas Transmission Company is located in Sections 25, 26 and 27. Koch Petroleum Group has a six-inch diameter propane line and a 12-inch diameter refined oil pipeline in Sections 34, 35 and 36. These lines are part of a system that transports product from the Pine Bend Refinery in Minnesota to the Koch Petroleum Group terminal in Junction City. No leakage problems have occurred along this segment of the transmission pipelines in recent years, but an emergency response manual is in place should an event occur.

#### **L. Telecommunications Facilities**

Wireless communication continues to grow at a rapid pace across the country. Currently, there are two wireless towers located near the intersection of Highway 10 and Stadt Road. The town does not have an ordinance to address the many issues that are associated with communications towers. Such an ordinance may become more important if additional towers are proposed. An ordinance could address issues like

setbacks, minimum lot sizes, access, aesthetics, or dismantling if the tower is no longer used.

Packerland Broadband provides television and internet services in portions of the town. Solarus and Countrywide also provide wireless communications in the Town of Marshfield.

### **M. Telephone Services**

Telephone service is provided throughout the town by Frontier Communications, formerly known as Verizon and General Telephone Company.

### **N. Goals and Objectives**

It is the overall goal of the Town of Marshfield that utilities and community facilities that are needed, or desired, by residents are provided by competent providers. If the overall goal can not be accomplished in the Town of Marshfield alone, or if it is not cost effective for the town to pursue the goal alone, partnerships and collaborations with other communities will be considered.

#### **GOAL: Protect the town's groundwater resources.**

**Objective:** Use zoning density standards and various minimum lot sizes in areas that are determined to have limited water supplies or issues with water quality.

**Objective:** Minimize non-point source pollution and reduce volumes of untreated runoff.

**Objective:** Monitor the impacts of City of Marshfield well sites on area groundwater resources.

**Objective:** Encourage residents to conserve water.

**Objective:** Request assistance from the Groundwater Guardians to address issues pertaining to groundwater quality.

#### **GOAL: Improve stormwater runoff to reduce problems with water in basements and yards.**

**Objective:** Assess current stormwater runoff issues, prioritize problem areas, and develop a plan that identifies possible solutions to work towards.

**Objective:** Require drainage easements as part of the local site development review process where drainage swales are identified. Do not allow drainage swales to be filled or leveled, which may cause localized flooding in parts of the town. Ensure that new development will not adversely affect drainage in the town.

**Objective:** Educate residents on low cost ways to solve water problems in basements and yards.

**GOAL:** Consider the need for regulations regarding cell towers for electronic transmissions.

**GOAL:** Consider the need for regulations regarding wind energy towers.



## **5. AGRICULTURAL, NATURAL & CULTURAL ELEMENTS**

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This section provides an analysis of lands that may have some constraints to development. They are primarily environmental constraints, such as floodplains, wetlands, soils with high groundwater conditions, or soils with characteristics that severely limit development because of inability to accommodate private on-site waste treatment systems. Prime agricultural soils may also be restricted from development to retain the best agricultural areas. This section will look at each of these characteristics and, through a series of analyses and map overlays, describe areas that cannot or should not be developed in the future. Conversely, the analyses and map overlays will also reveal the best areas in the Town of Marshfield for future development to occur.

A survey was sent to each household in the Town of Marshfield prior to beginning the comprehensive plan. Residents were asked if maintaining the Town of Marshfield's current rural landscape is important to them. Eighty-six percent answered "yes," yet 55% added that there is no problem with the placement of housing and 34% either agree with or don't care about the city's expansion into the town. An even greater proportion, 47%, said they agree with or don't care about Hewitt's expansion into the town. These conflicting survey results offer a challenge to town leaders to allow expansion in a manner that helps to preserve the rural landscape.

### **A. Topography**

The elevations in the Town of Marshfield range from 1,130 feet to 1,300 feet above mean sea level, a variation of 170 feet. Most of the town is in the 1,220 to 1,250 elevation range, with the higher elevations in the northern part of the town and flatter, lower elevations toward the south. That being said, the lowest point is actually in Section 1 south of East McMillan Road and west of Day Road on the north end of the town. The highest point is in the northwest quarter of Section 10 between Pheasant Lane and County Road H.

### **B. Productive Agricultural Areas**

According to a field survey by the Wood County Planning & Zoning Office, agricultural land, including farm buildings, fields and tree nurseries, accounts for about 64% of the land area in the Town of Marshfield. Figure 16 shows how the USDA's Natural Resource Conservation Service rates soils in the town for agricultural purposes. About 17% of the soils are classified as "prime" and nearly 81% are classified as "prime if drained." Most of the other two percent is considered "not prime." Some is classified as "farmland of statewide significance."

The amount of soil that is classified as "prime if drained" is rated that way primarily because of the extensive clay deposits and limited drainage in many areas of the town. Surface and subsurface drainage systems are needed before a number of soil types can be considered as prime for agricultural purposes.

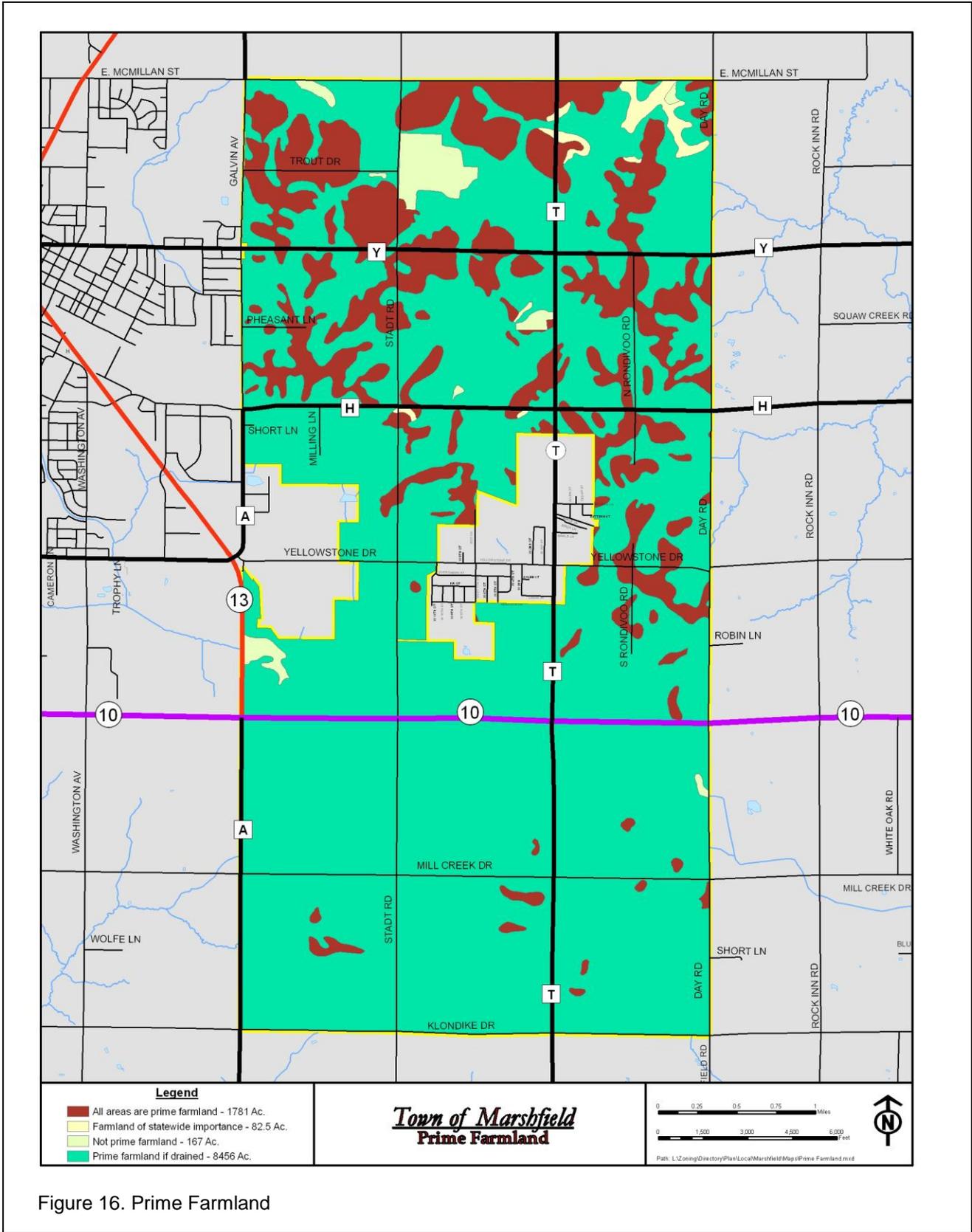


Figure 16. Prime Farmland

The Town of Marshfield has a history of a strong agricultural base, particularly dairying. Although the town's growth can be attributed to non-farm activities, agriculture will likely remain a very visible and important component of the town into the near future. Eighty-six percent of the community planning survey respondents indicated that maintaining the town's rural landscape is important. Good planning and zoning decisions can help to achieve that goal.

### **C. Water Resources**

The state has significant responsibilities for protecting water resources under what is known as the "Public Trust Doctrine." The Public Trust Doctrine embodies the notion that the waters in Wisconsin are held in trust by the state for the benefit of all. There can be no private interests in waterways that adversely affect this public interest. In fulfilling its responsibilities under the Public Trust Doctrine, the Wisconsin Legislature has enacted laws and charged the Wisconsin Department of Natural Resources to protect water resources. The local plan, at a minimum, must be consistent with the state laws in this regard. This section of the Town of Marshfield's comprehensive plan provides an inventory of the water resources in the town and establishes local policies and programs regarding those resources.

#### **(1) Groundwater**

Fifteen to thirty percent of the precipitation we get in Wisconsin each year seeps into the ground and recharges our aquifers.<sup>9</sup> It is estimated that there is enough water underground to cover Wisconsin to a depth of 30 feet.<sup>10</sup> The Town of Marshfield is in an area of Wood County where soils are characterized by seasonal high groundwater conditions mostly in the south half of the town and a mix of seasonal high water table soils and better soils in the north (Figure 17).<sup>11</sup> The shallow of water table is a cause for holding tanks to be the typical means of disposal of household wastes. Soils with a deeper water table may be acceptable for mound systems. The seasonal high groundwater table also contributes to the need to provide ample lot sizes to protect the groundwater. Groundwater is the source of drinking water throughout the town.

A comparison of Figures 16 and 17 reveals that nearly all of the town's most productive agricultural soils are also where the map indicates "no data" to be available. The 1977 Soil Conservation Service report, "Soil Survey of Wood County, Wisconsin" shows those areas to have a seasonal high water table of greater than five feet in areas

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<sup>9</sup> "Planning for Natural Resources", Dept. of Urban & Regional Planning, University of Wisconsin-Madison/Extension and Wisconsin Department of Natural Resources, January, 2002.

<sup>10</sup> Ibid.

<sup>11</sup> Figure 17 indicates extremely shallow groundwater levels. The data on the map was developed by the Natural Resource Conservation Service and is certified under the Soil Survey Geographical (SSURGO) database parameters. The 1977 "Soil Survey of Wood County, Wisconsin" report by the USDA Soil Conservation Service (now the Natural Resource Conservation Service) showed groundwater levels to be deeper and data to be shown for those areas in Figure 17 that are referred to as "no data." Figure 17 is presented for general information purposes only and should be considered only a guide for differences in water table depths.

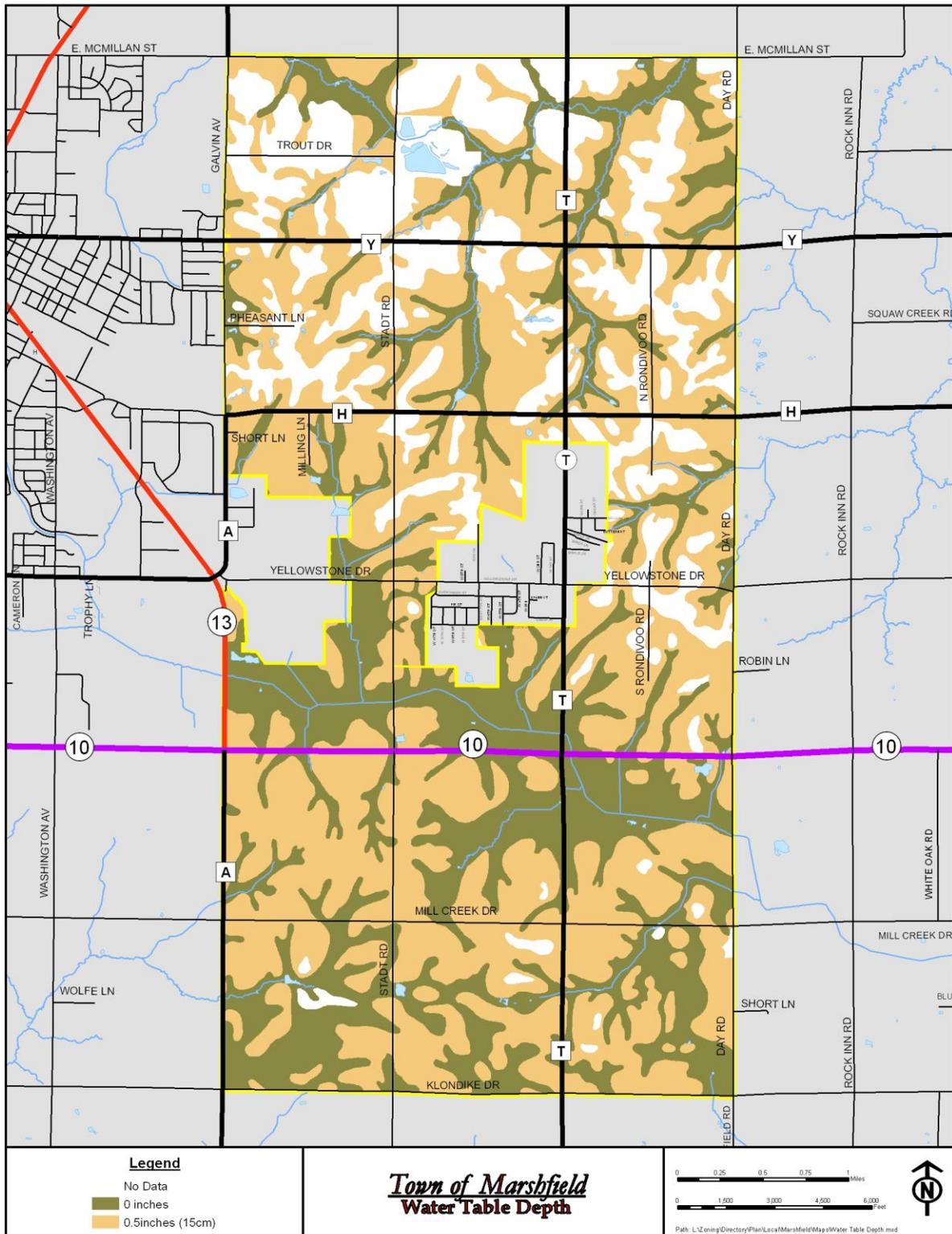


Figure 17. Water Table Depth

that have problems with seasonal high groundwater. Protecting the high groundwater areas would also have the effect of protecting the prime agricultural areas.

The community planning survey asked residents where they would prefer to see future development occur. The highest responses indicated the preferred areas to be around Hewitt and in the far northwest part of the town. Other preferred areas were in the northern two tiers of the town. These preferred locations correspond to the areas with the best soils to sustain new development. The “Hewitt Groundwater Data Summary” (Appendix A) provides a valuable data resource for town officials as they review development proposals.

There are growing concerns statewide about both the quantity and quality of groundwater. Figure 18 is a diagram that illustrates how nature’s water system works and how land uses can impact groundwater quality. Groundwater quality may be impacted by a variety of activities, including leaking underground storage tanks, old dumps, septic systems, land spreading of septage and over-application of fertilizers and pesticides. The most common contaminants found in Wisconsin groundwater are nitrate-nitrogen, volatile organic compounds (VOCs) and pesticides.<sup>12</sup> Nitrate comes from a number of sources, including nitrogen-based fertilizers, septic systems, animal waste storage, feedlots, municipal and industrial wastewater discharges and sludge disposal. Some examples of VOCs are gasoline, paints, paint thinners, stain removers and drain cleaners. Pesticides reach the groundwater from land application, spills, misuse or improper storage and disposal.

It is not only important to protect groundwater resources at the local level, it is the law. Private well supplies, agricultural uses, recreational use of surface waters, etc. depend on a clean water supply. Every drinking water supply in the Town of Marshfield is a private well – untreated water from the groundwater supply. In 1974, the Wisconsin Supreme Court overturned existing law and created the current law – the doctrine of reasonable use. A property owner’s use of groundwater is not absolute, but has to be reasonable, considering impacts on the water table and other uses. Groundwater is also protected as waters of the state.

## **(2) Surface Water**

There are several creeks and tributaries to those creeks that help to drain storm water runoff in the Town of Marshfield. With the exception of Section 15, virtually every section of the town has a creek or tributary in it. Mill Creek flows from west to southeasterly through Sections 21, 22, 23 and 25, with tributaries in Sections 24 and 26. Not only is Mill Creek the largest of the creeks, it is also the busiest. The wastewater treatment plants in Marshfield and Hewitt both discharge to Mill Creek. That could become an issue in the future as the communities grow and more is discharged to the stream.

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<sup>12</sup> “Planning for Natural Resources”, Dept. of Urban & Regional Planning, University of Wisconsin-Madison/Extension and Wisconsin Department of Natural Resources, January, 2002.

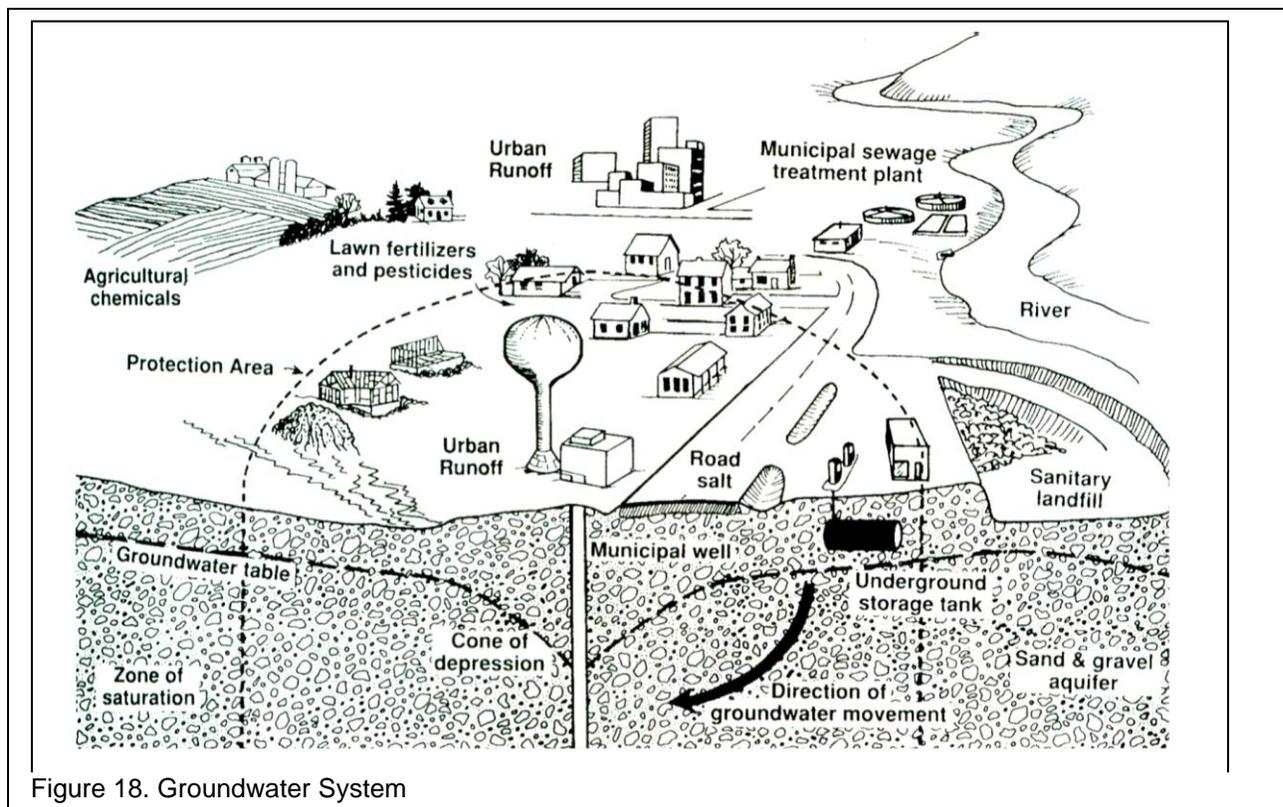


Figure 18. Groundwater System

Squaw Creek is in the north portions of the town and the main creek or its tributaries can be found in Sections 1, 2, 3, 11, 12 and 14. The upper reaches of Puff Creek help drain Sections 27 and 34 in the southwest part of the town.

Surface water also includes man-made ponds and reservoirs. These include agricultural ponds and ponds that are the result of quarrying operations. It is important to protect the quality of the Town of Marshfield's surface waters for the protection of the area's wildlife and because contamination can migrate to residential wells.

#### D. Floodplains and Shorelands

Floodplains serve many important functions related to flood control, erosion control, ground water recharge, fish and wildlife habitat and water quality. A floodplain is a natural extension of a waterway and flooding is a natural physical event. When structures are placed in the floodplain, the floodplain's water storage capacity is reduced, causing the next flood of equal intensity to crest even higher than the last, often flooding areas that were previously outside the floodplain.

The Federal Emergency Management Agency (FEMA) defines floodplains. Floodplains are comprised of the floodway, which is that area that actually carries the floodwaters, and the flood fringe, which is the area that accepts backed-up water for storage until the floodway can carry the water downstream. The flood fringe is sometimes referred to as the "backwater" areas. Floodplain boundaries have been

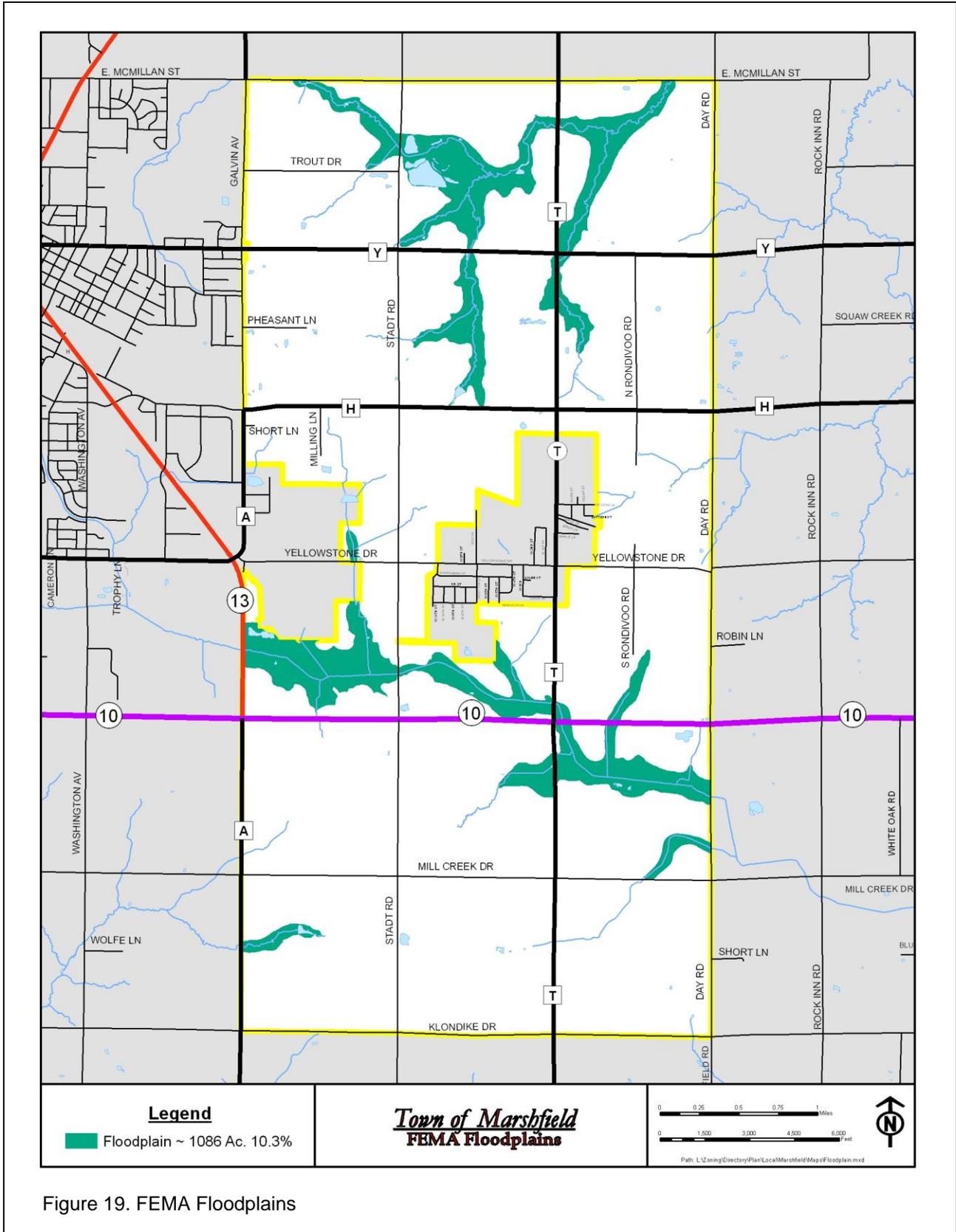


Figure 19. FEMA Floodplains

established nationwide to delineate the 100-year and 500-year flood elevations. There is a one percent chance that the 100-year, or regional, flood will occur in any given year. The regional flood could occur two years in a row, or may not occur at all in a 100-year period. According to the Wisconsin Emergency Management Division, Wisconsin communities experienced significant flooding each year from 1990 – 2001, except 1994. Total damages to public and private property, including agricultural damages, during that time period totaled more than one billion dollars.<sup>13</sup> More recently, all of Wood County, including the Town of Marshfield, experienced flooding that was near or exceeded the 100-year flood levels. The September, 2010 storm caused flooding of all the streams in the Town of Marshfield, resulting in damage to roads and properties. The town zoning ordinance requires a 100-foot setback from mapped wetlands, which helped to reduce damage to structures that are near the creeks.

Wood County adopted a floodplain zoning ordinance in the early 1970s so county residents would be eligible to participate in the National Flood Insurance Program (NFIP). FEMA Flood Insurance Rate Maps (FIRMs) identify various floodplain zones. Regulations prohibit development in the floodway, the most dangerous flood zone. Development is allowed in the flood fringe provided it is built above flood levels and otherwise flood-protected. Although allowed, it is wise to restrict development from occurring in the flood fringe as well as the floodway.

The floodplains in the Town of Marshfield are shown in Figure 19. Both Mill Creek and Squaw Creek have some floodplain areas that expand out some distance from the streambed itself. Most of the floodplain, however, stays pretty close to the streams. Although, from looking at the map, it does not appear that much land is in the floodplain, there are 1,086 acres of floodplain in the Town of Marshfield. That represents 10.3% of the town's land area.

Shorelands and floodplains are very closely associated. Like floodplains, shoreland areas are protected under Wisconsin law. Also, like floodplains, counties are required to zone all shorelands within their jurisdiction.<sup>14</sup> The shoreland includes that land that is located within 300 feet of a navigable stream or 1,000 feet of a lake, pond or flowage. A county permit is required before development in a shoreland area can begin.

By reviewing the floodplain map and the map that shows high groundwater areas, there does not appear to be a direct correlation between the two. Floodplain areas have soils with high groundwater, but, there are also many acres in the Town of Marshfield that are not included in a floodplain, yet have seasonal high groundwater.

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<sup>13</sup> "Planning for Natural Resources", Dept. of Urban & Regional Planning, University of Wisconsin-Madison/Extension and Wisconsin Department of Natural Resources, January, 2002.

<sup>14</sup> Sec. 59.692, Wisconsin Statutes, and Chapter NR 115, Wisconsin Administrative Code.

## **E. Wetlands**

The value of wetlands is often disregarded or not understood by the public. Wetlands serve as a water storage and distribution system, filtering nutrients and purifying the water before it is reintroduced into the groundwater or surface water system. As more impermeable surfaces (rooftops, driveways, patios, roads, etc.) dominate the landscape, the capacity of wetlands to handle excess water runoff becomes increasingly important.

Under Wisconsin Administrative Code, cities and villages (and towns with village powers) are required to protect, at a minimum, all unfilled wetlands that 1) are within their borders, 2) are shown on Department of Natural Resources wetland inventory maps, and 3) are located within shorelands.

Wetlands in the Town of Marshfield are widely scattered throughout the town (Figure 20) and total approximately 802 acres as defined by the DNR. This represents 7.6% of total land area in the town. As can be seen on the maps, wetlands are often associated with floodplains, but not always. In all but a very few instances, wetlands are associated with soils that have high groundwater characteristics. This can be verified by studying the various maps.

Development should be directed away from all mapped wetlands, both for the protection of the wetland and for the protection of the structures and persons using them. The Town of Marshfield requires a 100-foot setback from any mapped wetland for any new structure. This requirement has helped preserve the important functions of the wetlands and protect structures from water damage when wetlands reach and exceed capacity as they did in the September 2010 floods. It is the Town of Marshfield's policy to continue to protect wetlands from encroachment and destruction so they can serve the function of water runoff storage, wildlife habitat, etc.

## **F. Soils: Limitations for Dwellings**

Figure 22 is a map of the Town of Marshfield showing the soils limitations for development of dwellings with and without basements. Soil limitations are indicated by the ratings "slight", "moderate" and "severe." A slight limitation means that the soil properties are generally favorable for the rated use; that is limitations are minor and easily overcome. A moderate limitation means that some soil properties are unfavorable, but can be overcome or modified by special planning and design. A severe limitation means that soil properties are so unfavorable and so difficult to correct or overcome as to require major soil reclamation, special designs or intensive maintenance.

Looking at Figures 17 and 22, it makes sense that the areas with the most severe limitations for development are directly associated with the soils that have high groundwater conditions. The majority of land that is best suited for dwellings with basements is also that land that is classified as the best for agricultural practices; that identified as having seasonal high groundwater levels of greater than five feet (see

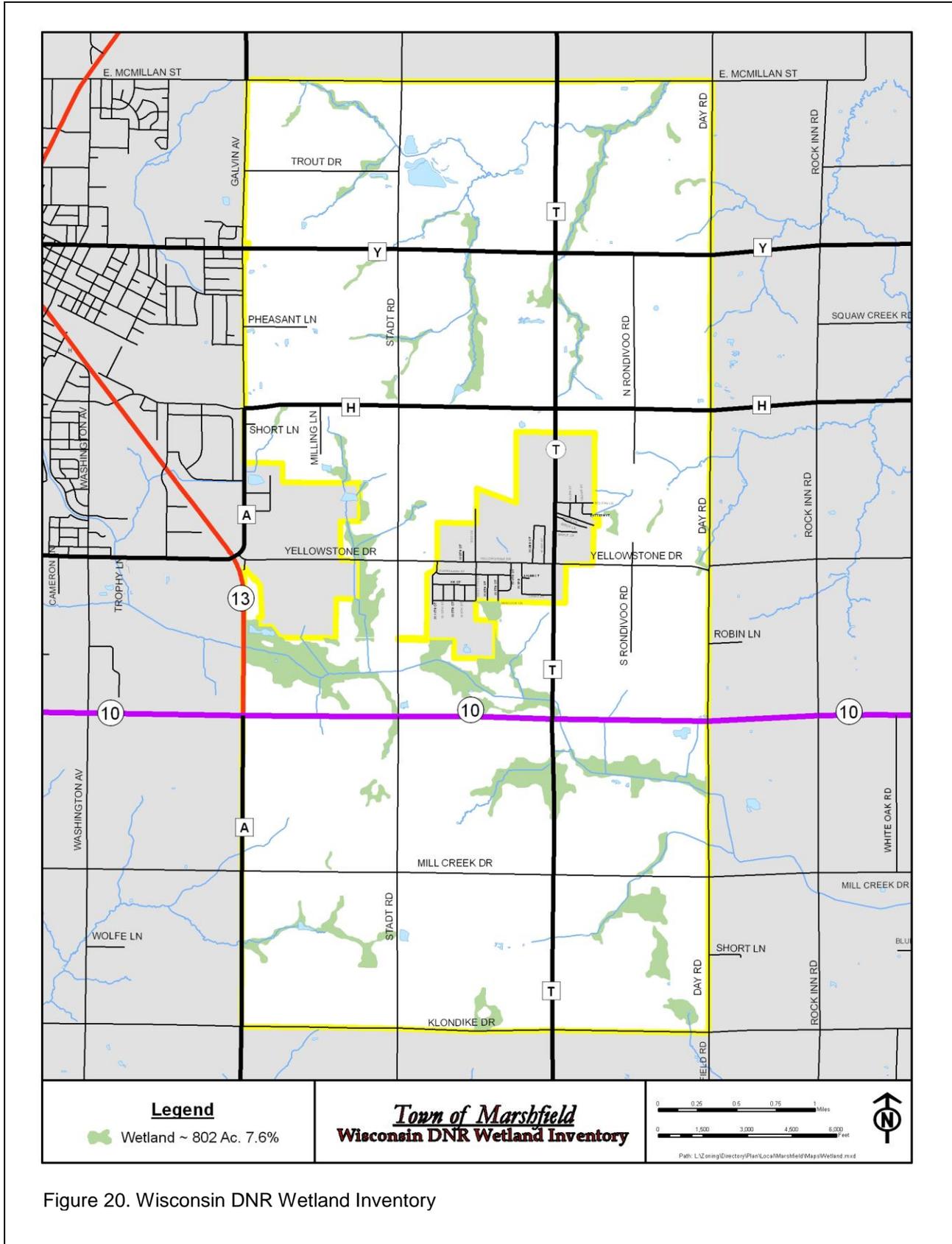


Figure 20. Wisconsin DNR Wetland Inventory

footnote 11). Because virtually all structures with running water are served by Private On-Site Waste Treatment Systems (POWTS), it is important for town officials to keep the soil maps in mind when reviewing areas for new development. It is imperative that all POWTS be properly maintained to protect the groundwater – the source of drinking water.

## G. Historical and Cultural Resources

The Wisconsin Historical Society has only one record for the Town of Marshfield. That is for an Astylistic Utilitarian Building (basement barn) on a farm at the NE corner of Highway 10 and County Road A. Unfortunately, that barn has been razed since the 1992 Historical Society inventory. There are likely other structures that are of historical or cultural significance, but have not been identified to the Wisconsin Historical Society to make a determination of the exact historical or cultural significance. One such structure is a house on Mill Creek Road. The structure (Figure 21) is adjacent to the old railroad bed and is reputed to have been a tavern at what was a railroad stop known as Spur #286. Unfortunately, the structure has fallen into disrepair over the years.



Figure 21. Spur #286 Railroad Stop. This home on Mill Creek Road is reputed to have once served as a tavern for the old railroad stop.

## H. Forests

There are no forests of significant size in the Town of Marshfield. The small wooded plots that are in the town are associated with low-lying areas, or spread about on agricultural land.

## I. Wildlife Habitat & Endangered Species

The Town of Marshfield has an abundance of wildlife, including deer, rabbits, squirrels, ducks, geese, turkey and more. There is also a rising population of coyotes. Black bears and pine martens are also known to be seen in the Town. According to the Wisconsin Department of Natural Resources, there are no known endangered species.

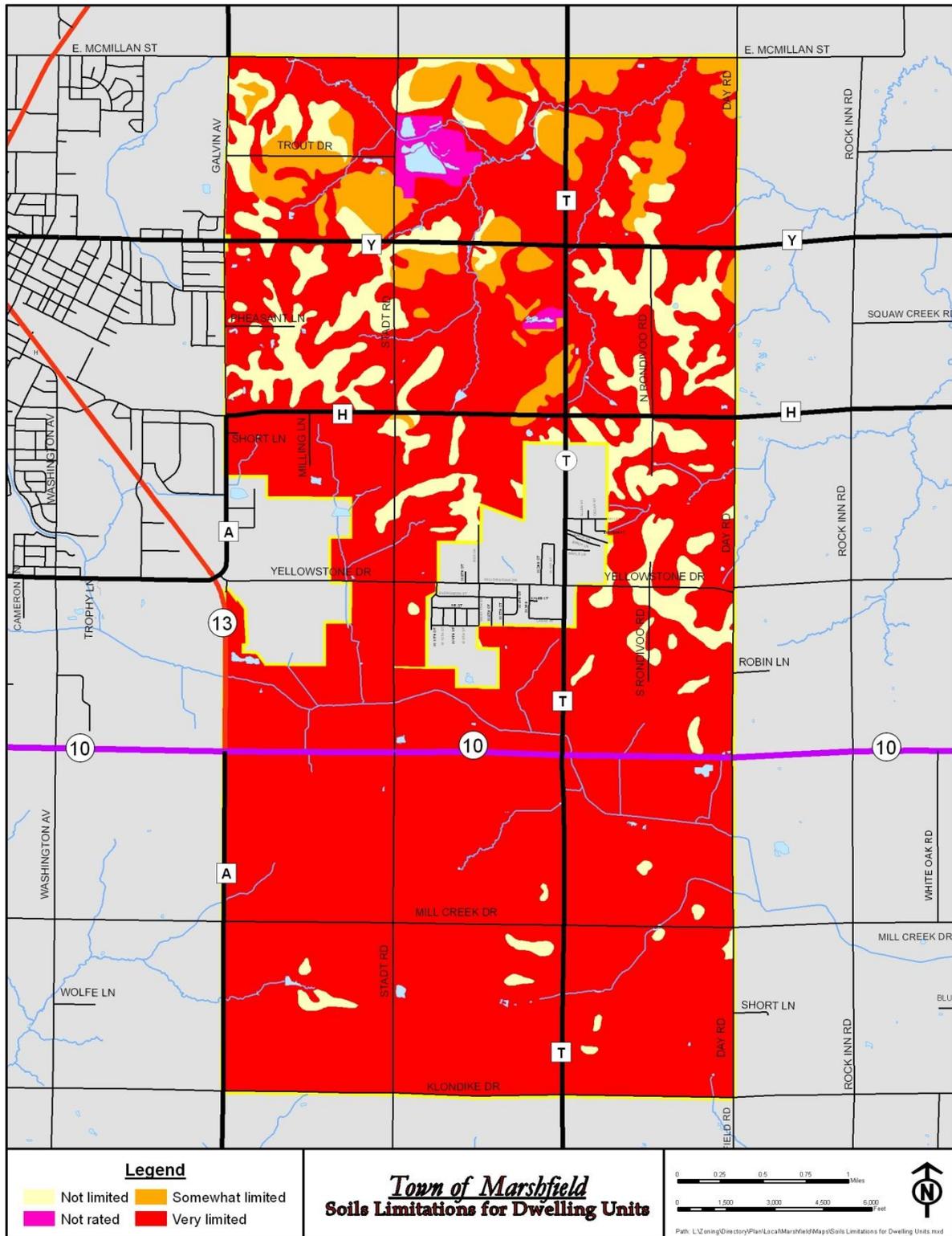


Figure 22. Soil Limitations for Dwelling Units

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## 6. ECONOMIC DEVELOPMENT

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### A. Recent Economic Change & Purpose

The Greater Marshfield area has undergone a lot of change with globalization of business, Internet sales and the recent economic recession. Through all of this, Marshfield has remained a leader in the field of health care. To remain competitive and to stimulate economic growth, the area has to assess its strengths and weaknesses and analyze opportunities that exist and recognize threats to its economy.

The purpose of this element of the comprehensive plan is to provide an analysis of the Town of Marshfield's current labor force and economic base and, from that analysis, develop objectives, policies, goals and programs "to promote the stabilization, retention or expansion of the economic base and quality employment opportunities in the [town]."<sup>15</sup> To achieve that purpose, this chapter will assess the types of businesses and industries that are desired in the Town of Marshfield, perceived strengths and weaknesses with respect to attracting and retaining businesses and industries, designate sites for desired business development, and identify county, regional and state economic development programs that apply to the town. Some employment characteristics were presented in Chapter 1 of this plan and will be expanded upon here. Much of the economy-related information is available only on a countywide basis. Consequently, that level data will be presented where town level data is not available, with comments and assumptions for the town drawn from county level data.

Disclaimer Much of the data in this chapter is from the U.S. Census for 1990 and 2000. The amount and types of data collected in the 2010 census was greatly reduced, making more recent comparisons difficult or impossible. More current data from the U.S. Census, American Factfinder, American Community Survey, and State agency sources is used where available. Data from these other sources, however, is based on samples and may have a large margin of error. Caution is advised when citing this data. It is presented for general planning purposes only.

### B. Employment Trends

The Town of Marshfield's total labor force increased by about six percent between 1990 and 2000. Slightly more than 74% of the labor force was employed in 2000. In 1990, 95% of the labor force was employed. The unemployment rate for the Town of Marshfield labor force was only 2.3% in 2000 (3.4% for Wood County), which is considered "full-employment." Although unemployment rate details for individual municipalities have not been available since 2000, the unemployment rate for Wood County in 2011 was 7.7% and averaged 8.2% for the first quarter of 2012. The State had a similar trend, rising from 8.5% in 2000 to 7.5% in 2011 and averaging 7.7% for the first quarter of 2012.

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<sup>15</sup> Chapter 66.1001 (2) (f), Wisconsin Statutes.

The industries that employ Town of Marshfield residents and the type of jobs are listed in Table 9 in the first chapter. As noted in the discussion of the contents of that table, the number of Town of Marshfield residents who were employed in agriculture declined between 2000 and 2010. That earlier discussion also noted a significant drop in the proportion of the Town of Marshfield workers who were employed in wholesale trade and retail trade.

The types of occupations held by Town of Marshfield residents indicate that many have management positions (33.3%). More than one in five workers (21.2%) hold jobs in production, transportation and material moving. There are high percentages in sales & office and service industries. Management positions often indicate higher salaries which were shown in Chapter 1 to be prevalent in the Town of Marshfield.

### **C. Worker Age Structure**

In the Town of Marshfield, there were 492 people between the ages of 16 and 64 in 2010, which is generally considered the working age group. Eighty-five percent of those are between the ages of 25 and 64, a range that the U. S. Bureau of Labor Statistics (BLS) considers to be the “prime working age” population. This is a bit higher than the proportion for Wood County (83%) and Wisconsin (80%). On the national level, the growth of the civilian labor force is expected to slow down, while the older labor force is expected to grow five times faster than the overall labor force. The age 55 and older portion of the labor force is expected to grow by 46.7% between 2006 and 2016, according to the BLS. Similar conclusions have been projected for Wisconsin and it is not unreasonable to expect our area to be any different given the information that was presented in Chapter 1 regarding the local aging population. The two principal reasons for the change are: the baby-boom generation is aging and retiring, and the labor force participation rate of women appears to have peaked.

### **D. Labor Force Participation**

The previous section focused on the working age population. Even though a person may be in that age group, he or she may or may not actually be in the labor force. If a person who is 16 years old or older is not looking for a job, that person is not part of the labor force. Most of those who fit into this category are students, retirees and others who choose not to work. If a person who is 16 years old or older is employed or is unemployed but looking for a job, that person is participating in the labor force. In 2010, the Town of Marshfield labor force consisted of 396 persons, a 63.7% labor force participation rate. There are only two other Wood County towns had lower rates than the Town of Marshfield in 2010 (Dexter and Remington). In comparison, the participation rate for Wood County in the same year was 66.5% and for Wisconsin was 68.9%. Wisconsin ranks relatively high, nationally, for labor force participation. In 2012, Wisconsin ranked 13<sup>th</sup> of the 50 states, with a labor force participation rate of 68.5%.

The unemployment rate is the number of unemployed as a percent of the labor force. Unemployment rates for individual municipalities have not been available since

about 2000. At that time, the unemployment rate in the Town of Marshfield was 2.3%, slightly lower than the unemployment rate of Wood County (3.4%) or the State (3.2%). The unemployment rate for all jurisdictions has increased substantially since then. Although unemployment rates for municipalities are no longer available, one can surmise from looking at Wood County's 2011 annual unemployment rate of 7.7%, that the unemployment rate in the Town of Marshfield also exceeded seven percent for the year. By mid-2012, the County's unemployment rate had dropped to under seven percent.

### E. Commuting Patterns

More people commute into Wood County from neighboring counties than those who travel to other counties to work (Table 20). Wood County has a net gain of over 5,000 commuters on a daily basis. The greatest number of commuters comes from Marathon County. In Chapter 3, it was noted that about 16% of Town of Marshfield workers commute to other counties. Of those who reported that they work outside Wood County, many indicated that they work in the Stevens Point area and still more were scattered throughout central Wisconsin (i.e., Neillsville, Spencer, Stratford, etc.).

County	Commute		Net Commute
	Into Wood County from...	From Wood County to...	
Portage	2,639	2,572	67
Marathon	3,944	1,449	2,495
Clark	1,956	272	1,684
Adams	899	178	721
Juneau	186	83	103
Jackson	70	52	18
TOTAL	9,694	4,606	5,088

Source: Wisconsin WorkNet; website, July 2012: <http://worknet.wisconsin.gov/worknet/default.aspx>

### F. Economic Base

The Town of Marshfield is small in geographic size, with new development in recent decades resulting in a conversion of agricultural land to residential uses. The geographic size, coupled with a lack of public water supply and sanitary sewer system, prevents the town from attracting much industrial or commercial development. Many larger businesses use a lot of water and, as a result, need to dispose of a lot of wastewater. Because all of the Town of Marshfield is on private, on-site waste treatment systems, disposal of large quantities of water can be hard on systems and pose a potential of contaminating private drinking water supplies. Even with these barriers to economic development, the Town of Marshfield is home to two large employers. Prince Corporation is a wholesale distributor and manufacturer of agricultural, lawn and garden, pet and wild bird products. Prince distributes over 16,000 items to retail customers throughout the Midwest.<sup>16</sup> Windy Hill Foliage, Inc. is a growing trucking company that was incorporated in 1976. Windy Hill currently has a fleet of 125 conventional tractors and 250 trailers<sup>17</sup>. Smaller businesses and home occupations scattered throughout the Town also play an important role in the area's economy.

<sup>16</sup> <http://www.prince-corp.com/>

<sup>17</sup> <http://whtrucking.com/>

Although a majority of respondents to the community planning survey want to see more jobs created in the town, three-fourths of the respondents want neither a business park nor an industrial park. The City of Marshfield has expanded into the town with their newest industrial park venture and the East Side Industrial Park is located adjacent to the Town of Marshfield, making an easy commute for the town's labor force. The relocation of Highway 10 through the town will likely create some additional demand for small commercial establishments. Small businesses and home occupations will continue to be the main type commercial activity in the town.

Wage information on the various industry types in Wood County is listed in Table 21 for the years 2000 and 2011 (this information is not available for municipalities). There have been substantial increases in wages during that time period, with the exception of the "professional and business services" category. That industry segment actually reported a lower average annual wage in 2011 than what was reported in 2000. Those who work in the Education and Health Services industry earn the most on average and those who work in the Leisure and Hospitality industry are the lowest paid (possibly because many leisure and hospitality jobs are seasonal or part-time). The Marshfield area is strong in the education and health services job sector.

Industry	2000	2011	Average Annual Increase
Education & Health Services	\$38,974	\$56,894	46.0%
Manufacturing	\$41,704	\$53,461	28.2%
Professional & Business Services	\$41,179	\$37,375	-9.2%
Construction	\$36,781	\$46,474	26.4%
Information	Suppressed	\$46,421	N/A
Natural Resources & Mining	\$29,963	\$35,141	17.3%
Public Administration	\$27,812	\$34,443	23.8%
Financial Activities	\$24,237	\$34,110	40.7%
Trade, Transportation, Utilities	\$24,038	\$29,413	22.4%
Other Services (inc. repair & maintenance, personal & laundry, membership organizations, and private households)	14,310	\$20,377	42.4%
Leisure & Hospitality	\$8,717	\$10,997	26.2%

Source: Wisconsin Dept. of Workforce Development, "Quarterly Census of Employment and Wages (ES202)", July 2012.

## G. Employment Projections

The Wisconsin Department of Workforce Development makes 10-year projections of the high growth occupations in Wisconsin. Recognizing that these are statewide projections, it is worthwhile to consider their impact in central Wisconsin. Table 22 identifies the occupations that are expected to grow the fastest between 2008

and 2018. It should come as no surprise that, given the aging population, many of the occupations on the list are medical- and health-related. The list is of those occupations that are projected to have the highest percentage growth. It does not reflect what jobs are expected to have the most openings during the 10-year period. That list can be seen on the Wisconsin Department of Workforce Development web site at <http://worknet.wisconsin.gov/worknet/default.aspx>.

A follow-up table, (Table 23) lists those industries that the Wisconsin Department of Workforce Development foresees as the fastest growing between 2008 and 2018. This table, sorted by number of new jobs expected, again shows the strong presence of the medical industry. The jobs listed in the table will provide an opportunity to attract new development to our area. The presence of the Marshfield Clinic, Saint Joseph's Hospital, and the research labs associated with the Marshfield medical industry are examples that can be (and have been) used to market our area for medical industry expansion. The City of Marshfield's industrial and business parks' location in relation to the relocated Highway 10 are ideal for attracting some of these type businesses and industries.

## **H. Area Business & Industrial Parks**

The immediate area's business and industrial parks are all located in the City of Marshfield. The Yellowstone Industrial Park is the city's newest industrial area. This park lies immediately adjacent to the Town of Marshfield. Of the 104 acres in the Yellowstone Industrial Park, approximately 57 acres is currently being used. The remaining 47 acres is available for new industrial development.

The Norwood Industrial Park is a 60-acre, privately-owned facility with all city utilities available. This park is also immediately adjacent to the Town of Marshfield. WeEnergies occupies about 1.6 acres and a spec building/pond occupies another 5 acres, leaving about 54 acres available for new industrial development.

The Marshfield East Industrial Park was the City's first industrial park and is located on the city's southeast side, very near the Town of Marshfield. This 260-acre industrial park is fully occupied.

Located adjacent to the Marshfield Airport on the city's southwest side is the Marshfield Air Park. This is a 26-acre park that has about 7.7 acres available for new development or expansion.

Another newer facility is located very near to the Town of Marshfield. The Mill Creek Business Park caters to office and light manufacturing operations. The Mill Creek Business Park has a total of 154 developable acres, 133 of which is still available. There are currently five businesses located in this business park.

Plenty of opportunity exists for new business and industry to locate in the area. The Town of Marshfield can help provide jobs to town residents by supporting the promotion of the City's industrial and business parks.

Occupational Title	Estimated Employment			
	2008	2018	New Jobs	Pct. Chg.
Home health aides	20,730	28,670	7,940	38.3%
Network systems and data communications analysts	7,860	10,760	2,900	36.9%
Personal and home care aides	21,720	29,100	7,380	34.0%
Financial Examiners	440	580	140	31.8%
Ambulance Drivers, Attendants, Exc. Emergency Medical Tech.	530	700	170	32.1%
Athletic Trainers	440	560	120	27.3%
Physician Assistants	1,670	2,120	450	29.9%
Surgical Technologists	2,660	3,330	670	25.2%
Medical Equipment Repairers	1,220	1,520	300	24.6%
Physical Therapist Aides	1,080	1,350	270	25.0%
Mental Health Counselors	1,880	2,330	450	23.9%
Cardiovascular Technologists & Technicians	960	1,180	220	22.9%
Animal Trainers	590	730	140	23.7%
Gaming Dealers	920	1,140	220	23.9%
Medical Scientist, except Epidemiologists	2,890	3,540	650	22.5%
Compliance Officers, except Ag/Construction/Health/Safety/Transportation	3,780	4,630	850	22.5%
Medical assistants	9,860	11,960	2,100	21.3%
Funeral Directors	800	970	170	21.3%
Dental assistants	6,060	7,340	1,280	21.1%
Dental Hygienists	4,920	5,960	1,040	21.1%
Respiratory Therapists	2,240	2,710	470	21.0%
Personal Financial Advisors	4,290	5,130	840	19.6%
Registered nurses	54,420	64,990	10,570	19.4%
Employment, Recruitment & Placement Specialists	5,450	6,490	1,040	19.1%
Skin Care Specialists	550	650	100	18.2%
Fitness trainers and aerobics instructors	7,100	8,160	1,070	15.0%

Source: Wisconsin Department of Workforce Development.

Industry Title	Estimated Employment			
	2008	2018	Change	Pct. Chg.
Ambulatory health care services	105,930	128,600	22,670	21.4%
Hospitals, including state and local government(2)	119,350	134,430	15,080	12.6%
Social assistance	69,500	84,100	14,600	21.0%
Administrative and support services	129,980	143,600	13,630	10.5%
Food services and drinking places	191,410	203,830	12,420	6.5%
Nursing and residential care facilities	72,470	84,730	12,260	16.9%
Professional, scientific, and technical services	100,180	108,750	8,570	8.6%
Religious, grantmaking, civic, professional, and similar organizations	90,300	96,370	6,070	6.7%
Local, excluding education and hospitals(2)	130,860	135,310	4,450	3.4%
Management of companies and enterprises	44,460	48,800	4,340	9.8%
Educational services, including state and local government(2)	264,580	268,110	3,530	1.3%
Specialty trade contractors	74,490	77,570	3,080	4.1%
General merchandise stores	63,620	66,440	2,820	4.4%
Truck transportation	46,210	48,830	2,610	5.7%
Personal and laundry services	27,160	29,720	2,570	9.4%
Wholesale electronic markets and agents and brokers	7,990	10,170	2,190	27.4%
Heavy and civil engineering construction	15,340	17,170	1,830	11.9%
Insurance carriers and related activities	69,600	71,400	1,800	2.6%
Warehousing and storage	13,880	15,390	1,510	10.9%
Construction of buildings	28,160	29,660	1,500	5.3%
Accommodation	31,560	33,040	1,480	4.7%
Private households	7,830	9,190	1,360	17.3%
Amusement, gambling, and recreation industries	26,350	27,550	1,200	4.6%
Merchant wholesalers, nondurable goods	46,480	47,540	1,070	2.3%
Credit intermediation and related activities	54,140	55,050	910	1.7%
Internet service providers, web search portals, and data processing services	7,510	8,370	860	11.4%
Support activities for transportation	5,310	6,160	850	16.0%
Total federal government employment	15,500	16,000	500	3.2%
Real estate	18,540	19,030	490	2.7%
Food and beverage stores	56,510	56,960	450	0.8%

Source: Wisconsin Department of Workforce Development.

## I. Desired Businesses

In the community planning survey that was provided to all property owners in the Town of Marshfield, 56% of the respondents said they want to see more job opportunities in the town. Light industrial jobs were the most desired, followed by general industry, a convenience store, farm service businesses and restaurants. The light industrial, general industry and farm service jobs would fit well in the area industrial parks, while the convenience store and restaurants would do well in the town.

Only 12% of the survey respondents said they wanted to see an industrial park developed in the town and a mere 15% said they'd like to see a business park. Seventy-three percent want neither. This response makes sense because of the abundant industrial and business park land that is just inside the city with full city utilities and in very easy commuting distance from any part of the town.

## **J. Economic Development Organizational Framework**

Economic development activities in the Town of Marshfield area are carried on by a number of organizations. Some of those that are most active are listed in the following paragraphs.

MACCI – The Marshfield Area Chamber of Commerce and Industry receives financial support from annual membership dues from nearly 600 member businesses, local government funding, public and private grants, sponsorships, program revenues and more. MACCI serves as a first contact for business resource assistance and either sponsors or participates in several economic development workshops each year. The staff are members of regional and state economic development organizations and actively participate in activities of those organizations. The Marshfield Business Assistance Team (MBAT) is a group of professionals representing various organizations within the business community. Lead by Marshfield Area Chamber of Commerce and Industry (MACCI) and the city's Planning and Economic Development Department, MBAT has formed to assist potential and existing business owners' in operating successful business. Any business expansion that can be attracted by this team's efforts benefits Town of Marshfield workers as well as those in the city and surrounding towns.

Wood County – Under the oversight of the Conservation, Education and Economic Development Committee, Wood County participates in several economic development activities and is represented on various Boards of Directors of area economic development organizations. County staff also participates in activities sponsored by the Wisconsin Economic Development Association. In addition, Wood County is a partner with Adams, Portage, Marathon, and Lincoln counties in a revolving loan fund program.

NCWRPC – The North Central Wisconsin Regional Planning Commission, located in Wausau, provides technical assistance and compiles economic development data for its members. It also administers a regional revolving loan fund on behalf of the North Central Wisconsin Development Corporation. The ten counties the NCWRPC serves have also been formally designated as an Economic Development District by the State of Wisconsin and by the U.S. Department of Commerce's Economic Development Administration. Under this designation, the NCWRPC maintains a continuous process of planning assistance that supports the formulation and implementation of economic development programs designed to create or retain full-time permanent jobs and income. The NCWRPC provides services such as economic research, marketing, financial packaging, evaluation and analysis of public infrastructure needs that support

private economic development activity, and works with local units of government to maintain eligibility for certain grants.

Centergy – The Centergy Central Wisconsin Alliance for Economic Development was initially created in 1988 and has evolved into the strong economic development proponent it is today. This non-profit organization is lead by an executive director who has the responsibility of conducting economic development activities and looking after economic development interests in Wood, Portage and Marathon counties. The County of Wood is represented on the Board of Directors by county staff, HOWBEA staff and private business owners from the county. Centergy has conducted economic opportunity forums and studies for central Wisconsin, which have resulted in cooperative efforts in our region. Each spring, Centergy coordinates Central Wisconsin Days in Madison. This two-day event features one-on-one meetings with many Wisconsin legislators and state-level staff members to educate them on the opportunities and needs throughout central Wisconsin. Centergy Board members, private business representatives and local elected officials travel to Madison to represent our area.

## **K. Competitive Strengths and Weaknesses**

A community's approach to economic development is based on its competitive strengths, weaknesses, opportunities and threats (SWOT). Every community will have certain factors that can encourage business expansion or attraction (strengths and opportunities) and certain shortcomings that will detract from a community (weaknesses and threats). Sometimes what is considered by some as a strength will be considered by others as a weakness. That will be explained in the following paragraphs as we identify some of the SWOT factors that are present in the Town of Marshfield.

### Strengths.

- Close proximity to the City of Marshfield's industrial and business parks.
- Small town living within minutes of city services and facilities.
- Four-lane U.S. Highway 10 provides easy access to Midwest markets.
- Abundant, well-educated labor force.
- Near nationally-recognized health care facilities and research centers.
- Continuing expansion of Marshfield Clinic's outreach clinics throughout Wisconsin.
- Access to customized training at local technical college.
- Located close to both two-year and four-year university campuses.
- Community support for locally-owned businesses.
- High quality of life (abundant indoor and outdoor recreation opportunities, safe, friendly, excellent schools, strong arts and cultural programs, etc.).
- Strong economic development organizations.
- Strong agricultural base.
- High quality municipal services at a lower tax rate than nearby communities.
- Cooperation with other towns to share services (i.e., fire protection, garbage pickup, recycling, multi-use trails, Hewitt park).

### Weaknesses.

- Lack of public sewer and water systems.
- Business climate (plant downsizings and closings).
- Proximity to City of Marshfield and Village of Hewitt.
- Location in relation to nearest Interstate Highways.
- Lack of risk capital in the area.

### Opportunities.

- Health care (research, Angel investing).
- Growth of small/medium size businesses.
- New business start-ups.
- Development/expansion of the arts and cultural programs and activities.
- Expansion of tourism and utilization of area park facilities.
- Aging population (expanded market opportunities, health care, related services).
- Green community movement.

### Threats.

- Workforce (aging workers, worker shortage).
- Brain drain (many students leave the area for college education and there are no jobs for them to return to).
- Lack of Interstate highway access.
- Global industrialization and commerce.
- State tax burden on new business.
- Upper Midwest climate.

## **M. Economic Development Goals, Objectives & Policies**

It is the overall objective of the Town of Marshfield to encourage development of small businesses in the town and to support area job retention and expansion programs to provide our residents the best opportunity possible to earn a living wage and to stay in the community, or to allow college graduates the opportunity to return to their hometown and have high paying jobs in their fields. Following are policies, goals and programs relating to specific utilities and community facilities.

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### **GOAL: Develop small businesses along the Highway 10 corridor.**

#### Objectives:

- Maintain commercial zoning along the Highway 10 corridor and provide development standards that are economically feasible for small businesses and business start-ups.
- Make referrals to Wood County or the Central Wisconsin Economic Development Fund administrator to provide information on funding opportunities for new and expanding commercial and industrial businesses.

**GOAL: Retain existing businesses.**

Objectives:

- Encourage local small businesses and agricultural operations to remain in the Town of Marshfield by being open to discussion of their business needs.
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## 7. INTERGOVERNMENTAL COOPERATION

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### A. Purpose.

In recent years government at all levels has struggled to continue to provide expected levels of services. There are a variety of factors that have contributed to this including rising costs of labor and materials, resistance against new taxes, and increased responsibilities. As local government searches for ways to continue to provide quality services with limited resources, they are reviewing the efficiency of their service delivery, setting priorities of services, and determining which services can be provided through alternative arrangements. One alternative arrangement that government has gravitated towards in recent years is providing services by working together with other government agencies. This “intergovernmental cooperation” can be defined as two or more government agencies working together to provide services, reach common goals, or solve mutual problems.

In general terms, intergovernmental cooperation among communities can lead toward relationships that prosper based on common goals and interests, while putting aside political and boundary differences. By establishing a rapport with adjacent communities, improved communication can lead to a better working relationship that can benefit all of the communities involved. By working together, not only will they have the potential of providing services at the lowest cost, and most efficient manner, they will be better positioned to address issues of mutual interest.

The Wisconsin comprehensive planning law requires each comprehensive plan to include an analysis of “the relationship of the local governmental unit to school districts and adjacent local governmental units and to the region, the state and other governmental units” and to identify potential conflicts between the local governmental unit and other governmental units. One purpose of this chapter, then, is to inventory existing activities in which the Town of Marshfield currently participates with other local units of government, the Marshfield Public School district, Wood County, and State and Federal governments. The inventory will identify important existing cooperative activities and summarize major challenges and issues that have been identified regarding intergovernmental cooperation, including opportunities to reduce or eliminate duplication of services; incompatible goals, policies and development; mechanisms for conflict resolution; and opportunities for joint planning and decision making. This chapter will also describe major area planning issues that will or could impact Town of Marshfield residents and residents of neighboring communities.

### B. Existing Shared Services and Cooperative Efforts

Law Enforcement. The Town of Marshfield does not have their own police department, but relies on the Wood County Sheriff’s Department and Wisconsin State Patrol to patrol the town and investigate traffic crashes and crimes. The Town Board cooperates with those agencies and will continue to work with them to provide residents with a safe community in which to live.

E-911 Dispatch Services. The Wood County Communications Department receives emergency calls for the Town of Marshfield and dispatches officers for response. Calls for the Humane Officer are also dispatched through the 911 system.

Fire Services. The Hewitt Area Volunteer Fire Department (HAVFD) provides fire and first responder service to the Town of Marshfield. The village and town share in all aspects of the department including day-to-day operations, staffing, and budgeting. It is anticipated that this cooperative relationship will continue through the planning period.

Wood County Health Department. The health department is concerned about all aspects the health of county residents. The town's first responders are included in the first round of drug dispensing in the event of a public health emergency, such as an influenza pandemic. The health department also handles lead inspections for elevated blood lead levels in the town. Residents can participate in the county's clean sweep program which is held annually. Finally, the town can consult with the health department regarding animal bites and rabies control issues.

Wood County Planning & Zoning Support. County planning staff has worked with Town of Marshfield officials on holding tank and disposal of household waste issues, on zoning ordinance development and interpretation and on this comprehensive plan. County staff has also participated in the development of the first area sanitary sewer extension plan and is the review agency for sewer extensions that fall within the jurisdiction of that plan. Planners have also worked with the town and Village of Hewitt on their trail system and village park. The planners are available to assist the town with any boundary planning that the town may pursue with the City of Marshfield in the future. They also review land divisions and subdivision proposals in the town. Wood County's GIS Specialist develops and maintains maps that can be used for town planning and zoning, street maintenance, and emergency services uses.

Wood County Towns Association. The 22 towns in Wood County meet monthly to discuss common issues and provide ideas others can use to make town operations more efficient. State legislators are usually at the Towns Association meeting to provide information and alerts on activities in Madison and interact with town officials on issues and legislation of concern. Each meeting features a speaker, often from county or state agencies, to provide information on programs or to offer assistance in meeting legislative requirements. This has been a very active, quite successful organization, very valuable to Wood County's towns.

Marshfield Public School District. All of the Town of Marshfield is encompassed in the Marshfield Public School District. Cooperation with the district includes open communications regarding snow plowing on town roads, accepting their comments on subdivision layouts (particularly the street layout for bussing), and other concerns or issues they may have. The Town Board remains open to any discussions or correspondence that the district may want to approach the town about.

Neighboring Municipalities. The Town of Marshfield Board has been an active participant on area-wide programs and projects that may affect town residents and businesses. The reconstruction of Highway 10 has had a negative impact on the town with the loss of several homes. The Town Board has attended WisDOT sessions regarding this project and has testified on issues regarding town properties and residents. Another example is the town's participation in developing the Marshfield Sanitary Sewer Area (SSA) Plan and the recent update to that plan. Although there is not a lot of the town's land that will be affected, town representatives on the planning committee attended the meetings to oversee any impact the plan may have on Town of Marshfield properties.

Another example is the meeting between the City and Town of Marshfield regarding the possibility of drafting a boundary agreement. Boundary agreements are used to lay out future expansion of the city that would result in annexation of town lands. Boundaries may be the most challenging of all intergovernmental issues and resolving any conflicts with boundaries can have dramatic improvements for the community. It was determined that a boundary agreement is not in the best interest of the town at this time.

The coalition of northwest Wood County towns for recycling and solid waste disposal is a cooperative venture of several communities. The coalition has been in place for several years and has shown that several communities can work together effectively.

State and Federal Agencies. There are, of course, many programs that are mandated by various State and Federal agencies. The town cooperates by submitting the appropriate records and reports as prescribed by the specific programs and laws.

### **C. Existing Intergovernmental Regulations and Tools**

Wisconsin Uniform Dwelling Code Chapters Comm 20 to 25 of the Wisconsin Administrative Code establish statewide construction standards and inspection procedures for one- and two-family dwellings and manufactured dwellings in Wisconsin. The Town of Marshfield Building Inspector is licensed to conduct all phases of these inspections. That person is under contract to the town.

Wisconsin Commercial Building Code. Uniform standards for design, installation, maintenance and inspection of commercial buildings and structures are contained in Comm 60 – 66 of the Administrative Code. This code addresses erosion control during construction; energy conservation; heating, ventilating and air conditioning (HVAC); and fuel gas appliances as well as administration and enforcement of the code.

Wisconsin Electrical Code and National Electric Code. Chapter Comm 16 of the Wisconsin Administrative Code provides a “practical safeguard” of persons and property throughout the state from hazards arising from the installation and use of electricity. Among other things, Comm 16 covers installation of electric and communication

conductors and equipment in places of employment, within or on public and private buildings or other structures, including mobile homes and certain other structures and premises. The National Electric Code, NEC-2005, is incorporated into Comm 16 by reference and, thus, are required to be followed for electrical installations.

Wisconsin Plumbing Code. Wisconsin Statutes and the companion Administrative Code regulate the method of installation and maintenance of private septic systems. The Code is implemented through the Wood County Planning & Zoning Office. That office works with homeowners, plumbers and system pumpers on the design, installation and maintenance of septic systems. When necessary, activities are coordinated with the town to ensure that a sanitary permit is issued prior to issuance of the town building permit. The two agencies also work together to follow-up on complaints about failing septic systems.

Floodplain & Shoreland Zoning. Although there are not many floodplain and shoreland zoning issues in the Town of Marshfield, there are occasions where development may be proposed near local streams. Floodplain regulations are driven by the Federal Emergency Management Agency (FEMA) and channeled to the state and down to the county. Wood County participates in the flood insurance program and has staff that can answer questions from town residents. Shoreland issues arise when development is proposed within 300 feet of a stream or 1,000 feet from a lake, pond or flowage.

Town of Marshfield Comprehensive Plan. This plan is the first comprehensive plan written specifically for the Town of Marshfield. The town has been included in other comprehensive plans. Two such plans have been completed by the Wood County Planning & Zoning Office and portions of the town have been included in comprehensive plans for the City of Marshfield. This comprehensive plan will give the Planning Commission direction in various areas of development and should help with some zoning decisions. The plan will be updated at least once every ten years, but more often depending on market conditions and development proposals in the city or town.

Town of Marshfield Zoning Ordinance. The Town of Marshfield first adopted a zoning ordinance in the mid-1960s, a document that has undergone a comprehensive revision and has been amended several times to accommodate changes in the town. The Zoning Committee (now known as the Planning Commission) has met on a regular basis to review planning and zoning issues. That practice is expected to continue. Their meetings are open to the public and attendees are invited to speak to agenda items.

Land Subdivision Review. Wood County has a land subdivision ordinance that requires review of, among other things, newly created parcels that are 10 acres or smaller in size. The town has a 30-day review period in which to provide their acceptance or objection to the land division to the county Planning & Zoning Office. Wood County will not approve a land division if the town has an objection based on zoning, access or other reasonable issues. The county will sometimes grant an extended review period to give the town more time to work with the subdivider on other local issues.

Extraterritorial Plat Review. The City of Marshfield exercises extraterritorial plat review as allowed by Wisconsin Statute. The city has statutory authority to review, comment on, approve or reject land division proposals within three miles of the city limits. The city reviews proposed divisions of land that conflict with their respective zoning standards, comprehensive plans and official street map. In a few cases, the city and county have negotiated and compromised on such things as street alignments and lot sizes.

Water Quality Management Review. The Towns of Marshfield, Cameron, Lincoln, Spencer and McMillan, the Village of Hewitt, and the City of Marshfield cooperated on the development of an area wide sanitary sewer extension plan. Such plans are required for cities with a population of 10,000 or more under the Federal Clean Water Act. An update to the 20-year plan is being completed by the North Central Wisconsin Regional Planning Commission concurrently with the Town of Marshfield comprehensive planning process. The sewer service area plan is used as a guide for future cost-effective sanitary sewer extensions. As a neutral third party, the Wood County Planning & Zoning Office reviews each sewer extension proposal. Their review is submitted to the Department of Natural Resources as part of the construction plan package.

Annexation. Wisconsin law generally places annexation power in the hands of individual property owners, making it difficult for local municipalities to control where or when annexation will occur. A landowner may petition a city or village to annex a parcel of land. Cities and villages may only react to annexation petitions, they cannot initiate them (except in the case where the territory petitioned for annexation is owned by the city or village). Chapter 66.021 of the Wisconsin Statutes outlines three procedures for petitioning for annexation. The most common involves a petition signed by owners of property that is proposed to be annexed to a city or village. A petition can also be circulated to initiate annexation. This requires signatures of a majority of electors in the territory and owners of one-half of the property either in value or land area. A petition for annexation can also be requested through a referendum election, but this requires signatures of at least 20% of the electors in the territory and is not a process that is used very often. Once a petition is received by the incorporated municipality, the local council or village board acts on the proposal.

Recent annexations of Town of Marshfield lands include several acres for the city's Yellowstone Industrial Park and lands near and around the U.W. Experimental Station. The city's general policy is that they will not extend sewer and water services to areas that do not annex first. That policy is supported by the Wisconsin Supreme Court in *T. of Halley v. City of Eau Claire*.

Detachment. Detachment is a process where territory is detached from one municipality and transferred to another. Detachment can be between cities and villages, and also between cities/villages and towns. Detachment between a city/village and a town is like the opposite of annexation and, most often, tends to involve land that

is rural in nature and more appropriate for town-level government, although they have been used to resolve boundary disputes. Detachments are rare – there have been only about 40 in the state since 2002 – but it is a tool that is available for certain circumstances.

#### **D. Existing and Potential Conflicts**

Annexation. Loss of property and tax base by annexation has created conflicts for towns for many years. Everything from single residential or commercial lots to major subdivisions, commercial or industrial areas have eaten away at the town borders. It was mentioned above that the City of Marshfield annexed town land for the Yellowstone Industrial Park. Local concern is that the town needs the tax base to provide all of the municipal services they provide, and loss of land, especially large expanses of land, reduces the fiscal abilities of the town to expand or even maintain those services. Some community planning survey respondents indicated a desire to avoid future annexations because, as one respondent said, “expanding too much is going to hurt agriculture and wildlife.”

Extraterritorial Plat Review. The City of Marshfield exercises extraterritorial plat review of new land divisions that fall under the requirements of the Wood County Land Subdivision Ordinance (currently 10 acres or less). The city’s review is normally conducted to assure street alignments or utility easements. The extraterritorial plat review for the city is three miles from its borders. The city does not exercise extraterritorial zoning, as allowed by Wisconsin Statutes, so they have no authority to approve or deny Town of Marshfield zoning map amendments.

Coordination of Services. Galvin Avenue is the only boundary street between the Town of Marshfield and the city. East McMillan Street is the boundary between the Town of Marshfield and the Town of McMillan to the north. Day Road is a boundary street between the town and the Town of Auburndale and Klondike Drive is the boundary between the town and the Town of Richfield. Statutes and agreements are in place regarding maintenance of those streets. More coordination of other municipal services could probably save the towns money. Although the Town of Marshfield coordinates with their neighbors a great deal now, a lack of coordination can be considered to be a potential conflict.

#### **E. Intergovernmental Cooperation Goals & Objectives**

##### **GOAL: Continue cooperative participation for emergency services.**

###### Objectives:

- Maintain open communications with the Wood County Sheriff’s Department and participate in exercises sponsored by that department.
- Use the Mutual Aid Box Alarm System (MABAS) to assist neighboring communities while maintaining protection within the Town.

- Cooperate with the E-911 dispatch center to assure rapid response to emergencies.

**GOAL: Continue cooperative partnerships with neighboring communities to provide cost-effective services.**

Objectives:

- Maximize effectiveness by working together with county and state staff for the conduct of inspections, reductions of health and safety violations, and monitoring new developments in the many different areas where staff can effectively work together.
- Remain active in the Wood County Towns Association, the sewer service area planning group and with neighboring municipalities to gain new knowledge and ideas of how to provide services in the most efficient and cost-effective manner.

**GOAL: Become an effective voice for State initiatives that can affect the Town operations or residents.**

Objectives:

- Consider participating in Central Wisconsin Days in Madison. This Centergy-sponsored event is aimed at making state legislators aware of central Wisconsin's needs. The annual two-day event brings a program of four or five issues to Madison, where participants meet with the Governor, his cabinet secretaries, and state senators and assemblymen.
- Through the Wood County and Wisconsin Towns Associations, be proactive in proposing or supporting changes in state statutes or codes that will have a positive impact on the Town of Marshfield.



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## **8. LAND USE**

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A study of past and current land use patterns is a good way to understand why a community has developed as it has. Land use changes have, more often than not, been driven by socio-economic conditions, but can be effectively guided by political decisions that are the result of desires of community residents. Regardless of why land uses changed, reflecting on historic land use changes will assist the community in determining how they want their area to develop in the future.

Physical land use in the Town of Marshfield has been inventoried by the Wood County Planning & Zoning Office several times in the past. The inventories can be used to aid land use analysis and planning for such things as community development projects and natural resource protection efforts. The land use inventory is important for good community management and should be updated regularly to remain current. The land use inventory is not a plan; it is part of the vital data from which plans are made.

### **A. Trends in Supply & Demand**

#### **(1) Historical Land Use Pattern**

Like many unincorporated towns that are adjacent to cities the size of the City of Marshfield, the Town of Marshfield has transitioned from a predominantly agricultural town toward more of a suburban, commuter community. In 2010, 84% of the Town of Marshfield labor force worked in Wood County. According to the community planning survey, some commute to the City of Marshfield, while others commute to the Wisconsin Rapids or Stevens Point areas. With the relocation of Highway 10, completed in 2012, commuting to and from the Town of Marshfield will be easier and faster, possibly creating more demand for residential lots as the economy recovers. Because many large businesses and industries require municipal sanitary sewer and water, however, the town is not likely to attract major employers (more is said about that in the chapter that addresses the local economy). It is possible, however, that small businesses could thrive in the town and, as such, may be a good target for future development.

#### **(2) Current Land Use & Future Expectations**

The inventory used for this analysis was developed using the Land Based Classification Standards (LBCS). These standards, developed by the American Planning Association, provide a consistent method for classifying land uses based on their characteristics – basically comparing apples-to-apples. LCBS refines traditional categories (i.e., residential, commercial, industrial, etc.) into multiple dimensions, such as activities, functions, building types, site development, character and ownership. Each dimension has its own set of categories and subcategories for classifying land uses, providing users precise control of land-use classifications. Classifications are based on field surveys, aerial photographs, topographic maps, local knowledge and other data.

For the purpose of this comprehensive plan, current land use analysis will focus on the activity that is on the property. Activity refers to what is actually taking place on the land, such as farming, housing, natural resources, manufacturing, etc. This is the most commonly referred to method of defining land uses and is the most easily understood.

The map in Figure 23 shows the “observable activity” on each parcel in the Town of Marshfield at the time of the most current land use inventory (2004). Table 24 summarizes what is shown on the map. It is important to remember that the **“observable activity” is different from “zoning designation”**. Although an entire parcel may be zoned for a specific use, the “observable activity” (eg., residential home on a 5-acre tract) may be on only a portion of the parcel (i.e.  $\frac{3}{4}$  of an acre with the house and mowed lawn). A description of each observable activity follows.

### *Residential*

LBCS* Code	LAND USE BY ACTIVITY ON PARCEL	ACRES	PCT. OF TOTAL
1000	Residential activities	312.4	2.67
2000	Shopping, business or trade activities	9.1	0.08%
3000	Industrial, manufacturing and waste-related activities	11.7	0.1%
4000	Social, institutional or infrastructure-related activities	10.9	0.09%
5000	Travel or movement activities	900.2	7.7%
6000	Mass assembly of people	0.0	0.0%
7000	Leisure activities	13.0	0.11%
8000	Natural resources-related activities	10,431.0	89.24%
9000	No human activity or unclassifiable activity	0.0	0.0%
TOTAL		11,688.3	100.0

\* Land-Based Classification Standards  
Source: Wood County Planning & Zoning Office, 2004

Residential activities fall in the 1000 LBCS code. In the Town of Marshfield, 312 acres, 2.7% of the total land area, is classified as residential. Residential development in the Town of Marshfield consists mostly of traditional single-family detached structures (98%), with a few (6 or 2%) having more than two housing units in the structure.<sup>18</sup> There weren't any 2-unit structures (duplexes) reported in 2010. Because structures in the town are served by private, on-site waste treatment systems (septic systems) and private wells versus municipal sewer and water, it is likely that most residential structures in the town will continue to be single-family homes.

According to census figures, in 2000, there were 293 single-family structures in the Town of Marshfield. In 2010, there were 303, according to the U.S. Census American Community Survey 2006-2010 5-year estimates. Town records indicate that 34 building permits were issued between 2001 and 2010 and 17 homes were lost due to the relocation of Highway 10. Using town records as a basis of estimating the number of homes would result in 310 homes in 2010. There are usually only a few permits issued each year, although as many as

<sup>18</sup> “Selected Housing Characteristics” (Table DP04), 2006-2010 American Community Survey 5-year estimates.

Year	Number of Permits
2001	2
2002	2
2003	3
2004	7
2005	3
2006	0
2007	3
2008	5
2009	7
2010	2
Total	34

Source: Town of Marshfield Clerk.

seven have been issued a couple of times. A good sign is that there is an upward trend in the number of permits in more recent years (Table 25).

### *Commercial*

The 2000-code includes shopping, business or trade activities. In the Town of Marshfield, there are about nine acres that are categorized as having some type of commercial activity listed as the primary use. Most commercial uses are located along Highway 10 and County Road A. The town should consider establishing policies, such as performance standards, for future commercial uses. They may also want to consider designating an area or areas for future commercial development. Respondents to the community planning survey recommended that new commercial development should be in the Highway 10 corridor or in areas adjacent to the Yellowstone Industrial Park.

“Traditional” zoning separates land uses for reasons related to the community’s health, safety and general welfare. For example, a shopping center should not be located next to a school because of the traffic danger to children. “Performance” zoning can be used to regulate the impacts of land uses rather than the uses themselves. For example, under traditional zoning (like that in the Town of Marshfield), in a typical R-1 single-family residential zone, convenience stores are often not allowed or may only be permitted as a conditional use. With performance zoning, a convenience store would be allowed as long as the business met certain pre-established performance standards relating to noise, air and water pollution, size of building, and parking. This concept of mixed commercial and residential activities allows people to live and work at the same location (similar to a home occupation). Town officials may wish to consider all the advantages and disadvantages of this concept before adopting ordinance provision allowing mixed uses.

### *Industrial*

Industrial, manufacturing and waste-related activities are identified in the 3000-level code of the land base classification standards. In the Town of Marshfield, nearly 12 acres is classified in the 3000-level code. Prince Corporation and Windy Hill Foilage Trucking Company account for most of this acreage.

There are no industrial or business parks in the Town of Marshfield, but the City’s Yellowstone Industrial Park, East Side Commerce Park and Mill Creek Business Park are all located immediately adjacent to or very near the town. In the community planning survey, 56% of the respondents support more job opportunities – light or general industrial jobs for the most part - in the town, or for town residents. Only 15%

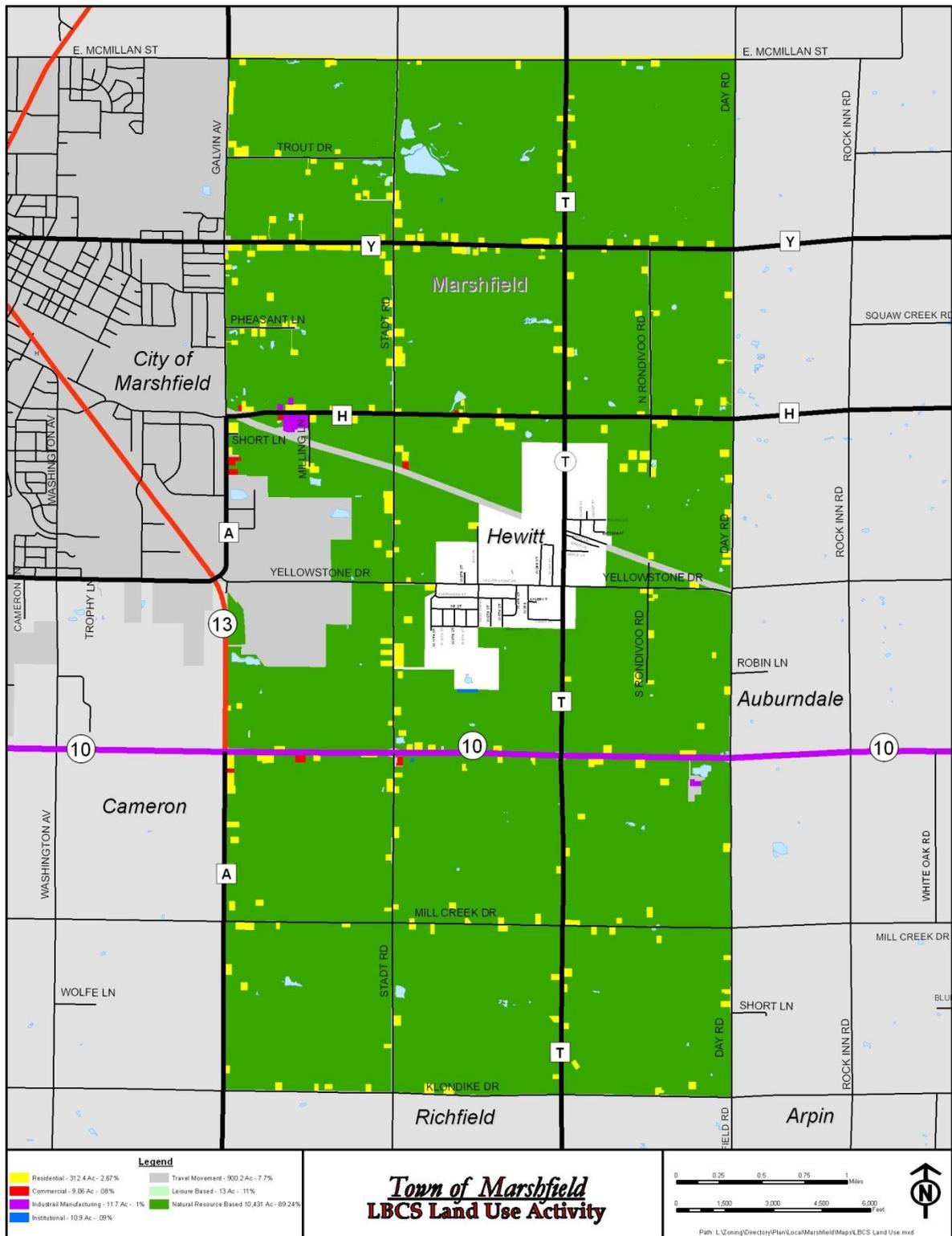


Figure 23 . Current Land Use - 2004

would like to see a business park developed in the town, 12% favor having an industrial park in the town, and 73% said they wanted neither. While the Highway 10 corridor and areas adjacent to the Yellowstone Industrial Park were the preferred areas for new industrial development, some survey respondents suggested that the town work with the City of Marshfield to attract industrial jobs to the business and industrial parks.

#### *Social, institutional or infrastructure-related*

The 4000-code includes, among other things, schools and libraries, public safety-related activities, activities associated with utilities and health care or medical facilities. The Town of Marshfield has 10.9 acres coded in this area.

#### *Transportation or movement-related*

The 5000-code, travel or movement activities, includes all types of transportation systems, whether for pedestrians, vehicles (including parking), railroads, aircraft and more. The transportation code includes trucking companies, town garage facilities and some roads. In the Town of Marshfield, about 900 acres has been classified under this code. While no significant increase in roads is anticipated, the town may experience small additions where new residential lots are created either by certified survey map or subdivision plat.

#### *Mass assembly of people*

No land in the Town of Marshfield is categorized under the 6000-level land use.

#### *Leisure activities*

Leisure activities consume about 13 acres of the land in the town. As the Town of Marshfield continues to grow, there may be pressure to create small community parks or neighborhood playgrounds, but, because the City facilities are easily accessible to town residents, it is unlikely that such demands will occur during this planning period. Recognizing the limitations of such facilities in rural areas, future subdivision plats should be reviewed with pedestrian-friendly facilities in mind. Providing multi-use trails as an alternate mode of transportation can be an inducement to those considering the town as their new home. Multi-use trails are an asset provided they fit into the trail system that has been developed by the town, the Village of Hewitt and the City of Marshfield.

#### *Agricultural and natural resources-related*

Agricultural and natural resources-related activities (8000-code) in the Town of Marshfield include 10,431 acres. Under the LBCS, natural resources-related activities include farming activities, mining and quarrying, logging and other natural resource areas. The town has an agricultural base that has been eroded somewhat by non-farm

suburban residential development. Because of the importance of agriculture in the area, steps should be taken to protect that activity from unnecessary encroachment of other uses.

## **B. Potential Conflicts**

Unincorporated towns that are adjacent to growing cities and villages will inevitably have some conflicts caused by growth of the neighboring community. The so-called conflicts are often nothing more than growing pains that can be resolved fairly easily if the two communities sit down and plan the growth cooperatively. While it is necessary for cities and villages to grow in population to support their infrastructure, it is equally important that towns not lose too much population or business and industrial development too fast because they too have municipal services they are obligated to provide. When annexation takes population or business and industrial development away from towns, they also struggle to maintain their services and infrastructure. Some of the potential conflicts in the Town of Marshfield are listed below, along with a discussion of each and ideas as to how they might be addressed. The town has communicated with the City of Marshfield regarding development of boundary areas because of the potential impacts on the town's health, safety and general welfare. Future meetings should be considered to discuss the benefits of development actions on the area and the impacts on the town tax base and services.

### **(1) Suburban Development**

The Town of Marshfield will continue to be impacted by activities in the City of Marshfield for a number of reasons. First, the City is where most jobs are being created, at least by larger employers or by those who require municipal sanitary sewer and water. The City continues the process of developing business and industrial parks adjacent to or near the town. Annexation of land from the town has occurred to accommodate new business and industrial growth, depleting land that the town needs to maintain their tax base.

Although the town has lost land for the Yellowstone Industrial Park, when new jobs are created, another impact that the Town of Marshfield may see is a demand for additional residential lots and associated support services. The potential for new retail growth and new residential growth is one reason to work with the city to attract the larger employers into the business and industrial parks.

The Town of Marshfield participates with the city and other towns to plan for future sewer extensions for a 20-year period. More is explained in the Utilities & Community Facilities chapter about the Sewer Service Area Plan and those parts of the town that are in the future service area. Most of the Town of Marshfield is in the "planning area" of the sewer service area plan, but relatively little of the town is within the actual 20-year service area. Although that is the case, the areas of the town that are in the 20-year service area are subject to annexation within the planning period if

the City is petitioned by the property owners to annex. Again, this is reason to work cooperatively with both municipalities toward win-win development policies.

### **(2) Highway 10 Development Pressures**

U.S. Highway 10 has been upgraded to a high-speed, four-lane highway from Marshfield to the Fox Valley. The relocation/reconstruction project is beneficial to the Marshfield area's economy, but has had and will have both detrimental and beneficial impacts on the town. As mentioned earlier in this plan, the Town of Marshfield lost 17 homes that were acquired by the Wisconsin DOT to make way for Highway 10. It will take some time for the town to recover from that loss. Conversely, the new highway may result in more demand for commercial and residential development along the Highway 10 corridor in the town. That pressure may benefit the town's tax base. Or, there may be more pressure for the town's land to be annexed to the city to gain access to municipal services. Good coordination and communication between the town and the city will help relieve misconceptions, rumors and will help the area as new growth develops.

### **(3) Cost of Providing Services**

General revenue sharing has been the topic of discussions and proposals at the state level for several years. Cuts in revenue sharing in recent years, coupled with tax freezes, have had a drastic affect on every level of government in Wisconsin. At the town level, services that have felt the impact include fire protection, ambulance service, road maintenance, snow plowing, garbage collection and more. Many communities have entered agreements, or are contemplating agreements with their neighbors to provide or share certain services to help with the financial situation and to continue to provide essential services. Under current fiscal policies, the town needs to continue to be innovative in this regard. Their small geographic size limits the amount of new development that can occur, which further handicaps the town's fiscal resources. Matching sources of funds to demand for uses of funds is difficult for communities the geographic size of the Town of Marshfield.

### **(4) Management of Private Septic Systems**

All structures in the Town of Marshfield are served by private onsite septic systems. It is necessary that lots be sized adequately to accommodate the original septic system and alternate system should the original fail while, at the same time, providing a legal and safe distance from any private wells that are used for drinking water. State law requires that all septic systems, no matter when they were installed, be inspected every three years and, if necessary, be pumped by a licensed pumper, with waste being disposed of in a legal manner. Additional demand for more housing in the town can create a conflict in preserving both the natural water resources and providing for the housing needs of those wishing to locate in the town. The Town of Marshfield is the only town in Wood County to have a setback from mapped wetlands. The goals of that regulation are to protect both the natural resource and any structures

that are constructed nearby. Continued good planning policies and zoning regulations can help achieve these goals.

### **(5) Protecting the rural character of the Town of Marshfield**

Eighty-six percent of the community planning survey respondents said that maintaining the town's current rural landscape is important and nearly that number said the town should preserve its prime agricultural areas. Although 67% of the respondents said there is no problem with the placement of housing in the town, there was not a lot of support for encouraging more or more rapid growth of residential lots. The challenge for the Plan Commission and Town Board is to create development policies that let the town grow while protecting the natural resources and preserving the character that attracted the people here in the first place. This can be accomplished through effective zoning and creative site development standards.

### **C. Land Use Goals & Objectives**

It is the desire of Town of Marshfield residents to retain the current rural character of the town, yet allow some new growth. While retaining the current character is important, it is acknowledged that the City of Marshfield will continue to expand into the town because of the improvements to Highway 10, the location of the Yellowstone Industrial Park, and the availability of land in the town. The overall land use objective in the Town of Marshfield is to plan for the new growth that is expected while protecting the town's natural resources and current rural character.

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**Goal: Work with the City of Marshfield on boundary issues and cooperative growth management.**

Objectives:

- Initiate or attend joint planning meetings and provide input to make sound planning decisions that will accommodate new urban growth on the City's perimeter while keeping urban sprawl tendencies in check.
- Participate in planning the area's sewer service boundaries and provide input when boundary changes are proposed in the town.
- Encourage open dialogue with adjacent towns to discuss common issues and to develop a working relationship to address common issues.
- To promote job growth, encourage development of small businesses that are compatible with neighboring properties, but encourage larger commercial and industrial developments to locate in nearby business and industrial parks where public services, such as sanitary sewer, water and police and fire protection can be provided most efficiently and cost effectively.

Policies:

- The Town of Marshfield will support coordinated planned growth in boundary areas, while protecting the town's land area, tax base and property rights.

- The Town of Marshfield will participate at area committee meetings that focus on the area's economic development or where planning decisions are made that impact the town or its residents.
  - When appropriate and in the best interest of town residents, provide letters of support and participate with the City of Marshfield in marketing of their industrial and business parks to larger commercial enterprises and industrial manufacturers that require municipal services.
- 

**Goal: Preserve the town's current rural character.**

Objectives:

- Consider the impact of zoning standards that that are designed to encourage commercial and industrial activities in the town.
- Encourage residential development in areas that will not have a negative environmental impact on the area's groundwater, surface water and wildlife.

Policies:

- The Town of Marshfield will attempt to manage residential development through its future land use plan and zoning ordinance to preserve the rural character of the town.
  - Consider adding zones of different development densities to protect the area's resources while encouraging housing types for different economic levels.
- 

## **D. Future Land Use Plan**

The previous portions of this chapter have presented a discussion on historical trends, existing land use patterns and goals that have been established, based on environmental information, town growth expectations and the desires of town residents as voiced in the community planning survey that preceded the development of the comprehensive plan. The Future Land Use Plan map (Figure 8-2) takes into consideration all of these factors and illustrates graphically how the Town of Marshfield is planned to grow for the next 20-years. It is important to note that the future land use plan map is not a zoning map, but is a depiction of the desired growth patterns for several years into the future. The town ordinance and zoning map are the actual documents that set standards for each of the land uses, including setbacks, height limitations, minimum lot sizes, etc. It is also important to note that the future land use plan is dynamic and can be amended as market trends or the local economy change. The Wisconsin Comprehensive Planning Law, Ch. 66.1001, requires that the comprehensive plan be updated no less than once every ten years, and the zoning ordinance must be consistent with the comprehensive plan. The future land use plan map often shows some areas to be used for purposes other than what the current use may be. That map is a blueprint for development and can be changed. It is dynamic. The following paragraphs, along with information presented

throughout this plan, help explain the reasoning behind the future land use plan categories.

### **(1) Environmental Corridors**

The Town of Marshfield has some natural resources that create difficulties for some types of development and, certainly, create areas that should not experience non-farm residential development that is common in the town. Those have been discussed in earlier sections of this plan. The future land use plan map shows the floodplains and the identified wetlands. Areas that present difficulties for dwellings with basements were also presented earlier in this plan, but this is not to say these areas can not be developed. To develop some areas may require compliance with certain federal, state, county or local restrictions.

### **(2) Residential (Additional Need to 2030 = 60 Acres)**

Because residential land uses in the Town of Marshfield rely on private septic systems and water supplies, it is not likely that large housing complexes will be constructed in the town. Low-density residential development will continue in the town, the density determined by the town's zoning ordinance. In Chapter 1, it was projected that the town will need an additional 40 households by 2030. Assuming that land parcels for each new housing unit will require minimum lot sizes of 1½ acres (the current minimum lot size in the Town of Marshfield), an additional 60 acres of land will be converted from some other land use – probably agriculture – between now and the 2030. Additional acres will likely be taken for local subdivision streets in the case of platted subdivisions.

### **(3) Commercial (Additional Need to 2030 = 20 Acres)**

The existing Highway 10 corridor has many commercial uses today and will likely continue to develop in that manner (the new highway corridor is protected with controlled access to the highway). Home-based businesses may also develop and will be monitored for their impact on traffic and noise. More home-based Internet businesses are likely to evolve as well as computer technology jobs, but, because they are operated out of homes, they can not be illustrated on the future land use map. Based on the current ratio of commercial properties to population, all that will be needed by the year 2030 is one additional acre of land, but it is more probable that more land will be used for commercial purposes as the city expands and with demands along Highway 10. For purposes of this plan, it is projected that the town should plan on an additional 20 acres to be developed into commercial uses.

### **(4) Manufacturing, Business & Technology (Additional Need to 2030 = 20 Acres)**

Discussion about manufacturing has centered around the fact that most manufacturers require municipal sanitary sewer, storm sewer and water. The City of Marshfield has plenty of capacity to provide those services to any manufacturers that want to expand or locate in the area. The town does not have the resources or the desire to

develop an industrial or business park to compete with the adjacent city facilities. There is little manufacturing in the town at this time. Like commercial uses, based on the current ratio of manufacturing properties to population, only one additional acre of land will be needed for manufacturing uses by the year 2030. Again, however, the town should plan on new industrial uses consuming as much as 20 acres during the planning period. Even a small manufacturing operation may need areas for employee parking, manufacturing facilities, truck storage, etc.

### **(5) Transportation**

Transportation is an important issue for any community. Town residents who responded to the community planning survey focused more on maintenance of town roads than on issues centered around the relocation of Highway 10. It is hard to calculate the future transportation needs as far as road are concerned. New residential subdivisions will need new roads, but those roads will be developed by the subdivision developer prior to being accepted by the town. Because most local roads are in place at this time, a projection for future roads is not being made for the purposes of this plan.

The Marshfield Airport will remain an important asset to the area, but the expansion of the facility is limited. It is not anticipated that the airport will be relocated at any future time. The Town of Marshfield does not have jurisdiction over that transportation facility.

The Wisconsin Central Railroad bisects the town as it travels through Sections 13, 14 and 15. The railroad corridor will remain important for attracting manufacturing companies to the area's industrial parks.

### **(6) Recreation & Open Spaces**

There are no parks in the Town of Marshfield. It is not anticipated that any parks will be developed in the town during the planning period.

### **(7) Agricultural**

Agriculture will continue to play an important role in the Town of Marshfield during the planning period. Crop production and dairying are the main agricultural practices. Both may be subject to conversion demands for new housing in the future.

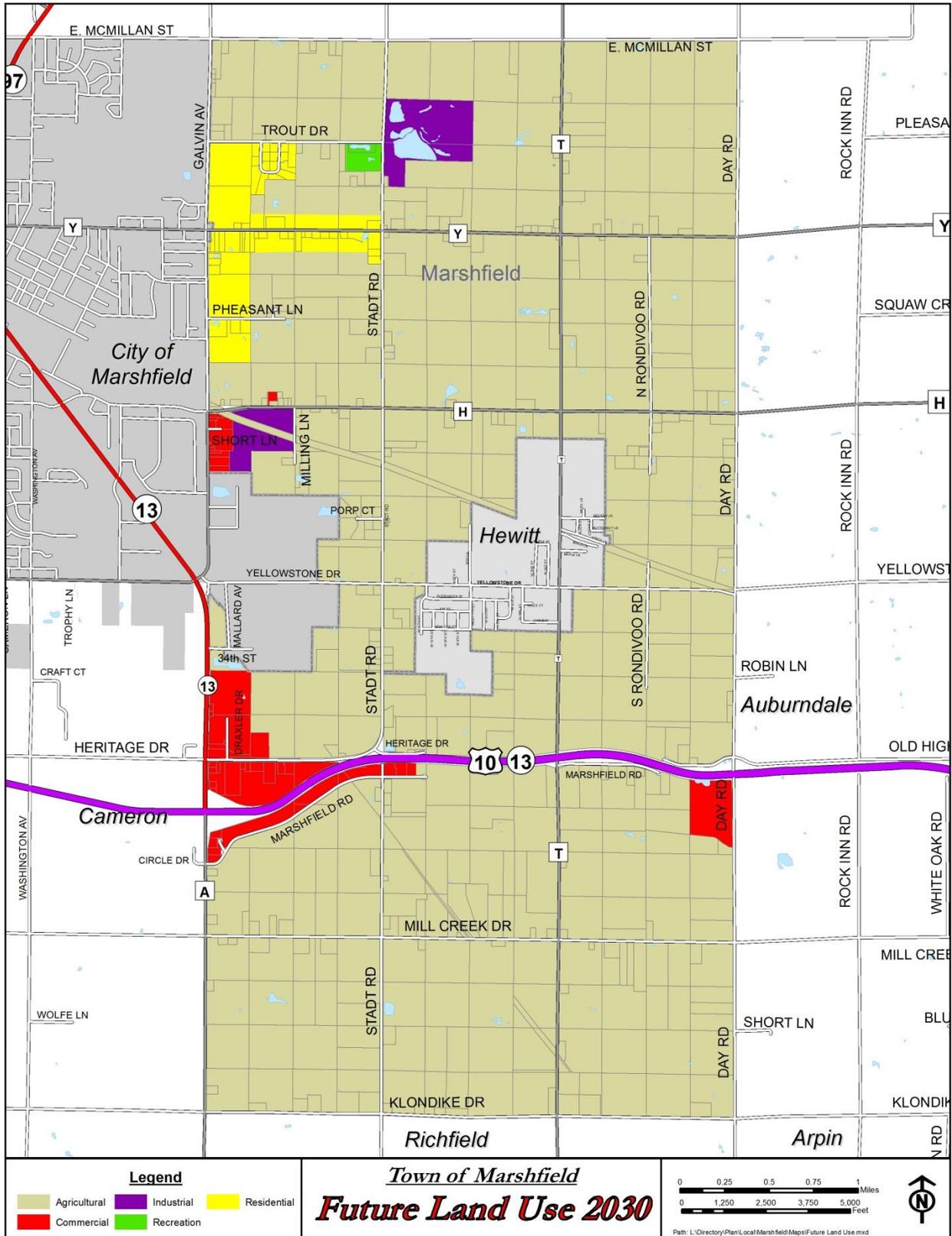


Figure 24. Future Land Use Map - 2030

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## 9. IMPLEMENTATION

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### A. Introduction

The Wisconsin planning law describes the implementation element as a compilation of programs and specific action to be completed in a stated sequence, including proposed changes to any applicable zoning ordinances, official maps, or subdivision ordinances, to implement the objectives, policies, plans and programs in the other elements. The task of this element is to describe how each of the elements of the comprehensive plan will be integrated and made consistent with the other elements and includes a mechanism to measure progress toward achieving all aspects of this comprehensive plan. A process for updating the comprehensive plan is also included as part of this element.

### B. Plan Adoption

The first step toward implementation of the comprehensive plan is adoption of the plan by the town board. Wisconsin Statute 66.1001 provides specific procedures that are necessary to adopt the plan. As allowed by statute, the Marshfield town board has delegated the responsibility of preparing and maintaining the comprehensive plan to the planning commission. Upon completion of the plan, the planning commission will adopt a resolution by a majority vote of the entire commission before sending the plan to the town board for adoption.<sup>19</sup> The comprehensive plan does not take effect until town board enacts an **ordinance** that adopts the plan and that ordinance cannot be adopted unless the plan contains all of the elements specified by the comprehensive planning statute. At a minimum, a class 1 public notice is required to be published at least 30 days before the hearing is held. Once adopted, any program or action of the town board or its authorized commission, that affects land use shall be “consistent” with the comprehensive plan. This statutory requirement will primarily impact the town’s zoning ordinance or other land use-related ordinances as specified in the statute and that the town may adopt.

### C. Zoning Ordinance

The zoning ordinance is the most common land use regulatory tool that is used in Wisconsin communities. Zoning allows municipalities to determine how different areas of their community will be used (eg. residential, commercial, open space, etc.) and authorizes municipalities to regulate the design and placement of structures within various zoning districts. The Town of Marshfield first adopted a zoning ordinance in 1960s and has amended the ordinance as needed to reflect changes in development patterns and structures. The town board has actively enforced the ordinance since its enactment.

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<sup>19</sup> Chapter 66.1001 (4) (b), Wisconsin Statutes, 2003-2004.

The relationship between the plan and the zoning ordinance is easy to understand if one considers that the plan identifies a general pattern of desired land use development and the zoning ordinance specifies the range of conditions of use that can occur on parcels of land to be “consistent” with the plan. In this relationship, the zoning ordinance is clearly a tool to implement the land use recommendations of the comprehensive plan and, in Wisconsin, it is a statutory requirement.

An effective and manageable planning tool, zoning offers many possibilities for confronting the issues presented in this comprehensive plan. Natural conditions such as geology or geography are very difficult, if not impossible, to alter. Zoning is an acceptable solution because of the characteristics of the land. Fitting compatible uses with suitable natural conditions saves expense for the landowner or homeowner as well as protects natural conditions.

Zoning traditionally creates different zones, or districts, for various land uses. Each district has some clearly permitted uses and other uses requiring approval of the planning commission and town board for specific site proposals. Some uses are prohibited. Flexibility can be built into the zoning ordinance to allow for some variance in land use rules. This is important because the unique characteristics of some lands preclude them from being categorized to be used the same as other lands in a specific zoning district. For example, odd-shaped lots may preclude a parcel from meeting lot line setbacks, while the lot may, in fact, contain adequate area for development. In cases, some mixing of uses may be appropriate where the uses are compatible with one another and with neighboring properties and where neither use creates a nuisance, health hazard, safety hazard or other conflict with other nearby uses.

The Town of Marshfield will continue to monitor and enforce the zoning ordinance and make any changes the town deems necessary to assure consistency with the other elements of the comprehensive plan.

#### **D. Subdivision Ordinance**

As a comprehensive plan implementation tool, subdivision regulations attempt to minimize the creation of lots that fail to satisfy zoning or sanitary ordinances. The control of land divisions promotes the dedication and reservation of land for roadways and drainage ways. In addition, landowners benefit from an effective subdivision code by assuring that properties don't overlap when new parcels are created by metes and bounds land descriptions. Most towns rely on the county to monitor and regulate land divisions although most, including Marshfield, review new land divisions very closely and communicate their concerns and objections to the county. If it appears that the town can begin anticipating residential development pressures, they may want to consider enacting a subdivision ordinance to provide some site development standards across the town.

Land divisions that come under town or county ordinance requirements are subject to review by the City of Marshfield as well. Wisconsin statutes authorize cities

and villages to exercise extraterritorial plat review. The primary purpose of such review is to assure road alignments, cost effective infrastructure development in the future, preservation of future road rights-of-way, lot layout and other issues with regard to land development. All of the Town of Marshfield lies within the three-mile extraterritorial plat review area of the city. Although extraterritorial plat review gives the city the right to comment on and approve or object to land divisions, it does not provide any review authority over zoning changes or land uses that are approved by the town.

### **E. Capital Improvement Program**

A capital improvement program (CIP) is a plan for the capital expenditures of the town over a period of years, usually five years. The CIP addresses the town's capital needs that require attention during the period and helps establish priorities and financing for those needs. A capital budget is a concurrent document that outlines the plans for the expenditure of funds for capital projects. A tax impact analysis, or development impact analysis, is sometimes used to develop the CIP and helps Town officials determine both the advantages and disadvantages of various projects or developments. Capital improvement programs are very useful, especially when the supply of money is short and the demand for services or improvements is high. The Town of Marshfield does not have a formal capital improvement plan, but does consider needed expenditures that may take two or more years for the town to put money aside before capitalizing the project.

### **F. Official Map**

Although allowed by Wisconsin statute, small towns rarely adopt an official map as provided by statute. As a supporting document to a land use plan and map, the official map can be a valuable tool, especially for towns that are adjacent to larger cities or are growing rapidly. According to Wisconsin Statutes, "The [official] map is conclusive with respect to the location and width of roads, highways, waterways and parkways, and the location and extent of railroad rights-of-way, public transit facilities, parks and playgrounds shown on the map. The official map is declared to be established to conserve and promote the public health, safety, convenience or general welfare."<sup>20</sup>

State law also allows the official map to be used as a planning document. Section 62.23(c), of the law, allows a community to "amend the official map of the city (town) so as to establish the exterior lines of planned new roads, highways, historic districts, parkways, railroad rights-of-way, public transit facilities, waterways, parks or playgrounds, or to widen, narrow, extend or close existing roads, highways, historic districts, parkways, railroad rights-of-way, public transit facilities, waterways, parks or playgrounds. No such changes may become effective until after a public hearing concerning the proposed change..." Municipalities can use their official map to preserve their ability to construct roads on forty lines throughout the town and to preserve their

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<sup>20</sup> Chapter 62.23 (6) (b), Wisconsin Statute, 2003-2004.

ability to create a grid street system for efficient movement of traffic through the town and for efficient movement of school buses and emergency services equipment.

## **G. Building Code**

The State of Wisconsin has a Uniform Building Code (UDC) for residential structures state wide. Although small geographically, the Town of Marshfield has had development pressures as people move out from the City of Marshfield to live on larger lots, or in lower density areas, or in an area with lower property taxes. The Town of Marshfield contracts with a certified building inspector for inspection services. Continued application of the UDC and the local zoning ordinance will help assure consistent with the comprehensive plan.

## **H. Other Ordinances**

The Town of Marshfield has other ordinances that have been enacted as needed to address local concerns or to meet the requirements of state statutes. Consistency is needed, but not necessarily required, with the comprehensive plan. An example may be for recycling. Although not required in ordinance form, nor required to be consistent with the comprehensive plan, recycling often requires land and/or buildings to accomplish the local recycling initiative. Although they are not required to be consistent with the comprehensive plan, consistency between many other ordinances (junk vehicles, protecting the water supply, noise regulations, speed limits, etc.) and the comprehensive plan will prove to be advantageous to the town and will help to implement the comprehensive plan recommendations.

## **I. Town of Marshfield Planning Administration**

### **(1) Planning Commission**

Planning commissions in Wisconsin are created by town ordinance under s. 62.23, Wisconsin Statutes. The ordinance may create a 7-member commission, or, if the town is under 2,500 population, a 5-member commission. The town chairman appoints the members and chooses the planning commission chair. Elected and appointed town officials may be appointed to the commission. There must, however, be at least three citizen members who are not town officials on the 7-member commission and one citizen member who is not a town official on the 5-member commission.<sup>21</sup>

The Town of Marshfield has a five-member planning commission. The commission meets as needed to consider rezoning requests, conditional uses, ordinance violations, text and map amendments, land divisions, consistency between the comprehensive plan and the zoning ordinance, and various other planning-, zoning- and building code-related issues.

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<sup>21</sup> Chapter 60.62 (4) (b) and (c), Wisconsin Statutes, 2003-2004.

The relationship of the planning commission and the town board is important. The town board in Marshfield is a three-member, elected body that is primarily a policy-making body charged with conducting the town's affairs. The planning commission, on the other hand, is an appointed body, whose responsibility includes developing a comprehensive development plan and measures to implement that plan. All of the planning commission's recommendations are forwarded to the town board for approval or adoption. A planning commission, therefore, functions in a more objective (versus political) manner than the town board, but must realize that, in developing plans and ordinances, it operates within a political system where the town board makes the final decision.

The planning commission assists the town board by involving citizens and developing expertise in planning, which can be a time-consuming and controversial undertaking. Having a designated group that focuses on planning and zoning issues frees the town board to carry out other obligatory functions. The planning commission is an appointed body whose policy-making function is advisory-only to the town board. If the town board chooses to delegate additional powers to the planning commission, beyond advisory powers, it may do so. For example, the town board may allow the planning commission to issue conditional use permits under town zoning and allow it to approve subdivision plats.

A good working relationship between the planning commission and the town board is essential for implementing land uses that are in the public interest. The existence of an adopted comprehensive plan and implementation measures depends upon both bodies – the planning commission to develop the proposals with public support and the town board to support the effort and ultimately adopt the legislation and implementation programs.

## **(2) Planning Commission Powers and Duties**

The powers and the duties of the planning commission are spelled out in state statutes and applicable town ordinances. A chief task of the commission is to develop the town's comprehensive plan, pursuant to the specifications of Chapter 66.1001, Wisconsin Statutes. That statute requires the planning commission ("or other body of a local governmental unit that is authorized to prepare or amend a comprehensive plan"<sup>22</sup>) to solicit citizen participation and intergovernmental communication and coordination in developing the community's plan. The planning commission oversees coordination and development of the comprehensive plan and, once completed, forwards the plan to the town board by formal resolution.

After the comprehensive plan is adopted, the zoning ordinance is to be reviewed and amended to reflect the goals, objectives, policies and programs of the plan (to provide consistency between the plan and the land use regulations). In the Town of Marshfield, recommending updates to the zoning ordinance is another function of the planning commission.

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<sup>22</sup> Chapter 66.1001 (4) (a), Wisconsin Statutes, 2005-2006, page 535.

## **J. Plan Amendments and Monitoring**

The amendment process can be as important as the initial development and adoption of the plan. Monitoring those changes and maintaining accurate records about why the changes were or were not made is also important. Monitoring changes helps the planning commission and town board to assure consistency in the application of standards and in proposing changes to either the text or the future land use map. The following process is used in the Town of Marshfield for amending the plan and monitoring changes.

### **(1) Plan Amendments**

The comprehensive plan is a dynamic document, that is, as conditions change in the town, the plan will change. Also, the Wisconsin planning law requires that comprehensive plans that are created under the statute be updated “no less than once every 10 years.”<sup>23</sup> An example of why a comprehensive plan would need to be amended, or updated, might include changing economic conditions in the area – if a new manufacturer chooses to locate in the Town or the City of Marshfield, there may be demands for new housing, new roads or highway access. An aging population demanding different types of housing or a change in the types of municipal services is another example. A major change to the local transportation system is yet another example of when the plan may need to be updated. Town officials, along with representatives from surrounding communities, Wood County and the local office of the Wisconsin Department of Transportation, have worked together on the relocation of Highway 10. This project has had negative impacts on residential uses in the town. Seventeen homes were dislocated in the Town of Marshfield and most of those households have chosen to leave the town. On the other hand, upon completion of the Highway 10 project, there may be demands for new commercial land uses, which can be a positive for the town. The highway project will certainly result in changing traffic patterns through in the area, especially with the renumbering of State Highway 13 and as jurisdictional changes are made.

Town officials must be ready to react to changing conditions in the community by amending the plan to reflect changes if those changes are in the best interest of the town. Care must be taken, however, not to amend the plan as a routine or the process may lose its importance in the community development process. It is important to establish local planning goals, review those goals on a regular basis and develop objectives that will help the decision makers achieve community planning goals.

The amendment process is rather straight forward (the flow chart on the last page shows the process for amendments). The first step can be either a petition to the planning commission from a town resident or property owner or a proposal by the planning commission or town board. The petition can be for either a change in the plan’s text, such as a change in goals or objectives, or a change to the future land use

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<sup>23</sup> Chapter 66.1001 (2) (i), Wisconsin Statutes, 2005-2006, page 535.

map. Remember, the zoning ordinance must also be consistent with the comprehensive plan and may need to be amended to reflect the change in the comprehensive plan.

The second step is review of the petition or proposal by the planning commission. Their review can include a site visit, meeting with the petitioner to discuss the reason for the request, obtaining professional planning assistance or a legal opinion, or meeting as a commission to discuss the merits of the proposal.<sup>24</sup> Third, the planning commission will make a recommendation, in writing, to the town board. The town board will then publish a notice for a public hearing and hold a hearing on the proposal to get input from any interested persons. They should keep a written transcript or, at the very least, detailed minutes of the testimony. Following the hearing, the town board will make a decision in the form of a motion to amend the comprehensive plan. The board can make a decision immediately following the public hearing or they can set a time to meet later to make the decision, allowing additional time to receive written testimony about the proposal. The board's options are to accept the recommendation, modify it, deny it, or send it back to the planning commission for further study. They should provide the petitioner a copy of the decision in writing. If the petitioner is not satisfied with the decision, he can submit an entirely new petition, submit a petition with revisions to the original proposal, appeal the decision to the circuit court, or do nothing. Of course, the petitioner also has the option of rescinding the petition at any time during the process.

## **(2) Monitoring**

Monitoring changes over time is also relatively easy and important. Changes can be documented simply by maintaining a file of each change, including copies of the:

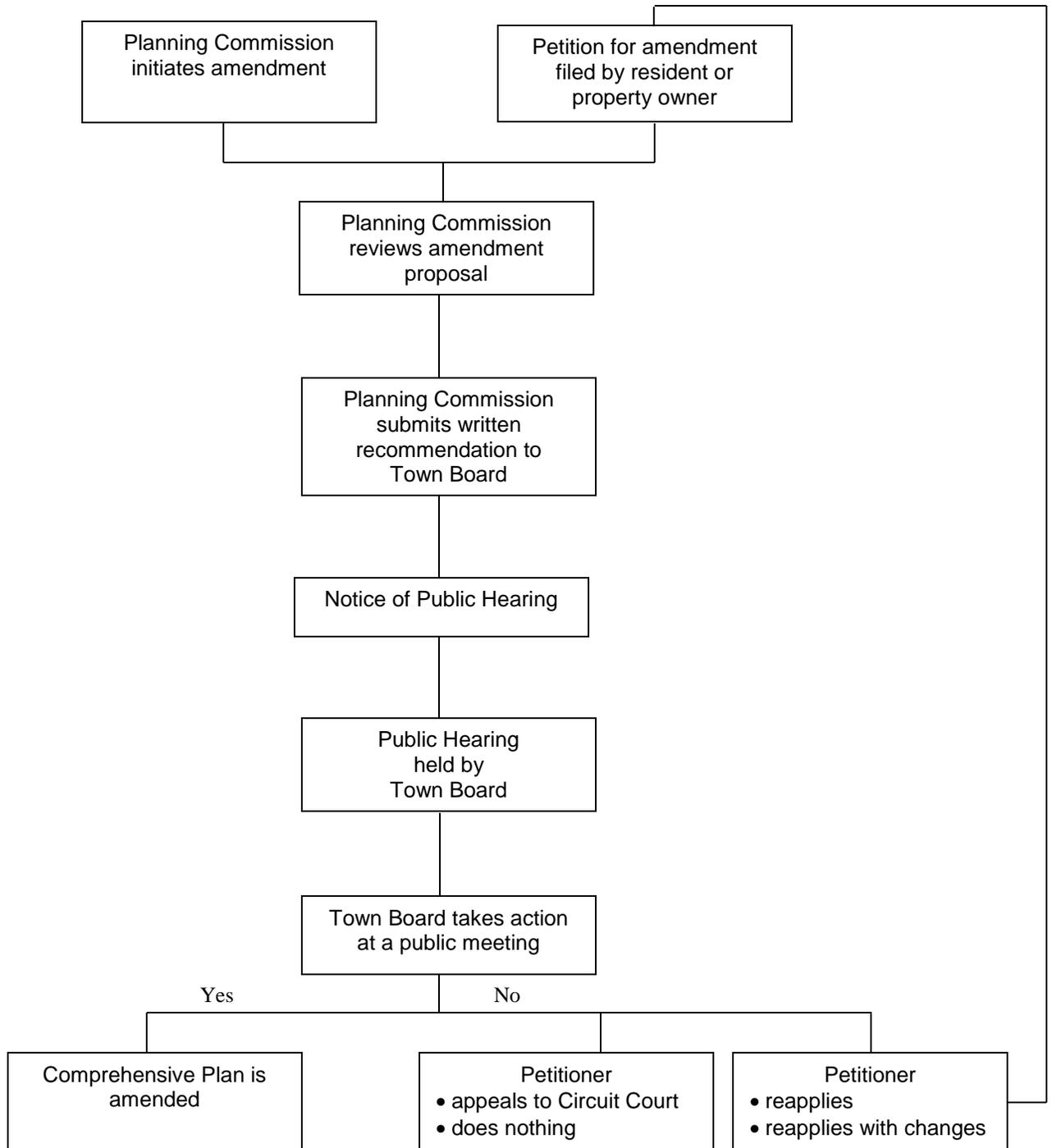
- petition for amendment or minutes of the planning commission meeting where an amendment was initiated,
- minutes of all planning commission meetings where the proposal was discussed,
- Planning commission's written recommendation to the town board,
- notice of public hearing,
- public hearing transcript or detailed minutes of the hearing,
- decision of the town board, including their rationale or justification for their decision,
- notice to petitioner of town board decision.

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<sup>24</sup> All meetings of plan commissioners must comply with the Wisconsin Open Meetings Law.

In the past, records have been maintained in the town hall. Accurate files become important if the decision is challenged by either the petitioner, in the case of a denial, or by someone who opposed the amendment proposal. These files are also useful when a comprehensive review of the plan is done in ten years (or sooner) from adoption.

### COMPREHENSIVE PLAN AMENDMENT PROCESS





APPENDIX A

HEWITT GROUNDWATER DATA SUMMARY

January, 2012



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# Hewitt Groundwater Data Summary

*A data summary for the Village of Hewitt, Wood County, Wisconsin*

**January, 2012**

Prepared by

Scott Johnson

Peter Schoephoester

Kenneth R. Bradbury

**Wisconsin Geological and Natural History Survey**

**University of Wisconsin-Extension**

## Hewitt Groundwater Data Summary

### Background

#### *Groundwater introduction*

Groundwater is water contained underground in pore spaces and fractures in sediment and rock. The *water table* is the undulating surface of the saturated zone; pore spaces and fractures are completely filled with water below this surface. The water table is an important feature of the groundwater system because its slope determines the direction of groundwater flow and where groundwater contributes to the flow in springs, streams, and rivers. Like surface water, groundwater flow is gravity-driven, moving from high water elevation towards low water elevation.

Groundwater *recharge* is water that has soaked into (infiltrated) the ground, and moved through pores and fractures in soil and rock to the water table. Recharge maintains the supply of fresh water that flows through the groundwater system to wells, streams, springs, and wetlands. Not all precipitation becomes groundwater recharge—some of it runs off the land surface to streams or storm sewers, some evaporates, and some is taken up by plants. Recharge is greatest in the spring and fall because the ground is not frozen and because plants are not using large amounts of water. Important factors that affect recharge include land cover (forest, row crop, pasture, commercial or residential area, etc.), soil type, vegetation, and rainfall timing and intensity. For example, infiltration rates are higher in sandy soil than in clayey soil or pavement.

The ease with which water flows through rock or sediment depends on the *hydraulic conductivity* of that material. A well in an aquifer with high hydraulic conductivity can be pumped at a higher rate without pumping the well dry. Hydraulic conductivity is controlled by the connectedness of pore spaces, so materials with large, well-connected pores or pervasive fractures transmit water more easily.

#### *Purpose of Project*

This study was requested and funded by the Village of Hewitt, and was completed between July and November of 2011. The purpose of this study was to collect information on Hewitt's groundwater resource and evaluate the sustainability of the current rate of water use, considering the village's growth trend. Local officials and planners requested information about local groundwater resources, including potential well yields, groundwater sustainability, and groundwater flow directions. The study area is approximately 3 miles by 3 miles, centered on the Village of Hewitt (Plate 1).

### *Hydrogeology of Wood County*

Hewitt is located in northwestern Wood County, Wisconsin. The bedrock geology of Wood County consists primarily of Precambrian-aged metamorphic and igneous rocks. The rock itself has very low hydraulic conductivity, but the upper portion (approximately the top 10 to 30 feet) is highly weathered, and numerous fractures allow groundwater flow. Some of the larger fractures extend deeper into the rock, but become less common with depth (Batten, 1989). The bedrock underlying Hewitt is identified by well drillers as granite, an igneous rock, and the upper portion is often reported as “broken”, “weathered”, or “soft”. In the southwestern half of the county, Cambrian sandstone is commonly found above the Precambrian bedrock. While Cambrian sandstone is occasionally encountered in boreholes in and around the Village of Hewitt, it does not form a continuous layer.

Due to topography of the land surface and bedrock surface, bedrock is approximately 30 to 80 feet below the ground surface in the Village of Hewitt.

Surficial sediments in the northern two-thirds of Wood County (including Hewitt) consist of clay-rich soils and hillslope deposits formed by weathering of the bedrock, as well as some glacial sediment (Batten, 1989).

The combination of clay-rich soils over crystalline bedrock makes groundwater in the vicinity of Hewitt scarce in comparison to other parts of Wisconsin.

### Village of Hewitt Maps

The main product of this study is a series of maps (Plates 1- 5) depicting various aspects of the hydrogeology of the Village and immediate surrounding area. These maps are primarily based on well construction reports produced by water well drillers and submitted to the Wisconsin Department of Natural Resources. For this project, three hundred twenty-three well construction reports were located by address and plotted on a map using Geographic Information System (GIS) software. In these reports, well drillers record the total depth of each well, the depth of the geologic layers encountered while drilling, and the depth to water in the well. This information was used to generate generalized maps of depth to bedrock (Plate 2) and depth to groundwater (Plate 4). By using land surface elevation data (Plate 1), maps of bedrock elevation (Plate 3) and water table elevation (Plate 5) were also created.

Depth to bedrock (Plate 2) across the study area varies from 10 ft to 85 ft, with depths inside the Village boundary ranging from 25 ft on the eastern side to 85 ft on the western side. Bedrock elevation (Plate 3) ranges from 1150 ft to 1220 ft above sea level. Bedrock elevation is the lowest in the western portion of the Village. Depth to groundwater (Plate 4) within the

Village is generally between 13 and 20 feet. Water table elevation (Plate 5) in the Village ranges from 1230 ft in the northeast to 1210 ft in the southwestern portion.

The northern area of the Village sits atop a high point in the water table, meaning that groundwater flows away in all directions. Plate 5 shows very generalized groundwater flow directions. Much of the groundwater pumped by wells in Hewitt comes from recharge that originated within the village boundary. Groundwater flow within the Village is to the south/southeast.

#### *Specific capacity and hydraulic conductivity*

The *specific capacity* of a well is a simple measure of the well's ability to produce water, and is commonly reported by well drillers on well construction reports. Specific capacity is defined as the well discharge (gallons per minute) divided by the amount of drawdown, or measured water level decline in the well, caused by the pumping. So, for example, a well that produces 20 gallons per minute (gpm) with two feet of drawdown would have a specific capacity of  $20/2$ , or 10 gpm/ft. Based on the 208 construction reports evaluated, the specific capacity of wells in the Village ranges from 0.003 to 9.0 gpm/ft, with an average of 0.19 gpm/ft. These are fairly low-yielding wells, adequate for supplying single-family homes, but probably not adequate for high-capacity irrigation or industrial wells.

Well installation specific capacity test data were also used to estimate the average hydraulic conductivity of the groundwater aquifer in the Hewitt area using a spreadsheet calculation known as TGUESS (Bradbury and Rothschild, 1985). Hydraulic conductivity is a basic measure of the ability of a geologic formation to transmit water. The average estimated hydraulic conductivity of aquifer material penetrated by wells was 1.7 feet/day (standard deviation of 7.7 feet/day). This is consistent with a previous estimate of 0.7 ft/d for the Precambrian aquifer (Batten, 1989), which was calculated using 1,350 well construction reports from Wood County.

A comparison of well depth and hydraulic conductivity (Figure 1) shows decreasing hydraulic conductivity at greater depths. This, too, is consistent with observations by Batten (1989) that most of the water pumped from the Precambrian aquifer comes from the weathered and fractured upper portion.

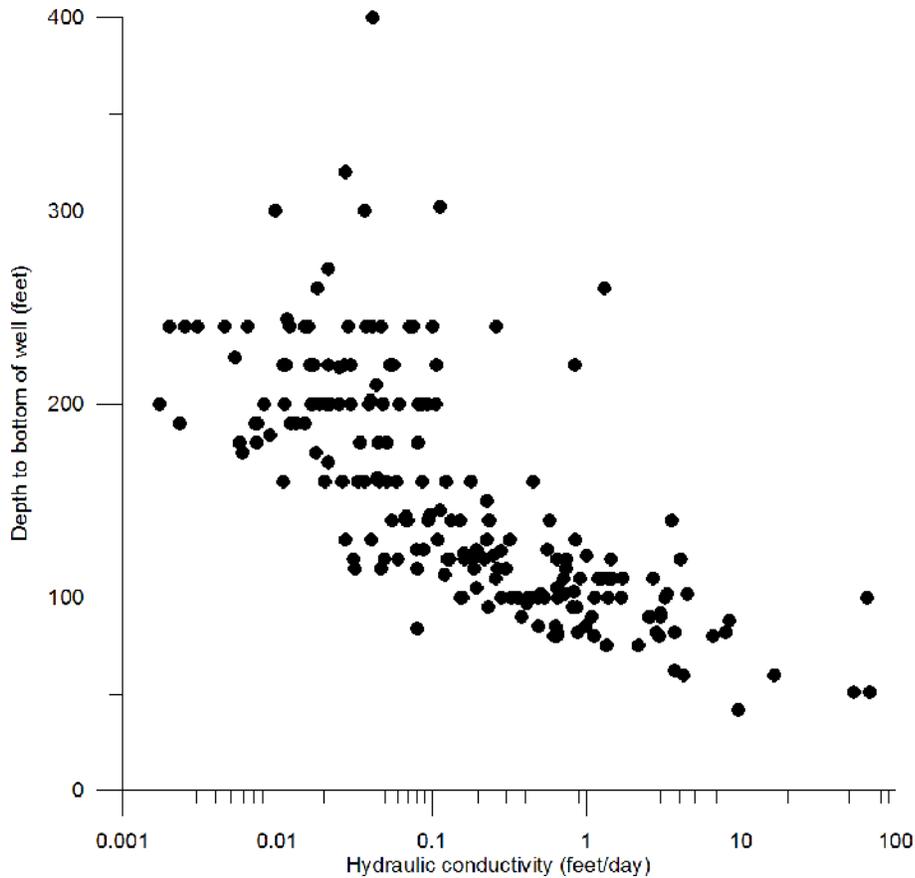


Figure 1- Scatter plot of hydraulic conductivity vs. depth to bottom of well.

## Water Budget

A water budget was estimated to evaluate the current rate of groundwater use compared to available groundwater resources. Based on the water table map (Plate 5), the Village is on a groundwater divide, and groundwater flows generally radially outward away from the village. Thus the only source of replenishment to groundwater in the Village is recharge from local precipitation.

Current water use for the Village of Hewitt was estimated using a population size of 790 people and 600 cattle (M. Stueland, personal communication). Average water use was estimated at 53 gallons/day for each human and 35 gallons/day for each bovine (Buchwald, 2009). This equates to approximately 3 million cubic feet/year of water.

Groundwater recharge was estimated using a GIS-based soil-water balance model (described by Dripps and Bradbury, 2007). The model uses daily temperature and precipitation data, along with soil characteristics and land use, to estimate the amount of precipitation that infiltrates to groundwater. Given daily weather data from Marshfield for the years 1981-2010, the model

calculated an average annual recharge of 7 inches/year for the Village of Hewitt (approximately 13 million cubic feet/year of water).

Based on this average recharge rate, current water use is equal to approximately 23% of annual groundwater recharge within the Village boundaries. However, it is important to note that some of the remaining 77% contributes to surface water bodies, such as streams and wetlands, and much of this water is removed by evapotranspiration. Annual groundwater recharge can be seen as an upper sustainable limit, but ecosystems may be affected long before water use reaches that amount. In the absence of pumping, groundwater discharges to nearby streams and wetlands, and sustains baseflow. Pumping removes water from the system and reduces baseflow.

A simple computer model of groundwater flow was constructed to help assess the impact of pumping on local groundwater and surface water. The model is based on a modeling code called GFLOW. GFLOW is a two-dimensional, steady-state, analytic element groundwater flow modeling code. It simulates groundwater levels and groundwater discharge based on analytical solutions for pumping wells and surface-water features. For this simple application individual wells were not simulated; instead, water use scenarios of current and doubled water use were simulated by reducing net recharge within the Village in proportion to the increased water use. This approach provides a good approximation of the overall water balance, but does not account for the uneven distribution of wells within the Village boundary, meaning that areas where wells are concentrated could see slightly higher drawdowns. Using this approach, only modest declines in the water table occur under the increased water-use conditions. Simulation of current water use resulted in lowering of the water table up to 2.5 ft with respect to natural (no pumping) conditions. Doubled water use lowered the water table an additional 3 ft.

Drawdown of the water table could reduce streamflow in nearby streams, but model simulations indicated that the impact is likely to be small. The upper reaches of the nearby streams are the most sensitive, as even modest decreases in groundwater discharge to small streams can reduce streamflow by a perceptible fraction. Additional work would be required to predict actual flow reductions in specific streams. However, the model simulations completed for this study do not demonstrate a need for further investigation.

Taken together, the specific capacity analyses, water-table map, and modeling simulations have several implications. First, the hydraulic conductivity of the local aquifer is low, and as a result local well yields are also generally low. The fractured bedrock aquifer can provide sufficient water for wells serving single-family homes or small businesses, but the potential for developing high-capacity wells (defined as wells yielding over 70 gallons per minute) is low. It is possible that higher well yields might be found by locating specific fractured bedrock zones or

isolated buried valleys filled with permeable material, but the available data show no such features inside the Village boundaries.

Second, the current groundwater use in the Village is sustainable. Current recharge exceeds water use, and there is no evidence that current water use has caused significant water-table drawdown or significantly impacted flow to local streams and wetlands. Increasing overall water use by a factor of up to 2 would still be sustainable, though obtaining that much groundwater might pose a challenge due to the low-yielding characteristics of local wells. Third, because it is located nearly on top of a high point, or divide, in the water table, most groundwater used in the Village originates as recharge within the Village itself. Thus, local land use practices, such as maintaining open space and protecting groundwater recharge areas, could have significant benefits to the Village.

### Conclusions

The information collected and simulations performed as a part of this study yield the following conclusions:

- Hewitt sits atop a high point in the water table, so much of the groundwater pumped by wells in Hewitt comes from recharge that originated within the village boundary.
- Hydraulic conductivity tends to decrease with depth, consistent with observations that most flow in the Precambrian aquifer occurs in the weathered and fractured upper portion.
- Wells in Hewitt produce an adequate amount of water for domestic use. However, because the crystalline bedrock beneath Hewitt forms a very low-yielding aquifer, the potential for successful high-capacity wells in or near the Village is low.
- Current groundwater use equals approximately 23% of recharge within the village boundary.
- The current groundwater and water use situation in the Village of Hewitt is sustainable, meaning that current water use is not causing significant declines in groundwater levels or degrading nearby surface water resources. The effect of plausible increases in water use on the elevation of the water table is not expected to be problematic.
- Management of Hewitt's groundwater resource should focus on maintaining current recharge and protecting groundwater quality.

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Bradbury, K.R. and E.R. Rothschild. 1985. A computerized technique for estimating the hydraulic conductivity of aquifers from specific capacity data. *Ground Water*, 23(2): 240- 246.

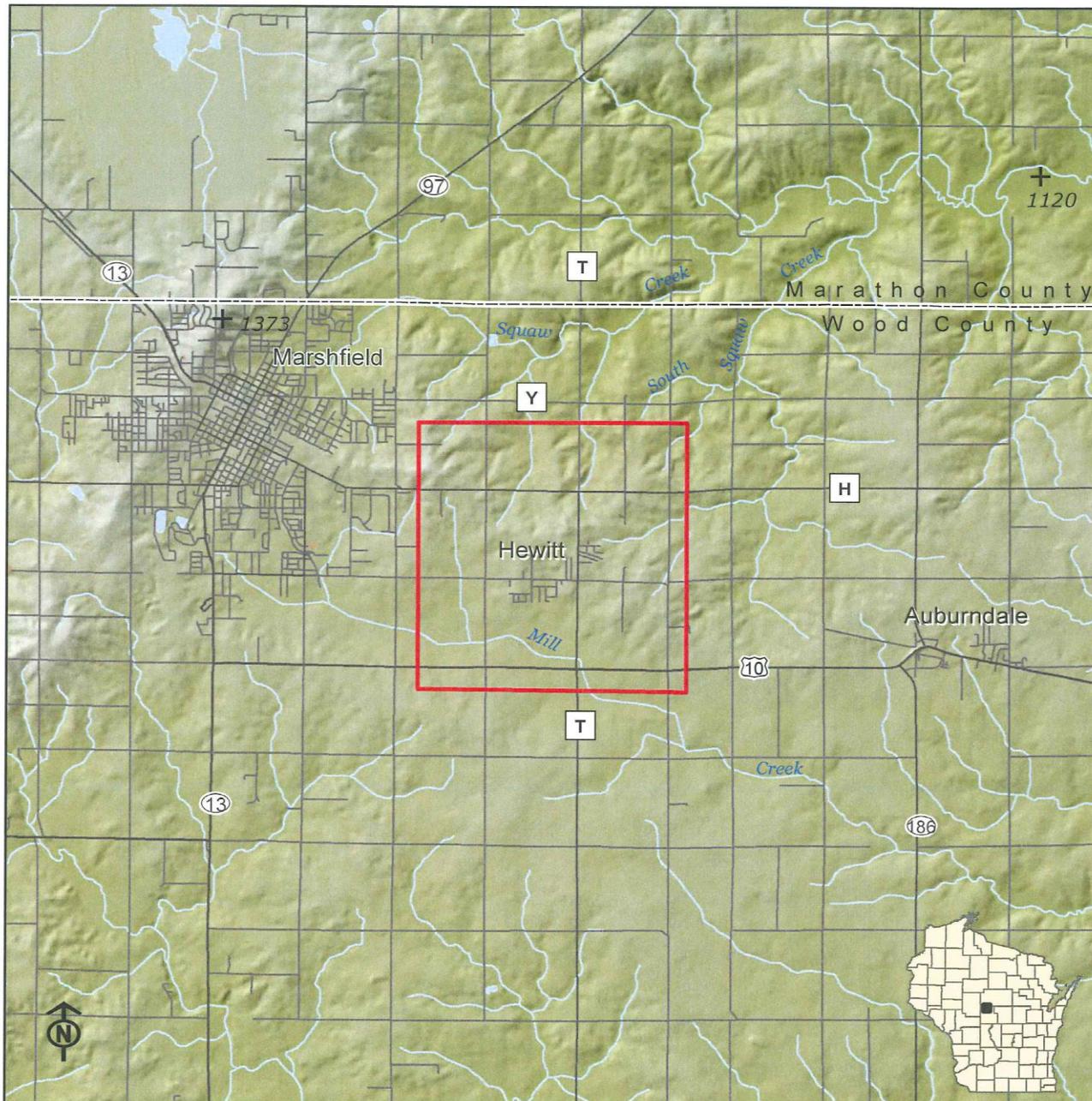
Buchwald, C.A. 2009. Water use in Wisconsin, 2005. U.S. Geological Survey Open-File Report 2009–1076.

Dripps, W.R. and K.R. Bradbury. 2007. A simple daily soil-water balance model for estimating the spatial and temporal distribution of groundwater recharge in temperate humid areas. *Hydrogeology Journal*, 15(3): 433-444.

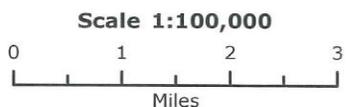
Stueland, M. 2011. Personal Communication. Village of Hewitt.

**Groundwater Data Summary for the  
Village of Hewitt**  
Wood County, Wisconsin

**Plate 1  
Regional Topography**



Base map from ESRI Streetmap dataset (2008),  
terrain data from Wisconsin Department of  
Natural Resources and US Geological Survey.



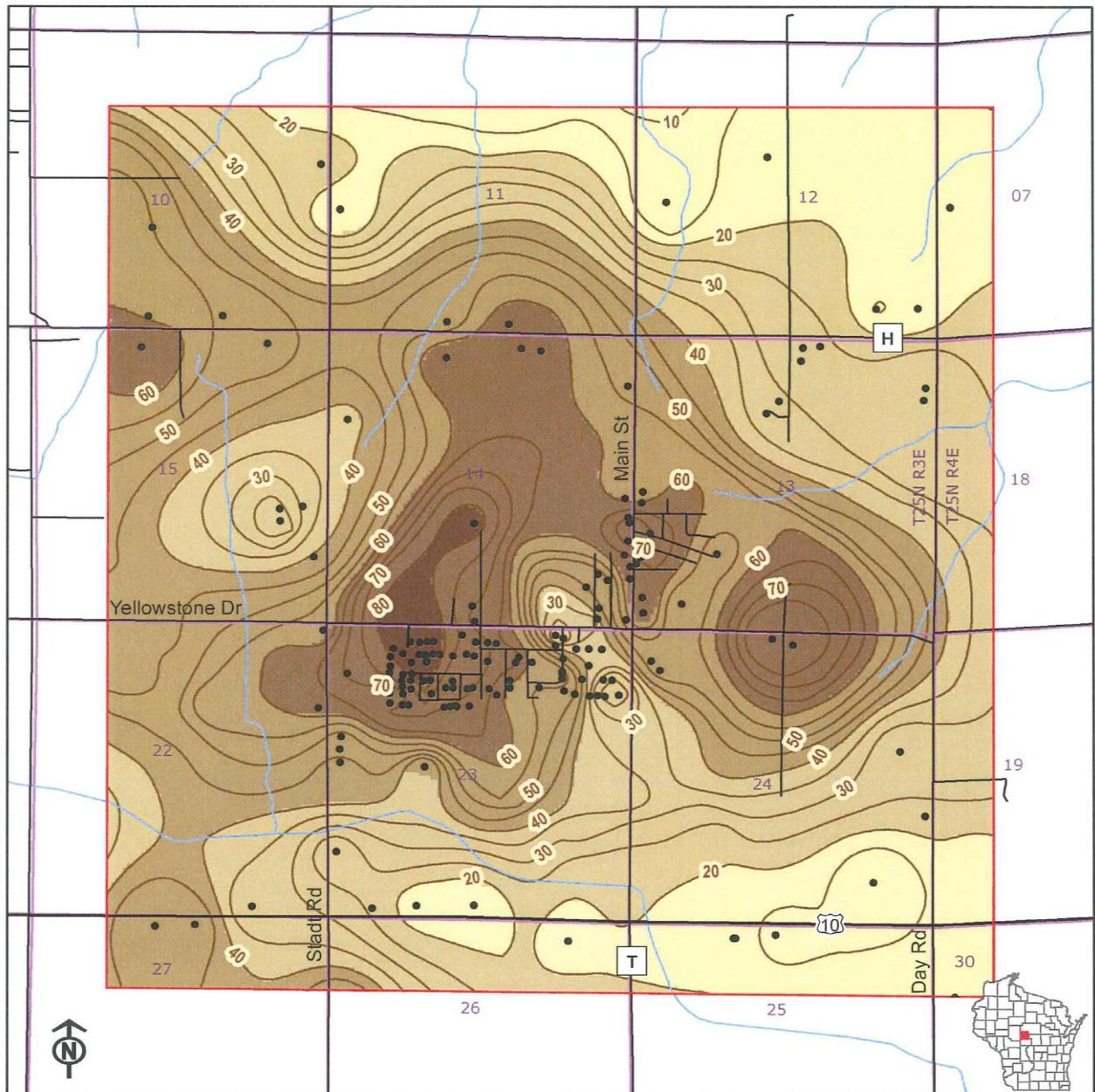
- Study Area Boundary
- + Topographic High and Low Points (in feet above sea level)



**Wisconsin Geological and Natural History Survey**  
November 2011

**Groundwater Data Summary for the  
Village of Hewitt**  
Wood County, Wisconsin

**Plate 2  
Depth to Bedrock**



- Data Point
- Study Area Boundary
- Public Land Survey Grid

Base map from ESRI Streetmap dataset (2008)

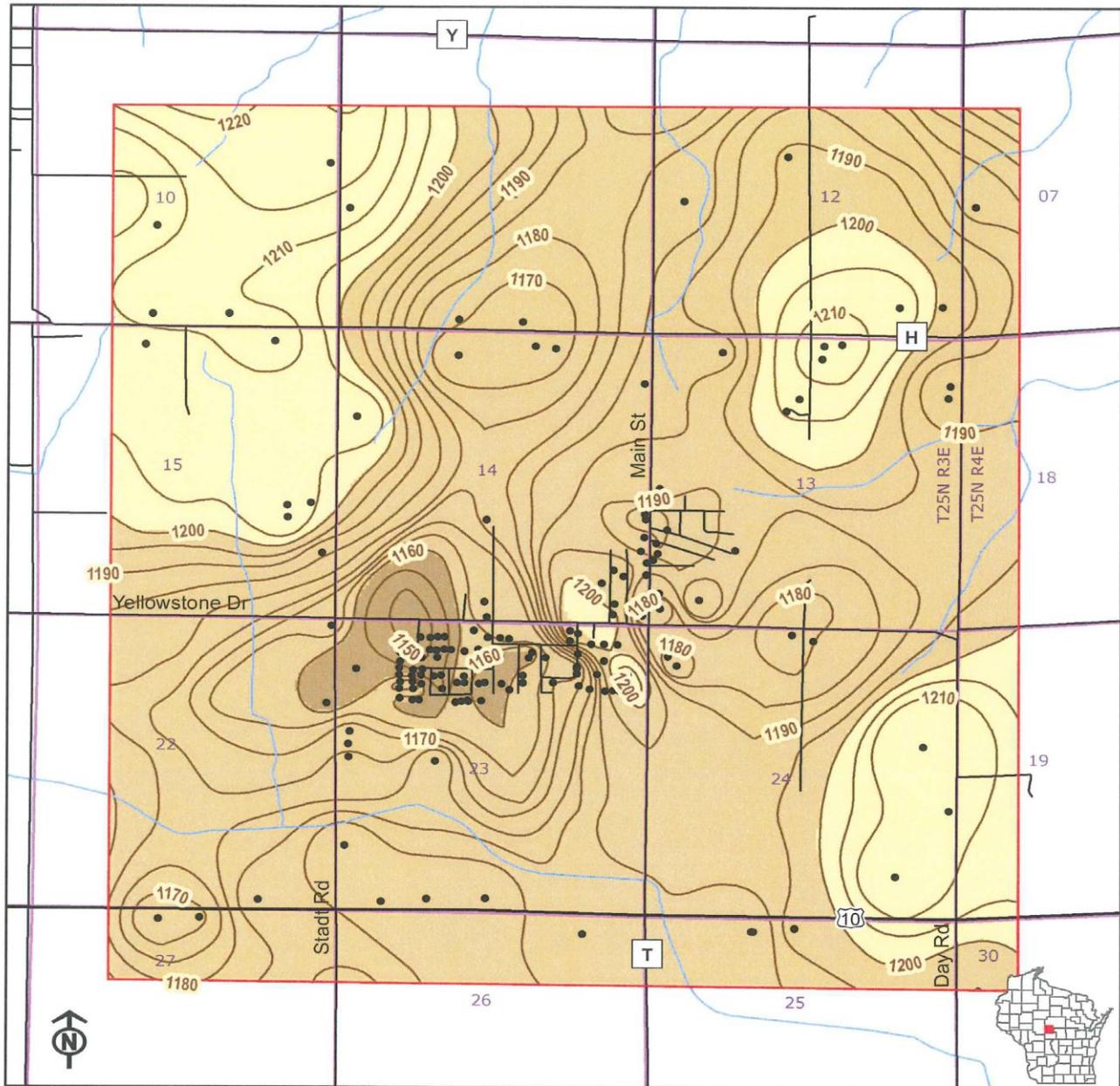
**UW Extension**  
Wisconsin Geological and Natural History Survey  
November 2011

**Scale 1:30,000**

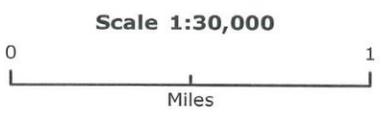
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Miles

**Depth to Bedrock (feet)**

- < 20
- 20 - 40
- 40 - 60
- 60 - 80
- > 80

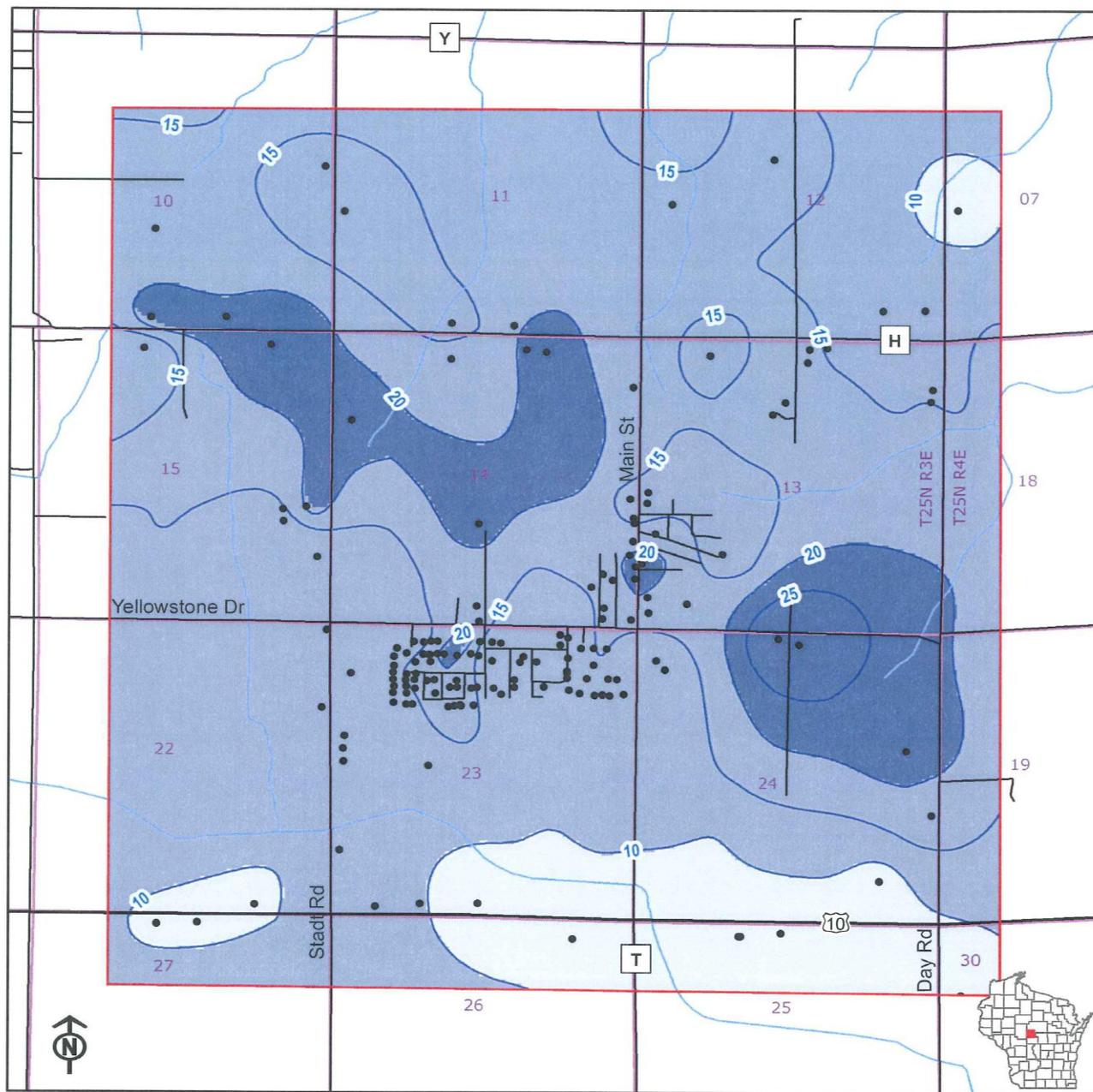


- Data Point
- Study Area Boundary
- Public Land Survey Grid



- Bedrock Elevation**  
(feet above sea level)
- 5-foot Contours
  - < 1120
  - 1120 - 1160
  - 1160 - 1200
  - > 1200

Base map from ESRI Streetmap dataset (2008)  
  
**Wisconsin Geological and Natural History Survey**  
 November 2011



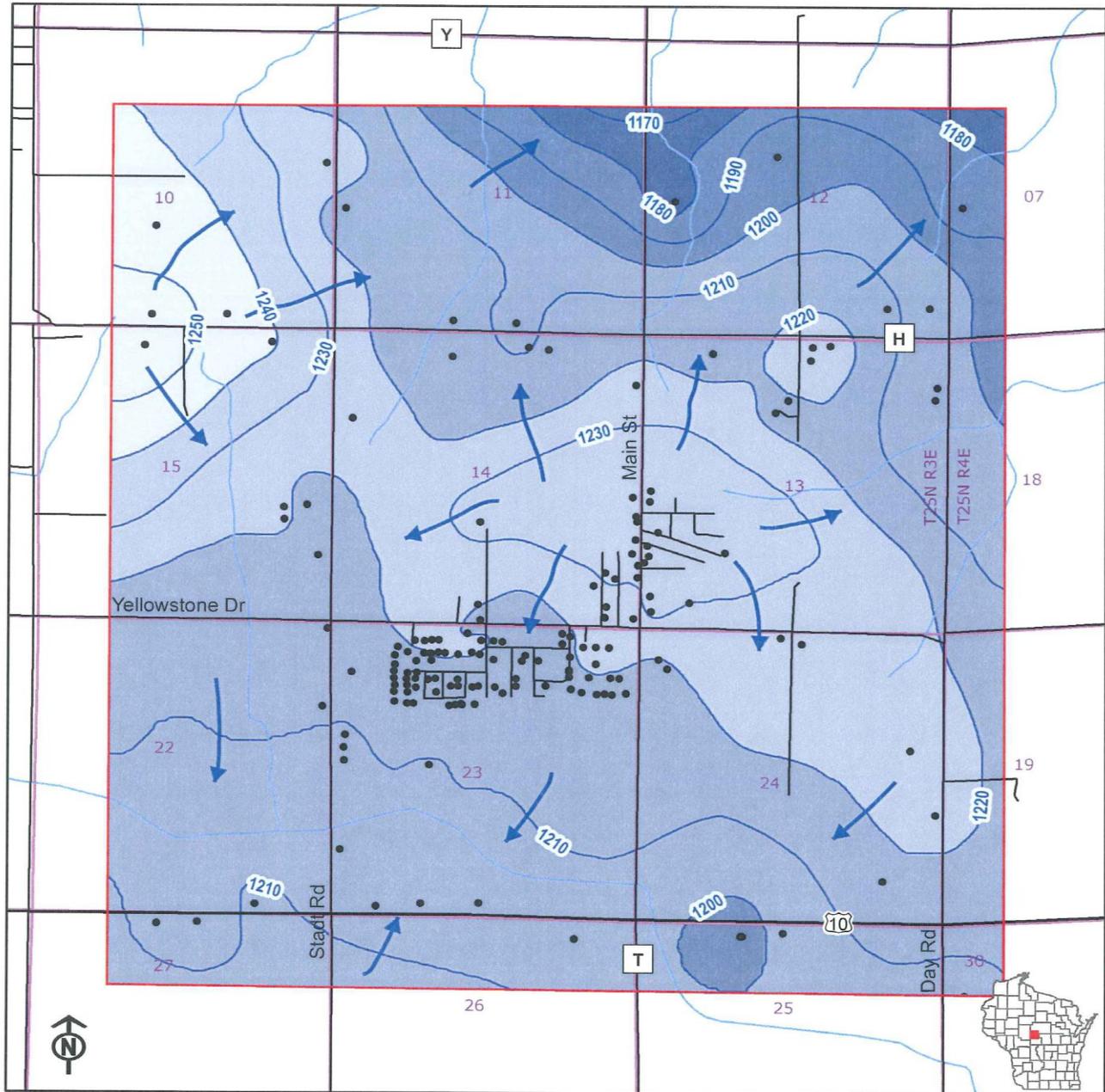
- Data Point
- Study Area Boundary
- Public Land Survey Grid



- Depth to Water (feet)**
- 5-foot Contours
  - < 10
  - 10 - 20
  - > 20

Base map from ESRI Streetmap dataset (2008)

**UNW**  
**Extension**  
**Wisconsin Geological and Natural History Survey**  
November 2011



- Data Point
- Study Area Boundary
- Public Land Survey Grid
- ➔ Approx. Direction of Groundwater Flow

Scale 1:30,000



Water Table Elevation  
(feet above sea level)

- 10-foot contour
- > 1240
- 1220 - 1240
- 1200 - 1220
- 1180 - 1200
- < 1180

Base map from ESRI Streetmap dataset (2008)



Wisconsin Geological and Natural History Survey

November 2011