

LAND USE ELEMENT 6



Credit: Washington County

6.1 INTRODUCTION

The Land Use Element is one of the nine elements of a comprehensive plan required by Section 66.1001 of the *Wisconsin Statutes*. Section 66.1001(2)(h) of the *Statutes* requires an analysis of past land use trends, an inventory of existing land uses, and a compilation of goals, objectives, policies, programs, and maps to guide future development and redevelopment of public and private property. Accordingly, the Land Use Element and Recommendations Element include the following:

- Information regarding the amount, type, and intensity or density of existing land uses
- Trends in land use, land supply, land demand, and land price
- Potential land use conflicts
- Projected land use needs in five year increments to the plan design year (2050)
- Maps showing existing and future land uses; productive agricultural soils; natural limitations to building site development; floodplains, wetlands, and other environmentally sensitive lands; and boundaries of areas to which public utility and community services will be provided by the plan design year.

Section 6.2 of this chapter presents an inventory of historical and existing land uses and an analysis of land use conditions and trends. Section 6.3 describes the framework for development of the plan, including the supporting maps required by the *Statutes*. The Recommendations Element (Chapter 12) presents the County land use plan map and describes the land use categories included on the map. The land use plan map serves as a visual representation and summary of the comprehensive plan. The land use plan map also serves to support related comprehensive plan goals, objectives, policies, and programs intended to guide the future development of public and private property in Washington County through the plan design year of 2050. The goals, objectives, policies, and programs are also set forth in Chapter 12 of this report.

6.2 EXISTING LAND USE AND TRENDS

The Commission utilizes an urban growth analysis and a land use inventory to inventory and monitor urban growth and development in the Region. The urban growth analysis delineates the outer limits of concentrations of urban development and depicts the urbanization of the Region over the past 150 years. The Commission land use inventory is a more detailed inventory that places all land and water areas in the Region into one of 67 land use categories, providing a basis for analyzing specific urban and nonurban land uses.

Urban Growth Analysis and Historical Urban Growth

The urban growth analysis shows the historical pattern of urban settlement, growth, and development of the County since 1850 for selected points in time. Areas identified as urban under this time series analysis include portions of the County where residential structures or other buildings were constructed in relatively compact areas, thereby indicating a concentration of residential, commercial, industrial, governmental, institutional, or other urban uses. These areas must be at least five acres in size. In the case of residential uses, such areas must include at least 10 homes over a maximum distance of one-half mile along a linear feature such as a street or lakeshore, or at least 10 homes located in a relatively compact group within a residential subdivision. Uses such as cemeteries, airports, public parks, and golf courses do not meet the criteria for urban land uses because they lack the required concentration of buildings or structures. However, these land uses are identified as urban uses if they are surrounded on at least three sides by urban land uses that do meet the above criteria.

Historical urban growth in the County between 1850 and 2010 is shown on Map 6.1. Urban growth for the years prior to 1940 was identified using a variety of sources, including the records of local historical societies, subdivision plat records, farm plat maps, U.S. Geological Survey maps, and Wisconsin Geological and Natural History Survey records. Urban growth for the years 1950 through 2010 was identified using aerial photographs.

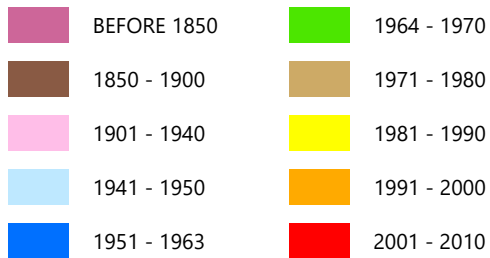
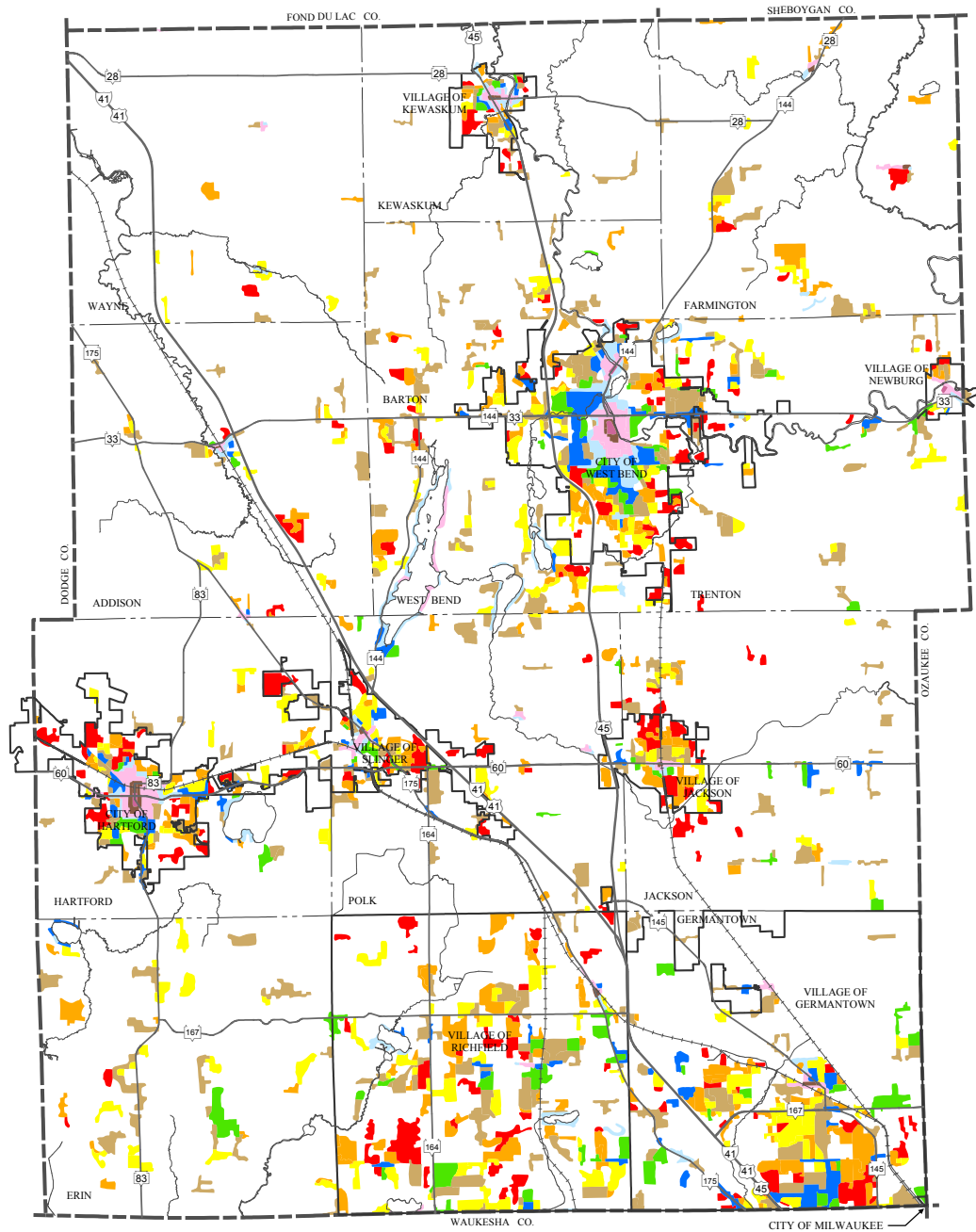
In Washington County, small portions of the Cities of West Bend and Hartford, and the Villages of Slinger and Newburg were developed prior to 1850. In 1900, urban development was still largely confined to the Cities of Hartford and West Bend and to the Villages of Newburg and Slinger, with additional development in the Villages of Germantown, Jackson, and Kewaskum. The period from 1900 to 1963 saw expansion mainly of the Cities of Hartford and West Bend and the Village of Germantown, and the development of lakeshores around Bark Lake, Big Cedar Lake, and Pike Lake. The period from 1963 to 2000 saw significant urban growth in scattered locations throughout the County, particularly in the southern portion of the County in the Village of Germantown and the then-Town of Richfield. Moderate development in and around the City of West Bend and the other established urban centers in the northern portion of the County also occurred during this period. Growth occurred in all of the cities and villages in the County between 2000 and 2010, and in a few isolated areas in many of the towns.

Land Use Trends, Supply, and Demand

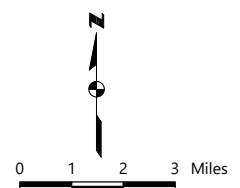
As indicated in Table 6.1, every urban land use experienced an increase in acreage between 1990 and 2015. Residential land uses experienced the largest increase of all of the County's urban and nonurban land uses. The second largest urban land use increase was transportation-related land uses, with street and highway rights-of-way accounting for the majority of the transportation-related land use increase between 1990 and 2015. The third largest increase in urban land use was recreational land uses, while industrial land use accounted for the fourth largest urban land use increase and commercial land use accounted for the fifth largest urban land use increase.

Over the same period, nonurban land uses decreased overall, a change that can be attributed entirely to the decrease in agricultural land use. A portion of the decrease in agricultural land is due to land being taken out of agricultural use but not being developed with urban uses. Such lands are now included in the Unused and Other Open Lands category. All of the other nonurban land uses, including natural resource areas, extractive sites, and open lands, experienced an increase in acreage. In fact, the increase in acreage in Unused and Other Open Lands from 1990 to 2015 amounted to the second largest increase among all urban and nonurban land uses in the County.

Map 6.1
Historical Urban Growth in Washington County: 1850-2010



Source: SEWRPC



**Table 6.1
Land Use Trends in Washington County: 1990-2015**

Land Use Category	Area (acres)					Change in Area							
	1990	2000	2010	2015		1990-2000		2000-2010		2010-2015		1990-2015	
						Acres	Percent Change	Acres	Percent Change	Acres	Percent Change	Acres	Percent Change
Urban	18,130	24,510	28,295	29,001	6,380	35.2	3,785	15.4	706	2.5	10,871	60.0	
Residential	343	533	761	764	190	55.4	228	42.8	3	0.4	421	122.7	
Single-Family	474	760	926	937	286	60.3	166	21.8	11	1.2	463	97.7	
Multifamily	105	114	110	110	9	8.6	-4	-3.5	0	0.0	5	4.8	
Mobile Homes	19,052	25,917	30,092	30,812	6,865	36.0	4,175	16.1	720	2.4	11,760	61.7	
Commercial	966	1,332	1,749	1,834	366	37.9	417	31.3	85	4.9	868	89.9	
Industrial	1,135	1,574	1,864	2,053	439	38.7	290	18.4	189	10.1	918	80.9	
Transportation, Communications, and Utilities (TCU)	4,411	5,825	6,012	6,063	1,414	32.1	187	3.2	51	0.8	1,652	37.5	
Arterial Street Rights-of-Way	6,660	8,339	9,484	9,514	1,679	25.2	1,145	13.7	30	0.3	2,854	42.9	
Nonarterial Street Rights-of-Way	951	878	732	738	-73	-7.7	-146	-16.6	6	0.8	-213	-22.4	
Railroad Rights-of-Way	534	575	587	579	41	7.7	12	2.1	-8	-1.4	45	8.4	
Communications, Utilities, and Other Transportation	12,556	15,617	16,815	16,894	3,061	24.4	1,198	7.7	79	0.5	4,338	34.5	
TCU Subtotal	1,295	1,477	1,757	1,852	182	14.1	280	19.0	95	5.4	557	43.0	
Governmental and Institutional	2,177	3,366	4,134	4,057	1,189	54.6	768	22.8	-77	-1.9	1,880	86.4	
Recreational	901	1,757	1,983	1,836	855	94.9	226	12.9	-146	-7.4	935	103.7	
Unused Urban Lands ^a	38,082	51,040	58,394	59,338	12,102	32.5	7,128	14.5	1,091	1.9	20,321	54.7	
Urban Subtotal	22,595	23,057	24,053	26,264	462	2.0	996	4.3	2,211	9.2	3,669	16.2	
Nonurban	42,029	42,771	46,528	46,640	742	1.8	3,757	8.8	112	0.2	4,611	11.0	
Natural Resource Areas	4,366	4,507	5,143	5,158	141	3.2	636	14.1	15	0.3	792	18.1	
Woodlands	68,990	70,335	75,724	78,062	1,345	1.9	5,389	7.7	2,338	3.1	9,072	13.1	
Wetlands	158,532	141,755	129,934	119,134	-16,777	-10.6	-11,821	-8.3	-10,800	-8.3	-39,398	-24.9	
Surface Water	957	1,266	1,452	1,518	309	32.3	186	14.7	66	4.5	561	58.6	
Agricultural ^b	12,269	14,362	13,253	20,705	2,298	19.0	-1,109	-7.7	7,452	56.2	8,641	71.6	
Extractive	240,748	227,717	220,363	219,419	-12,175	-5.0	-7,128	-3.1	-1,091	-0.5	-20,394	-8.4	
Unused and Other Open Lands ^{b, c}	278,830	278,757 ^d	278,757	278,757	--	--	--	--	--	--	--	--	
Nonurban Subtotal	278,830	278,757 ^d	278,757	278,757	--	--	--	--	--	--	--	--	
Total	278,830	278,757 ^d	278,757	278,757	--	--	--	--	--	--	--	--	

Table continued on next page.

Table 6.1 (Continued)

Note: As part of the regional land use inventory for the year 2000, the delineation of existing land use was referenced to real property boundary information not available for prior inventories. This change increases the precision of the land use inventory and makes it more usable to public agencies and private interests throughout the Region. As a result of the change, however, land use inventory data for the years 2000, 2010, and 2015 are not strictly comparable with the 1990 data. At the County level, the most significant effect of the change is to increase the transportation, communication, and utilities category due to the use of actual street and highway rights-of-way as part of the 2000 land use inventory as opposed to the use of narrower estimated rights-of-way in prior inventories. This treatment of streets and highways generally diminishes the area of adjacent land uses traversed by those streets and highways in the 2000 land use inventory relative to prior inventories.

^a *Unused Urban Lands include lands located within urban areas or adjacent to urban lands that are not utilized for an identifiable use.*

^b *A portion of the decrease in agricultural land is due to land being taken out of agricultural use, but not developed with urban use. Such lands are included in the Unused and Other Open Lands category.*

^c *Unused and Other Open Lands in nonurban areas include lands in rural areas that are not utilized for agricultural purposes and do not encompass wetlands, woodlands, or water. There were 205 acres of active landfills in the County in 1990, which are also included in this category. All active landfills had closed by 2000.*

^d *The reported size of the County decreased by 73 acres between 1990 and 2000 due to the use of more precise cadastral maps.*

Source: SEWRPC

Table 6.2
Equalized Value by Real Estate Class in Washington County: 2013 and 2016

Real Estate Class	Statement of Equalized Values 2013			Statement of Equalized Values 2016			Change in Equalized Value from 2013 to 2016	
	Land(\$)	Improvements (\$)	Total(\$)	Land(\$)	Improvements(\$)	Total(\$)	Number(\$)	Percent
Residential	2,956,586,700	6,802,046,800	9,758,633,500	3,230,890,400	7,574,390,700	10,805,231,100	1,046,647,600	10.7
Commercial	469,603,800	1,456,507,800	1,926,111,600	493,976,700	1,542,430,300	2,036,407,000	110,295,400	5.7
Manufacturing	62,363,100	351,438,600	413,801,700	82,211,500	393,048,100	475,259,600	61,457,900	14.9
Agricultural	24,636,700	--	24,636,700	24,624,000	--	24,624,000	12,700	-0.1
Undeveloped	38,788,800	--	38,788,800	39,064,000	--	39,064,000	275,200	0.7
Ag. Forest	40,244,500	--	40,244,500	38,411,200	--	38,411,200	1,833,300	-4.6
Forest	25,059,700	--	25,059,700	26,318,100	--	26,318,100	1,258,400	5.0
Other	50,724,000	125,937,800	176,661,800	47,326,800	129,582,800	176,909,600	247,800	0.1
Total	3,668,007,300	8,735,931,000	12,403,938,300	3,982,822,700	9,639,451,900	13,622,274,600	1,218,336,300	9.8

Source: Wisconsin Department of Revenue and SEWRPC

These trends indicate a demand for additional land to accommodate urban land uses in the County, especially for single-family residential and the transportation infrastructure that serves residential development. These trends also indicate a decreasing supply of land for agricultural use, which may pose challenges to satisfying the desire of County residents to preserve productive farmland while ensuring there is an adequate supply of land to accommodate the projected increase of approximately 22,700 households and 23,500 jobs that is expected in Washington County by 2050.

Land Price

Equalized value trends by real estate class in the County in 2013 and 2016 are set forth in Table 6.2. Residential properties experienced the greatest monetary increase in equalized value while manufacturing properties experienced the greatest proportional increases. Overall, the 10 percent increase in equalized value for the County between 2013 and 2016 was slightly larger than the 8 percent increase in equalized value Statewide over the same period.

Forest land and commercial properties in the County experienced moderate increases in value while agricultural forest land experienced a decrease of similar proportion. Agricultural land in the County also experienced a decrease in value, though very small. Despite this decrease in value, the sale price of agricultural land in the County that was to continue in agricultural use increased approximately 3 percent between 2010 and 2015.⁵⁶ This increase in sale price for the County's agricultural land that was to continue in agricultural use was small in comparison to the average land sale price of such land within the Southeastern Wisconsin Region (20 percent) or Statewide (39 percent).

Urban Service Areas

Urban service areas are identified in the regional land use plan based on the sanitary sewer service areas delineated in the regional water quality management plan.⁵⁷ Urban service areas are currently served, or have the capacity and are eventually planned to be served, by a public sanitary sewer system and public sewage treatment plant. These services allow for relatively dense residential, commercial, and industrial uses, which characterize urban areas. Urban service areas are also typically served by public water supply, public parks, local schools, and shopping areas.

All urban service areas include areas to which sewer and water services are not provided; however, sewer services are planned to be provided to all areas within an urban service area within a maximum 20-year period. Urban service areas and areas served by sanitary sewers in Washington County include the Cities of Hartford and West Bend; the Villages of Germantown, Jackson, Kewaskum, Newburg, and Slinger; and the unincorporated hamlet of Allenton in the Town of Addison, as shown on Map 9.1 in the Utilities and Community Facilities Element (Chapter 9).

⁵⁶ Data is derived from the Wisconsin Department of Revenue through real estate transfer returns. The transfer returns include information pertaining to the parties involved, size of the parcel, the predominant use of the land, and the sale price. The analysis of agricultural land prices includes only arm's length transactions; sales of agricultural land made under other than normal market conditions (such as family sales or foreclosures) are not included.

⁵⁷ Documented in the three-volume SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin, June 1979.

Portions of every urban service area in Washington County, except the Village of Newburg, are served by public water supply systems. Newburg residents and businesses rely on private wells as their water source.

Existing Land Uses – Washington County

Land uses in the County in 2015 are shown on Map 6.2 and quantitatively summarized in Table 6.3. Figure 6.1 illustrates a comparison of the percentage of land uses in each category. Map 6.2 reflects the actual use of land in 2015, rather than zoning or future planned land use. Planned land uses are shown in the Recommendations Element (Chapter 12).

The existing land use map is based on the SEWRPC land use inventory conducted in 2015. The land use inventory is intended to serve as a relatively precise record of land use for the entire Region. Aerial photographs serve as the primary basis for identifying existing land uses, augmented by field surveys as appropriate. The most recent land use inventory was based on digital ortho (aerial) photography taken in the spring of 2015.

Urban Land Uses

Urban land uses consist of residential; commercial; industrial; governmental and institutional; and transportation, communication, utility, and intensive recreational uses. As indicated in Table 6.3 and on Map 6.2, urban land uses encompassed about 59,338 acres, or about 21 percent of the County, in 2015.

Residential

Residential land comprised the largest urban land use category in the County, encompassing 30,812 acres, amounting to about 54 percent of all urban land or about 11 percent of the County in 2015. The land use inventory categorizes residential uses as single-family, two-family, and multifamily structures and mobile homes. Single-family homes occupied 29,001 acres or about 10 percent of the County in 2015. Of the land developed for residential uses, about 94 percent consisted of single-family residential uses. Higher-density single-family homes and two- and multifamily dwellings are concentrated in cities and villages with sewer service and in Allenton. Approximately 23 percent of the acreage in single-family residential use, or approximately 22 percent of the County's total residential land, was devoted to rural residential single-family development, which occurs at a net density of five acres or more per dwelling and is typically located in rural towns. Two-family dwellings and multifamily dwellings, which have three or more dwellings in a building, each accounted for approximately 0.3 percent of the County. Mobile homes occupied about 110 acres, or less than 0.05 percent of the County.



Residential land comprised the largest urban land use category in the County, encompassing 30,812 acres, or about 11 percent of the County in 2015.

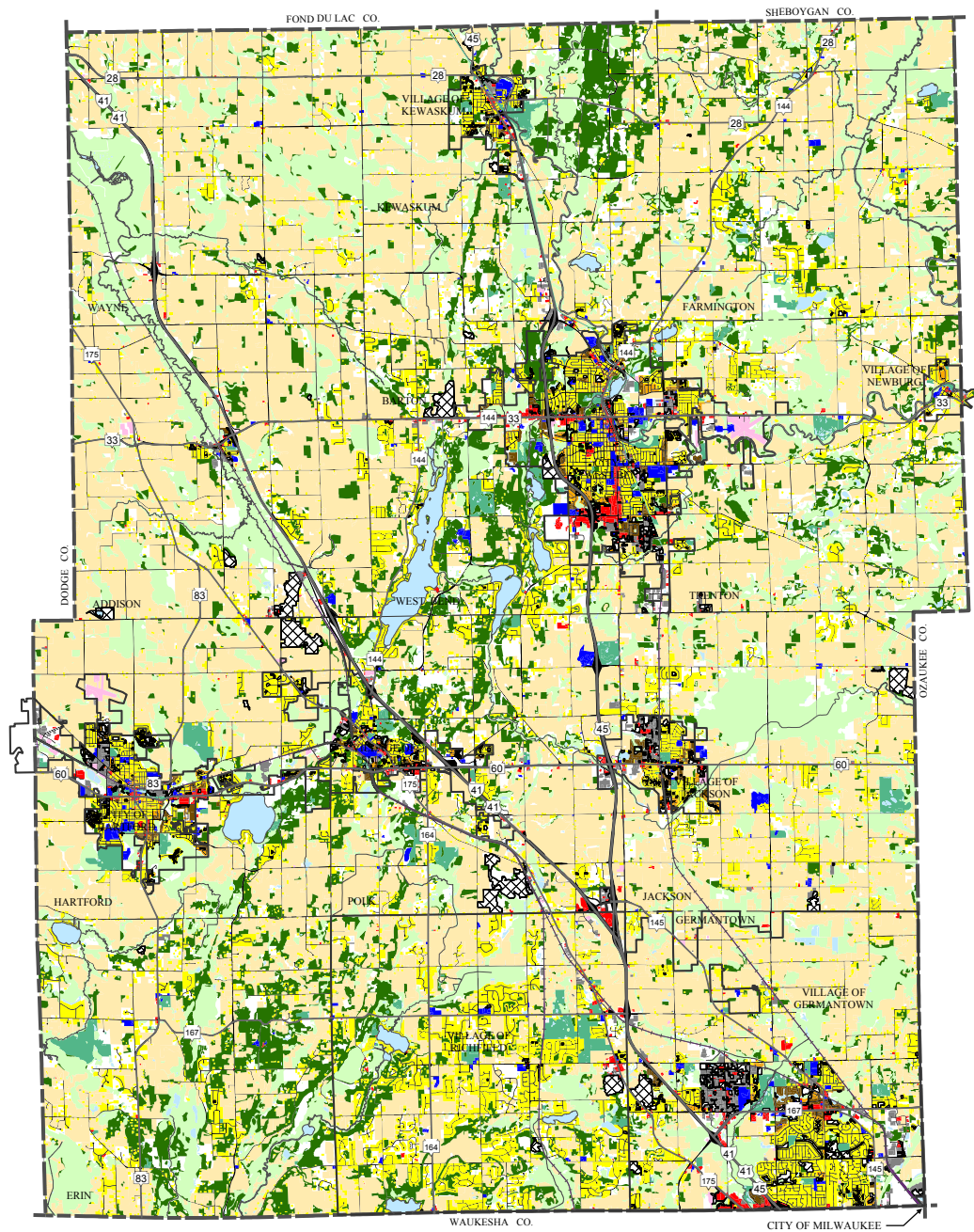
Commercial


















Commercial land encompassed about 1,834 acres, amounting to about 3 percent of all urban land or less than 1 percent of the County in 2015. Commercial development is concentrated in the County's urban service areas. The Cities of Hartford and West Bend, the Villages of Germantown, Jackson, Kewaskum, Newburg, and Slinger, and the hamlet of Allenton in the Town of Addison each have central business districts with concentrations of office, retail, and service establishments. Commercial development including retail and service establishments and offices are also concentrated along highways and arterial streets on the fringes of the aforementioned communities as well as within the Village of Richfield and the Town of West Bend. There is limited commercial development outside the established urban service areas with a few exceptions, such as the business district in the Village of Richfield.



Commercial land encompassed about 1,834 acres or less than 1 percent of the County in 2015.

Map 6.2
Existing Land Uses in Washington County: 2015



- | | | | | | |
|---|---|---|--|--|---|
|  | SINGLE-FAMILY RESIDENTIAL |  | COMMUNICATIONS, UTILITIES,
AND OTHER TRANSPORTATION |  | EXTRACTIVE |
|  | TWO-FAMILY RESIDENTIAL |  | GOVERNMENTAL
AND INSTITUTIONAL |  | UNUSED URBAN LANDS |
|  | MULTIFAMILY RESIDENTIAL
AND MOBILE HOMES |  | RECREATIONAL |  | UNUSED AND OTHER
OPEN LANDS (NONURBAN) |
|  | COMMERCIAL |  | WOODLANDS | | |
|  | INDUSTRIAL |  | WETLANDS | | |
|  | STREETS AND HIGHWAYS |  | SURFACE WATER | | |
|  | RAILROADS |  | AGRICULTURAL | | |

Source: SEWRPC

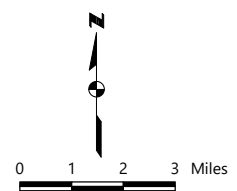


Table 6.3
Land Uses in Washington County: 2015

Land Use Category ^a	Area (acres)	Percent of Subtotal (Urban or Nonurban)	Percent of Total
Urban			
Residential			
Single-Family	29,001 ^b	50.4	10.4
Two-Family	764	1.3	0.3
Multifamily	937	1.6	0.3
Mobile Homes	110	0.2	-- ^c
Residential Subtotal	30,812	53.6	11.0
Commercial	1,834	3.2	0.7
Industrial	2,053	3.6	0.7
Transportation, Communications, and Utilities (TCU)			
Arterial Street Rights-of-Way	6,063	10.5	2.2
Nonarterial Street Rights-of-Way	9,514	16.5	3.4
Railroad Rights-of-Way	738	1.3	0.3
Communications, Utilities, and Other Transportation ^d	579	1.0	0.2
TCU Subtotal	16,894	29.4	6.1
Governmental and Institutional ^e	1,852	3.2	0.7
Recreational ^f	4,057	7.1	1.5
Unused Urban Lands ^g	1,836	3.1	0.7
Urban Subtotal	59,338	100.0	21.4
Nonurban			
Natural Resource Areas			
Woodlands	26,264	12.0	9.4
Wetlands	46,640	21.2	16.7
Surface Water	5,158	2.4	1.9
Natural Resources Subtotal	78,062	35.6	28.0
Agricultural	119,134	54.3	42.7
Extractive	1,518	0.7	0.5
Unused and Other Open Lands ^h	20,705	9.4	7.4
Nonurban Subtotal	219,419	100.0	78.6
Total	278,757	--	100.0

^a Parking included in associated use.

^b Includes 6,633 acres of rural residential single-family development, which has a net density of five acres or more per dwelling and is typically located outside urban areas.

^c Less than 0.05 percent.

^d Other Transportation includes bus depots, airports, truck terminals, and transportation facilities not classified as street or railroad rights-of-way.

^e Includes public and private schools, government offices, police and fire stations, libraries, cemeteries, religious institutions, hospitals, nursing homes, and similar facilities.

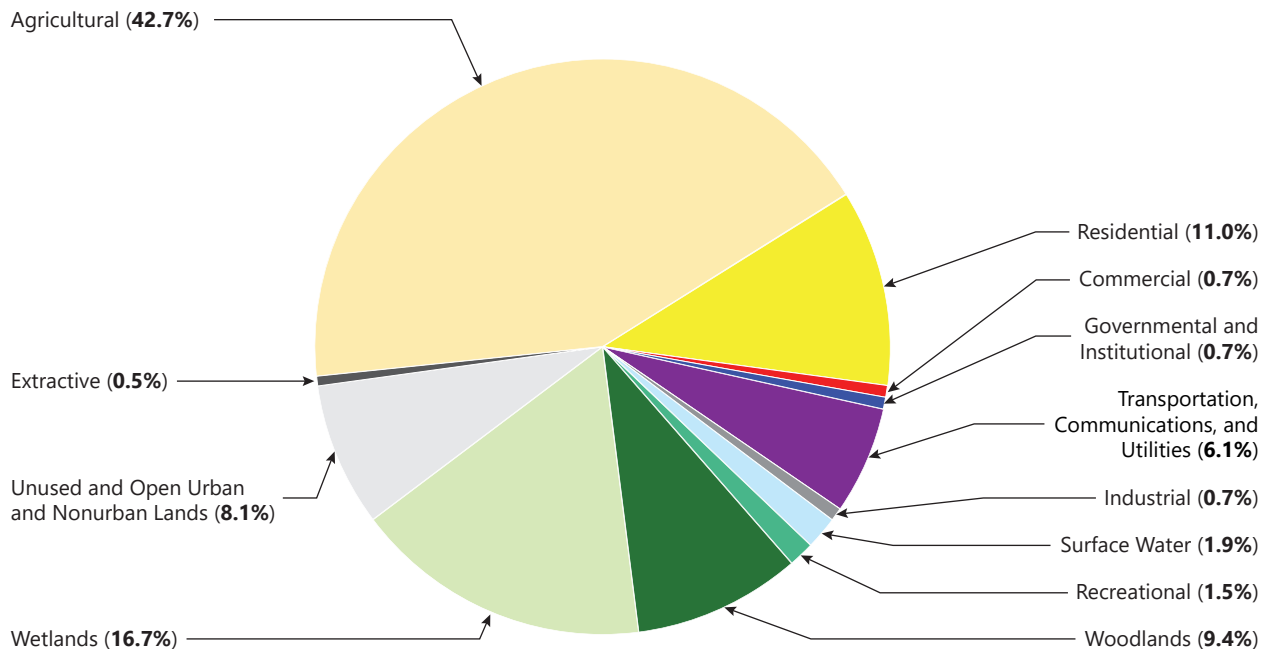
^f Includes only land that is intensively used for recreational purposes.

^g Unused urban lands are lands located within urban areas or adjacent to urban lands that are not utilized for an identifiable use.

^h Unused and other open lands in nonurban areas include lands in rural areas that are not utilized for agricultural purposes and do not encompass wetlands, woodlands, or water.

Source: SEWRPC

Figure 6.1
Existing Land Uses in Washington County: 2015



Industrial

Industrial land encompassed about 2,053 acres, amounting to about 4 percent of all urban land or less than 1 percent of the County in 2015. Much of the industrial land in the County is concentrated in business and industrial parks in cities and villages and on the west side of Allenton. Industrial sites are located outside of urban service areas on a limited basis. Business and industrial parks and other areas with concentrations of industrial land are generally located adjacent to arterial streets and highways to allow for good trucking and freight access. Table 10.10 and Map 10.2 in the Economic Development Element (Chapter 10) depict existing and proposed business and industrial parks in the County.



Much of the industrial land in the County is concentrated in business and industrial parks in cities and villages and on the west side of Allenton.

Transportation, Communication, and Utilities

Land used for transportation, utilities, and communications facilities comprised the second largest urban land use category in 2015. These uses encompassed about 16,894 acres, amounting to about 29 percent of all urban land or about 6 percent of the County. Streets and highways encompassed about 15,577 acres, or about 6 percent of the County, and railroad right-of-ways encompassed about 738 acres, or less than 1 percent of the County.



Land used for transportation, communication, and utilities comprised the second largest urban land use category in 2015, encompassing about 6 percent of the County.

source of fuel and had a total net generating capacity of 345 megawatts as of 2012. Additional information about utility uses and facilities is presented in the Utilities and Community Facilities Element (Chapter 9).

Governmental and Institutional

Land used for government and institutional uses encompassed about 1,852 acres, amounting to about 3 percent of all urban land or less than 1 percent of the County in 2015. Governmental and institutional lands in the County generally include the County Courthouse, Public Agency Center, and the Corrections Building in the City of West Bend; the County Highway Department garages in the City of West Bend and Village of Slinger; municipal halls and other municipal facilities; post offices; public and private schools; libraries; colleges; hospitals and other special medical centers; and cemeteries. Information about these government and institutional uses and facilities is presented in the Utilities and Community Facilities Element (Chapter 9).



Land used for government and institutional uses encompassed about 1,852 acres, or less than 1 percent of the County in 2015.

Recreational

Intensively used recreational land encompassed about 4,057 acres, amounting to about 7 percent of all urban land or almost 2 percent of the County in 2015. Intensively used recreational land only includes parks or portions of parks that have been developed with facilities such as playgrounds, major trails, tennis courts, baseball diamonds, soccer fields, and other playfields. A more detailed inventory of park and open space sites in the County is included in the Agricultural, Natural, and Cultural Resources Element (Chapter 5).



Intensively used recreational land encompassed about 4,057 acres, or about 2 percent of the County in 2015.

Nonurban Land Uses

Nonurban land uses consist of agricultural lands; natural resource areas, including surface waters, wetlands, and woodlands; extractive sites; and unused and other open lands. As indicated in Table 6.3 and on Map 6.2, nonurban land uses encompassed about 219,419 acres, amounting to about 79 percent of the County in 2015.

Agricultural Lands

Agriculture was the predominant land use in the County in 2015. Agricultural lands encompassed 119,134 acres, amounting to about 54 percent of nonurban land uses or about 43 percent of the County. Most of the County's agricultural land is located outside of urban service areas within the Towns of Addison, Farmington, Germantown, Hartford, Jackson, Polk, Trenton, and Wayne and the northern portions of the Town of Barton and the Village of Germantown. Agricultural lands include all croplands, pasture lands, orchards, nurseries, and nonresidential farm buildings. A more detailed inventory of agricultural land in the County is included in the Agricultural, Natural, and Cultural Resources Element (Chapter 5).



Agricultural land was the predominate land use in the County in 2015. It encompassed 43 percent of the County.

Natural Resource Areas

Natural resource areas consisting of surface water, wetlands, and woodlands combined to encompass 78,062 acres, amounting to about 36 percent of nonurban land uses or about 28 percent of the County in 2015. Natural resource areas are located throughout the County, in both rural areas and within established urban service areas. A complete inventory of natural resource areas is included in the Agricultural, Natural, and Cultural Resources Element (Chapter 5).



Natural resource areas combined encompass 78,062 acres, or about 28 percent of the County in 2015.

Extractive Sites

Extractive sites encompassed about 1,518 acres, or less than 1 percent of the County in 2015. There were nine operational nonmetallic mining sites in the County in 2015, which have been inventoried and mapped in the Agricultural, Natural, and Cultural Resources Element (Chapter 5). Nonmetallic mining includes the extraction of sand, gravel, stone, and peat.



There were nine operational nonmetallic mining sites in the County in 2015.

Unused and Other Open Lands

Unused and other open lands encompassed about 20,705 acres, amounting to about 9 percent of nonurban land or about 7 percent of the County in 2015. Unused and other open lands in nonurban areas include lands in rural areas that are not utilized for agricultural purposes and do not encompass wetlands, woodlands, or water. Examples of such lands include undeveloped portions of park sites, excess transportation rights-of-way, lots that have been platted but not yet developed, subdivision outlots, and undeveloped portions of commercial and industrial lots in nonurban areas.

Former Landfills and Contaminated Sites

Former Landfills

There are no active landfills in Washington County. As of 2016, the Wisconsin Department of Natural Resources (WDNR) had identified 78 former landfills in Washington County in the State registry of waste disposal sites. Former landfill sites are listed in Table 6.4 and shown on Map 6.3, and encompass over 400 acres. The WDNR uses a number of sources to identify former landfills, including State databases of registered landfills and demolition disposal permits. The WDNR Historic Registry of Waste Disposal Sites includes active, inactive, and abandoned sites where solid or hazardous wastes were known or likely to have been disposed. The inclusion of a site does not mean that environmental contamination has occurred, is occurring, or will occur in the future, but is intended to serve as a general informational source for the public and County and local officials regarding the location of waste disposal sites.

Contaminated Sites

The WDNR Bureau for Remediation and Redevelopment identifies and monitors contaminated sites. Contaminated sites include leaking underground storage tank (LUST) sites and environmental repair (ERP) sites. A LUST site has soil and/or groundwater contaminated with petroleum, which includes toxic and cancer causing substances. Over time, petroleum contamination naturally breaks down in the environment through biodegradation. This may result in some LUST sites emitting potentially explosive vapors. An ERP site is a site other than a LUST site that has contaminated soil and/or groundwater. Examples include industrial spills (or dumping) that require long-term investigation, buried containers of hazardous substances, and closed landfills that have caused contamination. ERP sites also include areas with petroleum contamination from above-ground (but not from underground) storage tanks. The WDNR identified 41 contaminated sites in 2016 that were being monitored. Sites in Washington County are listed in Table 6.5 and shown on Map 6.4.

Table 6.4
Former Landfill Sites in Washington County: 2016

Number on Map 6.3	Site Name	Location (Local Government)	Size (acres)
1	Town of Addison Landfill	Town of Addison	2.6
2	Wisconsin Department of Natural Resources (WDNR) Deer Pit	Town of Addison	0.1
3	Albert Luff Property	Town of Barton	1.3
4	Alden J. Belongia	Town of Barton	0.6
5	Len Dricken Property	Town of Barton	0.2
6	Walters Carpeting Store	Town of Barton	0.4
7	West Bend Sand and Gravel Company	Town of Barton	0.2
8	Town of Erin Dump/Earl Matter Gravel Pit	Town of Erin	4.4
9	Lazy Days Campground Inc.	Town of Farmington	1.2
10	Lazy Days Campground Inc.	Town of Farmington	1.0
11	Town of Farmington Landfill	Town of Farmington	4.8
12	Town of Farmington Landfill	Town of Farmington	-- ^a
13	Town of Farmington Landfill	Town of Farmington	-- ^a
14	George Strobel Farm	Town of Hartford	3.0
15	Leo Guelig Landfill	Town of Hartford	1.6
16	Pike Lake State Park	Town of Hartford	0.7
17	Bales Dump	Town of Jackson	0.8
18	Friedens Church Landfill	Town of Jackson	1.4
19	Lannon Stone Products Quarry/Jackson Cement Concrete Company	Town of Jackson	0.2
20	Lavern Remich	Town of Jackson	-- ^a
21	Town of Jackson Landfill	Town of Jackson	0.3
22	WDNR	Town of Jackson	7.4
23	Town of Kewaskum Landfill	Town of Kewaskum	4.5
24	Acme Disposal - Waste Management #307	Town of Polk	10.0
25	Ferdinand Andes Landfill	Town of Polk	0.2
26	Leroy Schmidt Dump	Town of Polk	8.9
27	Roland Koester Landfill	Town of Polk	0.6
28	Town of Polk (Lewis Property) #951	Town of Polk	1.0
29	Jeff Schneiss Property	Town of Trenton	0.2
30	McGraw Edison Company (Permaline)	Town of Trenton	1.0
31	Town of Trenton	Town of Trenton	1.3
32	Town of Trenton	Town of Trenton	3.7
33	Freeman Chem (Holzman Property)	Town of Wayne	23.4
34	Freeman Chem (Martin Property)	Town of Wayne	3.1
35	Town of Wayne	Town of Wayne	1.1
36	Town of Wayne	Town of Wayne	2.5
37	Clarks Tree Service (Wood)	Town of West Bend	0.4
38	Edward Martinson Property	Town of West Bend	1.0
39	Not available	Town of West Bend	-- ^a
40	Town of West Bend	Town of West Bend	3.8
41	Leroy Schmidt (Merqt Pit)	Village of Germantown	3.7
42	Merget Sand & Gravel Landfill	Village of Germantown	3.3
43	Omega Hills North Landfill/Waste Management of Wisconsin	Village of Germantown	171.4
44	Richard Brandt Property	Village of Germantown	3.1
45	Schreiner Landfill	Village of Germantown	-- ^a
46	Tom Reblin	Village of Germantown	-- ^a
47	Village of Germantown	Village of Germantown	-- ^a
48	Walterlin Construction Company	Village of Germantown	2.4
49	Village of Kewaskum Landfill	Village of Kewaskum	0.3
50	W.H. Voigt Property	Village of Newburg	2.3
51	Baumgartner Dump	Village of Richfield	0.3
52	Chris Beimel Landfill	Village of Richfield	2.1
53	Frank Licitar	Village of Richfield	-- ^a
54	Loosen Farm	Village of Richfield	-- ^a
55	Village of Richfield Landfill ^b	Village of Richfield	2.7

Table continued on next page.

Table 6.4 (Continued)

Number on Map 6.3	Site Name	Location (Local Government)	Size (acres)
56	Earl Indermuehle	Village of Slinger	0.5
57	Miller Brewery - Kratz Property	Village of Slinger	0.6
58	Slinger Foundry (Fillman Property)	Village of Slinger	16.8
59	Slinger Foundry (250 Hartford Road)	Village of Slinger	-- ^a
60	Slinger Foundry Landfill	Village of Slinger	6.2
61	Village of Slinger (280 Cedar Creek Road)	Village of Slinger	-- ^a
62	Washington County Highway Department Landfill	Village of Slinger	0.7
63	City of Hartford Landfill	City of Hartford	19.6
64	City of Hartford Landfill	City of Hartford	-- ^a
65	George Borst III	City of Hartford	-- ^a
66	Hofmaier Tire Center	City of Hartford	-- ^a
67	Maurice Gahlman Jr. Property	City of Hartford	2.4
68	Walter Ise Property	City of Hartford	2.3
69	City of West Bend	City of West Bend	1.7
70	City of West Bend Incinerator	City of West Bend	10.7
71	David Bohn Landfill	City of West Bend	0.1
72	Gehl Company Pit	City of West Bend	0.6
73	Glen Peters Landfill	City of West Bend	2.4
74	Joseph Mrazek Property	City of West Bend	0.8
75	Otten Property Landfill	City of West Bend	6.3
76	Peter Pirsch and Sons (Groth)	City of West Bend	3.0
77	Richard Sander Property	City of West Bend	2.9
78	City of West Bend Sanitary Landfill	City of West Bend	27.6
Total – 78 sites			-- ^c

^a Area not provided in WDNR Registry.

^b Referred to as the Town of Richfield Landfill in the WDNR Registry.

^c Total of 395.7 acres reported, plus an unknown acreage in 13 sites whose area is not included in the WDNR Registry.

Source: Wisconsin Department of Natural Resources Historic Registry of Waste Disposal Sites and SEWRPC

Opportunities for Redevelopment

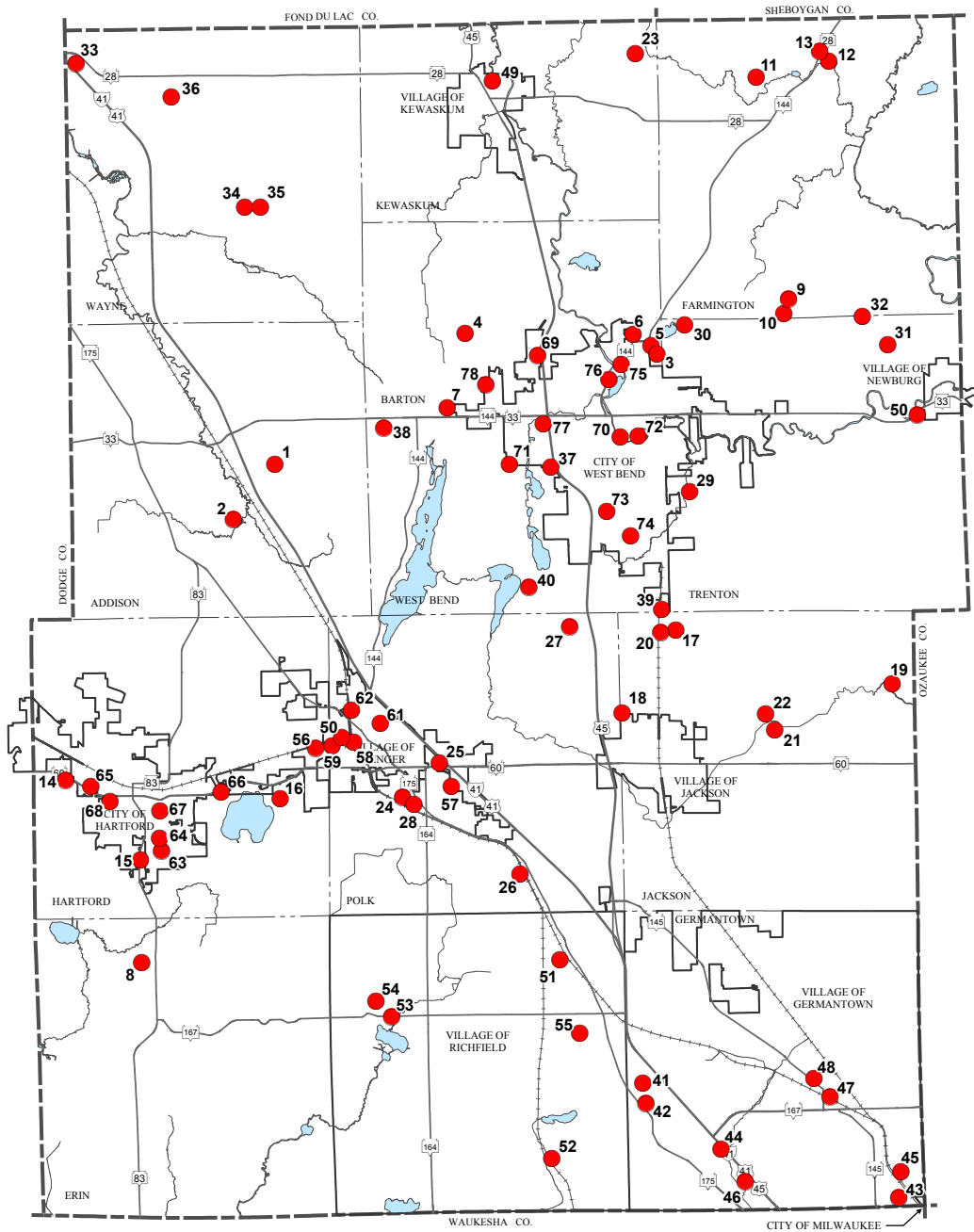
The greatest opportunities for redevelopment in the County exist where there is available land served by existing infrastructure, typically in the older and underutilized commercial buildings and parcels located in and adjacent to the traditional downtowns, and older shopping centers located in cities and villages. Downtown redevelopment efforts in recent years may be most notable in the Cities of Hartford and West Bend. Several such economic development efforts and other programs that can help to facilitate downtown commercial district rehabilitation are inventoried in the Economic Development Element (Chapter 10).

Additional opportunities for commercial, mixed-use, multifamily, or light industrial redevelopment may occur on environmentally contaminated sites, which are identified on Map 6.4 and in Table 6.5. The WDNR administers a number of brownfield redevelopment grant programs that can assist communities and developers with redevelopment efforts. A grant from one such program, the U.S. EPA Brownfield Redevelopment Program, was awarded to a coalition including the County, the Cities of Hartford and West Bend, and the Villages of Jackson, Richfield, and Slinger, and is described in Chapters 2 and 10. Through 2016, the program has helped coalition communities promote the redevelopment of environmentally contaminated sites within the County by conducting Phase I and Phase II environmental site assessments, completing remedial action and/or redevelopment plans, and performing community outreach and education related to redevelopment opportunities for several environmentally contaminated sites, identified in Table 10.13 in Chapter 10.

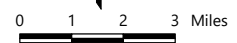
Existing and Potential Land Use Conflicts

Land use conflicts between communities in the County are most common in town areas directly adjacent to cities and villages. Conflicts arise as towns allow or plan for residential development near city and village borders at densities that are not cost efficient for cities and villages to provide with urban services, at such time as the city or village might annex that part of the town. Conversely, conflicts arise as cities and villages

Map 6.3
Former Landfill Sites in Washington County: 2016



- FORMER LANDFILL SITE
- 15** REFERENCE NUMBER
(SEE TABLE 6.4)
- SURFACE WATER



Source: Wisconsin Department of Natural Resources and SEWRPC

Table 6.5
Contaminated Sites in Washington County: 2016

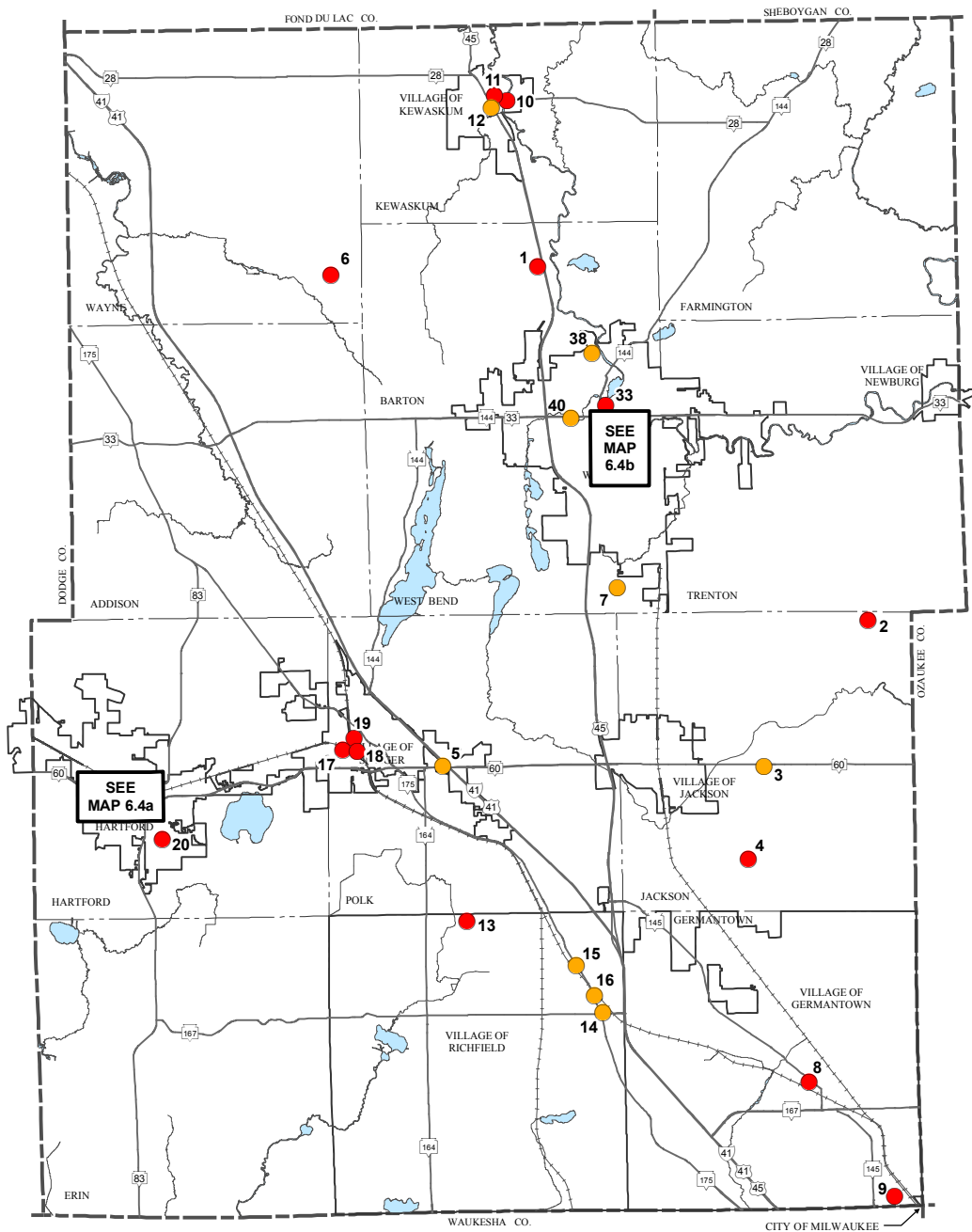
Number on Map 6.4	Name	Location	Activity Type ^a
1	Town of Barton Weasler Engineering	7801 USH 45 N	ERP
2	Town of Jackson Quincy Containers (Former)	869 CTH NN	ERP
3	Town of Jackson Garage	3685 Division Road	LUST
4	West Shore Pipe Line – Grandville North Pipe Line	Between 1880 and 1836 Western Avenue	ERP
5	Town of Polk WisDOT – 4350 STH 60	4350 STH 60	LUST
6	Town of Wayne Hahn Sky Ranch (Former)	5045/5121 CTH D	ERP
7	Town of West Bend Tri-Par Service	5105 CTH P	LUST
8	Village of Germantown Gehl Foods Inc.	N116 W15970 Main Street	ERP
9	Waste Management of Wisconsin – Omega Hills Landfill	N96 W12730 County Line Road	ERP
10	Village of Kewaskum 347 Main Street	347 Main Street	ERP
11	Herriges Oil Bulk Plant – South	215 Railroad Street	ERP
12	Kewaskum Living Waters Church	100 Clinton Street	LUST
13	Village of Richfield Gerald Lofy	4167 Pioneer Road	ERP
14	Goetz Garage	1704 STH 175	LUST
15	Kosterman Parcel ^b	2099 STH 175	LUST
16	Laubenheimers Garage ^b	1860 STH 175	LUST
17	Village of Slinger 203 Hartford Road West Parcel	203 Hartford Road	ERP
18	E. H. Wolf Warehouse Property East Parcel ^b	Kettle Moraine Drive	ERP
19	Niphos Coatings Inc. (Former) ^b	308 Oak Street	ERP
20	City of Hartford City of Hartford	Wilson Drive and East Monroe Avenue	ERP
21	NW Corner Parcel – South Street and Branch Street	158 Branch Street	ERP
22	Jerrys Dry Cleaning (Former)	28 S. Main Street	ERP
23	Menasha Packaging Hartford Plant	621 N. Wacker Drive	LUST
24	N. Bookend Redevelopment Site – Parcel H ^b	217 N. Main Street	ERP
25	N. Bookend Redevelopment Site – Parcel E ^b	212 N. Johnson Street	ERP
26	N. Bookend Redevelopment Site – Parcel F ^b	207 N. Main Street	ERP
27	N. Bookend Redevelopment Site – Parcel D ^b	37 W. State Street	ERP
28	City of West Bend Clothes Clinic Laundry Site	712 W. Washington Street	ERP
29	Cooleys Inc.	117 Wisconsin Street	LUST
30	Decorah Shopping Center Annex	1011-1025 S. Main Street	ERP
31	EIS Brake Parts	133 Oak Street	ERP
32	Fields Furniture (Former)	150 Veterans Avenue	ERP
33	West Bend Co. (Former) – Area 1	611 Veterans Avenue	ERP
34	West Bend Co. (Former) – TIF Parcel #5 ^b	134 Wisconsin Street	ERP
35	Gehl Parking Lot/Standard Oil (Former) ^b	134 Wisconsin Street	LUST
36	O'Connor Oil Bulk Plant	108 West Decorah Road	LUST
37	Ol' Tyme Cleaners	910 S. Main Street	ERP
38	Robot Car Wash	1975 N. Main Street	LUST
39	TIF District #12 – Gehl Co. (Former)	143 Water Street	LUST
40	Tri-Par Oil Co.	1613 Washington Avenue	LUST
41	West Bend Co. (Former) – TIF Parcel #8	107 W. Water Street	ERP

^a Includes Environmental Repair (ERP) sites and Leaking Underground Storage Tank (LUST) sites.

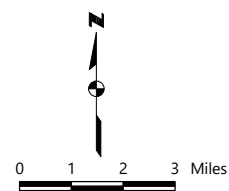
^b This site is currently undergoing remediation through Washington County's Site Redevelopment Program (SRP), which is described in Existing Plans and Ordinances (Chapter 2).

Source: Wisconsin Department of Natural Resources and SEWRPC

**Map 6.4
Contaminated Sites in Washington County: 2016**



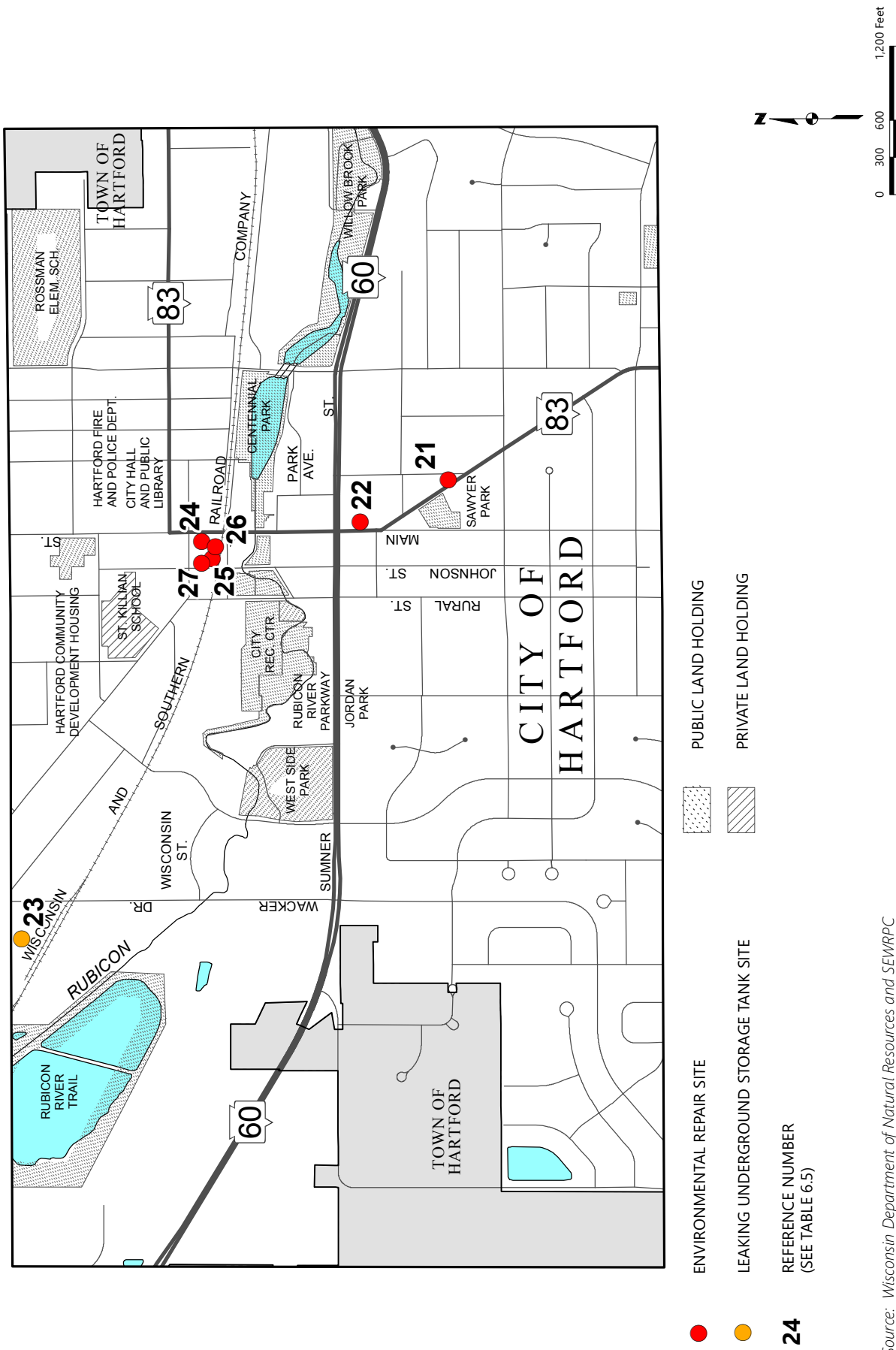
- ENVIRONMENTAL REPAIR SITE
- LEAKING UNDERGROUND STORAGE TANK SITE
- 4** REFERENCE NUMBER (SEE TABLE 6.5)
- SURFACE WATER



Source: Wisconsin Department of Natural Resources and SEWRPC

Map 6.4a

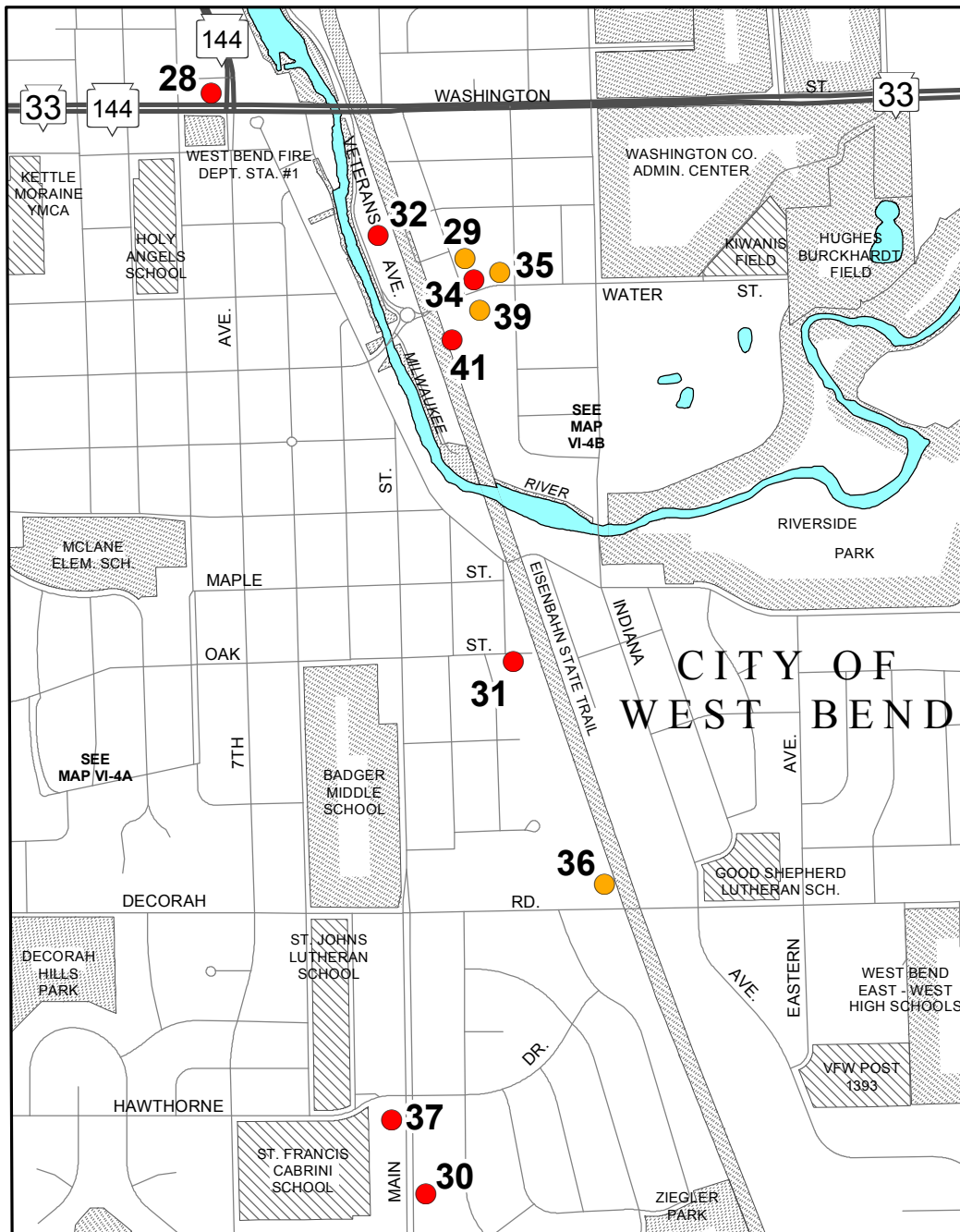
Contaminated Sites in the City of Hartford: 2016



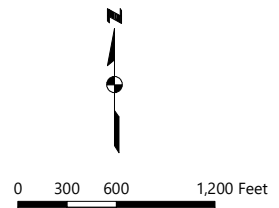
- ENVIRONMENTAL REPAIR SITE
- LEAKING UNDERGROUND STORAGE TANK SITE
- 24** REFERENCE NUMBER (SEE TABLE 6.5)

Source: Wisconsin Department of Natural Resources and SEWRPC

Map 6.4b
Contaminated Sites in the City of West Bend: 2016



- ENVIRONMENTAL REPAIR SITE
- LEAKING UNDERGROUND STORAGE TANK SITE
- PUBLIC LAND HOLDING
- PRIVATE LAND HOLDING
- 32** REFERENCE NUMBER
(SEE TABLE 6.5)



Source: Wisconsin Department of Natural Resources and SEWRPC

review and deny proposed subdivisions within extraterritorial plat review areas, which prevents residential development in the towns. A boundary agreement between a town and an adjacent city or village may help address conflicts between towns and adjacent municipalities.⁵⁸

6.3 FRAMEWORK FOR DEVELOPING THE COUNTY LAND USE PLAN MAP

Inclusion of City, Town, and Village Plans in the County Plan

Section 59.69(3)(b) of the *Wisconsin Statutes* explicitly requires that a county development (comprehensive) plan include, without change, the master (comprehensive) plan of a city or village adopted under Section 62.23(2) or (3), and the official map adopted by a city or village under Section 62.23(6) of the *Statutes*. Section 59.69(3)(e) of the *Statutes* further provides that a master plan or official map adopted by a city or village under Section 62.23 “shall control” in unincorporated areas of a county; however, Section 59.69(3)(e) does not specifically require that city and village plans for their extraterritorial areas be included in the County comprehensive plan. Planning areas included in city and village comprehensive plans are shown on Map 6.5.

The *Statutes* provide clear guidance that a county plan need not include city and village plans for extraterritorial areas where a county has established a regional planning department. In that case, Section 62.23(2) provides “that in any county where a regional planning department has been established, areas outside the boundaries of a city⁵⁹ may not be included in the (city) master plan without the consent of the county board of supervisors.” During the preparation of the initial multi-jurisdictional comprehensive plan, the Washington County Attorney determined that the County Planning and Parks Department is a “regional planning department.” Based on that determination, the County land use plan map does not include city and village land use plan designations for areas outside city or village boundaries.⁶⁰ The only exceptions are areas identified in the boundary agreement between the Town of West Bend and City of West Bend as areas that will be annexed over time into the City and areas identified in the mediated cooperative plan agreement between the Village of Jackson and the Town of Jackson to be attached to the Village of Jackson. Land use designations from the City of West Bend land use plan map and the Village of Jackson preliminary land use plan map are included on the County plan map for those areas.

On August 10, 2004, the Washington County Board of Supervisors adopted 2004 Resolution 35, which established criteria regarding the incorporation of town land use plans into the County Land Use Element, including the land use plan map, of the Washington County comprehensive plan. The resolution states that the County will accept a Town land use plan if the plan is in “substantial agreement” with the objectives, principles, and standards of the regional land use plan prepared and adopted by SEWRPC. The Planning, Conservation, and Parks Committee (PCPC)⁶¹ of the County Board was assigned the responsibility for determining if each town plan was in substantial agreement with the regional land use plan, based on a recommendation from SEWRPC. The Public Works Committee reviewed each Town land use plan map for this plan update to determine if it could be considered in “substantial agreement” with the regional land use plan by meeting the following key recommendations of the regional plan:

1. Primary environmental corridors should be recommended for preservation in accordance with the guidelines set forth in the regional plan, which are listed in Table 2.1 in Chapter 2. The regional plan recommends the preservation of primary environmental corridors throughout the seven-county region. As shown in Table 2.1, specified limited uses, including residential development at a density of

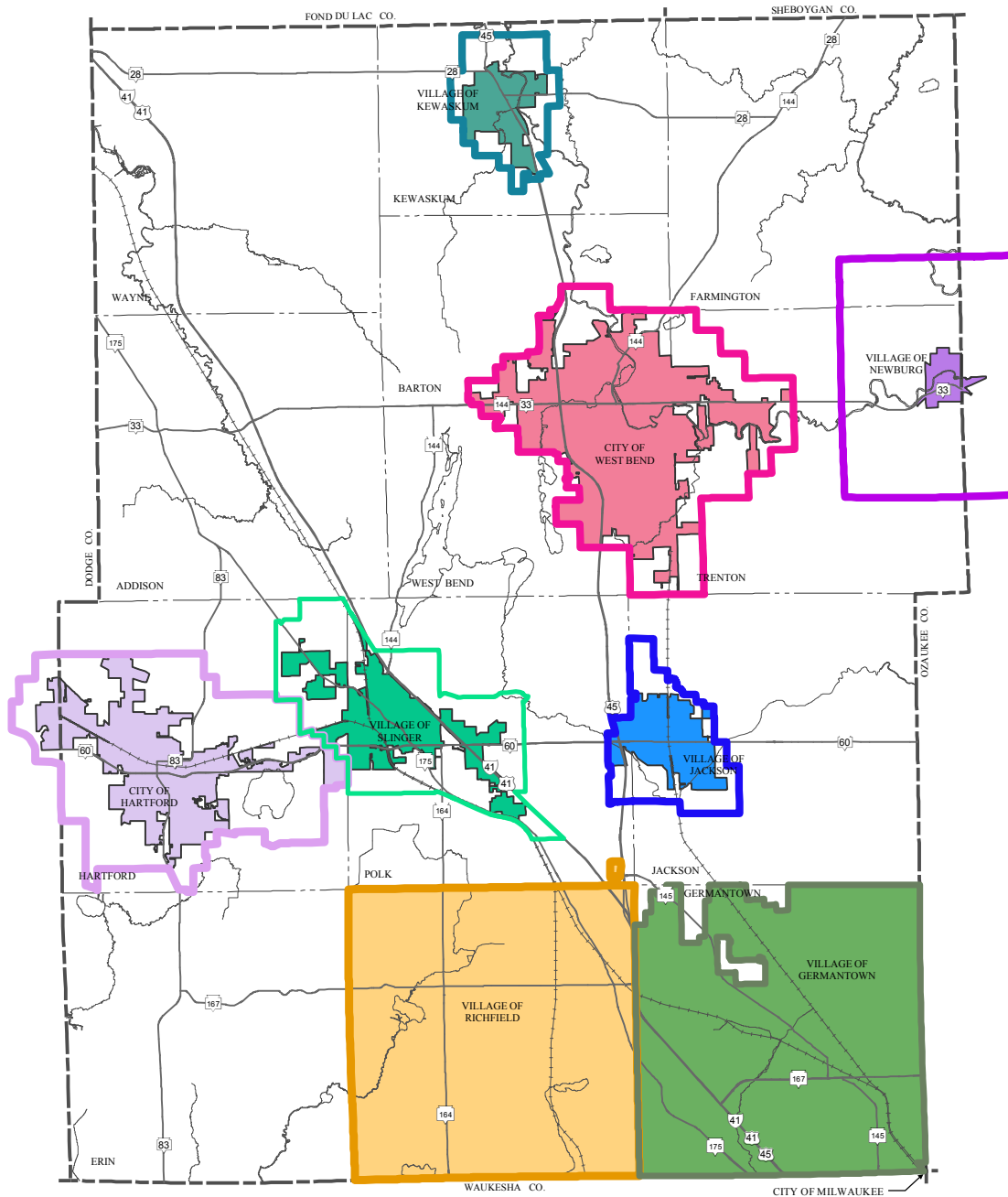
⁵⁸ *The Wisconsin Statutes grant cities and villages the authority to approve or deny subdivision plats within 1.5 miles of villages and cities of the fourth class, and within three miles of cities of the first, second, or third class (the Cities of Hartford and West Bend are cities of the third class). Cities and villages may also enact extraterritorial zoning regulations for their extraterritorial areas, but must work with the affected town to develop and approve such regulations. See Appendix C for additional information on extraterritorial authorities.*

⁵⁹ *In accordance with Section 61.35 of the Statutes, the same provisions apply to villages.*

⁶⁰ *Land use plan maps adopted by cities and villages in the County (including preliminary draft updates for the Villages of Jackson and Kewaskum) as of January 24, 2019, are included in the Intergovernmental Cooperation Element (Chapter 11) to the full extent of the city or village planning area. Town land use plan maps are also included in Chapter 11.*

⁶¹ *The Land Use and Planning Committee has assumed the duties of the former Planning, Conservation, and Parks Committee (PCPC).*

Map 6.5
Planning Areas Used in Adopted City and Village Comprehensive Plans in Washington County: 2016

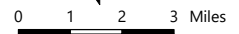


PLANNING AREA BOUNDARY

- | | | | |
|--|---|--|--|
| | VILLAGE OF GERMANTOWN
(Comprehensive Plan: 2020) | | VILLAGE OF SLINGER
(Comprehensive Plan: 2040) |
| | VILLAGE OF JACKSON
(See Note) | | VILLAGE OF RICHFIELD
(Comprehensive Plan: 2033) |
| | VILLAGE OF KEWASKUM
(Comprehensive Plan: 2035) | | CITY OF HARTFORD
(Planned Sewer Service Area:
Approved 9/2006) |
| | VILLAGE OF NEWBURG
(Comprehensive Plan: 2035) | | CITY OF WEST BEND
(Comprehensive Plan: 2020) |

Notes: A mediated cooperative plan agreement between the Village of Jackson and the Town of Jackson was approved by the Wisconsin Department of Administration in May 2018. Boundary changes resulting from the agreement have been incorporated into the County land use plan map (Map 12.1) presented in the Recommendations Element (Chapter 12).

The planning area for the Village of Slinger reflects the plan update adopted in November 2017.



Source: Local Governments and SEWRPC

no more than one housing unit per five acres in upland portions of primary environmental corridors, located outside natural areas and critical species habitat sites, are considered compatible with protection of the corridors, provided that buildings are kept off steep slopes. The regional plan also recommends that county and local governments consider protecting isolated natural resource areas as well, exercising the discretion of the county or local governing body in so doing. For the County plan, the Land Use and Planning Committee has determined that primary environmental corridors and isolated natural resource areas should be protected.

2. Urban-density development should occur within and adjacent to the urban service areas identified in the regional plan. Urban development proposed within one-half mile of a planned sewer service area was considered, for this review, to be in substantial agreement with the regional plan. This flexibility is consistent with a recognition in the regional plan that sewer service areas may be adjusted from time-to-time to meet urban land market and other conditions.
3. Development outside planned urban service areas should be limited to agricultural uses; rural residential uses at a density of no more than one home per five acres; and limited areas of highway-related services and commercial and industrial development to serve farmers, rural residents, and the traveling public. A town plan was considered to be in substantial agreement with the regional land use plan if the average proposed residential density of the town outside the expanded urban service area was no more than one home per five acres, or if no more than about 20 percent of the town outside the expanded urban service area is proposed to be developed for urban uses. The “expanded urban service area” refers to the planned sewer service area plus a one-half mile buffer.

The regional land use plan also recommends preserving prime agricultural lands outside planned urban service areas. Criteria to identify farmland preservation areas in Washington County were established as part of the farmland preservation planning process conducted by the County from 2011 to 2013. The updated farmland preservation plan was approved by the County Board and incorporated into the previous edition of this comprehensive plan as Appendix T as part of Amendment 2013-02. Town plans were considered to be in substantial agreement with the regional plan if they were consistent with the update to the Washington County farmland preservation plan. Both the Farmland Preservation and General Agricultural land use categories were considered when determining substantial agreement with the regional land use plan recommendation to preserve prime agricultural land. All Town plans were reviewed by SEWRPC at the time that Amendment 2013-1 was prepared and were found to be in substantial agreement with the regional land use plan. Town plans that were updated through the County multi-jurisdictional comprehensive plan update process have also been found to be in substantial agreement with the regional plan and are incorporated into the updated County land use plan map in the Recommendations Element (Chapter 12).

Background Data and Maps

Chapters 2 through 10 provide background data and maps used to help design the County land use plan map. In addition to the detailed information and inventories included in those chapters, the comprehensive planning law requires that the following maps be included in the Land Use Element:

- ***Productive Agricultural Soils***

Washington County conducted an analysis to identify land that may be most suitable for long-term agricultural use as part of the Farmland Preservation Plan adopted in 2013. Soil type, quality, and productivity were considered in the analysis. County and local governments reviewed the resulting draft farmland preservation areas (FPAs), depicted on Map T-7 of the County farmland preservation plan. FPAs formally adopted as part of the plan, which do not include all of the draft FPAs, are depicted on Map 2.2 in Chapter 2 of this report. Additional information about the farmland preservation plan is provided in the Agricultural, Natural, and Cultural Resources Element (Chapter 5).

- ***Natural Limitations to Building Site Development and Environmentally Sensitive Lands***

Natural resources and features within the County are also identified in the Agricultural, Natural, and Cultural Resources Element (Chapter 5). These features were reviewed by the local government partners and the Comprehensive Planning Advisory Committee when the first edition of this plan was prepared. Several natural resource features that may limit development were included on a map, “Natural Limitations to Building Site Development in Washington County,” based on approval of the

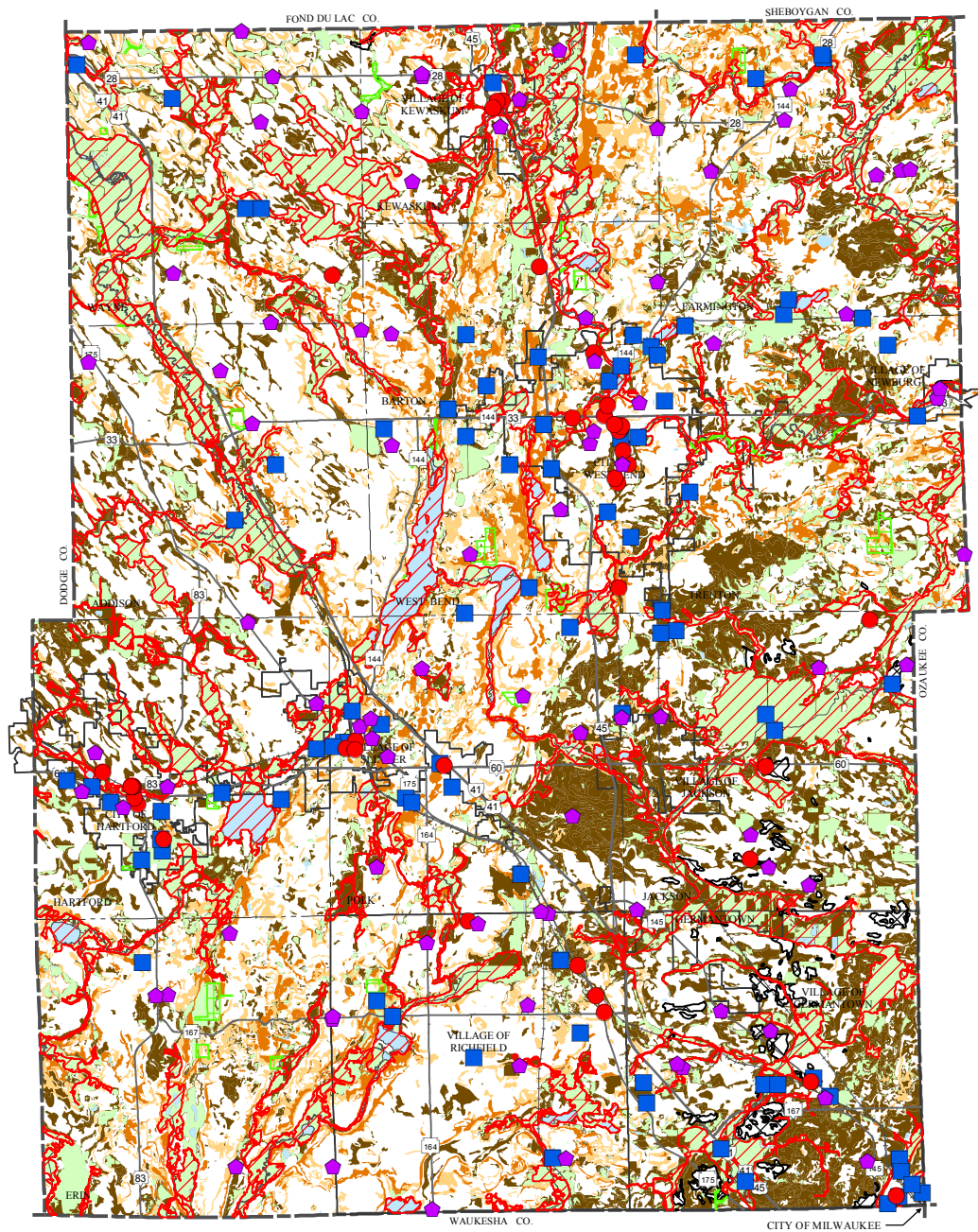
Advisory Committee for the first edition of this plan. An update to that map, Map 82 in the first edition of this plan, is shown on Map 6.6. The map features include one-percent-annual-probability (100-year recurrence interval) floodplains, bedrock within three feet of the surface, slopes of 12 percent or greater, wetlands, hydric soils, and surface water. Additional constraints to development, or special circumstances that must be carefully addressed when a parcel is developed, such as conservation easements, cemeteries, environmentally contaminated sites, and former landfills, are also included on Map 6.6. All of these conditions affect the construction costs of urban development, and may limit the location of buildings, pavement, utilities, and private onsite wastewater treatment systems (POWTS). In some cases, particularly in wetlands and floodplains, State regulations and County ordinances will also affect site development.












Environmentally sensitive lands are shown on Map 6.7, and include primary environmental corridors, isolated natural resource areas, natural areas, critical species habitat sites, surface water, wetlands, woodlands, and one-percent-annual-probability floodplains. Recommendations for the protection and management of these resources can be found in the Recommendations Element (Chapter 12).

- ***Utilities and Community Services***

The comprehensive planning law requires the Land Use Element to include maps showing boundaries of areas to which public utility and community services will be provided by the plan design year. Such maps are included in the Utilities and Community Facilities Element (Chapter 9).

Map 6.6 Natural Limitations to Building Site Development in Washington County

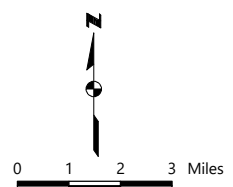


- | | | | |
|---|--|---|---|
|  | CEMETERIES (2015) |  | SLOPES 12 TO 20 PERCENT (2016) |
|  | ENVIRONMENTALLY CONTAMINATED SITES (2016) |  | SLOPES GREATER THAN 20 PERCENT (2016) |
|  | FORMER LANDFILLS (2016) |  | WETLANDS (2015) |
|  | ONE-PERCENT-ANNUAL-PROBABILITY (100-YEAR RECURRENCE INTERVAL) FLOODPLAINS (FEMA FIS, OCTOBER 2015) |  | HYDRIC SOILS OUTSIDE OF WETLANDS (2016) |
|  | CONSERVATION EASEMENT SITES (2017) |  | SURFACE WATER (2015) |
|  | BEDROCK WITHIN 3 FEET (2016) | | |

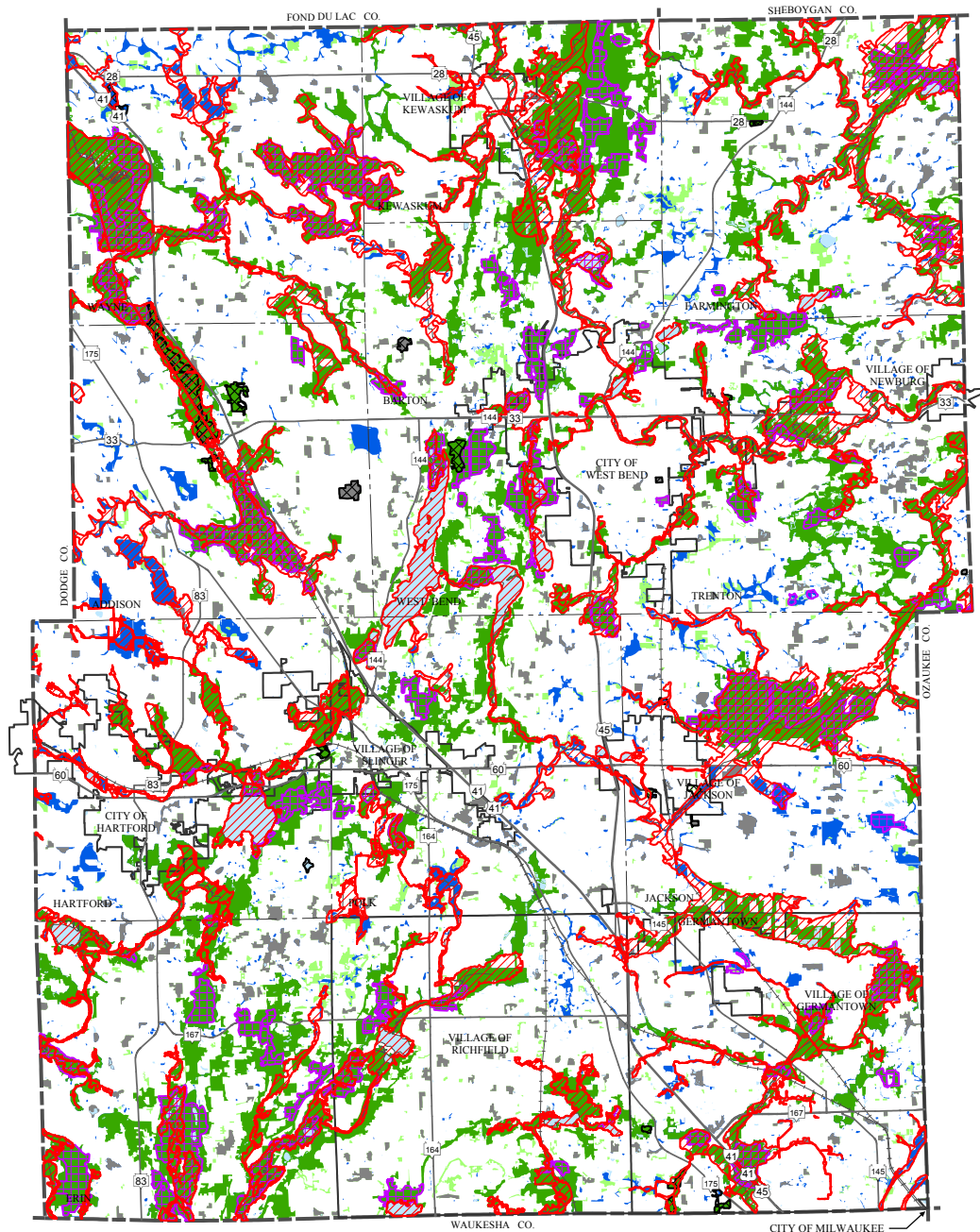
Notes: Documentation for FEMA study reaches are summarized on the Washington County Digital Flood Insurance Rate Map in the Flood Insurance Study, October 16, 2015.









Each local government participating in the multi-jurisdictional comprehensive planning process selected natural limitations to building site development to be included in the land use element of the town or village plan, which may differ from features shown on this county map. Refer to community comprehensive plans for more information.

Source: Federal Emergency Management Agency, USDA-Natural Resources Conservation Service, Wisconsin Department of Natural Resources, and SEWRPC

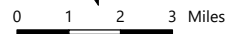


Map 6.7
Environmentally Sensitive Areas in Washington County



- | | | | |
|---|--|---|--|
|  | PRIMARY ENVIRONMENTAL CORRIDOR (PEC) (2015) |  | SURFACE WATER (2015) |
|  | ISOLATED NATURAL RESOURCE AREA (INRA) (2015) |  | ONE-PERCENT-ANNUAL-PROBABILITY (100-YEAR RECURRENCE INTERVAL) FLOODPLAINS (FEMA FIS, OCTOBER 2015) |
|  | NATURAL AREA (2016) | | |
|  | CRITICAL SPECIES HABITAT SITE (2016) | | |
|  | WOODLANDS OUTSIDE PEC AND INRA (2015) | | |
|  | WETLANDS OUTSIDE PEC AND INRA (2015) | | |

Note: Each local government participating in the multi-jurisdictional comprehensive planning process selected environmentally sensitive areas to be included in the land use element of the town or village plan, which may differ from features shown on this county map. Refer to community comprehensive plans for more information.



Source: Federal Emergency Management Agency and SEWRPC

