

land, traffic congestion, and the overloading of the utility systems. Zoning also provides an important means for protecting and preserving the natural resource base.

Local zoning regulations include general, or comprehensive, zoning regulations and special-purpose regulations governing floodland and shoreland areas. General zoning and special-purpose zoning regulations may be adopted as a single ordinance or as separate ordinances; they may or may not be contained in the same document. Any analysis of locally proposed land use must take into consideration the provisions of both general and special-purpose zoning.

It should be noted that, in addition to general zoning and special-purpose floodland and shoreland zoning, any county, city, village, or town in Wisconsin that owns Federal- or State-approved airport facilities has the authority under Section 114.136 of the Wisconsin Statutes to adopt a special-purpose height zoning ordinance in the vicinity of the airport to protect aerial approaches to the site. The only airport in Waukesha County subject to special regulations is Waukesha County-Crites Field. The Waukesha County Board of Supervisors adopted a height limitation zoning ordinance in 1964. That ordinance establishes height restrictions for structures in areas within three miles of the airport.

### ***General Zoning***

Cities in Wisconsin are granted comprehensive, or general, zoning powers under Section 62.23 of the Wisconsin Statutes. The same powers are granted to villages under Section 61.35 of the Statutes. Counties are granted general zoning powers within their unincorporated areas under Section 59.97 of the Statutes. However, a county zoning ordinance becomes effective only in those towns which ratify the county ordinance. Towns which have not adopted a county zoning ordinance may adopt village powers and subsequently utilize the city and village zoning authority conferred in Section 62.23 subject, however, to county board approval where a general purpose county zoning ordinance exists.

General zoning was in effect in all communities in Waukesha County in 2007. Four Towns in the County, Towns of Genesee, Oconomowoc, Ottawa, and Vernon, were under the jurisdiction of the County zoning ordinance, while the remaining eight towns have adopted their own zoning ordinances under village powers.

### ***Floodplain Zoning***

Section 87.30 of the Wisconsin Statutes requires that cities, villages, and counties, with respect to their unincorporated areas, adopt floodplain zoning to preserve the floodwater conveyance and storage capacity of floodplain areas and to prevent the location of new flood damage-prone development in flood hazard areas. The minimum standards, which such ordinances must meet, are set forth in Chapter NR 116 of the Wisconsin Administrative Code. The required regulations govern filling and development within a regulatory floodplain, which is defined as the area subject to inundation by the 100-year recurrence interval flood event, the event which has a one percent probability of occurring in any given year. Under Chapter NR 116, local floodplain zoning regulations must prohibit nearly all forms of development within the floodway, which is that portion of the floodplain required to convey the 100-year recurrence peak flood flow. Local regulations must also restrict filling and development within the flood fringe, which is that portion of the floodplain located outside of the floodway that would be covered by floodwater during the 100-year recurrence flood. Permitting the filling and development of the flood fringe area reduces the floodwater storage capacity of the natural floodplain, and may thereby increase downstream flood flows and stages. It should be noted that towns in Waukesha County may enact floodplain zoning regulations which may be more restrictive than those in the Waukesha County Shoreland and Floodland Protection Zoning Ordinance.

### ***Shoreland and Shoreland Wetland Zoning***

Under Section 59.971 of the Wisconsin Statutes, counties in Wisconsin are required to adopt zoning regulations within statutorily defined shoreland areas. Shoreland areas are those lands within 1,000 feet of a navigable lake, pond, or flowage; or 300 feet of a navigable stream, or to the landward side of the floodplain, whichever distance is greater. Minimum standards for county shoreland zoning ordinances are set forth in Chapter NR 115 of the Wisconsin Administrative Code. Chapter NR 115 sets forth minimum requirements regarding lot sizes and

building setbacks; restrictions on cutting of trees and shrubbery; and restrictions on filling, grading, lagooning, dredging, ditching, and excavating that must be incorporated into county shoreland zoning regulations.

In addition, Chapter NR 115 for Cities and Villages and Chapter NR 117 for Counties, requires that all wetlands five acres or larger within the statutory shoreland zoning jurisdiction area be placed into a wetland conservancy zoning district to ensure their preservation after completion of appropriate wetland inventories by the Wisconsin Department of Natural Resources. In 1982, the State Legislature extended shoreland-wetland zoning requirements to cities and villages in Wisconsin. Under Sections 62.231 and 61.351, respectively, of the Wisconsin Statutes, cities and villages in Wisconsin are required to place wetlands five acres or larger and located in statutory shorelands into a shoreland-wetland conservancy zoning district to ensure their preservation. Minimum standards for city and village shoreland-wetland zoning ordinances are set forth in Chapter NR 117 of the Wisconsin Administrative Code.

In 2007, the Waukesha County Shoreland and Floodland Protection Ordinance was in effect in all unincorporated areas of the County. Table VII-3 indicates 21 of the 25 Cities and Villages in the County had adopted shoreland-wetland zoning ordinances. Of the remaining four Villages, two, the Villages of Eagle and North Prairie, did not contain shoreland-wetlands and were thus not required to adopt such ordinances; two, the Villages of Lannon and Pewaukee, had not yet adopted such ordinances. The Waukesha County Shoreland and Floodland Protection Ordinance and 11 of the 19 local shoreland-wetland zoning ordinances have been approved by the Wisconsin Department of Natural Resources.

### ***Land Division Regulations***

Chapter 236 of the Wisconsin Statutes requires the preparation of a subdivision plat whenever five or more lots of 1.5 acres or less in area are created either at one time or by successive divisions within a period of five years. The Statutes set forth requirements for surveying lots and streets, for plat review and approval by State and local agencies, and for recording approved plats. Section 236.45 of the Statutes allows any city, village, town, or county that has established a planning agency to adopt a land division ordinance, provided the local ordinance is at least as restrictive as the State platting requirements. Local land division ordinances may include the review of other land divisions not defined as “subdivisions” under Chapter 236, such as when fewer than five lots are created or when lots larger than 1.5 acres are created.

The subdivision regulatory powers of Towns are confined to their respective unincorporated areas. City and village subdivision control ordinances may be applied to extraterritorial areas as well as to their respective incorporated areas. In accordance with Chapter 236 Wisconsin Statutes, counties have subdivision regulatory authority in Towns, Cities and Villages. The County has approval authority in Towns but is limited to objection authority in cities and villages. It is possible for both a county and a town to have concurrent jurisdiction over land divisions in unincorporated areas, or for a city or village to have concurrent jurisdiction with a town or county in the city or village extraterritorial plat approval area. In the case of overlapping jurisdiction, Chapter 66.0105 Wisconsin Statutes states the jurisdiction over the overlapping area shall be divided on a line all points of which are equidistant from the boundaries of each municipality concerned so that not more than one municipality shall exercise power over any area. Furthermore, a municipality may waive their extraterritorial review authority. Table VII-3 indicates communities that have adopted land division ordinances.

### ***Official Mapping and Highway Width Maps***

Official mapping powers, granted to local units of government under Section 62.23(6) of the Wisconsin Statutes, are an important but historically under-utilized plan implementation tool. An official map prepared under Section 62.23(6) can be used to identify precisely, the location and width of existing and proposed streets, highways, historic districts, parkways, railroad rights-of-way, waterways, public transit facilities, airports, and the location and extent of parks and playgrounds. The official map prohibits the construction of buildings and associated improvements on lands that are for future public use identified on the map.

Under Section 80.64 of the Statutes, counties may adopt highway-width maps showing the location and width of proposed new highways and the widths of any highways proposed to be expanded. Such maps serve a function similar to local official maps, but with jurisdiction limited to streets and highways. By statute, a county highway-width map is in effect only in those municipalities, which act to approve it. Table VII-3 identifies “county map in force” where the municipality has adopted the Waukesha County Street and Highway width map in place of a complete official map.

### ***Extraterritorial Zoning Regulations***

The Statutes authorize cities and villages to adopt extraterritorial zoning regulations for adjacent unincorporated areas, in cooperation with the adjacent town, within three miles of a city of the first, second, or third class, and within 1.5 miles of a city of the fourth class or a village. A city or village can initiate preparation of an extraterritorial zoning ordinance and map at any time. Initiation of the extraterritorial zoning ordinance freezes existing zoning in the extraterritorial (town) area for two years, while the city or village and affected town or towns jointly develop an extraterritorial zoning ordinance and map. A joint committee made up of three representatives from the city or village and three representatives from each affected town is formed to develop the ordinance. The time period can be extended for one additional year at the end of the two-year period.

## **POPULATION, HOUSEHOLD AND EMPLOYMENT PROJECTIONS**

Under the previous year 2020 regional land use plan and county development plan, three projections—low, intermediate, and high growth scenarios—were prepared for population, households, and employment in the Region and County. The intermediate projection was considered the most likely to be achieved and constituted the forecast which was used as the basis for the preparation of the year 2020 regional land use plan and county development plan. The high and low projections were intended to provide an indication of population, household, and employment levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios.

### **Review of Previous County Development Plan Projections**

The Waukesha County development plan presented in SEWRPC Community Assistance Planning Report No. 209, A Development Plan for Waukesha County, Wisconsin, dated August 1996, set forth population, household, and employment levels anticipated under buildout conditions (about the year 2050) and as envisioned under a 2010 plan stage. The 2010 plan stage envisioned that the County population would increase from 304,700 persons in 1990 to 384,800 persons in 2010; that the number of households would increase from 106,000 in 1990 to 143,400 in 2010; and that the number of jobs would increase from 172,300 in 1990 to 248,800 jobs in 2010. Based upon straight-line interpolation of the anticipated change between 1990 and 2010, the County development plan envisioned 356,800 persons, 130,300 households, and 222,000 jobs in the County in 2003.

The estimated County population of 371,200 persons in 2003 from the Wisconsin Department of Administration exceeded the population of 356,800 persons envisioned under the County development plan by 14,400 persons, or 4 percent. The estimated number of households in the County in 2003 (142,300) from the Wisconsin Department of Administration exceeded the number of households envisioned under the County plan (130,300) by 12,000 households, or 9 percent. The estimated number of jobs in the County in 2003 (266,400) from the U.S. Bureau of Economic Analysis exceeded the number of jobs envisioned under the County plan (222,000) by 44,400 jobs, or 20 percent.

### **Year 2035 Projections**

Chapter 2 of this Plan provides a more detailed description of the trends associated with population, household and employment change in the County. The methodology and assumptions that underlie the new population, household, and employment projections, along with the projections themselves are fully documented in SEWRPC Technical Report No. 10 (4th Edition), *The Economy of Southeastern Wisconsin* and in SEWRPC Technical Report No. 11 (4th Edition), *The Population of Southeastern Wisconsin*. These two reports were prepared in tandem to ensure consistency between the Commission's long-range population, household, and employment projections.

As indicated in Chapter 2, based on the methodology and assumptions presented in the afore-referenced technical reports, the intermediate growth scenario for population, households and employment will be used to make projections to the plan design year of 2035.

### ***Population Projections***

The intermediate projection envisions that the County population would increase by 86,000 persons, or 24 percent, from about 360,800 persons in 2000 to 446,800 persons in 2035. The high projection indicates that the population of the County could be as high as 504,900 persons in 2035, an increase of about 144,100 persons, or 40 percent, over the 2000 level. Conversely, the low projection indicates that the County population could be as low as 411,000 persons in 2035, an increase of 50,200 persons, or 14 percent, over the 2000 level. The SEWRPC-adopted year 2035 regional land use plan and this plan reflect the intermediate population projection of 446,800 persons for Waukesha County in 2035.

### ***Household Projections***

The intermediate projection envisions that the number of households in the County would increase by 38,900, or 29 percent, from 135,200 households in 2000 to 174,100 households in 2035, the same projection envisioned under the SEWRPC adopted year 2035 Regional Land Use Plan. The high projection indicates that the number of households in the County could be as high as 196,700 in 2035, an increase of 61,500 households, or 45 percent, over the 2000 level. The low projection indicates that the number of households could be as low as 160,100 in 2035, an increase of 24,900 households, or 18 percent, over the 2000 level. The intermediate projections envision a significant increase in the number of households, however as detailed in Chapter 2, the household sizes are projected to continue to decline from an average of 2.63 persons per household in 2000 to 2.50 persons per household in 2035.

### ***Employment Projections***

The intermediate projection envisions total employment of 347,200 jobs in the County in 2035, an increase of 76,400 jobs, or 28 percent, over the 2000 level of 270,800 jobs. The high projection indicates that employment in the County could be as high as 383,100 jobs in 2035, an increase of about 112,300 jobs, or 41 percent, over the 2000 level. The low projection indicates that employment in the County could be as low as 321,600 jobs in 2035, about 50,800 jobs, or 19 percent, over the 2000 level. The SEWRPC adopted year 2035 Regional Land Use Plan, envisions a total of 333,700 jobs in the County in the year 2035, rather than the year 2035 intermediate projection of 347,200 jobs. The slightly lower job level in the regional plan reflects community land use plans in place at the time the regional plan was prepared.

## **HISTORIC LAND USE GROWTH AND LAND USE TRENDS ANALYSIS**

The SEWRPC land use inventory is intended to serve as a relatively precise record of land use at selected points in time. The land use classification system used in the inventory consists of nine major categories which are divisible into 66 sub-categories, making the inventory suitable for both land use and transportation planning; adaptable to storm water drainage, public utility, and community facility planning; and compatible with other land use classification systems. Aerial photographs serve as the primary basis for identifying existing land use, augmented by field surveys as appropriate. The first regional land use inventory was prepared by SEWRPC in 1963 and has been updated periodically following the preparation of new aerial photography, with the most recent inventory prepared using aerial photographs taken in spring of 2000. As part of the year 2000 land use inventory,

the delineation of existing land use was referenced to real property boundary information not available in prior inventories. This change increases the precision of the land use inventory and makes it more useable to public agencies and private interests. As a result of this change, however, year 2000 land use inventory data are not strictly comparable with data from the 1990 and prior inventories. The data remains suitable for denoting general land use trends. The results of the year 2000 land use inventory are presented along with the results of prior land use inventories in Table VII-4 and Map II-1.

**Table VII-4  
CHANGE IN LAND USE ACRES IN WAUKESHA COUNTY: 1963-2000**

<b>Land Use Category</b>	<b>1963</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
Urban					
Residential	28,148	35,476	50,745	59,247	75,221
Commercial	1,197	1,831	2,754	3,827	5,351
Industrial	924	1,758	2,747	3,802	5,525
Transportation, Communication, and Utilities	16,079	18,545	21,867	22,805	30,001
Governmental and Institutional	2,550	3,587	4,037	4,215	4,887
Recreational	3,311	4,605	5,756	6,465	8,253
Unused Urban Land	8,509	8,516	8,017	7,025	7,806
<b>Subtotal Urban</b>	<b>60,718</b>	<b>74,318</b>	<b>95,923</b>	<b>107,386</b>	<b>137,044</b>
Non-urban					
Natural Areas					
Surface Water	16,076	16,461	16,753	16,878	16,891
Wetlands	52,588	51,660	51,233	51,978	52,661
Woodlands	31,181	30,818	29,472	29,584	28,931
<b>Subtotal Natural Areas</b>	<b>99,845</b>	<b>98,939</b>	<b>97,458</b>	<b>98,440</b>	<b>98,483</b>
Agricultural	200,241	184,390	161,558	142,428	112,611
Unused Rural and Other Open Lands	10,786	13,943	16,651	23,336	23,397
<b>Subtotal Nonurban</b>	<b>310,872</b>	<b>297,272</b>	<b>275,667</b>	<b>264,204</b>	<b>234,491</b>
<b>Total</b>	<b>371,590</b>	<b>371,590</b>	<b>371,590</b>	<b>371,590</b>	<b>371,535</b>

Source: SEWRPC

Residential development was responsible for the most significant land use change within Waukesha County since 1963. Over 47,000 acres of land was converted to residential use as the County gained over 100,000 households between 1960 and 2000. Agricultural lands experienced the greatest loss of any land use within the County between 1963 and 2000. Nearly 88,000 acres of agricultural lands were converted to other land uses.

#### **Urban Land Uses**

In 1990, urban land uses, consisting of residential, commercial, industrial, recreational, governmental, institutional, transportation, communication, and utility uses, encompassed about 107,386 acres, equivalent to 160 square miles, or about 28 percent of the County. Residential land comprised the largest urban land use category in the County in 1990, encompassing about 59,247 acres, or about 55 percent of all urban land and 16 percent of the total area of the County. Commercial and industrial lands each encompassed about 7,629 acres, about seven (7) percent of all urban land use and about two (2) percent of the total County area. Land used for governmental and institutional purposes encompassed about 4,200 acres, or about four (4) percent of all urban uses and about one (1) percent of the total area of the County. Lands devoted to intensive recreational uses encompassed about 6,500 acres, some six (6) percent of all urban uses and about two (2) percent of the County. Lands devoted to transportation, communication, and utility uses, including areas used for streets and highways, railways, airports, and utility and communication facilities, totaled about 22,900 acres, or about 22 percent of all urban uses and about six (6) percent of the total County area.

Between 1963 and 1990, urban land uses in the County increased from about 60,718 acres to about 107,386 acres, an increase of about 46,668 acres or about 77 percent. Each of the major urban land use categories increased significantly during this time. The residential land area approximately doubled, the commercial land area approximately tripled, and the industrial land area quadrupled. The transportation, governmental-institutional, and recreational land use categories also increased significantly, by 42 percent, 65 percent, and 86 percent, respectively.

Existing urban land use for cities, villages, and towns in the County is summarized in Table VII-5.

### **Nonurban Land Uses**

In 1990, nonurban lands, consisting of agricultural lands, wetlands, woodlands, and surface water, quarries, landfill sites, and other open lands, comprised about 264,204 acres, the equivalent of 421 square miles, or about 72 percent of the total area of the County. Agricultural land comprised the largest nonurban land use category, encompassing about 142,400 acres, or about 53 percent of all nonurban land and 38 percent of the total area of the County. Wetlands, woodlands, and surface water, in combination, encompassed about 98,400 acres, representing about 37 percent of all nonurban lands and about 27 percent of the County. Quarries and landfill sites, taken together, encompassed about 4,000 acres, representing about two (2) percent of all nonurban lands and about one (1) percent of the total area of the County. Unused lands, consisting of open lands other than wetlands and woodlands and agricultural lands, encompassed about 23,300 acres, representing about nine (9) percent of all nonurban lands and about seven (7) percent of the total area of the County. Unused lands include extractive uses and landfills.

Nonurban lands in the County decreased by about 46,668 acres, or about 15 percent between 1963 and 1990. Most of this loss resulted from the conversion of agricultural land to urban use. Modest losses in wetlands and woodlands also occurred during this time. The wetland acreage declined by about 600 acres, or about one (1) percent, between 1963 and 1990, while the woodland acreage declined by about 1,600 acres, or five (5) percent.

It should be noted that the change in wetland and woodland acreages between 1963 and 1990, like the change in all land use categories, represents the net change within the County. In this respect, the change in the wetland acreage reported between two inventory years is the net result of decreases in certain areas of the County, due, for example, to drainage or filling activity, and increases in other areas, due, for example, to the abandonment of agricultural drainage systems or to planned wetland restoration efforts. Similarly, the change in the woodland acreage between two inventory years reflects the net effect of the clearing of woodlands in certain areas and the reforestation of other areas.

Nonurban land use for cities, villages, and towns in the County is summarized in Table VII-5.

**Table VII-5**

**LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 1990**

Community	Urban													
	Residential		Commercial		Industrial		Transportation, Communication, and Utilities		Governmental and Institutional		Recreational		Subtotal	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	23,186	27.2	2,163	2.5	1,739	2.0	7,955	9.3	2,087	2.5	2,078	2.4	39,208	45.9
Brookfield	7,533	44.5	894	5.3	230	1.4	2,144	12.6	646	3.8	398	2.3	11,845	69.9
Delafield	1,256	18.3	71	1.0	33	0.5	536	7.8	122	1.8	235	3.4	2,253	32.8
Milwaukee	0	0.0	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0	1	1.9
Muskego	3,324	14.4	143	0.6	87	0.4	1,002	4.4	193	0.8	406	1.8	5,155	22.4
New Berlin	6,227	26.4	364	1.5	586	2.5	2,061	8.7	422	1.8	384	1.6	10,044	42.6
Oconomowoc	1,049	26.3	135	3.4	83	2.1	428	10.7	153	3.8	280	7.0	2,128	53.3
Waukesha	3,797	34.8	556	5.1	720	6.6	1,783	16.3	551	5.0	375	3.4	7,782	71.2
Villages (Subtotal)	11,245	24.1	873	1.9	1,335	2.9	4,078	8.7	1,165	2.5	1,378	3.0	20,074	43.1
Big Bend	198	41.4	22	4.6	38	7.9	54	11.4	13	2.7	14	2.9	339	70.9
Butler	135	26.6	40	7.9	111	21.9	86	17.0	11	2.2	24	4.7	407	80.3
Chenequa	480	16.2	0	0.0	0	0.0	129	4.4	3	0.1	80	2.7	699	23.4
Dousman	126	15.5	14	1.7	22	2.7	51	6.3	61	7.6	19	2.3	293	36.1
Eagle	222	32.0	5	0.7	6	0.9	74	10.7	24	3.5	30	4.3	361	52.1
Elm Grove	1,354	64.4	68	3.2	13	0.6	377	17.9	129	6.1	58	2.8	1,999	95.0
Hartland	574	27.6	63	3.0	72	3.5	279	13.4	68	3.3	47	2.3	1,103	53.1
Lac La Belle	91	32.2	0	0.0	0	0.0	18	6.4	0	0.0	24	8.5	133	47.1
Lannon	194	12.2	24	1.5	32	2.0	82	5.1	24	1.5	41	2.6	397	24.9
Menomonee Falls	4,539	21.3	402	1.9	728	3.4	1,674	7.9	331	1.6	787	3.7	8,461	39.8
Merton	270	18.7	7	0.5	13	0.9	76	5.3	25	1.7	10	0.7	401	27.8
Mukwonago	431	26.3	65	4.0	35	2.1	196	12.0	124	7.6	54	3.3	905	55.3
Nashotah	186	17.0	9	0.8	10	0.9	123	11.2	5	0.5	4	0.4	337	30.8
North Prairie	332	38.6	18	2.1	25	2.9	84	9.7	11	1.3	11	1.3	481	55.9
Oconomowoc Lake	375	18.9	30	1.5	2	0.1	92	4.6	3	0.2	2	0.1	504	25.4
Pewaukee	427	15.4	51	1.8	85	3.1	288	10.4	203	7.3	37	1.3	1,091	39.3
Sussex	569	22.9	45	1.8	134	5.4	255	10.3	47	1.9	104	4.2	1,154	46.5
Wales	738	51.0	10	0.7	9	0.6	137	9.5	83	5.7	32	2.2	1,009	69.7
Towns (Subtotal)	26,794	11.2	804	0.3	732	0.3	10,831	4.5	963	0.4	3,009	1.3	43,133	18.0
Brookfield	932	23.3	221	5.5	94	2.4	444	11.1	56	1.4	30	0.8	1,777	44.5
Delafield	1,944	14.0	15	0.1	4	0.0	661	4.8	100	0.7	335	2.4	3,059	22.1
Eagle	1,021	4.5	18	0.1	12	0.1	569	2.5	9	0.0	200	0.9	1,829	8.1
Genesee	2,919	14.1	38	0.2	51	0.2	780	3.8	50	0.2	157	0.8	3,995	19.3
Lisbon	2,511	12.1	25	0.1	38	0.2	906	4.4	132	0.6	90	0.4	3,702	17.8
Merton	2,066	11.2	42	0.2	25	0.1	813	4.4	156	0.9	214	1.2	3,309	18.0
Mukwonago	2,198	10.0	35	0.2	6	0.0	771	3.5	34	0.1	371	1.7	3,415	15.5
Oconomowoc	1,879	8.8	57	0.2	37	0.2	852	4.0	52	0.2	296	1.4	3,173	14.8
Ottawa	1,608	7.0	8	0.0	11	0.0	495	2.2	38	0.2	326	1.4	2,486	10.8
Pewaukee	2,526	15.5	215	1.3	378	2.3	1,810	11.1	126	0.8	261	1.6	5,316	32.6
Summit	1,503	8.1	25	0.1	23	0.1	847	4.6	84	0.5	190	1.0	2,672	14.4
Vernon	2,827	12.9	54	0.3	20	0.1	1,106	5.0	69	0.3	269	1.2	4,345	19.8
Waukesha	2,864	17.4	51	0.3	33	0.2	780	4.8	57	0.4	270	1.6	4,055	24.7
Waukesha County	61,225	16.5	3,840	1.0	3,806	1.0	22,864	6.2	4,215	1.1	6,465	1.8	102,415	27.6

**Table VII-5 (Continued)**

**LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 1990**

Community	Nonurban													
	Agricultural		Wetlands		Woodlands		Surface Water		Other <sup>a</sup>		Subtotal		Total Area	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	20,516	24.0	8,434	9.9	3,942	4.6	4,523	5.3	8,760	10.3	46,175	54.1	85,383	100.0
Brookfield	852	5.0	1,976	11.7	416	2.4	129	0.8	1,722	10.2	5,095	30.1	16,940	100.0
Delafield	1,804	26.2	265	3.9	902	13.1	997	14.5	651	9.5	4,619	67.2	6,872	100.0
Milwaukee	42	79.2	6	11.3	4	7.5	0	0.0	0	0.0	52	98.1	53	100.0
Muskego	9,596	41.7	2,806	12.2	1,140	4.9	2,802	12.2	1,519	6.6	17,863	77.6	23,018	100.0
New Berlin	6,817	28.9	2,323	9.8	1,283	5.4	128	0.6	2,997	12.7	13,548	57.4	23,592	100.0
Oconomowoc	805	20.2	277	6.9	90	2.3	369	9.2	322	8.1	1,863	46.7	3,991	100.0
Waukesha	600	5.5	781	7.2	107	1.0	98	0.9	1,549	14.2	3,135	28.8	10,917	100.0
Villages (Subtotal)	12,817	27.5	4,478	9.6	2,510	5.4	2,045	4.4	4,663	10.0	26,513	56.9	46,560	100.0
Big Bend	34	7.1	35	7.3	2	0.4	18	3.8	50	10.5	139	29.1	478	100.0
Butler	0	0.0	21	4.1	5	1.0	3	0.6	71	14.0	100	19.7	507	100.0
Chenequa	586	19.8	36	1.2	748	25.2	739	24.9	162	5.5	2,291	76.6	2,963	100.0
Dousman	283	34.9	122	15.0	56	7.0	32	3.9	25	3.1	518	63.9	811	100.0
Eagle	292	42.1	1	0.1	3	0.4	0	0.0	37	5.3	333	47.9	694	100.0
Elm Grove	0	0.0	37	1.8	8	0.4	8	0.4	51	2.4	104	5.0	2,103	100.0
Hartland	203	9.8	195	9.4	125	6.0	4	0.2	447	21.5	974	46.9	2,077	100.0
Lac La Belle	35	12.4	74	26.1	6	2.1	0	0.0	35	12.3	150	52.9	283	100.0
Lannon	461	28.9	187	11.7	71	4.5	5	0.3	473	29.7	1,197	75.1	1,594	100.0
Menomonee Falls	7,255	34.0	2,865	13.4	784	3.7	91	0.4	1,863	8.7	12,858	60.2	21,319	100.0
Merton	886	61.4	42	2.9	67	4.6	17	1.2	31	2.1	1,043	72.2	1,444	100.0
Mukwonago	284	17.4	124	7.6	98	6.0	43	2.6	182	11.1	731	44.7	1,636	100.0
Nashotah	420	38.3	43	3.9	98	8.9	55	5.0	143	13.1	759	69.2	1,096	100.0
North Prairie	186	21.6	16	1.9	21	2.4	0	0.0	157	18.2	380	44.1	861	100.0
Oconomowoc Lake	221	11.1	126	6.4	211	10.6	813	40.9	111	5.6	1,482	74.6	1,986	100.0
Pewaukee	806	29.0	351	12.6	53	1.9	214	7.7	263	9.5	1,687	60.7	2,778	100.0
Sussex	740	29.8	176	7.1	64	2.6	2	0.1	346	13.9	1,328	53.5	2,482	100.0
Wales	105	7.3	27	1.8	90	6.2	1	0.1	216	14.9	439	30.3	1,448	100.0
Towns (Subtotal)	109,096	45.5	39,066	16.3	23,132	9.7	10,310	4.3	14,884	6.2	196,488	82.0	239,648	100.0
Brookfield	322	8.1	1,206	30.1	56	1.4	60	1.5	576	14.4	2,220	55.5	3,997	100.0
Delafield	5,235	37.8	1,023	7.4	1,982	14.3	1,378	10.0	1,165	8.4	10,783	77.9	13,842	100.0
Eagle	11,053	49.1	4,243	18.9	4,073	18.1	322	1.4	982	4.4	20,673	91.9	22,502	100.0
Genesee	9,065	43.6	3,272	15.8	1,832	8.8	106	0.5	2,499	12.0	16,774	80.7	20,769	100.0
Lisbon	11,287	54.4	2,612	12.6	1,138	5.5	76	0.4	1,922	9.3	17,035	82.2	20,737	100.0
Merton	9,134	49.6	1,228	6.7	1,966	10.7	1,611	8.8	1,142	6.2	15,061	82.0	18,397	100.0
Mukwonago	10,793	49.1	4,048	18.4	2,355	10.7	672	3.1	694	3.2	18,562	84.5	21,977	100.0
Oconomowoc	11,909	55.6	2,890	13.5	656	3.0	2,225	10.4	576	2.7	18,256	85.2	21,429	100.0
Ottawa	9,422	41.3	5,075	22.2	4,355	19.1	471	2.1	1,032	4.5	20,355	89.2	22,841	100.0
Pewaukee	5,501	33.7	1,990	12.2	687	4.2	1,040	6.4	1,768	10.9	10,986	67.4	16,302	100.0
Summit	8,193	44.4	3,721	20.1	1,378	7.5	1,838	10.0	658	3.6	15,788	85.6	18,460	100.0
Vernon	10,613	48.3	4,495	20.5	1,481	6.7	395	1.8	643	2.9	17,627	80.2	21,972	100.0
Waukesha	6,589	40.1	3,263	19.9	1,173	7.1	116	0.7	1,227	7.5	12,368	75.3	16,423	100.0
Waukesha County	142,429	38.3	51,978	14.0	29,584	8.0	16,878	4.5	28,307	7.6	269,176	72.4	371,591	100.0

Note: Data for urban land uses includes related off-street parking areas of more than 10 spaces.

<sup>a</sup>Includes extractive, landfill and unused land.

Source: SEWRPC

## **EXISTING LAND USE INVENTORY**

While the previous section of this chapter provides an overview of the historic growth and trends of Waukesha County, this section provides a more detailed description and analysis of the existing land use of the County. For the purposes of this Plan, existing land use is based upon year 2000 data, the most recent detailed inventory of land use completed by SEWRPC. The pattern of land use that existed within the County in 2000, including formal land use amendments approved by Waukesha County through year 2008, is shown on Map VII-1.

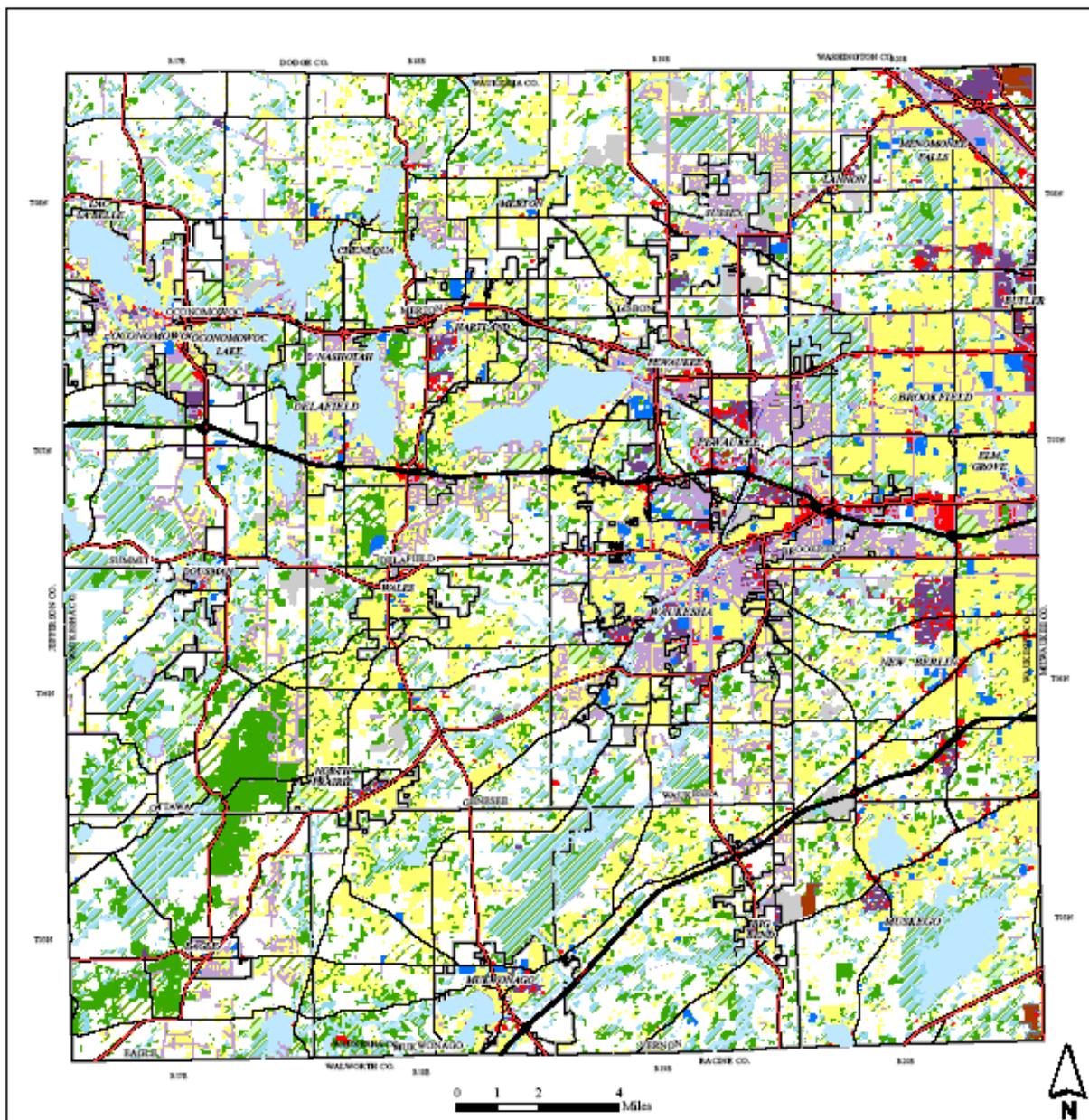
### **Urban Land Uses**

As indicated in Table VII-6, urban land uses, consisting of residential, commercial, industrial, recreational, governmental, institutional, and transportation, communication, and utility uses, encompassed about 130,425 acres, equivalent to about 35 percent of the County, in 2000. Residential land comprised the largest urban land use category in the County in 2000, encompassing about 76,075 acres, or about 59 percent of all urban land and 20 percent of the total area of the County. Commercial and industrial lands each encompassed about 5,500 acres, about four (4) percent of all urban land use and about two (2) percent of the total County area. Land used for governmental and institutional purposes encompassed about 4,900 acres, or about four (4) percent of all urban uses and about one (1) percent of the total area of the County. Lands devoted to intensive recreational uses encompassed about 8,416 acres, or about six (6) percent of all urban uses and about two (2) percent of the County. Lands devoted to transportation, communication, and utility uses, including areas used for streets and highways, railways, airports, and utility and communication facilities, totaled about 30,045 acres, or about 26 percent of all urban uses and about eight (8) percent of the total County area.

### **Nonurban Land Uses**

Nonurban lands, consisting of agricultural lands, wetlands, woodlands, and surface water, quarries, landfill sites, and other open lands, comprised about 241,112 acres, the equivalent of about 65 percent of the total area of the County, in 2000. Agricultural land comprised the largest nonurban land use category, encompassing about 112,620 acres, or about 47 percent of all nonurban land and 30 percent of the total area of the County. Wetlands, woodlands, and surface water, in combination, encompassed about 98,400 acres, representing about 41 percent of all nonurban lands and about 27 percent of the County. Other lands consisting of quarries, landfill sites, and unused lands, consisting of open lands other than wetlands and woodlands and agricultural lands, encompassed about 30,017 acres, representing about 12 percent of all nonurban lands and about 8 percent of the total area of the County.

## Map VII-1 Existing Land Use in Waukesha County: 2000



<b>Legend</b>			
Interstate	Landfills & Dumps	Industrial	Recreational
US	Transportation, Communication & Utilities	Extractive	Unused or Open Lands
State	Commercial	Woodlands	Agricultural
County	Government & Institutional	Water	<i>Source: SEWRPC</i>
Civil Division Boundary	Residential	Wetlands	<i>Civil Divisions as of 11/30/07</i>
			<i>Prepared by Waukesha Co. Dept. of Parks and Land Use</i>

**Table VII-6  
EXISTING LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2000**

Community	Urban													
	Residential		Commercial		Industrial		Transportation, Communication and Utilities		Governmental and Institutional		Recreational		Subtotal	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	28,968	27.4	3,343	3.2	3,097	2.9	13,007	12.3	2,644	2.5	2,721	2.6	53,781	50.9
Brookfield	7,760	44.5	1,082	6.2	322	1.8	2,768	15.9	689	3.9	540	3.1	13,160	75.4
Delafield	1,655	23.6	172	2.4	32	0.5	714	10.2	182	2.6	223	3.2	2,978	42.5
Milwaukee	0	0.0	0	0.0	32	65.1	3	7.0	0	0.0	0	0.0	36	72.1
Muskego	4,121	17.9	168	0.7	140	0.6	1,521	6.6	222	1.0	459	2.0	6,632	28.8
New Berlin	6,863	29.1	505	2.1	764	3.2	2,681	11.4	473	2.0	494	2.1	11,779	49.9
Oconomowoc	1,209	21.2	180	3.1	239	4.2	693	12.1	175	3.1	274	4.8	2,769	48.5
Pewaukee	2,826	18.9	467	3.1	647	4.3	1,921	12.9	146	1.0	232	1.6	6,239	41.8
Waukesha	4,535	32.5	770	5.5	921	6.6	2,705	19.4	756	5.4	500	3.6	10,188	73.1
Villages (Subtotal)	13,805	26.3	1,337	2.5	2,002	3.8	5,947	11.3	1,327	2.5	2,193	4.2	26,612	50.7
Big Bend	223	16.4	60	4.4	68	5.0	159	11.7	14	1.0	22	1.6	546	40.3
Butler	123	24.2	49	9.6	155	30.4	108	21.2	10	2.0	22	4.3	467	91.7
Chenequa	470	15.9	0	0.0	0	0.0	135	4.6	2	0.1	82	2.8	688	23.3
Dousman	161	17.2	14	1.5	25	2.6	71	7.6	74	7.9	21	2.2	365	39.2
Eagle	289	37.2	5	0.6	23	3.0	110	14.2	30	3.9	31	4.1	488	62.9
Elm Grove	1,309	62.1	60	2.8	14	0.7	441	20.9	126	6.0	57	2.7	2,007	95.3
Hartland	766	26.4	118	4.1	131	4.5	466	16.1	115	4.0	232	8.0	1,827	63.0
Lac La Belle	120	28.5	0	0.0	0	0.0	15	3.5	0	0.0	142	33.5	277	65.5
Lannon	201	12.6	35	2.2	86	5.4	94	5.9	23	1.5	40	2.5	479	30.1
Menomonee Falls	5,250	24.6	596	2.8	969	4.5	2,259	10.6	344	1.6	991	4.6	10,409	48.8
Merton	555	35.3	6	0.4	18	1.1	114	7.2	39	2.5	13	0.8	744	47.4
Mukwonago	599	18.8	114	3.6	69	2.2	461	14.4	136	4.3	89	2.8	1,469	46.0
Nashotah	349	32.0	10	0.9	12	1.1	155	14.2	6	0.5	11	1.0	543	49.8
North Prairie	481	31.7	22	1.4	39	2.5	160	10.6	11	0.7	225	14.8	938	61.7
Oconomowoc Lake	448	22.0	24	1.2	6	0.3	117	5.7	2	0.1	3	0.1	599	29.4
Pewaukee	644	22.3	125	4.3	83	2.9	437	15.1	213	7.4	41	1.4	1,543	53.5
Sussex	1,008	26.6	84	2.2	296	7.8	467	12.3	83	2.2	145	3.8	2,083	55.0
Wales	809	52.8	16	1.1	10	0.7	178	11.7	99	6.5	27	1.7	1,140	74.4
Towns (Subtotal)	33,301	15.6	763	0.4	447	0.2	11,091	5.2	929	0.4	3,502	1.6	50,033	23.5
Brookfield	1,049	29.7	309	8.7	119	3.4	512	14.5	69	1.9	51	1.4	2,110	59.7
Delafield	3,034	22.8	28	0.2	5	0.0	974	7.3	108	0.8	360	2.7	4,508	33.9
Eagle	1,757	7.8	21	0.1	19	0.1	776	3.5	8	0.0	250	1.1	2,832	12.6
Genesee	4,326	21.2	58	0.3	53	0.3	1,071	5.2	57	0.3	197	1.0	5,761	28.2
Lisbon	3,376	17.5	59	0.3	73	0.4	1,181	6.1	135	0.7	512	2.7	5,335	27.6
Merton	3,271	18.2	40	0.2	25	0.1	1,000	5.6	209	1.2	324	1.8	4,869	27.0
Mukwonago	3,156	15.5	37	0.2	5	0.0	839	4.1	39	0.2	385	1.9	4,460	21.9
Oconomowoc	2,266	10.8	60	0.3	59	0.3	1,010	4.8	53	0.3	199	1.0	3,647	17.4
Ottawa	2,277	10.1	9	0.0	14	0.1	612	2.7	35	0.2	390	1.7	3,337	14.9
Summit	2,161	12.7	24	0.1	19	0.1	896	5.3	83	0.5	189	1.1	3,373	19.8
Vernon	3,306	15.7	39	0.2	17	0.1	1,265	6.0	76	0.4	383	1.8	5,085	24.2
Waukesha	3,323	22.8	79	0.5	39	0.3	956	6.6	57	0.4	261	1.8	4,715	32.3
Waukesha County	76,075	20.5	5,443	1.5	5,546	1.5	30,045	8.1	4,900	1.3	8,416	2.3	130,425	35.1

**Table VII-6 (Continued)**  
**EXISTING LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2000**

Community	Nonurban													
	Agricultural		Wetlands		Woodlands		Surface Water		Other		Subtotal		Total Area	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	20,316	19.2	11,330	10.7	4,266	4.0	5,677	5.4	10,336	9.8	51,924	49.1	105,704	100.0
Brookfield	405	2.3	2,291	13.1	312	1.8	154	0.9	1,131	6.5	4,293	24.6	17,453	100.0
Delafield	1,277	18.2	257	3.7	903	12.9	997	14.2	599	8.5	4,034	57.5	7,012	100.0
Milwaukee	0	0.0	6	12.0	1	1.6	3	5.3	4	9.0	14	27.9	50	100.0
Muskego	7,974	34.6	2,922	12.7	1,008	4.4	2,851	12.4	1,633	7.1	16,388	71.2	23,020	100.0
New Berlin	5,124	21.7	2,301	9.8	1,154	4.9	112	0.5	3,124	13.2	11,814	50.1	23,594	100.0
Oconomowoc	1,424	24.9	461	8.1	122	2.1	384	6.7	548	9.6	2,939	51.5	5,708	100.0
Pewaukee	3,552	23.8	1,925	12.9	601	4.0	1,052	7.0	1,567	10.5	8,697	58.2	14,936	100.0
Waukesha	560	4.0	1,167	8.4	165	1.2	124	0.9	1,729	12.4	3,745	26.9	13,933	100.0
Villages (Subtotal)	10,483	20.0	5,105	9.7	2,647	5.0	2,147	4.1	5,486	10.5	25,869	49.3	52,480	100.0
Big Bend	653	48.2	57	4.2	22	1.6	21	1.6	56	4.2	809	59.7	1,355	100.0
Butler	0	0.0	21	4.2	4	0.8	2	0.5	14	2.8	42	8.3	509	100.0
Chenequa	521	17.6	38	1.3	771	26.1	741	25.1	192	6.5	2,263	76.7	2,952	100.0
Dousman	326	35.0	133	14.3	50	5.3	28	3.0	31	3.3	568	60.8	933	100.0
Eagle	186	23.9	1	0.2	4	0.5	0	0.0	96	12.4	287	37.1	775	100.0
Elm Grove	0	0.0	43	2.0	12	0.6	7	0.3	38	1.8	99	4.7	2,106	100.0
Hartland	51	1.7	229	7.9	162	5.6	8	0.3	622	21.5	1,071	37.0	2,899	100.0
Lac La Belle	30	7.2	84	19.9	6	1.5	2	0.5	23	5.4	146	34.5	422	100.0
Lannon	397	24.9	202	12.7	63	4.0	5	0.3	447	28.1	1,114	69.9	1,593	100.0
Menomonee Falls	5,151	24.2	2,950	13.8	778	3.6	131	0.6	1,906	8.9	10,916	51.2	21,325	100.0
Merton	639	40.7	36	2.3	92	5.8	17	1.1	43	2.8	827	52.6	1,571	100.0
Mukwonago	760	23.8	399	12.5	100	3.1	87	2.7	376	11.8	1,722	54.0	3,190	100.0
Nashotah	258	23.6	43	3.9	91	8.3	56	5.1	101	9.2	547	50.2	1,091	100.0
North Prairie	202	13.3	19	1.2	66	4.4	9	0.6	285	18.8	581	38.3	1,519	100.0
Oconomowoc Lake	119	5.8	154	7.6	206	10.1	815	39.9	147	7.2	1,440	70.6	2,040	100.0
Pewaukee	307	10.6	406	14.1	37	1.3	204	7.1	388	13.4	1,341	46.5	2,884	100.0
Sussex	757	20.0	266	7.0	112	3.0	16	0.4	551	14.6	1,702	45.0	3,785	100.0
Wales	126	8.2	23	1.5	72	4.7	1	0.1	170	11.1	392	25.6	1,532	100.0
Towns (Subtotal)	81,822	38.4	36,216	17.0	22,019	10.3	9,068	4.3	14,195	6.7	163,319	76.5	213,352	100.0
Brookfield	169	4.8	911	25.8	39	1.1	37	1.1	268	7.6	1,426	40.3	3,536	100.0
Delafield	3,235	24.4	1,039	7.8	2,046	15.4	1,387	10.4	1,064	8.0	8,772	66.1	13,280	100.0
Eagle	9,463	42.2	4,194	18.7	4,173	18.6	313	1.4	1,426	6.4	19,570	87.4	22,402	100.0
Genesee	7,226	35.4	3,298	16.1	1,752	8.6	112	0.5	2,287	11.2	14,675	71.8	20,436	100.0
Lisbon	8,162	42.3	2,603	13.5	944	4.9	82	0.4	2,175	11.3	13,966	72.4	19,301	100.0
Merton	6,896	38.3	1,265	7.0	1,987	11.0	1,613	9.0	1,381	7.7	13,143	73.0	18,013	100.0
Mukwonago	8,288	40.7	3,879	19.0	2,185	10.7	635	3.1	931	4.6	15,918	78.1	20,378	100.0
Oconomowoc	10,685	51.1	2,880	13.8	691	3.3	2,199	10.5	828	4.0	17,284	82.6	20,931	100.0
Ottawa	8,058	35.9	5,028	22.4	4,516	20.1	496	2.2	1,011	4.5	19,110	85.1	22,447	100.0
Summit	6,025	35.4	3,642	21.4	1,315	7.7	1,780	10.5	891	5.2	13,653	80.2	17,026	100.0
Vernon	8,855	42.1	4,474	21.3	1,340	6.4	336	1.6	928	4.4	15,934	75.8	21,019	100.0
Waukesha	4,758	32.6	3,001	20.6	1,030	7.1	76	0.5	1,002	6.9	9,868	67.7	14,584	100.0
Waukesha County	112,620	30.3	52,651	14.2	28,932	7.8	16,892	4.5	30,017	8.1	241,112	64.9	371,537	100.0

Note: In 1999, the Town of Pewaukee incorporated as a City.

Source: SEWRPC

## RECOMMENDED LAND USE PLAN

The year 2035 county land use plan was developed to meet the established planning objectives and standards presented in Chapter 2 of this Plan insofar as practicable, using the information and plan design concepts set forth in the previous sections of this Chapter. The plan was designed to accommodate the intermediate population, household and employment projections for the County. Map VII –2 presents the recommended land use plan for Waukesha County for the year 2035. The map shows urban areas in the County as envisioned under the plan including suburban areas, which are neither truly urban or rural in character; primary environmental corridors—i.e., areas containing concentrations of the best remaining elements of the natural resource base—which are recommended for preservation in essentially natural open uses; and rural areas consisting of prime agricultural land, other agricultural land, rural-density residential land, and other open lands. The various components of the land use plan, as depicted on Map VII-2, are described in this section. Table VII-8 presents the planned land uses by municipality for year 2035.

### Basic Definitions

#### *Urban Land and Urban Development*

For purposes of the 2035 recommended land use plan, “urban land” or “urban development” is defined as intensively developed areas devoted to urban-density residential, commercial, industrial, governmental and institutional, recreational, mixed use, transportation and utility and communication uses, that are serviced by public infrastructure such as sewer, water and public transit.

“Commercial and/or Office Park” development is defined as land devoted to retail, office, service activities, general business activities, and/or research and development and related off-street parking.

“Governmental and Institutional” development is defined as areas for government and public and private institutional buildings, facilities and grounds such as schools, churches, libraries, cultural facilities, nonprofit charitable organizations, hospitals, and police and fire stations, that have a direct bearing on the quality of life and on public safety.

“Highway and Railway Rights-of-Way” are federal, state and county highways, railroad rights-of-way, and parking associated with transportation systems.

“Industrial” development is defined as land devoted to manufacturing, wholesaling, storage activities, attendant offices and related off-street parking and may include office uses or take the form of a business park.

“Mixed Use” development is defined as development that may contain residential and could contain a combination of public, institutional, office, retail, service, light industrial, research and development, and/or other commercial uses, including off street parking and may take the form of a business park.

“Recreational” land use is defined as area devoted to public and private general use recreation including golf, baseball, swimming, tennis, ice skating. In addition, recreational lands include natural resource-based education and self-actualized recreational activities such as hiking, camping, picnicking, skiing and horseback riding.

“Suburban Density” residential development is defined as residential development at a densities ranging from 1.5 to 4.9 acres of area per dwelling unit. Such development is neither truly urban nor rural in character. Development at these densities generally precludes the provision of centralized sewer and water supply service and other urban amenities. While such development occurs and accordingly must be accommodated in the land use plan, it is only recommended while maintaining an overall residential density of 5 acres in “rural development” areas. “Suburban I Density” is residential development at 1.5 to 2.9 acres per dwelling unit. “Suburban II Density” is residential development at 3.0 to 4.9 acres per dwelling unit.

“Transportation, Communication and Utilities” land uses include areas used for airports, and utility and communication facilities.

“Urban Density Residential Development” includes the following density ranges: “high density” (less than 6,000 square feet of area per dwelling unit); “medium-density” (6,000 – 19,999 square feet of area per dwelling unit); and “low-density” (20,000 square feet to 1.4 acres of area per dwelling unit). The term “urban service area” refers to areas that are intended to accommodate urban development insofar as they are served by basic urban services and facilities, including public sanitary sewer service, public water supply service and a local park, school, and shopping area.

### ***Rural Land and Rural Development***

For the purposes of the land use plan, “rural land” or “rural development” is defined as sparsely developed areas where land is used primarily for farming, resource extraction, landfills, very low density residential uses (no more than one dwelling unit per five acres), or other open spaces uses, and includes environmental corridors and isolated natural resource areas.

“Extractive” land use is defined as area devoted primarily to the extraction of sand, gravel and stone and related activities. Mineral extraction is recognized as an interim land use. Future land use following the extraction activity will be subject to future plan amendments consistent with the planning standards and objectives contained in Chapter 2 and adjoining land uses.

“Isolated Natural Resource Areas” are smaller pockets of natural resource elements that are isolated from primary and secondary environmental corridors, and have environmental value in the areas in which they are located and are more specifically defined in SEWRPC Technical Record Vol. 4, No. 2, March 1981.

“Landfill” development is area devoted to licensed waste disposal operations.

“Other Open Lands to be Preserved” are defined as lands usually adjacent to, but outside, identified primary and secondary environmental corridors and isolated natural resource areas, including lands within the 100-year recurrence interval floodplain, open lands within existing County or State park and open space sites, and other lands covered by soils with a high water table, poorly drained soils, or organic soils.

“Prime Agricultural” are lands in agricultural use, unused/open lands, and primary/secondary environmental corridor or isolated natural areas and are within a five (5) square mile contiguous area (including adjacent counties) that meet all of the following criteria: 1) is outside of any planned sewer service area boundary; 2) 75% is agricultural or open/unused land use; 3) 50% is Class I or Class II soils which meet Natural Resources Conservation Service standards; and 4) 75% consists of land ownership parcels of 35 acres or more. A description of the origin of this definition is presented in Chapter 2. Residential development can occur on prime agricultural lands at a density of no more than one dwelling unit per 35 acres.

“Primary Environmental Corridors” are areas of woodlands, wetlands, prairies, surface water, and wildlife habitat that represent a composite of the best remaining elements of the natural resource base and are more specifically defined in SEWRPC Technical Record Vol. 4, No. 2, March 1981.

“Rural Density and Other Agricultural Land” consist primarily of farm and related open lands which do not meet the criteria for classification as prime agricultural lands, but which are nonetheless proposed to be retained in rural land uses. Rural land uses include continuation of existing farming activity; creation of smaller farms, including hobby farms, horse farms, or other specialty farms; and rural density residential development. Rural density residential development occurs at a density of no more than one dwelling unit per five acres (5 to 34.9 acres of area per dwelling unit or equivalent density). When accommodated through conservation subdivision designs, only a fraction of the total site area is intensively developed as homesites, the balance being retained in permanent open space use, achieving the overall rural density.

“Secondary Environmental Corridors” are areas containing a variety of natural resource elements, often remnant resources from primary environmental corridors, which have been developed for intensive urban or agricultural purposes, creating these smaller, yet significant corridors and are more specifically defined in SEWRPC Technical Record Vol. 4, No. 2, March 1981.

### **Planned Land Use**

The pattern of land use recommended under the Comprehensive Development Plan for Waukesha County is shown graphically on Map VII-2 and presented by municipality in Table VII-8. A description of the various urban and nonurban land uses in the County, as envisioned under the plan, follows.

#### *Urban Land Use*

The recommended land use plan envisions a substantial increase in urban land use within the County. Urban land uses, consisting of lands devoted to residential, commercial, industrial, governmental and institutional, recreational, landfill highway and railway rights-of-way and transportation, communication, and utility uses, encompassed about 130,425 acres and comprised about 35 percent of the total area of the County in 2000. Under the plan, the area devoted to urban uses would increase to about 190,978 acres, or about 51 percent of the County by the plan design year 2035. Table VII-7 presents the change in residential, commercial and industrial lands from the year 2000 to 2035, including the five (5) year increment.

#### *Recreational Land*

Under the recommended land use plan, recreational land use would increase from 8416 acres in 2000 to 15,548 acres by the year 2035.

#### *Residential Land*

Under the recommended land use plan, urban residential land use would increase by about 70 percent, from 76,075 acres in 2000 to about 129,346 acres by the year 2035. Under the plan, the proportion of the County devoted to urban residential use would increase from 21 percent to 35 percent.

Of the total planned urban residential land, about 44 percent (57,416 acres) would occur at low density (20,000 square feet to 1.4 acres of area per dwelling unit), 12 percent (14,918 acres) at suburban density I (1.5 to 2.9 acres per dwelling unit), and 13 percent (17,418 acres) at suburban density II (3.0 to 4.9 acres per dwelling unit). About 28 percent (36,275 acres) of the urban residential land would occur at medium density with 6,000 to 19,999 square feet of lot area per dwelling unit. The remaining three (3) percent (3,316 acres) of the additional urban residential land would occur at high density, with less than 6,000 square feet of lot area per dwelling unit.

#### *Commercial, Industrial and Mixed Use*

The recommended land use plan also envisions a substantial increase in economic activity areas, as represented by the commercial and industrial uses on Map VII-2. Under the plan, commercial business and office park land uses, which includes areas proposed to be utilized for retail, office, service activities, general business activities, and/or research and development and related off-street parking, individually or in various combinations would increase to about 8,897 acres by the year 2035 from 5,443 acres in 2000. The proportion of the total County area devoted to commercial and office park use would accordingly increase from 1.5 percent to 2.4 percent.

Under the plan, industrial land use would increase by from about 5,546 acres in 2000 to 13,038 by the year 2035. The proportion of the total County area devoted to industrial use would accordingly increase from 1.5 percent to 3.5 percent.

Under the plan, mixed use development, which may contain residential and could contain a combination of public, institutional, office, retail, service, light industrial, research and development, and/or other commercial uses, and may take the form of a business park would represent 1,962 acres, or less than 1 percent of the land

uses, by year 2035. Since this is a new land use category in this comprehensive development plan, no comparison can be made to year 2000 conditions.

*Governmental and Institutional*

Governmental and institutional lands represent areas for government and public and private institutional buildings, facilities and grounds such as schools, churches, libraries, cultural facilities, nonprofit charitable organizations, hospitals, and police and fire stations, that have a direct bearing on the quality of life and on public safety. The recommended land use plan identifies governmental and institutional lands would increase from 4,900 acres in year 2000 to 8,354 acres in year 2035.

*Other Urban Land*

Increases in other urban land uses, including governmental and institutional; recreational; highway and railway rights-of-way and transportation, communication, and utility lands, are also envisioned under the recommended land use plan.

Under the plan, the transportation, communication, and utility land use category, which includes areas used for airports, and utility and communication facilities, would represent 12,850 acres, or 3.5 percent of the county wide land use. Of this acreage, 11,754 acres are identified as highway right-of-ways. Map VII-2 depicts the highway right-of-ways separate from other transportation, communication and utility lands.

**Table VII-7  
INCREMENTAL LAND USE PROJECTIONS FOR SPECIFIC URBAN LAND USES: 2000-2035**

Land Use Category	Existing Land Uses: 2000		Future Land Uses: 2035		Change 2000 - 2035		5-Year Increment (acres)
	Acres	Percent of County	Acres	Percent of County	Acres	Percent Change	
Residential	76,075	20.5	129,346	34.8	53,271	70	7,610
Commercial	5,443	1.5	8,897	2.4	3,454	63	493
Industrial	5,546	1.5	13,038	3.5	7,492	135	1,070

*Nonurban Land Uses*

Under the recommended land use plan, nonurban land uses, consisting of environmentally sensitive lands, other open lands to be preserved, landfills, extractive uses, prime agricultural lands and rural density residential and other agricultural lands, would comprise about 180,567 acres, or about 49 percent of the total area of the County. Owing to the amount of urban development envisioned under the plan, the area dedicated to nonurban land uses would decrease from about 241,112 acres in 2000 to the planned 180,567 acres by the year 2035.

*Environmentally Sensitive Lands*

The most important remaining elements of the natural resource base are concentrated within areas identified on the recommended land use plan map as primary environmental corridors, secondary environmental corridors, and isolated natural resource areas. The environmental corridor concept and the pattern of existing environmental corridors and isolated natural resource areas in the County are described in Chapter 3 of this Plan.

Primary environmental corridors are linear areas in the landscape that contain concentrations of high-value elements of the natural resource base, including almost all of the best remaining floodlands, woodlands, wetlands, and wildlife habitat areas. By definition, these corridors are at least 400 acres in area, two miles long, and 200 feet

in width. The plan proposes the preservation of all remaining primary environmental corridors in essentially natural, open uses. Under the plan, development within these corridors would be limited to that needed to accommodate required transportation and utility facilities, compatible outdoor recreation facilities, and, on a limited basis, carefully sited rural-density residential use. The plan further envisions that certain adjacent floodlands within planned sewer service areas that are currently in agricultural or other open uses will over time be allowed to revert to a natural condition, becoming part of the environmental corridor network as urbanization of abutting upland areas proceeds. Under the recommended land use plan, the primary environmental corridor area in the County would consist of about 73,024 acres, or about 19 percent of the total land area in the year 2035.

Secondary environmental corridors also contain a variety of resource elements, often being remnants of primary corridors that have been partially converted to intensive urban use or agricultural use. By definition, secondary environmental corridors are at least one mile long and 100 acres in area. The County land use plan recommends that secondary environmental corridors be considered for preservation in natural, open uses or incorporated as drainage ways or local parks within developing areas. Such areas may, at the discretion of local units of government, also accommodate intensive urban uses. Caution must be exercised when considering development within such areas, however, since Federal, State, or local natural resource protection regulations concerning wetlands, floodplains, shorelands, storm water management, and erosion control, among others, may effectively preclude development within lowland portions of such corridor areas. Under the recommended land use plan, the secondary environmental corridor area would consist of about 6,759 acres, or about 2 percent of the total land area in the year 2035.

Isolated natural resource areas consist of smaller pockets of wetlands, woodlands, or surface water that are isolated from the primary and secondary environmental corridors. By definition, isolated natural resource areas are at least five acres in size. The land use plan recommends that these areas be preserved in natural, open uses insofar as is practicable, recognizing that such areas are often well suited for use as public or private parks and open space reservation. Such areas may, at the discretion of local units of government, also accommodate intensive urban uses. Caution must be exercised when considering development within such areas, however, since Federal, State, or local natural resource protection regulations concerning wetlands, floodplains, shorelands, storm water management, and erosion control, among others, may effectively preclude development within lowland portions of isolated natural resource areas. Under the recommended land use plan, the isolated natural resource areas would consist of about 7,688 acres, or about 2 percent of the total land area in the year 2035.

As indicated in Chapter 3 of this Plan, the preservation of these environmentally sensitive areas, particularly the primary environmental corridors, is essential to the maintenance of the overall quality of the environment. Moreover, because these areas are typically unsuitable for urban development, their preservation in natural, open uses can help to prevent such new developmental problems as failing foundations for pavement and structures, wet basements, excessive clear water infiltration into sanitary sewerage systems, and poor drainage.

#### *Extractive*

As noted in Chapter 3, Waukesha County contains an abundance of nonmetallic mineral resources, the mining of which may be necessary to provide the sand, gravel, and dimensional stone needed in support of the continued development of the area. This recommended land use plan recognizes that while the County contains an abundance of such resources, efforts to extract sand and gravel or dimensional stone are increasingly constrained by the continued urbanization of the County. The plan seeks to preserve and protect lands for mineral extraction purposes before the lands are developed for urban use or effectively precluded from extractive use by further urban development of adjacent areas.

For this aspect of the plan, input from the Aggregate Producers of Waukesha County, an association of mineral extraction operators in the County was sought. Members of that association provided information regarding the extent of lands now owned or leased for mineral extraction purposes as well as adjacent lands having the potential for mining activity. The areas so identified are shown on the recommended County land use plan (Map VII-2). In incorporating these areas into the land use plan, adjustments were made as necessary to ensure that the proposed activity would not encroach upon environmental corridors or isolated natural resource areas.

The areas identified for extractive use under the recommended plan encompass about 1.3 percent of the total area of the County. It should be recognized in this respect that mineral extractive activity is an interim use, and further, that mining activity at any given site usually proceeds in phases, with early phases undergoing restoration while later phases are being mined. Accordingly, the total area of the County being actively mined at any point in time may be expected to be significantly less than 4,930 acres.

### *Landfill*

The recommended land use plan envisions the continued operation of existing sanitary landfill sites in the Village of Menomonee Falls and City of Muskego with modest expansions of each of the sites. The sanitary landfill sites shown on the land use plan map together encompass about 1,091 acres or less than one (1) percent of the total area of the County.

### *Other Open Lands to Be Preserved*

Other open lands to be preserved under the recommended land use plan are lands usually adjacent to, but outside, identified primary and secondary environmental corridors and isolated natural resource areas, including lands within the 100-year recurrence interval floodplain, open lands within existing County or State park and open space sites, small wetlands less than five acres in size, and other lands covered by soils with a high water table, poorly drained soils, or organic soils. Such lands, which should be considered unsuitable for development of any kind, amount to about 16,018 acres, or about 4.3 percent of the total area of the County under the year 2035 plan conditions.

### *Prime Agricultural*

The recommended land use plan envisions, to the extent still practicable, the preservation of the best remaining prime agricultural lands in agricultural use. As shown on Map VII-2, prime agricultural lands envisioned under the recommended plan are located primarily in the northwest and southwest areas of the County. Under the plan, these areas would be developed at a minimum of a 35-acre density in order to preserve workable farm units and to prevent the intrusion of incompatible urban development. Structures would be limited to those consistent with agricultural use, with residences limited to homes for the farmer, farm laborers, or parents or children of the farmer.

Under the recommended land use plan, prime agricultural lands in the County would amount to about 10,341 acres, or about 2.8 percent of the total area of the County under year 2035 plan conditions. Anticipated losses in prime agricultural lands would occur as a result of planned additional urban development, primarily around expanding urban service areas, and as a result these prime agricultural lands have been reclassified to rural-density residential and other agricultural lands, or to other open lands to be preserved. Such areas would be reclassified because they no longer meet the criteria for designation as prime agricultural lands, owing to the intrusion of residential development that disrupts the extensive blocks of farmland, which once occurred throughout the County.

### *Rural Density and Other Agricultural Land*

Areas shown in white on the recommended land use plan map consist primarily of farm and related open lands which do not meet the criteria for classification as prime agricultural lands, but which are nonetheless proposed to be retained in rural land uses. Rural land uses envisioned under the plan for these areas include continuation of existing farming activity; creation of smaller farms, including hobby farms, horse farms, or other specialty farms; and rural-density residential development.

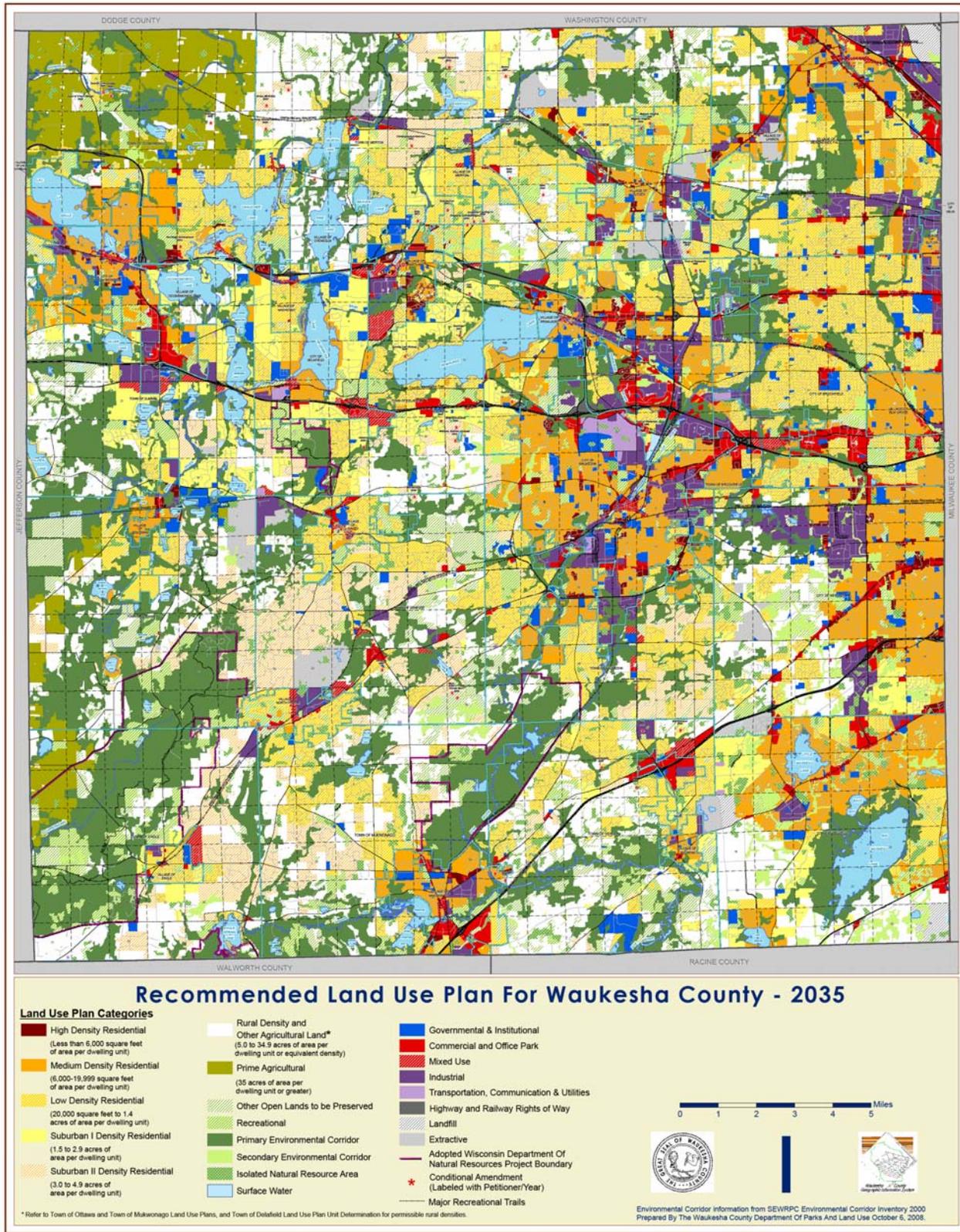
Rural-density residential development is defined for the purpose of the land use plan as residential development at a gross density of no more than one dwelling unit per five acres of land. It is envisioned that agricultural uses would be encouraged to continue in the rural-residential and other agricultural areas delineated on the plan map to the greatest extent possible, and that rural residential development be allowed to occur in those areas only at such

time as the agricultural uses are discontinued. The determination of permitted gross residential density in such areas could be calculated on an area wide basis and would include in the calculation rural-density residential and other agricultural lands, primary or secondary environmental corridors, isolated natural resource areas, and other open lands to be preserved and major public land holdings, as designated under the recommended plan, and excluding major lakes.

Rural-density residential development could take the form of large lots for single-family dwelling units, with each lot being five acres or more in area, or could use density transfer, planned unit development, or cluster development design techniques to achieve the recommended overall gross residential density. Dwelling units could be concentrated on carefully located groupings of smaller lots, possibly as small as one acre in size, on a portion of a site to be developed, while retaining the balance of the site in agricultural or other open uses. The clusters of residential lots should be sited to preserve the rural appearance of the landscape, to facilitate the provision of sewage disposal and water supply, and to avoid the creation of problems such as poor drainage and foundation failures. This development option could include transfer of development rights between parcels of land throughout the community or adjacent to each other, resulting in higher densities of dwelling units at the development site while maintaining large areas of the landscape in open uses. Many options exist with respect to the use and ownership of the preserved open areas of a rural development, as well as for the design of the portion of the site where dwelling units are to be clustered. These options and the manner in which they are implemented are considered later in this chapter.

Under the recommended land use plan, the rural-density residential and other agricultural land use category would amount to about 44,273 acres, or about 12 percent of the total area of the County under the year 2035 plan conditions. As shown on Map VII-2, lands in this category would be widely distributed in the outlying areas of the County.

## Map VII-2 Recommended Land Use Plan for Waukesha County: 2035



**Table VII-8  
PLANNED LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2035**

Community	Urban									
	Commercial and Office Park		Governmental and Institutional		Highway Rights of Way		Industrial		Landfill	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	4,695	4.3	3,945	3.7	0	0.0	7,040	6.5	629	0.6
Brookfield	1,243	7.0	793	4.5	0	0.0	504	2.9	0	0.0
Delafield	144	2.0	524	7.4	0	0.0	60	0.8	0	0.0
Milwaukee	0	0.0	0	0.0	0	0.0	37	72.5	0	0.0
Muskego	570	2.5	336	1.5	0	0.0	276	1.2	629	2.7
New Berlin	640	2.7	616	2.6	0	0.0	2,138	9.1	0	0.0
Oconomowoc	516	7.3	331	4.7	0	0.0	643	9.1	0	0.0
Pewaukee	623	4.6	273	2.0	0	0.0	1,439	10.6	0	0.0
Waukesha	958	6.0	1,072	6.7	0	0.0	1,943	12.1	0	0.0
Villages (Subtotal)	2,754	4.8	2,203	3.9	0	0.0	3,919	6.9	462	0.8
Big Bend	351	21.2	24	1.5	0	0.0	133	8.0	0	0.0
Butler	13	2.6	6	1.2	0	0.0	251	49.3	0	0.0
Chenequa	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0
Dousman	31	1.9	94	5.8	0	0.0	134	8.3	0	0.0
Eagle	41	4.6	71	8.0	0	0.0	65	7.3	0	0.0
Elm Grove	78	3.7	130	6.2	0	0.0	25	1.2	0	0.0
Hartland	54	1.6	240	7.2	0	0.0	441	5.5	0	0.0
Lac La Belle	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lannon	76	4.8	36	2.3	0	0.0	161	10.1	0	0.0
Menomonee Falls	878	4.1	797	3.7	0	0.0	1,724	8.1	462	2.2
Merton	14	0.7	54	2.8	0	0.0	32	1.6	0	0.0
Mukwonago	515	12.9	146	3.7	0	0.0	285	7.1	0	0.0
Nashotah	28	2.7	16	1.5	0	0.0	15	1.4	0	0.0
North Prairie	44	2.5	22	1.2	0	0.0	176	10.0	0	0.0
Oconomowoc Lake	35	1.7	51	2.5	0	0.0	5	0.2	0	0.0
Pewaukee	266	9.2	298	10.3	0	0.0	198	6.8	0	0.0
Sussex	226	4.8	106	2.2	0	0.0	524	11.1	0	0.0
Wales	104	5.1	107	5.2	0	0.0	10	0.5	0	0.0
Towns (Subtotal)	1,427	0.7	2,215	1.1	0	0.0	1,800	0.9	0	0.0
Brookfield	340	10.2	74	2.2	0	0.0	98	2.9	0	0.0
Delafield	163	1.2	221	1.7	0	0.0	0	0.0	0	0.0
Eagle	11	0.0	52	0.2	0	0.0	124	0.6	0	0.0
Genesee	181	0.9	100	0.5	0	0.0	504	2.6	0	0.0
Lisbon	170	0.9	247	1.4	0	0.0	318	1.8	0	0.0
Merton	58	0.3	269	1.5	0	0.0	140	0.8	0	0.0
Mukwonago	63	0.3	52	0.3	0	0.0	2	0.0	0	0.0
Oconomowoc	137	0.7	148	0.7	0	0.0	92	0.5	0	0.0
Ottawa	11	0.1	193	0.9	0	0.0	6	0.0	0	0.0
Summit	4	0.0	273	1.7	0	0.0	231	1.4	0	0.0
Vernon	127	0.6	421	2.1	0	0.0	126	0.6	0	0.0
Waukesha	162	1.2	165	1.2	0	0.0	159	1.2	0	0.0
Waukesha County	8,876	2.4	8,351	2.2	0	0.0	12,759	3.4	1,091	0.3

**Table VII-8 (Continued)**  
**PLANNED LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2035**

Community	Urban									
	Mixed Use		Recreational		Residential		Transportation, Communication and Utilities		Subtotal	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	490	0.5	4,480	4.1	48,803	45.2	5,123	4.7	75,206	69.6
Brookfield	105	0.6	590	3.3	10,276	58.2	818	4.6	14,329	81.2
Delafield	358	5.1	484	6.8	3,886	54.9	419	5.9	5,875	83.1
Milwaukee	0	0.0	0	0.0	0	0.0	0	0.0	37	72.5
Muskego	0	0.0	807	3.5	8,533	37.1	421	1.8	11,573	50.3
New Berlin	0	0.0	1,056	4.5	9,080	38.5	924	3.9	14,454	61.3
Oconomowoc	27	0.4	438	6.2	3,440	48.9	217	3.1	5,613	79.8
Pewaukee	0	0.0	446	3.3	5,609	41.2	1,017	7.5	9,407	69.1
Waukesha	0	0.0	659	4.1	7,979	49.8	1,307	8.2	13,919	86.8
Villages (Subtotal)	719	1.3	2,878	5.1	25,440	44.7	2,336	4.1	40,711	71.5
Big Bend	19	1.1	9	0.5	851	51.4	102	6.2	1,489	90.0
Butler	0	0.0	12	2.4	159	31.2	24	4.7	465	91.4
Chenequa	0	0.0	84	2.8	57	1.9	96	3.2	242	8.1
Dousman	0	0.0	23	1.4	956	59.4	31	1.9	1,269	78.9
Eagle	0	0.0	33	3.7	624	70.1	45	5.1	879	98.8
Elm Grove	10	0.5	62	2.9	1,624	77.1	80	3.8	2,009	95.3
Hartland	348	10.5	225	6.8	1,418	42.7	207	6.2	2,673	80.5
Lac La Belle	0	0.0	108	25.5	201	47.5	0	0.0	309	73.0
Lannon	0	0.0	82	5.1	627	39.3	57	3.6	1,039	65.2
Menomonee Falls	144	0.7	952	4.5	9,133	42.8	769	3.6	14,859	69.7
Merton	48	2.5	106	5.4	1,410	72.3	39	2.0	1,703	87.3
Mukwonago	0	0.0	179	4.5	1,782	44.6	262	6.6	3,169	79.4
Nashotah	4	0.4	40	3.8	622	59.4	98	9.4	823	78.6
North Prairie	105	6.0	263	14.9	984	55.8	49	2.8	1,643	93.2
Oconomowoc Lake	0	0.0	0	0.0	415	20.2	29	1.4	535	26.0
Pewaukee	0	0.0	53	1.8	1,102	38.1	188	6.5	2,105	72.7
Sussex	0	0.0	401	8.5	2,265	47.8	217	4.6	3,739	78.9
Wales	41	2.0	246	12.0	1,210	58.9	43	2.1	1,761	85.7
Towns (Subtotal)	1,082	0.5	8,190	4.0	55,110	26.7	5,391	2.6	75,215	36.4
Brookfield	116	3.5	64	1.9	1,316	39.4	231	6.9	2,239	67.1
Delafield	67	0.5	646	4.9	5,151	38.8	430	3.2	6,678	50.3
Eagle	196	0.9	1,792	8.0	3,349	15.0	471	2.1	5,995	26.9
Genesee	159	0.8	298	1.5	6,672	33.8	475	2.4	8,389	42.5
Lisbon	0	0.0	647	3.6	6,023	33.5	475	2.6	7,880	43.9
Merton	65	0.4	639	3.6	5,892	33.6	384	2.2	7,447	42.4
Mukwonago	21	0.1	918	4.6	5,396	27.1	314	1.6	6,766	33.9
Oconomowoc	29	0.1	556	2.7	3,404	16.8	708	3.5	5,074	25.0
Ottawa	0	0.0	862	4.0	3,129	14.4	290	1.3	4,491	20.6
Summit	187	1.1	363	2.2	4,664	28.6	549	3.4	6,271	38.4
Vernon	151	0.7	909	4.5	4,173	20.5	602	3.0	6,509	32.0
Waukesha	96	0.7	496	3.6	5,941	43.1	462	3.3	7,481	54.2
Waukesha County	2,291	0.6	15,548	4.2	129,353	34.8	12,850	3.5	191,132	51.4

**Table VII-8 (Continued)**  
**PLANNED LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2035**

Community	Non-Urban							
	Extractive		Other Open Lands to be Preserved		Primary and Secondary Environmental Corridor and Isolated Natural Resource Areas		Prime Agricultural	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	1,019	0.9	1,445	1.3	16,609	15.4	0	0.0
Brookfield	0	0.0	226	1.3	2,736	15.5	0	0.0
Delafield	0	0.0	17	0.2	152	2.1	0	0.0
Milwaukee	0	0.0	0	0.0	11	21.6	0	0.0
Muskego	319	1.4	0	0.0	4,448	19.3	0	0.0
New Berlin	700	3.0	583	2.5	3,993	16.9	0	0.0
Oconomowoc	0	0.0	0	0.0	809	11.5	0	0.0
Pewaukee	0	0.0	434	3.2	2,655	19.5	0	0.0
Waukesha	0	0.0	185	1.2	1,805	11.3	0	0.0
Villages (Subtotal)	452	0.8	697	1.2	9,097	16.0	0	0.0
Big Bend	0	0.0	8	0.5	137	8.3	0	0.0
Butler	0	0.0	0	0.0	42	8.3	0	0.0
Chenequa	0	0.0	0	0.0	967	32.4	0	0.0
Dousman	0	0.0	0	0.0	289	18.0	0	0.0
Eagle	0	0.0	0	0.0	9	1.0	0	0.0
Elm Grove	0	0.0	0	0.0	91	4.3	0	0.0
Hartland	0	0.0	199	6.0	347	10.5	0	0.0
Lac La Belle	0	0.0	0	0.0	112	26.5	0	0.0
Lannon	268	16.8	0	0.0	282	17.7	0	0.0
Menomonee Falls	0	0.0	85	0.4	4,071	19.1	0	0.0
Merton	0	0.0	0	0.0	212	10.9	0	0.0
Mukwonago	0	0.0	1,102	5.5	582	14.6	0	0.0
Nashotah	0	0.0	46	4.4	139	13.3	0	0.0
North Prairie	0	0.0	0	0.0	103	5.8	0	0.0
Oconomowoc Lake	0	0.0	0	0.0	402	19.6	0	0.0
Pewaukee	0	0.0	119	4.1	468	16.2	0	0.0
Sussex	184	3.9	25	0.5	611	12.9	0	0.0
Wales	0	0.0	59	2.9	233	11.3	0	0.0
Towns (Subtotal)	3,459	1.7	13,758	6.7	61,737	29.9	10,341	5.0
Brookfield	0	0.0	118	3.5	954	28.6	0	0.0
Delafield	0	0.0	95	0.7	3,251	24.5	0	0.0
Eagle	0	0.0	788	3.5	9,475	42.5	1,445	6.5
Genesee	898	4.5	2,276	11.5	5,651	28.6	0	0.0
Lisbon	1,611	9.0	1,766	9.8	3,659	20.4	0	0.0
Merton	150	0.9	612	3.5	3,428	19.5	0	0.0
Mukwonago	0	0.0	1,097	5.5	6,470	32.5	0	0.0
Oconomowoc	0	0.0	205	1.0	3,670	18.1	7,778	38.4
Ottawa	720	3.3	1,836	8.4	9,939	45.6	1,118	5.1
Summit	80	0.5	1,044	6.4	4,896	30.0	0	0.0
Vernon	0	0.0	2,727	13.4	6,181	30.4	0	0.0
Waukesha	0	0.0	1,194	8.7	4,163	30.2	0	0.0
Waukesha County	4,930	1.3	15,900	4.3	87,443	23.5	10,341	2.8

**Table VII-8 (Continued)**  
**PLANNED LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2035**

Community	Non-Urban							
	Rural Density and Other Agricultural Land		Surface Water		Subtotal		Total Area	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	7,871	7.3	5,927	5.5	32,871	30.4	108,077	100.0
Brookfield	0	0.0	363	2.1	3,325	18.8	17,654	100.0
Delafield	0	0.0	1,029	14.5	1,198	16.9	7,073	100.0
Milwaukee	0	0.0	3	5.9	14	27.5	51	100.0
Muskego	3,879	16.8	2,802	12.2	11,448	49.7	23,021	100.0
New Berlin	3,783	16.0	82	0.3	9,141	38.7	23,595	100.0
Oconomowoc	209	3.0	405	5.8	1,423	20.2	7,036	100.0
Pewaukee	0	0.0	1,118	8.2	4,207	30.9	13,614	100.0
Waukesha	0	0.0	125	0.8	2,115	13.2	16,034	100.0
Villages (Subtotal)	3,691	6.5	2,262	4.0	16,190	28.5	56,910	100.0
Big Bend	0	0.0	21	1.3	166	10.0	1,655	100.0
Butler	0	0.0	2	0.4	44	8.6	509	100.0
Chenequa	1,032	34.6	741	24.8	2,740	91.9	2,982	100.0
Dousman	0	0.0	51	3.2	340	21.1	1,609	100.0
Eagle	0	0.0	2	0.2	11	1.2	890	100.0
Elm Grove	0	0.0	7	0.3	98	4.7	2,107	100.0
Hartland	0	0.0	100	3.0	646	19.5	3,319	100.0
Lac La Belle	0	0.0	2	0.5	114	27.0	423	100.0
Lannon	0	0.0	5	0.3	555	34.8	1,594	100.0
Menomonee Falls	2,180	10.2	131	0.6	6,467	30.3	21,326	100.0
Merton	0	0.0	35	1.8	247	12.7	1,950	100.0
Mukwonago	0	0.0	86	2.2	824	20.6	3,993	100.0
Nashotah	21	2.0	18	1.7	224	21.4	1,047	100.0
North Prairie	0	0.0	17	1.0	120	6.8	1,763	100.0
Oconomowoc Lake	295	14.4	822	40.0	1,519	74.0	2,054	100.0
Pewaukee	0	0.0	204	7.0	791	27.3	2,896	100.0
Sussex	163	3.4	17	0.4	1,000	21.1	4,739	100.0
Wales	0	0.0	1	0.0	293	14.3	2,054	100.0
Towns (Subtotal)	32,696	15.8	9,347	4.5	131,338	63.6	206,553	100.0
Brookfield	0	0.0	26	0.8	1,098	32.9	3,337	100.0
Delafield	1,853	14.0	1,387	10.5	6,586	49.7	13,264	100.0
Eagle	4,269	19.2	315	1.4	16,292	73.1	22,287	100.0
Genesee	2,407	12.2	119	0.6	11,351	57.5	19,740	100.0
Lisbon	2,992	16.7	60	0.3	10,088	56.1	17,968	100.0
Merton	4,306	24.5	1,615	9.2	10,111	57.6	17,558	100.0
Mukwonago	4,889	24.6	690	3.5	13,146	66.1	19,913	100.0
Oconomowoc	1,219	6.0	2,327	11.5	15,199	75.0	20,273	100.0
Ottawa	3,211	14.7	482	2.2	17,306	79.4	21,797	100.0
Summit	2,099	12.9	1,925	11.8	10,044	61.6	16,315	100.0
Vernon	4,572	22.5	325	1.6	13,805	68.0	20,314	100.0
Waukesha	879	6.4	76	0.6	6,312	45.8	13,793	100.0
Waukesha County	44,258	11.9	17,536	4.7	180,408	48.6	371,540	100.0

Source: SEWRPC, Waukesha County and municipalities

## IMPLEMENTATION RECOMMENDATIONS

The recommended land use plan presented in this chapter provides a design for the attainment of the urban and rural development and open space preservation objectives contained in the comprehensive development plan. The implementation recommendations pertaining to the urban development areas, rural development areas, environmentally sensitive areas and other land use plan implementation measures are summarized below.

### Implementation Recommendations for Urban Development Areas

One of the initial steps recommended for implementation of the County land use plan as it pertains to the proposed urban development areas is the preparation of detailed development and redevelopment plans for the residential neighborhoods and special-purpose districts which comprise the proposed urban service areas.

Within the context of community-level plans, detailed neighborhood development plans should be prepared for each residential neighborhood or special district where significant growth is expected. While such plans may also vary in format and level of detail, they should generally do the following:

- Designate future collector and land access street locations and alignments, pedestrian paths and bicycle ways, and, as appropriate, the configuration of individual blocks and lots.
- Further classify residential areas as to structure type and density, with the mix of housing structure types and lot sizes resulting in an overall density for the neighborhood consistent with that recommended in the community-level and county plan.
- Identify specific sites for neighborhood parks, schools, and retail and service centers which are recommended on a general-site-location basis in the community-level plan.
- Identify environmentally significant areas to be preserved consistent with the community-level plan and county and regional plans.
- Indicate areas to be reserved for storm water management and utility easements.
- The neighborhood planning process should make full use of the many design concepts that can enhance the living environment and increase efficiency in the provision of urban services and facilities and in travel patterns. Among these design concepts are the following:
  1. *Mixed-Used Development*: Residential development in mixed-use settings can provide a desirable environment for a variety of household types seeking the benefits of proximity to places of employment as well as civic, cultural, commercial, and other urban amenities. Examples of mixed-use settings include dwellings above the ground floor of commercial uses and residential structures intermixed with, or located adjacent to, compatible commercial, institutional, or other civic uses.
  2. *Traditional Neighborhood Development*: The term “traditional neighborhood development” refers to very compact, pedestrian-oriented, mixed-use neighborhoods typically characterized by a grid like street system and street-oriented setbacks and building designs. The overall design, including the layout of streets and sidewalks, encourages walking and bicycling as alternatives to automobile transportation within the neighborhood.
  3. *Transit-Oriented Development*: The term “transit-oriented development” refers to compact, mixed-use development whose internal design is intended to maximize access to a transit stop located within or adjacent to the development. Within the development, commercial uses and higher-density residential uses are located near the transit stop. The layout of streets and sidewalks provides convenient walking and bicycling access to the transit stop.
  4. *Residential Cluster Development*: A residential development pattern characterized by a unified site design for a number of housing units, clustering buildings and providing common open space, potential density increases, and a mix of building types. It permits the planning of a project and the calculation of densities over the entire development, rather than on an individual lot-by-lot basis.

In addition to plans for developing neighborhoods, detailed plans should also be prepared for mature neighborhoods or special-purpose districts showing signs of land use instability or deterioration. Such plans

should identify areas recommended for redevelopment to a different use, areas recommended for rehabilitation, any local street realignments or improvements, and other public utility and facility improvements. Special consideration should be given in such planning to overcoming contamination problems at, and reuse of, brownfields. Redevelopment plans should seek to preserve those historic, cultural, and natural features and features of the urban landscape which provide for neighborhood identity within the larger urban complex. Such plans should maximize opportunities for the provision of living arrangements and amenities that are unique to older cities in the County, such as “downtown” housing development.

Although “suburban density” development, as described previously in this chapter, is not consistent with many of the planning standards and objectives, it is recognized that a community may desire infill between existing subdivision plats consistent with adjacent developments and, also, in growth areas adjacent to incorporated municipalities, where services may be available in the future, without utilizing the cluster design concept, which may not be compatible with adjacent existing developments. In addition, for municipalities to maintain an overall residential density of no more than one dwelling unit per five (5) acres in “rural development” areas, suburban densities may be planned.

In addition, in order to support open space or conservation design developments and to preserve rural character, it would be appropriate to permit lands in the Rural Density and Other Agricultural Land category to develop at an overall density of 3.5 acres per dwelling unit, rather than no more than five (5) acres per dwelling unit, if said lands will be developed as Planned Unit Developments (PUD) or conservation design developments utilizing conservation design standards. The standard density bonus option is not applicable in the Towns of Mukwonago and Delafield, as both Towns achieve five-acre rural density using local PUD provisions. The Town of Mukwonago Land Use Plan and the Town of Delafield Land Use Plan Unit Determination Chart are referenced accordingly by Table VII-10 and Figure VII-2. The idea is that a slight increase in density in otherwise rural areas is a reasonable trade-off in order to achieve more sustainable development design that conserves natural features, creates more open space within developments, protects the rural atmosphere and causes less need for infrastructure, such as roads and storm water management facilities. In order for a development to qualify for the 3.5 acre Rural Density option, the following criteria must be met.

1. The development plan for a given site must incorporate an absolute minimum of 40 percent of the site in open space owned by the property owners or recreational use or public open space. In calculating open space, not more than 20 percent of the required open areas may be floodplain or wetland (80 percent of open space must be upland).
2. The community in which the development is located must create and map an Upland Environmental Corridor District for all upland primary and secondary environmental corridors, which allows for development at a density not greater than one unit per five acres. It is recommended that communities also include isolated natural resource areas within the Upland Environmental Corridor District.
3. Individual development projects must be developed as Planned Unit Developments or conservation design developments, which allows the community an opportunity to properly analyze project design. Communities must adopt Planned Unit Development standards within their zoning and subdivision ordinances.
4. Primary environmental corridors, secondary environmental corridors, isolated natural resource areas, wetlands and floodplains must be protected to the greatest extent possible and shall be incorporated into protected open space. If any portion of the above resources will be located on a private lot, said resource must be protected with a protective covenant or restriction. Sites that do not contain significant natural features may be conducive to prairie or wetland restorations or may be enhanced with the establishment of landscaped open spaces.
5. Where open space is mentioned as part of a conservation design residential planned unit development, said open space shall be protected as green or natural open space and no more than five (5) percent of said open space area shall be allowed to have impervious surfaces.

Conservation design development can be equally valuable within any of the residential land use categories. As detailed above, the Rural Density and Other Agricultural Land category allows for a 30 percent increase (3.5 acres per dwelling unit vs. five (5) acres per dwelling unit) in density if certain conservation design criteria are met. In order to promote conservation design in the urban and suburban residential categories, it is recommended that a 30 percent density bonus also be made available to development projects that conform with development standards #1-4 above. The following list details the resultant maximum densities that could be offered when utilizing a 30 percent density bonus for conservation designs:

Suburban II Density	2.1 acres per dwelling unit (DU)	(3.0-4.9 conventional)
Suburban I Density	1.05 acres per DU	(1.5-2.9 conventional)
Low-Density Residential	14,000 sq. ft. per DU	(20,000 s.f.-1.4 acres conventional)
Medium-Density Residential	4,200 sq. ft. per DU	(6,000-19,999 s.f. conventional)
High-Density Residential	< 4,200 sq. ft. per DU	(<6,000 s.f. conventional)

Zoning regulations should be reviewed and adjusted, as necessary, to ensure the proper staging of development over time. In this respect, the application of urban zoning districts should proceed incrementally. The **premature zoning of lands for urban use should be avoided** so as to prevent inefficient use of public infrastructures, the creation of additional isolated urban enclaves and incomplete neighborhoods. Accordingly, the **areas concerned should be placed in zoning districts consistent with their existing use and should be rezoned into appropriate urban districts only when development has been proposed and approved and essential facilities and services can be efficiently readily provided.**

### Implementation Recommendations for Rural Development Areas

As defined previously in this Chapter, rural development areas are *sparsely developed areas where land is used primarily for farming, resource extraction, landfills, very low density residential uses (one unit per five acres or less), or other open spaces uses, and includes environmental corridors and isolated natural resource areas.* Rural development areas exist in several cities, villages and towns in Waukesha County. Planning and Zoning should be carried out in such a manner as to preserve rural character. First, new residential development should be limited to an overall density of no more than one dwelling unit per five acres of open land within the planning area unless a density bonus is allowed as a result of utilizing the open space or cluster design concept as discussed earlier. This density is intended to provide a basis for determining the maximum number of additional dwelling units, which could be accommodated. Table VII-9 presents a methodology for calculating the overall density within rural development areas. The overall density is calculated by dividing by five the total acreage within the rural development area currently in open use, including primary and secondary environmental corridors, isolated natural resource areas, and other open lands to be preserved and major public land holdings, but excluding major water bodies 50 acres or more in size. Table VII-10 presents the overall density within rural development areas using the aforementioned methodology for year 1996 and year 2000 conditions.

Second, to the maximum extent possible, the dwelling units, which may be accommodated in accordance with the overall five-acre density, should be developed by using residential cluster designs, in which dwelling units are grouped together on a relatively small portion of the site. The residential clusters should be limited in size, surrounded by open space, and, as may be necessary, contain open space. The clustered lots should be no larger than necessary to accommodate the residential structures, driveways, and desired yards, including, as necessary, space for an onsite soil-absorption sewage-disposal system and replacement system area. This can usually be accomplished on lots no greater than one acre in size.

Third, to the extent possible, residential clusters should be located in areas which are visually screened from public roadways, so that existing rural vistas are maintained; should be carefully adjusted to topographic and other natural features, taking full advantage of the settings provided by those features without causing undue disturbance; and should be buffered from nearby agricultural and mineral extraction lands, as appropriate, so as to minimize conflicts between farming or mining and residential uses.

Fourth, other intensive land uses should be limited to uses which are consistent with the rural character of the area or otherwise essential to the area, including, among others, animal hospitals and veterinary clinics, riding stables, and plant nurseries. In general, office, commercial, industrial, and storage uses and the types of retail and service uses that are provided as a matter of convenience and necessity in urban residential neighborhoods should not be considered appropriate within rural development areas.

Fifth, lands within the rural development areas, which are not designated for residential or other compatible intensive use, should be retained in general agricultural and other open space use. Potential agricultural uses include traditional farming, hobby farms, and community supported agriculture. Land not used for farming should be kept free of development, except for recreational trail facilities and access facilities for the benefit of those who own an interest in the land.

It should be noted that, in many cases, it will be necessary to revise zoning and subdivision control ordinances to accommodate the recommended residential cluster development designs. Clustering may be accommodated in rural areas through a variety of zoning approaches. Clustering may be permitted by conditional use or by right in a basic district or through an overlay district. In addition, when the concept of the transfer of development rights is used, residential clustering principles can be used on a community wide basis to achieve better site designs and preserve open space. Subdivision regulations regarding street improvement standards, sewer and water facilities, storm water management, landscaping, and open space preservation may also need revision to adequately promote and regulate cluster development. Residential cluster zoning provisions should require the use of legal restrictions to ensure the preservation of lands, which are to be permanently preserved in agricultural or other open space use.

Because density bonus' are increasing densities from 3.5 to 5 residential acres per unit, the density increase may outpace projected population and projected housing needs in the municipality. Therefore, the municipalities should consider additional growth management tools, such as an allotment system.

### **Implementation Recommendations for Environmentally Sensitive Lands**

Areas identified as primary environmental corridors, secondary environmental corridors, and isolated natural resource areas occur within both urban and rural development areas and within prime agricultural areas. Environmental corridors and isolated natural resource areas should be placed in one of several zoning districts, depending upon the type and character of the natural resource features to be preserved and protected. All lakes, rivers, streams, and wetlands should be placed in lowland conservancy or floodplain protection districts. Undeveloped floodplains and shorelands should be protected in accordance the shoreland and floodplain zoning ordinances. Upland woodlands and areas of steep slopes should generally be placed in appropriate upland conservancy, rural-density residential, or park and recreation districts. Through proper zoning, residential development should be confined to upland portions of environmental corridors, excluding areas of steep slopes, and should be limited to a density of no more than one dwelling unit per five acres, with provisions made as may be appropriate for clustering. Zoning applied to the environmental corridors should, however, accommodate necessary public facilities, such as crossings by streets and highways, utility lines, and engineered flood control facilities, but should require that the location, design, and development of the facilities concerned be sensitive to the protection of the existing resource features, and require that, to the extent possible following construction, disturbed areas be restored to preconstruction conditions.

**Table VII-9**

**METHODOLOGY FOR CALCULATING THE NUMBER OF DWELLING UNITS ALLOWED IN RURAL DEVELOPMENT AREAS**

Target for Rural Development Area 5 Acre Density Standard	Total Rural Development Area (acres)	minus	Water Bodies Exceeding 50 Acres in Size	minus	Existing and Planned Urban Development (Evaluate Border Agreements containing a land use component and Sewer Service Areas)	equals	Area Used to Determine Number of Dwelling Units (acres)	divided by five	equals	Number of Dwelling Units Allowed Under the County Development Plan (not counting any zoning)		
Planned Conditions	Total Rural Development Area (acres)	minus	Water Bodies Exceeding 50 Acres in Size	minus	Existing and Planned Urban Development (Evaluate Border Agreements containing a land use component and Sewer Service Areas)	equals	Area Used to Determine Number of Dwelling Units (acres)	divided	by	Planned 2035 land use categories (See note per assumptions)	equals	Number of Dwelling Units To Be Accommodated at Planned 2035 land use categories

How Actual Density of 2035 Town Land Use Categories is Determined

Acres of Rural Development Area Under 2035 County Development Plan	divided by	Number of Dwelling Units Allowed Under Proposed Land Use Categories (need to consider impact of offering density bonuses)	Equals	Density of Proposed Land Use Categories
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<b><u>Assumptions</u></b>
<ol style="list-style-type: none"> <li>1. Lot sizes are calculated under current zoning where conventional subdivisions are permitted. When calculating land use categories, public road right-of-ways were taken into account (1.23 acre for 1 acre zoning, 3.6 acres for 3 acre zoning, 5.7 acres for 5 acre zoning, and 10 acres at 10 acre zoning).</li> <li>2. The “Total Rural Development Area” includes primary and secondary environmental corridors, isolated natural resource areas, and other open lands to be preserved and major public land holdings.</li> <li>3. For the Town of Oconomowoc, the majority is in Ag Preservation or Urban Land Use categories.</li> <li>4. Where development is only allowed as conservation design or planned unit development/open space development, the density allowed under the development plan was used.</li> <li>5. For Suburban Density I (1.4-2.9 AC/DU), a 2.5 AC density shall be used. For Suburban Density II (3-4.9 AC/DU), a 3.6 AC density shall be used.</li> </ol>

Table VII-10

EVALUATION OF RURAL DEVELOPMENT AREA WITH AN  
OVERALL 5-ACRE DENSITY STANDARD

<b>Rural Development Area</b>	<b>Area Including Public Lands, Rural Density Lands and Environmental Corridors (Acres)</b>	<b>Year 1996 County Development Plan Density (Acres/Dwelling Unit)<sup>a</sup></b>	<b>Year 2000 Conditions Density (Acres/Dwelling Unit)</b>	<b>Year 2035 Maximum Permissible New Rural Area Lots</b>
Delafield <sup>b</sup>	4,435	4.8	4.5	887
Eagle	16,289	5.6	7.0	2,964
Genesee	10,740	6.9	5.1	1,865
Lisbon	9,066	2.2	1.3	1,439
Merton	9,099	3.4	2.9	1,566
Mukwonago <sup>c</sup>	7,476	4.8	4.5	1,931
Oconomowoc <sup>d</sup>				
Ottawa	16,089	6.8	11.2	2,939
Summit	8,777	5.7	3.8	1,493
Vernon	14,375	11.3	8.9	2,526
Waukesha	6,751	13.1	6.6	1,185
Total	103,097	6.5	5.6	18,741

Source: Waukesha County

<sup>a</sup> Based on Zoning in effect at the time.

<sup>b</sup> Town of Delafield Rural Area calculations include lands in Sections 25-36 only.

<sup>c</sup> Town of Mukwonago calculations derived from Town of Mukwonago Land Use Plan.

<sup>d</sup> The majority of the Town of Oconomowoc is in the Agricultural Preservation or Urban Use categories.

## **Implementation Measures for Other Open Lands to be Preserved**

Areas which have been identified in the Other Open Lands to be Preserved category are being mapped in both Urban and Rural areas. Lands identified in this category are mapped in part due to severe to very severe limitations for development of structures from high seasonal groundwater conditions, unstable soils, hydric or organic soil conditions or are generally poorly drained. For planning purposes, soil data available through the Soil Survey of Milwaukee and Waukesha Counties from the United States Department of Agriculture – Natural Resources Conservation Service was used.

Since the soil survey data is generalized, additional site-specific soil data analysis is necessary for individual development project review. It is recommended that the County and municipalities, through regulatory processes, provide a procedure to allow infield detailed investigation and soils analysis using the COMM 85 procedures, established in the Wisconsin Administrative Code, to assist in determining actual on-site soil conditions. Such procedures should identify and document whether or not seasonal high groundwater, soil instability, hydric or organic conditions exist. Where site-specific soil analysis indicates that soil conditions are suitable to accommodate development, an adjustment to the land use category or associated development density may be warranted and would not require a formal amendment request to an adjacent upland development land use category through the annual amendment process outlined in Chapter 9. The land use category which should be used for adjustment from the Other Lands to be Preserved category should be the adjacent upland land use category mapped on the Proposed Land Use Plan. For example, the land being adjusted from the Other Open Lands to be Preserved category are surrounded by lands in the Suburban I category and are found to be acceptable for development, not having the hydric soil conditions and high groundwater table conditions, the subject Open Lands category could be modified to the Suburban I category. There would, however, have to be a recognition and documentation of such change and the information used to justify the change so that appropriate measures are taken to incorporate the changes on the land use maps being maintained by the County and the affected municipality. A record of the documentation and information used to justify the change shall be filed with the County and the community, and an appropriate notation or identification on the Land Use Plan maps made with a reference to the location of the documentation shown on the map should be provided. It should also be noted that the new land use category, which has been modified, from the Other Lands to be Preserved category, can utilize similar densities as used for this new category as if the land were originally all designated in the new land use category.

Lands with soil conditions determined to be unsuitable for development, consistent with the planning standards detailed in Chapter 2 of this Plan, should be retained in open space uses, but can be included within lot boundaries. In addition, these lands may also be included in calculation for density standards as set forth in the Planned Unit Development or Cluster Development standards identified above. It is recommended that the County and municipalities establish, through regulatory processes, a density credit for retaining these lands in open space use. For years, the County used 20 percent of the acreage of lands in this category when calculating densities for proposed developments in the attached or adjoining upland areas. It would be appropriate that a range of 20 percent to 40 percent be used for these lands, subject to specific local community regulations. Further, it may be appropriate to grant a density of one (1) unit per five (5) acres for those lands in the Other Open Lands to be Preserved category.

## **Regulatory Implementation Measures**

Land use regulatory ordinances are an important tool available to county and local units of government to shape growth and development in accordance with adopted land use objectives. Under the State comprehensive planning law (S.66.1001 of the Wisconsin Statutes), “beginning on January 1, 2010, if a local governmental unit engages in official mapping, subdivision regulation, zoning ordinance enacted or amended and zoning of shorelands or wetlands in shorelands, those actions shall be consistent with that local governmental unit's comprehensive plan”. Accordingly, upon adoption of their comprehensive plans, the county, cities, villages, and towns should review the text of their ordinances and adjust as necessary to carry out the various implementation recommendations contained in this Plan. Such changes should include rezoning to use districts consistent with present uses so as

not to prezone, consider allotment system to evaluate and grade proposed developments which carry out the recommendations in this Plan and review of proposed developments for consistency with the recommendations of this Plan.

### ***Zoning in Urban Areas***

Zoning in urban areas should be administered in accordance with county and local comprehensive plans which refine the urban-area recommendations of the regional land use plan. The application of zoning districts that accommodate residential, commercial, industrial, and other urban development should be done in a manner that is consistent with any recommendations in the local comprehensive plan regarding the staging of development over the course of the plan period. Where the local comprehensive plan includes staging provisions, the application of zoning districts that accommodate the planned urban uses should be done incrementally in accordance with the timeframe set forth in the comprehensive plan. Lands should be placed in zoning districts consistent with their existing use, or, alternatively, placed in an urban land holding district or transition district. This approach allows municipalities to determine whether the proposed development is consistent with the Comprehensive Development Plan for Waukesha County or its goals, standards and objectives at the time a project is proposed. Specifically, a development plan needs to be periodically amended to adjust to changing conditions and updated data such as population and economic projections. Prezoning lands to match a particular land use plan, can limit a municipality's ability to respond to changing conditions and should be avoided wherever possible. Evaluations of new project developments should be reviewed and recommended on the basis of the recommendations contained in this and the local communities plan and allow development to occur where it is consistent with the recommendations contained herein.

### ***Zoning in Rural Areas***

Zoning in rural areas should be administered in accordance with county and local comprehensive plans which refine the rural-area recommendations of this Comprehensive Development Plan for Waukesha County. The following is recommended:

- Prime agricultural lands identified in county and local comprehensive plans should be placed into an exclusive agricultural zoning district, which essentially permits only agricultural and agriculture-related uses. Such a district should provide for a residential density of no more than one dwelling unit per 35 acres and should prohibit incompatible urban development.
- Other areas identified for continued agricultural use in county and local comprehensive plans should be placed into exclusive agricultural districts as defined above or into general agricultural districts with smaller minimum parcel sizes as may be appropriate for smaller agricultural operations, such as hobby farms or other specialty farms.
- Areas recommended in county and local comprehensive plans for rural residential development should be placed into a rural residential zoning district that limits development to no more than one dwelling unit per five acres and that encourages, or even requires, the use of conservation subdivision designs to accommodate the permitted development.
- Non-farmed wetlands should be placed in a lowland conservancy or shoreland-wetland zoning district, as appropriate. Farmed wetlands should remain in an agricultural zoning district as long as the parcel remains in agricultural use; with consideration given to placing a conservancy overlay zone on the wetland. Wetlands identified as farmed wetlands should be placed in a lowland conservancy district at the time farming activities on the wetland parcel cease and an application for residential or other urban development of the upland portion of the parcel is approved by the unit of government having zoning authority. Floodplains should be placed in the appropriate floodplain zoning district (floodway, floodfringe, flood storage, or general floodplain). Primary environmental corridors should be placed, and other natural resource areas, including secondary environmental corridors and isolated natural resource areas, may be placed, in a conservancy or other appropriate zoning district (such as a park or rural residential zoning district).

## ***Official Mapping***

Adoption of local official maps can contribute significantly to the implementation of the recommended County land use plan. Local units of government should prepare and adopt local official maps pursuant to Section 62.23(6) of the Wisconsin Statutes, showing thereon lands needed for future public use as streets, highways, transit ways, parkways, drainage ways, parks and playgrounds. The official map should be amended from time to time to incorporate the additional street and other public land requirements identified in detailed neighborhood unit development plans or rural area development plans, as those plans are prepared over time.

## ***Land Division Ordinances***

Land division ordinances should be adopted by the County and local units of government as a basis for the review and approval of subdivision plats and certified survey maps. Any proposed departure from adopted land use plans should be carefully considered and approved only if such departures are found to be in the public interest and the land use plan map is amended to a category that would allow the proposed subdivision. It should be noted that the existing Waukesha County subdivision control ordinance applies only to the statutory shorelands within the unincorporated areas of the County.

In 1999, Waukesha County created a Land Development Workgroup to analyze and address issues created by land division and development processes being used at that time. The Workgroup recommended:

1. The County should modify existing county transportation related ordinances to require pre-review of potential access points prior to recording of certified survey maps and subdivision plats.
2. Municipalities and the County should uniformly apply a development review checklist prepared by the Workgroup. The intent of the checklist is to set forth consistent standards for the review of development proposals by county municipalities, and to clearly express to development sponsors what should be contained in a proper development proposal. The Workgroup further recommended that each municipality in the County amend appropriate local codes incorporating and adhering to the checklist or a more stringent version in development reviews.
3. Another issue raised by the Workgroup was the variety of subdivision definitions used by Waukesha County municipalities. The variety in definitions has led to larger scale residential developments proceeding as certified surveys as opposed to a platted subdivision.

To address this issue, the Workgroup developed a minimum definition of a subdivision to be applied in Waukesha County. The definition reads "A subdivision is the division of land by the owner, subdivider, or his successor in title, for the purpose of transfer of ownership or building development where the division creates more than four (4) residential lots less than 1.5 acres in five (5) years or where the division creates more than six (6) residential parcels or building sites of any size within five (5) years." A remnant parcel in excess of 10 acres in size may be excluded from the plat by action of the municipality upon application by the owner. Upon receipt of an application, the municipality will notify the County.

4. County staff should continue to host training workshops on land use planning and development review topics for local officials.
5. The County should define a Development Review Team process to enhance communication between the County, Towns, Cities, Villages and developers regarding land development projects and issues.
6. The County should evaluate the existing County Storm Water Management Ordinance and Program to identify opportunities for addressing watershed based storm water issues.
7. The County should engage in a process to comprehensively update the Street and Highway Width Map and Jurisdictional System Plan.

This Plan recommends that municipalities and the County continue to follow the recommendations made by the Land Development Workgroup.

### ***Regulation of Public Sanitary Sewerage Systems***

In Wisconsin, the comprehensive water quality management planning program has led to the development of State regulations which have the effect of requiring the preparation of sanitary sewer service area plans for each public sewage treatment plant. In the Region, these plans are prepared cooperatively by the concerned local unit of government and the Regional Planning Commission, with ultimate approval authority resting with the Wisconsin Department of Natural Resources. Sewer service area plans have now been prepared for nearly all of the public sanitary sewerage systems in the Region. These plans define sewer service limits and delineate environmentally sensitive lands within those service limits to which service should not be provided. Chapter NR 110 and Chapter Comm 82 of the *Wisconsin Administrative Code* require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Commerce, with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions are in conformance with adopted area wide water quality management plans and the sanitary sewer service areas identified in such plans before approving such extensions.

Under Chapter NR 121, sewer service areas must be sized in a manner that is consistent with long-range population projections. As a practical matter, this requirement is considered to be met if the buildout population of the sewer service area—that is, the population that could be accommodated if the sewer service area were completely developed at locally planned residential densities—is within the projection range envisioned under the regional land use plan. In sizing their sewer service areas, many communities choose to plan for the high end of the projected population range in order to retain flexibility in terms of the location of future urban growth.

Historically, communities in the Region, with the assistance of SEWRPC, have amended their sewer service area plans from time to time in response to changing needs and conditions. This may be expected to continue in the years ahead, particularly as communities complete their required local comprehensive plans.

As noted above, sanitary sewer service area plans are an important part of the basis for State agency review and approval of proposed sewer extensions. Policies adhered to by the Wisconsin Department of Natural Resources and Department of Commerce prohibit or otherwise limit the extension of sanitary sewers to serve development in certain environmentally significant lands identified in local sewer service area plans. The following restrictions were in effect in 2007:

- The extension of sanitary sewers to serve new development in primary environmental corridors is confined to limited recreational and institutional uses and rural-density residential development (maximum of one dwelling unit per five acres) in areas other than wetlands, floodplain, shorelands, and steep slope (12 percent or greater).
- The extension of sanitary sewers to serve development in portions of secondary environmental corridors and isolated natural resource areas comprised of wetlands, floodplains, shorelands, or steep slopes is not permitted.

### **Park and Open Space Plan Implementation**

Achievement of the outdoor park and recreation and open space preservation objectives of the land use plan requires continued public interest acquisition of land for outdoor recreation and open space uses. The county park and open space plan recommends public interest acquisition (that is, acquisition by local, county, State and Federal government and by private conservancy interests) of land for recreation and resource protection purposes. The regional natural areas and critical species habitat protection and management plan also includes recommendations for public interest acquisition for most of the natural areas and critical species habitat sites identified in that plan. Moreover, cities, villages, and towns may acquire other lands for park and open space purposes as recommended in local comprehensive or park and open space plans. Each of the concerned units and

agencies of government should continue or begin land acquisition programs in accordance with such plans. Private conservancy organizations are encouraged to supplement public open space acquisition efforts, as appropriate, to ensure the preservation of important natural areas. The detailed County Park and Open Space Plan is presented in Appendix A of this Plan.

### **Transfer of Development Rights**

Under transfer-of-development-rights programs, or “TDR” programs, the right to develop a specified number of dwelling units under existing zoning may be transferred from one parcel, which would be maintained in open space use, to a different parcel, where the number of dwelling units permitted would be correspondingly increased. When the parcels are held by the same owner, the development rights are, in effect, simply transferred from one parcel to the other by the owner; when the parcels are held by different landowners, the transfer of development rights involves a sale of rights from one owner to another, at fair market value. In either case, the result is a shift in density away from areas proposed to be maintained in farming or other open use toward areas recommended for development. The transfer of development rights may be permanent or may be for a specific period of time or set of conditions.

The transfer of development rights may be implemented only if authorized under county or local zoning. To enable the transfer of development rights, the zoning ordinance must establish procedures by which the TDR technique will be administered, including the formula for calculating the number of residential dwelling units which may be transferred from the “sending” area to the “receiving” area. The zoning district map must identify the sending and receiving areas, or at least identify the districts within which development rights can be transferred from one parcel to another. As of 2007, the Waukesha County Zoning Code contains provisions for the transfer of development rights.

### **Municipal Boundary and Utility Extension Agreements**

The recommendations of the land use plan concerning the location and density of new urban development are formulated without regard to the location of city, village, and town boundaries. Rather, those plan recommendations are based upon a consideration of such factors as the location of existing utility infrastructure, including public sanitary sewer and water supply systems; the location of environmentally sensitive lands; and the availability of lands considered to be suitable for urban development. Where cities and villages own and operate essential public utilities not provided by adjacent towns, the plan assumes that cities and villages will either annex unincorporated territory recommended in the plan for urban development and provide extensions of essential utility services to serve such development, or that the cities and villages will reach agreement with adjacent unincorporated towns on the extension of those essential services without the need for annexation and municipal boundary change.

The *Wisconsin Statutes* establish a number of arrangements for cooperation among communities with regard to sharing of municipal services and cooperatively determining community boundaries, as indicated below:

- Section 66.0301: This section of the Statutes provides broad authority for intergovernmental cooperation among local units of government with respect to the provision and receipt of services and the joint exercise of their powers and duties.
- Section 66.0307: This section of the Statutes allows any combination of cities, villages, and towns to determine the boundary lines between themselves under a cooperative plan, subject to oversight by the Wisconsin Department of Administration. Section 66.0307 envisions the cooperative preparation of a comprehensive plan for the affected area by the concerned local units of government and prescribes in detail the contents of the cooperative plan. Importantly, the cooperative plan must identify any boundary change and any existing boundary that may not be changed during the planning period; identify any conditions that must be met before a boundary change may occur; include a schedule of the period during which a boundary change shall or may occur; and specify arrangements for the provision of urban services to the territory covered by the plan.

- Section 66.0225: This section of the Statutes allows two abutting communities that are parties to a court action regarding an annexation, incorporation, consolidation, or detachment, to enter into a written stipulation compromising and settling the litigation and determining a common boundary between the communities.

Cooperative approaches to the identification of future corporate limits and the extension of urban services can contribute significantly to attainment of the compact, centralized urban growth recommended in the land use plan. Conversely, failure of neighboring civil divisions to reach agreement on boundary and service extension matters may result in development at variance with the plan—for example, by causing new development to leap past logical urban growth areas where corporate limits are contested, to outlying areas where sewer and water supply service are not available. Accordingly, it is recommended that neighboring incorporated and unincorporated communities cooperatively plan for future land use, civil division boundaries, and the provision of urban services, as provided for under the *Wisconsin Statutes*, within the framework of the land use plan.

### **Municipal Revenue Sharing**

Additional opportunity for intergovernmental cooperation is provided under Section 66.0305 of the *Wisconsin Statutes*, entitled “Municipal Revenue Sharing.” Under this statute, two or more cities, villages, and towns may enter into revenue sharing agreements, providing for the sharing of revenues derived from taxes and special charges. The agreements may address matters other than revenue sharing, including municipal services and municipal boundaries. Municipal revenue sharing can provide for a more equitable distribution of the property tax revenue generated from new commercial and industrial development within urban areas and help reduce tax-base competition among communities, competition that can work against the best interests of the area as a whole.

A good example of municipal revenue sharing under this statute is the revenue sharing agreement included in the Racine Area Intergovernmental Sanitary Sewer Service, Revenue Sharing, Cooperation and Settlement Agreement entered into by the City of Racine and neighboring communities in 2002. Under this agreement, the City of Racine receives shared revenue payments from neighboring communities for use in renovating older residential areas, redeveloping brownfield sites, and supporting regional facilities like the City zoo, fine arts museum, and library. In return, the City of Racine agreed to support the incorporation of the adjacent Towns of Caledonia and Mt. Pleasant; refrain from annexations without the consent of the Towns; refrain from using extraterritorial zoning and plat review powers; and move ahead with sewerage system improvements that will accommodate growth in the Towns. It should be noted that the Towns of Mt. Pleasant and Caledonia were incorporated as villages in 2003 and 2005, respectively.

### **Brownfield Redevelopment**

Factors contributing to the abandonment or underutilization of older commercial and industrial sites vary from site to site, but often include structures which are obsolete in terms of accommodating current manufacturing, warehousing, and office needs; inadequate site access to the freeway system; and insufficient site area for horizontally-oriented structures, contemporary parking and loading requirements, and possible future plant expansion needs.

Once abandoned, the re-use of former commercial and industrial sites is frequently constrained by contamination problems created by past industrial and commercial activities, giving rise to the term “brownfields”—sites which are underutilized or abandoned due to known or suspected environmental contamination. While brownfields tend to be concentrated in older areas, they also occur in outlying areas. Redevelopment of brownfields is often hindered by high cleanup costs, and, even where contamination is only suspected, the potential for high cleanup costs tends to dampen private-sector interest in redevelopment.

In order to maintain the viability of existing urban areas, special efforts to promote the reuse of brownfields are required. Local units of government should include the cleanup and re-use of brownfields as a key element in their planning for the revitalization of urban areas and promote such re-use through such tools as tax-incremental financing. Limited State and Federal financial assistance has been made available in support of the cleanup and re-use of contaminated sites. Local units of government should make full use of, and assist private developers in securing, available State and Federal financial assistance.

The re-use of brownfield sites need not be limited to industrial use, but may include a mix of residential, commercial, recreational, and other development, in accordance with local development objectives. Properly carried out, the cleanup and re-use of brownfields has many potential benefits in addition to the underlying environmental benefits: elimination of blight, increase in the property-tax base, expansion of the housing stock, provision of jobs in close proximity to concentrations of the labor force, and increased use of existing public infrastructure.

### **Storm Water System Planning**

Storm water runoff pollution performance standards for new development, existing urban areas, and transportation facilities are set forth in Chapters NR 151 and NR 216 of the *Wisconsin Administrative Code*. The County should coordinate with municipalities to develop a storm water management plan to coordinate the management of storm water within defined watersheds which often transcend municipal boundaries. Storm water management practices appropriate for each urban area can best be developed through the preparation of a system management plan. These practices should be developed in a manner that integrates development needs and environmental protection, including integrated water resources protection. Such practices should reflect both storm water runoff quantity and quality considerations, as well as groundwater quantity and quality protection. Practices that are designed to maintain the natural hydrology should be encouraged.

## Chapter 8

# TRANSPORTATION FACILITIES ELEMENT

### INTRODUCTION

The transportation system of Waukesha County benefits all county residents by providing for the movement of goods and people into, out of, through, and within the County. An efficient, durable, cost-effective transportation system is essential to the sound social, community, and economic development of the County and of the Region of which the County is an integral part. An understanding of the existing transportation system and future improvements to that system is fundamental to the preparation of a comprehensive plan for Waukesha County.

The term transportation system describes several different aspects including:

- Transportation options used to move people and products
- Levels of jurisdictional authority
- Facilities that a user might access to begin, change, or switch, and end a trip.

When people hear the term transportation system they often think only of roads. While roads account for the majority of the transportation system, they are not the only component. A transportation system includes: roads, transit services, rail services, bicycle lanes, paths, trails, and accommodations, airports, pedestrian accommodations, ports, and harbors.

### STRENGTHS, CONCERNS, AND WEAKNESSES

The Waukesha County Comprehensive Development Plan Land Use, Housing and Transportation Subcommittee expressed the following transportation strengths, concerns, and weaknesses.

#### Transportation Strengths

- Easy access to the Interstate Highway System
- Advanced planning and implementation of highway facility improvements
- An established County Trunk Highway System that is effective
- Provides appropriate access to roadways
- Availability of other modes of transportation (ie. airports, trails)
- An increase in official mapping being completed by municipalities for improved inter-connectivity to roadway systems
- A continued commitment to funding County road improvements through a capital improvements program.

#### Transportation Concerns and Weaknesses

- A lack of a dedicated regional institutional structure for a high level inter-county transit system. The County and Region has a mass transit plan in place, but there is a lack of a comprehensive regional mass transit institutional structure and a dedicated source to fund it.
- Municipalities and the County over-rely on State and Federal funding for local transportation initiatives. A lack of a dedicated funding source exists for transit at the municipal or county level of government.
- A tendency for municipalities and the County to upgrade highways after volume or impact is realized instead of doing a more effective analysis of projecting these changes.
- A lack of county-wide or regional understanding of the impact of road construction (ie. bypass or road widening).

- A lack of continued re-education and endorsement of long-range comprehensive planning and the impact of not planning long-range or failure to implement these plans.
- A lack of grade separation between competing transportation uses such as road and railroad crossings.
- Road improvements are not being made because of current jurisdictional control and conflicting plans.
- Excessive local street road pavement widths.

## TRANSPORTATION FACILITIES AND SERVICES

This section presents inventories of the existing transportation system in Waukesha County. Much of this inventory is derived from the regional transportation system plan developed by SEWRPC.

### Streets and Highways

Waukesha County has over 2,917 miles of federal, state, county, and local roads and over 373,000 registered automobiles, trucks, semi-trailers, and motorcycles (Table VIII-1 and Table VIII-2). Four freeways, Interstate Highway 43, Interstate Highway 94, State Highway 16, and U.S. Highway 41/45 serve Waukesha County. In addition, the County is served by highways such as 18, 36, 59, 67, 74, 83, 100, 145, 164, 175, and 190. The County Trunk System includes over 391 miles of roads. Over 78 percent of road miles in Waukesha County are local village, town, or city roads. The street and highway system within the County serves several important functions; including providing movement of vehicular traffic; providing access for vehicular traffic to abutting land uses; providing for the movement of pedestrians and bicycles; and serving as a location for utilities and storm water drainage facilities. Streets and highways fall into a three-category hierarchy that, includes arterial, collector, and land access streets. This hierarchy of streets and highways provides for the safe, efficient, and convenient movement of goods and people by auto transport throughout Waukesha County and the Region.

**Table VIII-1**

#### ROAD MILEAGE IN WAUKESHA COUNTY: 2005

	State Trunk System (freeways, U.S., STH)	County Trunk System	Local Roads (City, Village, Town)	Total
Waukesha County	232.18	391.78	2,291.90	2,917.43

Source: Wisconsin Department of Transportation

**Table VIII-2**

#### REGISTERED VEHICLES IN WAUKESHA COUNTY: JULY 2007

	Automobiles	Trucks	Semi-Trailers	Motorcycles	Total
Waukesha County	175,209	156,026	20,268	21,742	373,245

Source: Wisconsin Department of Transportation

### Arterial Streets

An arterial street is a high-volume street that functions to conduct traffic between communities and activity centers and to connect communities to interstate highways. Arterial streets are defined by SEWRPC as streets and highways which are principally intended to provide a high degree of travel mobility, serving the through movement of traffic, and providing transportation service between major sub-areas of an urban area or through an area. In a rural area, an arterial street is a high-volume street that functions to conduct traffic between communities and activity centers and to connect communities to interstate highways. Together, arterial streets should form an integrated, area wide system. The most heavily traveled arterial streets and highways in the County are Interstate Highway 94, Bluemound (US Highway 18), Capitol Drive (State Trunk Highway 190), Moorland Road (County Trunk Highway O), Cleveland Avenue (County Highway D), Interstate Highway 43, State Highway 164, U.S. Highway 41/45, State Highway 16, State Highway 59, County Highway F, County J (Pewaukee Road) and State Highway 74.

In addition to their functional classification, arterial streets and highways are also classified by the unit of government that has the responsibility, or jurisdiction, over the facility. The Wisconsin Department of Transportation (WisDOT) has jurisdiction over the State trunk highway system, Waukesha County has jurisdiction over the County trunk highway system, and each local government unit has jurisdiction over local arterial streets within their community.

The State trunk highway system, which includes Interstate Highways, U.S. – numbered highways, and State highways, generally carry the highest traffic volumes, provide the highest traffic speeds, have the highest degree of access control, and serve land uses of statewide or regional significance. State trunk highways serve the longest trips, principally carrying traffic traveling through Waukesha County and between Waukesha County and surrounding counties. County trunk highways should form an integrated system together with the state trunk highways and principally serve traffic between communities in the County and land uses of countywide importance. Local arterial streets and highways would serve the shortest trips, serve locally-oriented land uses, carry the lightest traffic volumes on the arterial system, carry traffic at lower speeds, have the least amount of access control, and predominately serve traffic within a community.

### **Collector Streets**

Collector streets are defined as streets which are intended to serve primarily as connections between the arterial system and the land access street system. They may include frontage roads that parallel freeways within the County. In addition to collecting traffic from, and distributing traffic to, the land access streets, the collector streets provide a secondary function of providing access to abutting properties. As a result, collector and land access streets are also referred to as nonarterial, or local streets.

### **Land Access Streets**

The function of land access streets is to provide access to abutting property. As the lowest-order street in the hierarchy the access street is designed to conduct traffic between dwelling units and higher order streets. Land access streets are sometimes referred to as minor streets and may include frontage roads that parallel freeways.

### **County and Local Street Inventory**

The Wisconsin Department of Transportation (WisDOT) maintains a detailed database of county and local street information in the “Wisconsin Information System for Local Roads” (WISLR). Physical attributes such as right-of-way and pavement width, number of traffic lanes, type of surface and pavement rating, the presence and type of shoulders or curbs, and the presence of sidewalks are available through a database that can be accessed through the WisDOT website by registered users. Administrative information, including the functional classification and owner of street, can also be obtained. The information in the database is provided by county and local governments, and is intended to assist in the reporting of roadway pavement conditions. Under Section 86.302 of the Wisconsin Statutes, pavement ratings must be submitted to WisDOT by each county and local government every other year. The PASER method (pavement surface evaluation and rating) is the most commonly used method in Wisconsin.

### **County Traffic Counts**

WisDOT conducts average daily traffic counts for county trunk highways, state trunk highways, and U.S. Highways in Waukesha County every three years. Traffic counts are reported as the number of vehicles expected to pass a given location on an average day of the year. This value is called the "annual average daily traffic" or AADT and the values are represented on traffic count or traffic volume maps. The AADT is based on a short-term traffic count, usually 48 hours, taken at the location. This count is then adjusted for the variation in traffic volume throughout the year and the average number of axles per vehicle. The short-term counts are collected over a three-year cycle at nearly 26,000 rural and urban locations throughout the state. County data from 2000, 2003, and 2006 can be found at <http://www.dot.wisconsin.gov/travel/counts/waukesha.htm>.

### **Public Transportation**

Public transportation is the transportation of people by publicly operated vehicles between trip origins and destinations, and may be divided into service provided for the general public and service provided to special population groups. Examples of special group public transportation include yellow school bus service funded by

local school districts, and fixed route bus service provided by counties or municipalities. Public transportation service provided to the general public in Waukesha County may further be divided into the following three categories:

- Intercity or interregional public transportation, which provides service across regional boundaries and includes Amtrak railway passenger service, interregional bus service, and commercial air travel.
- Urban public transportation, commonly referred to as public transit, which is open to the general public and provides service within and between large urban areas. The fixed-route bus transit system provided by Waukesha Metro falls into this category.
- Rural and small urban community public transportation, which is open to the general public and provides service in and between small urban communities and rural areas, and may provide connections to urban areas.

Public transit is essential in any metropolitan area to meet the travel needs of persons unable to use personal automobile transportation; to provide an alternative mode of travel, particularly in heavily traveled corridors within and between urban areas and in densely developed urban communities and activity centers; to provide choice in transportation modes as an enhancement of quality of life; and to support and enhance the economy.

### **Interregional Public Transportation**

Air, rail, bus and ferry carriers provide Waukesha County residents with public transportation service between the Southeastern Wisconsin Region and a number of cities and regions across the Country.

#### ***Air Service***

Air services provide people, businesses, and goods with direct access to regional, national and international destinations. The primary commercial airport serving Waukesha County and the SE Wisconsin region with scheduled air carrier service is General Mitchell International Airport, owned and operated by Milwaukee County. Located within the City of Milwaukee, Mitchell International is the largest airport in Wisconsin and is served by 13 airlines offering approximately 235 departures and arrivals every day. Approximately 90 cities are served by nonstop or direct flights from Mitchell International.

Two principal airport facilities in Waukesha County provide general aviation services, those being Waukesha County-Crites Field and Capitol Airport. Crites Field, owned and operated by Waukesha County, is the larger of the two airports and can accommodate all types of general aviation aircraft up to and including business and corporate jets. It is equipped for full instrument landing system approaches and in 2006, handled about 60,000 aircraft operations. Capitol Airport is a private airport open to public use and provides an important facility for smaller business, personal, and recreational aircraft. Both Crites Field and Capitol Airport are reliever facilities for General Mitchell International Airport. Capitol Airport has more limitations on the size of aircrafts being served than Crites Field, it is generally limited to smaller aircrafts. The City of Brookfield does not support retaining the Capitol Airport as designated in the Regional Year 2035 Land Use Plan as noted in the City's Resolution 7655-06. The City of Pewaukee has also recently indicated they do not support retention of Capitol Airport.

#### ***Ferry Service***

In the SE Wisconsin region, high speed cross-Lake Michigan ferry service is provided between Milwaukee and Muskegon, Michigan by Lake Express. This ferry service operates from April to October each year and handles automobiles, small trucks, and passengers.

#### ***Rail Passenger Service***

Intercity passenger rail service in the Region is provided by Amtrak with stops at the downtown Milwaukee Amtrak depot, Mitchell International Airport, and Sturtevant but currently provides no stops in Waukesha County. Amtrak operates two passenger train services in Wisconsin: the long-distance Empire Builder operating from Chicago to Seattle and Portland, with six Wisconsin stops including Milwaukee; and the Hiawatha Service that carries nearly 600,000 people each year in the Chicago-Milwaukee rail corridor. Amtrak's Hiawatha Service runs weekday roundtrips daily between Chicago and Milwaukee. In a quick 90 minute trip, a passenger can be in the

middle of either city. Hiawatha Service is funded in part through funds made available by the Illinois and Wisconsin Departments of Transportation. In addition, the Empire Builder runs once a day in each direction between Chicago, Milwaukee, St.Paul-Minneapolis, and Seattle. Commuter rail service to southeastern Wisconsin is provided between Kenosha and Chicago by Metra with intermediate stops between Kenosha and downtown Chicago in the northeastern Illinois north shore suburbs.

### ***Bus Service***

Badger Coaches, Greyhound, Coach USA, and Lamers Bus Lines provide intercity bus service within the Region. Badger Coaches provides daily round trips between Madison, downtown Milwaukee, and Mitchell International Airport. Greyhound has a regional hub in Milwaukee that provides passengers with the opportunity to transfer between buses. Greyhound operates a daily route between Milwaukee and Green Bay with stops in Manitowoc and Oshkosh. Lamers Bus Lines provides a daily roundtrip service between Milwaukee and Wausau. Coach USA provides service between Goerke's Corners in Waukesha County and Chicago O'Hare International Airport, with stops in downtown Milwaukee and at General Mitchell International Airport. Other employee related bus services are also provided by various employers in Waukesha County to serve their private needs and meet their needs for employees from outside of Waukesha County.

### **Urban Public Transportation**

#### ***Waukesha County Bus Transit***

Waukesha Metro Transit oversees the operation of eighteen bus routes that travel throughout Waukesha County and parts of Milwaukee County. Waukesha Metro Transit directly operates ten routes to provide bus service within the City of Waukesha and its environs. Waukesha Metro Transit also administers for Waukesha County the County's service contracts with the Milwaukee County Transit System and Wisconsin Coach Lines, Inc. for eight bus routes comprising the Waukesha County Transit System. Wisconsin Coach Lines and the Milwaukee County Transit System operate these 10 routes for Waukesha Metro Transit. In 2006, sixty-three percent of riders were employed full-time or part-time. Over 2,500 trips were taken each weekday on the Waukesha Metro. In 2006, a total of 656,900 revenue passengers were carried on the City of Waukesha bus routes and about 720,100 trips were carried on Waukesha County bus routes. Only 27 percent of riders on city routes had access to an automobile and 79 percent of riders had household incomes under \$35,000. In addition, about 21,100 passengers were carried on the paratransit service for people with disabilities by the City of Waukesha transit system, and 11,600 revenue passengers were carried on the paratransit service for disabled persons provided by the Waukesha County Transit System. Paratransit service is provided to disabled individuals that cannot use fixed route service in accordance with the Federal Americans with Disabilities Act (ADA) of 1990. All transit vehicles that provide conventional fixed-route transit service must be accessible to persons with disabilities, including those persons using wheelchairs.

#### ***Employer Supported Transit Service***

Several employers within the area provide bus or van transportation to bring workers who live in surrounding counties to Waukesha County. Wisconsin Coach Lines operates a bus route that picks up school bus drivers for work at their facility in Waukesha. JNA, a temporary help service company, operates a bus route from West Bend in Washington County that brings workers to Waukesha County businesses. Milwaukee Careers Cooperative receives funding from the Wisconsin Employment Transportation Assistance Program to operate a van service that brings workers from Milwaukee to the River West Nursing Home in Pewaukee, Waukesha Technical College, Ameritech, Target and MTE Inc.

#### ***Specialized Transportation***

Rideline is a program subsidized by the Aging and Disability Resource Center of (ADRC) Waukesha County. It provides lift-equipped vans for disabled and older persons. Non-driving Waukesha County residents age 65 and older and individuals under age 65 who use a cane, walker, crutches, wheelchair or scooter, or are legally blind are eligible for this program. RideLine does provide transportation between communities for an additional fee. In 2007, RideLine provided a total of 21,789 one-way trips serving a total of 464 unduplicated passengers. The average mileage per trip was 17.0. Over 80.2 percent of these trips were for medical purposes, 8.4 percent were for education, 5.0 percent for employment, 3.3 percent for social/recreational opportunities, 2.1 percent for shopping, and 1.2 per cent or nutrition.

The shared-fare taxi program, a program also subsidized by the ADRC of Waukesha County , provides reduced fares to taxi service in the communities of Oconomowoc, New Berlin, Waukesha, Elm Grove, Brookfield, Butler, Hartland, Nashotah, Delafield, Mukwonago, Merton, and Muskego.. Waukesha County residents age 65 or older or Waukesha County residents, non-drivers, ages 18 to 64 who receive SSI or SSDI, are eligible. In 2007, 45,675 trips were made with shared-fare taxi. Over 28.9 percent of these trips were for personal business, 21.8 percent for employment/training, 12.5 percent for social/recreational activities, 20.3 percent for medical, and 16.5 percent for nutrition. Operators of the shared-fare taxi program include Best Cab of Waukesha, All Day Taxi, Elmbrook Senior Taxi, Ann Marie Ryan’s Transportation Services, Lake Country Cares Cab, Oconomowoc Silver Streak, New Berlin Senior Taxi, Seniors on the Go of Mukwonago, and Muskego Senior Taxi.

A third program, the shuttle program, serves ambulatory residents age 60 and over in Sussex and Lisbon. In Menomonee Falls, they also serve disabled individuals 18 and over. In 2007, the Sussex Senior Shuttle had 635 trips, and the Menomonee Falls bus provided 1,834 trips.

During 2007, Interfaith Senior Programs provided ambulatory specialized transportation services to Waukesha County seniors and adults with disabilities. Utilizing volunteer drivers, Interfaith provided 194 demand-responsive one-way trips and 606 out-of-county medical one-way trips to 289 unduplicated passengers.

Community based agencies received limited funding from the ADRC to provide group non-medical trips. Eight different agencies made 36 group trips (2536 one-way trips).

In an effort to create a better awareness of the bus systems in the City of Waukesha, the ADRC has partnered with the City of Waukesha Parks, Recreation, and Forestry, and Waukesha Metro Transit. The program is for seniors 55+ years and disabled individuals to learn how to ride the bus system and increase usage for both the Metro and Metro Lift systems. This project began in 2008 and will continue.

## **Bicycle and Pedestrian Facilities**

### ***Bikeways***

A “bikeway” is a general term that includes any road, path, or way that may legally be used for bicycle travel. Types of bikeways include “bike paths” which are physically separated from motor vehicle travel, “bike lanes” which are portions of roadways that are designated by striping, signing, and pavement markings for the exclusive use of bicycles; and “shared roadways” which are roadways that do not have designated bicycle lanes, but may be legally used for bicycle travel. A “bike route” is a bikeway designated with directional and information markers, and may consist of a combination of bike paths, bike lanes, and shared roadways. Bikeways are also classified as either “on-street or “off-street” bikeways. On-street bikeways include bikeways located in a street right-of-way, which include bike lanes, shared roadways signed as bike routes, and bike paths separated from motor vehicle lanes but within the street right-of-way. “Off-street” bikeways are bike paths not located in a street right-of-way. Off-street bikeways are typically located in utility rights-of-way, on former railroad rights-of-way, or along rivers or streams, and may serve as short connectors between residential areas and commercial or public facilities.

The bicycle and pedestrian facilities element in the 2035 Regional Transportation System Plan for Southeastern Wisconsin is intended to promote safe accommodation of bicycle and pedestrian travel, and encourage bicycle and pedestrian travel as an alternative to personal vehicle travel. The regional plan recommends that as the surface arterial street system of about 2,900 miles in the Region is resurfaced and reconstructed, accommodations for bicycle travel should be implemented, if feasible, through bicycle lanes, widened outside travel lanes, widened and paved shoulders, or separate bicycle paths. This recommendation would result in an additional 161 miles of off-street bicycle mileage on state, county, and local roads within Waukesha County.

Recommended bikeways in Waukesha County are shown on Map VIII-1. The longest current bikeway is the Glacial Drumlin Trail that is owned and managed by the Wisconsin Department of Natural Resources. Developed on a former railroad bed, it extends 51 miles from Waukesha to Cottage Grove in Dane County. Daily or annual State Trail Pass for ages 16 and over are required, except on the City of Waukesha trail segment from the Fox River Sanctuary to McArthur Rd. The Wisconsin Department of Transportation has published a map of bicycling conditions for Waukesha County. This map shows bicycle touring trails, urban escape routes, best roads for biking, and mountain bike trails (See Map VIII-2).

Waukesha County currently owns and manages three bikeways within the County. The Bugline Recreation Trail is a 12.2-mile trail located on the former Chicago, Milwaukee, St. Paul, and Pacific Railroad right-of-way. It stretches between Appleton Ave (State Trunk Highway 175) in Menomonee Falls and Main Street (County Trunk Highway VV) in the Village of Merton. A separate 4 foot wide bridle trail adjacent to the original 8 foot wide recreation trail extends 2.5 miles from The Ranch in Menomonee Falls to Menomonee Park where it joins the Parks bridle trails.

The Lake Country Recreation Trail is located on the former Milwaukee-Watertown Interurban Railway. The railway was popular in the late 1800's as a direct link between Waukesha and the Oconomowoc lake country. This 8-mile recreation trail now utilizes the Wisconsin Electric Power Company right-of-way. It stretches between the Landsberg Center trailhead (just north of Interstate Highway 94 on Golf Road, west of County Trunk Highway T) and Cushing Park in the City of Delafield. The Waukesha County Development Plan recommends that this trail be extended seven (7) miles west to Oconomowoc. Jefferson County has identified the segment of the Wisconsin Electric Company right-of-way between Oconomowoc and Watertown as a high priority for conversion to a multi-use trail in their County bike plan.

The New Berlin Recreation Trail is a seven (7)-mile lineal recreation trail located on the Wisconsin Electric Power Company right-of-way in the City of New Berlin. It extends from South 124th Street just south of Greenfield Ave. (State Highway 59) at the Milwaukee/Waukesha County Line to Springdale Road at the City of New Berlin/Town of Waukesha border. The New Berlin Trail connects in an easterly direction to the Milwaukee Oak Leaf Bike Trail in Greenfield Park. A westerly connection from the New Berlin Recreation Trail to the State DNR Glacial Drumlin Trail is possible by using city streets through Waukesha. In an effort to provide continuity of trails into neighboring counties, where available, references to those adjacent plans will be noted on Map VIII-1. Specifically, Dodge County, in their 2003 Bicycle and Pedestrian Plan, recommended bike lane development along County Trunk Highway P extending to the Waukesha County line.

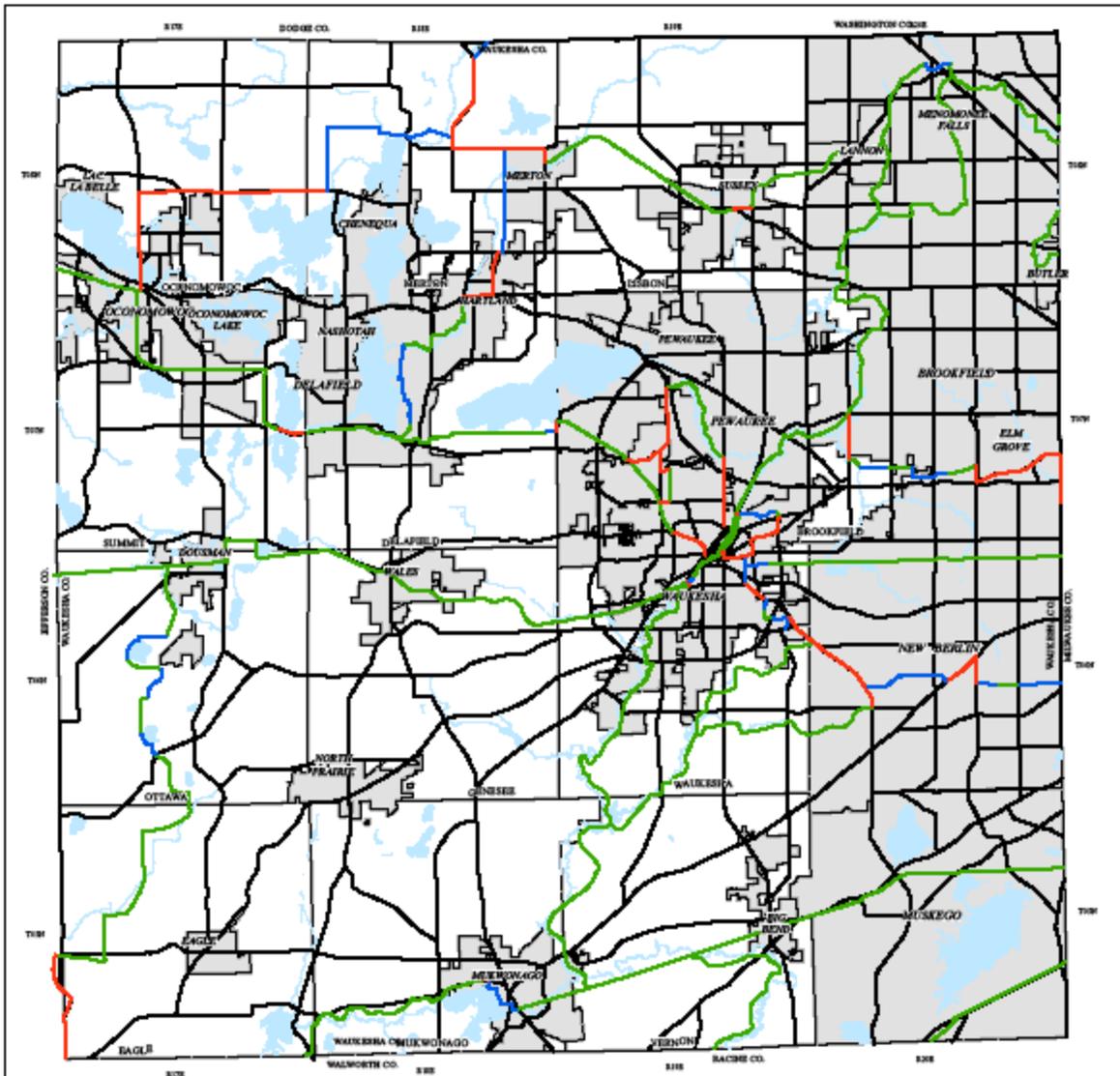
Local municipalities within Waukesha County have incorporated bicycle and pedestrian components into recreational facility and park and open space plans. These are discussed further in Chapter 3.

### ***Pedestrian Facilities***

A comprehensive inventory of pedestrian facilities, such as sidewalks, has not been completed for communities in Waukesha County. However, SEWRPC developed a pedestrian facilities policy, which applies to Waukesha County, as documented in the bicycle and pedestrian systems element of the 2035 Regional Transportation System Plan. It recommends that the various units and agencies of government responsible for the construction and maintenance of pedestrian facilities in the Region adopt and follow certain recommended policies and guidelines with regard to the development of those facilities. These policies and guidelines are designed to facilitate safe and efficient pedestrian travel within the Region and are documented in Appendix B of the Regional Transportation System Plan. Recommendations for provisions of sidewalks in areas of existing or planned urban development are summarized in Table VIII-3.

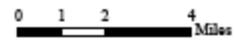
Map VIII-1

Waukesha County Proposed Bicycle Plan under 2035 Regional Transportation System Plan



Legend

- Off-street bicycle way in utility or natural resource corridor
- Non-arterial street connection to off-street bicycle way system
- Surface arterial street connection to off-street bicycle way system
- Surface arterial streets and highways where bicycle accommodations should be considered when facilities are resurfaced or reconstructed
- Major Water Body
- Town
- City or Village

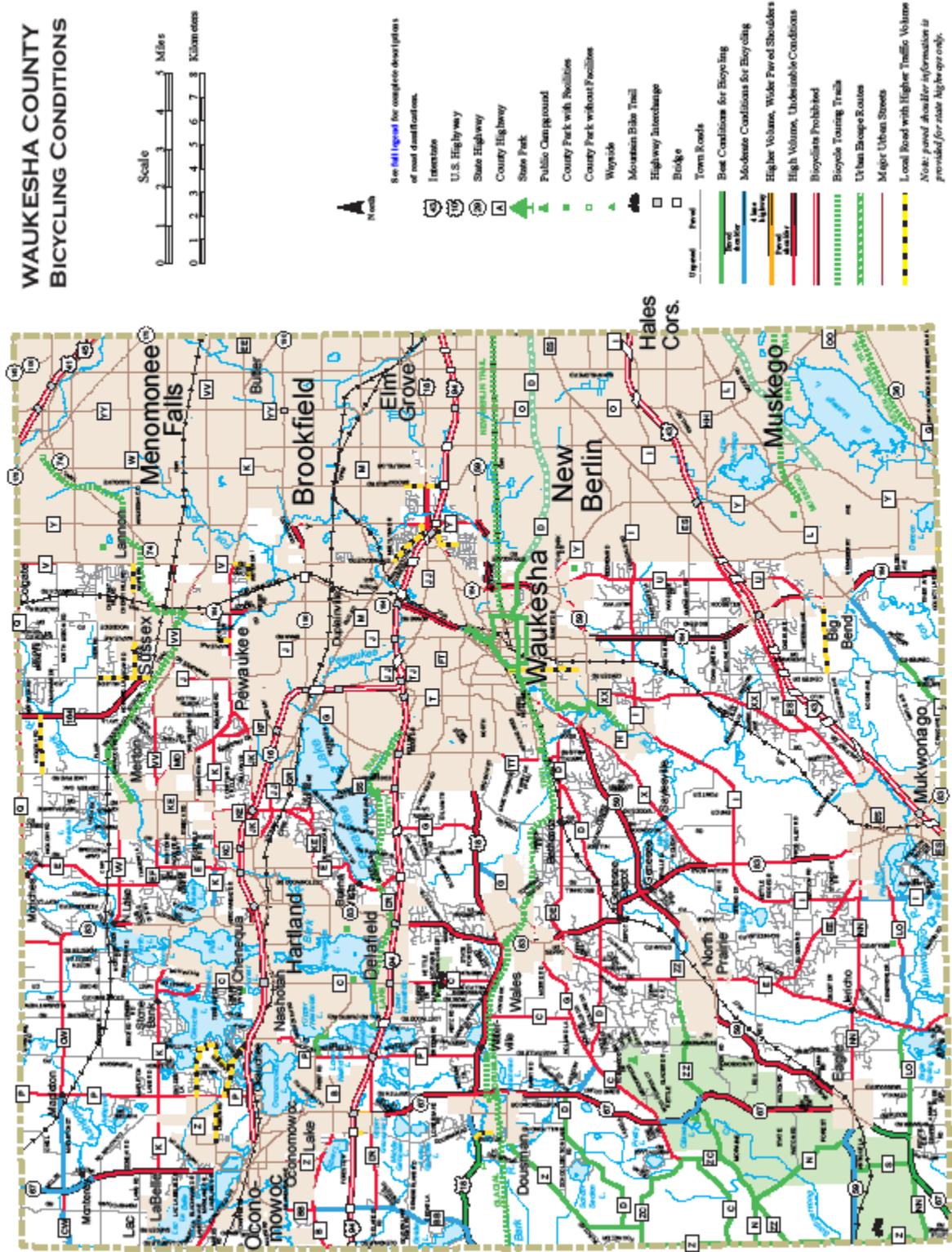


Source: SEWRPC

Civil Divisions as of 07/30/07  
 Prepared by Waukesha Co.  
 Dept. of Parks and Land Use

Map VIII-2

BICYCLING CONDITIONS IN WAUKESHA COUNTY



**Table VIII-3**

**RECOMMENDATIONS FOR PROVISION OF SIDEWALKS IN AREAS OF EXISTING OR PLANNED URBAN DEVELOPMENT**

Roadway Functional Classification	Land Use	New Streets <sup>a</sup>	Existing Streets <sup>a</sup>
Arterial Streets <sup>b</sup>	Industrial	Both Sides	Both Sides
	Commercial	Both Sides	Both Sides
	Residential	Both Sides	Both Sides
Collector Streets	Industrial	Both Sides	Both Sides
	Commercial	Both Sides	Both Sides
	Residential	Both Sides	At least One Side
Land Access Streets <sup>c</sup>	Industrial	Both Sides	Both Sides
	Commercial	Both Sides	Both Sides
	Residential (medium and high-density)	Both Sides	At least One Side
	Residential (low-density) <sup>d</sup>	At least One Side	At least One Side

<sup>a</sup>Sidewalks may be omitted on one side of streets where there are no existing or anticipated uses that would generate pedestrian trips on that side.

<sup>b</sup>Where there are marginal access control or service roads, the sidewalk along the main road may be eliminated and replaced by a sidewalk along the service road on the side away from the main road.

<sup>c</sup>Sidewalks need not be provided along courts and cul-de-sac streets less than 600 feet in length, unless such streets serve multi-family development; or along streets served by parallel off-street walkways.

<sup>d</sup>In low-density residential cluster developments, sidewalks could be replaced by perimeter and interior pathway systems.

Source: SEWRPC.

**Other Transportation Facilities and Services**

***Rail Freight Services***

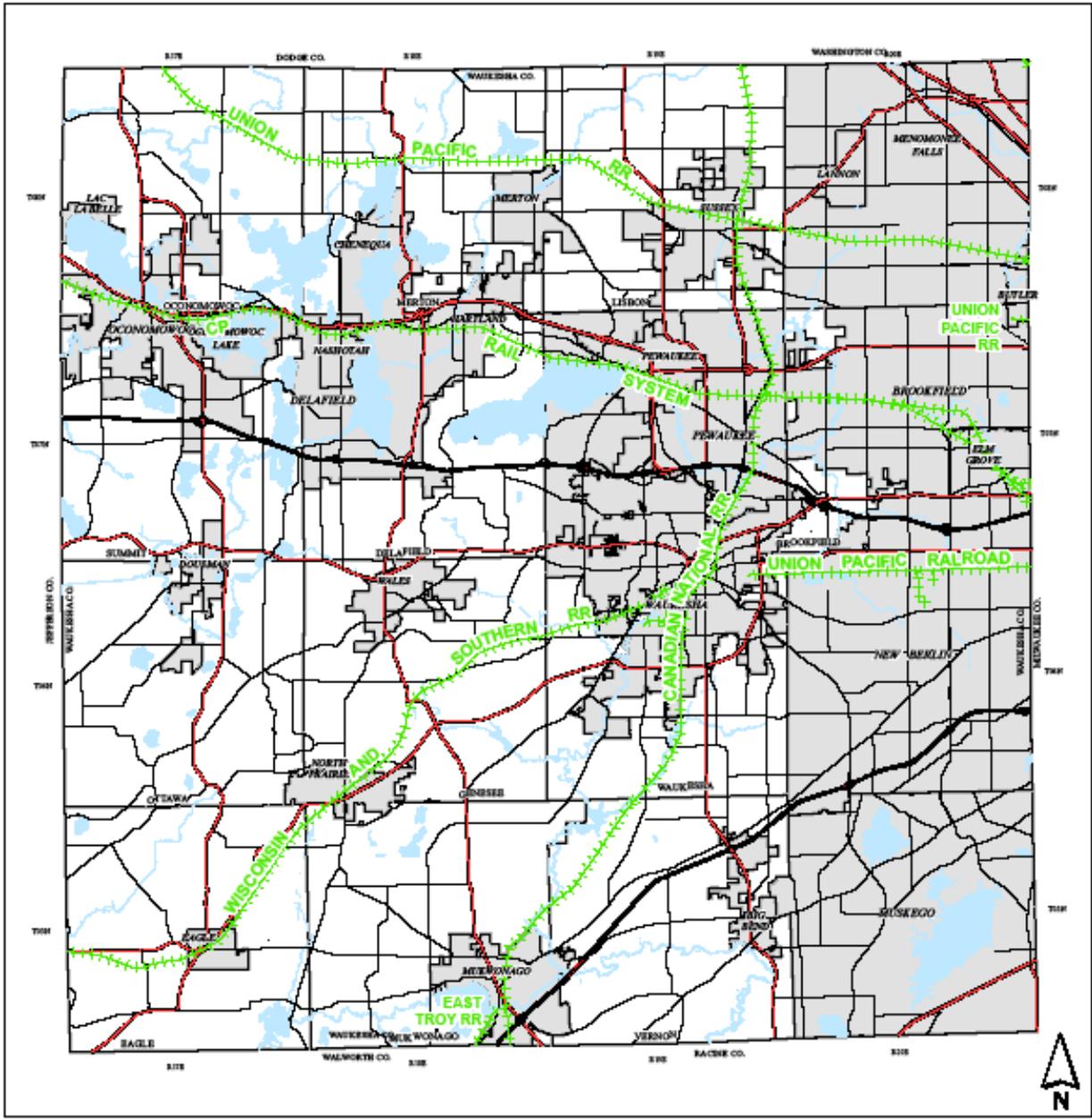
Railway freight service is provided by four railroad companies in Waukesha County (Map VIII-3). These include the Union Pacific Railroad, Canadian National Railroad, Canadian Pacific Railway, and Wisconsin & Southern Railroad Company. All four railroads provide rail freight transportation to Metropolitan Chicago. About one-third of the rail traffic in the United States (including much of Wisconsin’s rail freight) originates, terminates, or passes through Metropolitan Chicago.

Union Pacific, with headquarters in Omaha, Nebraska, is the largest railroad in North America, operating in the western two-thirds of the United States. The railroad serves 23 states, linking every major West Coast and Gulf Coast port, and provides service to the east through its four major gateways in Chicago, St. Louis, Memphis and New Orleans. Additionally, Union Pacific operates key north/south corridors and is the only railroad to serve all six major gateways to Mexico. The railroad is the nation's largest hauler of chemicals, much of which originates along the Gulf Coast near Houston, Texas. Union Pacific is also one of the largest intermodal carriers – that is the transport of truck trailers and containers.

The Canadian Pacific Railway is a transcontinental railroad stretching from Vancouver to Montreal, and also serves major cities in the United States such as Minneapolis, Chicago, and New York. Its headquarters are in Calgary, Alberta. In 1992, the Canadian Pacific Railway purchased the Soo Line Railroad. Over one-half of the Canadian Pacific Railway's freight traffic is in coal, grain, and intermodal freight, and the vast majority of its profits are made in western Canada. It also ships automotive parts and assembled automobiles, sulfur, fertilizers, other chemicals, forest products, and other types of commodities. The busiest part of its railway network is along its main line between Calgary and Vancouver.

Canadian National Railroad, a transcontinental railroad headquartered in Montreal, Quebec, serves ports on the Atlantic, Pacific, and Gulf coasts. It links customers in the United States, Canada, and Mexico. Canadian National derives revenues from the movement of petroleum and chemicals, grain, fertilizers, coal, metals, minerals, forest products, intermodal, and automotive. In 2001, Canadian National Railroad purchased Wisconsin Central Ltd.

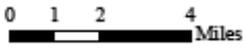
**Map VIII-3**  
**Existing Railroad Routes in Waukesha County: 2007**



**Legend**

- Interstate
- US
- State
- County
- Local Major
- Major Water Body
- Town
- City or Village
- Railroads

Source: Waukesha Co. Parks and Land Use



Civil Divisions as of 04/30/07  
 Prepared by Waukesha Co.  
 Dept. of Parks and Land Use

Wisconsin & Southern Railroad Co. (WSOR) is a regional railroad with headquarters in Milwaukee, and operates 700 miles of track (600 owned or leased and 100 in trackage rights) throughout south central Wisconsin and northeastern Illinois. It serves Waukesha, Genesee Depot, North Prairie, and Eagle in Waukesha County. The mission of WSOR is to provide rail freight service to rural communities in southern Wisconsin. In Waukesha County, WSOR operates over publicly owned railroad lines owned by the Wisconsin Department of Transportation and the Wisconsin River Rail Transit Commission.

Between 1990 and 2004, rail freight traffic nearly doubled in Wisconsin exceeding 27.4 billion ton-miles and resulting in over \$713 million in revenue. The increase in rail freight traffic has resulted in a need to consider additional grade crossing separations at busy intersections and quiet zones where railroad locomotives are prohibited from sounding horns.

### ***Other Rail Services***

The East Troy Electric Railroad is a 7 mile stretch of track from East Troy in Walworth County to Mukwonago. The line dates back to 1907 when it was part of the Milwaukee Electric Railway and Light Company line from East Troy to Milwaukee. The East Troy-Mukwonago segment of the railway was transferred to the Village of East Troy in 1939 and the remainder of the railway line to Milwaukee was abandoned. Between 1995 and 2000 the Friends of the East Troy Railroad Museum purchased the rail line and it operates it as a tourist destination offering rail rides on a weekly basis during the spring through fall season.

### ***Rail Intermodal Facilities***

Intermodal facilities are locations where bulk or containerized commodities are transferred from one mode of transportation to another. Intermodal transportation seeks to take advantage of the most cost-effective elements of each individual mode and maximize overall transportation efficiency. In 2004, The Port of Milwaukee was the only truck-rail intermodal facility operating in Southeastern Wisconsin. The 2020 Wisconsin Department of Transportation forecast indicates that six Wisconsin counties have concentrations of the types of commodities that generally indicate the potential for truck-rail intermodal movement (Brown, Dane, Outagamie, Milwaukee, Waukesha, and Winnebago). Nearly two-thirds of this estimate was identified as coming from, or to, Milwaukee and Waukesha counties. Currently, many shipments or destinations in Wisconsin are currently trucked to/from intermodal facilities located in Metropolitan Chicago or the Minneapolis/St. Paul metropolitan area.

### ***Ports and Harbors***

There are no harbors within Waukesha County. Water freight and transportation facilities are provided to the region by the Port of Milwaukee, which is located approximately 20 miles east of Waukesha County in the City of Milwaukee. In 2006, the Port of Milwaukee handled over 3.5 million tons of Wisconsin commodities.

### ***Airports***

As described earlier in this chapter, Waukesha County is served by two public-use airports. Waukesha County-Crites Field in Waukesha provides chartered air service and air freight services. Capitol Airport provides airport facilities for general aviation aircraft. Commercial airline service is provided by General Mitchell International Airport, located in Milwaukee County.

Crites Field, owned by Waukesha County, serves all single-engine aircraft, virtually all twin-engine piston and turboprop aircraft, and most business and corporate jets. Crites Field also serves as a heliport for "Flight for Life". Crites Field has two paved runways. The primary runway is 5,850 feet in length and the secondary runway is 3,600 feet in length. Airport facilities include a terminal building, hangars, and a wide variety of fixed-base operator services. Ground transportation access is provided directly by two adjacent county trunk highways, Blue Mound Road (CTH JJ) and Pewaukee Road (CTH J). In addition, Interstate Highway 94 and State Trunk Highway 16 are about one-half mile north of the airport.

Capitol Airport is privately owned and serves small single-engine aircraft and many small twin-engine general aviation aircraft. Capitol Airport has one paved (north-south) and two turf runways. The turf runways are closed during the winter. The paved runway is 3,500 feet long, and the two turf runways are 3,400 feet long and 1,600 feet long. Airport facilities include a small administration building and minor services. Ground access is provided

by Gumina Rd. just off Capitol Drive, which is adjacent to the airport. As mentioned previously, the City of Brookfield does not support retaining the Capitol Airport as designated in the Regional Year 2035 Land Use Plan unless the City of Brookfield determines that redevelopment of the airport is consistent with the goals and objectives of the City of Brookfield master plan. The City of Pewaukee has also expressed similar concerns regarding Capitol Airport.

## **STATE TRANSPORTATION PROGRAMS**

WisDOT maintains 11,753 miles out of 112,262 miles of the public roads in the State. The State highway system includes 750 miles of interstate freeways and 11,010 miles of state and US-marked highways. Although the state highway system represents only 10.5% of all of the public road mileage in Wisconsin, the State highways carry about 60% of the highway travel or about 35 billion vehicle miles of travel a year. The following programs provide state and federal funds to assist local governments with maintenance and improvements to their transportation system.

### **Corridors 2020**

Corridors 2020 is a part of WisDOT's long-range highway improvement plan designed to provide essential links to key employment and population centers throughout the State. As part of the planning process, Wisconsin's highways were classified based on operational and economic factors. Gaps in the system were identified and improvements scheduled. Since the plan was created in the late 1980's, about 900 miles of new highways have been built to accommodate network needs.

The plan's goal is to complete all backbone improvements, which will connect all communities with a population of 5,000 or more to the State highway system. To date, the majority of the improvements have been completed on schedule. US Highway 18 (Bluemound Road) serves as a major east-west arterial route through southern Wisconsin connecting the City of Milwaukee to the City of Prairie du Chien. US Highway 18 is classified as a backbone route or a connecting route in the Corridors 2020 plan. WisDOT is in the process of updating the 2020 Corridors plan to project the state's needs through 2030.

### **Airport Improvement Program**

The Airport Improvement Program, administered by WisDOT's Bureau of Aeronautics, combines federal, state and local resources to help fund improvements for nearly 100 public-use airports throughout the state.

WisDOT is responsible for assisting in the development of a coordinated system of airports in Wisconsin. To do this, WisDOT guides airport development through a process that begins with broad policy planning and includes progressively more detailed elements of system planning, airport master planning, programming, and finally individual airport development. Through an agency agreement with the airport owner, WisDOT oversees project planning, coordination, design, land acquisition and construction, as well as financial transactions for an airport project.

### **Freight Rail Infrastructure Improvement Program**

Freight Rail Infrastructure Improvement Program (FRIIP) loans are awarded to private industries, railroads, and local governments to improve rail infrastructure and to construct new rail-service facilities. The overall goal is to boost economic development and jobs, and increase the use of rail service.

FRIIP provides funding for the following types of railroad projects:

- Connect an industry to the national railroad system. Examples include construction of industrial spur tracks to various industries, and a pipeline from an ethanol plant to a nearby railhead.
- Make improvements to enhance transportation efficiency, safety and intermodal freight movement. Recent projects include grain and fertilizer storage/handling facilities, warehousing facilities to provide rail access and improved loading and delivery of products, and transloading facilities.

- Accomplish line rehabilitation. FRIIP funds have been used to fund rehabilitation projects on privately owned rail lines and rail facilities, and projects that are needed to provide increased efficiencies and benefits that are beyond the basic level of service.
- Complete rail-related projects in a timeframe that would not otherwise be possible.

### **Freight Rail Preservation Program**

The Freight Rail Preservation Program (FRPP) provides grants to local units of government, industries and railroads for the purpose of preserving essential rail lines and rehabilitating them following purchase.

FRPP provides grant assistance for the following types of projects:

- Acquisition of trackage needed to preserve rail service that would otherwise be lost. WisDOT, in cooperation with various rail transit commissions, owns approximate 450 miles of operating rail line in Wisconsin.
- Rehabilitate acquired trackage to allow a reasonable level of service. Recent projects include rehabilitation of the Horicon to Cambria line to maintain service to the Didion Milling facility in Cambria, an upgrade of the Janesville to Monroe line to handle the traffic generated by the Badger State Ethanol plant in Monroe, and improvements to the Janesville to Milton Jct. line, which is currently underway.
- Preserve railroad corridors for future rail service. WisDOT has worked closely with the Wisconsin Department of Natural Resources and other entities to preserve rail corridors under the National Trail Systems Act (Rails to Trails). These corridors are held for future rail use while being used on an interim basis for a recreation trail or other transportation or recreational use.
- Construct connections to reduce the cost of replacing lost rail service.

### **Midwest Regional Rail Initiative**

The Midwest Regional Rail Initiative (MWRRI) is a joint venture between nine state transportation departments (Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Wisconsin, and Ohio), the Amtrak rail system and the Federal Railroad Administration. This 3,000 mile rail system with Chicago as its hub would connect the cities of Cleveland, Cincinnati, Detroit, Milwaukee, Minneapolis, St. Louis and Omaha at speeds of up to 110 miles per hour. A key requirement for the success of the MWRRI is Congressional passage of a federal passenger rail funding program. Discussion has recently occurred regarding inter-city rail service along the Madison-Milwaukee corridor with local rail station stops including Brookfield, Hartland, and Oconomowoc, however, without dedicated funding sources and the political will to provide such services, the program cannot move forward.

### **Transportation Economic Assistance Program**

The Transportation Economic Assistance (TEA) Program is a rapid response grant program designed to create new employment, retain existing employment, and encourage private investment in Wisconsin. Communities can apply for TEA funds to encourage new businesses or business expansions in their region by building such transportation improvements as access roads, highway improvements, or rail spurs. The program covers up to 50% of the total cost of eligible projects.

### **Congestion Mitigation and Air Quality Improvement Program**

The Congestion Mitigation and Air Quality Improvement program (CMAQ) is a federally funded initiative to encourage transportation alternatives that improve air quality. It includes efforts to enhance public transit, bicycle/pedestrian facilities, ridesharing programs and facilities, and technologies that improve traffic flow and vehicle emissions. CMAQ funds have been invested in a wide variety of beneficial projects that provide air quality benefits while providing alternatives to added capacity on the road network. The \$11.6 million in annual funding is available only for projects in ten southeastern counties that form Wisconsin's ozone non-attainment and maintenance areas. The Cities of Waukesha and Pewaukee, Waukesha County, and the Waukesha County Technical College have received funding from this program for bike paths, new bus routes, Sunday transit service, and training.

### **Disadvantaged Business Enterprise Program**

The Disadvantaged Business Enterprise (DBE) Program's goal is to increase participation of firms owned by disadvantaged individuals in all federal aid and state transportation facility contracts. The DBE program strives to ensure a level playing field and foster equal opportunity for firms owned and operated by disadvantaged individuals on USDOT-assisted contracts and procurements.

The program started with the Surface Transportation Assistance Act of 1982. The Act set a national goal of placing at least 10% of federal highway and transit funds with persons who qualify as disadvantaged small business operators. A subsequent act in 1987 included women.

WisDOT invests between \$600 and \$700 million annually in federal and state dollars for highway, airport and transit projects. These funds translate into millions of dollars in transportation-related contracts and project work for DBE firms.

### **Wisconsin Highway Improvement Program**

The Wisconsin Highway Improvement Program currently invests over \$750 million each year in Wisconsin's highways, resulting in over 565 miles of roads improved and rehabilitated annually. The program addresses deficiencies in the highway and bridge system and incorporates needed improvements to increase the safety and mobility of the system. The program is divided into two subprograms (major highway projects and the state highway rehabilitation program). By State statute, a "Major highway project" denotes a project that has a total cost of over \$5 million and involves any of the following:

- Constructing a new highway 2.5 miles or more in length.
- Reconstructing or reconditioning an existing highway by any of the following:
  1. Relocating 2.5 miles or more of the existing highway.
  2. Adding one or more lanes five miles or more in length to the existing highway.
  3. Improving to freeway standards 10 miles or more of existing divided highway having two or more lanes in either direction.

The State Highway Rehabilitation (SHR) Subprogram involves three components:

- Existing highways
- State bridges
- Backbone rehabilitation

### **In This Together Program**

"In This Together" is a WisDOT program that targets statewide businesses facing road construction in their community. The program's goal is to help businesses maintain business while construction is underway.

WisDOT recognizes that businesses located in work zones have special needs. It is critical that customers have access and continue to patronize the businesses, in spite of any roadwork inconvenience. Early in the project development process, business owners receive a workbook, case studies, and video that contain successful marketing and promotion ideas used by other businesses facing the same situation.

### **Local Transportation Enhancements Program**

The U.S. Congress created the Transportation Enhancements (TE) Program in 1991 to address growing concerns about air quality, open space, and traffic congestion. This program is the first Federal initiative to focus on enhancing the travel experience and fostering the quality of life in American communities.

The TE program fosters more choices for travel by providing funding for sidewalks, bike lanes, and the conversion of abandoned railroad corridors into trails. Communities may also use the program to revitalize local and regional economies by restoring eligible historic buildings, renovating streetscapes, or providing transportation museums and visitor centers. Many communities use the program to acquire, restore and preserve scenic or historic sites.

WisDOT administers the local Transportation Enhancements Program to fund multi-modal transportation alternatives and projects that enhance communities and the environment. Currently \$6.25 million is available in annual funding. Federal funds administered through this program provide up to 80% of costs for a wide variety of projects such as bicycle or pedestrian facilities, landscaping or streetscaping and the preservation of historic transportation structures.

### **Rustic Roads Program**

The Rustic Roads Program was created in 1973 by the State Legislature to preserve what remains of Wisconsin's scenic, lightly traveled back roads for the enjoyment of motorists, hikers and bicyclists. Wisconsin is unique in its efforts to preserve these low volume, low function rural roads and since the designation of the first Rustic Road in 1975, the statewide system has grown to include 101 Rustic Roads in 54 counties with a total mileage of 562 miles. Waukesha County has two roads designated in the Wisconsin Rustic Roads Program. The first road is a paved 2.5 mile curving trail on the narrow isthmus between Upper and Lower Neshotah Lakes and runs south past Upper Nemahbin Lake. It includes portions of County Trunk Highway B and Mill Road. The second rustic road within the County includes portions of Waterville Road and Piper Road, from US Highway 18 to Wisconsin State Trunk Highway 59. It is a 7 mile paved road that provides scenic views of the Southern Unit of the Kettle Moraine State Forest and access to the Ice Age Trail. In addition, several local municipalities within the County maintain roads as rustic within their communities.

### **Scenic Byways Program**

The purpose of the national scenic byways program is to recognize and promote some of America's memorable roads for the enjoyment of the traveling public. The goal of the Wisconsin Scenic Byways program is to identify, designate, promote and preserve a system of State Trunk Highways recognized for their outstanding scenic views and ability to offer travelers an exceptional travel experience. These byway corridors highlight the best scenic resources along with the natural, historic, archeological, cultural and recreational opportunities available in Wisconsin. It is anticipated that this program will promote tourism and economic development by encouraging people to visit the route and spend money at local motels, restaurants and tourist attractions.

### **Tourist Oriented Directional Sign Program**

The Tourist Oriented Directional Sign (TODS) Program provides signs with directional information for qualifying tourist-related businesses, services or activities. TODS supports the tourism industry's effort to promote businesses and economic development in Wisconsin.

To qualify for a special blue and white sign, the major source of income for a business must come from visitors who do not live in the immediate area. The business also must be located within five miles of a State or US highway, but cannot have direct access to a State or US highway. TODS are prohibited on freeways and expressways and in most urban areas.

Businesses that qualify for TODS fall into five categories:

- Gasoline - Open at least 12 hours per day, seven days a week and provide restrooms, drinking water and a public telephone.
- Food - Open five days a week from at least 10 a.m. to 7 p.m. and have at least 50% of gross receipts from food and non-alcoholic beverages.
- Lodging - Includes hotels, motels, resorts, boarding houses and bed and breakfast establishments with parking accommodations.
- Camping - Provides restrooms, drinking water and a public telephone.
- Tourist attraction - Open at least eight hours a day, five days a week for at least three consecutive months and provides restrooms and drinking water. The attraction must also be of significant interest to the traveling public.

### **Transit Assistance Programs**

The purpose of the State's public transit programs is to financially support the 26 urban bus and 43 shared-ride taxi operating systems located throughout Wisconsin. In 2005, state support for local transit systems totaled \$98.6 million, among the highest in the nation. State funding provides a significant percentage of the total revenue for

transit systems; 41% of operating costs of the state’s largest transit system in Milwaukee County, 33.3% of the operating costs of bus systems in other urbanized areas, and 32.5% of the operating costs of smaller bus and shared-ride taxi systems.

**TRANSPORTATION IMPROVEMENT RECOMMENDATIONS, 2035 REGIONAL TRANSPORTATION PLAN**

The 2035 Regional Transportation System Plan for Southeastern Wisconsin is multi-modal in nature, dealing with public transit, bicycle and pedestrian, travel demand management, transportation systems management, and arterial streets and highways. The plan is designed to serve, and be consistent with, the Year 2035 Regional Land Use Plan drafted by the SEWRPC. The process for the development of the recommended multi-modal program began with consideration and development of the travel demand management, transportation systems management, bicycle and pedestrian, and public transit elements of the plan. Arterial street and highway improvement and expansion was then considered only to address the residual high traffic volumes and attendant traffic congestion, which may not be expected to be alleviated by travel demand management, transportation systems management, bicycle and pedestrian facilities, and public transit.

The recommendations set forth below are based upon inventory data, adopted recommendations, a regional public participation survey, and the transportation development objectives, principles, and standards in Chapter 2.

**Arterial Street and Highway System Functional Improvements**

The 2035 Regional Transportation System Plan for Southeastern Wisconsin identifies recommended functional improvements to the arterial street and highway system in Waukesha County (Map VIII-4). These recommendations are divided into three categories: system preservation – the proposed resurfacing, reconstruction, and modernization as needed of arterials to largely the same capacity as exists today; system improvement - the proposed widening of existing arterials to carry additional traffic lanes; and system expansion – the proposed construction of new arterial facilities (Table VIII-4).

**Table VIII-4**

**ARTERIAL STREET AND HIGHWAY PRESERVATION, IMPROVEMENT, AND EXPANSION BY ARTERIAL FACILITY TYPE IN WAUKESHA COUNTY: YEAR 2035 REGIONAL TRANSPORTATION SYSTEM PLAN**

	<b>System Preservation (Miles)</b>	<b>System Improvement (Miles)</b>	<b>System Expansion (Miles)</b>	<b>Total Miles</b>
Freeway	32.2	26.5	0.0	58.7
Standard Arterial	617.9	100.1	10.6	728.6
Total	650.1	126.6	10.6	787.3

Source: SEWRPC

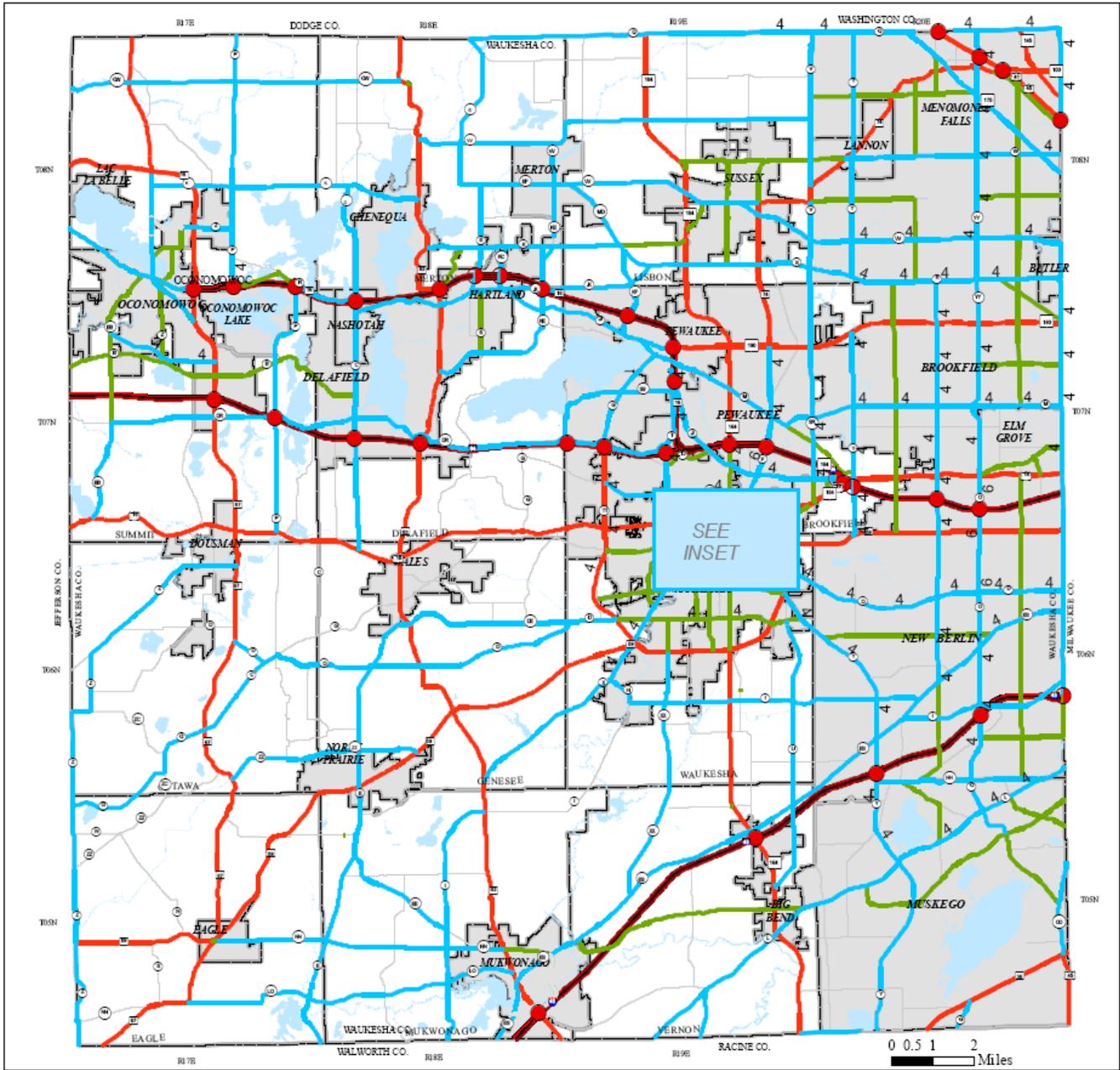
**Jurisdictional Recommendations**

Jurisdictional classification establishes which level of government – state, county, or local – has or should have, responsibility for the design, construction, maintenance, and operation of each segment of the total street and highway system. Jurisdictional classification is intended to group all streets and highways logically into subsystems under the jurisdiction of the established level of government.

Upon completion of the initial regional transportation system plan in 1966, detailed county jurisdictional highway system plans were prepared. These plans were extended in design year and updated as part of the year 2000 Regional Transportation System Plan completed in 1978, and the year 2010 plan completed in 1994, which was adopted in 1995 by the Waukesha County Board of Supervisors. The recommended Waukesha County jurisdictional arterial street and highway system for the year 2035, based upon the extension of the year 2020 plan to the year 2035 with refinements by the Waukesha County Department of Public Works in 2007, is shown on Map VIII-5.

### Map VIII-4

## RECOMMENDED FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WAUKESHA COUNTY: UNDER THE 2035 REGIONAL TRANSPORTATION SYSTEM PLAN



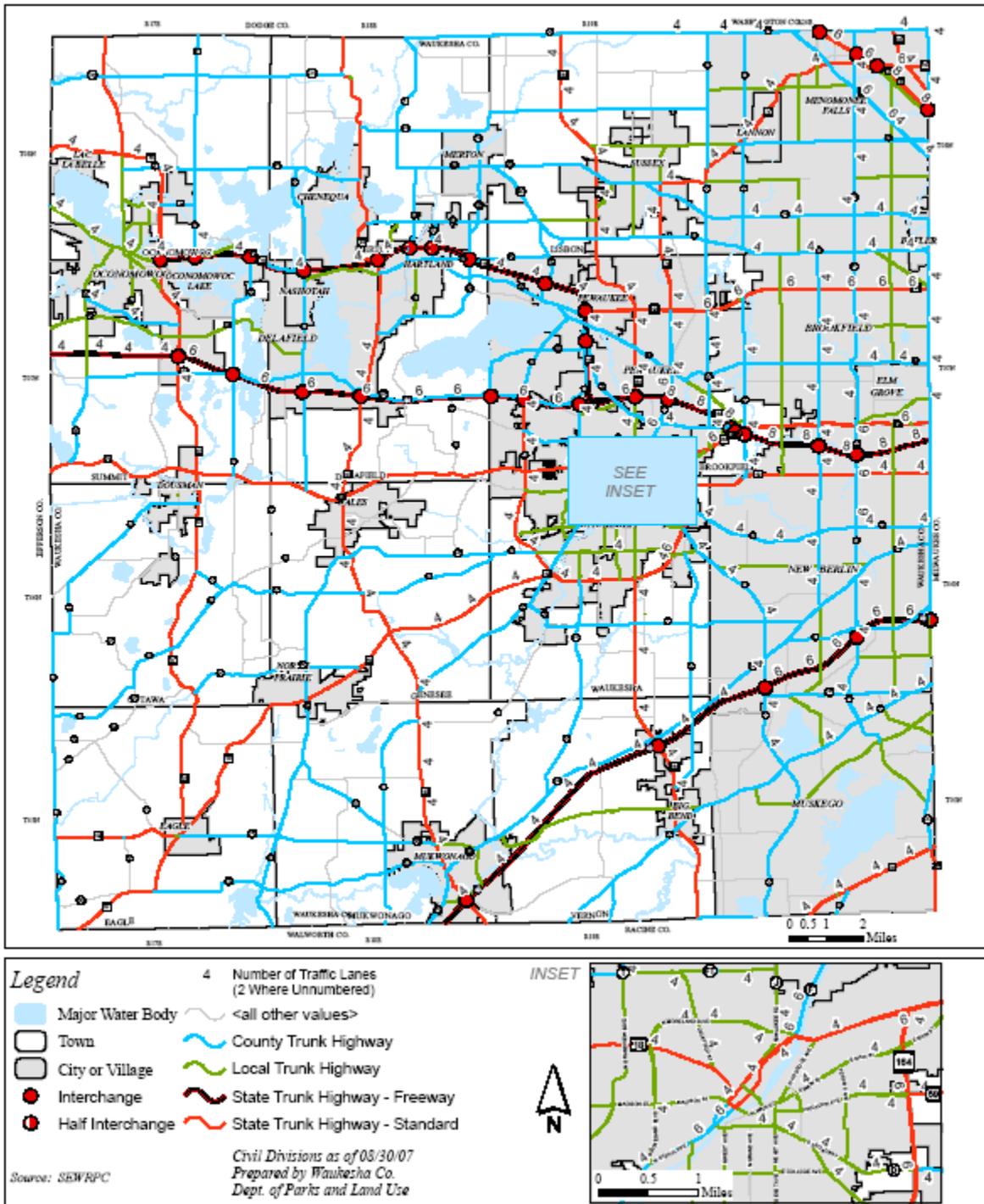
<b>Legend</b>	4 Number of Traffic Lanes (2 Where Unnumbered)	<b>INSET</b>
Major Water Body	Other Major Roads	
Town	County Trunk Highway	
City or Village	Local Trunk Highway	
Interchange	State Trunk Highway - Freeway	
Half Interchange	State Trunk Highway - Standard	

Source: SEWRPC

Civil Divisions as of 12/31/07  
Prepared by Waukesha Co.  
Dept. of Parks and Land Use

Map VIII-5

RECOMMENDED JURISDICTIONAL HIGHWAY SYSTEM PLAN FOR WAUKESHA COUNTY: 2035



Over the next two years, SEWRPC staff will be working with the county jurisdictional highway system planning committees in each county in the region, subsequent to Commission adoption of the year 2035 regional plan, to conduct a major review and reevaluation of the jurisdictional transfer recommendations in the year 2035 regional transportation system plan. This will be an extensive effort that will involve the review and redefinition of the functional criteria used for jurisdictional classification of arterial streets and highways, and the application of those criteria to the arterial street and highway system. This effort may change the jurisdictional recommendations of the year 2035 regional transportation system plan. Upon completion, public review, and subsequent adoption of the jurisdictional highway system plans by the Commission, the year 2035 Regional Transportation System Plan would then be amended to reflect the recommendations made in each county jurisdictional highway system plan.

### **Public Transit**

The public transit element of the final recommended regional transportation plan envisions significant improvement and expansion of public transit in southeastern Wisconsin, including development within the Region of a rapid transit and express transit system, improvement of existing local bus service, and the integration of local bus service with the proposed rapid and express transit services. Map VIII-6 displays the transit system proposals for each of the three transit system components.

The proposed expansion of public transit is essential in southeastern Wisconsin and Waukesha County for many reasons:

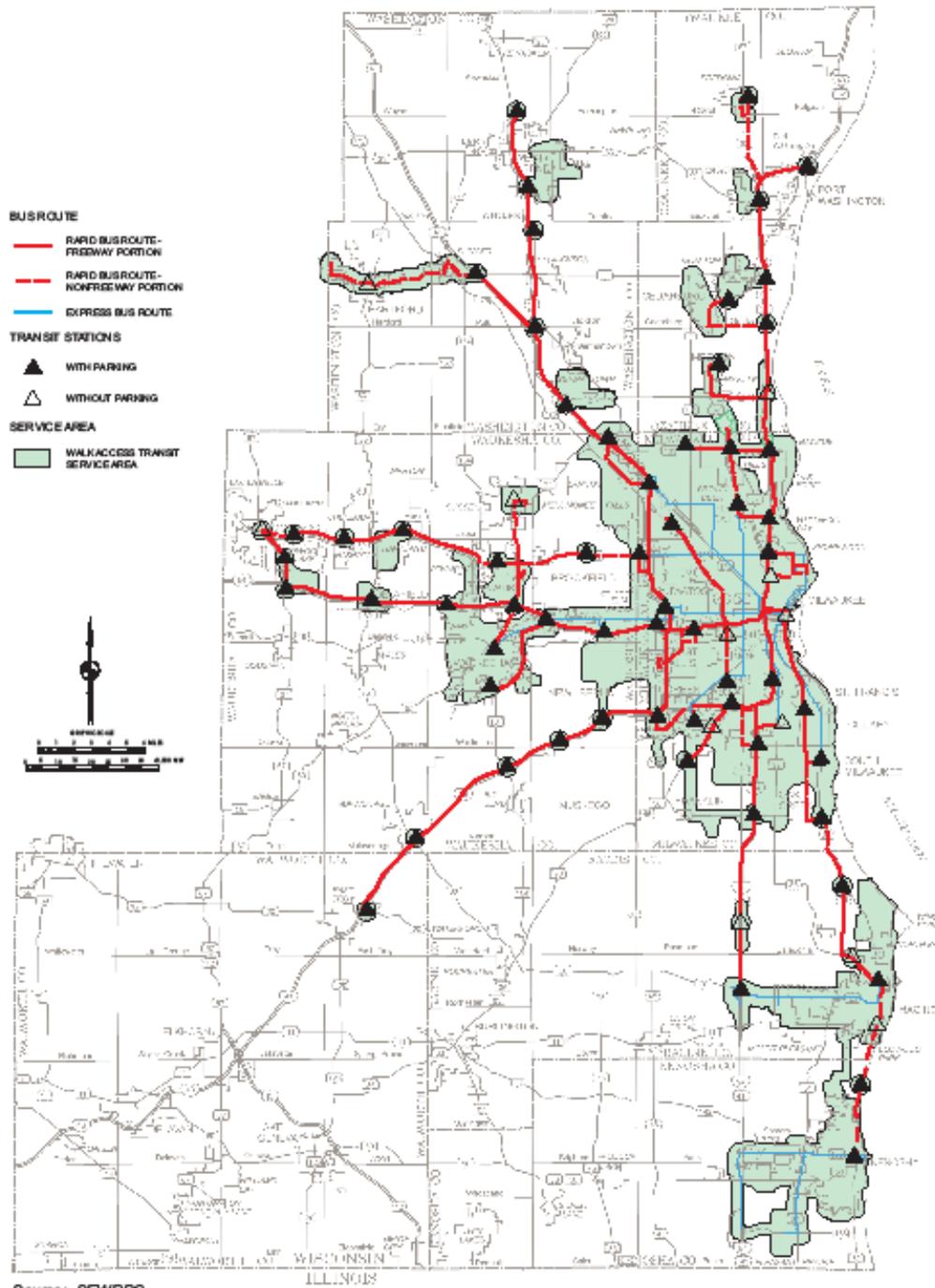
- Public transit is essential to provide an alternative mode of travel in heavily traveled corridors within and between the Region's urban areas, and in the Region's densely developed urban communities and activity centers. It is not desirable, and not possible, in the most heavily traveled corridors, dense urban areas, or the largest and densest activity centers of the Region, to accommodate all travel by automobile with respect to both demand for street traffic carrying capacity and parking. To attract users to public transit, service must be available throughout the day and evening at convenient service frequencies, and at competitive and attractive travel speeds.
- Public transit also supports and encourages higher development density and in-fill land use development, which results in efficiencies for the overall transportation system and other public infrastructure and services.
- Public transit also contributes to efficiency in the transportation system, including reduced air pollution and energy consumption.
- Public transit permits choice in transportation, enhancing the Region's quality of life and economy. A portion of the Region's population and businesses would prefer to have public transit alternatives available and to travel by public transit.
- Public transit is essential in the Region to meet the travel needs of persons unable to use personal automobile transportation. In the year 2000, approximately 80,000 households, or 11 percent of the Region's households and approximately 5,700 Waukesha County households or four (4) percent of the County's households did not have a personal vehicle available and were dependent on public transit for travel. The accessibility of this portion of the Region's population to the metropolitan area jobs, health care, shopping and education is almost entirely dependent upon the extent to which public transit is available, and whether or not it is reasonably fast, convenient, and affordable.
- Waukesha County projections show that the population of people aged 65 and over will more than double in size increasing from 26,763 people in 2000 to 56,678 people in 2035.
- Waukesha County projections show that the labor force of age 65 and over will nearly double from 6,550 in 2000 to 12,572 in 2020.

### **Upgrading to Rail Transit or Bus Guideways**

The regional transportation plan also proposes that consideration be given to upgrading the recommended rapid and express bus transit services to commuter rail for rapid transit service and light rail or bus guideways for express transit service. The regional transportation plan suggests four future commuter lines and six light rail lines within the Region as shown on Map VIII-7. In Waukesha County, the plan identifies a potential commuter rail

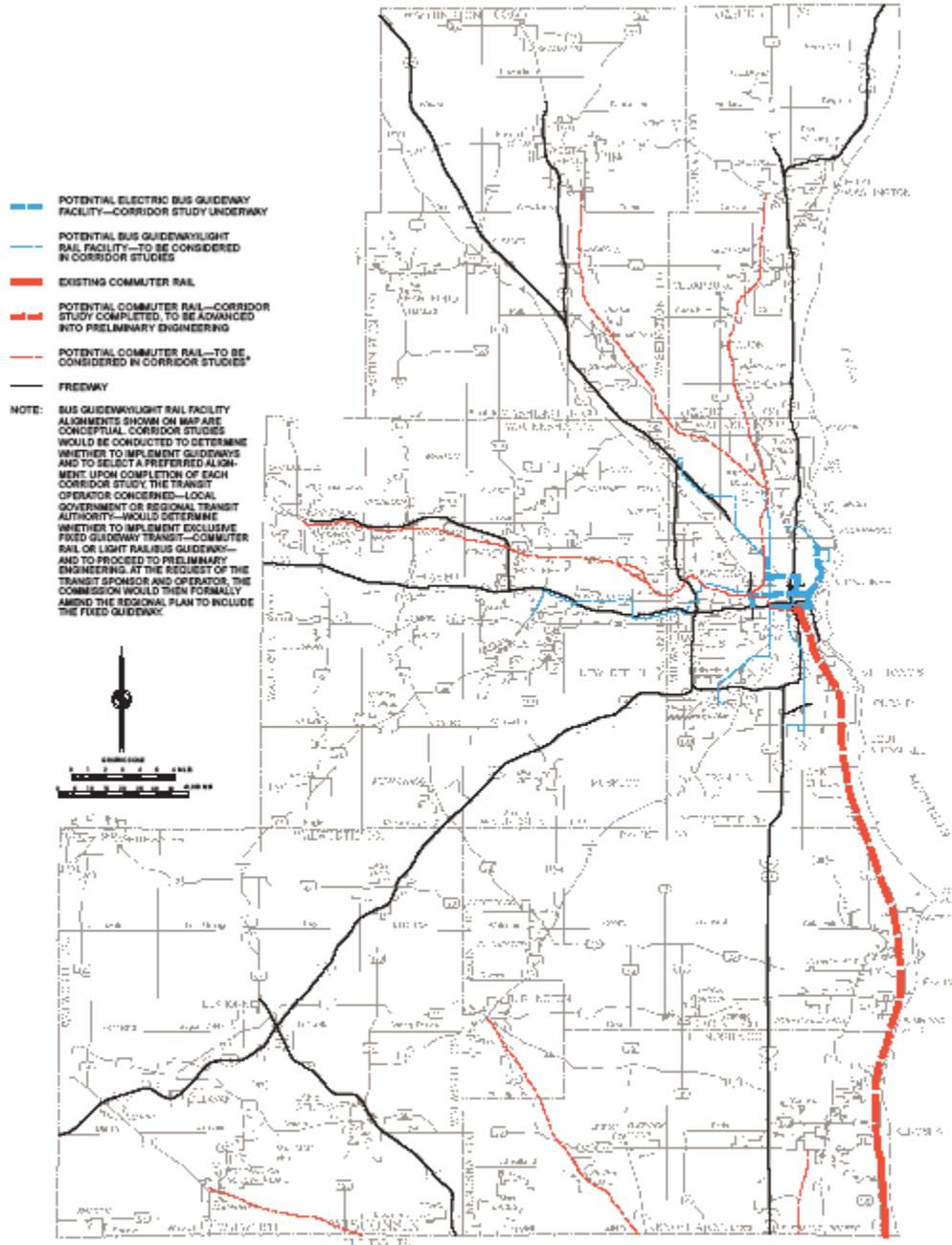
### Map VIII-6

## Waukesha County Recommended Public Transit Element of the 2035 Regional Transportation System Plan



Map VIII-7

POTENTIAL RAPID TRANSIT COMMUTER RAIL AND EXPRESS TRANSIT BUS GUIDEWAY/LIGHT RAIL LINES UNDER THE 2035 REGIONAL TRANSPORTATION SYSTEM PLAN



\*Corridor feasibility studies have been completed for the Chicago-based commuter rail extensions to the Village of Walworth in Walworth County and the City of Burlington in Racine County. The conclusion of the Walworth extension study was that it was potentially feasible and cost-effective, but should be deferred and considered again when a Metra extension from its current terminus in Fox Lake, Illinois is considered to Richmond, Illinois near the Wisconsin-Illinois State line. The conclusion of the Burlington extension study was that it was not feasible or cost-effective at that time, but could be considered again in the future.

Source: SEWRPC.

corridor and a potential light rail corridor that would connect Waukesha County communities with Central Milwaukee County and UW-Milwaukee. Special corridor studies would need to be conducted to determine whether or not to implement fixed guide way transit in these corridors and refine the alignments shown in the Regional plan.

The regional transportation plan recommends that local governments, which are the sponsors and operators of transit systems, determine whether or not to upgrade to commuter rail or light rail by conducting a detailed corridor transit analysis study. These studies are a requirement of the U.S. Department of Transportation, Federal Transit Administration in order to be eligible for federal funding.

The Midwest Regional Rail Initiative (MWRRI) is a joint venture between nine state transportation departments (Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Wisconsin, and Ohio), the Amtrak rail system and the Federal Railroad Administration. This 3,000 mile rail system with Chicago as its hub would connect the Cities of Cleveland, Cincinnati, Detroit, Milwaukee, Minneapolis, St. Louis and Omaha at speeds of up to 110 miles per hour. A key requirement for the success of the MWRRI is Congressional passage of a federal passenger rail funding program. Local rail station stops on the proposed Milwaukee to Madison corridor include Brookfield, Hartland, and Oconomowoc.

### **Bicycle and Pedestrian Facilities**

The bicycle and pedestrian facilities element in the 2035 Regional Transportation System Plan for Southeastern Wisconsin is intended to promote safe accommodation of bicycle and pedestrian travel, and encourage bicycle and pedestrian travel as an alternative to personal vehicle travel. The regional plan recommends that as the surface arterial street system of about 2,900 miles in the Region is resurfaced and reconstructed, the accommodations for bicycle travel should be implemented, if feasible, through bicycle lanes, widened outside travel lanes, widened and paved shoulders, or separate bicycle paths. This recommendation would result in an additional 161 miles of off-street bicycle mileage on state, county, and local roads within Waukesha County as shown on Maps VIII-8 and VIII-9.

### **Community Bicycle and Pedestrian Plans**

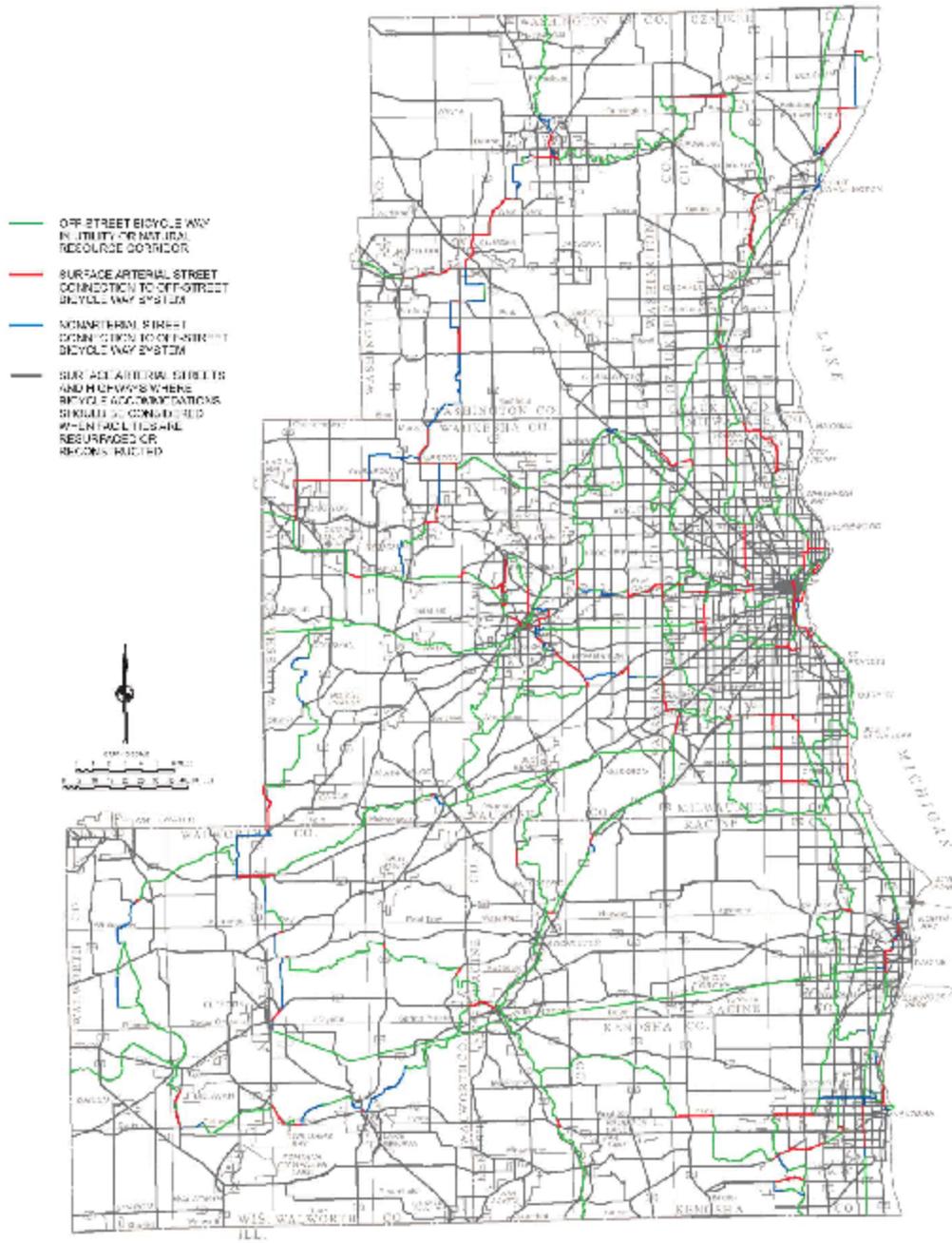
SEWRPC recommends that local units of government prepare community bicycle and pedestrian plans to supplement the regional plan. The local plans should provide for facilities to accommodate bicycle and pedestrian travel within neighborhoods, providing for convenient travel between residential areas and shopping centers, schools, parks, and transit stops within or adjacent to the neighborhood. The standards, guidelines, and system plans set forth in the regional plan should be the basis for the preparation of community and neighborhood plans. It is also recommended that local units of government consider the preparation and implementation of land use plans that encourage more compact and dense development patterns, in order to facilitate pedestrian and bicycle travel. Local municipalities within Waukesha County as well as adjacent counties may also have numerous park and recreation plans that incorporate bicycle and pedestrian pathways, and several have already developed bicycle and pedestrian plans. These plans should also recognize what jurisdiction is responsible for said trails. These are discussed further in Chapter 3. Since many trails cross municipal boundaries, Waukesha County should work with the municipalities and adjoining counties to coordinate trail planning.

### **Transportation Systems Management**

The transportation systems management element of the final recommended year 2035 regional transportation plan includes measures intended to manage and operate existing transportation facilities to their maximum carrying capacity and travel efficiency, including: freeway traffic management, surface arterial street and highway traffic management, and major activity center parking management and guidance. In addition, improving the overall operation of the regional transportation system requires regional cooperation and coordination between government agencies and operators.

### Map VIII-8

## Waukesha County Bicycle Paths & Surface Arterial Street & Highway System Bicycle Accommodations under the Recommended Year 2035 Regional Transportation Plan





## **Travel Demand Management**

The travel demand management measures included in the final recommended year 2035 regional transportation plan include measures intended to reduce personal and vehicular travel or to shift such travel to alternative times and routes, allowing for more efficient use of the existing capacity of the transportation system. These measures are in addition to the public transit and pedestrian and bicycle plan elements previously discussed.

Seven categories of travel demand management measures are recommended in the year 2035 Regional Transportation Plan: high-occupancy vehicle preferential treatment, park-ride lots, transit pricing, personal vehicle pricing, travel demand management promotion, transit information and marketing, and detailed site specific neighborhood and activity center land use plans. For more information on these categories see pages 384 to 387 in the SEWRPC Planning Report No. 49, A Regional Transportation System Plan For Southeastern Wisconsin: 2035.

## **OTHER IMPLEMENTATION RECOMMENDATIONS**

1. Waukesha County should work with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) to conduct a major review and reevaluation of the jurisdictional transfer recommendations in the year 2035 Regional Transportation System Plan.
2. Waukesha County should refine the proposed system of off street bicycle paths and surface arterial streets and highway system accommodation of bicycles contained in the 2035 Regional Transportation System Plan. In addition, the County should integrate bikeway accommodations into planning for upgrades and modifications to the county trunk highway system consistent with the refined county transportation plan and facilitate communication with local municipalities and bordering counties to address bikeway linkages and connectivity.
3. The County and municipalities should implement the transportation system development planning objectives, principles and standards contained in Chapter 2.
4. The County and municipalities should evaluate dedicated funding sources for county wide shared taxi service to meet the needs of a growing elderly population in all 37 municipalities.
5. As a consequence of increasing rail freight traffic, the County should establish additional rail quiet zones and invest in railroad grade separations as a safety priority at county trunk highway crossings.
6. The County should work with local municipalities and the Wisconsin Department of Transportation's Bureau of Aeronautics to determine if maintaining Capitol Airport as an aviation facility is consistent with future transportation and land use plans.
7. Evaluate the public transit recommendations contained in the 2035 Regional Transportation System Plan for Southeastern Wisconsin such as car pool lanes, van pool and bus guideways.

## Chapter 9

# IMPLEMENTATION AND INTERGOVERNMENTAL COOPERATION

### IMPLEMENTATION RECOMMENDATIONS OVERVIEW

The recommended plan provides a design for the attainment of the specific development objectives set forth in Chapter 2. In a practical sense, however, the plan is not complete until the steps required to implement the plan—that is, to convert the plan into action policies and initiatives are specified. Accordingly, this chapter is presented as a guide for use in the implementation of the Comprehensive Development Plan for Waukesha County. More specifically, this chapter outlines the actions that should be taken by various agencies and units of government in efforts to implement the Comprehensive Development Plan for Waukesha County.

Through out the planning process, various subcommittees participated in a facilitated discussion to identify the strengths, concerns and weaknesses associated the various elements of a comprehensive plan such as the agricultural, natural and cultural resources; community facilities and utilities; economy; transportation; housing; and land use elements. The comments provided by the various subcommittees are presented in the applicable chapters.

In addition, each subcommittee was asked to develop a series of implementation recommendations. The recommendations were based upon the results of the public opinion survey, an analysis of the issues and consideration of the data presented in the chapters. The following is a list of the implementation recommendations contained in the various chapters of this Plan.

### CONSISTENCY AMONG PLAN ELEMENTS

The comprehensive planning law requires that the implementation element "describe how each of the elements of the comprehensive plan shall be integrated and made consistent with the other elements of the plan." All elements of this comprehensive plan were prepared simultaneously by the same staff with great care given to ensure internal consistency among the various elements. All element chapters were reviewed by the Comprehensive Planning Advisory Committee. In addition, the Development Plan for Waukesha County simultaneously prepared the planning objectives and standards described in Chapter 2. It should be recognized that it is unlikely that the Plan can meet all of the standards completely. It should also be recognized that some objectives are complementary, with the achievement of one objective supporting the achievement of others. Conversely, some objectives may be conflicting, requiring reconciliation through consensus building and/or compromise.

### AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

Chapter 3 of this Plan presents an inventory and analysis of the agricultural, natural and cultural resource base of Waukesha County. Included is descriptive information pertaining to climate, air quality, physiography, bedrock geology, topography, soils, groundwater resources, surface water resources, wetlands, woodlands, natural areas and critical species habitat sites, park and open space sites, environmental corridors, historic and cultural resources and agricultural lands.

The Agricultural, Natural and Cultural Resources Element chapter presented the following implementation recommendations:

1. Following completion of the Regional Water Supply Plan or availability of sufficient data, the planning objectives and standards used to prepare this plan may need to be refined to address groundwater supply and recharge issues.
2. Amend land use categories to direct development away from areas with seasonally high groundwater one-foot or less from the surface and steep slopes (12% or greater) and to discourage development of below grade structures on soils with groundwater limitations less than three (3) feet from the surface. Amend applicable zoning and land division codes to establish a minimum of one foot separation between structures (including basements) and the seasonally high groundwater level.
3. Amend applicable zoning codes, land division and storm water management ordinances to more stringent site design and storm water management requirements necessary to address thermal and other runoff impacts detail to cold-water communities, outstanding water resources and exceptional water resources.
4. Provide to the municipalities in Waukesha County the lists of historical sites that are eligible for historic designation but have not been designated and the list of potentially eligible sites that need additional evaluation for inclusion as eligible sites.
5. To protect and encourage the preservation of primary and secondary environmental corridors and isolated natural resource areas, discourage residential development in environmentally sensitive areas, provide for some marketability of such lands, encourage more economical use of lands suited to limited and controlled residential development by permitting more intensive use of such lands without impacting the environmentally sensitive areas, it is recommended residential density transfer opportunities be provided. Within land use regulatory codes, these opportunities, with the following components, should be provided:
  - a. Through development design techniques, including but not limited to Planned Unit Developments and conservation design developments, primary and secondary environmental corridors and isolated natural resource areas should be preserved.
  - b. The density transfer technique would permit variable lot sizes while encouraging preservation of primary and secondary environmental corridors and isolated natural resource areas.
  - c. To transfer residential density opportunities to promote the preservation of the rural character of the County by preserving primary and secondary environmental corridors and isolated natural resource areas to be retained as common open spaces.
6. In an effort to prevent land use conflicts with nonmetallic mining operations in the County, the Waukesha County Mineral Extraction Advisory Committee developed a series of recommendations. They are:
  - a. Within appropriate land use regulatory codes, create a Mineral Extraction Notification Overlay District that extends beyond the property lines of nonmetallic mining operations. Creation of the Overlay District would require notifications to appear on recorded documents associated with land divisions within the District denoting the parcel's proximity to an active or planned mining operation. Loudoun County, Virginia is an example of the use of overlay districts.
  - b. Within appropriate land use regulatory codes, a minimum setback from nonmetallic mining operations and adjoining properties should be established. Landscape berms and vegetative screening could be provided in the setback area.
  - c. New wells placed on properties immediately adjacent to nonmetallic mining operations should be constructed to minimize the impacts from mining operations.

## **COMMUNITY FACILITIES AND UTILITIES**

Chapter 4 of this Plan presents a discussion of the major community facilities and utilities within the county including telecommunications infrastructure, public and private utilities, school districts, libraries, cemeteries,

healthcare facilities, childcare facilities, and public safety. The Community Facilities and Utilities chapter presented the following implementation recommendations facilities:

1. The County should work with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) as part of the regional water supply planning process to identify groundwater aquifers that can sustain planned development.
2. The County should consider modifying its Park and Open Space Planning process to identify lands that may need to be preserved for municipal groundwater supplies, specifically meeting the use isolation distances required for high capacity wells.
3. Municipalities should be encouraged to work on a county-wide basis to plan for the future placement and current use of emergency service facilities to optimize emergency response times and to eliminate overlap of service areas and equipment.
4. Since watershed boundaries rarely follow municipal boundaries, municipalities and Waukesha County should work to develop storm water system plans based on watershed areas.
5. Where unique surface water resources exist in Waukesha County (Outstanding or Exceptional Resource Waters or Cold Water Streams), local and County planning efforts should combine land use and storm water planning together with a review of related local regulatory and educational efforts to prepare watershed protection plans.
6. Waukesha County, in cooperation with SEWRPC and local municipalities, should develop a long-range wireless facilities plan to enhance business competitiveness, public safety and government communications.
7. School Districts should be encouraged to work with Waukesha County to use the demographic data and land use projections contained in this Plan for facility and sub-district planning. Often, School Districts are in a reactionary mode in responding to increases and decreases in the school age population. The population and trend data as well as the land use projections contained in a comprehensive development plan can be invaluable information to forecast facility demands for the school age population. In addition, it is suggested that school districts use the information contained in this Plan as baseline and conduct an annual assessment of actual enrollment to verify projections contained in this Plan.
8. In 2000, the Waukesha County Land Development Workgroup, consisting of many of the municipalities in the County, addressed several issues created by current land division and development processes. The goal was to create a consistent definition for land development projects to be considered subdivisions as well as a uniform checklist for the review of subdivisions. Municipalities in the County should continue to consistently use and cooperatively amend the review checklist as necessary.

## **HOUSING**

Chapter 5 of this Plan presents an analysis of the age, structural condition, value, and occupancy characteristics of existing housing stock in the County and local governments that participated in this planning process. In addition, the chapter provided a description of government programs which facilitate the provision of housing, including affordable housing and information on community policies established for the percentage distribution of single-family, two-family, and multi-family units. The Housing chapter presented the following implementation recommendations:

### **Housing Supply**

1. Each community within the County should identify a projected number of additional housing units to meet housing demand through year 2035. Land needed to accommodate additional housing units should be

included on the planned land use map based on the population trend information presented in Chapter 2 of this Plan.

2. Community comprehensive plans should address the need for adequate consumer housing choices that allow for a full range of housing structure types and sizes including single-family, two-family, and, in sewer service areas, multi-family.
3. Promote construction design concepts such as Universal Design<sup>1</sup> and Visitability. Visitability is a movement to change home construction practices so that all new homes, not just custom built homes, offer a few specific features that make the home easier for people with mobility impairment to live in at least one zero-step entrance approached by an accessible route on a firm surface no steeper than a 1:12 grade from a driveway or public sidewalk.

## **Housing Mix**

1. Communities that seek to attract jobs, as reflected in the accommodation of new commercial and industrial development, should ensure that a broad range of housing styles, types and price ranges are provided to provide opportunities to minimize geographic imbalances between job and residence locations.
2. Communities should establish policies concerning housing mix to provide a full range of housing choices. Comparing housing types and affordability to existing and projected jobs and wages will be beneficial to establishing effective housing mix policies.
3. Communities should analyze the population trend information presented in Chapter 2 and the employment projection information presented in Chapter 6 to ensure that a range of housing stock to meet the needs of an aging population. This analysis should be repeated annually to determine the effectiveness of the housing mix policy.
4. Communities should analyze existing housing stock to establish baseline conditions for the existing affordable housing. As part of this planning project, Waukesha County worked with the Town of Mukwonago to develop a sample methodology to analyze the value of existing housing stock. The following criteria were used to provide more accurate data on the actual housing stock within the municipality.
  - a. Equalized improved value of the property was greater or equal to \$40,000 based on tax and assessment information.
  - b. Equalized total value (land plus improvements) was less than or equal to \$208,700.
  - c. Land area was less than 10 acres to exclude large farms.
  - d. Special attention was given to removing parcels with partial assessments, parcels with only larger accessory structures, and parcels that had multiple living units or multi-family units.

## **Housing Affordability and Housing Costs**

1. Households should not have to pay more than 30 percent of their adjusted gross income in order to secure decent, safe, and sanitary housing, including, in addition to the contract rent payment or the payment of the principal, interest, and taxes, the necessary insurance, utility, and other attendant costs.
2. Chapter 6 (Economic Development) of this Plan discusses the use of Tax Incremental Financing. Municipalities should consider using Tax Incremental Financing for the redevelopment of properties to higher density residential uses to meet affordable housing needs.
3. Communities within the County should consider and explore the creation of incentives for the development of affordable housing units. Options to consider include density bonuses and waiver of fees.
4. The County should work with municipalities to study the feasibility of an affordable housing trust fund to assist in meeting the projected employment housing needs.
5. Encourage mixed income housing development to avoid concentrating affordable units in a limited number of areas.
6. Encourage the adoption and use of “flexible zoning district” regulations such as Traditional Neighborhood Development, Transit-Oriented Development, and Planned Unit Development regulations.

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<sup>1</sup> Accessibility for the disabled can be increased by providing homes with wider doors and hallways, level surfaces, and other features, often referred to as “Universal Design.”

7. Develop or encourage the development of rent-to-own programs through public-private partnerships and entrepreneurship to give low-to moderate-income families a chance at homeownership.<sup>2</sup>
8. Study the potential to integrate other types of specialty housing, where applicable, such as “cooperative housing” (sometimes called “coop-housing or co-habiting housing”),<sup>3</sup> “cohousing”<sup>4</sup> and university or campus-related housing for seniors,<sup>5</sup> which may also socially support and help seniors and/or persons with disabilities be self-sufficient.
9. Support the inclusion of accessory units and “live-work-units”<sup>6</sup> (sometimes called “flex units”), where suitable, to help provide affordable housing as well as affordable office or work space for entrepreneurs (i.e. small businesses and home-based businesses).

## **Household Size**

The average household size in the County in 1960 was 3.66 persons per household. The projected 2035 household size is 2.48. County projections show that the population of people aged 65 and over will more than double in size increasing from 26,763 people in 2000 to 56,678 in 2035. A higher percentage of smaller housing units, multi-family, independent and assisted living units may be required to better meet the housing needs of smaller households, including the increase in one- and two-person empty nester and elderly households and persons with disabilities.

## **Transition from Renter to Home Owner Occupied Housing**

Utilize existing local, state, and federal programs to educate young adults and families in the County to transition

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<sup>2</sup> An example of a rent-to-own development is Metcalfe Park in the City of Milwaukee. A private developer, in partnership with the Milwaukee Urban League and using affordable housing tax credits, is developing 30 homes that will be leased to families that qualify for below-market rents of \$675 and \$825 per month. In 15 years, the homes will be available for purchase at discounted prices.

<sup>3</sup> A multi-family dwelling owned and maintained by the residents. The entire structure and real property is under common ownership as contrasted with a condominium dwelling where individual units are under separate ownership. Apartments and dwellings may include shared common areas such as kitchen, dining, and/or living rooms, and services, such as housekeeping, organized social and recreational activities, including seniors and persons with disabilities capable of living “independently” (usually requiring no or minimal medical-care or “Stay at Home” related services). More information on cooperative housing in Wisconsin can be accessed from the University of Wisconsin-Extension Center for Cooperatives at [http://www.uwcc.wisc.edu/info/uwcc\\_pubs/coopHouse02.pdf](http://www.uwcc.wisc.edu/info/uwcc_pubs/coopHouse02.pdf)

<sup>4</sup> Cohousing communities are communities or “villages” that generally consist of privately-owned individual homes and community-owned areas and buildings. Households participate in social activities centered in a community-owned building, and help to design and manage their “village” consisting of small groups of homes concentrated around a community building which acts as the social center of the “village”. Residents own their private dwellings, usually condos or attached single-family homes, but share common areas, such as dining areas, kitchen, lounges, meeting rooms, a recreational facility, a workshop, children’s spaces and the like. Group meals are regularly shared where residents manage the property. Other types of cohousing include elderly cohousing which is generally designed for adults 55 or older. Elder cohousing promotes universal design concepts that support active lifestyles and can accommodate accessibility needs.

<sup>5</sup> Senior housing, rental or homeownership, linked to universities and colleges where services offered to seniors include auditing classes, library and computer privileges, access to healthcare, use of fitness facilities, discount event tickets, and/or reduced meal prices. The universities or colleges may or may not be involved with the development and operation of the retirement community, while providing such services to residents.

<sup>6</sup> Live-work units contain work space that usually occupies more floor area, up to 50 percent of the total floor area of the unit, than a conventional house containing a home occupation, in which the home-based business typically occupies between 10 to 25 percent of the total floor area. Live-work units may contain more types of business activities than a traditional home occupation, such as more parking, traffic, employees, and/or customer visits. Such units may be detached buildings or attached units (especially townhouses) functioning as potential small business incubators. Units may be rented or owned, including as condominiums, thereby allowing owners to accumulate equity.

from renter to home owner. About 20 percent of housing units in Waukesha County are renter occupied and 80 percent are owner occupied. However, in several communities within the County renter occupied units are over 40 percent of total housing units.

### **Housing Vacancy**

The supply of vacant and available housing units should be sufficient to maintain and facilitate ready housing consumer turnover. Rental and homeowner vacancy rates at the county level should be maintained at a minimum of four (4) percent and a maximum of six (6) percent for rental units and a minimum of one (1) percent and a maximum of two (2) percent for homeowner units over a full range of housing types, sizes, and costs.

### **Land Use Regulation**

1. The County and municipalities should examine regulatory codes to identify the extent to which they permit or exclude relatively lower cost housing, and make appropriate changes to facilitate the provision of such housing. This review should primarily focus on the structure types permitted (single-family, two-family, multi-family); development densities; minimum lot area requirements; and minimum dwelling unit floor area requirements.
2. The County should research, study, promote, and educate the use of energy efficient homes and green housing development design concepts.

## **ECONOMIC DEVELOPMENT**

Chapter 6 of this Plan provides an overview of the methodology and assumptions that underlie the economic and employment projections of southeastern Wisconsin and Waukesha County. Included is descriptive information pertaining to measures of economic activity and employment projections. The Economic Development chapter presented the following implementation recommendations:

1. In order to enhance the viability of existing industrial, office and retail centers, the following standards shall be included in the Land Use Chapter of this Plan (Chapter 7), to guide the placement of new industrial, retail and office uses, such as:
  - a. Access to available adequate water supply, sanitary sewer service, storm water drainage facilities, and power supply.
  - b. Ready access to the arterial street and highway system.
  - c. Adequate on-street and off-street parking and loading areas.
  - d. Provision for properly located points of ingress and egress appropriately controlled to prevent congestion on adjacent arterial streets.
  - e. Site design emphasizing integrated nodes or centers, rather than linear strips.
  - f. Site design appropriately integrating the site with adjacent land uses.
  - g. Served by a transit service. (This standard applies to industrial, retail, and office uses located within, or in proximity to, medium- and high-density areas).
2. To address cyclical overdevelopment of commercial space or buildings, in particular office space, municipalities should avoid pre-zoning lands. For example, communities should not create zoning patterns within a community that are not justifiable in the marketplace or for which the above standards have not been met.
3. Promote the use of other comprehensive land development tools and techniques in advising communities regarding planning and zoning actions and decisions.
4. Officials in the County should annually review the capital improvement plans or programs of local governments in an effort to coordinate transportation and other improvements that aid in the delivery of goods, services, and employment.

5. Officials in the County should coordinate access to state and federal resources to assist in funding County and local transportation improvements.

### **Tax Increment Financing**

1. The conservation and renewal of viable urban areas can enhance their viability.
2. Tax Incremental Financing should be used for brownfield and other redevelopment projects.
3. To encourage viable urban centers, increase the use of Tax Incremental Financing in cities and villages.
4. To discourage public subsidizing of development that can occur with lower development costs that cannot be justified. Discourage use of Tax Incremental Financing for development of agricultural lands.

### **Housing Development**

1. In anticipation of projected employment sector growth, promote and provide an adequate supply of new housing of sufficient quantity and density within reasonable proximity to new and existing employment centers (Refer to Chapter 5).

### **Education, Jobs and Business Growth**

1. In response to existing and projected skilled workforce needs, Waukesha County, in cooperation with appropriate business and community organizations, should work with the University of Wisconsin and other higher education systems to provide greater access to bachelor degree programs in Waukesha County.
2. To enhance higher paying jobs, support initiatives to increase development of the bioscience manufacturing industry, especially in the area of medical equipment.
3. Create partnerships between local economic development organizations and colleges and universities to promote entrepreneurial programs, industry collaborations, technology transfer and seed capital.
4. Collaborate with the Milwaukee 7, the Waukesha County Economic Development Corporation, Waukesha County Technical College and UW-Extension to conduct a labor market analysis for Waukesha County and the Region that assesses the existing and anticipated supply and demand for labor as well as employer and employee training needs.
5. To add to the livability of the County and enhance an employer's ability to attract workforce, update the County Park and Open Space Plan in cooperation with municipalities in the County to provide sufficient recreational facilities, including comprehensive trail system, to the resident population.

### **Government Services and Taxes**

1. In an effort to reduce property taxes in Waukesha County, consider consolidations, mergers, shared services or legislative measures to reduce the number of governmental jurisdictions.

## **LAND USE**

The recommended land use plan presented in Chapter 7 provides a design for the attainment of the urban and rural development and open space preservation objectives contained in this comprehensive development plan. The implementation recommendations pertaining to the urban development areas, rural development areas, environmentally sensitive areas and other land use plan implementation measures are summarized below:

### **Implementation for Urban Development Areas**

One of the initial steps recommended for implementation of the County land use plan as it pertains to the proposed urban development areas is the preparation of detailed development and redevelopment plans for the residential neighborhoods and special-purpose districts which comprise the proposed urban service areas.

Within the context of community-level plans, detailed neighborhood development plans should be prepared for each residential neighborhood or special district where significant growth is expected. While such plans may also vary in format and level of detail, they should generally do the following:

- Designate future collector and land access street locations and alignments, pedestrian paths and bicycle ways, and, as appropriate, the configuration of individual blocks and lots.
- Further classify residential areas as to structure type and density, with the mix of housing structure types and lot sizes resulting in an overall density for the neighborhood consistent with that recommended in the community-level and county plan.
- Identify specific sites for neighborhood parks, schools, and retail and service centers, which are recommended on a general-site-location basis in the community-level plan.
- Identify environmentally significant areas to be preserved consistent with the community-level plan and county and regional plans.
- Indicate areas to be reserved for storm water management and utility easements.
- The neighborhood planning process should make full use of the many design concepts that can enhance the living environment and increase efficiency in the provision of urban services and facilities and in travel patterns. Among these design concepts are the following:
  1. **Mixed-Used Development:** Residential development in mixed-use settings can provide a desirable environment for a variety of household types seeking the benefits of proximity to places of employment as well as civic, cultural, commercial, and other urban amenities. Examples of mixed-use settings include dwellings above the ground floor of commercial uses and residential structures intermixed with, or located adjacent to, compatible commercial, institutional, or other civic uses.
  2. **Traditional Neighborhood Development:** The term “traditional neighborhood development” refers to very compact, pedestrian-oriented, mixed-use neighborhoods typically characterized by a grid like street system and street-oriented setbacks and building designs. The overall design, including the layout of streets and sidewalks, encourages walking and bicycling as alternatives to automobile transportation within the neighborhood.
  3. **Transit-Oriented Development:** The term “transit-oriented development” refers to compact, mixed-use development whose internal design is intended to maximize access to a transit stop located within or adjacent to the development. Within the development, commercial uses and higher-density residential uses are located near the transit stop. The layout of streets and sidewalks provides convenient walking and bicycling access to the transit stop.
  4. **Residential Cluster Development:** A residential development pattern characterized by a unified site design for a number of housing units, clustering buildings and providing common open space, potential density increases, and a mix of building types. It permits the planning of a project and the calculation of densities over the entire development, rather than on an individual lot-by-lot basis.

In addition to plans for developing neighborhoods, detailed plans should also be prepared for mature neighborhoods or special-purpose districts showing signs of land use instability or deterioration. Such plans should identify areas recommended for redevelopment to a different use, areas recommended for rehabilitation, any local street realignments or improvements, and other public utility and facility improvements. Special consideration should be given in such planning to overcoming contamination problems at, and reuse of, brownfields. Redevelopment plans should seek to preserve those historic, cultural, and natural features and features of the urban landscape, which provide for neighborhood identity within the larger urban complex. Such plans should maximize opportunities for the provision of living arrangements and amenities that are unique to older cities in the County, such as “downtown” housing development.

Although “suburban density” development, as described previously in this chapter, is not consistent with many of the planning standards and objectives, it is recognized that a community may desire infill between existing

subdivision plats consistent with adjacent developments and, also, in growth areas adjacent to incorporated municipalities, where services may be available in the future, without the necessity of going through a cluster concept, which may not be compatible with adjacent existing developments. In addition for municipalities to maintain an overall residential density of 5 acres in “rural development” areas suburban densities may be planned.

In addition, in order to support open space or conservation design developments and to preserve rural character, it would be appropriate to permit lands in the Rural Density and Other Agricultural Land category to develop at an overall density of 3.5 acres per dwelling unit, rather than five (5) acres per dwelling unit, if said lands will be developed as Planned Unit Developments (PUD) or conservation design developments utilizing conservation design standards. The standard density bonus option is not applicable in the Towns of Mukwonago and Delafield, as both Towns achieve five-acre rural density using local PUD provisions. The Town of Mukwonago Land Use Plan and the Town of Delafield Land Use Plan Unit Determination Chart are referenced accordingly by Table VII-10 and Figure VII-2. The idea is that a slight increase in density in otherwise rural areas is a reasonable trade-off in order to achieve more sustainable development design that conserves natural features, creates more open space within developments, protects the rural atmosphere and causes less need for infrastructure, such as roads and storm water management facilities. In order for a development to qualify for the 3.5 acre Rural Density option, the following criteria must be met.

1. The development plan for a given site must incorporate an absolute minimum of 40 percent of the site in open space owned by the property owners or recreational use or public open space. In calculating open space, not more than 20 percent of the required open areas may be floodplain or wetland (80 percent if open space must be upland).
2. The community in which the development is located must create and map an Upland Environmental Corridor District for all Upland Primary and Secondary Environmental Corridors, which allows for development at a density not greater than one unit per five acres. It is recommended that communities also include Isolated Natural Resource Areas within the Upland Environmental Corridor District.
3. Individual development projects must be developed as Planned Unit Developments or conservation design developments, which allow the community an opportunity to fully analyze project design. Communities must adopt Planned Unit Development standards within their zoning and subdivision ordinances to achieve this end.
4. Primary Environmental Corridors, Secondary Environmental Corridors, Isolated Natural Resource Areas, wetlands and floodplains must be protected to the greatest extent possible and shall be incorporated into protected open space. If any portion of the above resources will be located on a private lot, said resource must be protected with a protective covenant or restriction. Sites that do not contain significant natural features may be conducive to prairie or wetland restorations or may be enhanced with the establishment of landscaped open spaces.
5. Where open space is mentioned as part of a conservation design residential planned unit development, said open space shall be protected as green or natural open space and no more than five (5) percent of said open space area shall be allowed to have impervious surfaces.

Conservation design development can be equally valuable within any of the residential land use categories. As detailed above, the Rural Density and Other Agricultural Land category allows for a 30 percent increase (3.5 acres per dwelling unit vs. 5 acres per dwelling unit) in density if certain conservation design criteria are met. In order to promote conservation design in the urban and suburban residential categories, it is recommended that a 30 percent density bonus also be made available to development projects that conform with development standards #1-4 above. The following list details the resultant maximum densities that could be offered when utilizing a 30 percent density bonus for conservation design:

Suburban II Density	2.1 acres per dwelling unit (DU)	(3.0-4.9 conventional)
Suburban I Density	1.05 acres per DU	(1.5-2.9 conventional)
Low-Density Residential	14,000 sq. ft. per DU	(20,000 s.f.-1.4 acres conventional)
Medium-Density Residential	4,200 sq. ft. per DU	(6,000-19,999 s.f. conventional)
High-Density Residential	< 4,200 sq. ft. per DU	(<6,000 s.f. conventional)

Zoning regulations should be reviewed and adjusted, as necessary, to ensure the proper staging of development over time. In this respect, the application of urban zoning districts should proceed incrementally. The **premature zoning of lands for urban use should be avoided** so as to prevent the creation of additional isolated urban enclaves and incomplete neighborhoods. Accordingly, the **areas concerned should be placed in zoning districts consistent with their existing use and should be rezoned into appropriate urban districts only when development has been proposed and approved and essential facilities and services can be readily provided.**

### **Implementation for Rural Development Areas**

As defined in Chapter 7, rural development areas are *sparsely developed areas where land is used primarily for farming, resource extraction, landfills, very low density residential uses (one unit per five acres or less), or other open spaces uses, and includes corridors and isolated natural resource areas.* Rural development areas exist in several cities, villages and towns in Waukesha County. Planning and Zoning should be carried out in such a manner as to preserve rural character. First, new residential development should be limited to an overall density of no more than one dwelling unit per five acres of open land within the planning area unless a density bonus is allowed as a result of utilizing the open space or cluster design concept discussed in Chapter 7. This density is intended to provide a basis for determining the maximum number of additional dwelling units, which should be accommodated. Within the implementation recommendations, Chapter 7 presents the methodology for calculating the overall density within rural development areas and the status of the five (5) acre density standard at various planning stages.

Second, to the maximum extent possible, the dwelling units, which may be accommodated in accordance with the overall five-acre density, should be developed by using residential cluster designs, in which dwelling units are grouped together on a relatively small portion of the site. The residential clusters should be limited in size, surrounded by open space, and, as may be necessary, contain open space. The clustered lots should be no larger than necessary to accommodate the residential structures, driveways, and desired yards, including, as necessary, space for an onsite soil-absorption sewage-disposal system and replacement system area. This can usually be accomplished on lots no greater than one acre in size.

Third, to the extent possible, residential clusters should be located in areas which are visually screened from public roadways, so that existing rural vistas are maintained; should be carefully adjusted to topographic and other natural features, taking full advantage of the settings provided by those features without causing undue disturbance; and should be buffered from nearby agricultural and mineral extraction lands, as appropriate, so as to minimize conflicts between farming or mining and residential uses.

Fourth, other intensive land uses should be limited to uses which are consistent with the rural character of the area or otherwise essential to the area, including, among others, animal hospitals and veterinary clinics, riding stables, and garden shops. In general, office, commercial, industrial, and storage uses and the types of retail and service uses that are provided as a matter of convenience and necessity in urban residential neighborhoods should not be considered appropriate within rural development areas.

Fifth, lands within the rural development areas, which are not designated for residential or other compatible intensive use, should be retained in general agricultural and other open space use. Potential agricultural uses include traditional farming, hobby farms, and community supported agriculture. Land not used for farming should be kept free of development, except for recreational trail facilities and access facilities for the benefit of those who own an interest in the land.

Finally, where open space is mentioned as part of a conservation design residential planned unit development, said open space shall be protected as green or natural open space and no more than five (5) percent of said open space area shall be allowed to have impervious surfaces.

It should be noted that, in many cases, it will be necessary to revise zoning and subdivision control ordinances to accommodate the recommended residential cluster development designs. Clustering may be accommodated in

rural areas through a variety of zoning approaches. Clustering may be permitted by conditional use or by right in a basic district or through an overlay district. In addition, when the concept of the transfer of development rights is used, residential clustering principles can be used on a community wide basis to achieve better site designs and preserve open space. Subdivision regulations regarding street improvement standards, sewer and water facilities, storm water management, landscaping, and open space preservation may also need revision to adequately promote and regulate cluster development. Residential cluster zoning provisions should require the use of legal restrictions to ensure the preservation of lands, which are to be permanently preserved in agricultural or other open space use.

Because density bonus' are increasing densities from 3.5 to 5 residential acres per unit, the density increase may outpace projected population and projected housing needs in the municipality. Therefore, the municipalities should consider additional growth management tools, such as an allotment system.

### **Implementation for Environmentally Sensitive Lands**

Areas which have been identified as primary environmental corridors, secondary environmental corridors, and isolated natural resource areas occur within both urban and rural development areas and within prime agricultural areas. Environmental corridors and isolated natural resource areas should be placed in one of several zoning districts, depending upon the type and character of the natural resource features to be preserved and protected. All lakes, rivers, streams, wetlands, and associated undeveloped floodlands and shorelands should be placed in lowland conservancy or floodplain protection districts. Upland woodlands and areas of steep slopes should generally be placed in appropriate upland conservancy, rural-density residential, or park and recreation districts. Through proper zoning, residential development should be confined to upland portions of environmental corridors, excluding areas of steep slopes, and should be limited to a density of no more than one dwelling unit per five acres, with provisions made as may be appropriate for clustering. Zoning applied to the environmental corridors should, however, accommodate necessary public facilities, such as crossings by streets and highways, utility lines, and engineered flood control facilities, but should require that the location, design, and development of the facilities concerned be sensitive to the protection of the existing resource features, and require that, to the extent possible following construction, disturbed areas be restored to preconstruction conditions.

### **Implementation Measures for Other Open Lands to be Preserved**

Areas which have been identified in the Other Open Lands to be Preserved category are being mapped in both Urban and Rural areas. Lands identified in this category are mapped in part due to severe to very severe limitations for development of structures from high seasonal groundwater conditions, unstable soils, hydric or organic soil conditions or are generally poorly drained. For planning purposes, soil data available through the Soil Survey of Milwaukee and Waukesha Counties from the United States Department of Agriculture – Natural Resources Conservation Service was used.

Since the soil survey data is generalized, additional site-specific soil data analysis is necessary for individual development project review. It is recommended that the County and municipalities, through regulatory processes, provide a procedure to allow infield detailed investigation and soils analysis using the COMM 85 procedures, established in the Wisconsin Administrative Code, to assist in determining actual on-site soil conditions. Such procedures should identify and document whether or not seasonal high groundwater, soil instability, hydric or organic conditions exist. Where site-specific soil analysis indicates that soil conditions are suitable to accommodate development, an adjustment to the land use category or associated development density may be warranted and would not require a formal amendment request to an adjacent upland development land use category through the annual amendment process outlined in Chapter 9. The land use category which should be used for adjustment from the Other Lands to be Preserved category should be the adjacent upland land use category mapped on the Proposed Land Use Plan. For example, the land being adjusted from the Other Open Lands to be Preserved category are surrounded by lands in the Suburban I category and are found to be acceptable for development, not having the hydric soil conditions and high groundwater table conditions, the subject Open Lands category could be modified to the Suburban I category. There would, however, have to be a recognition and documentation of such change and the information used to justify the change so that appropriate measures are taken to incorporate the changes on the land use maps being maintained by the County and the affected

municipality. A record of the documentation and information used to justify the change shall be filed with the County and the community, and an appropriate notation or identification on the Land Use Plan maps made with a reference to the location of the documentation shown on the map should be provided. It should also be noted that the new land use category, which has been modified, from the Other Lands to be Preserved category, can utilize similar densities as used for this new category as if the land were originally all designated in the new land use category.

Lands with soil conditions determined to be unsuitable for development, consistent with the planning standards detailed in Chapter 2 of this Plan, should be retained in open space uses, but can be included within lot boundaries. In addition, these lands may also be included in calculation for density standards as set forth in the Planned Unit Development or Cluster Development standards identified above. It is recommended that the County and municipalities establish, through regulatory processes, a density credit for retaining these lands in open space use. For years, the County used 20 percent of the acreage of lands in this category when calculating densities for proposed developments in the attached or adjoining upland areas. It would be appropriate that a range of 20 percent to 40 percent be used for these lands, subject to specific local community regulations. Further, it may be appropriate to grant a density of one (1) unit per five (5) acres for those lands in the Other Open Lands to be Preserved category.

### **Regulatory Implementation**

Land use regulatory ordinances are an important tool available to county and local units of government to shape growth and development in accordance with adopted land use objectives. Under the State comprehensive planning law (S.66.1001 of the Wisconsin Statutes), “beginning on January 1, 2010, if a local governmental unit engages in official mapping, subdivision regulation, zoning ordinance enacted or amended and zoning of shorelands or wetlands in shorelands, those actions shall be consistent with that local governmental unit's comprehensive plan”. Accordingly, upon adoption of their comprehensive plans, the county, cities, villages, and towns should review the text of their ordinances and adjust as necessary to carry out the various implementation recommendations contained in this Plan. Such changes should include rezoning to use districts consistent with present uses so as not to prezone, consider allotment system to evaluate and grade proposed developments, which carry out the recommendations in this Plan and review of developments for consistency with the recommendations of this Plan.

#### ***Zoning in Urban Areas***

Zoning in urban areas should be administered in accordance with county and local comprehensive plans, which refine the urban-area recommendations of the regional land use plan. The application of zoning districts that accommodate residential, commercial, industrial, and other urban development should be done in a manner that is consistent with any recommendations in the local comprehensive plan regarding the staging of development over the course of the plan period. Where the local comprehensive plan includes staging provisions, the application of zoning districts that accommodate the planned urban uses should be done incrementally in accordance with the timeframe set forth in the comprehensive plan. Lands should be placed in zoning districts consistent with their existing use, or, alternatively, placed in an urban land holding district or transition district. This approach allows municipalities to determine whether the proposed development is consistent with the Comprehensive Development Plan for Waukesha County or its goals, standards and objectives at the time a project is proposed. Specifically, a development plan needs to be periodically amended to adjust to changing conditions and updated data such as population and economic projections. Prezoning lands to match a particular land use plan, can limit a municipality's ability to respond to changing conditions and should be avoided wherever possible. Evaluations of new project developments should be reviewed and recommended on the basis of the recommendations contained in this and the local communities plan and allow development to occur where it is consistent with the recommendations contained herein.

#### ***Zoning in Rural Areas***

Zoning in rural areas should be administered in accordance with county and local comprehensive plans, which refine the rural-area recommendations of this Comprehensive Development Plan. The following is recommended:

- Prime agricultural lands identified in county and local comprehensive plans should be placed into an exclusive agricultural zoning district, which essentially permits only agricultural and agriculture-related uses. Such a district should provide for a residential density of no more than one dwelling unit per 35 acres and should prohibit incompatible urban development.
- Other areas identified for continued agricultural use in county and local comprehensive plans should be placed into exclusive agricultural districts as defined above or into general agricultural districts with smaller minimum parcel sizes as may be appropriate for smaller agricultural operations, such as hobby farms or other specialty farms.
- Areas recommended in county and local comprehensive plans for rural residential development should be placed into a rural residential zoning district that limits development to no more than one dwelling unit per five acres and that encourages, or even requires, the use of conservation subdivision designs to accommodate the permitted development.
- Non-farmed wetlands should be placed in a lowland conservancy or shoreland-wetland zoning district, as appropriate. Farmed wetlands should remain in an agricultural zoning district as long as the parcel remains in agricultural use; with consideration given to placing a conservancy overlay zone on the wetland. Wetlands identified as farmed wetlands should be placed in a lowland conservancy district at the time farming activities on the wetland parcel cease and an application for residential or other urban development of the upland portion of the parcel is approved by the unit of government having zoning authority. Floodplains should be placed in the appropriate floodplain zoning district (floodway, floodfringe, flood storage, or general floodplain). Primary environmental corridors should be placed, and other natural resource areas, including secondary environmental corridors and isolated natural resource areas, may be placed, in a conservancy or other appropriate zoning district (such as a park or rural residential zoning district).

### ***Official Mapping***

Adoption of local official maps can contribute significantly to the implementation of the recommended County land use plan. Local units of government should prepare and adopt local official maps pursuant to Section 62.23(6) of the Wisconsin Statutes, showing thereon lands needed for future public use as streets, highways, transit ways, parkways, drainage ways, parks and playgrounds. The official map should be amended from time to time to incorporate the additional street and other public land requirements identified in detailed neighborhood unit development plans or rural area development plans, as those plans are prepared over time.

### ***Land Division Ordinances***

Land division ordinances should be adopted by the County and local units of government as a basis for the review and approval of subdivision plats and certified survey maps. Any proposed departure from adopted land use plans should be carefully considered and approved only if such departures are found to be in the public interest and the land use plan map is amended to a category that would allow the proposed subdivision. It should be noted that the existing Waukesha County subdivision control ordinance applies only to the statutory shorelands within the unincorporated areas of the County.

In 1999, Waukesha County created a Land Development Workgroup to analyze and address issues created by land division and development processes being used at that time. The Workgroup recommended:

1. The County should modify existing county transportation related ordinances to require pre-review of potential access points prior to recording of certified survey maps and subdivision plats.
2. Municipalities and the County should uniformly apply a development review checklist prepared by the Workgroup. The intent of the checklist is to set forth consistent standards for the review of development proposals by county municipalities, and to clearly express to development sponsors

what should be contained in a proper development proposal. The Workgroup further recommended that each municipality in the County amend appropriate local codes incorporating and adhering to the checklist or a more stringent version in development reviews.

3. Another issue raised by the Workgroup was the variety of subdivision definitions used by Waukesha County municipalities. The variety in definitions has led to larger scale residential developments proceeding as certified surveys as opposed to a platted subdivision.

To address this issue, the Workgroup developed a minimum definition of a subdivision to be applied in Waukesha County. The definition reads "A subdivision is the division of land by the owner, subdivider, or his successor in title, for the purpose of transfer of ownership or building development where the division creates more than four (4) residential lots less than 1.5 acres in five (5) years or where the division creates more than six (6) residential parcels or building sites of any size within five (5) years." A remnant parcel in excess of 10 acres in size may be excluded from the plat by action of the municipality upon application by the owner. Upon receipt of an application, the municipality will notify the County.

4. County staff should continue to host training workshops on land use planning and development review topics for local officials.
5. The County should define a Development Review Team process to enhance communication between the county, towns, cities, villages and developers regarding land development projects and issues.
6. The County should evaluate the existing County Storm Water Management Ordinance and Program to identify opportunities for addressing watershed based storm water issues.
7. The County should engage in a process to comprehensively update the Street and Highway Width Map and Jurisdictional System Plan.

This Plan recommends that municipalities and the County continue to follow the recommendations made by the Land Development Workgroup.

### ***Regulation of Public Sanitary Sewerage Systems***

In Wisconsin, the comprehensive water quality management planning program has led to the development of State regulations which have the effect of requiring the preparation of sanitary sewer service area plans for each public sewage treatment plant. In the Region, these plans are prepared cooperatively by the concerned local unit of government and the Regional Planning Commission, with ultimate approval authority resting with the Wisconsin Department of Natural Resources. Sewer service area plans have now been prepared for nearly all of the public sanitary sewerage systems in the Region. These plans define sewer service limits and delineate environmentally sensitive lands within those service limits to which service should not be provided. Chapter NR 110 and Chapter Comm 82 of the *Wisconsin Administrative Code* require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Commerce, with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions are in conformance with adopted area wide water quality management plans and the sanitary sewer service areas identified in such plans before approving such extensions.

Under Chapter NR 121, sewer service areas must be sized in a manner that is consistent with long-range population projections. As a practical matter, this requirement is considered to be met if the buildout population of the sewer service area—that is, the population that could be accommodated if the sewer service area were completely developed at locally planned residential densities—is within the projection range envisioned under the regional land use plan. In sizing their sewer service areas, many communities choose to plan for the high end of the projected population range in order to retain flexibility in terms of the location of future urban growth.

Historically, communities in the Region, with the assistance of SEWRPC, have amended their sewer service area plans from time to time in response to changing needs and conditions. This may be expected to continue in the years ahead, particularly as communities complete their required local comprehensive plans.

As noted above, sanitary sewer service area plans are an important part of the basis for State agency review and approval of proposed sewer extensions. Policies adhered to by the Wisconsin Department of Natural Resources and Department of Commerce prohibit or otherwise limit the extension of sanitary sewers to serve development in certain environmentally significant lands identified in local sewer service area plans. The following restrictions were in effect in 2007:

- The extension of sanitary sewers to serve new development in primary environmental corridors is confined to limited recreational and institutional uses and rural-density residential development (maximum of one dwelling unit per five acres) in areas other than wetlands, floodplain, shorelands, and steep slope (12 percent or greater).
- The extension of sanitary sewers to serve development in portions of secondary environmental corridors and isolated natural resource areas comprised of wetlands, floodplains, shorelands, or steep slopes is not permitted.

### **Park and Open Space Plan Implementation**

Achievement of the outdoor park and recreation and open space preservation objectives of the land use plan requires continued public interest acquisition of land for outdoor recreation and open space uses. The county park and open space plan, as a refinement of the regional park and open space plan, recommends public interest acquisition (that is, acquisition by local, county, State and Federal government and by private conservancy interests) of land for recreation and resource protection purposes. The regional natural areas and critical species habitat protection and management plan also includes recommendations for public interest acquisition for most of the natural areas and critical species habitat sites identified in that plan. Moreover, cities, villages, and towns may acquire other lands for park and open space purposes as recommended in local comprehensive or park and open space plans. Each of the concerned units and agencies of government should continue or begin land acquisition programs in accordance with such plans. Private conservancy organizations are encouraged to supplement public open space acquisition efforts, as appropriate, to ensure the preservation of important natural areas. The detailed County Park and Open Space Plan is presented in Appendix A of this Plan.

### **Transfer of Development Rights**

Under transfer-of-development-rights programs, or “TDR” programs, the right to develop a specified number of dwelling units under existing zoning may be transferred from one parcel, which would be maintained in open space use, to a different parcel, where the number of dwelling units permitted would be correspondingly increased. When the parcels are held by the same owner, the development rights are, in effect, simply transferred from one parcel to the other by the owner; when the parcels are held by different landowners, the transfer of development rights involves a sale of rights from one owner to another, at fair market value. In either case, the result is a shift in density away from areas proposed to be maintained in farming or other open use toward areas recommended for development. The transfer of development rights may be permanent or may be for a specific period of time or set of conditions.

The transfer of development rights may be implemented only if authorized under county or local zoning. To enable the transfer of development rights, the zoning ordinance must establish procedures by which the TDR technique will be administered, including the formula for calculating the number of residential dwelling units, which may be transferred from the “sending” area to the “receiving” area. The zoning district map must identify the sending and receiving areas, or at least identify the districts within which development rights can be transferred from one parcel to another. As of 2007, the Waukesha County Zoning Code contains provisions for the transfer of development rights.

### **Municipal Boundary and Utility Extension Agreements**

The recommendations of the land use plan concerning the location and density of new urban development are formulated without regard to the location of city, village, and town boundaries. Rather, those plan

recommendations are based upon a consideration of such factors as the location of existing utility infrastructure, including public sanitary sewer and water supply systems; the location of environmentally sensitive lands; and the availability of lands considered to be suitable for urban development. Where cities and villages own and operate essential public utilities not provided by adjacent towns, the plan assumes that cities and villages will either annex unincorporated territory recommended in the plan for urban development and provide extensions of essential utility services to serve such development, or that the cities and villages will reach agreement with adjacent unincorporated towns on the extension of those essential services without the need for annexation and municipal boundary change.

The *Wisconsin Statutes* establish a number of arrangements for cooperation among communities with regard to sharing of municipal services and cooperatively determining community boundaries, as indicated below:

- Section 66.0301: This section of the Statutes provides broad authority for intergovernmental cooperation among local units of government with respect to the provision and receipt of services and the joint exercise of their powers and duties.
- Section 66.0307: This section of the Statutes allows any combination of cities, villages, and towns to determine the boundary lines between themselves under a cooperative plan, subject to oversight by the Wisconsin Department of Administration. Section 66.0307 envisions the cooperative preparation of a comprehensive plan for the affected area by the concerned local units of government and prescribes in detail the contents of the cooperative plan. Importantly, the cooperative plan must identify any boundary change and any existing boundary that may not be changed during the planning period; identify any conditions that must be met before a boundary change may occur; include a schedule of the period during which a boundary change shall or may occur; and specify arrangements for the provision of urban services to the territory covered by the plan.
- Section 66.0225: This section of the Statutes allows two abutting communities that are parties to a court action regarding an annexation, incorporation, consolidation, or detachment, to enter into a written stipulation compromising and settling the litigation and determining a common boundary between the communities.

Cooperative approaches to the identification of future corporate limits and the extension of urban services can contribute significantly to attainment of the compact, centralized urban growth recommended in the land use plan. Conversely, failure of neighboring civil divisions to reach agreement on boundary and service extension matters may result in development at variance with the plan—for example, by causing new development to leap past logical urban growth areas where corporate limits are contested, to outlying areas where sewer and water supply service are not available. Accordingly, it is recommended that neighboring incorporated and unincorporated communities cooperatively plan for future land use, civil division boundaries, and the provision of urban services, as provided for under the *Wisconsin Statutes*, within the framework of the land use plan.

### **Municipal Revenue Sharing**

Additional opportunity for intergovernmental cooperation is provided under Section 66.0305 of the *Wisconsin Statutes*, entitled “Municipal Revenue Sharing.” Under this statute, two or more cities, villages, and towns may enter into revenue sharing agreements, providing for the sharing of revenues derived from taxes and special charges. The agreements may address matters other than revenue sharing, including municipal services and municipal boundaries. Municipal revenue sharing can provide for a more equitable distribution of the property tax revenue generated from new commercial and industrial development within urban areas and help reduce tax-base competition among communities, competition that can work against the best interests of the urban area as a whole.

A good example of municipal revenue sharing under this statute is the revenue sharing agreement included in the Racine Area Intergovernmental Sanitary Sewer Service, Revenue Sharing, Cooperation and Settlement Agreement entered into by the City of Racine and neighboring communities in 2002. Under this agreement, the City of Racine receives shared revenue payments from neighboring communities for use in renovating older residential areas, redeveloping brownfield sites, and supporting regional facilities like the City zoo, fine arts

museum, and library. In return, the City of Racine agreed to support the incorporation of the adjacent Towns of Caledonia and Mt. Pleasant; refrain from annexations without the consent of the Towns; refrain from using extraterritorial zoning and plat review powers; and move ahead with sewerage system improvements that will accommodate growth in the Towns. It should be noted that the Towns of Mt. Pleasant and Caledonia were incorporated as villages in 2003 and 2005, respectively.

### **Brownfield Redevelopment**

Factors contributing to the abandonment or underutilization of older commercial and industrial sites vary from site to site, but often include structures which are obsolete in terms of accommodating current manufacturing, warehousing, and office needs; inadequate site access to the freeway system; and insufficient site area for horizontally-oriented structures, contemporary parking and loading requirements, and possible future plant expansion needs.

Once abandoned, the re-use of former commercial and industrial sites is frequently constrained by contamination problems created by past industrial and commercial activities, giving rise to the term “brownfields”—sites, which are underutilized or abandoned due to known or suspected environmental contamination. While brownfields tend to be concentrated in older areas, they also occur in outlying areas. Redevelopment of brownfields is often hindered by high cleanup costs, and, even where contamination is only suspected, the potential for high cleanup costs tends to dampen private-sector interest in redevelopment.

In order to maintain the viability of existing urban areas, special efforts to promote the reuse of brownfields are required. Local units of government should include the cleanup and re-use of brownfields as a key element in their planning for the revitalization of urban areas and promote such re-use through such tools as tax-incremental financing. Limited State and Federal financial assistance has been made available in support of the cleanup and re-use of contaminated sites. Local units of government should make full use of, and assist private developers in securing, available State and Federal financial assistance.

The re-use of brownfield sites need not be limited to industrial use, but may include a mix of residential, commercial, recreational, and other development, in accordance with local development objectives. Properly carried out, the cleanup and re-use of brownfields has many potential benefits in addition to the underlying environmental benefits: elimination of blight, increase in the property-tax base, expansion of the housing stock, provision of jobs in close proximity to concentrations of the labor force, and increased use of existing public infrastructure.

### **Storm water System Planning**

Storm water runoff pollution performance standards for new development, existing urban areas, and transportation facilities are set forth in Chapters NR 151 and NR 216 of the *Wisconsin Administrative Code*. The County should coordinate with municipalities to develop a storm water management plan to coordinate the management of storm water within defined watersheds, which often transcend municipal boundaries. Storm water management practices appropriate for each urban area can best be developed through the preparation of a system management plan. These practices should be developed in a manner that integrates development needs and environmental protection, including integrated water resources protection. Such practices should reflect both storm water runoff quantity and quality considerations, as well as groundwater quantity and quality protection. Practices that are designed to maintain the natural hydrology should be encouraged.

## **TRANSPORTATION**

The 2035 Regional Transportation System Plan for Southeastern Wisconsin is multi-modal in nature, dealing with public transit, bicycle and pedestrian, travel demand management, transportation systems management, and arterial streets and highways. The plan is designed to serve, and be consistent with, the Year 2035 Regional Land Use Plan drafted by the SEWRPC. The process for the development of the recommended multi-modal program

began with consideration and development of the travel demand management, transportation systems management, bicycle and pedestrian, and public transit elements of the plan. Arterial street and highway improvement and expansion was then considered only to address the residual high traffic volumes and attendant traffic congestion, which may not be expected to be alleviated by travel demand management, transportation systems management, bicycle and pedestrian facilities, and public transit.

Chapter 8 of this Plan contains a series of recommendations set forth in the Year 2035 Regional Transportation System Plan for Southeastern Wisconsin.

The following additional recommendations were developed based upon inventory data, a public opinion survey, and transportation development objectives, principles, and standards presented in Chapter 2:

1. Waukesha County should work with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) to conduct a major review and reevaluation of the jurisdictional transfer recommendations in the year 2035 Regional Transportation System Plan.
2. Waukesha County should refine the proposed system of off street bicycle paths and surface arterial streets and highway system accommodation of bicycles contained in the 2035 Regional Transportation System Plan. In addition, the County should integrate bikeway accommodations into planning for upgrades and modifications to the county trunk highway system consistent with the refined county transportation plan and facilitate communication with local municipalities and bordering counties to address bikeway linkages and connectivity.
3. The County and municipalities should implement the transportation system development planning objectives, principles and standards contained in Chapter 2.
4. The County and municipalities should evaluate dedicated funding sources for county wide shared taxi service to meet the needs of a growing elderly population in all 37 municipalities.
5. As a consequence of increasing rail freight traffic, the County should establish additional rail quiet zones and invest in railroad grade separations as a safety priority at county trunk highway crossings.
6. The County should work with local municipalities and the Wisconsin Department of Transportation's Bureau of Aeronautics to determine if maintaining Capitol Airport as an aviation facility is consistent with future transportation and land use plans.
7. Evaluate for implementation the public transit recommendations contained in the 2035 Regional Transportation System Plan for Southeastern Wisconsin such as car pool lanes, van pool and bus guide ways..

## **PLAN ADOPTION**

As presented in Chapter 1, the Wisconsin comprehensive planning law, set forth in Section 66.1001 of the Wisconsin Statutes, requires that comprehensive plans be completed and adopted by local governing bodies by January 1, 2010 in order for a county, city, village, or town to enforce its zoning, subdivision, or official mapping ordinances. According to this law, a comprehensive plan means:

1. For a county, a development plan that is prepared or amended under s.59.69 (2) or (3).
2. For a city or a village, or for a town that exercises village powers under s. 60.22 (3), or a master plan that is adopted or amended under s. 62.23 (2) or (3).

It is the intent of this Plan to satisfy the comprehensive planning requirements contained in s.66.1001 of the Wisconsin Statutes.

## **MONITORING AND UPDATING THE PLAN**

### **Annual Plan Amendment**

Amendments will be made to the Comprehensive Development Plan for Waukesha County on an annual basis. The Department of Parks and Land Use will make available a plan amendment request form for property owners

and towns wishing to propose a change to the Plan. The deadline for plan amendment request forms will be the end of the workday on January 15<sup>th</sup>. If that date falls on a weekend, the submittal deadline will be extended to the end of the workday on the following Monday. All applications for plan amendments will be scheduled for a public hearing and advertised according to statutory procedures. As with proposed zoning changes, property owners within a minimum of 300 feet of the property subject to the plan amendment will be notified in writing by regular mail. A review and recommendation for each request will be prepared and submitted to the Park and Planning Commission, Land Use, Parks and Environment Committee and County Board for consideration. Under special circumstances, the Waukesha County Park and Planning Commission may authorize plan amendments to be processed in addition to the schedule outlined herein.

### **Regional or Countywide Plan Refinements**

Due to the complexity of comprehensive planning, it is very difficult to complete all detailed planning initiatives in advance of comprehensive amendments to a Development Plan for Waukesha County. As identified in the implementation recommendations, it is anticipated that the Regional Water Supply Plan, Jurisdictional Highway System Plan and Bicycle and Pedestrian Facilities System Plan will be updated or completed following the adoption of this Plan. The products of those regional or countywide planning initiatives will be evaluated and appropriate amendments to this comprehensive development plan will be proposed.

### **Amendments by Cities and Villages**

When cities and villages amend land use plans, the adopted plan amendments will be forwarded digitally to the Department of Parks and Land Use in a timely manner to provide for updating of the planned land use map on the Waukesha County Land Information System.

### **Comprehensive Amendment**

The Comprehensive Development Plan for Waukesha County should be updated no less than once every 10 years. In anticipation of the continued development of the County, it is recommended a comprehensive reevaluation, update, and revision, as appropriate, of this Plan be conducted following the availability of the Year 2020 Census data. Initiating a comprehensive plan review using Year 2020 data will allow for the evaluation of planning projections made as part of the Year 2020 Regional Land Use Plan adopted in 1997 and the first generation Waukesha County Development Plan adopted in 1996, as well as this Plan. It is further recommended that the comprehensive reevaluation use a similar intermunicipal cooperative approach used in the preparation of this Plan.

### **Land Development Plan Monitoring**

On an annual basis, the staff of the Waukesha County Department of Parks and Land Use will evaluate plan amendment requests for consistency with the planning objectives and standards contained in Chapter 2 of the Plan. Staff recommendations to the County Park and Planning Commission and County Board will be consistent with the planning standards. On an on-going basis, the staff will evaluate rezoning requests for their consistency with Plan. For rezoning requests inconsistent with the Plan, the applicant will be advised of the inconsistency and recommended to request a plan amendment. Plan amendments and data associated with the Plan will be made available through the County's website.

## Appendix A

# Waukesha County Park and Open Space Plan

### INTRODUCTION

The Park and Open Space Plan for Waukesha County is intended to assist in promoting environmental stewardship and assessing current and future park, recreation, and open space needs within the County. It acts as a guide for the acquisition, preservation, development and management of park, recreation and open space lands in Waukesha County. The plan is the blueprint that Waukesha County uses to make park, recreation and open space decisions. It consists of both an area-wide outdoor recreation element and an open space preservation element, and is intended to provide an integrated, sustainable outdoor recreation lands system.

The State of Wisconsin, Waukesha County and the local municipalities have the responsibility of providing the citizens of Waukesha County with a full range of outdoor recreation opportunities. Sites and facilities for intensive nonnature-based recreational facilities are typically provided by city, village and town governments and are therefore not specifically addressed in this plan. It is not the intent of the Waukesha County Park and Open Space Plan to serve as the park and open space plan for the individual units of government within the County, the State of Wisconsin Department of Natural Resources (DNR) or Nonprofit Conservation Organizations. Recommendations for the provision of state, local park sites and facilities should be identified in their own park and open space plans and referenced in the County plan. The County plan should, however, assist towns that adopt the County plan to qualify for available Federal and State funding in support of the development of town park and associated recreation facilities.

This County Park and Open Space Plan is also designed to meet State planning requirements for outdoor recreation aids program, thereby making the County eligible to apply for, and receive, available State and Federal funds to assist in the acquisition and development of recommended park and open space sites and facilities.

Inventory data needed for the preparation of the park and open space plan are provided in previous chapters of the Comprehensive Development Plan for Waukesha County. Such data include historic, existing and projected resident population and household levels, presented in Chapter 2; the location and extent of environmental corridors, natural areas, floodlands, and other important natural resource-related elements, presented in Chapter 3; and the existing and planned land use patterns presented in Chapter 7.

## **OBJECTIVES, PRINCIPLES AND STANDARDS**

The Regional Planning Commission Technical and Citizen Advisory Committee on Regional Park and Open Space Planning, as part of the regional park and open space planning program completed in 1977, formulated a set of park and open space preservation, acquisition, and development objectives. The regional standards were based on standards previously developed by the National Recreation and Parks Association. The advisory committee compared the national standards to the recreational preferences and demands of the region as determined by surveys of park and recreation professionals and citizens. The standards were modified as necessary to meet the park and open space demands of the region.

### **General Objectives of the Park and Open Space Planning Process**

The intent of the Waukesha County park and open planning process is to accomplish the following six general objectives:

1. To create guidelines for the acquisition, preservation, development, operation and maintenance of the Waukesha County Park System lands and facilities.
2. To incorporate, detail and modify regional park and open space objectives, principles and standards to reflect Waukesha County park and open space planning efforts.
3. To comply with State and Federal outdoor recreation grant eligibility planning requirements to make the County eligible to apply for and receive available State and Federal funds to assist in the acquisition and development of recommended park and open space sites and facilities.
4. To initiate a process to coordinate park and open space planning in Waukesha County with all stakeholders: local units of government, State of Wisconsin, non-profit conservation organizations (NCO's) and the Southeastern Wisconsin Regional Planning Commission (SEWRPC) providing an integrated system of public general-use outdoor recreation sites which will afford the resident population of the County adequate opportunities to participate in a wide range of outdoor recreation and education activities.
5. To define roles and responsibilities of Waukesha County, local units of government, State of Wisconsin and NCO's in the plan implementation.
6. To establish consistent communication of the park and open space elements to the citizens and development community of Waukesha County.

### **Specific Objectives of the Park and Open Space Planning Process**

The terms "objective," "principle," "standard," and "plan," are subject to a range of interpretations. Under the regional planning program, these terms have been defined as follows:

1. Objective: a goal or end toward the attainment of which plans and policies are directed.
2. Principle: a fundamental, primary, or generally accepted tenet used to support objectives and prepare standards and plans.
3. Standard: a criterion used as a basis of comparison to determine the adequacy of plan proposals to attain objectives.
4. Plan: a design that seeks to achieve agreed-upon objectives.

The following are the Outdoor Recreation and Open Space Planning Objectives, Principles, and Standards for Waukesha County. They will be met through a combination of State, County, or Local Municipality efforts.

#### **Objective No. 1 - An Integrated System of Park, Recreation, and Open Space Areas**

To provide an integrated system of public general-use outdoor recreation sites and related open space areas which will afford the resident population of the County adequate opportunities to participate in a wide range of outdoor recreation and outdoor education activities.

#### ***Principle – The Benefits of an Integrated Park, Recreation and Open Space System***

The attainment and maintenance of good physical and mental health is an inherent right of all residents of the County. The provision of public general-use outdoor recreation sites and related open space areas contributes to the attainment and maintenance of physical and mental health by providing opportunities to participate in a wide

range of both intensive and extensive outdoor recreation activities. Moreover, an integrated park and open space system properly related to the natural resource base, such as the existing surface water network, can generate the multiple benefits of satisfying recreational demands in an appropriate setting, protecting and preserving valuable natural resource amenities, and providing educational opportunities. Finally, an integrated system of public general use outdoor recreation sites and related open space areas can contribute to the orderly growth of the County by lending form and structure to urban development patterns.

***Principle – Public Use-General Outdoor Recreation Sites***

Public, general-use outdoor recreation sites promote the maintenance of proper physical and mental health both by providing opportunities to participate in such athletic recreational activities as baseball, swimming, tennis, ice-skating, and other similar activities that facilitate the maintenance of proper physical health because of the exercise involved, as well as the opportunities to participate in such less athletic activities as pleasure walking, picnicking, or just rest and reflection. These activities tend to reduce everyday tensions and anxieties and thereby help to maintain proper physical and mental well being. Well designed and properly located public general-use outdoor recreation sites also provide a sense of community, bring people together for social, cultural and recreation activities, thus contributing to the desirability and stability of residential neighborhoods.

***Standards***

1. The public sector should provide general use outdoor recreation sites sufficient in size and number to meet the recreation demands of the resident population.
2. The general use recreation sites should contain the natural resource or man-made amenities appropriate for the recreation activities.
3. The general-use recreation sites should be spatially distributed to provide equal and ready access, to the resident population.
4. Public general-use outdoor recreation sites should, to the maximum extent possible, include portions of the planned primary environmental corridors of the County in order to provide an attractive natural setting for recreation enjoyment and educational enlightenment. Recreational facilities should, however, be carefully located and designed to protect and preserve such environmentally sensitive areas as wetlands, natural areas, and high value wildlife areas.
5. To achieve the general use outdoor recreation objective the following public general use Outdoor Recreation Site Standards should be met. *See Exhibit A*
6. The Waukesha County Park System, Site Classifications Guidelines for County Park Facilities should be met. *See Exhibit B*

***Principle – Recreation Related Open Space***

Effective satisfaction of recreation demands within the County cannot be accomplished solely by providing public general use outdoor recreation sites. Certain recreational pursuits such as hiking, biking, pleasure driving, and ski touring are best provided through a system of recreation corridors located adjacent to linear resource-oriented open space lands. A well-designed system of recreation corridors offered as an integral part of linear open space land also can serve to physically connect existing and proposed public parks, thus forming a truly integrated park and recreation related open space system. Such open space lands, in addition, satisfy the human need for natural surroundings, serve to protect the natural resource base, and ensure that many scenic areas of natural, cultural, or historic interest assume their proper place as form determinants for both existing and future land use patterns.

***Standards***

1. The public sector should provide sufficient open space lands to accommodate a system of resource-oriented recreation corridors to meet the residential demand for extensive trail-oriented activities.
2. Resource-oriented recreation corridors should maximize the use of:
  - a) Primary environmental corridors and secondary environmental corridors as locations for trail-oriented recreation activities provided environmentally sensitive resources are protected.
  - b) Outdoor recreation facilities provided at existing parks.
  - c) Existing recreation trail facilities within the County.

3. Resource-oriented recreation corridors should, where possible, effectively connect park system components, community public facilities, cultural sites and historic sites together to form a continuous park environment.
4. The Waukesha County Park System Greenway Corridor Cross- Section and Standards should be met. *See Exhibit C*

**Objective No. 2 – Provide Intensive Non-resource-oriented Outdoor Recreation Activity**

To provide sufficient outdoor recreation facilities to afford the resident population of the County adequate opportunities to participate in intensive non-resource-oriented outdoor recreation activities.

***Principle – The Benefits of an Intensive Non-resource-oriented Outdoor Recreation Activity***

Participation in intensive non-natural resource-based outdoor recreation activities including basketball, baseball and softball, soccer, ice-skating, playfield and playground activities, pool swimming, and tennis provides an individual with both the opportunity for physical exercise and an opportunity to test and expand his physical capability. Such activities also provide an outlet for mental tension and anxiety as well as a diversion from other human activities. Competition in the various intensive non-natural resource-based activities also provide an opportunity to share recreational experiences, participate in team play, and gain an understanding of other human beings.

***Standard***

1. A sufficient number of facilities for participation in intensive non-natural resource-based outdoor recreation activities should be provided throughout the County.
2. To achieve the non-natural resource-based outdoor recreation objective utilize the following per capita and design criteria facility recommendations indicated in the chart below.

Minimum Per Capita Facility Requirements				Design Standards					Service Radius of Facility (miles) <sup>1</sup>
Activity	Facility	Owner	Facility per 1,000 Urban Residents	Typical Location of Facility	Facility Requirements (acres per facility)	Additional Suggested Support Facilities	Support Facility Requirements (acres per facility)	Total Land Requirement (acres per facility)	
Baseball	Diamond	Public Nonpublic Total	0.09 0.01 0.10 <sup>2</sup>	Types II, III, and IV general-use site	2.8 acre per diamond	Parking (30 spaces per diamond) Night lighting Concessions and bleachers Buffer and landscape	0.28 acre per diamond -- 0.02 acre minimum 1.40 acres per diamond	4.5	2.0
Basketball	Goal	Public Nonpublic Total	0.91 0.22 1.13	Type IV general-use site	0.07 acre per goal	--	--	0.07	0.5
Ice-Skating	Rink	Public Nonpublic Total	0.15 <sup>2</sup> -- 0.15	Type IV general-use site	0.30 acre per rink minimum	Warming house	0.05 acre --	0.35 minimum	0.5
Playfield Activities	Playfield	Public Nonpublic Total	0.39 0.11 0.50	Type IV general-use site	1.0 acre per playfield minimum	Buffer area	0.65 acre minimum	1.65 minimum	0.5
Playground Activities	Playground	Public Nonpublic Total	0.35 0.07 0.42	Type IV general-use site	0.25 acre per playground minimum	Buffer and landscape	0.37 acre	0.62 minimum	0.5
Softball	Diamond	Public Nonpublic Total	0.53 0.07 0.60	Types II, III, and IV general-use site	1.70 acre per diamond	Parking (20 spaces per diamond) Night lighting Buffer	0.18 acre per diamond -- 0.80 acre per diamond	2.68	1.0
Swimming	Pool	Public Nonpublic Total	0.015 <sup>2</sup> -- 0.015	Types II and III general-use site	0.13 acre per pool minimum	Bathhouse and concessions Parking (400 square feet per space) Buffer and landscaping	0.13 acre minimum 0.26 acre minimum 0.70 acre minimum	1.22 minimum	3.0 3.0
Tennis	Court	Public Nonpublic Total	0.50 0.10 0.60	Types II, III, and IV general-use site	0.15 acre per court	Parking (2.0 spaces per court) Night lighting Buffer	0.02 acre per court -- 0.15 acre per court	0.32	1.0

3. The Waukesha County Park System, Site Classifications and Standards for County Park Facilities should be met. *See Exhibit B*

**Objective No. 3 – Provide Intensive Natural Resource-based Outdoor Recreation Activity**

To provide sufficient intensive natural resource-based outdoor recreation activities to allow the resident population of the County adequate opportunities to participate in intensive natural resource-based outdoor recreational activities.

**Principle – The Benefits of an Intensive Natural Resource-based Outdoor Recreation Activities.**

Participation in intensive resource-oriented outdoor recreation activities including camping, golf, picnicking, downhill skiing, and pond, stream and lake swimming provides the opportunity for individuals to experience the exhilaration of recreational activity in natural surroundings as well as an opportunity for physical exercise and can be nature based. In addition, the family can participate as a unit in certain intensive natural resource-based activities such as camping, picnicking, and beach swimming.

**Standard**

1. A sufficient number of facilities for participation in intensive natural resource-based outdoor recreation activities should be provided throughout the County.
2. To achieve the intensive natural resource-based outdoor recreation objective, utilize the facility per capita and design criteria indicated on the chart below.

Minimum Per Capita Facility Requirement				Design Standards						Service Radius of Facility (miles)*
Activity	Facility	Owner	Per Capita Requirements (facility per 1,000 residents)	Typical Location of Facility	Facility Requirements (acres per facility)	Additional Suggested Support Facilities	Support Facility Requirements (acres per facility)	Total Land Requirements (acres per facility)	Resource Requirements	
Camping	Camp site	Public Nonpublic Total	0.35 1.47 1.82	Types I and II general-use sites	0.33 acre per camp site	Rest rooms - showers Utility hookups Natural area backup lands	-- -- 1.5 acres per camp site	1.83	Wooded area Presence of surface water Suitable topography and soils	25.0
Golf	Regulation 18-hole course	Public Nonpublic Total	0.013 0.027 0.040	Types I and II general-use sites	135 acres per course	Clubhouse, parking, maintenance Practice area Woodland-water areas Buffer acres	8.0 acres per course 5.0 acres per course 35.0 acres per course 2.0 acres per course	185.0	Suitable topography and soils Presence of surface water Form-giving vegetation desirable	10.0
Picnicking	Tables	Public Nonpublic Total	6.357 2.39 8.74	Types I, II, III, and IV general-use sites	0.07 acre per table minimum	Parking Shelters and grills Buffer and parking overflow	0.02 acre per table (1.5 spaces per table) -- 0.02 acre per table	0.11	Topography with scenic views Shade trees Presence of surface water desirable Suitable soils	10.0
Skiing	Developed slope (acres)	Public Nonpublic Total	0.010 0.090 0.100	Types I, II, and III general-use sites	1.0 acre per acre of developed slope	Chalet Parking Ski tows (and lights) Buffer and maintenance Landscape	0.13 acre minimum 0.25 acre per acre of slope 0.40 acre per acre of slope 0.40 acre per acre of slope 0.35 acre per acre of slope	2.1	Suitable topography and soils (20 percent slope minimum) North or northeast exposure	25.0
Swimming	Beach (linear feet)	Public Nonpublic Total	Major Inland Lakes Lake Michigan 6 12 18 16 -- 16	Types I, II, and III general-use sites	40 square feet per linear foot (average)	Parking Bathhouse-concessions Buffer areas	0.2 acre per acre of beach 0.10 acre minimum 10 square feet per linear foot	--	Natural beach Good water quality	10.0

3. The Waukesha County Park System, Site Classifications and Standards for County Park Facilities should be met. *See Exhibit B*

**Objective No. 4 – Provide Extensive Land-based Outdoor Recreation Activities**

To provide sufficient outdoor recreation facilities to afford the resident population of the County adequate opportunities to participate in extensive land-based outdoor recreation activities.

**Principle – The Benefits of Extensive Land Based Outdoor Recreation Activities**

Participation in extensive land-based outdoor recreation activities including bicycling, hiking, horseback riding, nature study, pleasure driving, ski touring, and snowmobiling provides opportunity for contact with natural, cultural, historic, and scenic features. In addition, such activities can increase an individual’s perception and intensify awareness of the surroundings, contributing to a better understanding of the environment. It also will provide an individual with a wider range of vision and comprehension of all forms of life both as this life may have existed in the past and as it exists in the present. Similar to intensive resource-oriented outdoor recreation activity, the family unit also can participate in extensive land-based outdoor recreation activities; such participation also serves to strengthen social relationships within the family. For activities like bicycling, hiking, and nature study, participation provides an opportunity to educate younger members of the family in the importance of environmental issues which may become of greater concern as they approach adulthood.

**Standard**

1. A sufficient number of facilities for participation in extensive land-based outdoor recreation activities should be provided throughout the County.
2. Public facilities provided for these activities should be located within the linear resource-oriented recreation corridors identified in Objective 1.
3. Public facilities provided for these activities should comply with the Waukesha County Park System, Site Classifications and Standards for County Park Facilities. *Refer to Exhibit B*
4. To achieve the extensive land based outdoor recreation objective utilize the facilities per capita and design criteria shown below.

Minimum Per Capita Public Facility Requirements <sup>aa</sup>			Design Standards				
Activity	Facility	Per Capita Requirements (linear mile per 1,000 residents)	Typical Location of Facility	Minimum Facility Requirements (acres per linear mile)	Suggested Support Facilities and Backup Lands	Minimum Support Facility Requirements (acres per linear mile)	Resource Requirements
Biking	Route Trail	- . <sup>bb</sup> 0.16	Scenic roadways Recreation corridor	-- 1.45	Route markers Backup lands with resource amenities	-- 24.2	-- Diversity of scenic, historic, natural, and cultural features Suitable topography (5 percent slope average maximum) and soils
Hiking	Trail	0.16	Recreation corridor	0.73	Backup lands with resource amenities	24.2	Diversity of scenic, historic, natural, and cultural features Suitable topography and soils
Horseback Riding	Trail	0.05	Recreation corridor Type I general-use site	1.21	Backup lands with resource amenities	24.2	Diversity of scenic, historic, natural, and cultural features Suitable topography and soils
Nature Study	Center	1 per county	Types I, II, and III general-use sites	--	Interpretive center building Parking	--	Diversity of natural features, including a variety of plant and animal species Suitable topography and soils
	Trail	0.02	Recreation corridor Types I, II, and III general-use sites	0.73	Backup lands with resource amenities	24.2	Diversity of natural features, including a variety of plant and animal species Suitable topography and soils
Pleasure Driving	Route	- . <sup>cc</sup>	Scenic roadways recreation corridor	--	Route markers	--	--
Ski Touring	Trail	0.02	Recreation corridor Types I and II general-use sites	0.97	Backup lands with resource amenities	24.2	Suitable natural and open areas Rolling topography
Snowmobiling	Trail	0.11	Private lands (leased for public use)	1.45	Backup lands, including resource amenities and open lands	24.2	Suitable natural and open areas Suitable topography (8 percent slope average maximum) and soils

**Objective No. 5 – Provide Extensive Water-Based Outdoor Recreation Activities**

To provide sufficient surface water-access areas to afford the resident population of the County adequate opportunity to participate in extensive water-based outdoor recreation activities consistent with safe and enjoyable inland lake and river use and the maintenance of good water quality.

**Principle – The Benefits of Extensive Water-based Outdoor Recreation Activities**

The major lakes and rivers of the County accommodate participation in extensive water-based outdoor recreation activities, including canoeing, kayaking, fishing, ice fishing, motor boating, sailing, and water skiing, which may involve unique forms of physical exercise or simply provide opportunities for rest and relaxation within a particularly attractive setting. Participation in extensive water-based recreation activities requires access to major inland lakes and rivers. Such access should be available to the general public.

**Standard**

1. Access sites available for use by the general public on rivers and lakes, that are 50 acres or larger, should be provided in accordance with the requirements established by the Wisconsin Department of Natural Resources in Section NR 1.90 and NR 1.91 of the Wisconsin Administrative Code.
2. Access sites with appropriate parking and restroom facilities should be provided on major rivers throughout the County. The maximum distance between access points on major rivers should be 10 miles.

## **Objective No. 6 – Protect the Natural Resource Base**

To preserve sufficient lands in essentially natural, open uses to assure the protection of the underlying and sustaining natural resource base, including surface-water and groundwater resources, and the enhancement of the social and economic well being and environmental quality of the County.

### ***Principle – The Benefits of Preserving the Natural Resource Base***

Ecological balance and natural beauty within the County are primary determinants of the ability to provide a pleasant and habitable environment for all forms of life and to maintain the social and economic well being of the County. Preservation of the most significant aspects of the natural resource base, including primary environmental corridors, and prime agricultural lands, contribute to the maintenance of the ecological balance, natural beauty, and economic well-being of the County.

### ***Principle – Primary Environmental Corridors***

The primary environmental corridors are a composite of the best individual elements of the natural resource base including surface water, streams, and rivers and their associated floodlands, shorelands; woodlands, and wildlife habitat; areas of groundwater discharge and recharge; organic soils, rugged terrain, and high relief topography; and significant geological formations and physiographic features. By protecting these elements of the natural resource base, flood damage can be reduced, soil erosion abated, water supplies protected, air cleansed, biodiversity preserved, and continued opportunities provided for scientific, educational and recreational pursuits.

### ***Standard***

1. All remaining non-urban lands within the designated primary environmental corridors in the County should be preserved in natural open uses.
2. Primary environmental corridors located within the preservation zone of the Waukesha County Greenway Cross Section and Standards should be preserved in permanent public ownership. *Refer to Exhibit C*

### ***Principle – Natural Areas and Critical Species Habitat Sites***

Natural areas and critical species habitat sites contain rare, threatened, and endangered animal and plant species, which are important components of the biodiversity of the County. Maintenance of this biodiversity requires the preservation of the habitat concerned.

### ***Standard***

1. In conformance with SEWRPC Planning Report No. 42, A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin, the remaining natural areas and critical species habitat areas should be preserved.

### ***Principle – Prime Agricultural Lands***

Prime agricultural lands, in addition to providing food and fiber, can supply significant wildlife habitat; contribute to maintaining an ecological balance between plants and animals; offer locations close to urban centers for the production of certain food commodities which may require nearby population concentrations for an efficient production-distribution relationship; provide opportunities for agricultural and agriculture-related employment; provide open spaces which give form and structure to urban development; and serve to maintain the natural beauty and unique cultural heritage of the County.

### ***Standard***

1. Prime agricultural lands should be preserved for agricultural use as recommended by the land use element of the Waukesha County Development Plan.
2. Agricultural lands surrounding adjacent high-value scientific, educational or recreational resources should be considered for preservation to provide a buffer between such resources and urban development.

**Objective No. 7 – Efficient Provision of Outdoor Recreation**

To satisfy outdoor recreation and related open space needs in an efficient and economical way.

***Principle***

The total resources of the County are limited and any undue investment in park and open space lands must occur at the expense of other public investment.

***Standard***

1. To maximize fund resources and avoid duplication of effort in the implementation of the park and open space plan. Public and private providers of outdoor recreation should communicate and coordinate outdoor recreation provision efforts.
2. To provide for the efficient and economical satisfaction of outdoor recreation and related intensive resource-oriented outdoor recreation activities.

## **PARK AND OPEN SPACE PLANNING PROCESS**

The Waukesha County Park and Open Space Plan is intended to refine and detail the regional level planning, taking into account and integrating County planning objectives and standards. An understanding of past park and open space planning efforts is therefore essential to the preparation of an updated park and open space plan. Accordingly, this section provides a brief description of the previous park and open space plans and various supporting functional plan elements that have been prepared to date as they pertain to Waukesha County.

### **Inventory of Park and Outdoor Recreation Facilities (1960)**

The Inventory of Park and Outdoor Recreation Facilities report prepared by Waukesha County Park and Planning Commission identified existing park and recreation facilities in Waukesha County. The report called for conservation of Waukesha County's natural resources and to provide for recreation facilities development. The report proposed a program of large regional county parks, lineal parkways and the conservation of wetlands.

### **A Park and Parkway Plan for Waukesha County (1973)**

The Park and Parkway Plan for Waukesha County, prepared by the Waukesha County Park and Planning Commission, qualified the County for State and Federal parkland acquisition and development grants. The plan recommended the following:

- Preserve the County's natural resource base
- Establish regional County Parks distributed evenly throughout the County
- Develop parkways along the major rivers
- Establish land acquisition criteria
- Establish park classification standards
- Cooperation and coordination with other park agencies
- Promote family oriented resource based recreation

### **A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000 (1977)**

The regional park and open space plan, described in SEWRPC Planning Report No. 27 identifies:

- Existing and probable future park and open space needs in the Region and recommends a system of large regional resource-oriented parks
- Recreational corridors
- Recreational facilities
- Smaller urban parks

The portion of the regional plan that applies to Waukesha County was revised and updated in 1989 and is documented in SEWRPC Community Assistance Planning Report No. 137, *A Park and Open Space Plan for Waukesha County*. The plan was adopted by both the Waukesha County Board of Supervisors and the Regional Planning Commission in 1990. Subsequent amendments to the Park and Open Space Plan were incorporated into Community Assistance Planning Report No. 209, *A Development Plan for Waukesha County Wisconsin* in 1996 and amended in 1998 and 2004.

### **Description of the Planning Area**

Information regarding existing conditions and historic trends with respect to the demographic conditions and natural environment is essential to the park and open space planning process. An extensive database has been developed by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) pertaining to these and other aspects of the Southeastern Wisconsin Region, updating that database periodically. A major inventory update effort was carried out by SEWRPC in the early 2000's in support of the preparation of new land use and transportation plans and other elements of the comprehensive plan for the Region, including Waukesha County and its municipalities. This section presents a summary of the results of that inventory update pertaining to the population and natural resource base. Detailed information is presented in Chapters 2 - Trends, Issues, Opportunities and Planning Standards and Chapter 3 - Agricultural, Natural and Cultural Resources of the Comprehensive Development Plan for Waukesha County.

**Demographics**

Much of the demographic data in this section is from the U.S. Bureau of the Census. This data is collected every ten years and is derived from both short and long form questionnaires. The short form provides a complete count of all persons living in the United States along with over 300 tables with counts and cross tabulations of race, ethnicity, gender, and age data. The long form is sent to one out of every six households in the United States. It provides sample data for topics related to education, housing, income, and other social and economic issues.

**Population Growth by County**

In 1930, Waukesha County had approximately 52,000 residents. *Refer to Table A-1* Waukesha County began to experience significant population growth in the 1950’s and experienced a population boom since 1940 that resulted in population increases per decade ranging from 23,000 people to 73,000 people. *Refer to Table A-1* From 1960 to 2005, the County population more than doubled increasing from 158,249 to 377,348. *Refer to Table A-1* All of the counties surrounding Waukesha experienced smaller gains in total population since 1960 with the exception of Milwaukee County, which experienced a decline. Between 1970 and 2005, Milwaukee County declined by 115,254 people as population, business and industry migrated from the City of Milwaukee.

**Table A-1  
SELECTED COUNTY POPULATION GROWTH TRENDS: 1840-2005**

Year	Dodge County	Jefferson County	Milwaukee County	Racine County	Walworth County	Washington County	Waukesha County
1840	67	914	5,605	3,475	2,611	343	N/A
1850	19,138	15,317	31,077	14,973	17,862	19,485	19,558
1860	42,818	30,438	62,518	21,360	26,496	23,622	26,831
1870	47,035	34,050	89,936	26,742	25,992	28,274	28,258
1880	45,931	32,155	138,523	30,921	26,249	33,270	28,957
1890	44,984	33,530	236,101	36,268	27,802	35,229	33,270
1900	46,631	34,789	330,017	45,644	20,259	23,589	35,229
1910	47,436	34,606	433,187	57,424	29,614	23,784	37,100
1920	49,742	35,022	539,449	78,961	29,327	25,713	42,612
1930	52,092	36,785	725,263	90,217	31,058	26,551	52,358
1940	54,280	38,868	766,885	94,047	33,103	28,430	62,744
1950	57,611	43,069	871,047	109,585	41,584	33,902	85,901
1960	63,170	50,094	1,036,041	141,781	52,368	46,119	158,249
1970	69,004	60,060	1,054,249	170,838	63,444	63,829	231,338
1980	75,064	66,152	964,988	173,132	71,507	84,848	280,203
1990	76,559	67,783	959,275	175,034	75,000	95,328	304,715
2000	85,897	75,784	940,164	188,831	91,996	117,493	360,767
2005	88,748	79,188	938,995	193,239	98,496	125,940	377,348

Source: United States Census Bureau and the Wisconsin Department of Administration.

**Waukesha County Community Population Trends**

Between 1970 and 1980, 46 percent of the County’s population growth took place in cities, 44 percent in towns and 10 percent in villages. Between 1990 and 2000, the growth in cities remained the same (46 percent) with a more even distribution of growth between villages (31 percent) and towns (23 percent). In 2005, an estimated 20 percent of the total County population lived in towns (75,626 people), 24 percent resided in villages (91,157 people) and 56 percent were residents of cities (210,565).

### ***Age Structure***

As Wisconsin's population is increasing, it is also aging. In the trend known as the demographic transition, average life expectancy has increased as birth rates have declined. Waukesha County's median age is increasing. The median age in 1970 for the county was 27. The median age increased to 34 in 1990 and in 2000 reached 38.1. This changing age composition will have implications for park and recreation, school districts, housing, labor, and transportation. As a general rule, older residents enjoy quieter, low impact activities while younger residents enjoy more active recreation activities. The recreation needs of the County residents will be explored more in depth in the section entitled Park and Recreation Needs Assessment.

### ***Racial Composition***

Almost 96 percent of residents in Waukesha County were white in 2000. However, the population of Waukesha County continues to grow more diverse. Between 1990 and 2000, the Hispanic/Latino population in the County nearly doubled from 5,448 to 9,503. The City of Waukesha experienced the largest growth in the number of Hispanics/Latinos. Several neighborhood block groups within the City of Waukesha recorded populations that were over 25 percent Hispanic/Latino. Nearly 5,400 Asians made up the third largest racial group within Waukesha County.

### ***Educational Attainment***

Waukesha County has a highly educated population with one of the highest percentages of people with associate, bachelors, graduate, and professional degrees in Wisconsin *Refer to Table A-2*

**Table A-2**

#### **WAUKESHA COUNTY EDUCATIONAL ATTAINMENT FOR PERSONS 25 AND OVER: 2000**

<b>Attainment Level</b>	<b>Number</b>	<b>Percent</b>
Less than 9 <sup>th</sup> Grade	5,537	2.3
High School, No Diploma	14,873	5.7
High School Graduate	66,651	27.6
Some College (No Degree)	54,483	22.6
Associate Degree	18,492	7.7
Bachelor's Degree	57,050	23.6
Graduate/Professional Degree	25,213	10.4
<b>Total</b>	<b>241,299</b>	<b>100</b>

Source: U.S. Census Bureau

### ***Household Size***

In 2000, the average household size ranged from 2.05 in the Village of Butler to 3.26 in the Village of Merton. *As shown in Table A-3, next page* This figure continues to decline slightly in Waukesha County communities. From 1990 to 2000, the average household size declined in Waukesha County from 2.83 to 2.63. This trend is occurring on a regional, state, and national scale as families continue to become smaller.

**Table A-3**

**AVERAGE HOUSEHOLD SIZE IN WAUKESHA COUNTY: 2000**

Community	Average Household Size	Community	Average Household Size	Community	Average Household Size
Town of Brookfield	2.29	Village of Big Bend	2.85	City of Brookfield	2.74
Town of Delafield	2.93	Village of Butler	2.05	City of Delafield	2.52
Town of Eagle	2.97	Village of Chenequa	2.61	City of Muskego	2.80
Town of Genesee	3.00	Village of Dousman	2.58	City of New Berlin	2.62
Town of Lisbon	2.90	Village of Eagle	2.88	City of Oconomowoc	2.40
Town of Merton	2.95	Village of Elm Grove	2.49	City of Pewaukee	2.57
Town of Mukwonago	3.14	Village of Hartland	2.63	City of Waukesha	2.43
Town of Oconomowoc	2.69	Village of Lac La Belle	2.81	<b>Waukesha County</b>	<b>2.63</b>
Town of Ottawa	2.73	Village of Lannon	2.37		
Town of Summit	2.76	Village of Menomonee Falls	2.52		
Town of Vernon	3.00	Village of Merton	3.26		
Town of Waukesha	2.97	Village of Mukwonago	2.54		
		Village of Nashotah	2.84		
		Village of North Prairie	2.96		
		Village of Oconomowoc Lake	2.71		
		Village of Pewaukee	2.19		
		Village of Sussex	2.67		
		Village of Wales	2.98		

Source: U.S. Census Bureau

**Natural Resource Features**

The natural resource base of Waukesha County is one of the most important factors influencing the physical development of the County. It is the natural resource base that makes the County an attractive location to live and work. The natural resource base has great economic as well as recreational and aesthetic value.

***Climate***

Its mid-continent location gives Waukesha County a continental climate that spans four seasons, one season succeeding the other through varying time periods of unsteady transition. Summers, generally the months of June, July, and August, are relatively warm, with occasional periods of hot, humid weather and sporadic periods of cool weather. The cold winter, accentuated by prevailing frigid northwesterly winds, generally spans the months of December, January, and February, but may in some years include parts of November and March. Autumn and Spring in the County are transitional times of the year between the dominant seasons and usually periods of widely varying weather conditions. Temperatures are extremely varied, and long periods of precipitation are common in autumn and spring. Some of the more pronounced weather events include tornadoes and major snowmelt occurrences.

Air temperatures within the County are subject to extreme seasonal variation. Data on temperature observations in the County, recorded at the City of Waukesha, indicate variations in temperature from a low in January with a mean daily temperature of 18.7 degrees to a high in July with a mean daily temperature of 71.8 degrees. The growing season, which is defined as the number of days between the last freeze in the spring and the first freeze in the fall, averages about 155 days in Waukesha County. The last freeze in the spring normally occurs during the first two weeks in May and the first freeze in the fall normally occurs in mid-October.

Precipitation in Waukesha County, in the form of rain, sleet, hail, and snow, ranges from gentle showers to destructive thunderstorms. The more pronounced weather events can cause major property and crop damage, inundation of poorly drained areas, and lake and stream flooding. Daily precipitation data for observations recorded at the City of Waukesha indicate that the total average annual precipitation observed is slightly more than 32 inches, expressed as water equivalent. Monthly averages range from a low of 1.2 inches in February to a high of 3.70 inches in June. Snowfall and sleet averages approximately 41 inches annually, with January receiving the most snow and sleet, at about 11 inches.

Waukesha County is positioned astride cyclonic storm tracks along which low-pressure centers move from the west and southwest. The County also lies in the path of high-pressure centers moving in a generally southeasterly direction. This location at the confluence of major migratory air masses results in the County being influenced by a continuously changing pattern of air masses associated with alternately high- and low-pressure centers and results in frequent weather changes superimposed on the aforementioned annual range in weather characteristics, especially in winter and spring.

Prevailing winds in the County are northwesterly in the late fall and winter, northeasterly in the spring, and southwesterly in the summer and early fall. Wind velocities are less than 5 miles per hour (mph) for about 15 percent of the year, between 5 and 15 mph for about 60 percent of the year, and more than 15 mph for about 25 percent of the year.

### ***Surface Geology and Physiography***

Four major stages of glaciations, the last of which was the Wisconsin stage, ending approximately 10,000 years ago in the State, have largely determined the physiography, topography, and soils of Waukesha County. The dominant physiographic and topographic feature in Waukesha County is the Kettle Moraine, an interlobate glacial deposit formed between the Green Bay and Lake Michigan lobes of the continental glacier that moved in a generally southerly direction from its origin in what is now Canada. The Kettle Moraine, which is oriented in a general northeast-southwest direction across western Washington, Waukesha, and Walworth Counties, is a complex system of kames, or crudely stratified conical hills; kettle holes formed by glacial ice blocks that became separated from the ice mass and melted to form depressions and small lakes as the melt water deposited material around the ice blocks; and eskers, long, narrow ridges of drift deposited in abandoned drainage ways. The remainder of the County is covered by a variety of glacial landforms and features, including various types of moraines, drumlins, kames, outwash plains, and lake basin deposits. The combined thickness of unconsolidated glacial deposits, alluvium, and marsh deposits overlying bedrock exceeds 100 feet throughout most of the County. Thicknesses are greatest where glacial materials fill the bedrock valleys and in areas of topographic highs formed by end moraines.

The most substantial glacial deposits, from 300 to 500 feet thick, are located in the northwestern part of the County in the lakes area and in portions of the Towns of Mukwonago and Vernon. The thinnest glacial deposits, 20 feet thick or less, are found along an approximately six-mile-wide band traversing the County in a north-easterly direction from the Village of Eagle to the Villages of Lannon and Menomonee Falls.

Geologic properties can influence the manner in which land is used, since geologic conditions, including the depth to bedrock, can affect the cost and feasibility of building site development and provision of public facilities and infrastructure. In the case of potential mineral extraction areas, the geologic attributes of the County are a valuable and irreplaceable resource. A need, therefore, exists in any planning program to examine not only how land is developed, but also how the geologic resources can best be used and managed

### ***Soils***

Soil properties exert a strong influence on the manner in which land is used, since they affect the costs and feasibility of building site development and provision of public facilities. In the case of productive agricultural lands and potential mineral extraction areas, soils are a valuable and irreplaceable resource. A need, therefore, exists in any planning program to examine not only how land and soils are currently used, but also how they can best be used and managed. Soil suitability interpretations for specific types of urban and rural land uses are therefore important aids to physical development planning and for determining the best use of soils within an area.

In 1963, to assess the significance of the diverse soils found in Southeastern Wisconsin, the Southeastern Wisconsin Regional Planning Commission negotiated a cooperative agreement with the U. S. Department of Agriculture, Soil Conservation Service (SCS), now known as the Natural Resources Conservation Service (NRCS), under which detailed operational soil surveys were completed for the entire Region. The results of the soil surveys have been published in SEWRPC Planning Report No. 8, *Soils of Southeastern Wisconsin* and subsequently updated by the NRCS, 2003. These soil surveys have resulted in the mapping of the soils within the Region in great detail. At the same time, the surveys have provided definitive data on the physical, chemical, and biological properties of the soils and, more importantly, have provided interpretations of the soil properties for planning, engineering, agricultural, and resource conservation purposes.

The soils in Waukesha County range from very poorly drained organic soils to excessively drained mineral soils. General grouping of these soils into soil associations is useful for comparing the suitability of relatively large areas of the County for various land uses. A soil association is defined as a landscape with a distinctive proportional pattern of soils, typically comprised of one or more major soil types and at least one minor soil type, as identified by the U. S. Department of Agriculture, Natural Resources Conservation Service, and named after the major soils. Nine soil associations are found in the County.

### ***Topography***

Topographic elevation in Waukesha County ranges from approximately 730 feet above mean sea level in the extreme eastern portions of the County along tributaries of the Menomonee River in Brookfield, Elm Grove, and Menomonee Falls, to 1,233 feet at Lapham Peak in the Town of Delafield, a variation of over 500 feet. Most of the high points in the County are located along the Kettle Moraine in three distinct areas: the southern half of the Town of Delafield near Lapham Peak, the southwestern quarter of the Town of Lisbon and between State Highways 59 and 67 in the Towns of Genesee and Ottawa.

### ***Bedrock Geology***

Bedrock topography was shaped by pre-glacial and glacial erosion of the exposed bedrock. The consolidated bedrock underlying Waukesha County generally dips eastward at a rate of about 10 feet per mile. The bedrock surface ranges in elevation from about 900 feet above mean sea level, at Lapham Peak, to approximately 500 feet above mean sea level in the eastern portion of the County. The bedrock formations underlying the unconsolidated surficial deposits of Waukesha County consist of Precambrian crystalline rocks; Cambrian sandstone; Ordovician dolomite, sandstone, and shale; and Silurian dolomite. Figure III-1 shows a cross-section of the bedrock geology of Waukesha County. The uppermost bedrock unit throughout most of the County is Silurian dolomite, primarily Niagara dolomite, under laid by a relatively impervious layer of Maquoketa shale. In some of the pre-Pleistocene valleys in the southwestern and central portions of the County, however, the Niagara dolomite is absent and the uppermost bedrock unit is the Maquoketa shale.

### ***Woodlands***

Woodlands have both economic and ecological value and can serve a variety of uses providing multiple benefits. Located primarily on ridges and slopes and along streams and lakeshores, woodlands provide an attractive natural resource, accentuating the beauty of the lakes, streams, and the topography of the County. In addition to contributing to clean air and water, woodlands contribute to the maintenance of a diversity of plant and animal life and provide for important recreational opportunities.

Under balanced use and sustained yield management, woodlands can, in many cases, serve scenic, wildlife, educational, recreational, environmental protection, and forest production benefits simultaneously. Woodlands existing in 2000 cover 28,931 acres. These woodlands exist in large contiguous areas along the Kettle Moraine in the western half of the County and in scattered small areas throughout the remainder of the County.

### ***Prairies***

Prairies are open, treeless or generally treeless areas dominated by native grasses with associated native forbs. Such areas have important ecological and scientific value and consist of four basic types: low prairies, mesic or moderately moist prairies, dry prairies, and oak openings. The low prairies typically occupy ancient glacial lake beds; mesic prairies tend to occur on glacial outwash plains, the glacial till of recessional moraines, and the loessial, windblown depositional soils which cover the dolomitic bedrock; dry prairies occur on well-drained soils, usually on steep hillsides; oak openings are savannas dominated by dry prairie grasses and associated native forbs, with between one and 17 oak trees, usually bur oaks, per acre.

Prairies existing in 1990 consist of 34 sites covering a combined total of approximately 280 acres, a very small portion of the total land area of the County, located mostly in the southwestern quarter of the County. Very few native prairies are left in Waukesha County, although they once covered large portions of the County. The loss of native prairie and oak openings was primarily a result of agricultural practices, urbanization, and the suppression of the wildfires, which had served to restrain the advancing shrubs and trees that shade out prairie plants.

### ***Wildlife***

The Wisconsin Department of Natural Resources and the Southeastern Wisconsin Regional Planning Commission conducted inventories of wildlife habitat in the Southeastern Wisconsin Region jointly in 1985. Wildlife habitat areas encompassed a combined area of 182 square miles, or 31 percent of the total area of the County in 1985. These areas are concentrated on the Kettle Moraine, in the Vernon Marsh, along Scuppernong Creek and the Scuppernong River, and around the major lakes in the County. As a part of the 1985 inventory, three classes of wildlife habitat were identified:

Class I (high-value) wildlife habitat areas contain a good diversity of wildlife, are adequate in size to meet all of the habitat requirements for the species concerned, and are generally located in proximity to other wildlife habitat areas. Class I wildlife habitat encompassed 88 square miles, or 49 percent of total wildlife habitat.

Class II (medium-value) wildlife habitat areas generally lack one of the three criteria for Class I wildlife habitat. However, they do retain a good plant and animal diversity. Class II wildlife habitat encompassed 61 square miles, or 33 percent of total wildlife habitat.

Class III (other significant) wildlife habitat areas are remnant in nature in that they generally lack two of the three criteria for a Class I wildlife habitat, but may, nevertheless, be important if located in proximity to high- or medium-value wildlife habitat areas, if they provide corridors linking higher-value wildlife habitat areas, or if they provide the only available range in the area. Class III wildlife habitat encompassed 33 square miles, or 18 percent of total wildlife habitat.

### ***Surface Water Resources***

Surface water resources constitute an extremely valuable part of the natural resource base of Waukesha County. Surface waters are a focal point of water-related recreational activities and provide an attractive setting for properly planned residential development. Surface waters, particularly the major lakes, also provide substantial economic benefits. Expenditures by boaters and other recreational users of surface waters benefit the owners of restaurants, grocery and convenience stores, service stations, and sporting goods stores in the County. Lakeshore properties, which generally have high-assessed valuations, also serve to enhance the property tax base of the

County. In addition, when viewed in the context of open space areas, surface waters greatly enhance the aesthetic and scenic characteristics of the natural environment. Because surface water quality is highly susceptible to deterioration from pollutant runoff, both urban and rural land uses must be carefully managed to achieve a balance between the extent of use and the maintenance of water quality.

### ***Lakes***

In 1997, the Wisconsin Legislature created a lake classification grant program. The program was intended to further the degree of protection of lakeshore habitat with the State. In 2000, Waukesha County received a Lake Protection Grant to initiate a program for the classification of the lakes within the County. The objective was to develop criteria for determining the sensitivity of lakes within the County to disturbance from land-based activities. Specifically, these criteria could be used to review and potentially refine the County's shoreland zoning code to provide an appropriate degree of protection for aquatic ecosystems.

Major inland lakes are defined as those with a surface area of 50 acres or larger, a size capable of supporting reasonable recreational use with minimal degradation of the resource. Waukesha County contains all or portions of 33 major lakes with a combined surface area of approximately 14,000 acres, or 21.9 square miles, or about 3.8 percent of the total area of the County. This represents about 38 percent of the combined surface area of the 101 major lakes in the seven-county Southeastern Wisconsin Region, more than any other county in the Region. Thirty of the major lakes are located entirely within the County, while three major lakes, Lake Denoon, Golden Lake, and Lake Five, are located only partly within the County.

### ***Rivers and Streams***

For flood control and water quality planning purposes, the Southeastern Wisconsin Regional Planning Commission has divided the Region into 11 major watersheds, four of which are located wholly or partially in Waukesha County. The sub-continental divide traverses the County in a north-south direction in the eastern tier of communities, separating the County between the Mississippi River and the Great Lakes-St. Lawrence River drainage systems. Two of the major watersheds, the Menomonee River and Root River watersheds, lie east of the sub-continental divide and are part of the Great Lakes-St. Lawrence River drainage system. The other two watersheds, the Fox (Illinois) and Rock River watersheds, lie west of the sub-continental divide and are part of the Mississippi River drainage area. The watershed covering the largest area of Waukesha County is that of the Fox River, encompassing about 58 percent of the total area of the County.

Major streams are perennial streams, which maintain, at a minimum, a small contiguous flow throughout the year except under unusual drought conditions. Waukesha County contains a total of approximately 268 miles of perennial streams. The longest major streams are the Fox (Illinois) and Bark Rivers, with 46.1 and 31.8 stream miles, respectively, in the County.

### ***Floodlands***

The floodlands of a stream are the wide, gently sloping areas contiguous with and usually lying on both sides of a stream channel. Streams occupy their channels most of the time. However, during even minor flood events, stream discharges increase beyond the capacity of the channel to accommodate the entire flow, especially where urban development increases runoff or alters the stream channel. As a result, stages increase and the river or stream spreads laterally over the floodlands. The periodic flow of a river onto its floodlands is a recurring phenomenon and, in the absence of costly flood control measures, will occur regardless of the extent of urban development in floodlands. Floodlands are not suited to urban development because of flood hazards, high water tables, and inadequate soils. These areas are, however, generally suitable locations for valuable park and open space areas. Floodlands also provide storage for floodwaters and thereby decrease downstream flood discharges and stages. The 100-year flood recurrence interval flood hazard area encompasses about 72 square miles, not including nearly 24 square miles of surface water in lakes and streams, or about 13 percent of the County's total land area.

### ***Wetlands***

Wetlands perform an important set of natural functions, which make them particularly valuable resources lending to overall environmental health and diversity. Some wetlands provide seasonal groundwater recharge or discharge. Those wetlands that provide groundwater discharge often provide base flow to surface waters. Wetlands contribute to the maintenance of good water quality, except during unusual periods of high runoff following prolonged drought, by serving as traps, which retain nutrients and sediments, thereby preventing them from reaching streams and lakes. They act to retain water during dry periods and hold it during flooding events, thus keeping the water table high and relatively stable. They provide essential breeding, nesting, resting, and feeding grounds and predator escape cover for many forms of fish and wildlife. These attributes have the net effect of improving general environmental health; providing recreational, research, and educational opportunities; maintaining opportunities for hunting and fishing; and adding to the aesthetics of an area.

Wetlands pose severe limitations for urban development. In general, these limitations are related to the high water table, and the high compressibility and instability, low bearing capacity, and high shrink-swell potential of wetland soils. These limitations may result in flooding, wet basements, unstable foundations, failing pavements, and failing sewer and water lines. Moreover, there are significant and costly onsite preparation and maintenance costs associated with the development of wetland soils, particularly in connection with roads, foundations, and public utilities. Wetlands existing in 2000 cover 52,652 acres scattered throughout the County.

### ***Environmental Corridors and Isolated Natural Resource areas***

The most important elements of the natural resource base of the County, including the best remaining woodlands, wetlands, prairies, wildlife habitat, surface water and associated shorelands and floodlands, and related features, including existing park and open space sites, scenic views, and natural areas and critical species habitat sites, occur in linear patterns in the landscape, termed “environmental corridors.” The most important of these have been identified as “primary environmental corridors,” which are by definition at least two miles long, 200 feet wide, and 400 acres in area. Primary environmental corridors are generally located along river and major stream valleys, around major inland lakes, and in the Kettle Moraine. The County Development Plan recommends the preservation of primary environmental corridors in essentially natural, open use. The preservation of these corridors is considered essential to the overall environmental quality of the County and the maintenance of its unique cultural and natural heritage and natural beauty. Because these corridors are generally poorly suited for urban development owing to soil limitations, steep slopes, or flooding potential, their preservation will also help to avoid the creation of new environmental and developmental problems.

Under the Development Plan, primary environmental corridors would encompass about 148.5 square miles, or about 31 percent of the County, in 2035. This represents a net increase of 5.7 square miles, or four percent, over the existing 2000 area. Secondary environmental corridors would encompass 11 square miles in 2035, a decrease of about two percent, from 2000. Isolated Natural Resource areas would encompass about 12.5 square miles in 2035, a decrease of about four percent from 2000.

## **EXISTING PUBLIC PARK AND RECREATION PROVIDERS**

A comprehensive inventory and mapping of all known existing or proposed, public and private park, recreation and open space sites in Waukesha County was completed in September 2008. *Refer to Exhibit D-1* This information provides a baseline of existing park and recreation facilities which when compared to the park and recreation needs will indicate the adequacy of park, recreation and open space lands in the county.

Waukesha County has three primary providers of public park and recreation. They are the Wisconsin Department of Natural Resources, Waukesha County and local municipalities. This section presents a discussion of their roles in the provision of park and recreation services.

### **Wisconsin Department of Natural Resources**

By definition, the Wisconsin Department of Natural Resources (WDNR) provides space for outdoor recreation and nature and conservation education. State parks aim to preserve, protect, interpret and enhance the scenic and cultural resources of the state. The size of a state park typically varies between 500 to 3000 acres, but can be smaller than twenty acres or larger than 10,000 acres. The service area of state parks is generally 100 miles. The WDNR park sites offer a diverse range of outdoor resource-oriented, intensive resource-oriented, extensive land-based and extensive water-based recreation activities including camping, hunting, fishing, canoeing, hiking, cross-county skiing, bird watching, horseback riding, and boat launching.

The WDNR has acquired large areas of park and open space lands in Waukesha County. These sites were generally acquired for natural resource preservation purposes. Major sites owned by the Department include the Kettle Moraine State Forest, Vernon Marsh, Big Muskego Lake Wildlife Area, Lapham Peak Unit of the Kettle Moraine State Forest, the Ottawa Lake Recreation Area and the Pine Woods Campground, both of which are located within the Southern Unit of the Kettle Moraine State Forest. The Department also owns one special regional recreational site, Old World Wisconsin, which is also located within the Southern Unit of the Kettle Moraine State Forest. In 2008, the WDNR acquired the former Rainbow Springs property that includes significant Mukwonago River frontage, a lake and a golf course for which detailed plans have not been prepared as of this writing. The area is expected to become a major recreational amenity and includes a total of 971 acres of both Waukesha and Walworth Counties. Wisconsin Department of Natural Resources consisted of 28 sites totaling 18,229 acres or four percent of the County area. *Refer to Exhibit D-1*

### **Local Municipalities and School Districts**

In addition to meeting resource-oriented outdoor recreation needs, a park plan must seek to provide sites and facilities for non-nature-based activities, such as baseball, soccer, skateboard parks, tennis, and playground activities. Sites and facilities for non-nature-based activities rely less heavily on natural resource amenities, generally meet a neighborhood and community needs, and have a relatively small service radius. For these reasons, responsibility for providing such sites and facilities generally rests with city, village, and town governments. Local municipality park classifications and standards will vary based upon the municipalities adopted park and open space plan. Local municipalities own 10,058 acres or 2.7 percent of the total area of the County. Local Municipalities propose to acquire 8,627 acres or 2.3 percent of the County.

### **Private Preservation and Recreation Providers**

There are numerous private providers of outdoor recreation. These include non-profit organizations and businesses operated for profit. They can provide a full range of outdoor recreation activities including outdoor resource-oriented, intensive resource-oriented, intensive-non resource-oriented and extensive land-based recreation activities. Recreation activities include golf, water parks, horseback riding, camping, tennis, health clubs and youth camps.

Non-profit providers in Waukesha County include the Waukesha County Land Conservancy, Ice Age Trail Foundation, the Nature Conservancy, Isaac Walton League, Tall Pines Conservancy and various YMCA's and religious institutions. The mission of the Waukesha County Land Conservancy seeks is to protect environmentally significant lands in Waukesha County. The Nature Conservancy, through its mission, seeks to

preserve plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The mission of the Isaac Walton League is to restore watersheds, reduce air pollution, fight litter, protect wildlife habitat and open spaces, and instilling conservation ethics in outdoor recreationists. The Tall Pines Conservancy's mission is to preserve our rural heritage by protecting remaining farmland, water resources, natural areas and open spaces impacting Northwestern Waukesha County.

The non-profit conservation organization sites consist of 1,255 acres or 0.3 percent of the County area. Exhibit D-1 identifies non-profit conservation organizations existing lands and proposed acquisitions of 10,634 acres or 2.9 percent.

Recreation providers, who operate for-a-profit, cover a wide range of recreation activities. They often provide specialized recreation activities and cater to a niche market. Some private recreation sites are only open to members and their guests and therefore are not considered in an inventory of private preservation and recreation providers. Exhibit D-1 identifies private recreation providers whose recreation activities are open to the public.

### **Other Public Preservation and Open Space Providers**

#### ***Wisconsin Department of Transportation***

The Wisconsin Department of Transportation owns eight wetland mitigation sites totaling 351.5 acres within the County. The 178 acres of the 351.5 acres have been restored or enhanced as wetlands or, in upland portions of the sites, as prairies. Six of the eight sites are located within, or adjacent to, primary environmental corridors and two are located adjacent to a secondary environmental corridor. In each case, restoration or creation of wetland or prairie vegetation is expected to result in an expansion of the corridor to include the mitigation sites.

#### ***University of Wisconsin***

The University of Wisconsin owns the Waterville Field Station, encompassing about 96 acres, located in the Town of Ottawa. Both the Ice Age Trail and the Glacial Drumlin Trail traverse the Field Station.

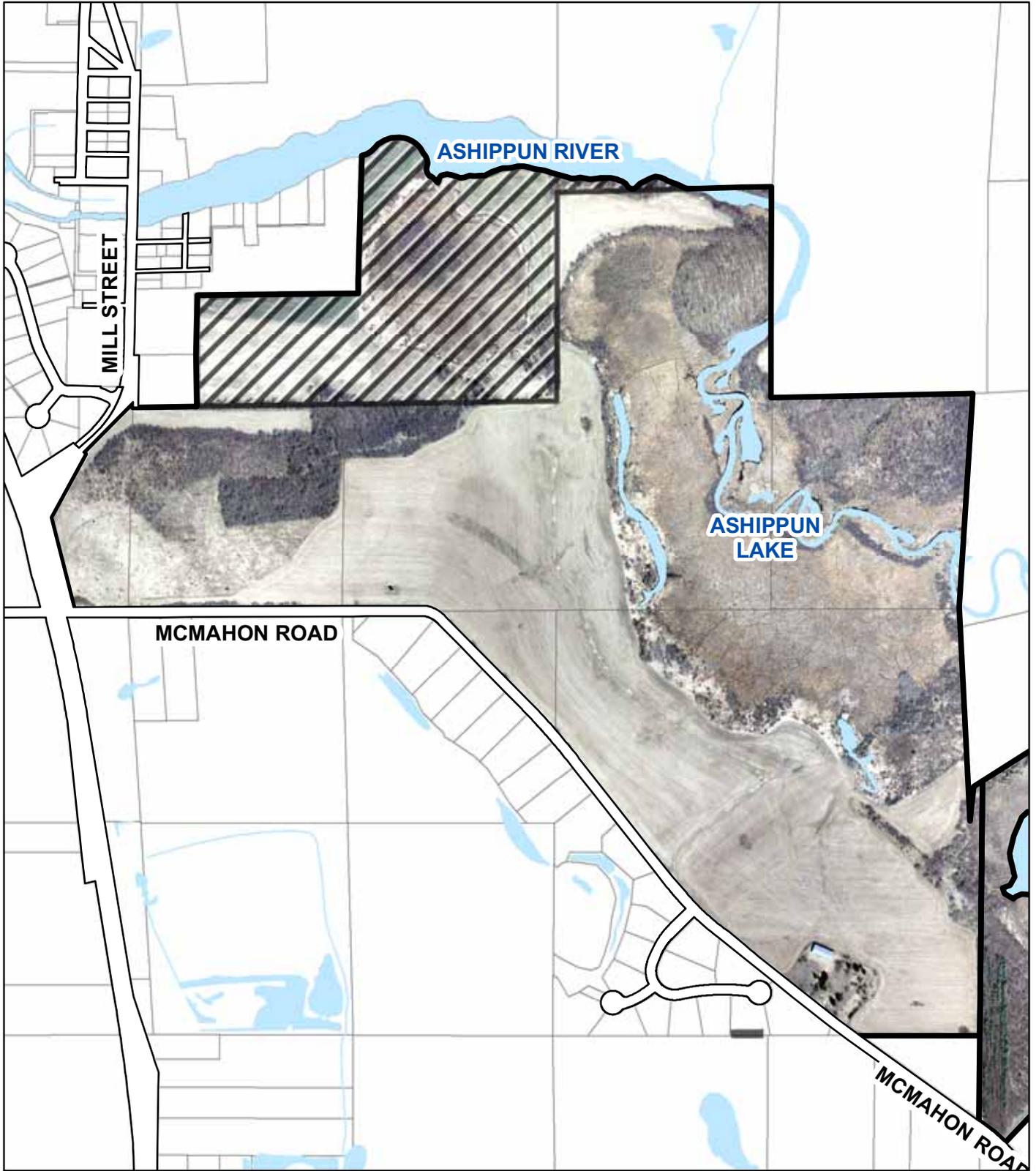
### **EXISTING WAUKESHA COUNTY PARK AND OPEN SPACE SITES**

The Waukesha County Park System is a nature-based park system, which demonstrates environmental stewardship, while providing nature based recreation and programmed education activities. The County Park System provides outdoor resource-oriented, intensive resource-oriented, extensive land-based outdoor and extensive water-based recreation activities through regional parks, regional greenway corridors, regional trail corridors, and special use parks. In 2008, Waukesha County Park system consists of 4,858 acres of parkland and 2,786 acres of greenways or 2.0 percent of the County. *Refer to Exhibit D-2*

A detailed description of existing Waukesha County park and open space sites is provided in this section. For each park, greenway, trail or special use facility, a detailed description of the location, acquisition history, site characteristics, resource management and existing and planned improvements are provided.

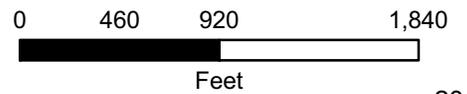
#### **Major Parks**

Under the Waukesha County Park System, major parks are a minimum of 250 acres in size and have a service radius of four miles. *Refer to Exhibit E* To establish and maintain a natural park setting, 70% of the park is undeveloped and included in the park systems natural management plans. The remaining 30% of the park is developed for compatible recreation activities. To avoid a duplication of effort, there are no County regional parks planned in close proximity to the Southern Unit of the Kettle Moraine State Forest in the southwestern portion of the County. There are eight developed parks in the system that have year-round staff located at the facility. All parks have rentable park facilities available to the public for various family, private or public events year-round. Four parks have camping facilities open from April through October. Six parks have sand beaches with modern changing and restroom facilities. The Waukesha County Parks provide open space for nature based recreation activities. The Waukesha County Park System is fee based. Through County policy, the Park System is required to offset thirty percent of the operating budget with fees.



# Ashippun Park

 Acquisition Interest





**Waukesha County  
Park System**

## **2008-2012 Park and Open Space Plan**

### **Ashippun River Park (Undeveloped)**

**Location:** Town of Oconomowoc, Sections 8, 9 and 16

**Address:** 7640 McMahan Road, Oconomowoc

#### **Acquisition (History):**

##### **338 Acres**

1992 – Dedication from Saddle Brook farms - 38 acres

1999 – Purchase from Jim and Patricia Williams - 50 Acres

1999 – Purchase from Jim Williams and John Zurheide - 250 Acres

#### **Acquisition Interest:**

61 acres – Northwest area of the park includes a large wetland and upland

#### **2000 – 2007 Accomplishments:**

\* Removal of Farm Buildings

#### **Site Characteristics:**

The Ashippun River runs through the tranquil northeast portion of the park and abuts state land where the Ashippun Lake access is located. This undeveloped parcel has varying character starting along McMahan Road with tilled farm fields continuing on the northeast third of the site where it borders a wetland and finally transitioning into the Ashippun River. One mile of the Ashippun River runs through the northeast corner with about 131 acres of wetland surrounding it. Wooded terrain exists at the northern most point of the parcel and overlooks the river. The western portion is a hill covered with brushy old-field and small woods.

#### **Existing Development:**

- Lake Access - South of Park along McMahan Road, no access fee, asphalt road and parking lot, boat launch, 11 boat trailer-parking stalls and 10 vehicles-only stalls
- Picnic area - picnic table, pit toilet
- Rental Ag Land -140 acres
- Rental Building - Metal storage building 60'x 130'

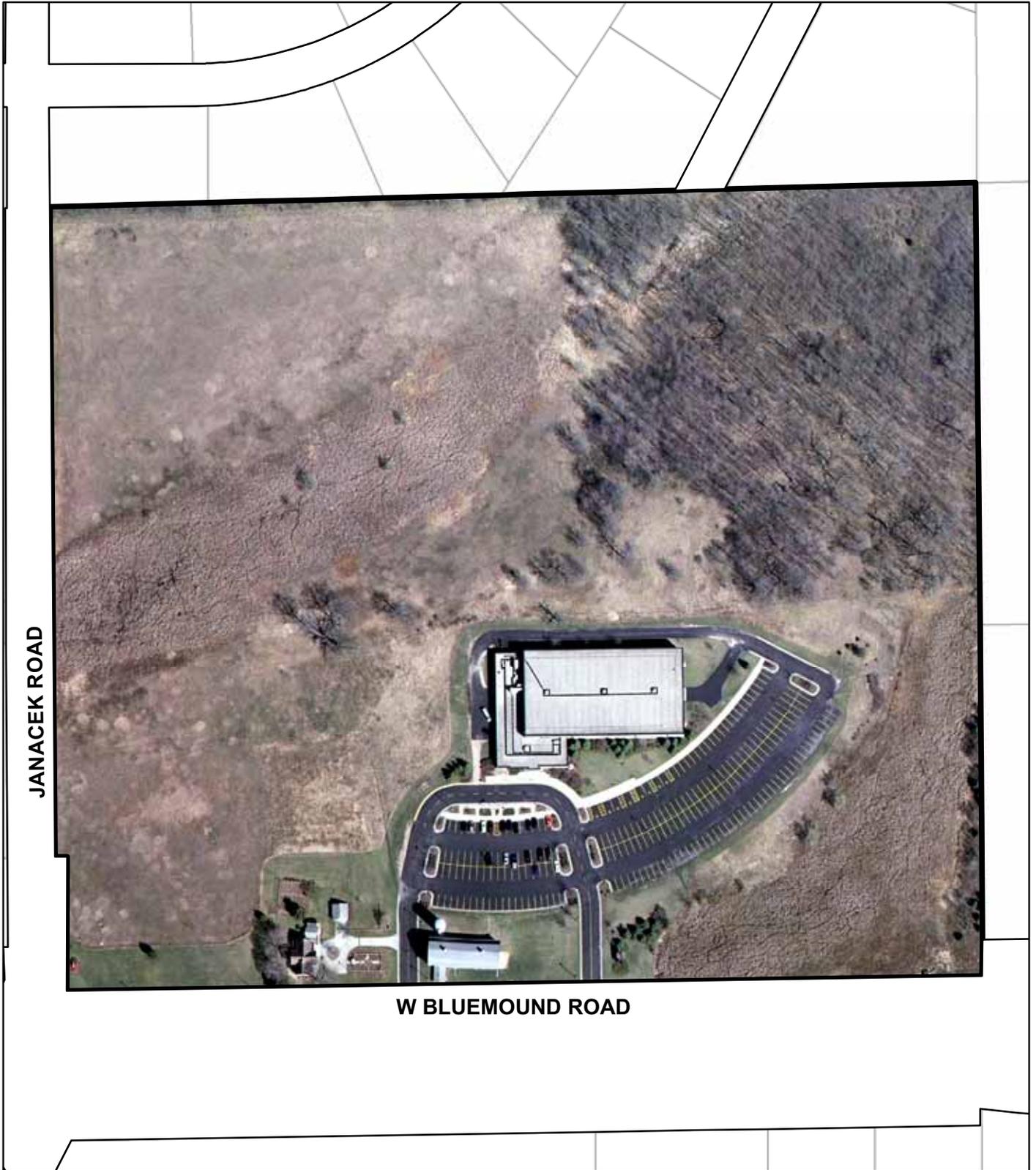
#### **Planned Development:**

Natural Management Plan – April 2009

Resource Management Planning

#### **Park System Connection:**

Ashippun River Greenway

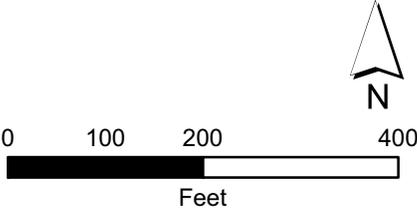


JANACEK ROAD

W BLUEMOUND ROAD



Eble Park





## **2008-2012 Park and Open Space Plan**

### **Eble Park**

**Location:** Town of Brookfield, Section 29

**Address:** 19400 W. Bluemound Road, Brookfield

#### **Acquisition (History):**

32 acres of original farmstead donated by siblings, Florence and Roy Eble, in 1987 for park and recreation purposes.

#### **2000 – 2007 Accomplishments:**

- \* Re-shingle Barn Roof
- \* Re-shingle Garage Roof
- \* Routine Pavement Management

#### **Site Characteristics:**

Eble Park opened in November 1988 and is located in the Town of Brookfield at the northeast intersection of Bluemound Road (Hwy 18) and Janacek Road. The park is a highly visible property dominated by the outstanding barn and farmhouse with plenty of open space around the ice arena. There is wetland to the southeast and an old field to the north of the ice arena. A tranquil lawn and garden surround the barn and homestead which are maintained by a local group.

#### **Existing Development:**

- Ice Arena - 35,400 square foot facility with an 85'x 200' ice rink on a concrete floor, seating capacity for 1,200 with a concession area and four sets of locker rooms, cooled by a Freon-based system.
- Asphalt parking areas
- Formal Flower and Vegetable Garden - maintained by the Master Gardeners Association
- Historical Sites - unoccupied two story home previous residents Roy and Florence Eble with a garage re-roofed in 2006, two outbuildings and a barn re-roofed in 2007
- Legacy Forest – Trees donated in memory/honor of others.

#### **Planned Development:**

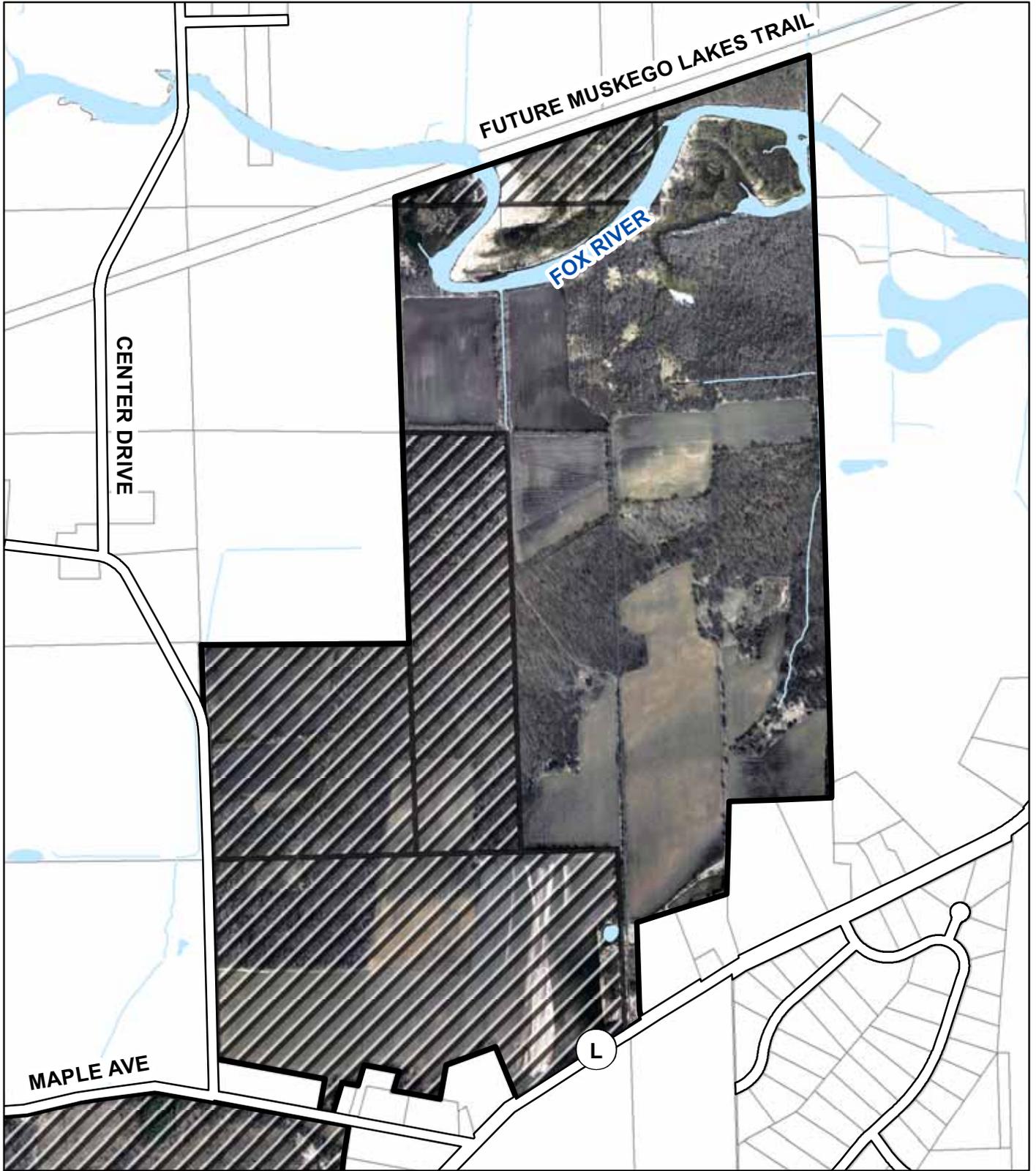
New entrance to Janacek Road and removal of existing driveway between house and barn  
Site plan for entire Park (2008)  
Explore partnerships for garden demonstration and environmental/agricultural education area  
New entrance signage  
Resource Management Planning

#### **Park Activities:**

- Ice Skating
- Gardening

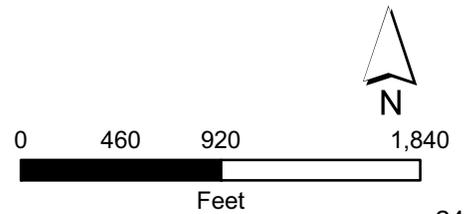
#### **Planned Park Activities:**

- Educational Activities
- Roller Hockey



Fox Bend Park

 Acquisition Interest





## **2008-2012 Park and Open Space Plan**

### **Fox Bend Park (Undeveloped)**

**Location:** Town of Vernon; Sections 22, 27

**Address:** CTH L (Forest Home Avenue)

#### **Acquisition (History):**

##### **225 Acres**

1992- Robert & Alice Mueller – 154 acres

1995- Links Acres – 68.5 acres

2004- Purchase from Dean Hintz - 2.5 acres

#### **Acquisition Interest:**

160 acres

Small parcel to the North along the Fox River and connecting to the Fox River Greenway. Also, a large area to the southwest containing woodlands and uplands providing a connection to Smith Park.

#### **2000 – 2007 Accomplishments:**

\*None

#### **Site Characteristics:**

The proposed Fox Bend Park of 390 acres is located along the main branch of the Fox River in the Town of Vernon, west of the Village of Big Bend. This undeveloped park is in the south central section of Waukesha County and is located off CTH L to the south and Center Drive to the west. The park has varied terrain, is in an agricultural area and some of the property is tillable cropland. The Fox River runs across the north part of the park, which is in a conservancy wetland. Fox Bend Park is also part of the Fox River Greenway Corridor.

#### **Existing Development:**

Rental Ag Land: 90.5 acres

#### **Planned Development:**

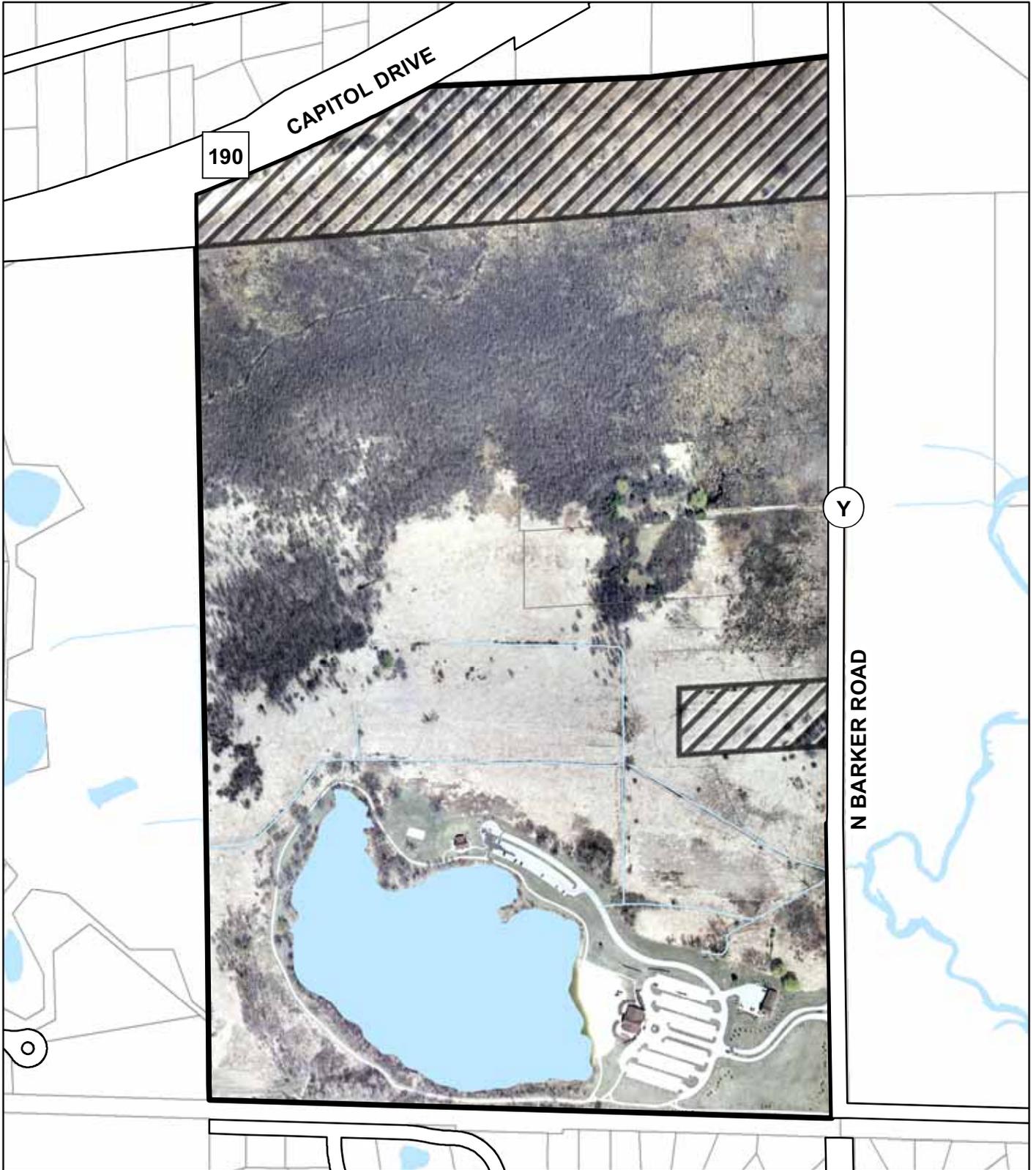
Natural Management Plan (June 2008)

Resource Management Plan

Canoe launch to the Fox River

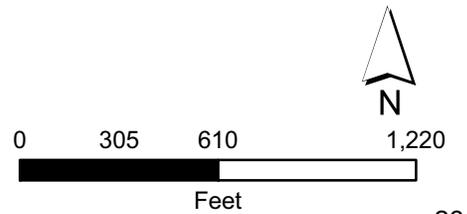
#### **Park System Connection:**

The proposed Fox River Greenway



Fox Brook Park

 Acquisition Interest





## **2008-2012 Park and Open Space Plan**

### **Fox Brook Park (Dedicated in 2000)**

**Location:** City of Brookfield, Section 7 and 18

**Address:** 2925 North Barker Road, Brookfield

#### **Acquisition (History):**

##### **223 Acres**

1997 - 173 acres acquired from the City of Brookfield

2000 - Purchase Wetzel- 50 acre parcel (primarily wetland to the north) - DNR & City of Brookfield funding

#### **Acquisition Interest:**

35 acres – Includes 4-acre wetland parcel along Barker Road and a 31-acre parcel that would make up the North end of the park

#### **2000 – 2007 Accomplishments:**

- \* New Park as of 1999
- \* Wayfaring signage
- \* Concession Building
- \* Pedal Boat Dock
- \* 3 – Legacy Forest Plantings
- \* Routine Pavement Maintenance

#### **Site Characteristics:**

Fox Brook Park is a 223-acre park located west of Barker Road (CTH Y) in the northwestern section of the Town of Brookfield. Formerly the site of a gravel quarry the park now has a 22-acre quarry lake with a spacious lodge and sandy beach that opened on June 24, 1999. Pedal boats for enjoyment on the lake became available in 2001. The 138-acre wetland area is a natural habitat and resource preserve. This habitat allows many bird species to flourish such as Gold Finches and Indigo Buntings. One mile of paved trail curves around the quarry lake and provides three wildlife-viewing areas to observe the wonders of nature. The beauty and tranquility of this park offers a variety of recreational and open space opportunities.

#### **Existing Development:**

- ☑ Beach House/Lodge – concession stand mid May through August, with soda machines, restrooms and shower facilities open to all. September through May lodge can be reserved for public or private events, electricity, microwave, refrigerator, freezer, sink, indoor restrooms, wood burning fireplace, patio, capacity 100 with tables and chairs
- ☑ Picnic Pavilion – One rentable 30'x 30' covered area with cement base, 25 picnic tables, modern restrooms, Caterer's Room w/hot and cold water, sink and counter space, electricity, large grill, wood burning fireplace, sandpit volleyball w/net
- ☑ Legacy Forest - Trees donated in memory/honor of others
- ☑ Maintenance Building - equipment storage, cleaning and maintenance supply storage, park office, lunchroom, counting room, locker room, shower, unisex bathroom facility, mechanical room

- ☑ Observation Decks - 3 decks along the trail overlooking Quarry Lake
- ☑ Paved Trail -1 mile multi use trail winding around the lake
- ☑ Pedal Boat Rentals - 6 Pedal boats (1 handicapped and 5 regular), dock for loading and unloading,
- ☑ Pedal Boat/Concession Building - rental payment and agreement, life jacket supply, electricity
- ☑ Play Structure - Single multi-play station structure, poured rubber base
- ☑ Quarry lake - 22 acre - swimming, fishing, pedal boat rental, kayak lessons in cooperation with area park and recreation departments
- ☑ Scuba Diving Access
- ☑ Swimming beach - 400 feet of sand beach, diving dock, volleyball net, swimming only when lifeguards are on duty

**Planned Development:**

Natural Management Plan April 2008  
 Resource Management Plan

**Park Activities:**

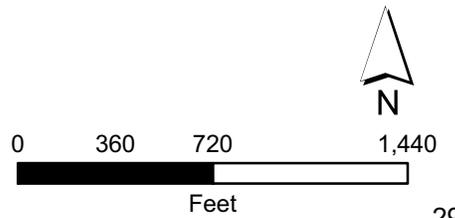
- |                      |                        |
|----------------------|------------------------|
| ☑ Beach              | ☑ Rollerblading        |
| ☑ Biking             | ☑ Running or jogging   |
| ☑ Bird watching      | ☑ Scuba diving         |
| ☑ Family gatherings  | ☑ Seasonal activities  |
| ☑ Fishing            | ☑ Swimming             |
| ☑ Geocaching         | ☑ Swimming lessons     |
| ☑ Kayak lessons      | ☑ Walking for pleasure |
| ☑ Pedal boat rentals |                        |
| ☑ Picnicking         |                        |

**Park System Connection:**

The proposed Fox River Greenway



# Fox River Park





**Waukesha County  
Park System**

## **2008-2012 Park and Open Space Plan**

### **Fox River Park**

(Dedicated in 2003)

**Location:** Town of Waukesha Sections 20 and 21

**Address:** W264 S4500 River Road, Waukesha

#### **Acquisition (History):**

##### **257 Acres**

1989- Dedication Richard Casper – 24 Acres

1988- Purchase Winzenried /Mittelstadt – 144 Acres

1993- Dedication Don Bellman- 50 Acres

1994- Dedication Don Bellman – 15 Acres

1994- Dedication Richard Casper – 24 Acres

#### **2000 – 2007 Accomplishments:**

- \* New Park 2003
- \* Wayfaring signage
- \* Entrance hut improvements
- \* 2 – Observation decks
- \* Canoe Launch
- \* 20 Legacy Forest Trees
- \* Routine Pavement Maintenance
- \* Nature Play area
- \* Buffer plantings
- \* Revised Natural Land Management Plan

#### **Site Characteristics:**

Fox River Parks 257 acres are located alongside the Fox River in the Town of Waukesha. This park features Fox River frontage, wetlands, upland oak-hickory woodlands, open meadows and a deep marsh all providing a feeling of wilderness and solitude. No matter what season of the year one visits, the view and activity are ever changing. Spring brings delicate wildflowers, summer produces a wooded canopy for a hike through the forest, fall offers a breath taking color display and winters snows glisten in the sun. The abundance of wildlife provides great opportunities for nature study and the exploration of the natural world. As the trails wind through the park, numerous wildflowers and bird species can be observed. Several miles of paved trails draw hikers, bikers, and rollerbladers throughout spring, summer and fall offering a variety of trail experiences.

#### **Existing Development:**

- ☑ Canoe Launch
- ☑ Legacy Forest - Trees donated in memory/honor of others
- ☑ Maintenance Building - Park office, lunchroom, locker room with shower, unisex bathroom, counting room, utility room, cleaning and maintenance storage, maintenance equipment storage.
- ☑ Nature Play Area - Spider climber, rock climber, 2 sets of slides, sand play area with water supply, council ring, accessible paved pathway along with sensory landscaping

- ☑ Paved Trail
  - Black trail 2.25 miles
- ☑ Picnic Pavilion - 3 Rentable 30'x 30' covered area with cement base, picnic tables, indoor restrooms, large grill, wood burning fireplace, sandpit volleyball w/net
  - Picnic Area #1: electricity, water
  - Picnic Area #2: electricity, water
  - Picnic Area #3: electricity, water
- ☑ Trail Head Building - indoor restrooms, water
- ☑ Turf and wood-chipped trails (total 4.3 miles) located in the forested area of the park
  - Red Trail 1.2 miles
  - Blue Trail 1.4 miles
  - Green Trail 1.7 miles
- ☑ Two Observation Decks
  - Overlooks the south end of the Deep Marsh
  - Along the paved path beside the Fox River

### **Natural Management Plan:**

The Conservancy Area for Fox River Park is mainly high quality dry-mesic forest covering approximately 84 acres. The wooded area (the area known as Foster's Woods) is designated NA-2 by the Southeastern Wisconsin Regional Planning Commission (SEWRPC). There are smaller open wet areas on the northern and eastern edges and two sites on the southwest border showing open structure like oak woodland or savanna. These smaller areas contribute, albeit on a minute scale, to diversity at the landscape level. Most, perhaps all, of the buffer zone will be a minimum of 25 feet due to the NA-2 ranking. The quality of the two wetlands will need to meet WI DNR NR 151 regulations to determine if buffers there exceed 25 feet. The surrounding areas will focus on buffering forest wildlife while also providing a preferred transition for grassland birds. Immediately adjacent grasslands will provide a "soft" or shrubby edge to the forest border and scattered woody vegetation beyond (Sample and Mossman 1997). Areas next in line will be a mosaic of shorter old-field vegetation and plantings blended with warm season grasses. The shrubby edge borders may eventually succeed into forest themselves. At that time, management strategies will be re-evaluated.

Fox River Park is in the midst of heavy suburban development. Communicating to the public why this area is of high quality and why it is a dry-mesic or Red Oak forest can be an attraction in and of itself. It is also important for the public to understand the importance of large, intact, functional tracts of contiguous plant communities and how they contribute to landscape scale diversity.

### **Planned Development:**

Resource Management Plan

Install prairie meadow on outside perimeter west of maintenance building to the front entrance.

Continue to improve buffer area between picnic areas and residential neighbors

Enhance the canoe launch

Secondary signage along trail system

Improved trail signage

Fox River Trail Connection

### **Park Activities:**

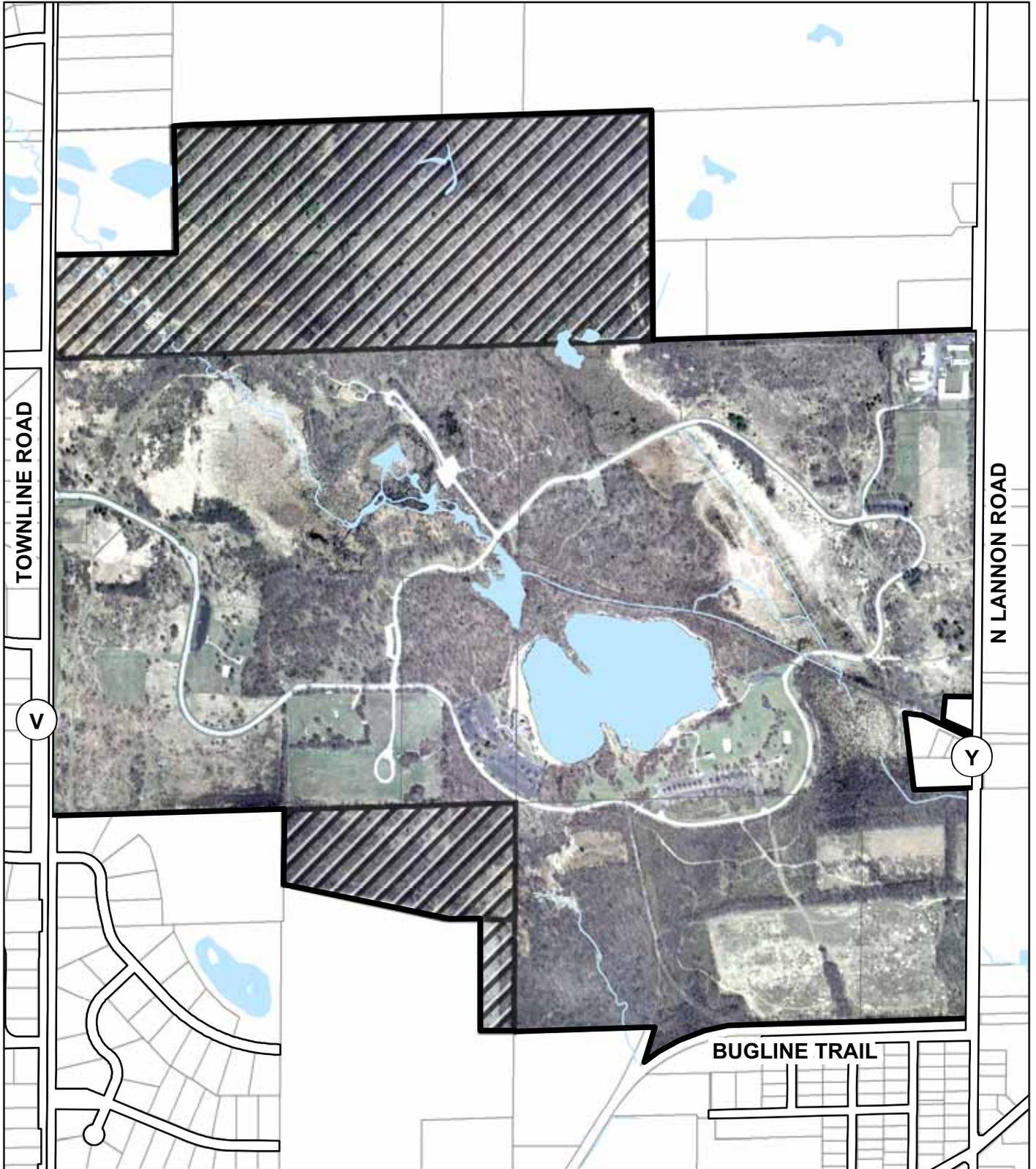
- Bicycling
- Bird-watching
- Canoeing
- Cross-country Skiing (multi-use trail)
- Day Hiking
- Family gatherings
- Geocaching
- Kayaking
- Nature-based educational programs
- Picnicking
- River Fishing
- Rollerblading
- Running or Jogging
- Seasonal Events
- Snowshoeing
- Walk for pleasure
- Winter Hiking

### **Planned Activities:**

- Hot air balloon launching
- Kite flying
- Outdoor art fair

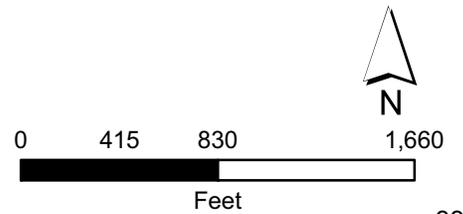
### **Park System Connection:**

Proposed Fox River Greenway extends through the park.



# Menomonee Park

 Acquisition Interest





**Waukesha County  
Park System**

## **2008-2012 Park and Open Space Plan**

### **Menomonee Park**

**Location:** Village of Menomonee Falls, Section 18

**Address:** W220 N7884 Townline Road, Menomonee Falls

#### **Acquisition (History):**

##### **400 Acres**

1960 - Purchase (from three separate owners) – 315 acres

- Arthur Prag – 144.3 acres

- Elmer Schultz – 99.1 acres

- Lake Shore Sand and Stone Co. – 71.6 acres

1963 - Conveyed by deed from Department of Interior – 5 acres

1970 – Purchase Ritsch – 79 acres

1984 – Purchase from June Prag – 1 acre

#### **Acquisition Interest:**

113 acres

Includes a 93-acre wooded site to the North and a 20-acre site wooded site south of the Group Camping area to work as a buffer to the park to the north and protect the Sedge Meadow Thicket to the east.

#### **2000 – 2007 Accomplishments:**

- \* Revised Park Entrance Signage
- \* Wayfaring Signage
- \* Reconstruct swimming dock
- \* New picnic shelter #1 with electric
- \* Electric to Picnic Shelter #2
- \* Extension of stone pier and post fence at beach
- \* 3 Legacy Forest trees
- \* Routine pavement maintenance
- \* Revised Natural Management Plan

#### **Site Characteristics:**

Menomonee Park is located in the northeastern section of Waukesha County in the Villages of Lannon and Menomonee Falls. The Park totals 400 acres of rolling fields, high quality maple woods, cattail marsh, wetlands, several trails for hiking, biking, horseback riding and a 16-acre quarry lake. There are three Artesian wells within the park located near the Beach House, Camp Pow Wow Lodge and the Family camp area. In 1880-1900, a stone quarry operated here, now remnants of its history include an old stone crusher and the railroad spur running from the quarry to the Bugline Recreation Trail. Rolling hills challenge the hikers, cross country skiers and those on snowshoes. The historical Bugline Trail, once a railroad that served Stone City, with its 12 miles of crushed limestone has become a valued trail for biker, hikers and a portion is reserved for equestrian and snowmobile use.

## Existing Development:

- ☑ Archery - 3 targets, on a 10' raised platform
- ☑ Beach House - May through September for beach operation only, concession stand, soda machines, indoor restrooms and shower facilities. Reservable September through May for public or private events, refrigerator, hot and cold water, sink, soda machine, microwave, coffee pot, indoor restrooms, fireplace, tables/chairs, capacity 50
- ☑ Family Camping – 33 sites, reservations not accepted, rustic and wooded sites, picnic table, fire-pit, outdoor restrooms, parking for one vehicle per site
- ☑ Fishing Pier
- ☑ Group Camping - 7 reservable sites/minimum 8 people per site, picnic tables, fire-pit, outdoor restrooms
- ☑ Legacy Forest - Trees donated in memory/honor of others.
- ☑ Lodge - Camp Pow Wow Lodge - May through September reserved exclusively for ARCH (Association for the Rights of Citizens with Handicaps) September through May building is reservable amenities include; full kitchen, heated, indoor and outdoor fireplace, indoor restrooms w/showers, covered patio w/cement floor, tables/chairs, capacity 125
- ☑ Maintenance Building - Park office, cleaning and maintenance supply storage
- ☑ Picnic Shelters - 3 rentable, 20'x 30' covered shelters with cement base includes, sandpit volleyball w/net, outdoor restrooms, large grill, 20 picnic tables
  - Picnic Area #1: electricity
  - Picnic Area #2: electricity
  - Picnic Area #3: none
- ☑ Quarry Lake 16-acres
- ☑ Recreation Building – reservable, heated facility, stove, refrigerator, soda machine, hot/cold water, sink, electric coffee pot, cots, indoor restrooms, outdoor grill, tables/chairs, day time capacity 100, overnight capacity 40, sandpit volleyball w/net
- ☑ Scuba Diving
- ☑ Swimming Beach - 160 feet of sand beach, diving dock, swimming only when lifeguards are on duty
- ☑ Turf and Wood-chipped Trails
- ☑ Winter Sledding Hill

## Natural Management Plan 2007:

The Conservancy Area for Menomonee Park covers 126.9 acres of mesic woods, wet forest and marsh. Much of the area is intact and dates back to at least 1941. The aerial photo then shows some haying of the wet areas and some of the current forest had not developed by the time the image was taken. Whether this is due to agricultural practices or lack of fire is uncertain but this area is definitely out of the historic fire zone. The park is located far enough to the north and east to place it in Wisconsin's tension zone. Maple forests likely dominated here before settlement. The current woodland is of high quality and diverse groundlayer and should be managed as such.

Initial plans for Menomonee Park were primarily for succession and forest management to expand the existing woods. We are now cooperating with the Butler's Garter Snake initiative to increase potential habitat. The areas involved are the upland grass-covered regions close to the wetlands and waterways. Most are old-fields but there are some remnant meadows and openings. This strategy will not add acres to our existing forest but it will not remove forest either. Most of these areas are already altered from their natural state and those remnants involved will only benefit from management.

## **Planned Development:**

Resource Management Plan  
Park and Trail signage  
Pow Wow site plan  
Group camp relocation  
Overnight lodge facilities  
Campground improvements  
2011 Restroom upgrades (Capital Project # 200505)  
Renovation to beach house  
2009 Maintenance building (Capital Project # 200504)  
Proposed dog exercise area

## **Park Activities:**

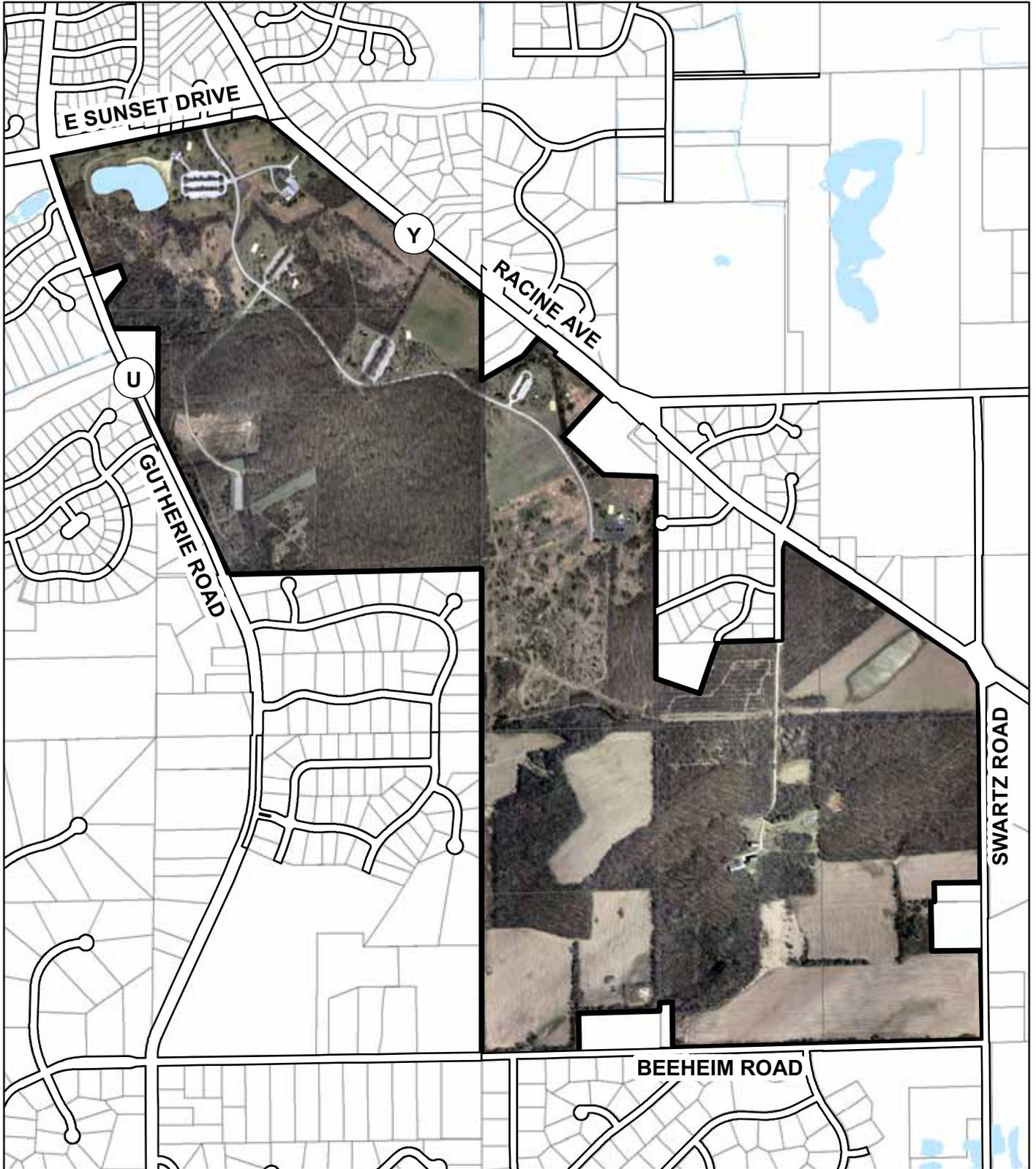
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Archery                               | <input checked="" type="checkbox"/> Nature-based Educational Programs |
| <input checked="" type="checkbox"/> Beach                                 | <input checked="" type="checkbox"/> Picnicking                        |
| <input checked="" type="checkbox"/> Bicycling                             | <input checked="" type="checkbox"/> Primitive Camping                 |
| <input checked="" type="checkbox"/> Bird-watching                         | <input checked="" type="checkbox"/> Rowing                            |
| <input checked="" type="checkbox"/> Canoeing                              | <input checked="" type="checkbox"/> Running or Jogging                |
| <input checked="" type="checkbox"/> Cross-country Skiing (groomed trails) | <input checked="" type="checkbox"/> Scuba Diving                      |
| <input checked="" type="checkbox"/> Day Hiking                            | <input checked="" type="checkbox"/> Seasonal Activities               |
| <input checked="" type="checkbox"/> Family Gatherings                     | <input checked="" type="checkbox"/> Snow and Ice Activities           |
| <input checked="" type="checkbox"/> Fishing (includes accessible pier)    | <input checked="" type="checkbox"/> Snowshoeing                       |
| <input checked="" type="checkbox"/> Geocaching                            | <input checked="" type="checkbox"/> Swimming                          |
| <input checked="" type="checkbox"/> Horseback Riding                      | <input checked="" type="checkbox"/> Swimming Lessons                  |
| <input checked="" type="checkbox"/> Kayaking                              | <input checked="" type="checkbox"/> Walking for pleasure              |

## **Proposed Park Activities:**

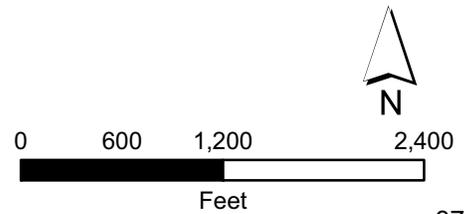
- Self-guided Nature Trails

## **Park System Connection:**

Bugline Trail runs through the park property



Minooka Park





**Waukesha County  
Park System**

## **2008-2012 Park and Open Space Plan**

### **Minooka Park**

**Location:** Town of Waukesha, Section 13; City of New Berlin, Sections 18 & 19

**Address:** 1927 E. Sunset Drive, Waukesha

#### **Acquisition (History):**

**Opened for limited use in 1968**

**579 Acres**

- 1965- Purchase Scott Lowry – 86 Acres
- 1965- Purchase Richard & Stuart Fondrie – 38 Acres
- 1965- Purchase William Hart Estate – 113 Acres
- 1965- Purchase Frank Swartz- 40 Acres
- 1965- Purchase Frank Swartz- 20 Acres
- 1994- Purchase Piechura/O’Neil – 238 Acres
- 1996- Purchase John Illing - 44 Acres

#### **2000-2007 Accomplishments:**

- \* Revised Park Entrance Signage
- \* Wayfaring signage
- \* Barn Re-roof, concrete ground floor and re-deck main floor
- \* Piechura-O’Neil (6) Building Demolition
- \* Pond Aeration
- \* New Shelter #5 with electric
- \* Legacy Forest plantings (2)
- \* Dog Exercise Area
- \* Routine Pavement Maintenance
- \* Electric to Picnic Areas #1 & #2

#### **Site Characteristics:**

Minooka Park is the largest in the park system with 579 acres of open mowed fields, meadows and fen, wetland, upland and lowland woodlands. Located in the east-central sector of Waukesha County in the city of New Berlin and Town of Waukesha, the park has a refreshingly tranquil atmosphere with trails that lead you farther from the city and further into nature. Enjoy a day at the 3.5 acre pond, take a stroll around the barn or walk through the miles of wooded trails and catch a glimpse of the abundant spring ephemeral wildflowers or assorted variety of songbirds such as: Fly Catchers or Scarlet Tanagers. See the scenic fall colors as stands of blazing deciduous hardwoods burst into autumn reds, yellows and oranges. In winter, the park becomes an outdoor enthusiast's frosty paradise with miles of groomed cross-country ski trails and a spacious sledding hill. With financial support from the Waukesha Kennel Club, and the Cities of Waukesha and New Berlin, a Dog Exercise area was constructed and opened on October 17, 2007.

## Existing Development:

- ☑ Archery Area -3 targets, on a 10' raised platform
- ☑ Barn - Estimate original construction to be around 1886; re-decked first floor in 2002
- ☑ Beach house - indoor restrooms, changing rooms, soda machines
- ☑ Cross-Country Ski Trails -3 loops approximately 6 miles of trail
- ☑ Dog Exercise Area - opened October 17, 2007, w/outdoor restrooms
  - Small Breed Area (3.8 acres),
  - Large Breed Area (11.9 acres)
- ☑ Horse Riding Trails
- ☑ Legacy Forest – Trees donated in memory/honor of others
- ☑ Maintenance Facility
- ☑ Picnic Shelters - 5 rentable, 20'x 30' covered shelters with cement base includes, sandpit volleyball w/net, outdoor restrooms, large grill, 30 to 35 picnic tables
  - Picnic area #1: water, electricity
  - Picnic area #2: water, electricity
  - Picnic area #3: water, multi-purpose play field (1.5 acre)
  - Picnic area #4: no electric, no water
  - Picnic area #5: electricity
- ☑ Pond - 3.5 acres
- ☑ Rental Ag Land - 126 acres
- ☑ Swimming beach - 220 feet of sand beach, sandpit volleyball w/net, swimming only when lifeguards are on duty
- ☑ Turf and Wood-chipped Trails
- ☑ Winter Sledding Hill

## Planned Development:

Natural Management Plan (12/2007)  
Resource Management Plan  
2012 Restroom upgrades (Capital Project #200505)  
Continue Park Road to the Pichura/O'Neil property  
Addition of campground facilities  
Improve trail signage  
Mountain bike trails  
Expanded use of the barn

## Park Activities:

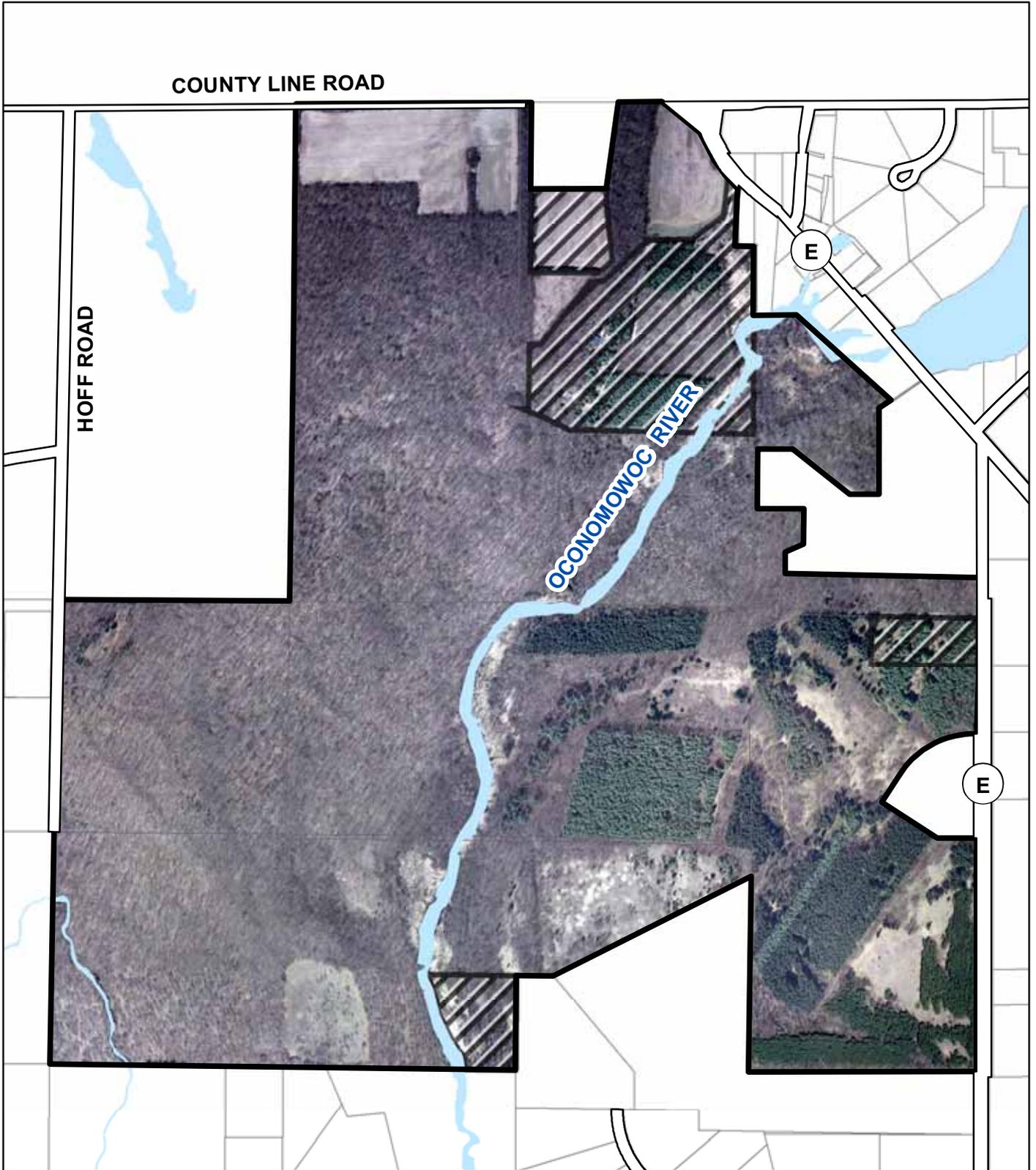
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|---|-------------------------------------|-------------------------|
| ☑ Archery                               | ☑ Family gatherings                 | ☑ Sledding              |
| ☑ Beach                                 | ☑ Geocaching                        | ☑ Snow/Ice Activities   |
| ☑ Bicycling                             | ☑ Horseback Riding                  | ☑ Snowshoeing           |
| ☑ Bird watching                         | ☑ Nature-based educational programs | ☑ Swimming              |
| ☑ Cross-country-skiing (groomed trails) | ☑ Picnicking                        | ☑ Swimming lesson       |
| ☑ Day Hiking                            | ☑ Running or Jogging                | ☑ Urban Fishing Program |
| ☑ Dog Exercise Area                     | ☑ Seasonal events                   | ☑ Walk for pleasure     |

## Proposed Park Activities:

- ☑ Developing Campgrounds to replace area displaced by Dog Exercise Area
- ☑ Trails - Mountain biking

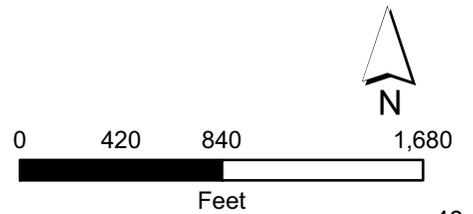
## Park System Connection:

Minooka Park is located along the proposed Pebble Brook Greenway. Existing trail facilities at the site would connect with the proposed Pebble Brook Trail.



Monches Park

 Acquisition Interest





## **2008-2012 Park and Open Space Plan**

### **Monches Park (Undeveloped)**

**Location:** Town of Merton, Sections 3, 10 and 15

**Address:** Not applicable at this time

#### **Acquisition (History):**

##### **366 Acres**

1973- Purchase Ellen Guilfoile Estate, 40 Acres

1973- Purchase Metropolitan Property Corp. 70 Acres

1986- Purchase Levenhagen 40 acres

1991- Donation Norman Chester 84 Acres

1998- Purchase Baumgartner/Follett 42 Acres

2001- Purchase Ice Age Park & Trail Foundation 13 Acres

2005- Purchase Ketterer, 77 Acres

#### **Acquisition Interest:**

41.5 acres

Lands that are currently open lands that protrude into main parkland area. All areas would help to buffer the Monches hardwood forest.

#### **2000-2007 Accomplishments:**

\* Rebuilt footbridge over the Oconomowoc River (on the Ice Age Trail)

#### **Site Characteristics:**

The original acquisition of Monches Park began with 108 acres occurring in 1973. Existing County ownership encompasses an area of about 366 acres, which includes an isolated five-acre parcel along the Little Oconomowoc and Oconomowoc River. The site is a high quality portion of Wisconsin's inter-lobate Kettle Moraine. A large portion of the site is covered with a high quality hardwood forest, moist mesic woods, Northern wet forest, lowland hardwoods, flood plain forest and plantations of Red and White Pine as well as Norway Spruce. Some open fields are being converted to old-field or prairie meadows. There are shrub swamps and wet meadow/shallow marshes located within the floodplains of the Oconomowoc River. The Monches Woods natural area has been identified as a natural area of statewide or greater significance.

#### **Existing Development:**

-  Trailhead – at Hwy Q and Hwy E - for the Ice Age Trail
-  Ice Age Trail - runs through the Park
-  Rentable Ag Land - 26 acres

#### **Planned Development:**

Natural Management plan (March 2009)

Resource Management Plan

Signage

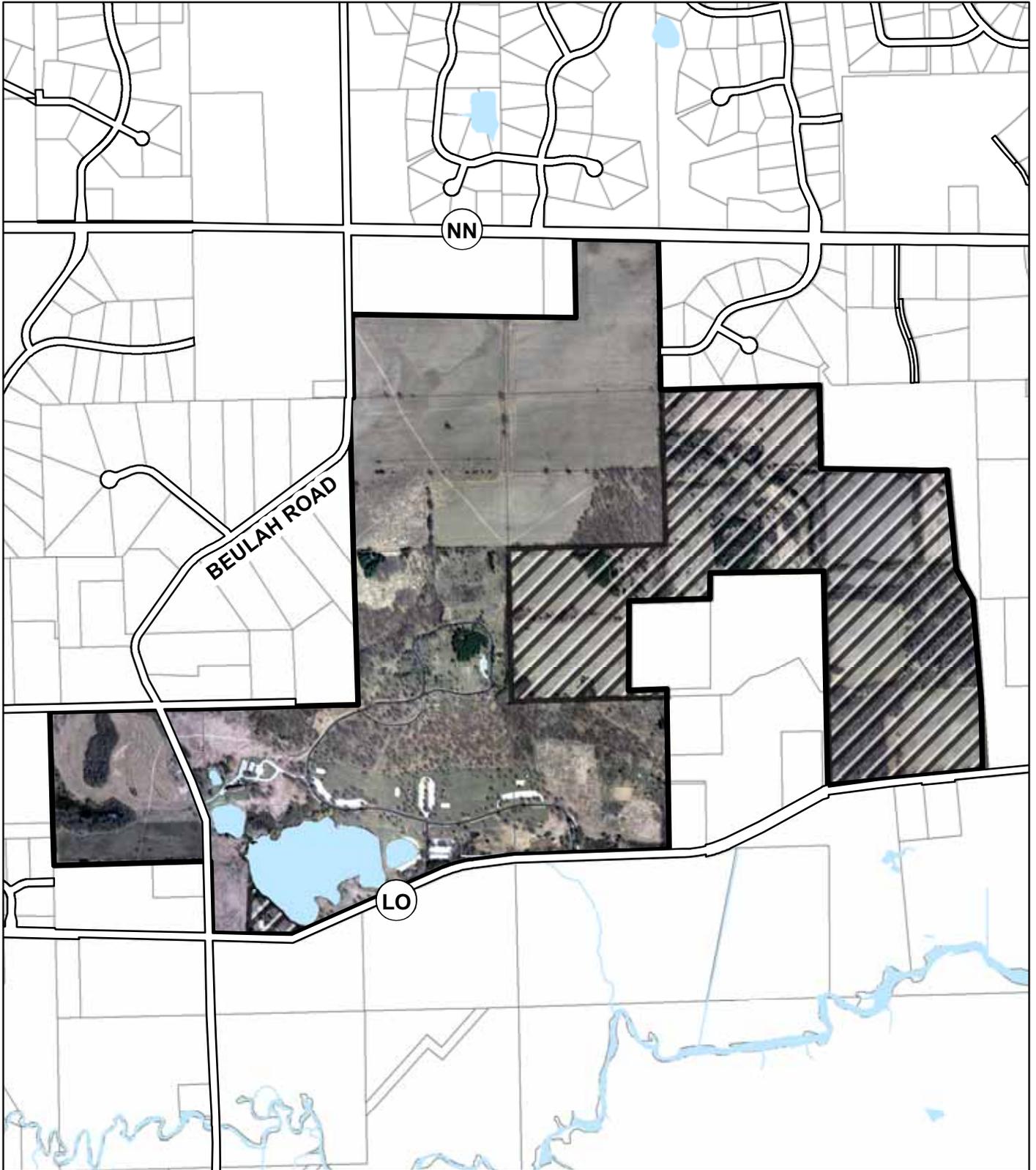
## **Park Activities**

- Day Hiking
- Geocaching
- Snowmobiling

- Snowshoeing
- Walking for pleasure

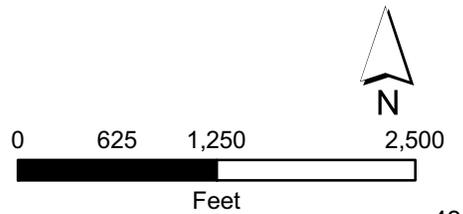
## **Park System Connection:**

Monches Park will connect to the Oconomowoc River Greenway, both trail and Greenway will connect to the Bugline Trail extension in the future. A segment of the Ice Age Trail also extends through the park.



# Mukwonago Park

 Acquisition Interest





**Waukesha County  
Park System**

## **2008-2012 Park and Open Space Plan**

### **Mukwonago Park**

**Location:** Town of Mukwonago, Sections 20, 21, 28, 29

**Address:** W325 S9945 Beulah Road, Mukwonago

#### **Acquisition (History):**

##### **355 Acres**

1959 - Purchase - Andrew Ketter 222 Acres

2000 - Purchase - Kemp & Kathy Wilson 133 Acres – DNR Funding

#### **Acquisition Interest:**

162 acres

Area is east of existing parklands

#### **2000-2007 Accomplishments:**

- \* Wayfaring Signage
- \* Entrance Hut Improvements
- \* Black Swallow-wort control
- \* Re-siding / re-roofing barn
  - \* Rebuild swimming dock
  - \* Pond Aeration
  - \* Dredged Swim Pond
  - \* 3 Legacy Forest Plantings
  - \* Routine Pavement Management
  - \* Water Service to Picnic Areas
  - \* New Hiking Trail
  - \* Updated Natural Management Plan

#### **Site Characteristics:**

“The Place of the Bear” is a park with an oak opening wooded hillside and rolling meadows. Mukwonago Park totals 355 acres and is located in the southern portion of Waukesha County in the Town of Mukwonago. The park entrance is on Highway LO just three miles west of Highway 83 near the Village of Mukwonago. The site includes a high ridge formed during the last glacial period, which stretches nearly the length of the park. This oak-opening ridge allows a commanding view of the rolling terrain and farmlands that are typical of southeast Wisconsin and is covered with pre-settlement vegetation including: Burr Oak, Shagbark Hickory and ground cover prairie plants. The 0.3-acre spring pond flows into two fishing lakes and the 1.2-acre swim pond. As the spring pond winds through the park, it eventually feeds into the Mukwonago River.

## Existing Development:

- Barn
- CRP Land -15.2 acres
- Family Camping - 30 sites, reservations not accepted, picnic table, fire pit, outdoor restrooms
- Group Camping - 6 reservable sites/minimum 8 people, picnic tables, fire pit, outdoor restrooms
- Legacy Forest - Trees donated in memory/honor of others.
- Maintenance Building
- Picnic Shelters - 4 rentable 20'x 30' covered shelters with cement base include: water, electricity, sandpit volleyball w/net, outdoor restrooms, large grill, picnic tables
- Pond - 1.4 acre
- Pond - 15.5 acres
- Prairie nursery
- Swim pond - 1.2 acre
- Recreation Center – Reservable September through May for public/private events, heated overnight facility, stove, refrigerator, soda machine, hot and cold water, sink, electricity, indoor restrooms, 6 - 6 foot tables, 40 chairs, capacity 50/25 overnight
- Rental Ag Land -105 acres
- Spring Pond - 0.3 acre

## Natural Management Plan:

The Conservancy Area for Mukwonago Park covers 66 acres. Most of the acreage was altered by agriculture and farmers exposed much of the soil in the past. There are some areas that were unfarmed, mostly sloped and/or consisting of gravel soils. Great, old Bur Oaks show savanna structure on these sites and some even have remnants of native ground layer underneath the wide branches. There are some sections of savanna becoming dry forest and some abandoned farm fields showing prairie colonization. Elevation varies greatly with the glacial features and we do have some wetlands and moist forest toward the southern borders.

Black swallowwort is an invasive weed of significant concern. This herbaceous plant does not have a foothold in much of the State yet, but it is certainly established within this park, necessitating aggressive eradication methods. Summer stand-wide mowing, which makes the swallowwort visible during searches, will kill native vegetation over time. Therefore, we restrict mowing in the truly high quality units. We are also working to notify and educate our neighbors about concerns over the invasive weed.

## Planned Development:

Resource Management Plan  
Color-coded looped trail system  
Upgraded restrooms  
Mountain bike trails  
Dog Exercise area

## Park Activities:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Beach                               | <input checked="" type="checkbox"/> Kayaking                         |
| <input checked="" type="checkbox"/> Bicycling                           | <input checked="" type="checkbox"/> Nature-based educational program |
| <input checked="" type="checkbox"/> Bird watching                       | <input checked="" type="checkbox"/> Picnicking                       |
| <input checked="" type="checkbox"/> Boating (no gas motors)             | <input checked="" type="checkbox"/> Primitive Camping                |
| <input checked="" type="checkbox"/> Cross-country skiing (none groomed) | <input checked="" type="checkbox"/> Running                          |
| <input checked="" type="checkbox"/> Day Hiking                          | <input checked="" type="checkbox"/> Snow/Ice activities              |
| <input checked="" type="checkbox"/> Family gathering                    | <input checked="" type="checkbox"/> Snowmobiling                     |
| <input checked="" type="checkbox"/> Fishing                             | <input checked="" type="checkbox"/> Snowshoeing                      |
| <input checked="" type="checkbox"/> Geocaching                          | <input checked="" type="checkbox"/> Swimming in lake                 |
| <input checked="" type="checkbox"/> Jogging                             | <input checked="" type="checkbox"/> Swim Lessons                     |
| <input checked="" type="checkbox"/> Kayak Lessons                       | <input checked="" type="checkbox"/> Walk for pleasure                |

**Planned Park Activities:**

Dog exercise area

Expanded hiking opportunities

Mountain biking

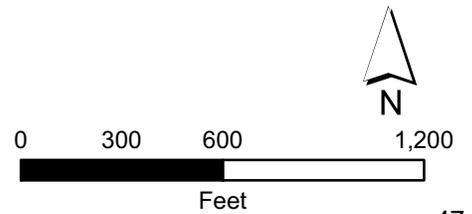
Wildlife Viewing/Photography

**Park System Connection:**

Mukwonago Park is located north of the proposed trail traversing the Mukwonago River Greenway; trail facilities would extend from the greenway to the park.



Muskego Park





## **2008-2012 Park and Open Space Plan**

### **Muskego Park**

Dedicated in 1961

**Location:** Town of Muskego, Section 17

**Address:** S83 W20370 Janesville Road, Muskego

#### **Acquisition (History):**

##### **193 Acres**

1958 - Purchase Addie Ellarson Crosswaite – 54.5 Acres

1958 - Purchase Arthur Ellarson 54.5 Acres

1958 - Purchase Cecelia Ellarson Neiman 50 Acres

1987 - Dedication Scholbe Farms, 34 acres

#### **2000-2007 Accomplishments:**

- \* New Park Signage
- \* Wayfaring Signage
- \* Dredge Swim Pond
- \* Pond Aeration
- \* New Shelter #5
- \* Legacy Forest Plantings (2)
- \* Routine Pavement Management
- \* Electric to Picnic Area #1
- \* New Picnic Shelter pads
- \* Remove Old Concession Building
- \* Remove Tennis Court
- \* Revised Natural Management Plan

#### **Site Characteristics:**

Formerly known as the Ellarson farm, it was one of the pioneer farms occupied by members of the same family since 1836. It comprised about 162 acres containing the most remarkable hardwoods on nearly 60 acres. “It has a substantial amount of virgin timber and is an outstanding example of native Wisconsin flora.” (An excerpt from William Nelson’s report to the Waukesha County Board of Supervisors in 1957) The park’s terrain is a rolling landscape of dense soils and wetland areas with small ponds. Within the park is the State Natural Area known as the Muskego Park Hardwoods. Muskego Park Hardwoods is an old-growth southern dry-mesic forest dominated by white and red oaks on a gently sloping southeast slope. Occasional large sugar maples occur along with a mixture of other trees such as bitternut hickory, shagbark hickory, butternut, walnut, white ash, basswood, black cherry, ironwood, and, of particular interest, Kentucky coffee tree (*Gymnocarpium dioicus*) and blue ash (*Fraxinus quadrangulata*). The southeast corner has a lowland forest with some elm and hackberry. The spring flora is exceptionally rich and contains wild leek, toothwort, bloodroot, declined trillium, reflexed trillium, green dragon, and red baneberry. The large populations of sweet cicely, honewort, black snakeroot, and wood avens are indicative of past grazing. Small woodland ponds lie in the northwest portion. Summer bird populations are representative of southern hardwoods and include the state-threatened cerulean warbler (*Dendroica cerulea*).

## Existing Development:

- ☑ 2-acre water impoundment
- ☑ Beach House - May through September for beach operation only, concession stand, soda machines, indoor restrooms and shower facilities. Reservable September through May for public or private events, refrigerator, sink, indoor restrooms, vending machines, tables/chairs, capacity 40
- ☑ Family Camping – 24 sites, reservations not accepted, picnic table, fire pit, outdoor restrooms
- ☑ Group Camping - 2 reservable sites/minimum 8 people, picnic tables, fire-pit, outdoor restrooms
- ☑ Legacy Forest - Trees donated in memory/honor of others
- ☑ Maintenance Building
- ☑ Picnic Shelters - 5 reservable covered shelters with cement base includes: sandpit volleyball w/net, large grill, 20 picnic tables
  - Picnic Area #1: 20' x 30' shelter, outdoor restrooms, electricity, water, horseshoe pit
  - Picnic Area #2: 20' x 30' shelter, outdoor restrooms, electricity, water, horseshoe pit
  - Picnic Area #3: 20' x 30' shelter, outdoor restrooms, electricity, water, horseshoe pit
  - Picnic Area #4: 24' x 38' shelter, indoor restrooms, electricity, water, horseshoe pit, caterer's room, sink, 2 fireplaces
  - Picnic Area #5: 28' x 33' shelter, indoor restrooms, electricity, water, horseshoe pit, caterer's room, sink
- ☑ Swimming Beach - 190 feet of sand beach, diving dock, swimming only when lifeguards are on duty
- ☑ Trail system -1.4 miles through Muskego hardwoods

## Natural Management Plan:

The Conservancy Area for Muskego Park covers 107 acres. Most of this is a hardwood forest of exceptional quality. The forest slopes gently to the southeast. There are several ponds and wet areas, most ephemeral, and a larger wetland down slope adjacent to the subdivision. It is one of our smallest parks, but it contains our best quality woods (and our best native community of any type) in the park system. The large block of forest to the east is a designated State Natural Area called 'Muskego Park Hardwoods' and the spring diversity are among the best in the state. Many homes border our property, many of them are upslope where the subdivisions add runoff and alter hydrology.

## Planned Development:

2008 Maintenance building (Capital Project #200503)

2010 Restroom upgrades (Capital Project #200505)

Campground upgrade

Trail signage/upgrade

Interpretative signage

Resource Management Plan

## Park Activities:

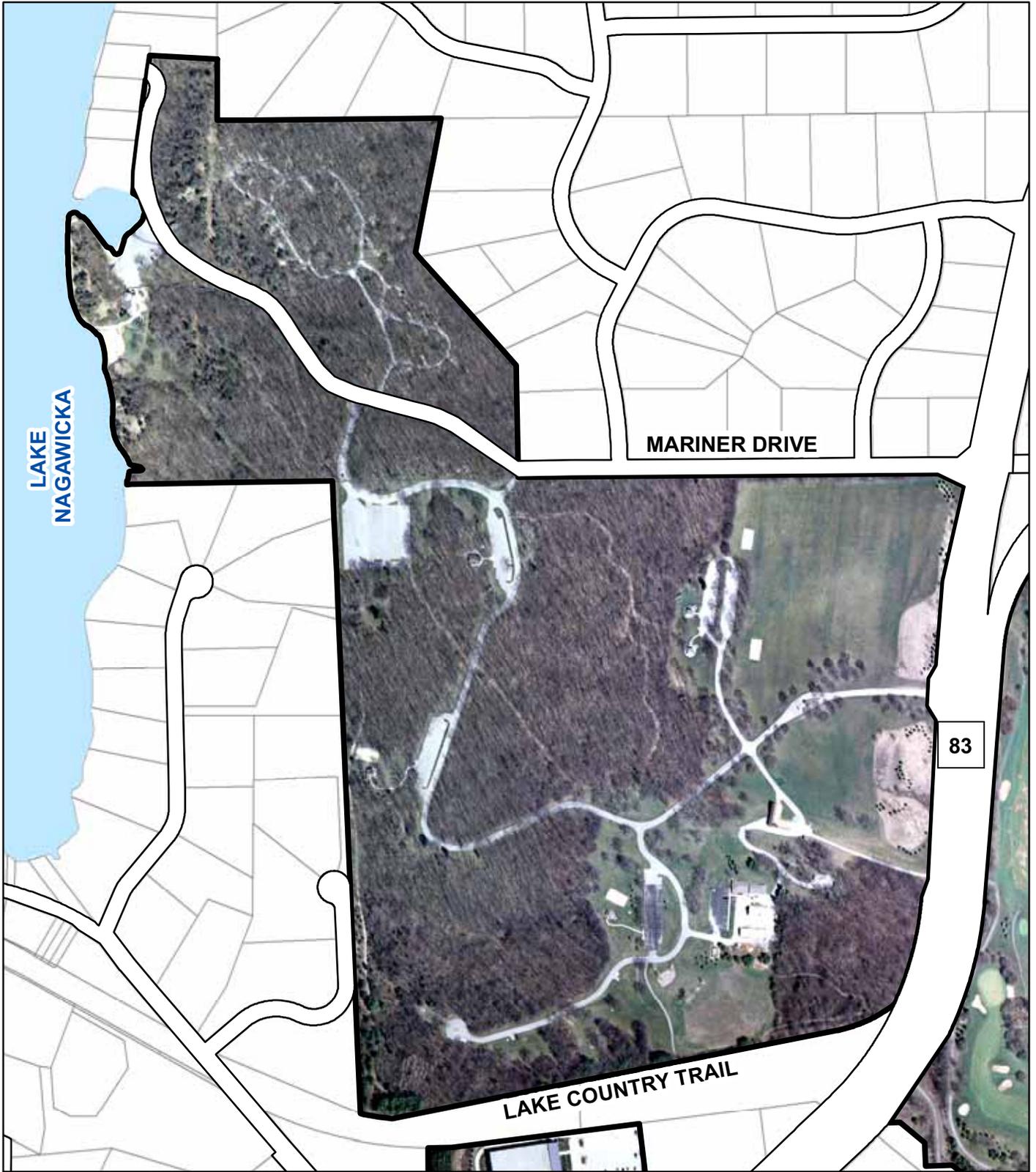
- |                                    |                           |
|------------------------------------|---------------------------|
| ☑ Beach                            | ☑ Primitive camping       |
| ☑ Bicycling                        | ☑ Running or jogging      |
| ☑ Bird-watching                    | ☑ Seasonal special events |
| ☑ Day Hiking                       | ☑ Snow/Ice activities     |
| ☑ Family gathering                 | ☑ Snowshoeing             |
| ☑ Geocaching                       | ☑ Swimming                |
| ☑ Horseback riding on trails       | ☑ Swimming lessons        |
| ☑ Horseshoe                        | ☑ Urban fishing program   |
| ☑ Kayak lessons                    | ☑ Volleyball              |
| ☑ Nature-based educational program | ☑ Walking for pleasure    |
| ☑ Picnicking                       |                           |

**Planned Park Activities:**

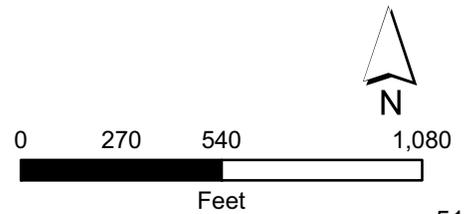
- Picnic activity packs
- Retzer Nature Center educational programs
- Seasonal special events
- Snowshoe rentals

**Park System Connection:**

To the South of the Park entrance is the Muskego Lakes Trail that would connect with the Fox River Greenway and Trail.



Naga-Waukee Park





**Waukesha County  
Park System**

## **2008-2012 Park and Open Space Plan**

### **Naga-Waukee Park**

**Location:** Town of Delafield Sections 15, 16, 21 & 22

**Address:** 651 STH 83, Hartland

#### **Acquisition (History):**

##### **414 Acres**

In a 1957 report to the Waukesha County Board of Supervisors, William Nelson, the Executive Director described the four parcels of land between Pewaukee and Nagawicka Lakes proposed for Naga-Waukee County Park “An almost unparalleled and irreplaceable opportunity to establish a park almost in the geographic center of the county, just off the Milwaukee-Madison leg of the Interstate Highway System, providing adequate access to two of the largest lakes in the county, and with 400 acres of magnificent wooded, rolling hills and breathtaking vistas.”

##### **Naga-Waukee Park & Golf Course**

1958- Purchase Florence Yunker 12 Acres

1958- Purchase Harry Larkin 29 Acres

1960- Purchase August Kapchinsky 9 Acres

1960- Purchase Bernard Paulson 164 Acres

1960- Purchase Herman Salen 200 Acres

#### **2000-2007 Accomplishments:**

- \* Revised Park Entrance Signage
- \* Wayfaring Signage
- \* Entrance Hut Improvements
- \* Naga-Wicka Lake Access Improvements
- \* Nemahbin Lake Access Improvements
- \* New Carpenter / Storage Building
- \* Beach House Improvements
- \* Routine Pavement Maintenance
- \* Water Service Picnic Area # 5
- \* Boardwalk to Beach
- \* New road Construction
- \* Roadway Plantings
- \* Carpenter shop and storage building (2007) (Capital Project #200502)

#### **Site Characteristics:**

Naga-Waukee Park is a 414-acre park located in the central portion of Waukesha County, within the City and Town of Delafield. The park includes land along the shoreline of both Pewaukee and Nagawicka Lakes with varying terrain including; rolling open fields, timbered slopes, and marshy wetlands along the interlobate moraine known commonly as the Kettle Moraine. There are several vistas with picturesque views of both Nagawicka and Pewaukee Lakes. The main park area is West of Highway 83, Naga-Waukee War Memorial Golf Course is between Highway 83 and Maple Avenue, and East of Maple Avenue (mostly lowlands) is the Pewaukee Lake Boat

Launch. The Lake Country Recreation Bike Trail is located along the Southern boundary of the Park. The Ice Age Trail follows the West and North edge of the main park area.

The diverse topographical features were created during the glacial age, which enhance the beauty of the site. The park offers a spectacular view of Nagawicka Lake as you meander down the boardwalk to the boat launch or beach. Another boardwalk awaits you as it winds through the trees along the lakefront. It is a splendid view and a great photo opportunity. The oak hickory forest and thick undergrowth define the trails that wind throughout the park, which is home to many different species of wildlife. Many Baltimore Orioles make Naga-Waukee Park their home, as well as Great-Horned Owls.

### **Existing Development:**

- ☑ Barn
- ☑ Beach House - May through September for beach operation only, concession stand, soda machines, indoor restrooms and shower facilities. Reservable September through May for public or private events, refrigerator, hot and cold water, sink, soda machine, indoor restrooms, capacity 20
- ☑ Boat-Launch facilities
  - Pewaukee Lake - four boat launch ramps, boardwalk, toilet facilities, 70 parking stalls
  - Nagawicka Lake - four boat launch ramps, boardwalk, toilet facilities. 49 parking stalls
- ☑ Carpenter Storage Building
- ☑ Family Camping - 33 sites, reservations not accepted, picnic table, fire-pit, outdoor restrooms, water
- ☑ Golf Course -18-Hole, Naga-Waukee War Memorial Golf Course
- ☑ Group Camping - 5 reservation only sites/minimum 8 people, fire-pit, picnic tables, outdoor restrooms, water
- ☑ Hiking trails
- ☑ Legacy Forest - Trees donated in memory / honor of others
- ☑ Maintenance Building
- ☑ Multi-purpose Field - 14 acres, available at Picnic Area # 1 and 2
- ☑ Picnic Shelters- 5 rentable covered shelters,
  - Picnic Area #1: 20' x 30' shelter w/cement base, water, electric, sandpit volleyball w/net, outdoor restrooms, adjacent to multi-purpose field
  - Picnic Area #2: 20' x 30' shelter w/cement base, water, electric, sandpit volleyball w/net, outdoor restrooms, adjacent to multipurpose field
  - Picnic Area #3: 20' x 30' shelter w/cement base, water, electric, sandpit volleyball w/net, outdoor restrooms
  - Picnic Area #4: 20' x 30' shelter w/cement base, water, sandpit volleyball w/net, outdoor restrooms
  - Picnic Area #5: 32' x 40' shelter w/cement base, water, electric, outdoor restrooms
- ☑ Swimming beach -130 feet of sand beach, swimming only when lifeguards are on duty
- ☑ Trail Connections:
  - Lake Country (Bicycling & Hiking)
  - Ice Age Trail systems

### **Planned Development:**

Update Natural Management Plan  
Resource Management Plan  
2013 Restroom upgrades (Capital Project # 200505)  
Color-coded looped trail system  
Campground upgrade for RV Sites  
Sledding hill

### **Park Activities:**

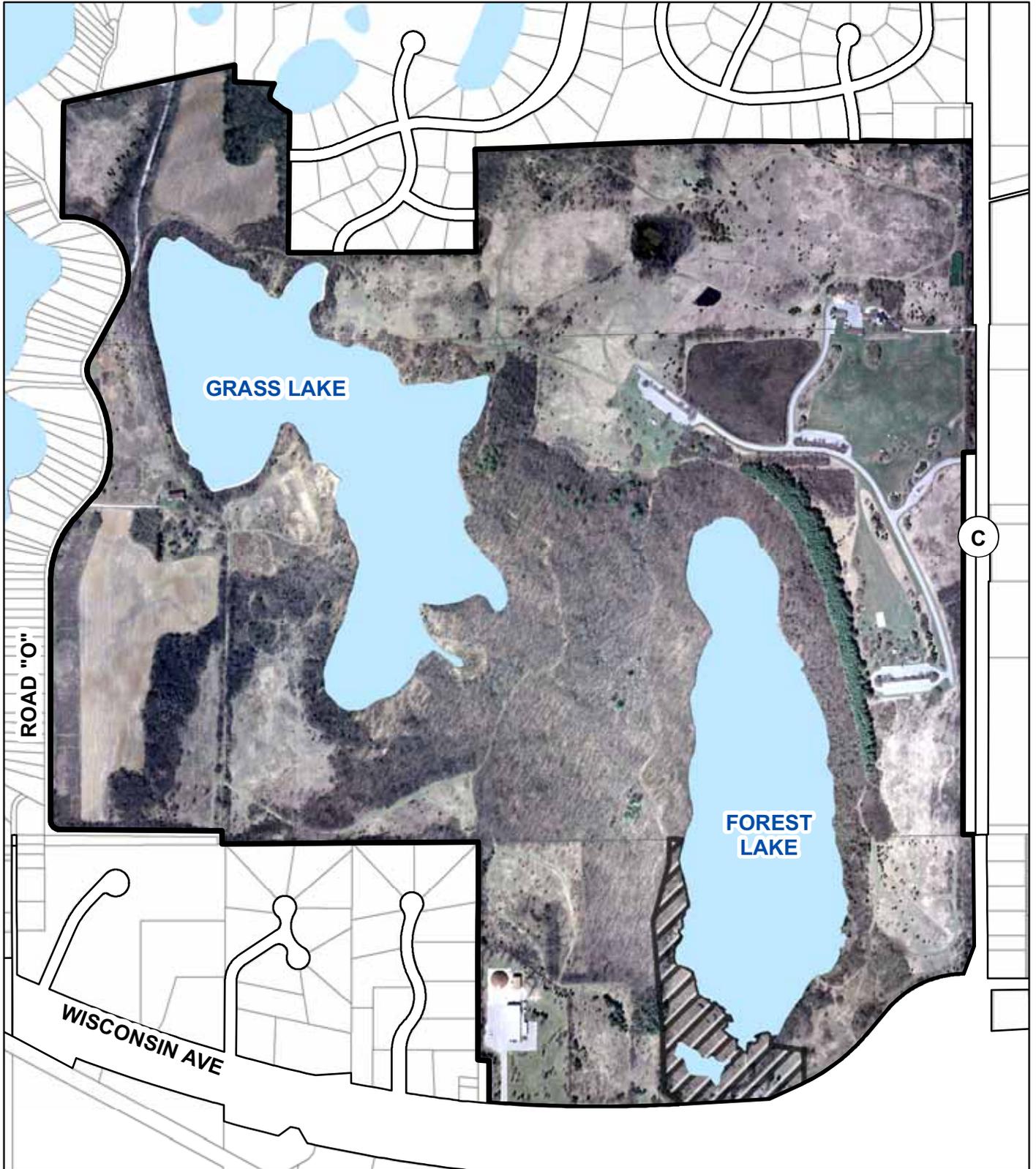
- Beach
- Bicycling
- Bird watching
- Boating
- Camping
- Cross-country skiing
- Day Hiking
- Family gathering
- Fishing
- Geocaching
- Ice activities
- Kayaking
- Motor boating
- Nature-based educational program
- Picnicking
- Primitive camping
- Running or jogging
- Sailing
- Snow/Ice activities
- Snowshoeing
- Seasonal special events
- Swimming
- Swimming lessons
- Use of personal watercraft
- Walk for pleasure

### **Planned Park Activities:**

- Sledding

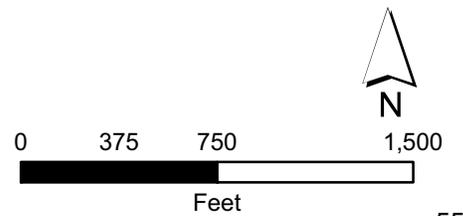
### **Park System Connection:**

Existing segments of both the Ice Age Trail and the Lake Country Trail also traverse the park. Naga-Waukee War Memorial Golf Course, Naga-Waukee Ice Arena, Nagawicka and Pewaukee Lake accesses are all connected to the park.



Nashotah Park

 Acquisition Interest





## **2008-2012 Park and Open Space Plan**

### **Nashotah Park**

**Location:** Section 31 Merton Township; Section 6 Delafield Township

**Address:** W330 N5113 CTH C, Nashotah

#### **Acquisition (History):**

Purchased in 1971, the park opened in 1977

#### **444 Acres**

1972 – Purchase Edwin Gallun Et Al, 420 Acres

1974 – Purchase George Nicholas et al, 24 Acres

#### **Acquisition Interest:**

9.5 acres – Area on the South end of Forest Lake would connect the parkland and provide for access to Forest Lake.

#### **Site Characteristics:**

Nashotah Park consists of 444 acres nestled between the Village of Nashotah and the Town of Merton. The park consists of rolling hills, woodlands, wetlands, grasslands and two small lakes. Nature trails lead through easily identifiable landscape types, created by the last glacial advance over 10,000 years ago. Eight glacial remnant terrains exist within the park, which are a natural lake system, an oak forest, an oak savanna (an area sparsely populated with trees), a cedar glade, a floating leaf marsh, a meadow, a shallow marsh, and a deep marsh. Due to the variety of landscapes, outstanding arrays of songbirds flourish here. The scenery comes alive with different colors each season. The park continues to thrive in winter months for cold-weather enthusiasts who treasure mornings and afternoons spent on miles of groomed cross-country ski and snowshoe trails.

#### **Existing Development:**

- Barn (Beaumont)
- Cross Country Ski Trails
- Legacy Forest - Trees donated in memory / honor of others
- Maintenance Building
- Multi-Purpose Field - 3.5 acres of mowed turf, outdoor pit toilets
- Picnic Shelters - 2 rentable, 20'x 30' covered shelters with cement base includes, sandpit volleyball w/net, outdoor restrooms, large grill, 20 picnic tables
  - Picnic Area #1: electricity, water, horseshoe pit
  - Picnic Area #2: water, grassy volleyball area
- Rentable Ag Land – 19 acres
- Storage Building
- Turf and wood chipped trails -
  - Red Trail 1 mile (most difficult)
  - Blue Trail 1.5 mile (easiest)
  - Green Trail 3.5 miles (intermediate)
  - Winter hiking, dog walking and snowshoe trail (3.5 miles)
  - Nature trail
- Winter Sledding Hill

## Natural Management Plan:

The Conservancy Area for Nashotah Park covers 138.4 acres. Most of this is a hardwood forest of varying quality. There are two wetland areas of high quality and scattered sites of oak woodland, oak savanna and prairie that show great promise. Forest and Grass Lake are maintained in their natural state as most lake shorelines in Waukesha County are developed. The only developments around the lakes of Nashotah Park are trails and one carry-in boat launch. Many plants and animals benefit from these pristine lakes and this is one of the most diverse and unique landscapes in the Waukesha County Park System. The surrounding areas will focus mainly on buffering forest wildlife while also providing a preferred transition for grassland birds. Immediately adjacent grasslands will provide a “soft” or shrubby edge to the forest border and scattered woody vegetation beyond (Sample and Mossman 1997). Areas next in line will be a mosaic of shorter old-field vegetation and plantings blended with warm season grasses. The shrubby edge borders may eventually succeed into forest themselves. At that time, management strategies will be re-evaluated. There are also some out-and-out old-field grasslands in the north and planted prairie in the east portions of the park.

Nashotah, like most parkland is in the midst of heavy suburban development. Communicating to the public why this area is of high quality and why it is a dry (Xeric) forest or savanna can be an attraction in itself. It is also important for the public to understand the importance of large, intact, functional tracts of contiguous plant communities and how they contribute to landscape scale diversity.

## Planned Development:

Resource Management Plan  
Dog Exercise Area  
Overnight Lodge  
Group and family camping area  
Add electricity to Picnic Area #2  
Restrooms upgrade (Capital Project #200505)  
Natural outdoor amphitheater  
Nature trails and interpretive signage

## Park Activities:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Bird-watching           | <input checked="" type="checkbox"/> Nature-based educational programs |
| <input checked="" type="checkbox"/> Boating (non-motorized) | <input checked="" type="checkbox"/> Picnicking                        |
| <input checked="" type="checkbox"/> Canoeing                | <input checked="" type="checkbox"/> Running or jogging                |
| <input checked="" type="checkbox"/> Cross-country skiing    | <input checked="" type="checkbox"/> Seasonal events                   |
| <input checked="" type="checkbox"/> Family gatherings       | <input checked="" type="checkbox"/> Snow/Ice activities               |
| <input checked="" type="checkbox"/> Fishing                 | <input checked="" type="checkbox"/> Snowshoeing                       |
| <input checked="" type="checkbox"/> Geocaching              | <input checked="" type="checkbox"/> Walk for pleasure                 |
| <input checked="" type="checkbox"/> Kayaking                |   |

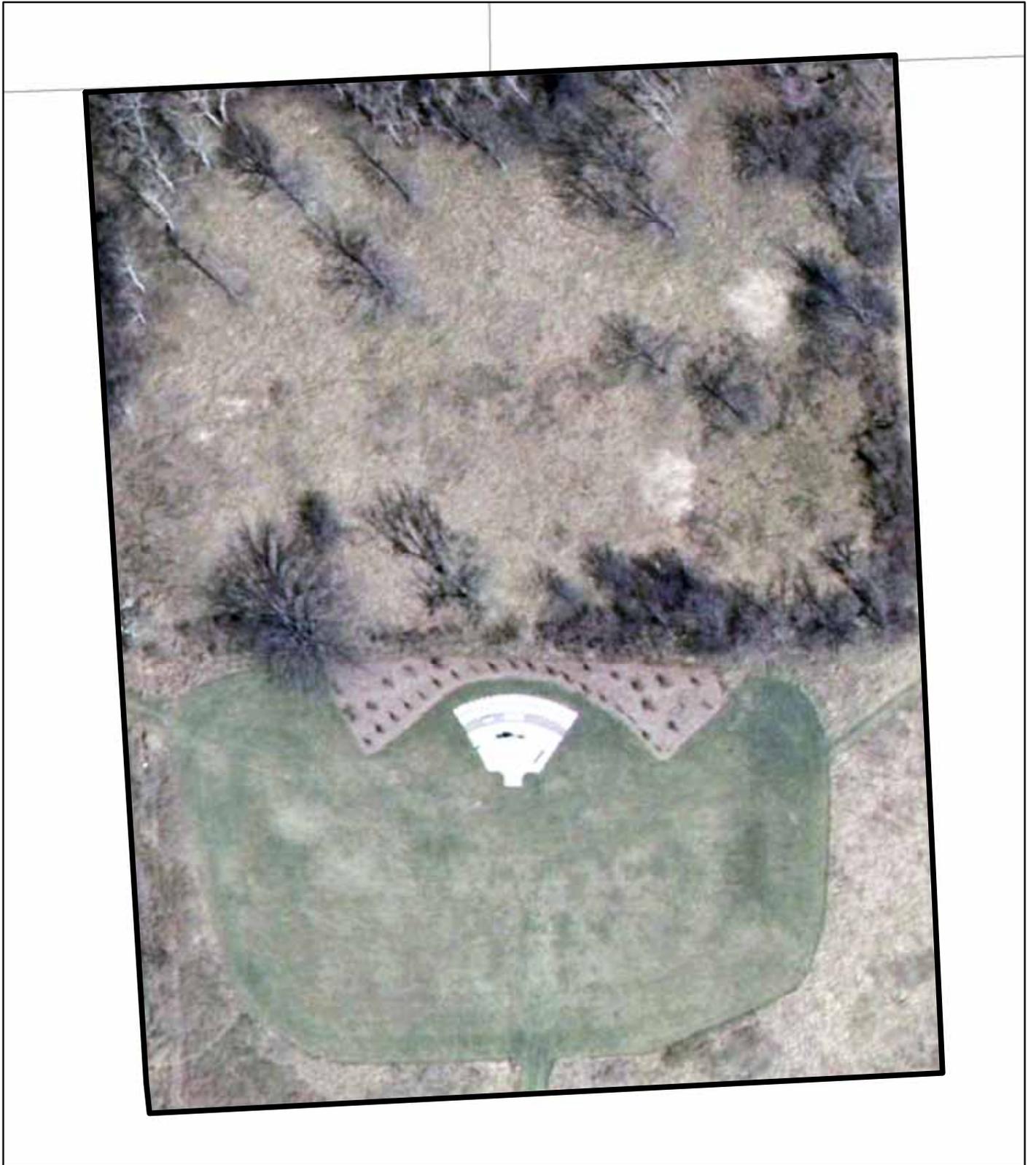
## Planned Park Activities:

Group and family camping  
Guided kayaking and canoeing outings  
Retzer Nature Center educational programs  
Seasonal activities

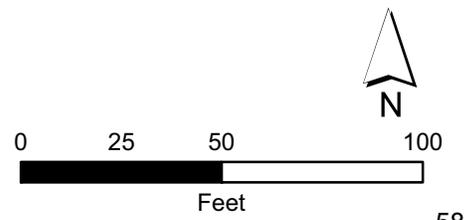
Self-guided nature trails

## Park System Connection:

None



Cemetery Park





**Waukesha County  
Park System**

## **2008-2012 Park and Open Space Plan**

### **Northview Cemetery Park**

**Location:** City of Pewaukee, Section 28

**Address:** 1621 Woodburn Road, Waukesha

#### **Acquisition (History):**

**1 acre**

Previously part of the Northview complex.

#### **2000 – 2007 Accomplishments:**

\* Wednesday September 27, 2000 area was dedicated as a park

\* Benches and Landscaping

#### **Site Characteristics:**

Northview Cemetery Park was a potter's cemetery for the County's Northview Sanitarium. An estimated 319 people were buried.

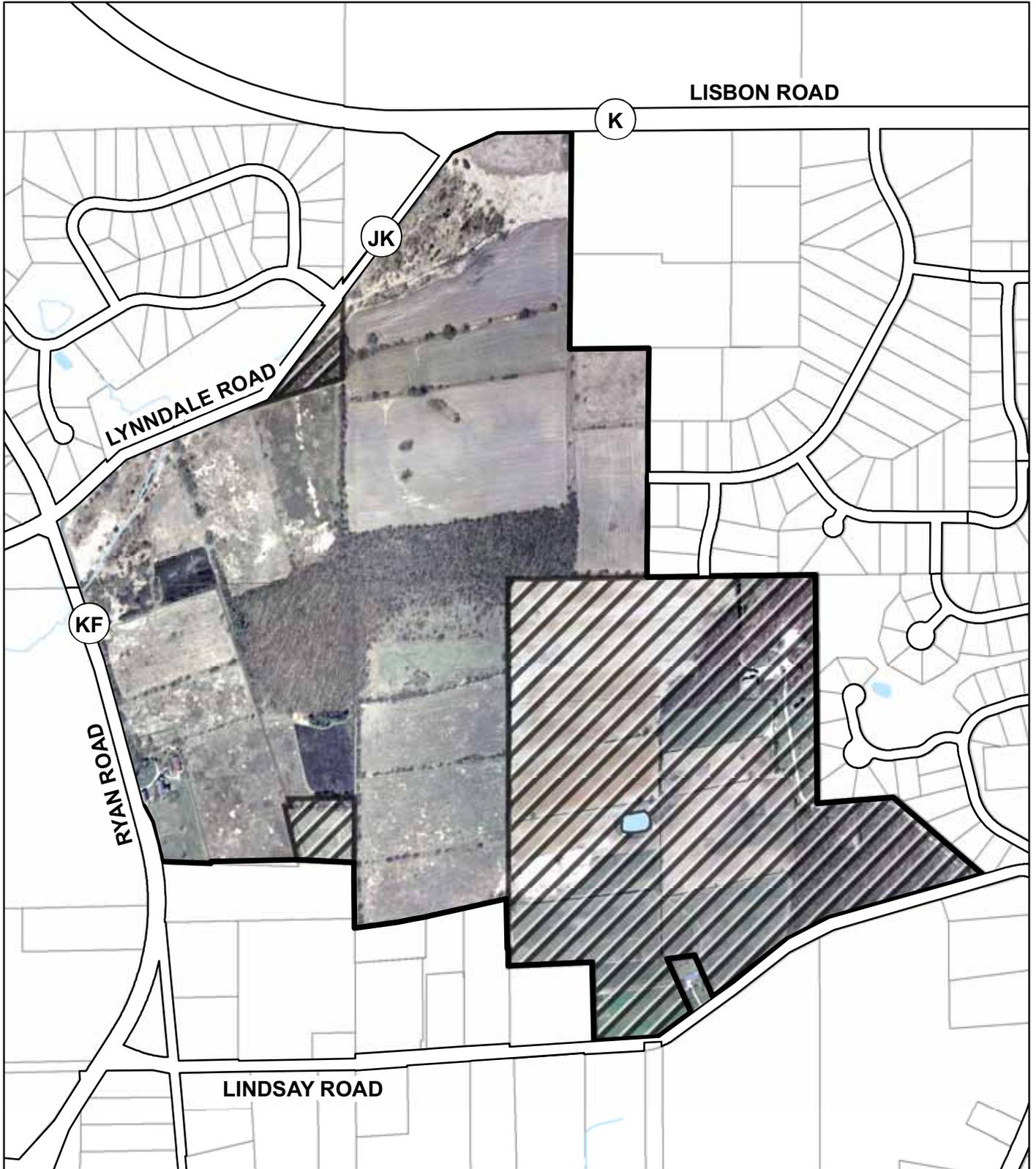
#### **Existing Development:**

- Asphalt parking area at County Highway Facility
- Mowed trail
- Benches
- Monument

#### **Planned Development:**

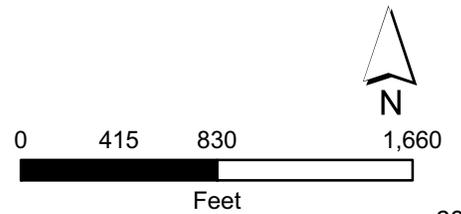
#### **Park Activities:**

- Hiking
- Cultural Education



Ryan Park

 Acquisition Interest





## **2008-2012 Park and Open Space Plan**

### **Ryan Park (Undeveloped)**

**Location:** Town of Lisbon Sections 32 & 33; City of Pewaukee Sections 4 & 5

**Address:** Highway JK (Ryan Road)

#### **Acquisition (History):**

**204 Acres**

1976- Donation Henry Ryan Estate 117 Acres

1995- Purchase Glass 87 acres

#### **Acquisition Interest:**

112 acres

Includes a 3-acre parcel on the south end of the existing park and 99 acres on the southwest corner, which includes sloped wooded area on the east edge.

#### **Site Characteristics:**

Ryan Park is mainly an upland parcel consisting of open old fields, some prairie restoration, and a large wooded area. There is an elevation change of around 100 feet from the south to the north of the property. There are maintained trails for equestrian, dog walking and hiking. There is an old plant nursery remnant in the north section near Hwy JK and Lisbon Road intersection.

In the years 1838-53, Samuel Daugherty owned land where Ryan Park today stands. During 1842, the Daugherty family was host to a run-away slave by the name of Caroline Quarrells for approximately three weeks.

#### **Existing Development:**

- Rentable Ag Land – 51 acres
- CRP Ag Land – 59.6 acres
- Prairie Plant Nursery
- Turf and wood-chipped trails

#### **Natural Management Plan:**

Report filed 2006 (Bourquin/Grimm)

CRP Lands at Ryan Park (Includes: N-2, N-3, M-1, M-2, M-5, M-6, M-7 and M-8) for CRP Contract 2007-2017

Natural Resources Conservation Service Management plan for CRP land:

1. Visual inspection of CRP acres at least once per month, looking for invading woody plants, weed patches, and erosion areas.
2. Removal of woody plants to occur during winter months, December, January, and February, by use of brush mower, chain saw, pruners, and or loppers.
3. Management practices for a CP10 area (Vegetative Cover – grass already established). Control weed infestations in existing vegetative cover before May 15<sup>th</sup> or after July 15<sup>th</sup> by spot mowing and / or spot spraying. If control is needed during the May 15<sup>th</sup> to July 15<sup>th</sup> time period, permission must be obtained from the Farm Service Agency office.

4. Perform required management practices for a CP10 area for cool season grasses through a prescribed spring burn in the 1<sup>st</sup> and 6<sup>th</sup> years of the contract (2008 and 2013) from March 1<sup>st</sup> to May 14<sup>th</sup>. Inter-seed any required areas with Mix C from the Natural Resources Conservation Service Wisconsin Job Sheet 388, which has the following mix:

Purple Prairie Clover: 2 oz  
Black-eyed Susan: 1 oz  
Ox-eye Sunflower: 2 oz  
Stiff Goldenrod: 2 oz  
Round Headed Bush Clover: 2 oz

*Additional Information pertaining to 2007 CRP Contract:*

Under the CRP contract numbers 324 and 325, Waukesha County Parks and Land Use employees will remove woody vegetation on fields 2, 3, and 4 on tract #7773 and field 1 on tract #7772. We will also discontinue mowing of trails and the remaining trails will be removed from the new CRP contract. We will put up trail-closed signs where the discontinued trails begin on the CRP acres.

**Planned Development:**

Update the Natural Management Plan  
Resource Management Plan  
Bridle trail improvements

**Park Activities:**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Bird watching              | <input checked="" type="checkbox"/> Snowmobiling (very North edge along JK) |
| <input checked="" type="checkbox"/> Day hiking                 | <input checked="" type="checkbox"/> Walk for pleasure                       |
| <input checked="" type="checkbox"/> Horseback riding on trails |   |

**Planned Park Activities:**

Improve trail system  
Planting of trees  
CRP land inter-seeding

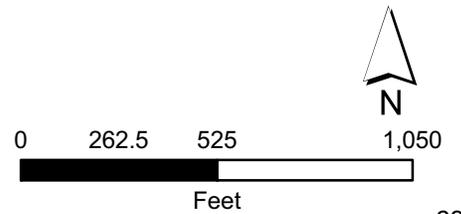
**Park System Connection:**

None



Smith Park

 Acquisition Interest





**Waukesha County  
Park System**

## **2008-2012 Park and Open Space Plan**

### **Smith Park (Undeveloped)**

**Location:** Town of Vernon, Section 33

**Address:** County Highway L

#### **Acquisition (History):**

##### **49.8 Acres**

Donated by Cathryn Smith 1978

“I give, devise and bequeath the wooded area of the farm I own in the town of Vernon, Waukesha County, Wisconsin, consisting of approximately 40 acres to Waukesha County for a public park to be left in it’s wildlife state, provided the said county shall accept the same for said purpose within 180 days after my will is admitted to probate and such park shall be named in memory of myself and my deceased husband, Donald Smith.” – Will of Cathryn Smith

#### **Acquisition Interest:**

97 acres

Includes forested ridges and wet lowlands that connect Smith Park to Fox Bend Park

#### **2000-2007 Accomplishments:**

None

#### **Site Characteristics:**

While the wooded ridge, both on-site, and to the north, has very good wildlife grades, it is only about average as ecological grades go for our regions woodlots (i.e. ecol. Grade based mostly plant communities’ condition compared to pristine characteristics presently expressed in the best remaining regional woodlots). The on-site and adjacent wetlands however are very good for both wetland and ecological grades; this includes on-site and adjacent wetlands south of C.T.H. L. Although this quality does deteriorate to about an ordinary wetland ecological condition for our region, in the vicinity of C.T.H. L about ¼ mile northeast of the site, some upgrading may be possible after closer examination of the non-recent drain-ditch system in the area. The above conditions in combination, suggest that the wetlands form a significant local (town at least) natural corridor with fairly high quality, maintained partly by buffering of adjacent woodlots, old-fields, etc. Such a corridor should normally be preserved for its own merit with at least a minimum of buffering (i.e. at least some natural cover between intensive soil / land used and floodplain- like conditions).

#### **Existing Development:**

Rentable Ag Land – 1 acre

#### **Planned Development:**

Natural Management Plan (yet to be scheduled)

Signage

Mark property corners

## Special Use Areas

Special Use Areas provide citizens facilities that meet educational or recreational needs that are not generally found in the County park areas, Greenways or trail corridors. Within this section of park facilities are the lake accesses, golf courses, ice arenas, nature centers and exposition areas. Some of these areas are located within park areas or greenways but most are stand-alone facilities.

Waukesha County maintains five lake accesses in Waukesha County. A total of forty three-boat access sites located within Waukesha County; of those twelve are carry-in sites along lakes and streams. County-owned lake accesses at Nagawicka, Nemahbin and Pewaukee Lakes have launch fees, the accesses at Ashippun and School Section Lakes are non-fee.

Waukesha County golfers have many choices when it comes to golf courses. There are thirty golf courses located within the county's boundary, nineteen public, seven private and four semiprivate courses. Waukesha County's golf courses provide a venue for any experience level golfer, below are the Waukesha County course ratings.

### ***Moor Downs 9-hole Golf Course***

<u>Tees</u>	<u>Par</u>	<u>Yards</u>	<u>Course Rating</u>	<u>Slope Rating</u>
White	34	2,710	64.9	106
Red	34	2,490	67.2	109

### ***NagaWaukee 18-hole Golf Course***

<u>Tees</u>	<u>Par</u>	<u>Yards</u>	<u>Course Rating</u>	<u>Slope Rating</u>
Blue	72	6,830	71.8	125
White	72	6,501	70.4	122
Red	72	5,817	72.9	125

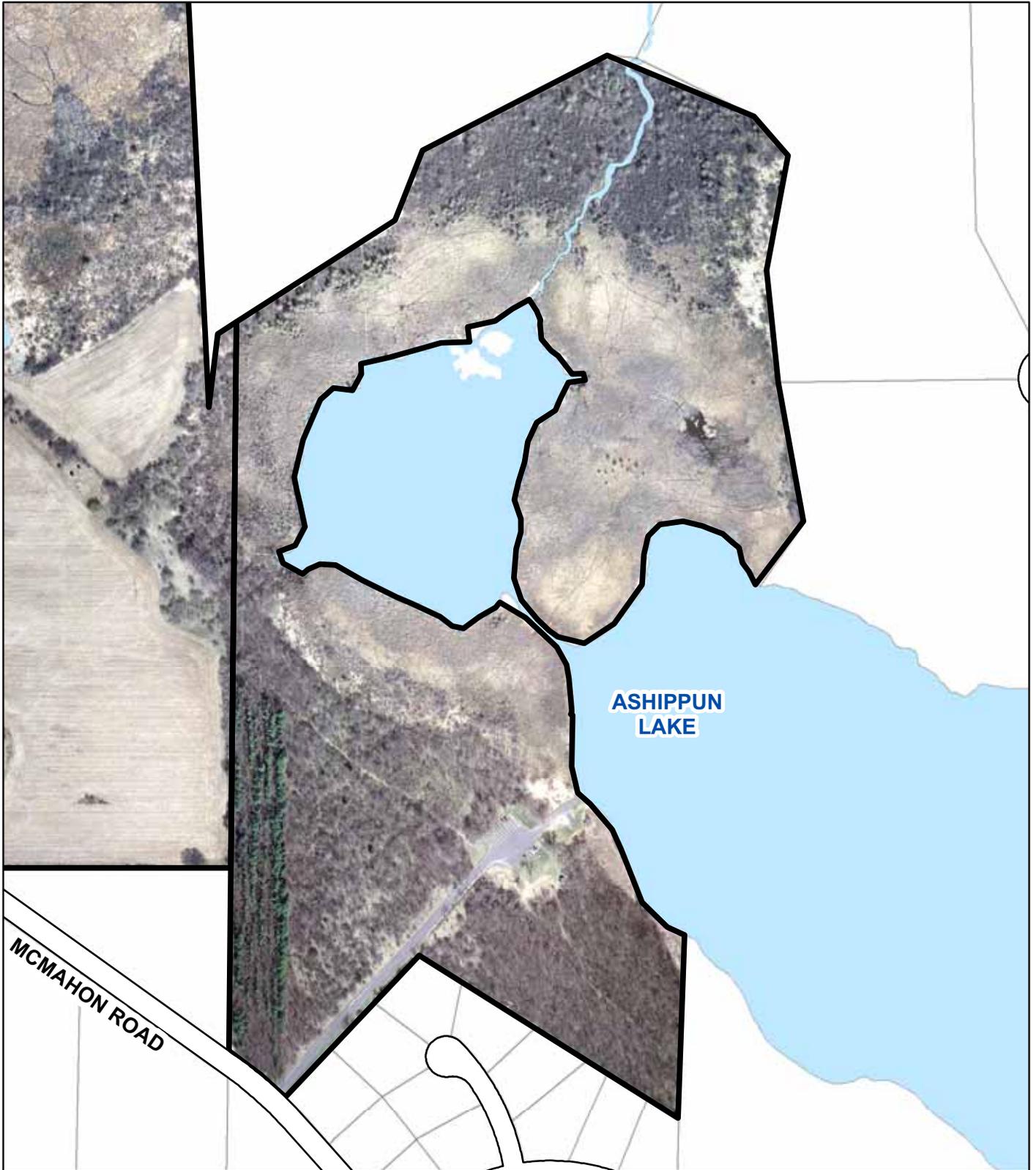
### ***Wanaki 18-hole Golf Course***

<u>Tees</u>	<u>Par</u>	<u>Yards</u>	<u>Course Rating</u>	<u>Slope Rating</u>
Blue	71	6,569	71.4	127
White	71	6,224	69.8	123
Red	70	5,012	69.2	117

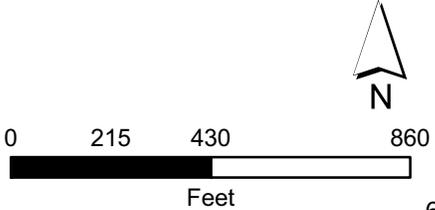
There are four ice arenas located within Waukesha County, The Ponds is privately owned and located in Brookfield, The Mullet Center is associated with the Arrowhead School District in Hartland, Eble Ice Arena operated by Waukesha County in Town of Brookfield and NagaWaukee Ice Arena also operated by Waukesha County in the City of Delafield.

There currently is only one Nature Center in Waukesha County, Retzer Nature Center that is centrally located in the County. The State of Wisconsin received a private home, which they will be turning into a nature center at Lapham Peak State Park in the near future.

Waukesha County Exposition Center serves the area in hosting large events. Music, ethnic and entertainment venues, corporate and club meetings, public marketing and the County Fair all make use of the grounds.



# Ashippun Lake Access





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Ashippun Lake Access**

**Location:** Town of Oconomowoc Section 15

**Address:** McMahan Road, Oconomowoc

**Size:** 20 acres

#### **Acquisition (History):**

State-owned property maintained by perpetual lease to Waukesha County. The agreements between the State of Wisconsin and Waukesha County to develop, operate and maintain a recreational area, was approved and signed in 1967 by the Waukesha County Board.

#### **Site Characteristics:**

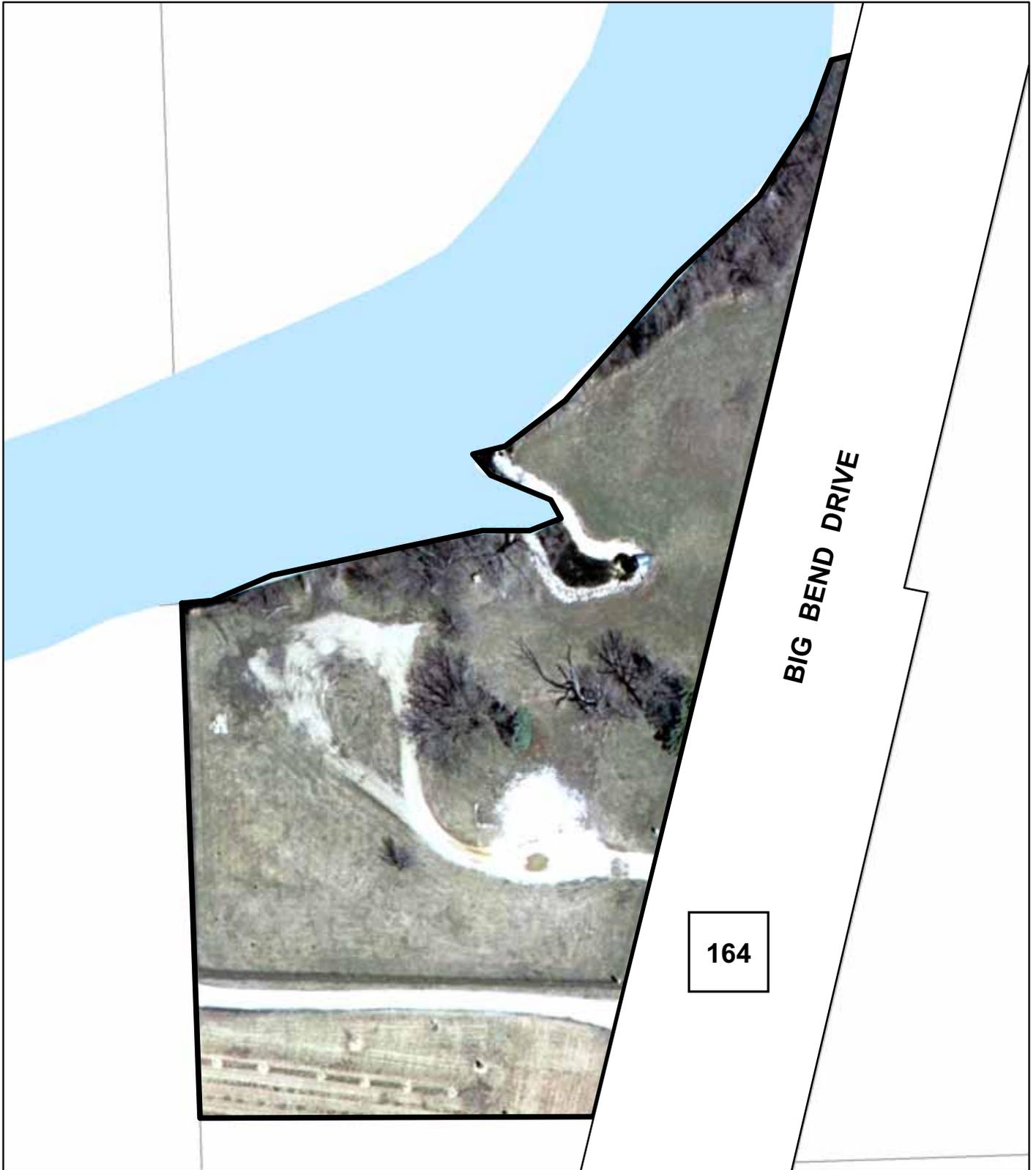
Northwest corner of Ashippun Lake (84 acres) provides an upgraded Lake Access Ramp and Dock (2008) provides access to Ashippun Lake for all boating, canoeing, kayaking, fishing, and hunting activities. Concrete planks that formed the original launch ramp were placed on the ice in the winter of 1967. When the ice melted in the spring of 1968, the planks sank to create the launch ramp.

#### **Existing Development:**

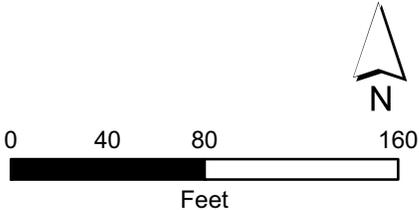
- Pit toilet
- Asphalt parking lot (reconstructed 2005) with parking for eleven vehicles with trailers and ten vehicles without trailers
- Lake access ramp
- Floating Dock
- Picnic shelter

#### **Park System Connection:**

Ashippun Park  
Ashippun River Greenway



Fox Bend River Access





**Waukesha County  
Park System**

## **2008 -2012 Park and Open Space Plan**

### **Fox Bend River Access**

**Location:** Town of Vernon Section 25

**Address:** W224 S9955 Big Bend Road (STH 164), Big Bend

**Size:** 2.9 acres

#### **Acquisition (History):**

2001 Carl R. Olson (2.9 acres)

#### **Site Characteristics:**

Site of a former tavern; tavern building and stage area was removed and land restored in 2001. Area is located along the bank of the Fox River and has Primary Environmental Corridor along the shoreline.

#### **Existing Development:**

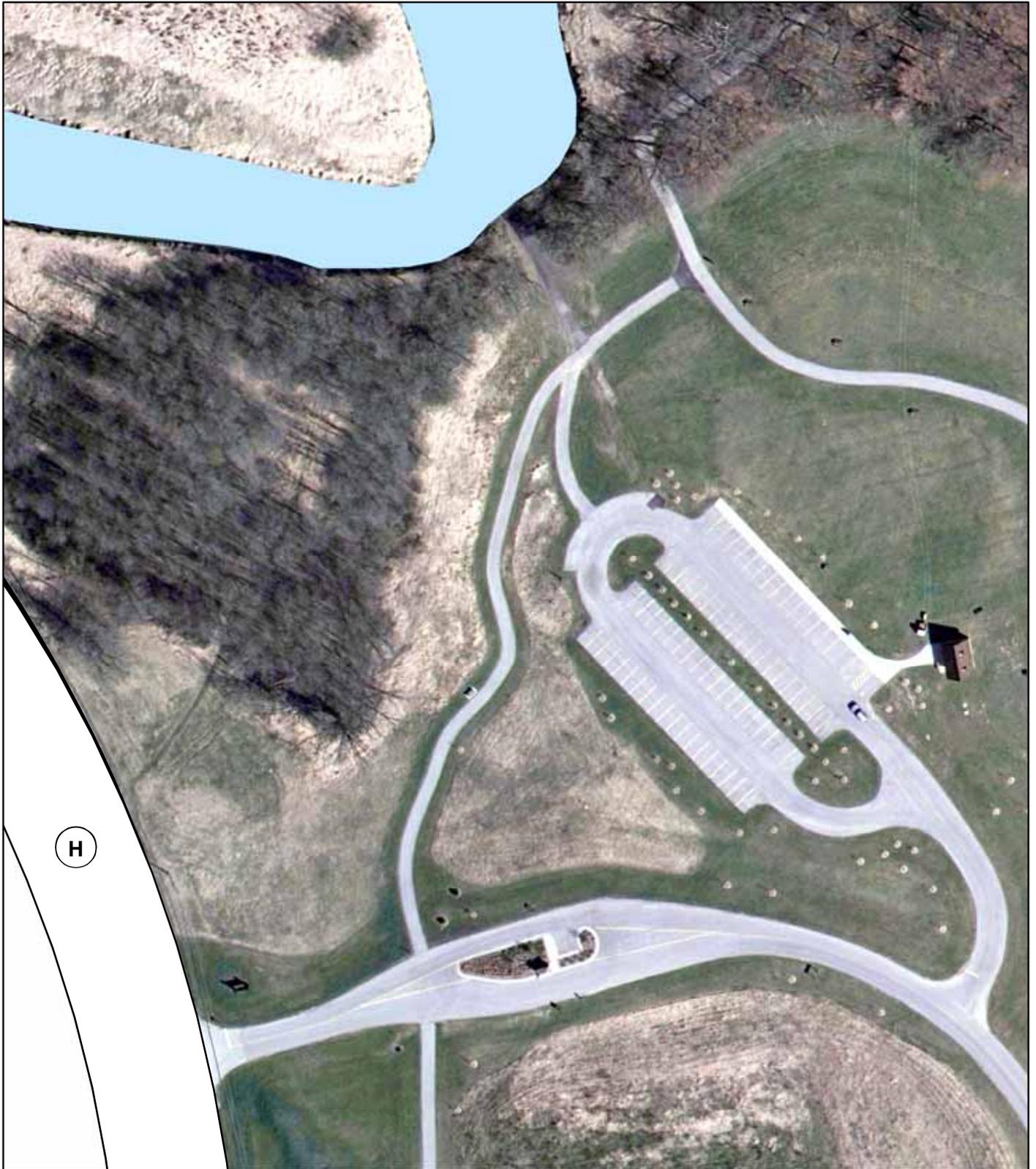
- Gravel drive
- Gravel parking lot

#### **Park System Connection:**

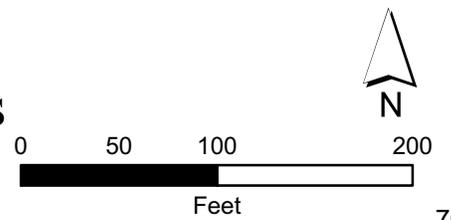
Fox River Greenway

#### **Planned Development:**

Canoe launch  
Restroom building  
Improve parking lot  
Update Master Plan for Fox River Greenway  
Fox River Blue Trail



# Fox River Park River Access





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Fox River Park River Access**

**Location:** Fox River Park; Town of Waukesha Section 20

**Address:** W264 S4500 River Road

#### **Acquisition (History):**

Included with Winzenried property purchased in 1998

#### **Site Characteristics:**

Located within Fox River Park the canoe launch provides carry-in access to the Fox River. Asphalt pad that leads down to the Fox River from the lower parking lot of Fox River Park.

Modern Restroom facilities located at Fox River Park

#### **Existing Development:**

River Access from the lower parking lot to the Fox River was constructed in 2004.

Lower parking lot at Fox River Park has access to a restroom and is trailhead for park.

#### **Planned Development:**

Launch upgrade (2009)

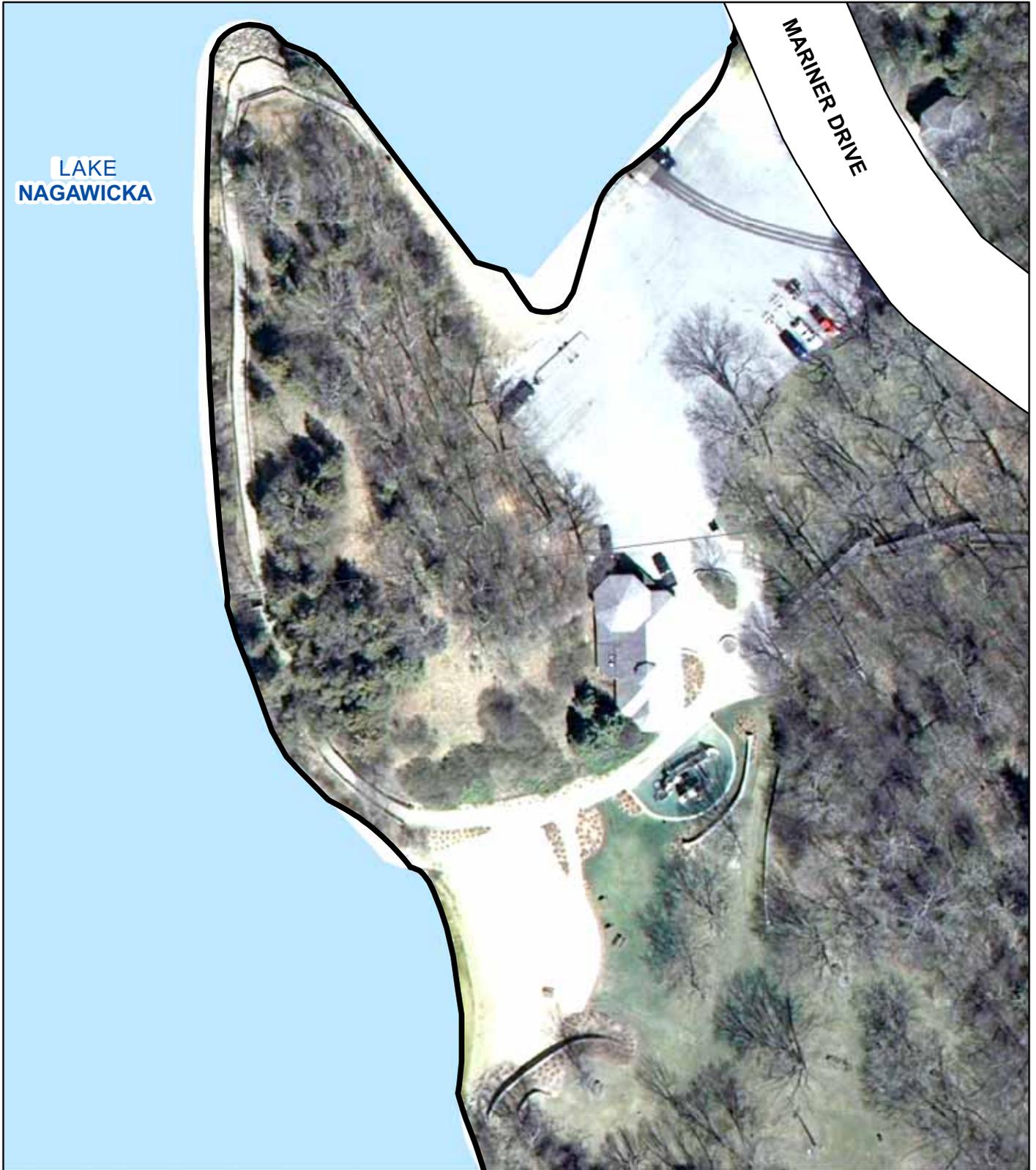
Fox River Blue Trail

#### **Connection to the Park System:**

Fox River Park

Fox River Greenway

Fox River Trail

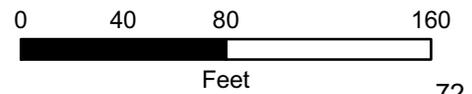


LAKE  
NAGAWICKA

MARINER DRIVE



Naga-Waukee Park  
Nagawicka Lake Access





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Nagawicka Lake Access**

**Location:** Naga-Waukee Park, City of Delafield Section 16

**Address:** 651 Highway 83, Hartland

#### **Acquisition (History):**

Land for boat access was acquired with Naga-Waukee Park in 1960.

#### **Site Characteristics:**

Picturesque Lake Nagawicka is a 917-acre lake. This is the only public access to Nagawicka Lake for all boating, canoeing, kayaking, and fishing activities. Four launch accesses (2001), asphalt parking lot; beach house building provides modern toilet facilities, port-a-johns available in off hours.

#### **Accomplishments 2000-2007:**

New ramps installed (2001)

#### **Existing Development:**

- Parking for forty-two vehicles with trailers (twelve in lower lot, thirty in upper lot). Boardwalk from upper parking lot leading to lake access area.
- Beach house provides seasonal concessions, vending machines, restrooms, and shower facilities during the swim season.

#### **Park System Connection:**

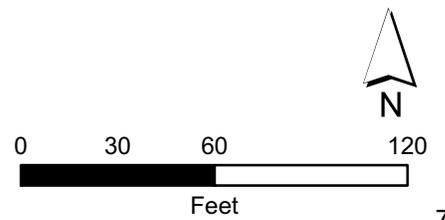
NagaWaukee Park

#### **Planned Development:**

Night Light Improvements



# Nemahbin Lake access





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Nemahbin Lake Access**

**Location:** Located in the Town of Summit Section 24

**Address:** CTH “DR” at Upper and Lower Nemahbin Lake connection

#### **Acquisition (History):**

Acquired from the state for public recreational and park purposes on August 20, 1965.

#### **Site Characteristics:**

Asphalt parking lot, pit toilet, ramp and dock (2005), Upper Nemahbin Lake is 248 acres, Lower Nemahbin Lake is 271 acres, access through a channel to Lower Nashotah Lake. Also provides access to the Bark River.

#### **Accomplishments 2000-2007:**

- Paving parking lot
- New dock and concrete ramp

#### **Existing Development:**

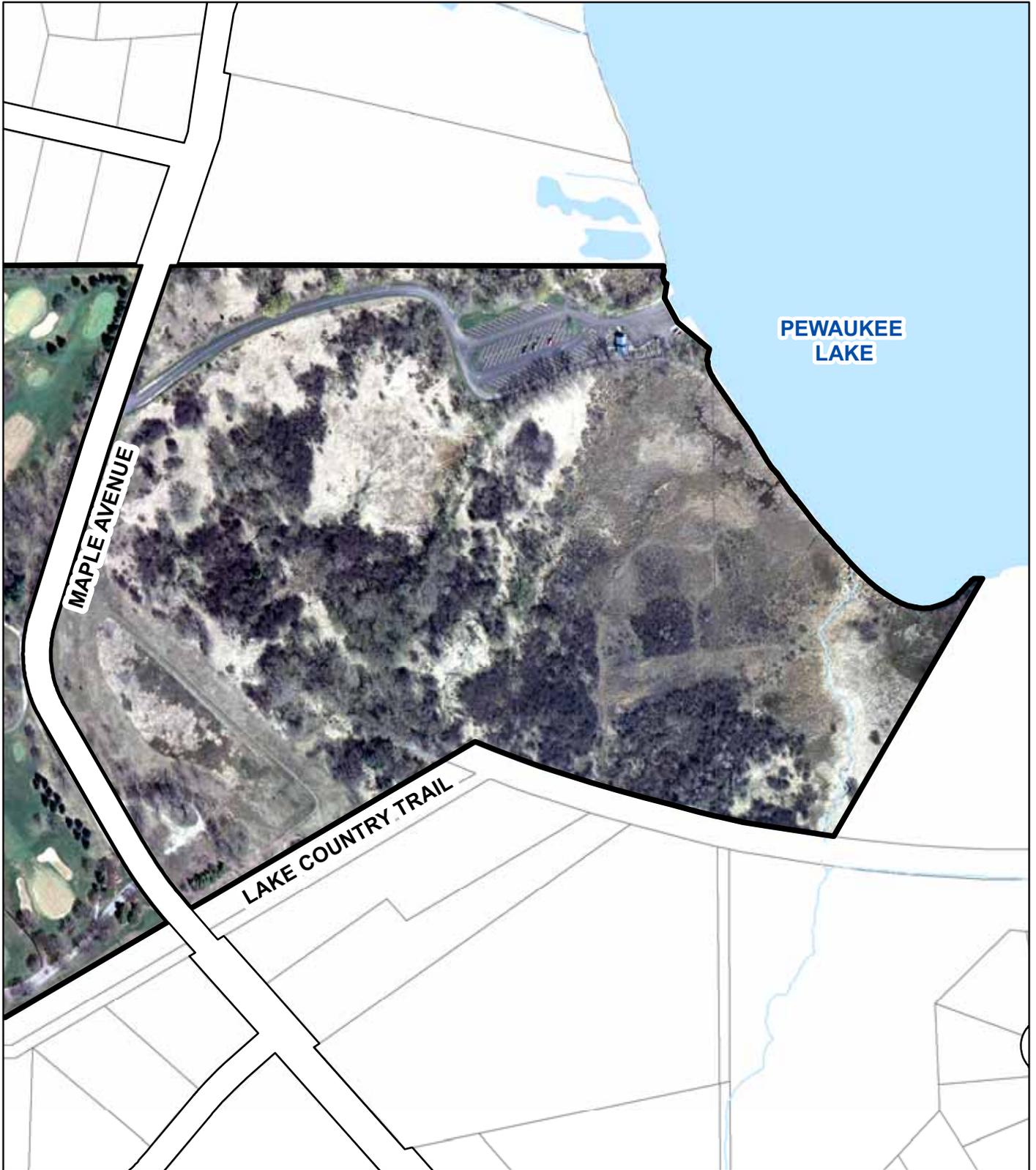
Parking for eleven vehicles with trailers and overflow parking for ten more in west lot.

#### **Park System Connection:**

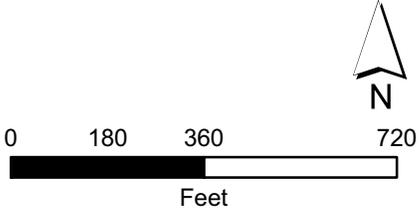
Adjacent to Lake Country Trail

#### **Planned Development:**

Re-vegetate slope between CTH DR and the parking lot.



Pewaukee Lake Access





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Pewaukee Lake Access**

**Location:** Located in the Town of Delafield Section 22

**Address:** Maple Avenue in the Town of Delafield

#### **Acquisition (History):**

Acquired with Naga-Waukee Park in 1960. The contracts were signed November 13, 1963 for construction of the launch access, which was completed in 1964.

#### **Site Characteristics:**

Western end of Pewaukee Lake with access to Maple Avenue.

Four launch accesses asphalt parking lot, modern toilet facilities. Pewaukee Lake is 2,493 acres. This launch site provides access to Pewaukee Lake for boating, canoeing, kayaking, and fishing activities.

#### **Accomplishments 2000-2007:**

Dredging of ramp area

#### **Existing Development:**

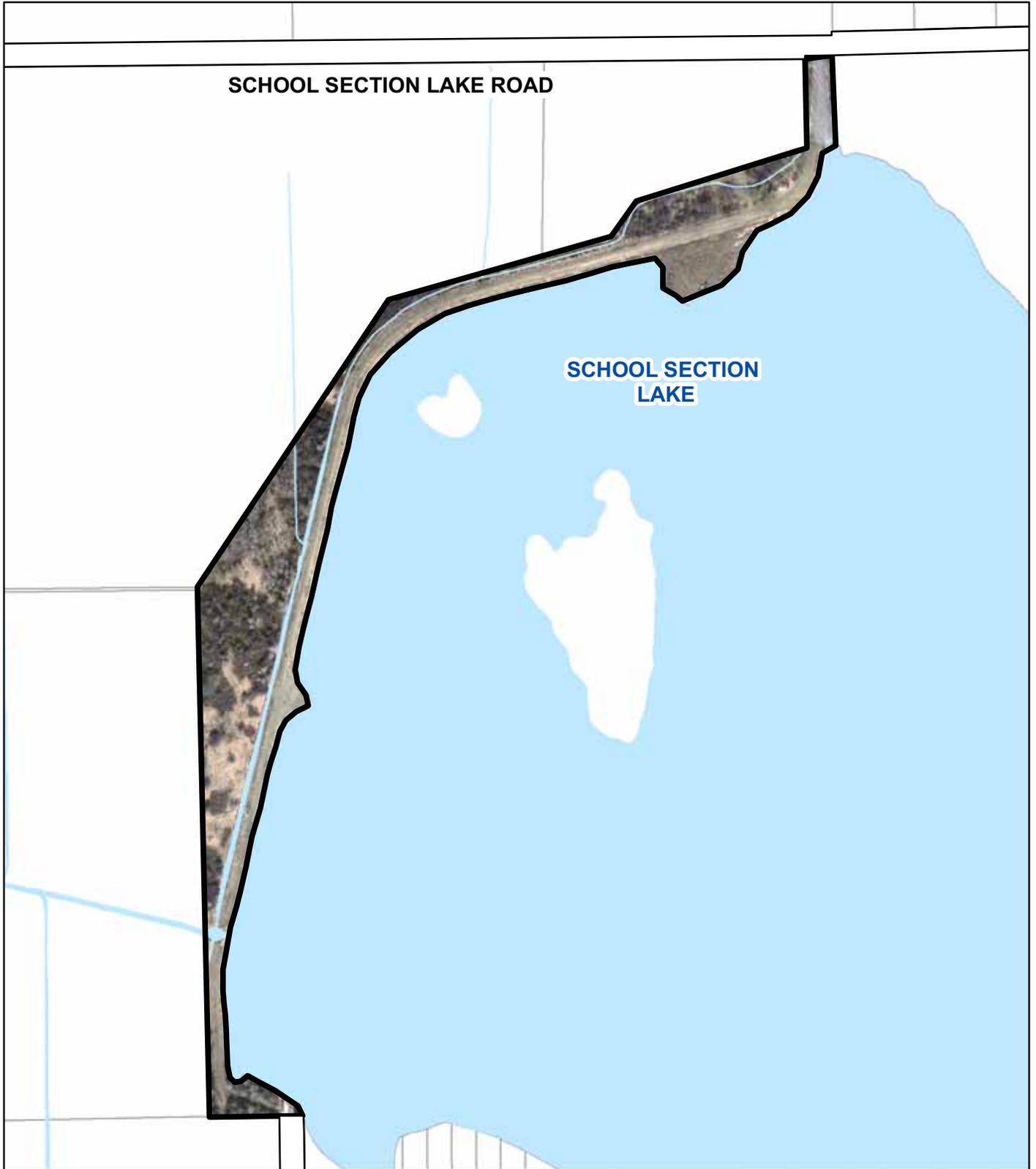
Parking for seventy-two vehicles with trailers and fourteen vehicles without trailers

Restroom building with a vending machine.

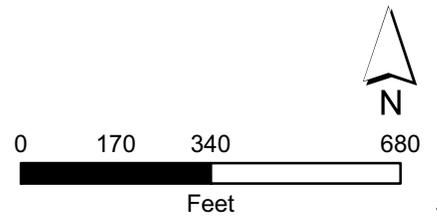
#### **Planned Development:**

Parking lot upgrade

Boardwalk and pier upgrade to more sustainable material



# School Section Lake Access





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **School Section Lake Access**

**Location:** Located in the Town of Ottawa NE corner of Section 17

**Address:** North end of School Section Lake with access off School Section Lake Road

#### **Acquisition (History):**

The parcels that now make up the School Section Lake Access were purchased in 1935, the first county park area in Waukesha County. On December 12, 1935, the Waukesha County Park Commission passed a resolution that the Park Commission proceed to purchase land for the School Section Lake dam and dike project. In 1938, the completed project resulted in lake levels that allowed boat access to the lake.

#### **Site Characteristics:**

Asphalt parking lot, pit toilet, metal grate access, and dock. School Section is a 117-acre lake. This is the only public access to School Section Lake for boating, canoeing, kayaking, and fishing activities.

#### **Existing Development:**

Parking for four vehicles with trailers

Pit Toilet

#### **Accomplishments 2000-2007:**

Pave parking lot

New dock

#### **Park System Connection:**

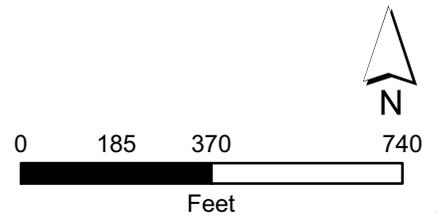
Future connection to Scuppernong Trail

#### **Planned Development:**

Launch upgrade



# Moor Downs Golf Course





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Moor Downs Golf Course**

**Location:** City of Waukesha, Section 34

**Address:** 438 Prospect Avenue, Waukesha

#### **Acquisition (History):**

**77 Acres**

1972 – Tax deed Mount St. Paul College –77 acres

#### **2000-2007 Accomplishments:**

- \* Rebuild Clubhouse and Garage
- \* 3 Legacy Forest Plantings
- \* Routine Pavement Management

#### **Site Characteristics:**

Constructed in 1915 as part of the Moor Bath Hotel and Spa property. 9-hole golf course; Clubhouse, renovated in 2006, includes a pro shop, golf lessons, meeting room, porch, fireplace, food and beverage service, restrooms, locker facilities, club and cart rentals, and cart storage building.

#### **Existing Development:**

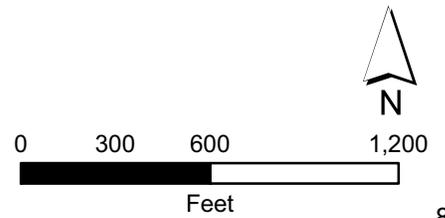
- 9-hole golf course, small to medium sized greens, rolling terrain, water hazards and mature trees
- Putting green
- Pro shop
- Asphalt parking lot (with additional parking at HHS)
- Clubhouse is a City of Waukesha historical building. It is part of the Administration Campus

#### **Planned Development:**

- Expand third tee towards HHS
- Fairway bunker installation on 4, right side
- Automated irrigation system
- Replacement of Box Elder trees with Oaks and Maples
- Renovation of eighth fairway
- Should be considered under the Master Plan for the entire campus
- Seasonal rentable meeting room
- Swale improvements
- Golf Course sustainability (reduce maintenance costs)



# Naga-Waukee Golf Course





## **2008 – 2012 Park and Open Space Plan**

### **Naga-Waukee War Memorial Golf Course**

**Location:** Town of Delafield, Section 22

**Address:** W307 N1897 Maple Avenue (CTH E), Pewaukee

#### **Acquisition (History):**

208 acres acquired in 1960 as part of NagaWaukee Park

#### **2000-2007 Accomplishments:**

- \* Built Pumphouse
- \* Landscape Lighting
- \* Redeck bridge between #11 green and #12 tee
- \* Routine Pavement Maintenance
- \* No Mow Meadows

#### **Site Characteristics:**

208-acre course is located within Naga-Waukee Park between Highway 83 and Maple Avenue. Golf course construction started in 1964, opened June 1, 1966. Designed by golf course architect Lawrence Packard, an 18-hole championship golf course laid-out in the hills of the mid-Kettle Moraine. Large, undulating, well-bunkered greens, wide irrigated fairways, and a well-drained course with unforgettable views of Pewaukee Lake make for an enjoyable round of golf for all skill levels. The course also includes a driving range and putting green. The Lake Country Recreation Trail runs along the south border of the property.

#### **Existing Development:**

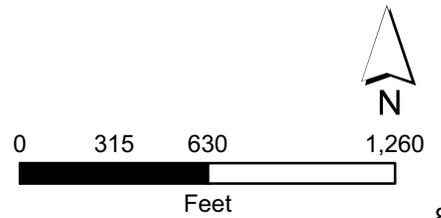
- Clubhouse (1984), pro shop, food and beverage service, which includes beverage cart and banquet services, patio seating, restrooms, and locker facilities with showers, irrigation system, club and cart rental, golf lessons.
- The golf course does host a variety of leagues and tournaments.
- Maintenance and soil storage buildings built in 1997.

#### **Planned Development:**

- Buckthorn and honeysuckle control throughout woods areas
- New forward tee on 5 (near the service road)
- New forward tee on 7
- Planting by 8 blue tee in the middle of the turnaround
- New forward tee on 14
- Expand white and blue tee surfaces on 14
- Fairway bunker renovation on 15
- Continuous cart path
- Flush toilets on front and back nines
- Clubhouse site plan to include patio refinishing, arbor, lighting and plantings.
- Naturalizing areas of the golf course
- Front entrance area plantings and redevelopment
- Entrance drive lighting – explore solar
- Rock Garden Improvements



Wanaki Golf Course





## **2008 – 2012 Park and Open Space Plan**

### **Wanaki Golf Course**

**Location:** Village of Menomonee Falls, Section 31

**Address:** N50 W20830 Lisbon Road (CTH K), Menomonee Falls

#### **Acquisition (History):**

##### **152 Acres**

Purchased in 1967 as Oakwood Park, a 152 Acre partially completed, 18-hole championship golf course. The county opened the course in 1970.

#### **2000-2007 Accomplishments:**

- \* Cart Paths
- \* 4 Legacy Forest Plantings
- \* Routine Pavement Maintenance
- \* Built a Well-house
- \* No Mow Meadows
- \* Landscape Lighting
- \* Practice Driving Cage

#### **Site Characteristics:**

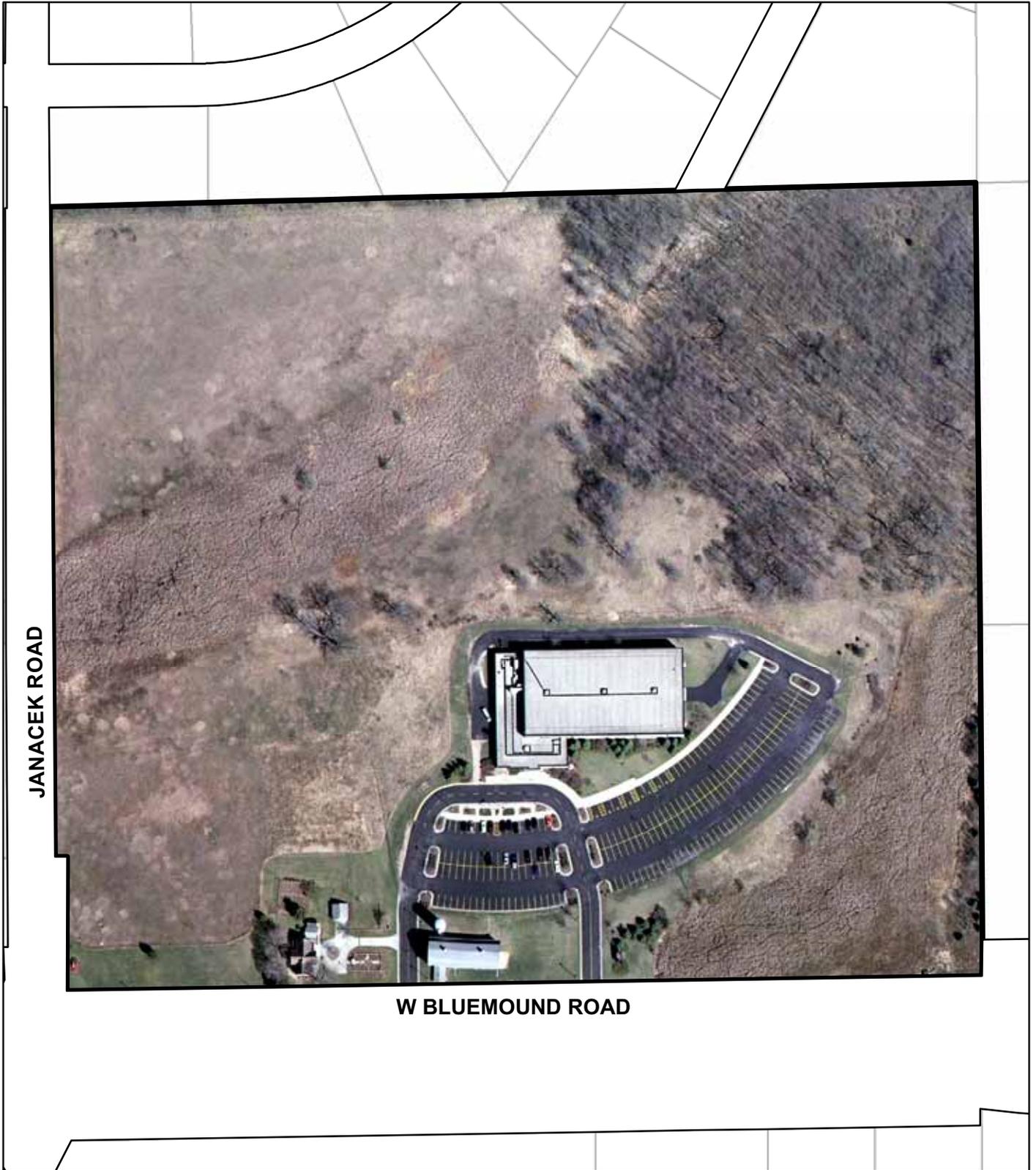
The 152-acre course was constructed from an old sawmill property. The course features well-bunkered greens and fairways, multiple tee box locations, and a continuous cart path on many holes. The Fox River and five ponds come into play on fifteen of the eighteen holes.

#### **Existing Development:**

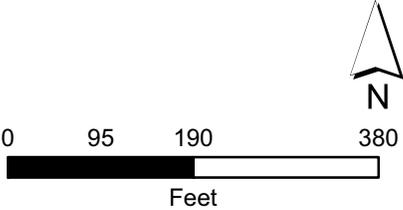
- Clubhouse (1989), pro shop, food and beverage service, which includes beverage cart and banquet services, patio seating, restrooms, and locker facilities with showers, warm-up cage, club and cart rental, golf lessons, and irrigation system. The golf course does host a variety of leagues and tournaments.
- Maintenance Building (1968)
- Soil storage building (2004)

#### **Planned Development:**

- Finish continuous cart path
- Drainage work in high use areas (9 fairway, 15 fairway)
- Buckthorn and honeysuckle control in wooded areas
- Replace woven wire fence surrounding property (different look for a fence)
- Eliminate warm-up cage (could become another putting green)
- Replace existing culvert bridges with span bridges
- Tree planting program to add trees for safety and aesthetic purposes
- Finish drainage/naturalizing plan
- Link to Fox River Greenway Trail



Eble Ice Arena





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Eble Ice Arena**

**Location:** Town of Brookfield, Section 29

**Address:** 19400 W. Bluemound Road, Brookfield

#### **Acquisition (History):**

Eble Ice Arena is located on a 32-acre parcel donated by the Eble family for park and recreation purposes. An organized fund raising effort for one-third of the construction cost received donations by individuals and businesses resulting in over \$680,000 collected to help fund the construction, which opened in December 1988. Hockey associations, figure skating enthusiasts, individual and family donors, and businesses donated the funds.

#### **Site Characteristics:**

35,400 square foot facility located within Eble Park that offers public ice-skating, hockey, figure and other special ice-skating events. A new access (2008) to Janacek Road.

#### **Existing Development:**

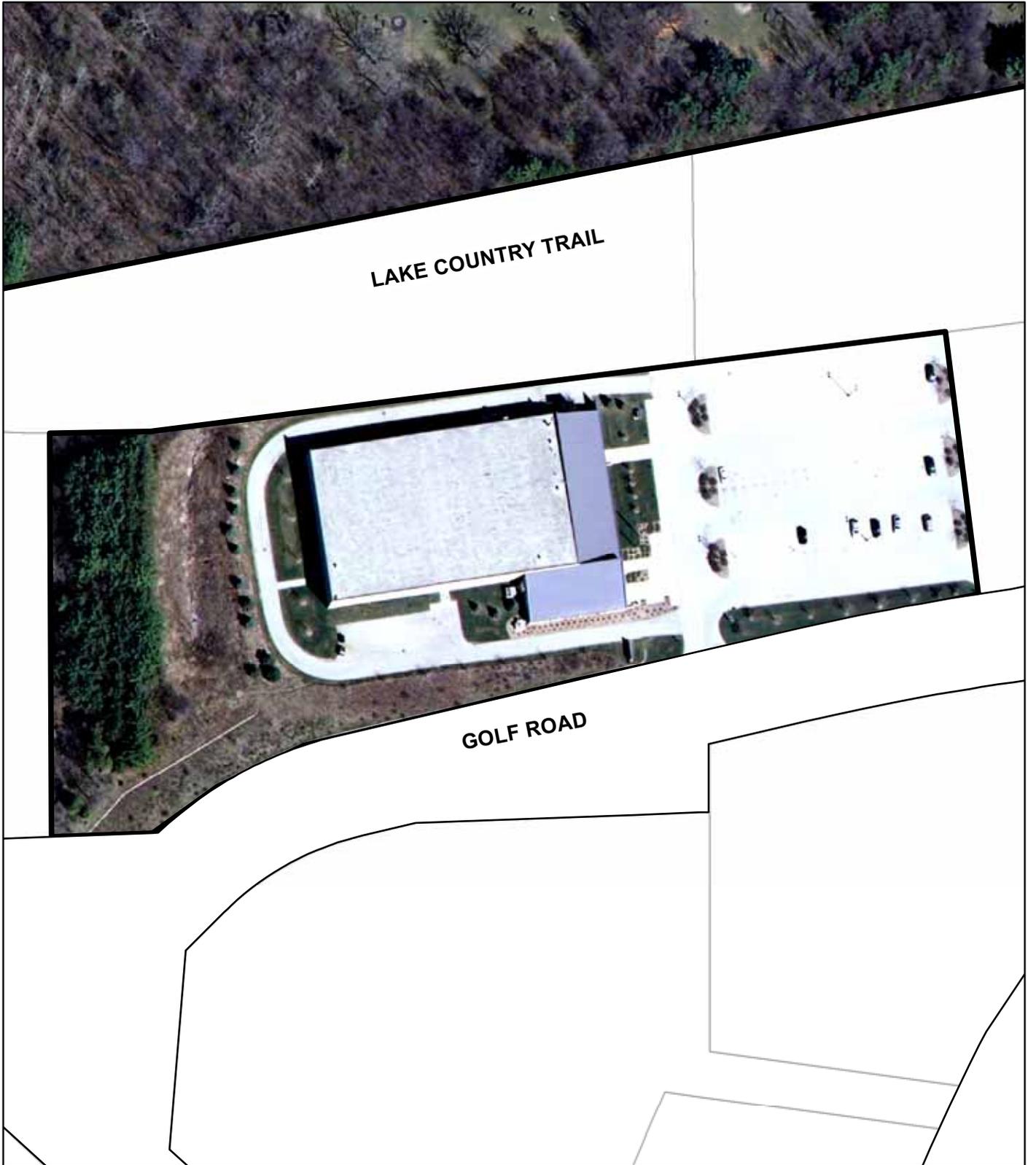
Eble Ice Arena has a National Hockey League size rink (85'x 200') and capacity for 1,200 spectators and offers a concession stand and four locker rooms. The refrigeration system is a direct Freon-based system that flows under the concrete rink floor. 233-car asphalt parking lot, public skating and ice time rentals, skate rentals and sharpening, concessions with seating and arcade, lessons, and team locker rooms.

#### **Planned Development:**

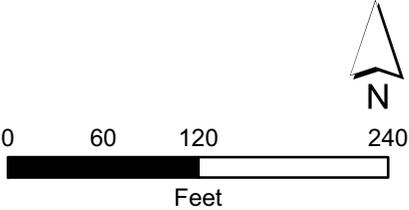
Additional locker/meeting rooms

Interior character development

Consistent co-branding with the Park System



Naga-Waukee Ice Arena





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Naga-Waukee Ice Arena**

**Location:** City of Delafield, Section 21

**Address:** 2946 Golf Road, Delafield

#### **Acquisition (History):**

A public-private partnership formed between the Lakes Area Ice Association Limited, Waukesha County and Wisconsin Department of Transportation. Lakes Area Ice Association Limited generated over \$670,000 through fund raising efforts that went towards the construction cost. Waukesha County Capital Improvement funds in addition to Eble Ice Arena revenue funds provided for the construction of the facility. The Wisconsin Department of Transportation donated one-half of the current parking lot for use by the Ice Arena. Groundbreaking was on June 29, 1995 with the dedication ceremony on January 12, 1996.

#### **Site Characteristics:**

Arena located adjacent to Naga-Waukee Park and the Lake Country Trail. Parking lot shared with the Wisconsin Department of Transportation, Naga-Waukee Park and Ride.

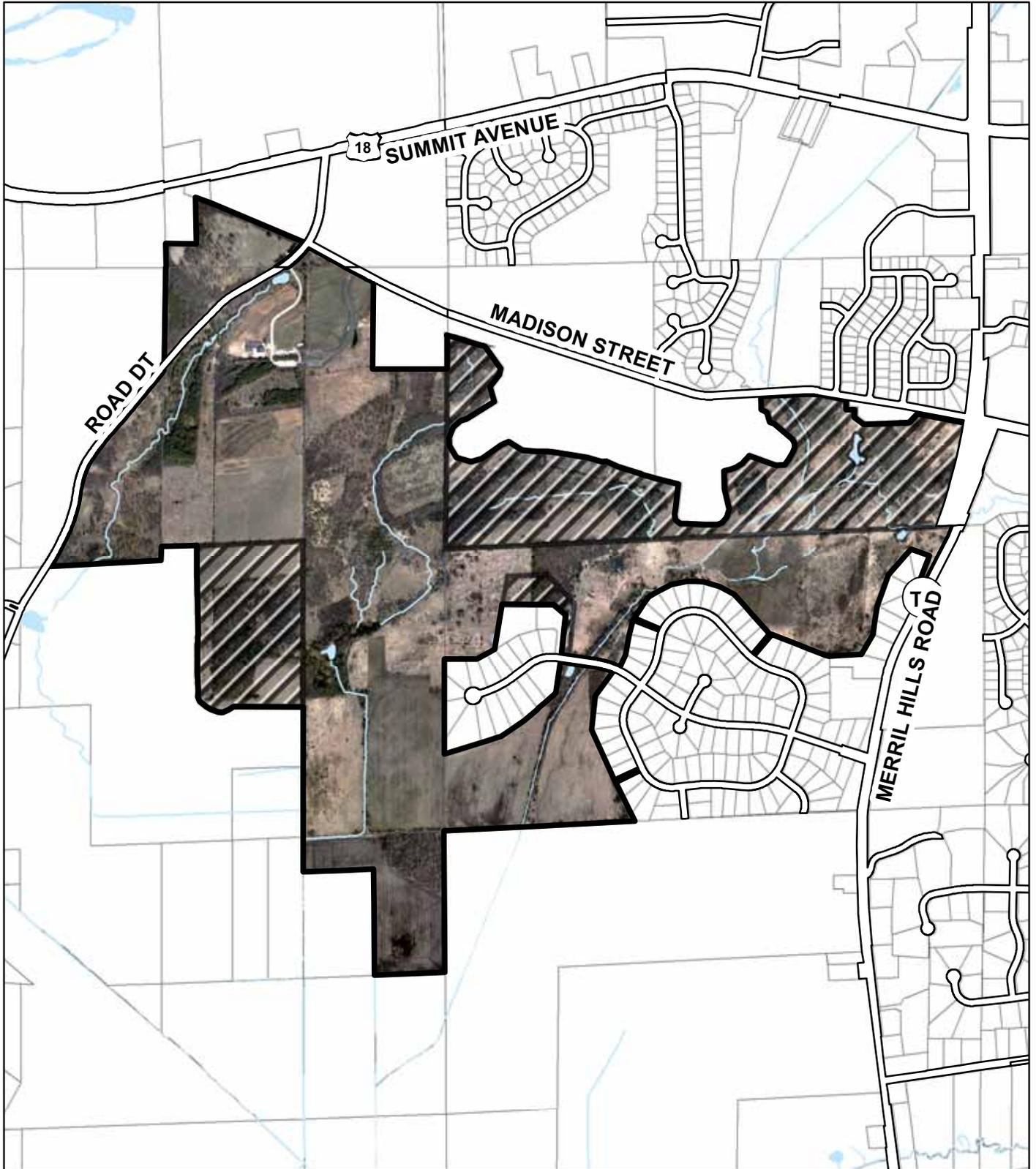
#### **Existing Development:**

Naga-Waukee Ice Arena is 39,319 square feet and features five locker rooms, a concession stand, and spectator seating for 1,100. The rink is an Olympic size sheet (100'x 200') with a sand rink floor. The refrigeration system is an indirect ammonia-based system. Ice Arena also has a meeting room, restrooms, team locker rooms and asphalt parking lot with 140 stalls. Services include public skating, ice time rentals, skate lessons, skate rentals and sharpening, concessions with seating and arcade.

#### **Planned Development:**

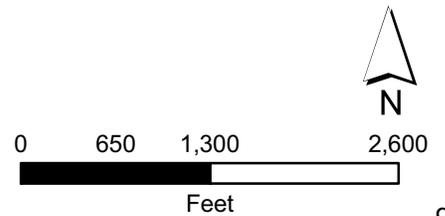
Interior character development

Consistent co-branding with the Park System



Retzer Nature Center

 Acquisition Interest





**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Retzer Nature Center**

**Location:** Town of Genesee, Section 1; Town of Delafield Section 36; Town of Waukesha, Section 6

**Address:** S14 W28167 Madison Street, Waukesha

### **Acquisition (History):**

#### **413 Acres**

1973- Donation Florence Horn Retzer Estate 90.1 acres 77 Acres

1980- Purchased August Sigurdson 24.6 acres

1984- Donation Bryce Styza Kames Terrace, 229.6 acres (formerly the Brown family farm)

1999- Purchase Owen Williams 68.7 acres

### **Acquisition Interest:**

137 Acres

36 acres on the southwest includes a wooded hillside, 97 acres is in the process of dedication from the Howell farms estate subdivision and 4 acres that is part of the Kames Terrace Subdivision.

### **2000-2007 Accomplishments**

- \* Learning Center Expansion
- \* Planetarium addition (Waukesha School District)
- \* New Entrance Road
- \* New Entrance Signage
- \* Wayfaring Signage
- \* 20 Legacy Forest Plantings
- \* Routine Pavement Management
- \* Pergola
- \* Rain Gardens
- \* Entrance Road Plantings
- \* Composting Demonstration
- \* Butterfly Garden

### **Site Characteristics:**

This is a 413-acre educational facility with rolling hills, open fields, woodlands, and wetlands including Brown's Fen, a locally significant natural area. Retzer Nature Center is located near the center of Waukesha County. Retzer Nature Center's natural landscape has been accented by management of quality natural lands and re-establishment of others areas. Planting or re-establishment examples of mesic prairie, dry mesic prairie, mid-grass prairie, xeric prairie, prairie catena and old-field areas are found within the Retzer property. The land also has examples of pine plantations, meadows, thickets, wet forests, shallow/deep marsh and a fen for people to observe. Currently the staff is working on a prairie vista with oak opening as part of the legacy forest program.

The Nature Center focuses on environmental education, natural land management, community restoration, and wildlife habitat improvement. A colorful butterfly and rain garden, a compost demonstration area, children's garden, an oak opening demonstration area greets visitors and complement the education center. The Waukesha School District constructed the Charles Z. Horwitz Planetarium in conjunction with the Learning Center Expansion. The Planetarium compliments the nature programs offered by Retzer Learning Center.

## Existing Development:

- ☑ Original Nature Center was built in 1974, Nature Center expansion including the Waukesha School District's Charles Z. Horwitz Planetarium opened in 2005
- ☑ Observation deck
- ☑ Boardwalks
- ☑ Picnic tables
- ☑ Wood-chipped and turf trails
- ☑ Exhibit areas
- ☑ 700-gallon fresh-water native game-fish aquarium
- ☑ Gift shop
- ☑ Vending machines
- ☑ Room rentals with kitchen facilities
- ☑ Restrooms
- ☑ Planetarium
- ☑ Restored plant communities
- ☑ Wildlife habitat areas
- ☑ Nature trails
- ☑ Accessible Adventure Trail: Local plants, birds and animals are highlighted at 30 interpretive stops along the 800 foot paved trail. Braille signage, additional trail guides and audio MP3 players are available.
- ☑ Hiking trail system
- ☑ Butterfly garden
- ☑ Children's Garden
- ☑ Rain gardens
- ☑ Composting demonstration
- ☑ Prairie nurseries
- ☑ 110-space parking lot with overflow parking for special events
- ☑ 76 acres of rentable farmland

## Planned Development:

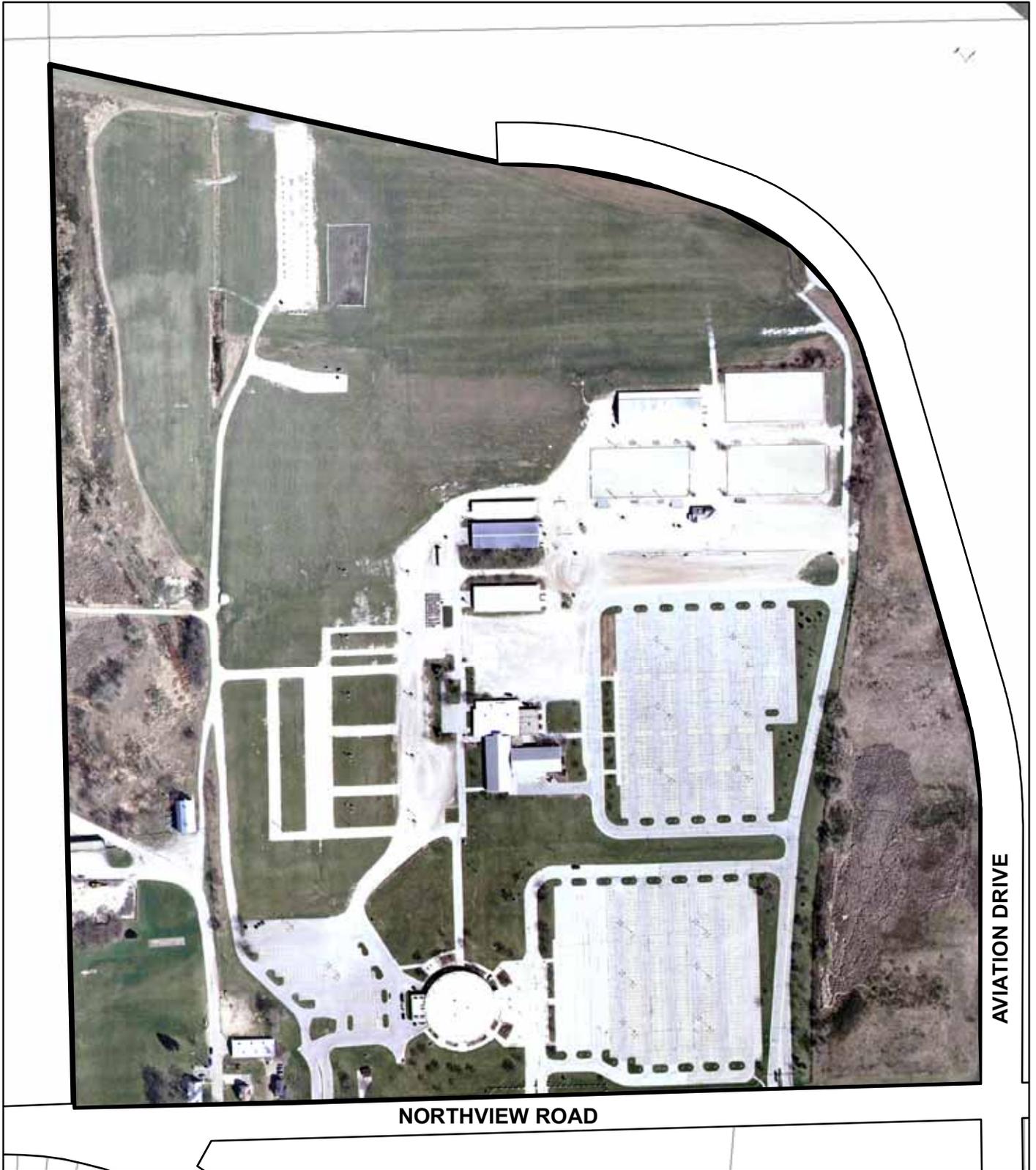
- Natural Management Plan (11/ 2008)
- Natural Resource Planning
- Maintenance Building (Capital project #200609)
- Expand prairie nurseries
- Trail Connections to Lake Country, Glacial Drumlin, and City of Waukesha trail systems
- Amphitheater
- Enhance children's garden
- Open-air picnic shelter/remote classroom
- Improve signage
- Upgrade Boardwalk

## Nature Center Activities:

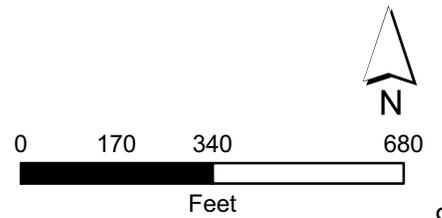
- |                           |                                   |
|---------------------------|-----------------------------------|
| ☑ Environmental education | ☑ Water education resource center |
| ☑ Natural land management | ☑ Native plant and seed sales     |
| ☑ Specialty workshops     | ☑ Bird seed sale                  |
| ☑ Ecology consulting      | ☑ Snowshoe rentals                |
| ☑ Recreational activities | ☑ Seasonal events                 |

## Planned Activities:

- Outdoor concerts



Exposition Center





## **2008 – 2012 Park and Open Space Plan**

### **Exposition Center**

**Location:** City of Waukesha, Section 27

**Address:** 1000 Northview Road, Waukesha

### **Accomplishments 2000-2007:**

Paving of the midway area

### **Site Characteristics:**

135-acre parcel in northern City of Waukesha

40,000 plus sq. ft. of meeting and exhibit space and 135 acres of grounds

### **ARENA**

The Arena has a total of 21,000 square feet of meeting and exhibit space. This unique air-conditioned, circular building features a domed roof, stage, three meeting rooms, kitchen, balcony and box office. Adjacent paved lots provide parking for over 850 vehicles. The ground level has over 12,000 square feet of usable free span floor space with high load bearing concrete floors and two large overhead doors. The balconies provide an additional 4,000 square feet of display space. Three side-meeting rooms, a back storage area, and a 1,825 square foot stage provide additional space for your event.

Oconomowoc Room – Executive Conference Room - The newly renovated Oconomowoc Room is an excellent choice for your smaller meetings or functions. This 850 square foot room features a small kitchenette, multiple phone jacks, A/V screen, and other amenities to ensure a successful, productive meeting.

### **FORUM BUILDING**

The Forum Building consists of three halls, a kitchen, office, restrooms, shower facilities, and a storage room that may be used for additional meeting or exhibit space. The Forum is divided into 3 main exhibit halls and is heated for year-round use. The Forum features high load bearing concrete floors, overhead lighting, 3-phase 220-volt, 50-amp electrical service, and 115-volt 20-amp service.

All three halls interconnect to provide 22,500 square feet of floor space with the flexibility to hold one large or three separate events. There is parking for over 800 cars adjacent to this building.

### **NORTH HALL:**

This versatile room provides 6,600 square feet of usable free-span floor space, with a 10 x 12 foot overhead door adjoining the South Hall. The attached 625 square foot kitchen features a walk-in cooler, two ovens, commercial sinks, and an abundance of cabinet and counter space. Side doors open to a spacious patio area.

### **SOUTH AND EAST HALLS:**

These identical halls built in early 1980 each have 7,200 square feet of usable free-span floor space. 10 x 12 foot overhead doors provide for easy move-in/move-out service. They are also connected by an interior overhead door, which facilitates traffic-flow through the events.

### **SOUTHEAST ROOM:**

The 1,500 square foot Southeast Room is accessible from both the South and East halls. Generally used for equipment storage, this space is available for additional seminar or exhibit space.

### **GROUNDS**

The 135-acre Expo Grounds are host to a wide variety of outdoor events year-round. These include: WMIL's Country fest, concerts, the Waukesha County Fair, car shows, autocross, tractor pulls, circuses, national dog shows, and many corporate events.

The grounds feature several paved and gravel walkways, numerous electrical stations, and a natural area that can be converted to an off-road driving course, a clay tractor pull course, and large expanses of open land adaptable to many uses.

### **HORSE COMPLEX**

The Expo Horse Complex is one of the finest in the Midwest, featuring three barns with stables for over 200 horses, a large dressage area, and 3 top-rated show rings. The recently built 2-story announcers' stand is air-conditioned and has a registration area, private office on the first floor, and a judges viewing room on the second floor. Restrooms and showers are included in this building. A camper/trailer parking area adjacent to the horse complex has water and electrical hook-ups and a sanitary dump station.

### **Existing Development:**

- ☑ Arena (21,000 sq. ft. of rentable meeting and exhibit space) featuring a domed roof, a stage, three meeting rooms, a kitchen, balcony, and a box office
- ☑ Forum (22,500 sq. ft. of rentable floor space) divided into three halls, a kitchen, restrooms, and shower facilities
- ☑ Horse barn
- ☑ Show ring with announcer stand
- ☑ Dairy barn
- ☑ Beef barn
- ☑ Swine barn
- ☑ Tractor pull area
- ☑ Outdoor exhibit areas are also available for rent: Water and electricity is available for venues, vendors and camping activities

### **Planned Development:**

Expand capacity for outdoor exhibit and show space, for carnivals, music festivals and regional events through the paving of grounds and provision of permanent sewer and water facilities.

## **Greenways and Trails**

Environmental corridors in urban or urbanizing areas, similar to Southeastern Wisconsin, that are held in public ownership or preservation easements, are often termed “Greenways”. The County park and open space plan previously referred to a greenway as “parkway”. Greenways are generally located along a stream or river, environmental corridor, ridgeline, or other linear natural feature and are intended to provide aesthetic and natural resource continuity. Greenways often serve as ideal locations for trail facilities. The natural resources that form the corridors also make such corridors attractive settings for recreational trails.

### ***Greenway Purpose and Vision***

The vision of the Waukesha County Greenway Project is to create a system of corridors along the County’s major rivers and streams, which will protect the high quality natural resource based elements, connect major state, county, and local parkland, as well as other community social and cultural amenities, and provide recreational and educational opportunities for the use and enjoyment by present and future generations.

The Greenway corridor serves as a River/Streamway buffer to:

1. Protect water quality by filtering and removing sedimentation, organic matter, pesticides and other pollutants from surface runoff and subsurface flow through deposition, absorption, plant uptake, denitrification or other processes.
2. Create, enhance and protect wildlife habitat and provide a corridor for the movement of a wide range of species.
3. Protect and stabilize the riparian land and reduce flood water velocity.
4. Protect high quality plant communities, including upland woods.
5. Provide non-motorized trail opportunities.

### ***Greenway Cross-section***

The Greenway Cross-section was developed to ensure the preservation of the greenway corridors and guide the development of trails within the greenways which give people access to enjoy these areas. The Waukesha County Department of Parks and Land Use Parks division staff assembled a committee representing: Planning Division and Land Resources Division, WDNR, residents of the Town of Vernon, private Non-for-Profit Organizations, Natural Resources Conservation Service (NRCS), SEWRPC, Farm Bureau, and UW-Extension. This committee met thirteen times over a two year period to discuss standards and voice concerns regarding greenways. Park staff took into consideration the input generated by the committee and refined it to develop the Waukesha County Greenway Cross-section. The greenway cross-section document is to be utilized as a tool to implement the development of the greenways. *Refer to Exhibit C*

The County has established Greenway project areas along the following 11 major rivers or streams:

Ashippun River	Mukwonago River	Pewaukee River
Bark River	Oconomowoc River	Scuppernong Creek
Fox River	Pebble Brook	Spring Creek
Mill Creek	Pebble Creek	



**Waukesha County  
Park System**

## **2008 -2012 Park and Open Space Plan**

### **Ashippun River Greenway (Proposed)**

**Location:** The 9.6 mile proposed greenway is to be located along the main stem of the Ashippun River, in the northwestern portion of the County. Ashippun River enters the County on its North border and exits on the West border. Current discussions are underway about the future of the Monterey Mill Pond Dam, which may return the river to a free flowing stream. The proposed Ashippun River Park is located about midway along the river corridor within Waukesha County. Ashippun River Greenway is completely located in the Town of Oconomowoc within the border of Waukesha County.

**Major Basin:** Rock River

**Watershed:** Ashippun River

**Acres of Greenway Property:** 42.8

**Acres of Greenway in plan to be acquired:** 789.9

#### **Existing Development:**

Ashippun Lake Boat Launch

#### **Planned Development**

Acquisition of land

#### **Activities:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Bird-watching         | <input checked="" type="checkbox"/> Nature-based educational programs |
| <input checked="" type="checkbox"/> Canoe Launch          | <input checked="" type="checkbox"/> Observation Decks                 |
| <input checked="" type="checkbox"/> Canoeing and kayaking | <input checked="" type="checkbox"/> Day hiking                        |
| <input checked="" type="checkbox"/> Cross-country skiing  | <input checked="" type="checkbox"/> Snowshoeing                       |
| <input checked="" type="checkbox"/> Geocaching            | <input checked="" type="checkbox"/> Hunting, Fishing and Trapping     |

#### **Park System Connection:**

Ashippun River Park



## **2008 – 2012 Park and Open Space Plan**

### **Bark River Greenway and Trail**

**Location:** The proposed 16-mile Bark River Trail is to be located along the main stem of the Bark River, in the northwestern portion of the County. The Bark River enters the County in the Town of Lisbon, section 2 and flows to the southwest. As the Bark River enters Town of Merton, it flows through the Merton millpond, the Village of Merton and south through the Village of Hartland. West of Hartland the Bark travels South through the City of Delafield and flows into the northeast corner of Lake Nagawicka. On the southwest corner of Lake Nagawicka is the outflow, which contains a recently rebuilt water control structure. The historic Delafield fish hatchery is located along the river as it travels towards the Town of Summit and the southeast corner of Upper Lake Nemahbin. The Nemahbin Roller Mill Dam just east of Upper Nemahbin Lake has recently been ordered to be removed. On the South end of Upper Nemahbin is the channel where Waukesha County’s Nemahbin Lake Access is located and heads into the North end of Lower Nemahbin Lake. The Bark River exits on the Northwest edge of the lake where a control structure (weir) is located. Just west of the outlet the Bark River flows through Crooked Lake then turns south to southwest flowing into of the Village of Dousman where it turns west. After crossing Hwy 18, the second time the Bark River turns south as it moves into the Town of Ottawa. West of the Village of Dousman the Scuppernong Creek joins the Bark River as the Bark turns west to Jefferson County paralleling the Glacial Drumlin Trail.

**Major Basin:** Rock River

**Watershed:** Bark River

**Acres of Greenway Property:** 402.4

**Acres of Greenway in plan to be acquired:** 1082.7

**Existing Development:**

Nemahbin Lake Access

**Planned Development**

The Bark River trail, which will parallel and shares sections with the Ice Age Trail, would provide a north-south trail for non-motoring travel in the northwestern portion of the County, since bicycling and horses are not permitted on the Ice Age Trail property. It is recommended that Waukesha County assume responsibility for development of the trail. There are opportunities with the Ice Age Trail Foundation to collaborate for construction and maintenance of shared trail and bridge improvements.

**Activities:**

- |   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Bird-watching         | <input checked="" type="checkbox"/> Geocaching                        | <input checked="" type="checkbox"/> Snowshoeing |
| <input checked="" type="checkbox"/> Canoeing and kayaking | <input checked="" type="checkbox"/> Nature-based educational programs | <input checked="" type="checkbox"/> Hunting     |
| <input checked="" type="checkbox"/> Cross-country skiing  | <input checked="" type="checkbox"/> Running or jogging                | <input checked="" type="checkbox"/> Fishing     |
| <input checked="" type="checkbox"/> Biking                | <input checked="" type="checkbox"/> Day hiking                        | <input checked="" type="checkbox"/> Trapping    |
| <input checked="" type="checkbox"/> Roller-blading        | <input checked="" type="checkbox"/> Cross-country skiing              |   |
| <input checked="" type="checkbox"/> Fishing               |   |   |

**Park System Connection:**

This trail would connect with the Bugline Trail the Lake Country Trail and Glacial Drumlin Trail on the south.



## **2008 -2012 Park and Open Space Plan**

### **Bugline Trail**

**Location:** The Bugline Trail extends about fourteen miles over a County-owned right-of-way, the former Chicago, Milwaukee, St. Paul and Pacific Railroad Line, starting at Grand Avenue in the Village of Menomonee Falls and ending at Dorn Road west in the Village of Merton.

#### **Acquisition (History):**

This trail was purchased in 1978 from the railroad for a cost of \$280,000, of which \$140,000 was paid for by Federal Land and Water Conservation Funds and the State of Wisconsin Department of Natural Resources. The name “Bugline” came from the name of the original railroad and its curving alignment known as the “Bug on a Vine” Railroad. The local citizenry later referred to the railroad as the “Bugline Railroad”. The original railroad, established in the early 1900’s by Joseph Hadfield, served the area’s limestone quarries.

The trail was constructed in 1983 and opened in 1984. The cost to develop the trail was \$120,000, with a \$30,000 westerly extension and \$30,000 easterly extension, for a total cost of \$180,000. State of Wisconsin Department of Natural Resources Outdoor Recreation Aid Funds were used to offset 50 percent of these costs, with Waukesha County funding the remaining cost. The trail travels through the Village of Menomonee Falls, Lannon, Sussex, Town of Lisbon, and Village of Merton. The trail crosses the Fox River and Bark River, and has six timber bridges. The trail passes through a wide variety of urban, residential and rural communities, and offers trail experiences in woods, wetlands, quarry overlooks, and open fields. The trail is primarily used for biking and hiking purposes, with some sections of the trail designated for equestrian and snowmobile use. Significant trail connections are the Village of Menomonee Falls Riverfront Trail, Menomonee Park, Village Park in Sussex, Coolings Meadow in Sussex, and a Town of Lisbon Park. The Bugline Trail has been used for several special events and fund-raising activities.

#### **Site Characteristics:**

The Bugline trail from Grand Avenue in Menomonee Falls to Highway VV in the Village of Merton is a 10-foot wide crushed stone trail. Beginning on the east end of the trail at Grand Avenue, the trail goes through residential areas of the Village of Menomonee Falls. The trail continues by crossing Highway 74 and the Fox River and proceeds through open fields and woodlands crossing the Fox River again. As you approach the Village of Lannon, the woodlands open up into quarry operations, which offer a glimpse of this area’s limestone quarry heritage. In Lannon, the trail crosses Highway 74 and moves west towards the southern border of Menomonee Park where an old rail spur connects the trail to the Park. The Bugline continues southwest and goes through wooded areas once again between quarry operations flanked by Good Hope Road and Townline Road. West of Townline the trail continues through woodlands where an old train trestle bridge crosses over the railroad corridor and down the hill past Cooling’s Meadow Nature Preserve and into the Village of Sussex. Within the Village of Sussex, the trail uses both on-road and trail corridor routes. Leaving the Village of Sussex the trail uses a new (2007) underpass of Highway 164 to move onto the three-mile unobstructed stretch of trail. Along this section of trail, the trail passes along wet-mesic prairie, mixed prairie remnants, and grass/sedge meadows as well as the Town of Lisbon Park. At Lake Five Road, the trail crosses the Bark River with views of the Merton Mill Pond seen through the woods. At Highway VV in the Village of Merton the trail goes south on VV to the Village Park where the paved trail continues west along the Bark River. The paved portion weaves in and out of open fields and dense woodlands and then climbs a hill to the old railroad grade where the pavement stops. The gravel trail heads west to Dorn Road where the trail currently ends.

### **Existing Development:**

The trail provides opportunities for biking, hiking, and jogging along its entire length and a separate path running parallel for horseback riding along an approximately four-mile segment from The Ranch to Menomonee Park.

Mile markers exist starting at the east end of the trail. Portions of the trail are utilized for snowmobiling.

### **Planned Development:**

Identify on-street route along Highway VV in the Village of Merton.

Update designated trailheads and signage.

Bikeway Pavement Improvement Capital Project will upgrade the trail surface to pavement in 2011.

Future development of the Bugline Trail:

- Extend approximately one and one half mile westward from Dorn Road to the Oconomowoc River Greenway to connect with the Ice Age Trail and the proposed Oconomowoc River Trail and into the unincorporated community of North Lake.
- Connect to the Bark River Greenway and Trail via bridge over Bark River west of the Village of Merton Park
- Connect with the proposed Fox River Trail in the Village of Lannon.
- Trail to extend approximately one-half mile eastward, to connect with the Menomonee River Trail.

### **Park System Connection:**

Menomonee River Trail (Village of Menomonee Falls) - Bugline trail would need to be extended approximately one-half mile east in the Village of Menomonee Falls

Connect with the Ice Age Trail at Dorn Road

Future Bark River Trail in the Village of Merton

Fox River Trail in the Village of Lannon

Future Oconomowoc River Greenway and Trail

### **Activities:**

Bird-watching

Horseback riding

Cross-country skiing

Biking

Roller-blading

Snowmobiling

Geocaching

Running or jogging

Day hiking

Cross-country skiing

Snowshoeing



## **2008 – 2012 Park and Open Space Plan**

### **Fox River Greenway and Trail**

**Location:** The proposed 37-mile Fox River Trail is to be sited along the main stem of the Fox River, in the eastern half of Waukesha County. Fox River’s headwaters begin in the Town of Lisbon in Section 1. Initially flowing eastward in the Village of Menomonee Falls, the Fox River turns southward and parallels the Bugline Trail continuing south to Wanaki Golf Course. As it crosses Hwy K, it enters a large wetland complex that is home to a Great Blue Heron Rookery. South of Capital Drive it flows through The City of Brookfield’s Mitchell Park and then turns southwest through the City of Pewaukee and is a major feature of the City of Waukesha’s Frame Park. As it leaves the City and enters the Town of Waukesha, it flows by Fox River Park and eventually into the Vernon Marsh State Wildlife Area. It meanders through the Town of Vernon and the Town of Mukwonago before turning eastward to the future site of Fox Bend Park. As the Fox River reaches the Village of Big Bend, it turns south and parallels Hwy 164 into Racine County. Just south of the Village of Big Bend is the location of a future county-owned canoe launch site.

**Major Basin:** Fox River

**Watershed:** Upper Fox River

**Acres of Greenway Property:** 916.4

**Acres of Greenway in plan to be acquired:** 3588.9

#### **Existing Development:**

- Overlook at Fox River Park
- Canoe Launch at Fox River Park
- Rental Ag Land: 36 acres

#### **Planned Development:**

It is recommended that Waukesha County assume responsibility for development of the Fox River Trail. Of the total 37-mile length of the Fox River Trail in Waukesha County, about two miles have been developed by the City of Waukesha within existing park sites.

#### **Activities:**

- |   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Bird-watching         | <input checked="" type="checkbox"/> Geocaching                        | <input checked="" type="checkbox"/> Snowshoeing |
| <input checked="" type="checkbox"/> Canoeing and kayaking | <input checked="" type="checkbox"/> Nature-based educational programs | <input checked="" type="checkbox"/> Hunting     |
| <input checked="" type="checkbox"/> Cross-country skiing  | <input checked="" type="checkbox"/> Running or jogging                | <input checked="" type="checkbox"/> Fishing     |
| <input checked="" type="checkbox"/> Biking                | <input checked="" type="checkbox"/> Day hiking                        | <input checked="" type="checkbox"/> Trapping    |
| <input checked="" type="checkbox"/> Roller-blading        | <input checked="" type="checkbox"/> Cross-country skiing              |   |
| <input checked="" type="checkbox"/> Fishing               |   |   |

**Park System Connection:** This trail would connect with the Bugline Trail on the north, with the Glacial Drumlin State Trail and the New Berlin and Pebble Brook Trails in the central portion of the County, with the Mukwonago River Trail in the southern portion of the County, and with the Fox River Trail in Racine County on the south. Parkland connections include:

Menomonee Park  
Wanaki Golf Course  
Mitchell Park

Fox Brook Park  
Frame Park  
Fox River Sanctuary

Fox River Park  
Vernon Marsh  
Fox Bend Park



## **2008 – 2012 Park and Open Space Plan**

### **Lake Country Trail**

**Location:** The Lake Country Trail currently extends about 10.5 miles over an electric power line transmission and former TMER&L electric interurban railway right-of-way, from the Landsburg Center at the northwestern corporate limit of the City of Waukesha to Sawyer Road (C.T.H. P) in the Town of Summit. The WE Energies right-of-way was originally an electric rail line between Milwaukee through Waukesha and onto Watertown.

**Acquisition (History):** An agreement was reached in April of 1994 between Wisconsin Electric Power Company and Waukesha County to allow the County to construct and maintain a recreation trail on the Power Company property. This trail was developed in 1994, as a partnership with the Town of Pewaukee, Town of Delafield and City of Delafield, and State of Wisconsin Department of Natural Resources. The cost of development was approximately \$240,000, of which the State contributed 50 percent, Waukesha County 25 percent, and the partnering communities 25 percent. Construction was started in 1994 and the grand opening of the trail and the trailhead at the Landsberg Center on October 1, 1994.

**Site Characteristics:** The Lake Country Trail runs through the middle of the County (North of I-94) from east to west through very rolling terrain and provides scenic views of the mid kettle moraine area, including the Landsberg Center (Trail Head), Pewaukee Lake, Naga-Waukee Golf Course, Lake Nagawicka and the historic City of Delafield, Upper and Lower Nemahbin Lakes.

A unique feature of this trail is the Landsberg Center, a historic building that was relocated from the Town of Brookfield to its City of Waukesha location, and renovated for use as a trailhead and restroom building. The present Landsberg Building was a former barbecue and custard stand that was donated to Waukesha County by local businessman and entrepreneur A. William Huelsman. Hotel owners Dick and Carol Richards donated the 1-acre parcel of land for this building to Waukesha County. This unique building offers a focal point and historic feature, as well as restrooms and parking for the trail. A second parking lot and restroom facility exists west of the Nemahbin Boat access along Delafield Road just east of CTH 'P'.

The Lake Country Trail passes through or by wetlands, woods, Pewaukee Lake and Nagawicka Lake vistas, Naga-Waukee Golf Course and Park, downtown City of Delafield and Cushing Park. There is a paved spur that connects to Naga-Waukee Park and the Naga-Waukee Ice Arena parking lot. Several new residential developments are located adjacent to the trail, and offer residents easy access for biking, hiking, running, or alternative transportation to work, business, schools, parks and shopping.

**Existing Development:** The trail is a 10' wide hard surface of crushed limestone, with asphalt paving in areas that are the most susceptible to erosion. Portions of the trail are on-street bike routes in the Cities of Pewaukee and Delafield. In 2006, the trail was extended and paved from Nemahbin Lake Access west to Sawyer Road in the Town of Summit. The extension also included a trailhead with restroom facility. In 2001 at the cost of \$350,000.00, Phase 2 trail paving was accomplished from the west edge of the City of Delafield including a parking lot and restroom facility which exists at the current west end on the trail along Delafield Road just east of CTH 'P'. The trail has been extended in 2008 from CTH P to Roosevelt Park in the City of Oconomowoc. This extension will add an additional 3.5 miles of paved trail and 1.3 miles of crushed stone for a total length of about 14.5 miles.

**Planned Development:** The 1.3 miles of crushed stone trail parallel to Highway “P” will be paved once the Pabst Farm Development, I-94 and Highway “P” interchange and Utility Right of Ways are established. It is also recommended that trail connections be established to the South of I-94 corridor in the City of Waukesha. Capital Improvement project Bike Pavement Improvements is scheduled for 2010 paving of the first phase of the Lake Country Trail from the Landsberg Center to the City of Delafield.

### Activities

- |  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> Bird-watching        | <input checked="" type="checkbox"/> Roller-blading     | <input checked="" type="checkbox"/> Day hiking           |
| <input checked="" type="checkbox"/> Cross-country skiing | <input checked="" type="checkbox"/> Geocaching         | <input checked="" type="checkbox"/> Cross-country skiing |
| <input checked="" type="checkbox"/> Biking               | <input checked="" type="checkbox"/> Running or jogging | <input checked="" type="checkbox"/> Snowshoeing          |

### Park System Connections:

- Ice Age Trail in the City of Delafield
- Landsberg Center (Trailhead)
- Pewaukee Lake Access
- Naga-Waukeee War Memorial Golf Course
- Naga-Waukeee Park
- Naga-Waukeee Ice Arena
- Nagawicka Lake Access
- Nemahbin Lake Access
- Historic City of Delafield
- Cushing Park, Delafield
- Bark River Trail (Future connection south on Sawyer Road in the Town of Summit)



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Mill Creek Greenway and Trail**

**Location:** The proposed five-mile Mill Creek Trail is to be located along the main stem of Mill Creek, in central Waukesha County. Mill Creek begins in section 30 of the City of New Berlin and heads west into the Town of Waukesha and joins the Pebble Brook System.

**Major Basin:** Fox River

**Watershed:** Fox River

**Acres of Greenway Property:** 123.7

**Acres of Greenway in plan to be acquired:** 44.6

**Existing Development:**

None at this time

**Planned Development:**

It would provide opportunities for non-motorized activities. The entire length of the corridor would lie within existing and proposed County Greenway lands.

**Park System Connection:** This trail would link a proposed City of New Berlin community park on the east with the Pebble Brook Trail on the west.



**Waukesha County  
Park System**

## **2008 - 2012 Park and Open Space Plan**

### **Mukwonago River Greenway and Trail (Proposed)**

**Location:** The proposed eight-mile Mukwonago River Trail is to be located along the main stem of the Mukwonago River, in southwestern Waukesha County. Jericho Creek at Eagle Spring Lake in the Town of Eagle forms the Mukwonago River. From Eagle Spring Lake, the Mukwonago River flows eastward into the Town of Mukwonago to the west end of Lower Phantom Lake. The Mukwonago River exits Lower Phantom Lake through the Village of Mukwonago and connects to the Fox River in the Town of Vernon.

Greenway acquisition will require State of Wisconsin and Village of Mukwonago cooperation along with various conservation oriented groups. Protection of the Mukwonago River is of highest priority as it is listed as an “Exceptional River” by the State of Wisconsin due to its clarity and ability to sustain threatened and endangered species. It should be noted that on October 2, 2008 the WDNR acquired the resort and golf course known as Rainbow Springs and will be developing plans as to the future use of the area. Greenway would stretch from Eagle Springs Lake to the confluence with the Fox River.

The trail portion is to be from Mukwonago Park on the west to joining the Muskego Lakes Trail in the Village of Mukwonago south of I-43.

**Major Basin:** Fox River

**Watershed:** Mukwonago River

**Acres of Greenway Property:** 19.2

**Acres of Greenway in plan to be acquired:** 806.7

#### **Activities:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Bird-watching         | <input checked="" type="checkbox"/> Nature-based educational programs |
| <input checked="" type="checkbox"/> Canoeing and kayaking | <input checked="" type="checkbox"/> Running or jogging                |
| <input checked="" type="checkbox"/> Cross-country skiing  | <input checked="" type="checkbox"/> Day hiking                        |
| <input checked="" type="checkbox"/> Biking                | <input checked="" type="checkbox"/> Snowshoeing                       |
| <input checked="" type="checkbox"/> Roller-blading        | <input checked="" type="checkbox"/> Hunting                           |
| <input checked="" type="checkbox"/> Fishing               | <input checked="" type="checkbox"/> Trapping                          |
| <input checked="" type="checkbox"/> Geocaching            |   |

**Park System Connection:** The Mukwonago River Trail would connect with the Fox River Trail on the east and the Mukwonago Park on the west.



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Muskego Lakes Trail (Proposed)**

**Location:**

The proposed 10-mile portion of the Muskego Lakes Trail within Waukesha County is to be located on a Wisconsin Electric Power Company right-of-way, a former TMER&L electric interurban railway right-of-way, from the Milwaukee-Waukesha County line westward through the City of Muskego and the Village of Big Bend.

**Acquisition (History):**

Proposed at this time

**Site Characteristics:**

ATC Utility Corridor

**Existing Development:**

The City of Muskego has developed that portion of the trail from Forest Home Avenue in the City of Franklin, about one-quarter mile east of the eastern Muskego City line, approximately five and one-half miles west, to Woods Road, where it connects to Muskego County Park.

**Planned Development:**

Waukesha County, in cooperation with the local governments, shall assume responsibility for constructing remaining portions of the trail within Waukesha County. This trail would extend eastward to the community of St. Martins, in Milwaukee County.

**Park System Connection:**

Muskego Park

Future connection to Fox River Greenway and Trail

Future connection to Fox Bend Park



## **2008 – 2012 Park and Open Space Plan**

### **New Berlin Trail**

#### **Location:**

The New Berlin Trail extends about six miles in an east-west direction across the City of New Berlin and eastern City of Waukesha over a Wisconsin Electric Power Company power transmission line right-of-way, the right-of-way of a former TMER&L (The Milwaukee Electric Railway & Light Co.) interurban electric railway line. Approximately six and one-half miles of the trail, extending from the Milwaukee County '76 Trail at Greenfield Park, approximately one-half mile east of the Milwaukee-Waukesha County line, to the western corporate limit of the City of New Berlin, has been developed by Waukesha County.

#### **Acquisition (History):**

A license agreement with Wisconsin Electric Power Company on December 28, 1978, allowed construction of the recreation trail on WEPCO land. The trail construction started in late 1983 for a cost of \$60,000 and was finished in early 1984. In 1996, a 1.5-mile west extension brought the trail to Lincoln Ave in Waukesha.

#### **Site Characteristics:**

The eastern end of the New Berlin Trail connects with the Milwaukee County Oak Leaf Trail at Greenfield Park in the City of West Allis. A remodeled train bridge crosses over 124<sup>th</sup> Street joining the two County's trails. The New Berlin trail has very little elevation change and is in a straight east-west direction. The first three segments of the trail are residential in nature, with at-grade road crossing having heavy cross traffic. City of New Berlin's Buena Park is located between Moorland and Calhoun Roads. Buena Park has parking, picnic tables, shelter building, restrooms, play equipment and sport fields as well as access to the trail. The trail west of Calhoun Road is naturally more open having plant communities like shrub carr, prairie/fen type wet meadow, high meadow old-fields, lowland thicket/low prairie and old rail right of way with choice prairie flowers. The New Berlin trail ends as it meets Lincoln Avenue in the City of Waukesha. The City of Waukesha has developed an on-road route to connect the New Berlin Trail to the Glacial Drumlin Trail on the West side of Waukesha, a nearly 50 mile trail that travels west to the Madison area.

#### **Existing Development:**

Asphalt Paved (2006) trail is ten feet in width with a five foot mowed shoulder  
Mile Markers (starting from the east)

#### **Planned Development:**

- County extend the trail westward one additional mile, to Lincoln Avenue in the City of Waukesha.
- The Highway 164/59 location is a heavily traveled at-grade crossing and is in the process of change as the City of Waukesha has negotiated a plan to take the trail south to Pearl Street, cross at the controlled crossing, and back north to reconnect with the trail.
- City provide connecting on-streets bike route to connect the New Berlin Trail to the Fox River and Glacial Drumlin Trails.
- Evaluate roadway crossings
- Update gates

**Activities:**

- Bird-watching
- Horseback riding
- Cross-country skiing
- Biking
- Roller-blading
- Snowmobiling

- Geocaching
- Running or jogging
- Day hiking
- Cross-country skiing
- Snowshoeing
- Dog Walking (dog must be on a 6' leash)

**Connections:**

- Oak Leaf Trail (Milwaukee County)
- Greenfield Park (Milwaukee County)
- Buena Park (City of New Berlin)
- City of Waukesha Trail System
- Fox River Trail, to Fox River Greenway and Fox River Park
- Glacial Drumlin Trail (State of Wisconsin)



## **2008 – 2012 Park and Open Space Plan**

### **Oconomowoc River Greenway and Trail**

**Location:** Oconomowoc River enters Waukesha County in section 2 of the Town of Merton entering the Monches Mill Pond. The river flows southwest through Monches Park. The Ice Age Trail runs parallel as the river flows south where it joins the Little Oconomowoc and enters the north End of North Lake. Exiting the west shore of North Lake the Oconomowoc flows west then south to the northeast corner of Okauchee Lake in the Town of Oconomowoc. There is a control structure on the southwest corner as the Oconomowoc River flows to Oconomowoc Lake. The river flows out of the Oconomowoc Lake’s northwest edge and flows to Fowler Lake and Lac La Belle in the City of Oconomowoc. The Oconomowoc River heads south from Lac La Belle through the City of Oconomowoc into the Town of Summit before exiting into Jefferson County.

Partnerships with conservation groups and the Ice Age Trail will be necessary for securing this greenway system. Greenway starts at the south border of Monches Park and runs between the lake areas except for the Okauchee to Oconomowoc lake portion, which is of local community interest. County has interest south and west of the City of Oconomowoc as the greenway follows the river to Jefferson County. The trail is from Monches Park with the connection to the Bugline trail.

**Major Basin:** Rock River

**Watershed:** Oconomowoc River

**Acres of Greenway Property:** 302

**Acres of Greenway in plan to be acquired:** 611.6

#### **Existing Development:**

The Ice Age Trail currently has a well-established trail in this area  
County maintains the bridge over the Oconomowoc River

#### **Planned Development:**

A trail is proposed in the future Monches Park heading south on the west of the river separating it from the Ice Age Trail that follow the river on the east side of the trail.

#### **Activities:**

- |   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Bird-watching         | <input checked="" type="checkbox"/> Fishing                           | <input checked="" type="checkbox"/> Day hiking  |
| <input checked="" type="checkbox"/> Canoeing and kayaking | <input checked="" type="checkbox"/> Geocaching                        | <input checked="" type="checkbox"/> Snowshoeing |
| <input checked="" type="checkbox"/> Cross-country skiing  | <input checked="" type="checkbox"/> Nature-based educational programs | <input checked="" type="checkbox"/> Hunting     |
| <input checked="" type="checkbox"/> Biking                | <input checked="" type="checkbox"/> Running or jogging                | <input checked="" type="checkbox"/> Trapping    |
| <input checked="" type="checkbox"/> Roller-blading        |   |   |

**Park System Connection:** This greenway and trail would connect with the Bugline Trail, which would be the westerly route to North Lake. East bound on the Bugline would connect to the Bark River trail, Menomonee Park, and the Fox River Trail.



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Oconomowoc - Watertown Trail (Proposed)**

**Location:**

The proposed three-mile portion of the Oconomowoc-Watertown Trail within Waukesha County is to be located on a Wisconsin Electric Power Company right-of-way, a former TMER&L electric interurban railway right-of-way, from the west County line to the western corporate limit of the City of Oconomowoc, where it is proposed to be routed on non-arterial streets to the City's Roosevelt Park.

**Acquisition (History):**

None at this time

**Site Characteristics:**

Utility Corridor

**Planned Development:**

Waukesha County, in cooperation with the City of Oconomowoc, will be responsible for constructing that portion of the trail within Waukesha County. The trail would accommodate both hiking and bicycling.

**Park System Connection:**

The trail would connect via City of Oconomowoc bike routes to the Lake Country Trail at Roosevelt Park on the east and to a proposed trail in the Wisconsin Electric Power Company right-of-way in Jefferson County on the west.



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Pebble Brook Greenway and Trail**

**Location:** The proposed eight-mile Pebble Brook Trail is to be located along the main stem of Pebble Brook, in the Town and City of Waukesha. Pebble Brook gathers water from an area west of Minooka Park draining parts of sections 13, 14, 23 and joins together in section 22 of the Town of Waukesha. Heading south, Millcreek flows into Pebble Brook, as does Red Wing Creek in the Town of Waukesha. Pebble Brook enters the Town of Vernon and the Vernon State Wildlife Area where it flows into the Fox River.

The Greenway extends from Minooka Park to the Fox River.

The trail portion will connect Minooka Park to the Fox River Trail. An east-west connector will travel along Lawnsdale Road to take people to Fox River Park and Trail. The south route will connect to the Fox River Trail as it exits the Vernon Marsh

**Major Basin:** Fox River

**Watershed:** Fox River

**Acres of Greenway Property:** 144.4

**Acres of Greenway in plan to be acquired:** 1148

**Planned Development:**

It would provide opportunities for bicycling and hiking and would be sited within existing and proposed Pebble Brook Greenway lands.

**Park System Connection:** It would connect with Minooka Park on the east, Mill Creek Greenway, Fox River Park and the Fox River Trail at the Vernon Marsh on the West.



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Pebble Creek Greenway and Trail**

**Location:** Headwaters are in southern City of Pewaukee and head south into the Town of Waukesha traveling through Retzer Nature Center property. Drifting southwest into the Town of Genesee before re-entering the Town of Waukesha eastward to the City of Waukesha where it enters the Fox River.

**Major Basin:** Fox River

**Watershed:** Middle Fox River

**Acres of Greenway Property:** 39.1

**Acres of Greenway in plan to acquire:** 8.7

#### **Planned Development:**

This stream is of interest to the Land Resources Division to re-establish the stream corridor. Portion of Pebble Creek Trail would connect to the Glacial Drumlin Trail

#### **Activities:**

-  Bird-watching
-  Nature-based educational programs

#### **Park System Connection:**

Retzer to the Glacial Drumlin



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Pewaukee River Greenway and Trail**

**Location:** Pewaukee River starts northeast of the Village of Pewaukee then flows through the Village where it is joined by the outflow of Pewaukee Lake, it then flows southeast through the City of Pewaukee. Under the I-94 Corridor it flows through a culvert underpass, the culvert is passable under normal conditions as the annual Pewaukee Kiwanis' Pewaukee River Run - a six-mile canoeing event from Village of Pewaukee to City of Waukesha's Frame Park. From the I-94 Corridor the Pewaukee River flows into the Fox River in section 26 of the City of Pewaukee.

**Major Basin:** Fox River

**Watershed:** Middle Fox River

**Acres of Greenway Property:** 319.1

**Acres of Greenway in plan to acquire:** 119.4

**Site Characteristics:** The proposed five-mile Pewaukee River Trail is to be located along the main stem of the Pewaukee River, in the Village and City of Pewaukee. The trail, which is proposed to be developed cooperatively by the City and Village of Pewaukee and the County, would connect the Pewaukee Lake lakefront, in the Village of Pewaukee, on the west, to the Fox River Trail, on the east. The trail would be located within existing and proposed Pewaukee River Greenway lands.

**Existing Development:**

Land acquisition and survey

**Planned Development and Activities:**

The planned boardwalk and asphalt trail would provide opportunities for a variety of trail-oriented activities, including non-motorized transportation, and nature study.

**Park System Connection:**

Connects with the Fox River Trail



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Ottawa Trail (Proposed)**

(Formally known as Pretty Lake Section Trail)

#### **Location:**

The proposed nine-mile Ottawa Trail is recommended to be developed by the County in cooperation with the Wisconsin Department of Natural Resources to connect the Ice Age Trail in the Southern Unit of the Kettle Moraine State Forest and the Glacial Drumlin Trail to the North via the Scuppernong Creek Trail.

#### **Existing Development:**

Proposed at this time

#### **Planned Development:**

The Ottawa Trail, which is recommended to accommodate hiking and bicycling, would provide off-street bicycle access from the Glacial Drumlin Trail to the Southern Unit of the Kettle Moraine State Forest. With the State of Wisconsin's proposed project area for the Paradise Valley unit, this trail project will be requested within the State's project boundary.

#### **Park System Connection:**

The Ottawa Trail, which is approximately parallel to the Ice Age Trail, would provide a north-south trail usable for non-motorized activities in the southwestern portion of the County, since bicycling is not permitted on the Ice Age Trail.

Future connection to the Scuppernong Creek Trail

Ottawa Lake State Recreation Area



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Scuppernong Creek Greenway and Trail (Proposed)**

**Location:** Scuppernong Creek headwaters is located in section 28 of the Town of Delafield and heads southwest through the Lapham Peak Unit of the Kettle Moraine State Forest. The creek briefly enters the Town of Genesee and swings back into the Town of Delafield only to exit into the Town of Summit and Waterville Lake. Leaving Waterville Lake the creek continues southwest past Henrietta Lake into the Town of Ottawa eventually flowing into Dutchman’s Lake. Leaving Dutchman’s Lake on the west edge, the river drops south to the north end of Hunters Lake, exiting the south end of Hunters Lake the creek turns west – northwest flowing into a millpond south of Dousman then traveling more northwest it meanders until it connects up with the Bark River west of the Village of Dousman. The Scuppernong Creek Greenway starts at Highway 83 north of the Village of Wales, Scuppernong Creek travels west through Waterville, Henrietta, Dutchman’s, and Hunter Lakes until it connects with the Bark River.

**Major Basin:** Rock River

**Watershed:** Bark River

**Acres of Greenway property owned:** 160.7

**Acres of Greenway property in plan:** 265.4

#### **Planned Development:**

Proposed trail south from the Glacial Drumlin Trail to Ottawa Trail

#### **Activities:**

- Bird-watching
- Canoeing
- Geocaching

- Nature-based educational programs
- Hunting

- Fishing
- Trapping

#### **Park System Connection:**

Glacial Drumlin Trail  
Lapham Peak  
Bark River Greenway  
Future Ottawa Trail  
School Section Lake



**Waukesha County  
Park System**

## **2008 – 2012 Park and Open Space Plan**

### **Spring Creek Greenway (Proposed)**

**Location:** South central Waukesha County, the Greenway starts at Spring Lake and Willow Spring Lake flowing northeast to the Saylesville Mill Pond.

**Major Basin:** Fox River

**Watershed:** Middle Fox River

**Acres of Greenway Property owned:** 172.4

**Acres of Greenway property in the plan:** 64.7

#### **Existing Development and Activities:**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Bird-watching                     | <input checked="" type="checkbox"/> Fishing  |
| <input checked="" type="checkbox"/> Nature-based educational programs | <input checked="" type="checkbox"/> Trapping |
| <input checked="" type="checkbox"/> Hunting                           |  |

#### **Planned Development:**

Satellite for Retzer Nature Center

## **PARK AND OPEN SPACE NEEDS ASSESSMENT**

The County resident needs for park and recreation facilities and services are dependent upon demographic characteristics, use trends, and the availability of land to accommodate preservation and recreation facilities required to meet those needs. Together, these factors formulate the area’s recreation needs profile. A recreation needs profile describes which activities are increasing or decreasing in demand, which facilities need further development, and which issues are hindering outdoor recreation.

Demographic and natural resource characteristics, which influence the needs for park and recreation facilities and services, were identified in the Description of the Planning Area section of this Appendix. Generally, Waukesha County will continue to experience moderate (24%) population growth to the year 2035. Other notable demographic characteristic is that the average household size is projected to continue to decline from an average of 2.63 in 2000 to 2.50 in 2035. The population composition trend will also continue to reflect the aging of baby boomers. The high quality natural resource base plays a significant role in the accommodation of the resident’s recreation demands.

To determine the recreation needs of the residents of Waukesha County, two recreation needs assessment survey documents will be reviewed. Recreation trends will be examined and per capita and service area standards will also be reviewed. The two survey documents reviewed are the 2005- 2010 Wisconsin Statewide Comprehensive Outdoor Recreation Plan (SCORP) and the Waukesha County Park System Focus Group Study conducted by the Chamberlain Research Consultants in 2000-2001.

### **Wisconsin Statewide Comprehensive Outdoor Recreation Plan 2005-2010 (SCORP)**

Since passage of the Federal Land and Water Conservation Fund (LWCF) Act of 1965, preparation of a Statewide Comprehensive Outdoor Recreation Plan has been required for states to be eligible for LWCF acquisition and development assistance. In the State of Wisconsin, LWCF grants are administered by the Wisconsin Department of Natural Resources. The plan is a comprehensive evaluation of the demand and supply of outdoor recreation in the state. The plan reviews Wisconsin outdoor recreation on a regional basis. Waukesha County is located in the Lower Lake Michigan Coastal Region. The Lower Lake Michigan Coastal Region includes Kenosha, Racine, Walworth, Milwaukee, Waukesha, Ozaukee, Washington and Sheboygan Counties.

As a part of the SCORP process, outdoor recreation participation surveys conducted by the National Survey on Recreation and the Environment (NSRE) have examined 62 recreational uses broken down into the SCORP regional level. SCORP lists the participation rates of adults, ages 16 and older for all 62 recreational uses examined in the NSRE data. In the Lower Lake Michigan Coastal region, high recreation demand was expressed for the following activities:

Walking for pleasure	Golf	Horseback riding on trails
Visit a beach	Nature-based education program	Snorkeling
Swimming in lakes and streams	Visit a dog park to walk a pet	Kayaking
Swimming in an outdoor pool	Fishing in the Great Lakes	Geocaching
Running or jogging	Use of a personal watercraft	Scuba diving

Certain issues are causing impediments to outdoor recreation opportunities within Wisconsin. To understand the issues, the WDNR conducted a series of town meeting across the state. These meetings conducted in 2005, collected 12 written comments and 1300 online comments. In addition, the participants were asked to express their needs for outdoor recreation facilities. Of the issues listed for the Lower Lake Michigan Coastal Region the issues that most influence Waukesha County residents are:

Continued urban sprawl/development	Increased multiple-use recreation conflicts
Invasive species	Loss of public access to lands and waters
Maintaining rustic areas	Preserving natural lands

For the Lower Lake Michigan Coastal Region the needs that most influence Waukesha County are:

Better maps/signage for trails	More biking trails	More boat access
More camping opportunities	More dog parks	More electric campsites
More hiking trails	More horse trails	More mountain biking trails
More public lake access	More silent sport opportunities	More swimming opportunities

### ***Recreation Trends under the Statewide Comprehensive Outdoor Recreation Plan 2005-2010***

The SCORP has identified several key indicators and general recreation trends, which can be applied to Waukesha County. The key indicators are demographics, health and wellness, environment, technology, economics, government, and changing land use. Each indicator will be briefly discussed. Projecting recreation trends are not an exact science. Trends are only indicators of future recreation needs and factors influencing their implementation. Response to trends should only occur after they have been fully evaluated, deliberated and found to meet a long-term County need and is consistent with the mission, goals and objectives of the Waukesha County Park System.

#### Demographics

Presently the aging of the baby boomer generation is one of the most significant trends effecting outdoor recreation. The boomers are retiring with a relatively high disposable income allowing them to travel and participate in a wide range of recreation activities. As a person ages they generally participate in less active recreation pursuits such as hiking, nature viewing, biking, nature education programs and photography. As the population becomes more diverse, recreation demands will change. For example Hispanic populations favor picnic areas for family gathering and nature based educational programs.

With the increased demand for a person's time and limited free time there will be increased interest in nature based recreation activities.

#### Health and Wellness

Exercise and being physically fit is a major component of preventative health care. Park and recreation facilities provide numerous opportunities to maintain a personal health. It is expected that health and wellness will be a constant feature of programming and investment in park facilities.

#### Environment

It is projected that as the public become more aware of environmental issues they will support the preservation, protection and sustainable development of the natural resource base lands. The increased interest in the environment has also affected recreation participation rates as more people visit areas of minimally altered environments and trails.

#### Technology

Technology offers an opportunity to make outdoor recreation activities interesting and fun. However, outdoor recreation providers should not make technology a substitute for high quality outdoor recreation programming and facilities.

#### Economics

Household income impacts how a person recreates. Households with higher income generally seek out new and exciting forms of recreation while households with lower income seek out quality low cost recreation alternatives. The recreation trend has been to place an emphasis on high value and diverse recreation opportunities.

#### Government

A large percent of park and recreation lands are publicly owned and operated. With the current tax environment, current economic conditions, more competition from the private and non-profit recreation providers and recreation becoming more market driven, the public provision of low cost and high value recreation opportunities will become more challenging.

### Changing Land Use

As Waukesha County becomes more developed, there will be an increased demand for recreation activities such as dog parks, paved trails, and preservation of the natural resource base.

### *Projected Recreation Activity Trends under the Statewide Comprehensive Outdoor Recreation Plan 2005-2010*

The SCORP also provided a summary of the types of recreational activities that are increasing in demand, stable in demand or decreasing in demand. They are:

#### Increasing Demand

All Terrain Vehicles	Motor boating	Snow boarding
Bird watching	Off-Road Motorcycling	Snowshoeing
Canoeing	Paintball Games	Visiting a Dog Park
Driving for pleasure	Picnicking	Walking
Gardening	Road Biking	Water Parks
Geocaching	RV Camping	Wildlife viewing /Photography
Kayaking	Skateboarding	

#### Stable Demand

Cross-Country skiing	Ice Skating	Sailing
Day Hiking	Personal Watercraft	Scuba/Snorkel
Disc Golf	Rock Climbing	Swimming
Fishing	Rowing	Tennis
Horseback riding	Run/Jog	Tent Camping

#### Decreasing Demand

Backpacking	Downhill Skiing	Golfing
Hunting	Mountain Biking	Snowmobiling
Team Sports		

### **Waukesha County Park System Focus Group Study**

The Waukesha County Department of Parks and Land Use commissioned Chamberlain Research Consultants to conduct research with park visitors residing in Waukesha County. The purpose of the research was to evaluate and determine the wants and expectations of Waukesha County residents for the Waukesha County Park System. The survey results were to be used to determine the future allocation of park system funds.

The methodology used was to conduct three focus group interviews regarding each focus group's general perception of the parks, prioritization of park activities, knowledge of Retzer Nature Center, their thoughts concerning the park mission statement, promotion of the parks, and suggested park improvements. Questions were developed from the focus groups response. Random telephone surveys were then conducted to verify the focus groups' thoughts concerning the park system. The survey respondents favored the following:

Keeping the parks natural	Add more playground equipment
Purchase more parkland	Add more beaches and swimming area
Add more bathrooms	

Of the park facilities the respondents knew best, respondents indicated they wanted more of the following facilities:

Park trails	Individual camping
Reserved group picnic areas	Playground equipment
Archery ranges	Boat launch facilities
Swimming beaches	Bathrooms
Group camping	Fishing piers

### **Waukesha County Comprehensive Planning Public Opinion Survey**

As part of the “Smart Growth” planning process, in October, 2006 Waukesha County and 27 individual governmental jurisdictions sought the input of County residents on land use issues via a mail-out survey. The University of Wisconsin at River Falls was contracted to assist a local ad hoc Planning Committee in the implementation of this survey. Samples were drawn to produce statistically valid results for all 27 participating jurisdictions (towns, villages, and cities) and the County as a whole. Of particular interest to the Park and Open Space Planning process, residents preferred by a 3 to 1 margin, the use of residential conservation designs to more traditional ones for developments. This is important since the conservation design approach has led to the protection and public acquisition of unique natural resource areas and other open space lands. In addition, two-thirds or more of respondents in the County were satisfied with parks and recreation services. Despite their opinion that environmental quality in the County is generally good, citizens were not necessarily satisfied that key natural resources are being adequately protected. Finally, 74% of survey respondents supported continued natural area and open space acquisition efforts.

### **Waukesha County Park System Customer Feedback Process**

Waukesha County Park System uses a 4x6 inch preaddressed stamped green postcard for which park users can comment on their park visit(s). Cards are made available to all customers when they purchase annual stickers, or as they enter the park. Park personnel also hand out the comment cards to users they have contact with. Respondents list the park(s) visited and are allowed 8-9 lines in which to write their comments. There is no need for the user to sign the card but many people do. Park staff use the comments to evaluate and improve services.

### **Accessibility Recreation Consideration**

The Federal Americans with Disabilities Act, adopted by the U. S. Congress in 1990, requires that “reasonable accommodation” be made to provide persons with disabilities equal opportunities for access to jobs, transportation, public facilities, and services, including access to recreational facilities. All new or renovated park and recreation facilities within the County must be designed and constructed to comply with the requirements of the Act. Existing public park and recreation facilities should be evaluated by the unit of government concerned to determine if improvements are needed to meet Federal accessibility requirements.

According to the National Survey on Recreation and the Environment (NRSE) 15 recreation uses were determined to have average to above average participation rates among mobility-disabled individuals. For the most part, these activities are nature based, requiring a more natural undeveloped setting.

These uses are, listed in alphabetical order:

Attending concerts	Fishing	Viewing fish
Backpacking	Horseback riding	Visiting historical/ archeology sites
Bird watching, camping	Nature study	Visiting nature centers
Canoeing	Sightseeing	Wildlife viewing
Drive off-road	Sledding	

The top constrains to recreation participation among mobility disabled individuals were:

No companions	Not enough money	Not enough time
Outdoor pests	Personal health	

For the most part, these barriers are the same as the non-disabled citizen whose recreation participation is time, money, and outdoor pests.

## **Per Capita and Service Radius Standards**

The Southeastern Wisconsin Regional Planning Commission, Outdoor Recreation and Open Space Planning Objectives, Principles and Standards and the Waukesha County Park System Standard can be translated into spatial requirements for land and water outdoor recreation resources. Through the budget, ordinances, cooperative or joint public-private efforts, these objectives, principles, and standards are translated into a system for acquisition, development and management of park and recreation resources.

Two types of standards, per capita and service radius standards are used to help estimate the number, size, and distribution of outdoor recreation sites needed to serve the anticipated future population of the County.

1. The per capita standards estimate the total number of acres of land needed to satisfy requirements for park and recreational land based on the anticipated future resident population of the County. *Refer to Objectives 2 through 5 found on pages 4 through 6 in this Appendix A*
2. The service radius standards insure that public parks are spatially distributed in a manner that is convenient and efficient for the population they are intended to serve. *See Exhibit E*

It should be recognized that, in some situations, while per capita standards may be met, a need might still exist for additional sites or facilities because of the relative inaccessibility or distance of an existing facility to some residents of the County.

These standards are a useful guide in determining minimum per capita and/or service radius park and open space requirements; however, it is recommended that all Waukesha County local municipalities determine their own park and recreation needs and service requirements through the preparation and adoption of a park and open space plan. It is highly recommended that the local municipal park and open space plans be developed within the context of the Waukesha County Park and Open Space Plan.

Waukesha County has adopted a service area and preservation of the natural resource base standards for the location of parks, greenways, trails, and special use facilities. The recreation needs are based upon the level of services requested by the County residents, which are consistent with the standards established for the Waukesha County natural resource based park system.

## **PARK AND OPEN SPACE PLAN IMPLEMENTATION RECOMMENDATIONS**

Recreation needs are dependant upon demographic characteristics of the County, recreation trends, and the application of outdoor recreation standards. Satisfaction of recreation needs is also dependant on the availability of suitable land to accommodate the recreation facility needs. These outdoor recreation need elements should be considered and fully evaluated and deliberated to determine if the expressed need are consistent with the long-term vision and purpose of the park and recreation agency. The minimum per capita and service radius standards should be met by the County. Local municipalities should through the development of park and recreation plans determine the level and type of services they provide to their residents. No single recreation provider can meet all the County resident recreation needs. It is through cooperation and coordination between the public and private outdoor recreation providers that the needs of the Waukesha County residents will be met.

### **Major Parks Acquisition**

It is recommended that the County continue actively to acquire land for recreational and open space preservation purposes. Land acquisition is particularly important as the County continues to develop. A priority for land acquisition must continue to focus on the acquisition of lands to complete the major regional parks within the County. As depicted on Exhibit D-2, the County proposes acquiring an additional 887 acres to complete the major parks.

### **Proposed Greenway Acquisition**

The County should continue to acquire land and establish Greenways along 11 of the major rivers or streams in accordance with the greenway acquisition standards presented in this report. Currently 2,695 acres of the proposed 11,246 acres of greenway is under ownership of Waukesha County, the major rivers and streams are:

Ashippun River	Mukwonago River	Pewaukee River
Bark River	Oconomowoc River	Scuppernong Creek
Fox River	Pebble Brook	Spring Creek
Mill Creek	Pebble Creek	

All other County waterways are proposed for state or local ownership or preservation as called for on the Waukesha County Park and Open Space Plan. (i.e. Menomonee River proposed for Village of Menomonee Falls Ownership).

### **Greenways with Proposed Trail Corridors**

It is recommended that the County continue to acquire land and or easements for trail development along the following greenways:

Bark River	Fox River	Mill Creek
Mukwonago River	Oconomowoc River	Pebble Brook
Pebble Creek	Pewaukee River	Scuppernong Creek
Spring Creek		

### **Budgeting for Acquisition**

Walter J. Tarmann Legacy Parkland Acquisition Fund provides a separate fund used for the acquisition of Parkland and unique natural areas either directly by the County or in partnership with local municipalities, government units or non-profit conservation organizations as identified in the Waukesha County Park and Open Space Plan and Greenway Plans. The County Board approves all acquisitions requesting program funds as ordinances for consideration. The County Board appropriates one million dollars annually for purposes of acquiring lands; requests over the one million-dollar budget require additional expenditure authority. In addition to Walter J. Tarmann Funds, acquisitions will be accomplished with grant aid administered by the State of Wisconsin. *See Exhibit F*

### **Existing Park Development**

The Existing Waukesha County Park and Open Space Sites section of this Appendix provides a detailed description of each existing park, greenway, trail or special use facility, and a detailed description of the resource management and planned improvements. It is recommended that Waukesha County implement the resource management, natural land management and facility improvements identified under each park property.

## Capital Improvement Program

Waukesha County Park System has requested through the 5-year Capital Improvements Plan the following projects; all projects require County Board approval:

**Annual Pavement Management:** \$460,000 for repair of asphalt and concrete in parks and around the County Administration campus.

**2009 Menomonee Park Maintenance Building:** \$637,200 to replace old military barracks currently used as office and maintenance shop.

**2011 Exposition Center Arena Roof:** \$460,000 to replace arena roof built in 1975.

**2010 -2011 Bikeway Pavement Improvements:** \$495,000 for Lake Country Trail (2010) and \$280,000 for the Bugline Trail (2011) paving. These trails currently are of crushed limestone tread. These projects will require grant enhancement to accomplish.

**2010 Retzer Maintenance Building:** \$759,000 to construct a sustainable maintenance building. Currently equipment is stored in various buildings and outside.

**2009 – 2014 Park Restrooms Renovations:** \$3,075,000 to replace pit toilets in picnic areas with modern fixtures.

When appropriate, Capital improvement projects will be accomplished with grant aid administered by the State of Wisconsin. *See Exhibit F*

## Park System Operating Budget\*

The County Board approves the operating budget for the Park System, the past two years and the proposed 2009 budget are as follows:

	<b>2007 Actual</b>	<b>2008 Budget</b>	<b>2009 Proposed</b>
Personnel Costs	\$ 5,660,360	\$ 5,788,461	\$ 6,022,654
Operating Expenses	\$ 2,590,731	\$ 2,633,126	\$ 2,664,054
Interdept Charges	\$ 1,917,488	\$ 1,972,376	\$ 2,013,590
Fixed Assets	\$ 132,838	\$ 270,170	\$ 394,000
Total	\$10,301,417	\$10,664,133	\$11,094,298

*\*Budget numbers reflect Park System, Retzer Nature Center, Grounds Maintenance, Golf, Ice and Exposition Center budgets.*

## Natural Areas and Critical Species Habitat Sites

The Regional Planning Commission conducted a comprehensive inventory of natural areas within the County in 1994 as part of the Natural Areas and Critical Species Habitat Protection and Management Plan being prepared by the Commission. The inventory systematically identified all remaining high-quality natural areas and critical species habitat then existing within the Region. This plan presently is undergoing an update process and will be completed in the near future.

Natural areas were classified based upon the natural area classification system developed by the Wisconsin Department of Natural Resources. Three classification categories are used:

NA-1: Natural areas of Statewide or greater significance contain nearly complete and relatively undisturbed plant and animal communities are believed to resemble closely those of presettlement times.

NA-2: Natural areas of countywide or regional significance, which contain native biotic communities judged to be of lower than NA-1 significance, either because of evidence of a limited amount of human disturbance or because of limited size.

NA-3: Natural areas of local significance, which have been substantially altered by human activities, but which provide refuge for native plant and animal species that no longer exist in the surrounding area because of land uses and associated activities.

A total of 105 natural areas were identified in Waukesha County in 1994. Of the 105 natural area sites, nine were classified as NA-1 sites, 30 were classified as NA-2 sites, and 66 were classified as NA-3 sites. In addition, a total of 77 critical species habitat sites were identified, with 36 of these sites located outside a natural area.

It is recommended that all but two of the natural area sites within Waukesha County be preserved. The two sites not recommended to be preserved are the Luther Parker Cemetery Prairie located in the City of Muskego and Busse Woods located in the City of Pewaukee. Natural area sites to be preserved encompass about 13,670 acres in 103 sites. It is further recommended that those critical species habitat sites located within the primary environmental corridor, which encompass about 5,065 acres in 28 sites, also be preserved. To insure such preservation, it is recommended that all such critical species habitat sites and all natural areas be acquired by public agencies or by nonprofit conservation organizations such as The Nature Conservancy, the Waukesha Land Conservancy, or the Izaak Walton League. Exceptions would be made only where lands within such sites have already been developed, which occurs in some instances where large-lot residential or outdoor recreational development has occurred in such a manner that the natural area or critical species habitat site has generally been protected. In these cases, it is recommended that the areas be protected from additional development either through protective zoning or through conservation easements or management agreements between the landowner and public agencies or nonprofit conservation groups. *See Exhibit G*

### **Bicycle and Pedestrian Plans**

It is recommended that the County work with local units of government to prepare coordinated bicycle and pedestrian plans to supplement the regional plan. The local plans should provide for facilities to accommodate bicycle and pedestrian travel within neighborhoods, providing for convenient travel between residential areas and shopping centers, schools, parks, and transit stops within or adjacent to the neighborhood. The standards, guidelines, and system plans set forth in the regional plan should be the basis for the preparation of community and neighborhood plans. It is also recommended that local units of government consider the preparation and implementation of land use plans that encourage more compact and dense development patterns, in order to facilitate pedestrian and bicycle travel. Local municipalities within Waukesha County as well as adjacent counties may also have numerous parks and recreation plans that incorporate bicycle and pedestrian pathways, and several have already developed bicycle and pedestrian plans. These plans should also recognize what jurisdiction is responsible for said trails. These are discussed further in chapter 3. Since many trails cross municipal boundaries, Waukesha County should work with local municipalities and adjoining counties to coordinate trail planning.

Waukesha County should refine the proposed system of off-street bicycle paths and surface arterial streets and highway system accommodation of bicycles contained in the 2035 Regional Transportation System Plan and noted in the County Development Plan. In addition, the County should integrate bikeway accommodations into planning for upgrades and modifications to the county trunk highway system consistent with the refined county plan.

Specifically, it is recommended that the County, in cooperation with the Wisconsin Department of Natural Resources and the City of Waukesha, work to connect the Fox River, Glacial Drumlin, Lake Country and New Berlin trails through a combination of off-street paths and on-street routes. In addition, it is recommended the development of two on-street and pathway connections between the Lake Country and Glacial Drumlin Trails. The first connection would be located on CTH TT, on the west side of the City of Waukesha. The second would be located on Cushing Park Road, in the City and Town of Delafield. Finally, it is recommended that the County coordinate with the Village of Dousman, Town of Ottawa and the Wisconsin Department of Natural Resources to connect the Glacial Drumlin Trail to the Ottawa State Park.

### **Lake and River Access**

Lakes and rivers constitute a particularly valuable part of the natural resource base of the County. Lakes and rivers enhance the aesthetic quality of the County and are focal points for water-related recreational activities, including such active uses as swimming, boating, and fishing and such passive uses as walking, viewing, or sitting along the water's edge.

The open space element of this Waukesha County Development plan provides for the protection, through zoning or public acquisition, of environmental corridors and isolated natural resource areas. Generally, such corridors include the area within 75 feet of the ordinary high-water mark of rivers and major lakes. Public acquisition of such corridors is recommended in areas of the County proposed to be developed for urban use or if the corridors encompass an identified natural area or a proposed park or trail facility. The open space element of this plan further recommends the acquisition of corridor lands along eight rivers and major streams in the County as part of proposed greenways. Such

greenways are intended to protect river and stream corridors and to provide facilities for such recreational activities as hiking, biking, fishing, canoeing, and wildlife viewing.

Waukesha County will assist the Wisconsin Department of Natural Resources, in keeping with State Statutes that seek to assure that all Wisconsin residents have access to publicly owned inland waters. Rules set forth in Chapter NR 1.91 of the Wisconsin Administrative Code, require public boating access sites, including boat launching and parking facilities, to be provided on inland lakes, with an appropriate number of parking spaces varying depending on the size of the lake.

### **Department of Natural Resources Open Space Sites**

The outdoor preservation element of this Plan includes lands which have been acquired or which are proposed to be acquired by the Wisconsin Department of Natural Resources (DNR) within their project boundaries. Project boundaries have been developed by the DNR and approved by the Wisconsin Natural Resources Board. It is recommended that the DNR continue to acquire additional land within the approved project boundaries for open space or outdoor recreation purposes. It is further recommended that the County coordinate with the DNR to adequately provide nature-based recreational activities while minimizing duplication of services. Provisions contained in the Waukesha County Development Codes require landowners proposing development of lands within a DNR project boundary contact the DNR to discuss and negotiate a land purchase where appropriate.

### **Local Municipal Park and Outdoor Recreation Sites**

In addition to meeting natural resource-based recreation needs, a park and open space plan must seek to provide sites and facilities for non natural resource-based activities, such as baseball, tennis, and playground activities. In comparison to the natural resource-based recreation site and facilities, sites and facilities for non natural resource-based activities rely less heavily on natural resource amenities, generally meet a greater need in urban than rural areas, and have a relatively small service radius. For these reasons, responsibility for providing such sites and facilities generally rests with city, village, and town governments. Local Municipalities propose to acquire 8,627 acres or 2.3 percent of the County.

It is recommended that a full range of community and neighborhood park sites and facilities be provided. Recommendations for the provision of local park sites and facilities should be identified through the preparation and local adoption of comprehensive local municipal park and open space plans.

It is recommended that the County continue using its Natural Areas and Critical Species Habitat Sites Acquisition Partnership Funding Program established under enrolled Ordinance 152-101, to collaborate with local municipalities in the acquisition of these sites where appropriate.

### **Nonprofit Conservation Organization Sites**

The recommended park and open space plan also presents lands that should be acquired by nonprofit conservation organizations. These lands primarily represent isolated natural areas and critical species habitat sites that are not part of a DNR project boundary, lands to be acquired as a major park for Waukesha County or a Waukesha County greenway and not part of a property identified for local municipal park purposes. It is recommended that the County continue using its Natural Areas and Critical Species Habitat Sites Acquisition Partnership Funding Program established under enrolled Ordinance 152-101, to partner with nonprofit conservation organizations in the acquisition of these sites where appropriate.

### **Open Space Lands to be Protected by Public Land Use Regulation**

The recommended park and open space plan presents lands that should be protected through public land use regulation. These lands represent natural resource features such as wetlands and minor isolated natural areas that have not been identified for acquisition by the County, DNR, local municipalities or nonprofit conservation organization. As a result, these lands should be placed in protective zoning districts to prevent incompatible development. Such protective zoning districts include an environmental corridor, and, for upland portions of the corridor outside areas of steep slopes, rural residential zoning with an overall density of no more than one dwelling unit per five acres. In addition, land use regulation may include actions such as dedications, conservation easements and preservation statements. However, should such open space lands, particularly lands within primary environmental corridors, become available

for acquisition and use for public open space purposes, it is recommended that the appropriate public agency consider the acquisition of such lands.

## **MONITORING AND UPDATING THE PLAN**

It is intended that the Waukesha County Park and Open Space Plan meet State planning requirements for outdoor recreation aids program, thereby making the County eligible to apply for, and receive, available State and Federal funds to assist in the acquisition and development of recommended park and open space sites and facilities. It is not the intent of the Waukesha County Park and Open Space Plan to serve as the park and open space plan for the individual units of government within the County, the State of Wisconsin Department of Natural Resources (DNR) or Nonprofit Conservation Organizations, but it may serve as an overall guide for local planning purposes. Recommendations for the provision of state, local park sites and facilities should be identified in their own park and open space plans and referenced in the County plan. The County plan should, however, assist towns that adopt the County plan to qualify for available Federal and State funding in support of the development of town park and associated recreation facilities.

### **Annual Amendments**

To ensure that the plan continues to properly reflect the state, county, local, or NCO changing conditions and plans, it is recommended that an annual park summit of all stakeholders be held to review and update the plan. Amendments to the Park and Open Space Plan will be made along with amendments to the Comprehensive Development Plan for Waukesha County on an annual basis. The Department of Parks and Land Use will make available a plan amendment request form for property owners and towns wishing to propose a change to the Plan. The deadline for plan amendment request forms will be the end of the workday on January 15<sup>th</sup>. If that date falls on a weekend, the submittal deadline will be extended to the end of work on the following Monday. All applications for plan amendment will be scheduled for a public hearing and advertised according to statutory procedures. A review and recommendation for each request will be prepared and submitted to the Park and Planning Commission, Land Use, Parks and Environment Committee and County Board for consideration. Under special circumstances, the Waukesha County Park and Planning Commission may authorize plan amendments to be processed, in addition, to the schedule outlined herein.

### **Regional or Countywide Plan Refinements**

Due to the complexity of comprehensive planning, it is very difficult to have completed all detailed planning initiatives in advance of comprehensive amendments to the Park and Open Space Plan or Development Plan. It is anticipated that the Regional Bicycle and Pedestrian Facilities System Plan and the Natural Areas and Critical Species Habitat Protection and Management Plan will be updated following the adoption of this Plan. In addition, it is anticipated that the Wisconsin Department of Natural Resources will also periodically be amending their project acquisition boundaries. The products of those regional or countywide planning initiatives will be evaluated and appropriate amendments to this park and open space plan will be proposed.

### **Comprehensive Amendment**

In anticipation of the continued development of the County, it is recommended a comprehensive reevaluation, update, and revision, as appropriate, of this Plan be conducted. In conformance with state and federal outdoor recreation grant eligibility planning requirements, a comprehensive reevaluation and revision of the plan shall be conducted every five years. It is further recommended that the comprehensive reevaluation use a similar inter-municipal cooperative approach used in the preparation of this Plan.

## **Park and Recreation Design**

A recreation system is composed of many different components, the combinations of which provide facilities and landscapes for outdoor recreation. Many entities are involved in the development and management of recreational areas and facilities for a community or region. Facilities provided by these entities should be complementary and serve a particular geographic area or recreational need. For this plan, parks and recreation areas have been classified based on their service areas.

They are described as the following:

### **Mini Park**

#### **1. Definition Summary:**

A play lot or playground provides space for parental supervised recreation of toddlers and young children within a neighborhood, or as part of a larger neighborhood or community park and urban center, including retail-shopping areas.

#### **2. Size Objectives:**

0.5 to 1.5 acres.

#### **3. Service Area Objectives:**

Generally within a neighborhood of a half mile radius or population of 2,000-3,000. Mini parks may be included in parks that serve a larger population or service area.

#### **4. Location Objectives:**

Located in protected areas with separation from street traffic and high visibility; serving local neighborhoods and adjoining schools, libraries, or police and fire facilities.

• *Population Ratio to Acreage:* .25 to 0.5 acre per 1,000 population to achieve a park unit size that serves 2,000 to 3,000 people.

#### **5. Space, Design, and Service Area:**

The size of a play lot or playground may range from as small as 2,500 sq. ft. to 1.5 acres.\* Amenities offered by these facilities generally include sand play areas, play apparatus, play equipment, and other special child-oriented features. The service radius

*\*Stand-alone play lots require more land area than play lots incorporated into larger parks.*

for these parks in terms of distance from population served is limited to less than a quarter mile, or within a super block space, unless the playground is incorporated into a larger park.

#### **6. Orientation:**

Small geographic areas, sub-neighborhoods, or neighborhoods, when combined with a larger park unit. Serves youth ranging in age from toddler to 12 years, with adult supervision. Playgrounds also serve important needs in city business districts and inner city areas where a mix of commercial and recreation activity is desired.

#### **7. Function:**

Provides outdoor play experiences for youth under parental supervision. Generates neighborhood communication and provides diversion from work and domestic chores. Promotes neighborhood solidarity.

## Neighborhood Park

### **1. Definition Summary:**

A neighborhood park, by size, program, and location, provides space and recreation activities for the immediate neighborhood in which it is located. It is considered an extension of neighborhood residents' "out-of-yard" and outdoor use area.

### **2. Size Objectives:**

5 to 25 acres.

### **3. Service Area Objectives:**

Generally a one mile radius, but actually defined by collector street patterns which form the limits of a neighborhood or recreation service area. Population served may range from 2,000 up to 5,000.

### **4. Location Objectives:**

Centrally located for equitable pedestrian access within a definable neighborhood service area.

Adjoining or adjacent to an elementary, middle school or high school, fire station, or library, if possible.

### **5. Program Objectives:**

Compatible with the neighborhood setting and park site constraints. Generally includes the following facilities, which are determined with public input as to use and activities:

- a. Parking for 10 to 20 vehicles.
  - 1) On-street parking is acceptable if negative impact to residential units can be mitigated. On-site parking is preferable as a planning objective.
  - 2) Bike racks with Class II trail connections where possible.
- b. Restrooms
  - 1) Men's restroom with
    - 2 water closets
    - 2 urinals
    - 2 lavatories
  - 2) Women's restroom with

3 water closets

2 lavatories.

3) Utility and minimum park janitorial storage space.

c. Tot lot/children's play area

d. Family event/group picnic facility

e. Informal family picnic area with benches and tables

f. Unstructured turf grass play area/play or practice field for children, young adults, and families.

g. Sport facilities—compatible with neighborhood setting and park site constraints.

1) Basketball—half court, full court, or tri-court configuration

2) Volleyball area

3) Softball field/soccer practice or game overlay

4) Other features as needs or site conditions allow

### **6. Orientation:**

Serves all age groups, with an emphasis on youth and families in neighborhood settings.

### **7. Function:**

To provide a combination of active recreation and passive activities, both outdoor and indoor facilities, and special features as required or needed.

### **8. Space, Design, and Service Area:**

A minimum size of 5 to 25 acres with amenities including sports facilities, picnic areas, swim facilities, cultural activities, arts, crafts, and individual passive activities. The park should primarily serve a defined neighborhood area population of 2,000-5,000. Distance from this neighborhood will vary depending on urban development pattern, zoning, and densities in the respective neighborhoods being served. Efforts should be made to allow easy pedestrian access to the park.

## Community Park

### **1. Definition Summary:**

A community park, by size, program, and location, provides space and recreation activities for a defined service area, the entire city, or significant geographic segment of the city's population.

### **2. Size Objectives:**

Usually more than 25 acres.

### **3. Service Area Objectives:**

Generally a 2 to 5 mile radius within the city and adjacent neighborhoods outside of city limits.

### **4. Location Objectives:**

Centrally located if planned to serve a particular geographic segment of the city. Located adjoining or immediately adjacent to a collector street providing community-wide vehicular access, thereby reducing neighborhood traffic impacts. Connected with Class II on-street and/or off-street community trail and bike lane system. Adjoining or adjacent to an elementary, middle, or high school if possible.

### **5. Program Objectives:**

Elements that fulfill the service area, park facilities and recreation program demands. The following facilities may be compatible with community setting and park site constraints:

- a. Off-street parking calculated to satisfy demand of park and recreation activities provided. Includes bike racks and a public transit station at the site as well as both on-site and street parking.
- b. Restrooms designed to accommodate the level of park and recreation activities provided and the number of people served. Restrooms should be located within a reasonable walking distance from children's play equipment and other high-use areas.
- c. Community recreation center

- d. Park maintenance and equipment storage building
- e. Tot lot/children's play area
- f. Group picnic shelters
- g. Family picnic facilities
- h. Sport/recreation facility fulfilling the overall city demand

### *Appropriate program elements include:*

- 1) Community pool/water feature
- 2) Soccer fields
- 3) Softball, little league baseball, junior pony league baseball
- 4) Football
- 5) Roller hockey/skateboard area
- 6) Tennis courts
- 7) Basketball courts
- 8) Amphitheater/performing arts center
- 9) Volleyball (indoor and outdoor)
- 10) Jogging trails
- 11) Other facilities as desired and as permitted under park site plan
- 12) Concessions (food and beverage)

### **6. Orientation:**

Multi-purpose service area or community-wide recreation resource serving most or all of the population.

### **7. Function:**

Provides opportunities for a diverse mix of indoor and outdoor recreation, including walking and bicycling, outdoor performances, various programmed and non-programmed field sports, swimming, and special events.

### **8. Space, Design, and Service Area:**

The minimum space for a community park is 15 acres. Facilities typically provide for some sports activities, though emphasis is on passive cultural and community centers with recreational programming and organized activities. The community park may serve populations within a 2 to 5 mile radius, a scope that would allow residents of other communities to use the park as well.

## Special Use Park

### **1. Definition Summary:**

A special use park is often designed as a revenue-generating enterprise created to satisfy demand for a particular sport, recreational activity, or special event. A special use park may also be a sports park combined with enterprise activities and administered as a community recreation resource.

### **2. Size Objective:**

The actual size of a special use park is determined by land availability and facility/market demand for special uses or recreation programs.

### **3. Service Area Objectives:**

Community or area-wide and determined by the type of recreation program, special events or use activities.

### **4. Location Objectives:**

Determined by the property opportunity, service area and size objectives.

### **5. Program Objectives:**

Special use parks require facility programming that is user- or market-driven and based on community needs or economic

and service principles for public and private partnerships. The magnitude and type of special use facilities may include:

- a. Water play park
- b. Amphitheater
- c. Festival/swap meet/farmers market
- d. League/individual sports complex
- e. Fitness/entertainment center
- f. Skateboard/in-line hockey park
- g. Recreation programs and classes

### **6. Orientation:**

Provides recreation programming, sports and special event attractions and activities for all age groups.

### **7. Function:**

Special events, fairs, festivals, expositions, symposiums, sports, community gatherings, ethnic/cultural celebrations, plays and numerous other recreational programs and activities.

### **8. Space, Design, and Service Area:**

The minimum size for special parks varies depending on intended use and programming.

## **School Park**

### ***1. Definition Summary:***

By combining the resources of two public agencies, the school park classification allows for expanding the recreational, social, and educational opportunities available to the community in an efficient and cost-effective manner.

Depending on the circumstances, school park sites often complement other community recreation or open lands. As an example, an elementary/middle school site could also serve as a neighborhood park. Likewise, middle or high school sports facilities could do double duty as a community park or as youth athletic fields. Depending on its size, one school park site may serve in a number of capacities, such as a neighborhood park, youth athletic fields, and a location for recreation classes. Given the inherent variability of type, size and location, determining how a school park site is integrated into a larger park system will depend on case-by-case circumstances. The important outcome in the joint-use relationship is that both the school district and park system benefit from shared use of facilities and land area.

### ***2. Size Objective:***

The optimum size of a school park site depends on its intended use. The size criteria established for neighborhood park and community park classifications may apply.

### ***3. Service Area Objectives:***

Neighborhood park and community park classifications criteria should be used to determine school park functions and area

served. For planning purposes, the degree to which school lands, including buildings or facilities, meet community needs depends on the specific inter-local agreements formed.

### ***4. Location Objectives:***

The location of a school park site will be determined by the school district based on district policy.

Coordinated city and school district planning allows sighting, acquisition, and facility development to be responsive to community needs. Service areas for school park sites will depend on the type of use and facilities provided.

### ***5. Program Objectives:***

The criteria established for neighborhood parks and community parks should be used to determine how a school park site is developed and programmed. If athletic fields are developed at a school park site, they should, where feasible, be oriented toward youth rather than adult programs.

Establishing a clearly defined joint-use agreement between involved agencies is critical to making school park relationships workable. This is particularly important with respect to acquisition, development, maintenance, liability, use, and programming of facility issues. The orientation of school park projects is typically for neighborhood and community recreation services. The functions may include sports, recreation classes, passive recreation activities, and other recreation programs suitable to an elementary or secondary education school.

## County Park

### **1. Definition Summary:**

A county park provides sufficient park and recreation area to meet the needs of county residents. County parks consist of land that is specifically set aside for active and passive recreation uses, and that accommodates large gatherings, special events, and individual users. County parks offer a wide variety of compatible outdoor recreation activities, and may provide areas that do not primarily serve a recreational purpose such as protected natural areas, historic areas, and special use areas.

### **2. Size Objectives:**

The size of recreation parks varies greatly from park to park, but with the exception of those parks that serve a special use or are trail corridors, a recreation park should consist of a minimum of 100 acres of land. Each park should be of sufficient size to accommodate the estimated use and to allow for the operation and maintenance of planned recreational facilities.

### **3. Service Area Objectives:**

County parks provide for a regional user group and serve primarily county residents. Special facilities like camping and trails are used by tourists and visitors to the county.

### **4. Location Objectives:**

The land should have high recreational potential and be able to withstand intensive and extensive recreational activities. Land should have potential to accommodate large groups of people. Land for corridors should be located so as to connect to communities, parks, and open spaces. The potential for future land acquisition should be taken into account.

### **5. Program Objectives:**

Development should be appropriate for intended use and should accommodate moderate to high use. Development and planning should consider the physical

condition and characteristics of the land and recognize potential environmental or structural limitations that might require intensive maintenance. County parks may include the following facilities:

- a. Camping/group camping
- b. Picnic areas
- c. Recreational trails (hiking, bicycling, mountain biking, equestrian, cross-country ski, snowmobile, etc.)
- d. Play areas
- e. Swimming beaches
- f. Water access
- g. Fishing access
- h. Shelters
- i. Restrooms
- j. Shower facilities
- k. Sport fields (basketball, volleyball, softball, etc.)
- l. Pet exercise area

### **6. Orientation:**

Multi-purpose service area and regional recreation resource serving a significant portion of a county or multi-county population.

### **7. Function:**

To provide sufficient parks and recreation areas to meet the needs of the people of the county.

### **8. Space, Design, and Service Area:**

The size of a county park should be a minimum of 100 acres. Facilities vary by park; some parks offer active recreation (camping, recreational trails, etc.), while others provide passive recreation (scenic lookouts, picnic areas, beaches, etc.). Most parks provide both active and passive recreation. County parks provide for a regional user group and serve primarily county residents, though special facilities also serve tourists and visitors to the county.

## State Forest

### **1. Definition Summary:**

A state forest consists of well-blocked areas of state owned lands which are managed to benefit present and future generations of residents, recognizing that forests contribute to local and statewide economies and to a healthy natural environment. State forests practice sustainable forestry. The management of state forests is consistent with the ecological capability of state forestland and with the long-term goal of maintaining sustainable forest communities and ecosystems. Benefits of maintaining these ecosystems include soil protection, public hunting, protection of water quality, production of recurring forest products, outdoor recreation, native biological diversity, aquatic and terrestrial wildlife, and aesthetic value. The range of benefits provided in each state forest reflect its unique character and position in the regional landscape.

### **2. Size Objectives:**

Typically between 1,000 and 250,000 acres, but can be larger or smaller.

### **3. Service Area Objectives:**

Generally a 100-mile radius. State forests typically provide close-to-home recreational areas. Day users typically travel approximately 50 miles one-way to reach state forests, while overnight users tend to travel further, approximately 100-150 miles one-way.

Travel to state forests can, however, exceed 160 miles for longer vacation stays and travel to “destination areas.”

### **4. Location Objectives:**

Areas with large blocks of land.

### **5. Program Objectives:**

State forests must meet ecological, economic, social, and cultural needs. Elements are compatible with the natural resource setting and park site constraints. Facilities may include the following:

Hiking trails, Cross-country ski trails, Snowmobile trails, Equestrian trails, ATV trails, and Camping sites

### **6. Orientation:**

Multi-purpose service area and regional recreation resource serving a significant portion of a state or regional population.

### **7. Function:**

To provide for nature conservation, provide income to forest owners, supply raw materials to the wood processing industry, and provide public recreation.

### **8. Space, Design, and Service Area:**

The size of a state forest is determined by the extent of the area’s natural resources and recreation capabilities. There is no minimum or maximum size for a state forest. Facilities are not universal and vary by forest. The geographic location of the forest and the natural resources present dictate recreation available at the site. State forests serve large geographic areas of a state or region.

## State Park

### **1. Definition Summary:**

A state park, by size, program, and location, provides space for outdoor recreation and education about nature and conservation. These parks serve a significant geographic segment of a state or regional population. State parks aim to preserve, protect, interpret and enhance the scenic and cultural resources of the state.

### **2. Size Objectives:**

Parks must be large enough to accommodate a reasonable mix of outdoor recreational activities.

Typically, parks are between 500 and 3000 acres, but can be smaller (<20 acres) or larger (>10,000 acres).

### **3. Service Area Objectives:**

Generally a 100-mile radius. State parks typically provide close-to-home recreational areas. Day users generally travel approximately 50 miles one-way to reach state parks, while overnight users tend to travel further, approximately 100-150 miles one-way. Travel distances to state parks can often exceed 160 miles for longer vacation stays and trips to “destination areas.”

### **4. Location Objectives:**

Sighting of Wisconsin State Parks is typically based on five criteria developed by John Nolen. These criteria are:

- 1) Large size to serve a large number of citizens,
- 2) Accessibility to major population areas,
- 3) A healthful, natural setting,
- 4) Reasonable cost for land acquisition,
- 5) Land possessing “decidedly uncommon charm and beauty.”

All, or a combination of these criteria are used to determine where to site a state park.

### **5. Program Objectives:**

Elements that fulfill the service area, park facilities and recreation program demands. Elements are compatible with the natural resource setting and park site constraints. Developments may include the following facilities:

Hiking trails, Surfaced bicycle trails, Mountain bike trails, Nature trails, Cross-country ski trails, Snowmobile trails, Equestrian trails, Picnic sites, Camping sites, Parking stalls and Swimming beaches

### **6. Orientation:**

Multi-purpose service area and regional recreation resource serving a significant portion of a state or regional population.

### **7. Function**

To provide for public recreation and education of conservation and nature study. To preserve, protect, interpret and enhance the scenic and cultural resources of the state.

### **8. Space, Design, and Service Area:**

The size of a state park is determined by the extent of the area’s natural resources and recreation capabilities. There is no minimum or maximum size for a state park. Facilities are not universal and vary by park. Some parks offer active recreation (camping, boating, mountain biking trails, hunting etc.), while others offer passive recreation (scenic lookouts, picnic areas, beaches, etc.). Most provide both active and passive recreation. The geographic area and the natural resources present dictate recreation uses and facilities present in the park. State parks serve large geographic areas of a state or region.

## EXHIBIT B

# WAUKESHA COUNTY PARK AND OPENSOURCE PLAN UPDATE

## WAUKESHA COUNTY PARK CLASSIFICATIONS

The classification system for Waukesha County Parks focuses on providing facilities of regional importance for County residents. Municipal park systems within the County typically provide recreation facilities to serve local residents through a hierarchy of mini-parks or tot lots, neighborhood parks, community parks, and occasionally regional or special use parks. The Waukesha County Park system provides an overlay of regional facilities to serve a countywide client base and to conserve valuable natural resources that frequently bridge multiple jurisdictions.

- A. Regional Parks
- B. Regional Greenways
- C. Conservancy Areas
- D. Regional Trail Corridors
- E. Regional Special Use-Areas

### A. **Regional Park**

Regional Parks provide a wide range of natural resource-related recreation opportunities as well as preserving high quality and unique landscapes and open spaces.

#### Site Selection Criteria:

- Regional park site should contain a minimum of 250 acres, with a four-mile service radius. Regional parks may contain special use areas or other features that are unique within the County and serve a wider radius of park users.
- Sites should contain a diversity of resources, either natural or artificial, in an adequate space for both protection and management of the natural resources and the pursuit of compatible passive nature-based outdoor recreation activities. Access to recreation-quality water bodies is important.
- Sites should contain, at least in part, significant blocks of natural resource conservation areas of high quality or in a condition, which permits restoration through adequate management.
- Sites should contain land that will support resource based recreation activities and buffers for recreation activities. The recreation sites should not adversely affect the areas of conserved or restored natural resources.

#### Implementation Criteria:

- Regional Parks are natural resource based parks, and to maintain that vision 70% of each Regional Park will be managed in a natural condition, while 30% of each Regional Park can be developed to accommodate needed recreational facilities and activities.

### Regional Park Continued

- Regional parks provide for passive nature-based recreation activities such as; Camping, swimming, walking and hiking, picnicking, boating and canoeing, nature study, cross county skiing, sledding, and snowshoeing.

#### Waukesha County Regional Parks:

- Developed Regional Parks  
Fox Brook Park, Fox River Park, Mukwonago Park, Muskego Park, Minooka Park, Menomonee Park, Nashotah Park, Naga-Waukee Park
- Undeveloped Regional Parks  
Ashippun Park, Eble Park, Fox Bend Park, Monches Park, Ryan Park, Smith Park

### **B. Regional Greenways**

Greenways are a system of corridors along the County's major rivers and streams, which will protect the high quality natural resource based elements, guide urban growth, connect major state, county, and local parkland, as well as other community social and cultural amenities, and provide recreational and educational opportunities for the use and enjoyment by present and future generations.

#### Site Selection Criteria:

- Sites should preserve wetlands, A-rated vegetation, slopes greater than 20%, natural areas of statewide significance, critical species habitat, class I wildlife habitat, and water quality. These areas comprise the preservation zone of the greenway corridor.
- Sites should contain land to provide a buffer between residential/commercial land or agriculture land and the preservation corridor zone.
- Sites should provide non-motorized trail opportunities within the greenway corridor and visual buffering from adjacent property owners.
- The regional trail & greenway trail corridor shall serve as the spine for the countywide trail system connecting regional parks and local trail systems.

#### Proposed Greenways:

Ashippun River, Bark River, Fox River, Mill Creek, Mukwonago River, Oconomowoc River, Pebble Brook, Pebble Creek, Pewaukee River, Scuppernong Creek and Spring Creek.

### C. Conservancy Area

Conservancies are areas designated for the purpose of restoring or maintaining significant native wildlife or plant species. Development is limited for educational and restoration purposes. These areas may be included within Regional Parks or Regional Greenways, or may be unique natural areas. Intrusion by people is permitted on a limited basis for scientific investigation, education instruction or observation. They are inviolate areas providing habitat that act as reservoirs for species of special concern and interest. Conservancies must be protected from any unwarranted effects of human activity resulting from recreational use, but may require occasional management activities.

Site Selection Criteria:

- A delineated portion of a park or greenway for which a unique stewardship or management plan will be developed; or
- A unique parkland unit serving the goals of a Conservancy Area, benefiting from management under a specific stewardship plan.

### D. Regional Trail Corridors

Regional Trail Corridors provide opportunities for non-motorized recreational use and serve as multi-modal transportation facilities for bicycle commuters and pedestrians. Portions of these trail corridors may be within Regional Parks or Regional Greenways.

Site Selection Criteria:

- Corridors may follow natural features such as regional greenways or man-made features such as utility or transportation corridors.
- The regional trail & greenway trail corridor shall serve as the spine for the countywide trail system connecting Waukesha County communities and providing access to regional parks, cultural sites, special use facilities, local trail systems, trail systems in adjacent counties, and statewide trail systems.

Waukesha County Regional Trail Corridors:

Active

Bugline Trail, Lake Country Trail and New Berlin Trail

### E. Regional Special Use Areas

Regional Special Use Areas provide facilities to meet countywide educational or recreational needs that are not generally found in the regional parks, greenways, or trail corridors. This classification covers a broad range of special park facilities oriented toward single purpose use or more active uses that are incompatible with passive, nature-based recreation emphasized within the Regional Parks and Greenways.

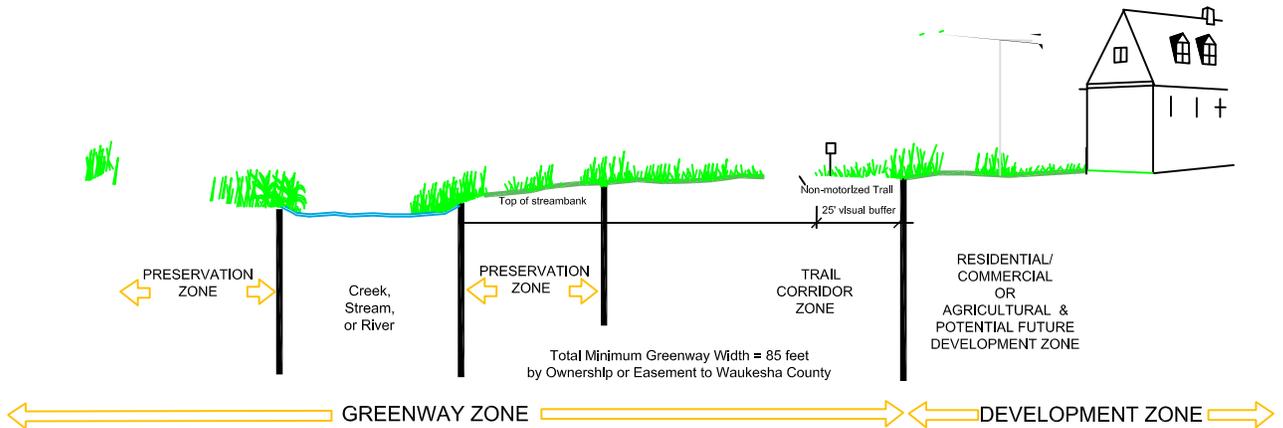
Site Selection Criteria:

- Not meant to occur in Regional Parks, Regional Special Use Areas are to have a separate and distinct location.
- Size varies with use

Waukesha County Regional Special Use Areas:

Retzer Nature Center, Eble Ice Arena, Naga-Waukee Ice Arena, Moor Downs Golf Course, Naga-Waukee Golf Course, Wanaki Golf Course, Expo Center, Stand-alone Lake and River Boat Access Facilities.

# TYPICAL CROSS-SECTION



The Greenway Corridor serves as a River/Streamway buffer to:

- (a) Protect water quality by filtering and removing sediment, organic matter, pesticides and other pollutants from surface runoff and subsurface flow through deposition, absorption, plant uptake, denitrification or other processes
- (b) Create, enhance, and protect wildlife habitat and provide a corridor for the movement of a wide range of species
- (c) Protect and stabilize the riparian lands and reduce flood water velocity
- (d) Protect high quality plant communities, including upland woods.
- (e) Provide non-motorized trail opportunities.

	PRESERVATION ZONE		TRAIL CORRIDOR ZONE	DEVELOPMENT ZONE
<b>Purpose Resource-Based Protection</b>	To leave in as natural a state as possible by protecting water quality and the physical integrity of the creek/ stream/ river ecosystem and high quality plant communities including upland woods.		Provide non-motorized trail opportunities along greenway corridor with visual buffer from adjacent property owners.	Provide land for agricultural preservation or future development.
<b>Width</b>	Varies based upon: -Wetlands (SEWRPC) -A-rated vegetation***** -Critical Species Habitat (SEWRPC) -Natural Areas of Statewide significance (NA 1)  <u>May Include:</u> -Slopes >20% within or directly adjacent to river corridor. -Class I Wildlife Habitat***** -Floodplain* -Primary Environmental Corridor.			Varies with Zoning.
<b>Ecological Value/Target</b>	<ul style="list-style-type: none"> <li>• Wetlands</li> <li>• A-rated Vegetation*****</li> <li>• Slopes &gt; 20%</li> <li>• Natural Areas of Statewide significance (NA 1)</li> <li>• Critical Species Habitat</li> <li>• Class I Wildlife Habitat*****</li> <li>• Water quality protection based on the standards of NR151****, NRCS- sec. IV***and the Waukesha County Shoreland &amp; Floodland Protection Ordinance.</li> </ul>		<ul style="list-style-type: none"> <li>• Floodplain*, Primary or Secondary Environmental Corridor, and B, C, D, E and F rated vegetation*****</li> <li>• Class II Wildlife Habitat or greater. Class I Wildlife Habitat or Critical Species areas will be evaluated on a case by case basis.</li> <li>• Slopes not exceeding 20% and preferably not on slopes exceeding 5%</li> <li>• Soils suitable for trail development.</li> <li><u>May occur within:</u></li> <li>• Mature riparian vegetation native to the southeastern Wisconsin region</li> <li>• Natural Areas of Countywide and Local significance (NA 2, NA3)</li> </ul>	<ul style="list-style-type: none"> <li>• Farming in agriculture areas.</li> <li>• Primary Environmental Corridor in development areas (PEC Restrictions Apply).</li> </ul>
<b>Uses</b>	<u>Allowable uses limited to:</u> - Stormwater channels***** - Signage - May Include Non-Motorized Trail Linkage or continuation of trail.** - May include boardwalk for trail linkage. - Noxious weed control. - Firebreaks.		<u>Allowable Uses:</u> - Farming - Selective vegetation removal and noxious weed control - Firebreaks - Non-motorized Trails - Stormwater retention/detention/outfall structures - Boardwalk allowed for trail linkage - Signage - Maintenance vehicles  <u>Restricted Uses:</u> - No buildings/structures	As permitted by Zoning Regulations. May be Farming, Housing, Commercial, Park, Golf Course, Public Roadway.

Flood way - as defined in the Waukesha County Shoreland Protection Ordinance and Waukesha County Greenway Definition of Terms.  
Location of Non-motorized Trail with Greenway Corridor based upon site specific evaluation of site features and land-based suitability. Refer to Waukesha County Greenway Corridor Trail Guidelines.

NRCS standards are found in Section IV of the Field Office Technical Guide, published by the USDA Natural Resource Conservation Service.

NR 151 is a Wisconsin Department of Natural Resources administrative code that defines minimum performance standards for runoff pollution control.

Paved channels are not considered compatible within the Preservation Zone.

Areas of A-Rated Vegetation and Class I Wildlife Habitat will be included as field verified on a site by site basis.

Vegetation rating based upon Waukesha County Parks vegetation rating system.