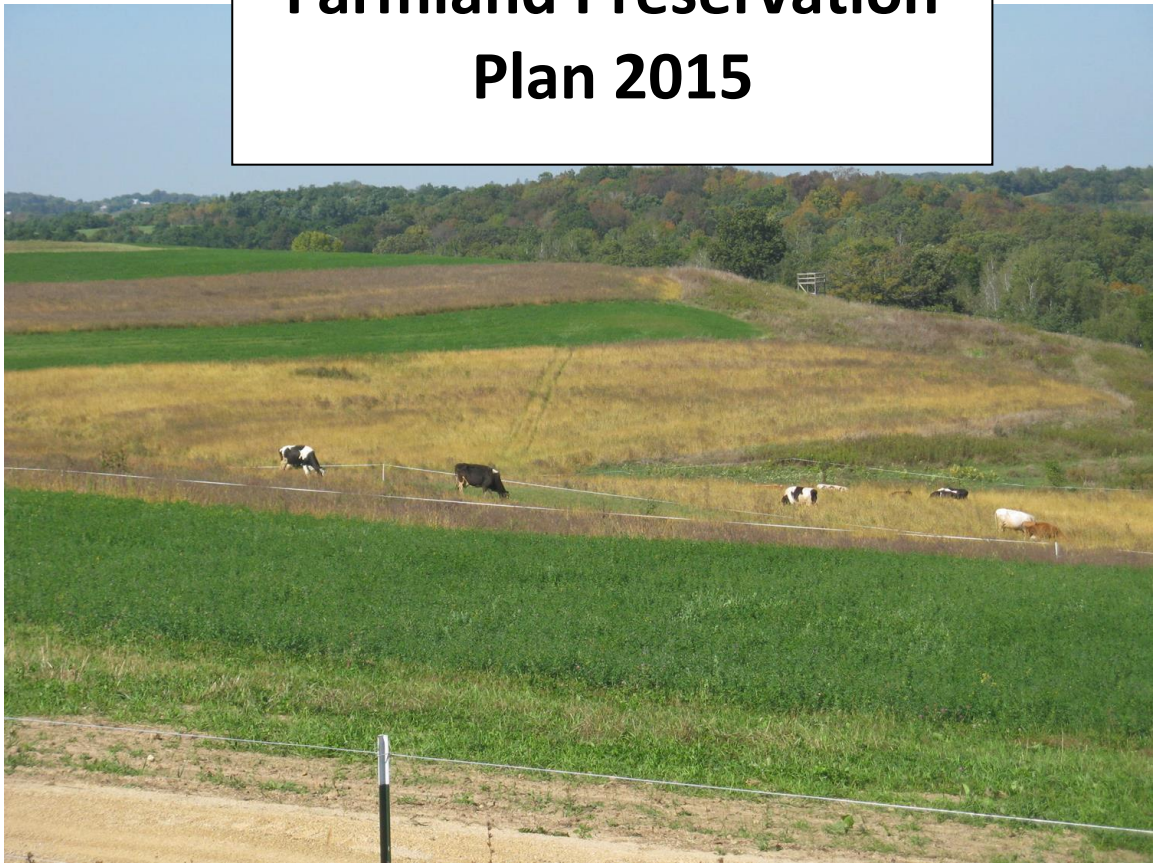




**Vernon County  
Farmland Preservation  
Plan 2015**



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# **CHAPTER 1**

## ***INTRODUCTION***

### **OVERVIEW**

Predominantly focused in the upper Midwest, America's farmland regions coincide with our traditional notions of America's farm belt. While not containing as much prime farmland area as some other upper Midwest states, Wisconsin is still home to many acres of prime land. In 2010 agriculture constituted a \$88 billion industry in Wisconsin. Most of this area can be found in the southern and eastern portion of the state. In Vernon County, the prime agriculture land is almost exclusively located in the central portion of the county.

Despite its importance, agriculture faces many challenges. Farmland around the country is being lost at an alarming rate, and once it is gone we cannot get it back. Because of the economic importance of agriculture in Wisconsin and the potential for loss of our agricultural land base, farmland preservation planning is crucial to preserve the agricultural land remaining the State.

### **BACKGROUND**

Vernon County is located in southwest Wisconsin and is part of the Mississippi Valley and Wisconsin River regions. Vernon County is bordered by the Mississippi River to the west and dissected by the Kickapoo River, which flows to the Wisconsin River. The county is home to 21 towns, 9 villages (two partially located in an adjacent county) and 3 cities. As of the 2000 census there were 28,056 people, 10,825 households, and 7,501 families residing in the county. The 2010 Census reports that the population in Vernon County totaled 29,773, an increase of 1,717 new residents, which is a 6.1 percent increase over the 2000 census. According to the U.S. Census Bureau, the county has a total area of 817 square miles (2,115 km<sup>2</sup>). Land comprises 759 square miles (2059 km<sup>2</sup>) of that area; water covers the other 22 square miles (56 km<sup>2</sup>) and is only 2.64% of the area. The majority of Vernon County can be generally described as rural with small cities and villages that provide more urban type services. The northwestern portion of the county and areas along the Mississippi River are developing more rapidly than other areas—development pressure due to its proximity to the City of La Crosse. Vernon County is primarily rural agricultural and woodland intermixed with low density residential development.

The economic base of Vernon County is historically dependent on agriculture. Recently, the diversity of the agricultural activity has expanded with the rise of organic production and marketing through Organic Valley Coop that is headquartered in the Village of La Farge. The tourism industry here continues to thrive with the natural beauty of Wildcat Mountain State Park, the Kickapoo Reserve, and Mississippi River corridor providing many opportunities for recreation. Renewed trout streams and the rural atmosphere bring people to the area from major urban centers that surround this corner of Wisconsin.

Counties adjacent to Vernon County include La Crosse County - northwest, Monroe County – north, Juneau County – northeast, Sauk County – east, Richland County – southeast, Crawford County – south, Allamakee County, Iowa – southwest, Houston County, Minnesota – west. The western part of the county is connected by transportation and jobs to the city of La Crosse, the central area of the county is dominated by the cities of Viroqua and Westby, while the eastern towns are oriented towards Hillsboro and points east. Each region offers a unique set of amenities and opportunities that attract new residents at a slow, but steady rate.

### **PRIMARY GOAL OF THIS PLAN**

The primary goal of this plan is to lay out potential options for Towns and local communities to find voluntary and non-intrusive ways of promoting and preserving a viable agricultural community. Efforts will often consist of collaboration between a County entity, such as the Vernon County Land & Water Conservation Department, and willing Towns and local farmer groups. The primary methods for preserving farmland in this community will be through: education of available tools; education of viable agricultural systems; farmer-to-farmer field days and other agricultural knowledge sharing events; promotion of voluntary Farmland Preservation tools; market based agricultural development; and use of available grants and Vernon County's Revolving Loan Fund. These strategies are all impactful ways of promoting agriculture and protecting farmland, yet still maintaining the maximum amount of local control and personal property rights.

### **PURPOSE AND SCOPE**

Part of the purpose of drafting, adopting and implementing this document was the process of gathering input from various sources; the public, other agencies, and peers. In doing so, Vernon County was able to develop a process to create the FPP mapping areas that would best describe the criteria decided upon in this systematic approach to our farmland preservation process.

The current Farmland Preservation Plan (FPP) for Vernon County was adopted in 1981. With the Working Lands Initiative (WLI) being adopted in 2009 as part of the 2009-2011 biennial budget known as Wisconsin Act 28, it became a priority for counties to update their FPP. This document will fulfill that requirement and help to preserve the farmland that contributes to the economic and cultural importance of our County while still allowing for the necessary growth that allows for a vibrant and diverse community.

### **OVERVIEW OF 1981 PLAN**

The 1981 Vernon County Farmland Preservation Plan was largely a summary of the business, natural resource, and agricultural trends of the time. This plan did a good job explaining existing

infrastructure and resources of the time. The 1981 FPP plan is not particularly relevant to how to help preserve the rural character and farming way of the life that is still prevalent in Vernon County. Now with the advent of the Working Lands Initiative an updated plan is needed to help Towns in Vernon County to maintain eligibility for their Farmland Preservation Tax Credits.

## **OVERVIEW OF PLANNING PROCESS**

Several meetings were held at various times and places in order to get input regarding Plan text and mapping areas. Meetings were held with agency personnel (peer to peer or local work groups), township plan commissions, and the general public. The Plan components were also discussed at length in various Towns in coordination with discussing FPP Zoning options for the Towns. This gave the writing staff an opportunity to gain the perspective of each group within their own context. Each meeting was properly publicly noticed.

The writing of the text and the mapping decisions were made as the planning process went along and changes and adjustments were made as needed.

## **PLAN MAINTENANCE AND AMENDMENT**

Wis. Stats. 66.1001 require that an adopted plan be reviewed and updated at least once every ten years. This is not a static plan, but one that may change over time because of changing land uses, policy changes and shifting economics thus it will be reviewed on an “as needed” basis and amended if significant changes are seen in land use, policies, economics or regulations.

# CHAPTER TWO

## EXISTING CONDITIONS

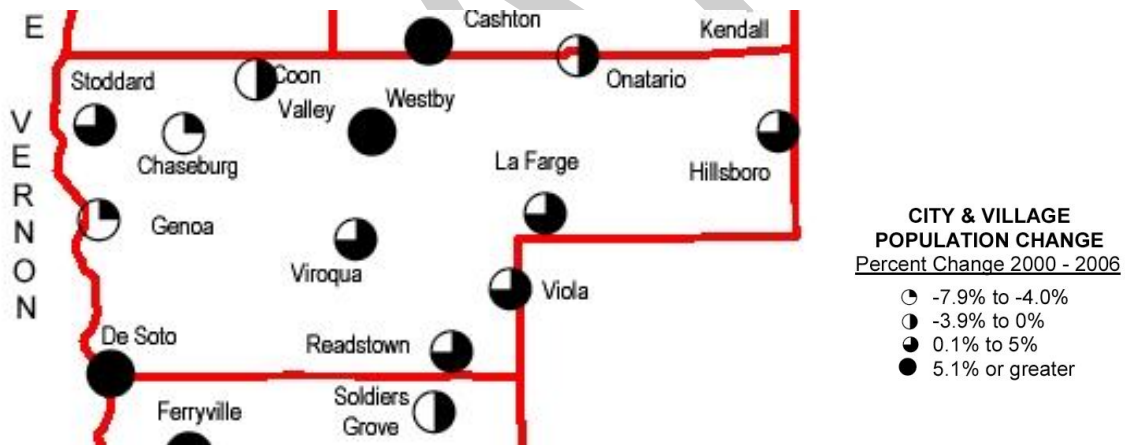
### OVERVIEW

This chapter will give a brief summary of existing conditions in Vernon County. This will help to explain why and how the determinations were made in this plan. Vernon County does not have a completed Comprehensive Plan. The Comprehensive Plan draft was worked on in 2009-2012. Though the plan was never adopted, the plan provided a significant source for the facts and figures listed below.

### DEMOGRAPHIC & HOUSEHOLD CHARACTERISTICS AND TRENDS

The 2010 Census reports that the population in Vernon County totaled 29,773, an increase of 1,717 new residents, which is a 6.1 percent increase over the 2000 census. Vernon County's total population is increasing from both natural causes (births minus deaths) and net-migration (more individuals moving into the county than leaving). The growth in population is unevenly distributed across the county as the following figure illustrates (from: MRRPC, 2006.)

Figure 1 - Population Changes, 2000-2006



Adding new residents from natural causes is helping to keep the median age in the county in check, but at 39.7 years it is still higher than the state median age of 37.6 years. There is still a noticeable dip in the 20-40 age group that reflects the locally reported out-migration of the county's youth and resulting "brain drain" from the county workforce (Appendix C, 2008 Neighborhood Listening sessions). The median age is poised to increase further, as a large share of the county's population advances toward the older age groups. By 2030 roughly 28% of Vernon County's population will have celebrated their 60th birthday. In 2005, slightly more than 21% of the population was aged 60 years or older.

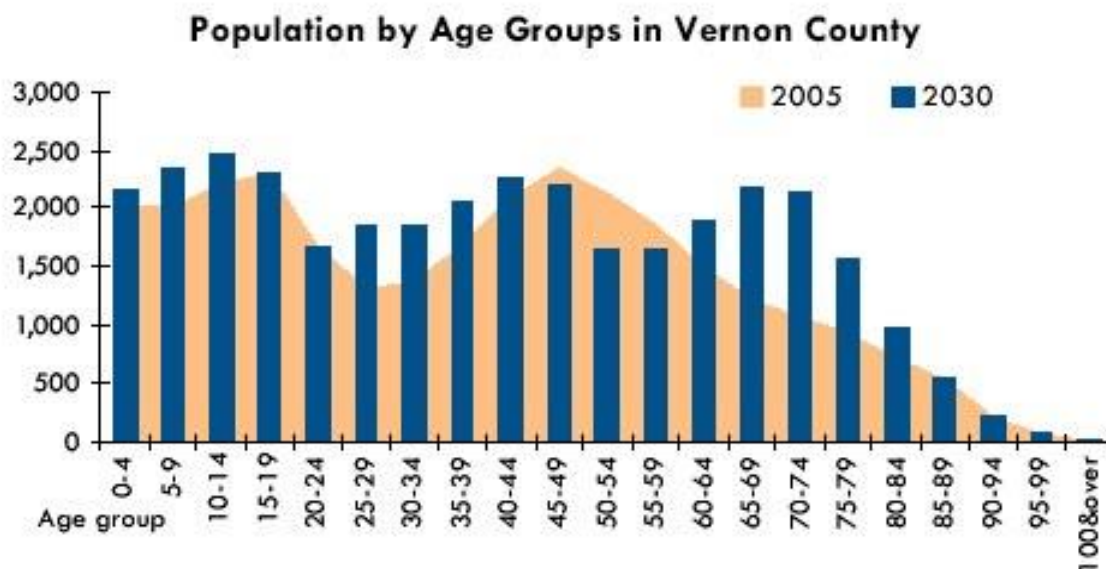
The projected number of households in Vernon County shows a steady increase, according to the Demographic Service Center, Wisconsin Department of Administration. The number of Vernon

County households is projected to increase from 10,825 in 2000 to 13,902 in 2030, a numeric change of 3,077 and percentage change of 28.4% as shown in table 3.

This increase in households is predicted to be in part due to an increase in single-person households, and an aging population. Households headed by older people tend to be smaller in size than those headed by younger householders, and as the proportion of older residents increases, the average size of households decreases.

It is projected that the mean Vernon County household size will decrease from 2.55 in 2000 to 2.46 in 2030. In Wisconsin the mean household size will decrease from 2.50 in 2000 to 2.31 in 2030 as shown in table 1.

Figure 2 - Population By Age Group



Source: WI Dept. of Administration, Demographic Services

Note: Data included in all tables and charts in this profile are subject to revision.

(from p.1 Vernon County Profile, 2007)

Table 1 –Final Household Projections Vernon County: 2005 – 2030

	2000 Census	2005 Estimate	2010 Projection	2015 Projection	2020 Projection	2025 Projection	2030 Projection
Number of Households	10,825	11,234	11,755	12,317	12,870	13,379	13,902
Household Pop.	27,583	28,796	29,800	31,009	32,218	33,298	34,150
Average Household Size	2.55	2.56	2.54	2.52	2.50	2.49	2.46

Source: Demographic Services Center Division of Intergovernmental Relations, Wisconsin Department of Administration (2008).

Table 2 shows that according to the 2000 Census, Vernon County population was 28,056 and there were 10,825 households in the county, an average of 2.59 persons per household.

*Table 2 – Vernon County Average Number of People per Household – 2000 Census*

	2000 Census Population	2000 Census Households	Persons Per Household		2000 Census Population	2000 Census Households	Persons Per Household
Bergen T	1,317	491	2.68	La Farge V	775	342	2.20
Chaseburg V	306	133	2.30	Liberty T	167	73	2.29
Christiana T	871	308	2.83	Ontario V	476	225	2.12
Clinton T	1,354	313	4.33	Readstown V	395	187	2.11
Coon T	683	262	2.61	Stark T	349	138	2.53
Coon Valley V	714	307	2.28	Sterling T	713	234	3.00
De Soto V	248	104	2.38	Stoddard V	815	351	2.32
Forest T	583	199	2.93	Union T	531	165	3.22
Franklin T	923	324	2.85	Viola V	245	103	2.38
Genoa V	263	112	2.35	Viroqua C	4,335	1,990	2.10
Genoa T	705	285	2.47	Viroqua T	1,560	549	2.64
Greenwood T	770	201	3.83	Webster T	676	217	3.12
Hamburg T	848	311	2.73	Westby C	2,045	840	2.34
Harmony T	739	247	2.99	Wheatland T	533	236	2.26
Hillsboro C	1,302	565	2.18	Whitestown T	509	167	3.04
Hillsboro T	766	285	2.69	<b>Vernon County</b>	<b>28,056</b>	<b>10,825</b>	<b>2.59</b>
Jefferson T	974	367	2.65	<b>Wisconsin</b>	<b>5,363,715</b>	<b>2,084,544</b>	<b>2.57</b>
Kickapoo T	566	194	2.92	<b>United States</b>	<b>281,421,906</b>	<b>105,480,101</b>	<b>2.67</b>

Source: 2000 Census of Population and Housing, SF1.

*Table 3 – Vernon County Final Household Projections for Wisconsin Municipalities - 2005 – 2030*

MCD Type & Name (* indicates split muni)	C2000	Est2005	Proj2010	Proj2015	Proj2020	Proj2025	Proj2030	NumChg30yr	PctChg30yr
T Bergen	491	517	546	578	609	638	669	178	36.3%
T Christiana	308	311	319	327	336	343	351	43	14.0%
T Clinton	313	334	364	395	426	455	487	174	55.6%
T Coon	262	272	278	284	291	296	302	40	15.3%
T Forest	199	205	213	222	230	239	246	47	23.6%
T Franklin	324	345	357	371	384	396	408	84	25.9%
T Genoa	285	292	299	306	314	321	327	42	14.7%
T Greenwood	201	221	243	267	291	314	338	137	68.2%
T Hamburg	311	337	363	391	418	444	471	160	51.4%
T Harmony	247	271	296	322	349	375	401	154	62.3%
T Hillsboro	285	293	307	321	336	349	363	78	27.4%
T Jefferson	367	392	414	438	462	485	507	140	38.1%



MCD Type & Name (* indicates split muni)	C2000	Est2005	Proj2010	Proj2015	Proj2020	Proj2025	Proj2030	NumChg30yr	PctChg30yr
T Kickapoo	194	202	213	225	237	249	261	67	34.5%
T Liberty	73	93	104	114	125	136	146	73	100.0%
T Stark	138	145	156	167	179	189	201	63	45.7%
T Sterling	234	232	240	249	258	265	274	40	17.1%
T Union	165	180	196	214	231	248	265	100	60.6%
T Viroqua	549	587	606	628	647	665	684	135	24.6%
T Webster	217	234	252	273	293	312	331	114	52.5%
T Wheatland	236	264	291	318	346	373	401	165	69.9%
T Whitestown	167	175	184	194	205	215	224	57	34.1%
V Chaseburg	133	125	124	123	120	118	116	-17	-12.8%
V Coon Valley	307	310	310	309	308	308	305	-2	-0.7%
V De Soto *	104	105	108	110	112	114	116	12	11.5%
V Genoa	112	108	107	106	104	102	100	-12	-10.7%
V La Farge	342	346	355	363	373	379	387	45	13.2%
V Ontario	225	220	226	234	240	246	252	27	12.0%
V Readstown	187	187	187	188	190	190	191	4	2.1%
V Stoddard	351	349	355	364	371	377	384	33	9.4%
V Viola *	103	121	135	148	163	176	191	88	85.4%
C Hillsboro	565	563	572	582	592	599	606	41	7.3%
C Viroqua	1,990	2,020	2,111	2,213	2,308	2,395	2,483	493	24.8%
C Westby	840	878	924	973	1,022	1,068	1,114	274	32.6%
Totals	10825						13902	3077	28.4%

Source: Demographic Services Center Division of Intergovernmental Relations, Wisconsin Department of Administration (2008).

## POPULATION AND HOUSING TRENDS AND OUTLOOK

- Vernon County consistently lags behind the State and Nation in increases to housing stock. Much of the rise in housing stock is centered along the Mississippi River communities and localized pockets of development throughout the county.
- Our aging community and increases in single-person households will result in smaller households in the future and the need for more housing units per capita.
- While each community in the county has some low income and senior housing units, the rising needs of the aging community may outpace supply.
- The unusually old age of the housing stock in Vernon County leads to concerns about condition, rehabilitation, and redevelopment needs in the future.
- In many communities mobile home units provide a high percentage of housing. Some of these are used for recreational/seasonal activities. More and varied options for low-income non-seasonal residents should be considered.

- County residents tend to stay in their housing longer than State and National averages.
- County residents spend less on housing as a percent of income compared to State and National averages.

## **UTILITIES, INFRASTRUCTURE & COMMUNITY FACILITIES**

### **Existing Road System**

#### ***HIGHWAYS, LOCAL ROADS AND STREETS.***

Vernon County's road system is characterized by a rural winding pattern of local roads that typically serve property access and county roads that primarily move traffic between local roads and state highways. U.S. Highway 14/61 is the only U.S. Highway located within the county and is the major roadway that connects Vernon County's population centers to the major cities of La Crosse and Madison. The winding ridge tops and valleys characteristic of the Driftless Area do not create conditions favorable to a high speed and efficient point to point transportation system. They do however, create excellent conditions for "Sunday" rides to enjoy the scenery and get away from it all.

### **Additional Modes of Transport**

#### ***SHIPPING***

According to a 2004 report by TDA, trucks carry 83 percent of all manufactured freight transported in Wisconsin. More than 77 percent of all Wisconsin communities are served exclusively by trucks. Vernon County is served by a network of highways that include: STH 27; STH 33; STH 35; STH 56; STH 61; STH 80; STH 82; STH 131; STH 162; and USH 14 and 61. Access to interstate I-90 is approximately 35 miles from the county line via STH 27.

#### ***COMMUTER BUS***

The Scenic Mississippi Regional Transit (S.M.R.T.) bus began in November of 2012. Currently S.M.R.T. buses run between Viroqua and La Crosse and between Prairie du Chien and La Crosse several times a day. See <http://www.ridesmrt.com/> for specific information on times and routes.

#### ***TRANSPORTATION AND AGRICULTURE***

Transportation is critical for agriculture, yet ag-related transportation needs and impacts are often overlooked. Ag-related transportation operates on several scales, ranging from moving machinery on the system of local roads to moving commodities both through and to larger communities via truck or rail.

Family farming has historically been an important part of the Vernon County economy and way of life. The transportation needs and demands of this vital contributor to the local economy need to continue to be met by transportation planners. As of 2004, 92% of all farms within Vernon County were family farms with dairying as the main product. But with an aging population in the county, particularly among farmers, there is a trend toward large-scale farm operations. These large-scale

operations rely on daily shipments of feed, often from areas outside of Vernon County. They also produce daily shipments of milk and frequent hauling of manure. These freight loads are often removed from the major transportation routes in the county, putting a strain on county and local roads. In addition to the wear that these trucks bring, they also have implications for the safety of other road users.

### **SEASONAL WEIGHT RESTRICTIONS**

The seasonal weight restrictions apply to the spring when there is frost coming out of the road bed. At this time of the year the extra weight can increase road wear significantly.

In addition to agricultural operations, numerous large-scale forestry operations exist in the county, which also have impacts on the county's transportation network.

### **RAIL FREIGHT**

WISDOT's commodity forecasts project that Wisconsin's freight rail tonnage will increase by more than 50 percent by 2020. Like roads and streets, rail infrastructure requires ongoing maintenance and improvements, much of the existing rail infrastructure dates back to the early 1900's when rail cars were smaller and lighter.

Existing rail in Vernon County is along the Mississippi River and is owned by Burlington Northern-Santa Fe (BNSF). This line parallels State Highway 35 for about 21 miles on the west side of the County. This rail infrastructure has no stops or spurs in Vernon County for transportation of ag related commodities and supplies – rail shipment points exist in La Crosse and Prairie du Chien.

### **WATER TRANSPORTATION**

Vernon County has the Mississippi River running along its entire western boundary. There is extensive commercial and recreational navigation on the Mississippi River, but the county has no commercial docks for barge traffic. . The nearest commercial ports are in La Crosse and Prairie du Chien.

### **Drinking Water Supply**

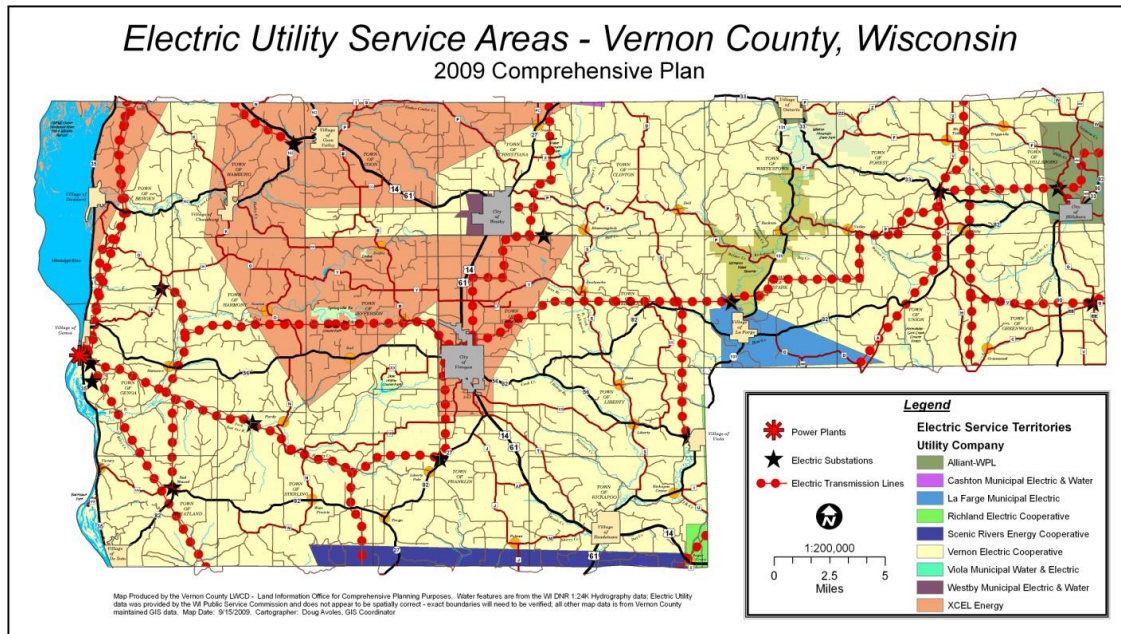
Outside of municipal jurisdictions, water is supplied by private drilled wells. Documents related to private well construction and periodic water quality testing is filed with the Vernon County Health Department and the State Department of Natural Resources. This data is not presently digitized.

High levels of nitrate in drinking water have been documented in the county. There is an Atrazine ban imposed by DATCP in an area north of Viroqua. The LWCD is periodically able to fund well testing at reduced cost for county residents. The Health Department advises residents when a well is found to be contaminated. High coliform bacteria levels were reported after the 2007 and the 2008 floods, and disinfection procedures were communicated through the Health Department.

### **Power Facilities**

The electric utility service area data in map 9 was provided by the WI Public Service Commission and can be used as a schematic for service area. The data may need to be corrected at the local level if accurate boundaries are required for future analysis.

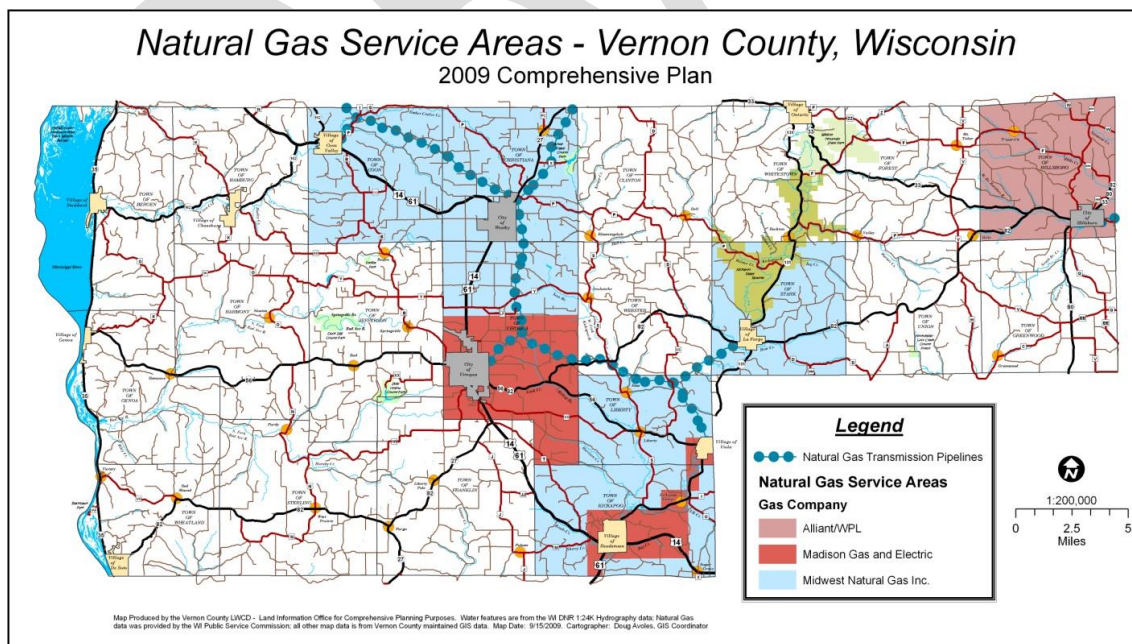
Map - Electric Utility Service Areas in Vernon County



## Natural Gas

Three companies provide natural gas service in the county. The Towns that are shaded on the map do not have universal coverage. Because natural gas is less expensive than propane gas it would benefit county citizens for coverage to be more wide-spread. It would also benefit county citizens for county utilities to provide full incentives for energy efficiency and renewable improvements, irrespective of primary energy sources.

Map - Natural Gas Service Areas in Vernon County



## **Processing, Storage and Supply**

The growing of the crops and livestock is just part of the process. Farmers need to have convenient access to supplies – from what they put in the ground to what they feed their animals and how they care for them to maintaining the equipment that runs the daily operations of any type of farm. Without these types of services, a farm would have difficulty staying in business. Vernon County has the following supplies and services available to help farmers operate efficiently:

- Farm Equipment and Repair
- Feed Dealers
- Farmer Cooperatives
- Fertilizer Dealers
- Livestock Services
- Farmers Markets
- Grain Storage
- Meat Processing
- Dairy Consulting & Supplies
- Agriculture Consulting
- Soil Testing
- Veterinary Services
- Fuel Supplies
- Manure Management
- Pest Management

Anticipated changes in the nature and focus of agricultural production, processing, supply and distribution over a fifteen year period is very difficult to predict. At this time it appears that the focus is being turned towards less dairy and more grain production. so the focus would be toward an increase in storage capacity. Currently there are two companies and a number of smaller landowners that have storage bins of various capacities for rent and it is anticipated that this type of business will increase as crop production increases.

## **Communications**

Cellular telephone service and wireless internet service have become important tools in today's farming climate. However, concerns over the locations of wireless service facilities and their possible impact on property values and health have led some municipalities to develop restrictions on the location, placement and appearance of wireless service facilities. There is a lack of major broadband providers in rural Wisconsin and the best solution in providing reliable, high-speed service is often left to municipally-owned cooperatives. With parts of Vernon County being very rural and parts of it being very hilly, the access to wireless service for farming operations is problematic.

## **SOLID WASTE MANAGEMENT AND RECYCLING**

### **Landfill**

Vernon County owns and operates a Solid Waste Facility (located at S3705 CTH “LF” in the Town of Viroqua) that provides waste disposal and recycling services to County residents and businesses. Vernon County chose to provide these services beginning in 1993 to ensure residents would continue to have easy access to affordable and environmentally sound waste management options.

The Solid Waste Facility accepts municipal solid waste, commercial solid waste, construction/demolition waste, and a wide variety of recyclable materials as well as other, difficult to manage wastes (such as tires, waste oil, appliances, scrap metal, agricultural plastics, batteries, fluorescent and incandescent light bulbs, computer monitors and related components). Vernon County also provides occasional collection of Household Hazardous Waste (cleaning products, pesticides, oil based paints, etc) when funding is available—usually on an annual basis. Vernon County does accept and recycle cleaned silage bag plastic and also holds an annual agricultural clean sweep.

All twenty-two Townships have manned collection sites for solid waste and recycling that are secured when they are not open. All twelve Cities and Villages provide curbside collection services either by contract or with municipal employees.

The County’s intention in waste management went beyond the desire to provide services to County residents. The issue was to make sure waste services were provided in a manner that protected both the public health and the region’s beautiful environment. Operations at the Solid Waste Facility meet or exceed state and federal regulations and focus on doing so in the most economical manner practical.

# CHAPTER THREE

## ECONOMICS

### OVERVIEW

Economics in Vernon County are greatly connected to agriculture and tourism. The statistics of Wisconsin Agriculture are published every year by the United States Department of Agriculture National Agricultural Statistics Service. The livelihood of a farm family (and all families) is tied to development, growth, access to health care and off-site job availability. This section describes the economic climate in Vernon County.

### BUSINESS DEVELOPMENT & ECONOMIC GROWTH

There are a variety of economic development programs available in the County. These promote business growth and economic development through non-profit organizations, job centers, County, State and Federal programs and grants. Some of these are specific to farming and agriculture. Considerable funding and technical assistance for on-farm conservation practices comes through the NRCS EQIP program and through Vernon County Land & Water Conservation Department.

### AGRICULTURE ECONOMIC GROWTH

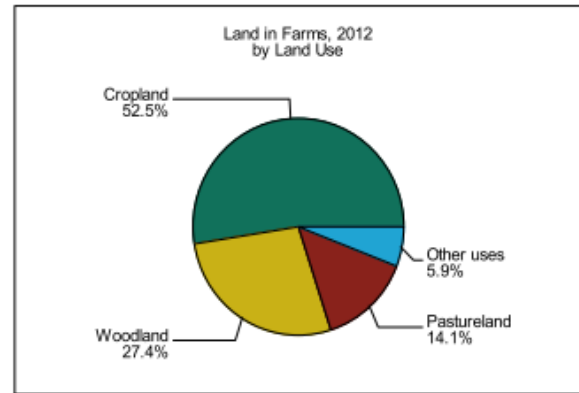
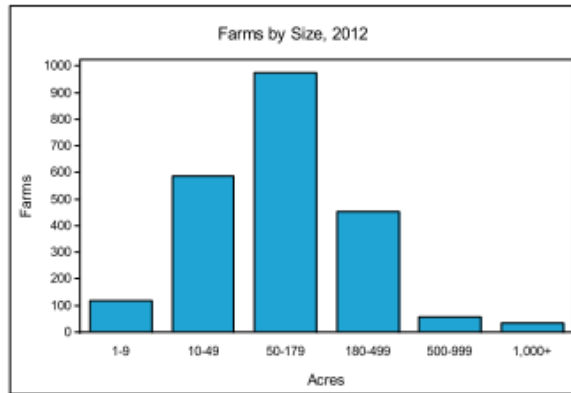
Jobs in farming and tourism are an important part of the economy but provide more seasonal, low-wage work than living wage employment. A UW Extension publication “Vernon County Agriculture: Value and Economic Impact” identifies that the Agriculture sector as a whole (with multiplier effects) provides 27% of the jobs for the workforce, but only accounts for 16% of the income for the county. Since the publication of that pamphlet, the Department of Commerce figures (2006) estimate that about 19% of Vernon County’s workforce is in the farming sector. Technical services to the agriculture and tourism sectors and manufacture of value-added products will continue to help make these sectors of the economy more stable, attain higher wages and provide a positive impact on the economy of the county.

Table 4. Farms by North American Industry Classification System: 2012

Item	Sauk	Sawyer	Shawano	Sheboygan	Taylor	Trempealeau	Vernon	Vilas
Total farms .....	1,665	172	1,278	986	967	1,436	2,228	47
Oilseed and grain farming (1111) .....	517	16	340	325	171	450	523	-
Vegetable and melon farming (1112) .....	20	2	6	23	7	6	71	1
Fruit and tree nut farming (1113) .....	10	12	9	20	5	20	53	6
Greenhouse, nursery, and floriculture production (1114) .....	31	15	45	31	34	13	22	6
Other crop farming (1119) .....	405	39	259	143	203	370	407	11
Tobacco farming (11191) .....	-	-	-	-	-	-	-	-
Cotton farming (11192) .....	-	-	-	-	-	-	-	-
Sugarcane farming, hay farming, and all other crop farming (11193,11194,11199) .....	405	39	259	143	203	370	407	11
Beef cattle ranching and farming (112111) .....	258	42	128	113	219	207	489	6
Cattle feedlots (112112) .....	23	3	21	11	10	20	13	-
Dairy cattle and milk production (11212) .....	205	17	315	155	232	187	400	-
Hog and pig farming (1122) .....	12	4	3	14	2	7	7	-
Poultry and egg production (1123) .....	45	5	26	15	19	77	55	1
Sheep and goat farming (1124) .....	37	1	42	27	10	21	70	6
Animal aquaculture and other animal production (1125,1129) .....	102	16	84	109	55	78	118	10

Tables 5-7. Vernon County Farms, Wisconsin NASS: 2012

	(2012)	(2002)	(% Change)
<b>Number of Farms</b>	2,228	2,492	- 11
<b>Land in Farms</b>	345,892 acres	357,090 acres	- 3
<b>Average Size of Farm</b>	155 acres	143 acres	+ 8



Tables 8-9 Economic and Operator Characteristics, Wisconsin NASS: 2012

**Other County Highlights, 2012**

Economic Characteristics	Quantity
Farms by value of sales:	
Less than \$1,000	470
\$1,000 to \$2,499	164
\$2,500 to \$4,999	179
\$5,000 to \$9,999	247
\$10,000 to \$19,999	191
\$20,000 to \$24,999	66
\$25,000 to \$39,999	164
\$40,000 to \$49,999	101
\$50,000 to \$99,999	282
\$100,000 to \$249,999	228
\$250,000 to \$499,999	74
\$500,000 or more	62
Total farm production expenses (\$1,000)	168,714
Average per farm (\$)	75,724
Net cash farm income of operation (\$1,000)	63,661
Average per farm (\$)	28,573

Operator Characteristics	Quantity
Principal operators by primary occupation:	
Farming	1,096
Other	1,132
Principal operators by sex:	
Male	1,958
Female	270
Average age of principal operator (years)	55.1
All operators by race <sup>2</sup> :	
American Indian or Alaska Native	3
Asian	-
Black or African American	9
Native Hawaiian or Other Pacific Islander	1
White	3,619
More than one race	2
All operators of Spanish, Hispanic, or Latino Origin <sup>2</sup>	22



# **CHAPTER FOUR**

## ***AGRICULTURE & ENVIRONMENT***

### **OVERVIEW**

Agriculture not only produces food and fiber, but is also linked to many other components of the economy. Agriculture supports equipment and implement manufacturers, dealers, and repair technicians, the vegetable and meat processing industries, the construction trade, trucking, veterinary services, genetic research, and many others. Agriculture is intimately connected to Wisconsin's culture and heritage (see the Historical Resources section 5.15) and agriculture has many considerations relative to the natural environment, both positive and negative. Farms provide green space, wildlife habitat, enhanced groundwater recharge, and nutrient recycling. Farms can also be sources of soil erosion, polluted runoff, groundwater contamination, odors, and shoreline damage to stream bank areas.

Agriculture is connected to other land uses, and is a significant contributor to the overall development pattern. The distance from farm related services, markets for farm commodities, processing industries, and other critical land uses can determine the long term success of an agricultural area. Current agricultural supply and distribution has been adequate to support the current level of activity in this County. Major changes to the nature and scope of farm and farm related infrastructure is not anticipated over the next ten years.

The goal of balancing our economic and agricultural development activity with preservation and protection of natural resources has been a major theme throughout the planning process. Vernon County is blessed with much to protect including a long and varied heritage grounded in working the soil. The goals that follow endeavor to strike this balance and also highlight where lack of data and tools might get in the way of informed decision-making.

The reality is that often decision-makers need to come to a choice without perfect knowledge about resource issues. The goals below will close this gap over time as monetary resources become available for studies, and best practice research continues to improve.

Ensure the County has accurate and reliable data to support decision making.

- Pursue funding for hydrologic and geologic studies.
- Map current and potential uses of agriculture and related infrastructure, natural resources, forests, floodplains, and invasive species.
- Balance Agricultural Production and Natural Resource Protection by promoting agricultural and forestry business growth that is economically, environmentally and socially sustainable.
- Develop and map water sustainability.
- Educate for, encourage and oversee the Nutrient Management Plan program.
- Encourage economic sustainability through innovative and alternative agricultural management, crops and development rights.
- Promote best practices to protect air, water, wildlife and plant resources.
- Enforce prohibitions and promote best air quality practices.
- Promote, educate and seek funding for best water quality practices, including soil conservation.

- Promote best wildlife, forest and invasive species management practices.
- For Historic and Cultural Resources, achieve coordination between historic preservation groups in the county.
- Encourage coordination between groups that will reduce duplication of effort, waste of resources in promotion, and be a hub of information for historic preservation and information in the county/region.
- Create useable resources based on the coordinated vision that groups can use for cooperation
- Improve outreach/education to the Vernon County community, board, and partners

## RESOURCES AND LAND USES

### Watersheds

Three watersheds (Geographic Management Units GMUs in Wisconsin DNR terms) cover Vernon County, the Central Wisconsin, the Lower Wisconsin and the La Crosse-Bad Axe River basins. The Central Wisconsin falls in the very eastern part of Vernon County with its western boundary primarily following County Highway V. The Lower Wisconsin (LW) lays primarily East of Highway 27, and the La Crosse – Bad Axe River basin lays West of Highway 27. Water flowing in the La Crosse – Bad Axe River basin flows to the Mississippi River and water flowing in the Central and Lower Wisconsin basins flows to the Wisconsin River before eventually entering the Mississippi River.

Figure 3 - Wisconsin DNR Geographic Management Units

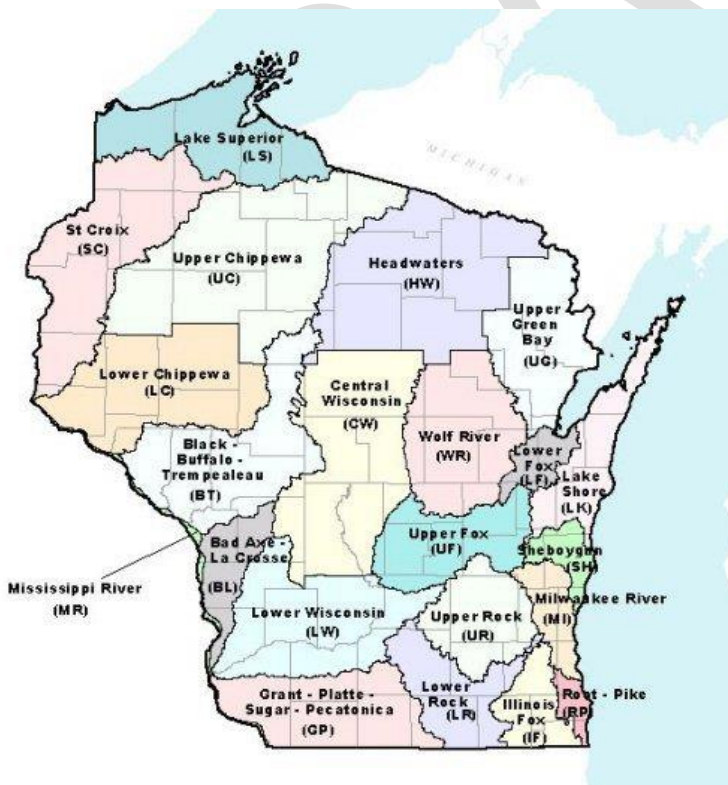
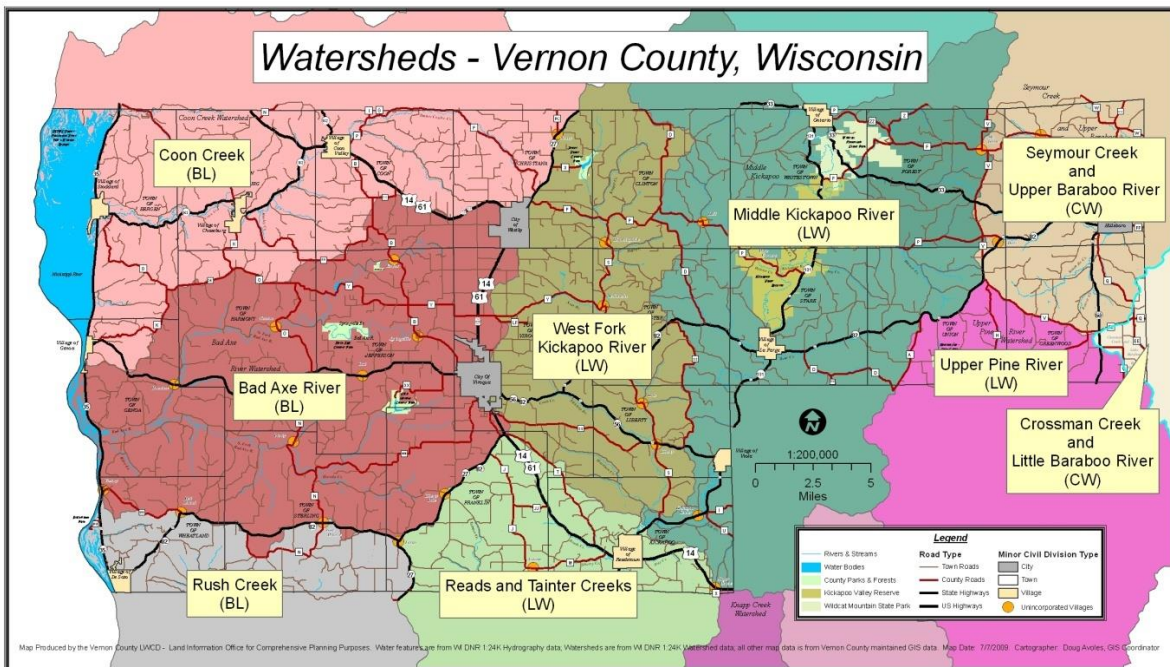


Figure 4 - Vernon County Subwatersheds by GMU

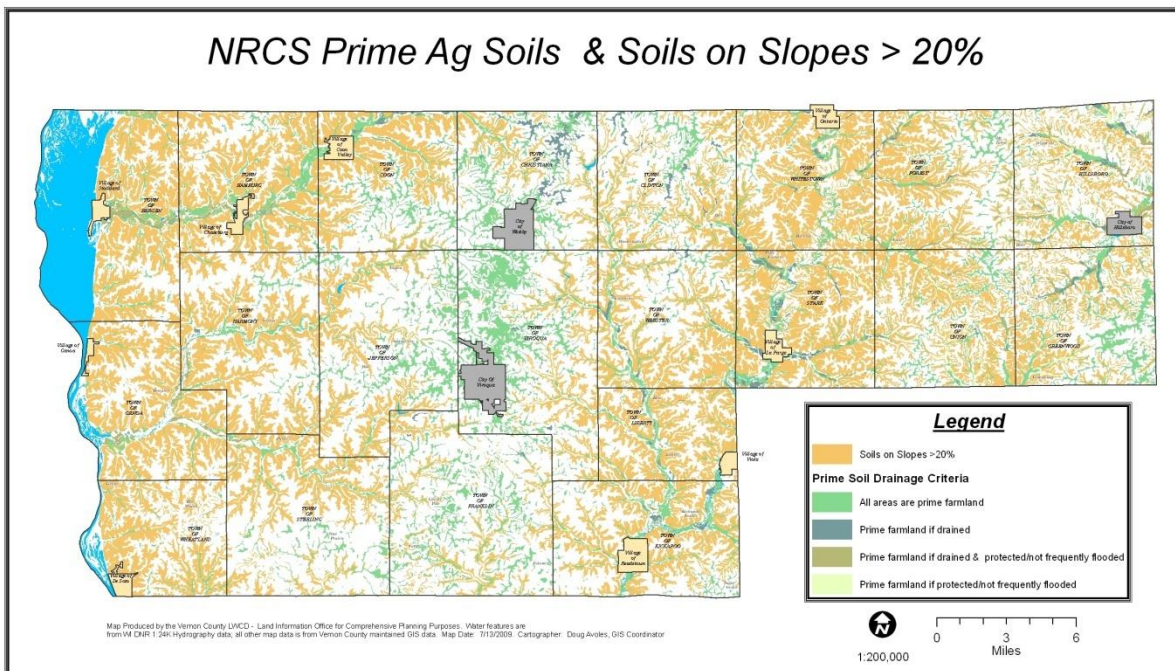


## Soils

A soil survey for the county was completed in 1969 by the United States Department of Agriculture, Soil Conservation Service. There are five major soil associations found in Vernon County. These soil associations are composed of multiple soil types that are grouped into associations that can be used to compare the suitability of large areas for general land uses. Soil associations are groupings of soils that share a distinctive pattern of soils, relief, and drainage. In Vernon County the associations are strongly related to topography and position in the landscape (upland, valley slopes and benches, and bottom lands).

Prime Farm Soils are identified by the Natural Resource Conservation Service as those soils with the fewest limitations for agriculture operations. Limitations to agriculture include highly erodible soils, extreme wetness, low moisture holding capacity, and low productivity. Soils characterized as “prime when drained” would be well suited to agriculture if extreme wetness can be overcome with drainage.

Figure 5 - Prime Ag Soils and Soils on Slopes > 20% in Vernon County



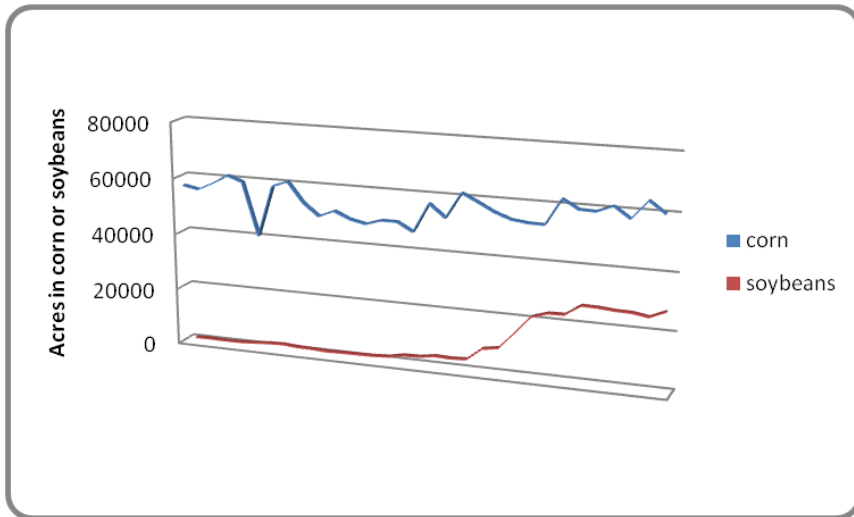
Source: Vernon County LWCD – Land Information Office.

The fragility and susceptibility to erosion of Vernon County soils is thoroughly documented in the 2009 revision of the county Land and Water Resources Management Plan. This is a result of the parent material that the geologic history provides, and also the 20-30% slopes that are common in the county. In addition the soils are used increasingly for row crops that increase the pressure on the resource. Prime Agricultural Soils as defined by the soil survey and USDA comprise less than 10% of the land base. This compares with corn and increasing soybean production on the land in the county.

### Land Use Trends

The trend toward more intense grain production and away from animal production will pose a challenge for land managers at all levels. The graphs that follow illustrate some of the trends and challenges.

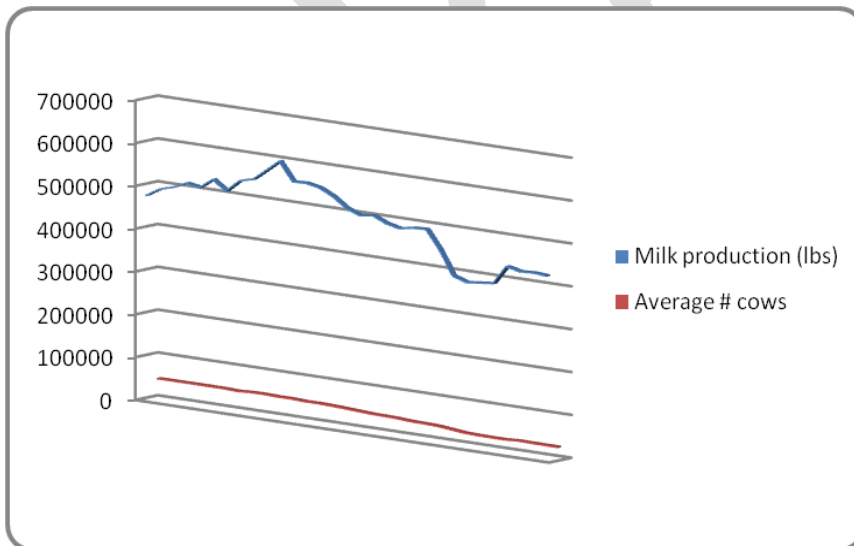
Table 10 - Changes in Vernon County acreage in Corn and Soybeans from 1970 to 2008



All data from the National Agricultural Statistics Service, USDA

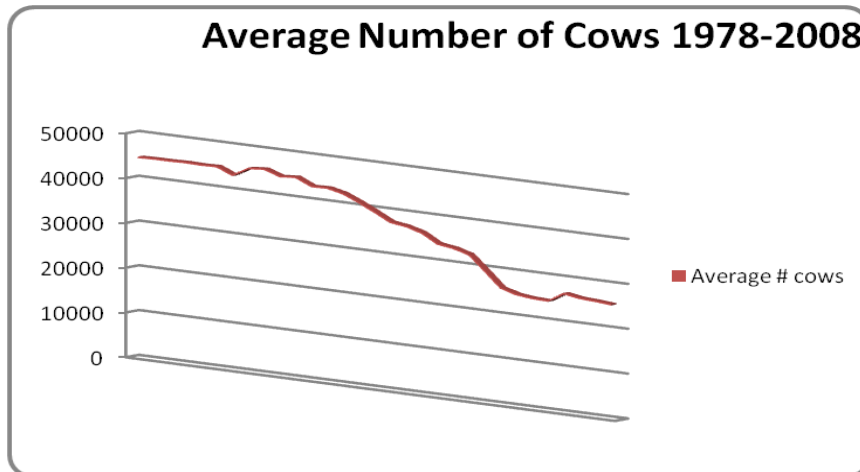
In 1978 acres in soybeans was about 300, by 1998 to 1999 soybean acreage rose from 8,600 acres to nearly doubling, 14,600 acres and has steadily risen to 25,000 to 27,000 range for the past 5 years. In the same time frame, hay production has been cut in half, from 110,000 acres harvested in the 1980s to about 55,000 acres since 2000. The 2007 Census reports about 360,000 acres of Vernon County in farms, and half of that in crops, so there are clear shifts in crop production. Aligned with this is a shift in milk production dynamics

Table 11 - Changes in Vernon County Milk Production and Cow Number from 1970 to 2008



All data from the National Agricultural Statistics Service, USDA

Table 12: Average Number of Cows



All data from the National Agricultural Statistics Service, USDA

Data is lacking about the farming systems used in these milk production figures. This information could be helpful in future to address concerns about the use of larger confinement systems in the county. These systems produce large amounts of liquid manure that needs to be spread in a short time-frame—often challenging to manage on steep slopes and soils of low production potential. Excess nutrients can leak out of the farming system into surface and ground water resources.

Mitigating some of those concerns is the trend in more diversification and value-added agriculture. Comparing 2007 agricultural census data with 2002 we see more farms in Vernon County (2,230 to 2,492), a reduction in farm size from an average of 171 acres to 143 acres and an increase in market value in that production from \$40,453 to \$67,211. This would indicate an increase in the diversity and profitability of farming (Vernon County Profile, 2007.) This was also seen as a national trend (Press Release, “Census of Agriculture Shows Growing Diversity in U.S. Farming” Feb. 2009.) The neighborhood meetings emphasized the need to respect diversity in the county and treat it as a strength and opportunity.

### Organic Farming and Fresh Markets

Organic food is the fastest growing part of the consumer food market, with especially rapid growth in produce and dairy products. Wisconsin farmers are leaders in organic food production, especially in dairy. Wisconsin boasts the third-most organic farms in the country, behind California and Washington. Wisconsin dairy producers raise 22% of the nation’s organic milk cows, and they enjoy a price premium ranging from 80-115% over conventionally produced milk. Vernon County has the most certified organic farms in the state. There are also many more organic farms that are not certified in the county. Organic Valley Co-op, with its headquarters located in Vernon County, has seen a steady increase in their markets. Therefore, infrastructure for organic agriculture in Vernon County is continuing to grow and expand. Increases in organic agricultural supply and distribution include dairy product processing, grain storage, meat processing, and fertilizer.

## **Parks, Recreation, and Open Space**

### ***STATE AND FEDERALLY OWNED FACILITIES***

The State of Wisconsin owns a large amount of land in the Middle Kickapoo River Watershed including 3,646 acres in Wildcat Mountain State Park and 8,569 acres in the Kickapoo Valley Reserve. Ownership of the Kickapoo Valley Reserve, located in central Vernon County, recently transferred from the U. S. Army Corps of Engineers to the State of Wisconsin and the Ho-Chunk Nation. The Reserve, originally planned to contain a large flood control structure and impoundment, is home to numerous native species of plants and animals. The Reserve is managed by an 11-member board, which includes a joint management agreement with the Ho-Chunk Nation. It is the first time a locally controlled board has managed state land. Recreational activities include on- and off- road biking, primitive camping, canoeing, hiking, cross-country skiing, horse riding, fishing and hunting. Future plans for the reserve include the construction of timber bridges to connect many trails and a visitor's center. More information on the Reserve can be found at <http://kvr.state.wi.us/static/>.

Wildcat Mountain State Park, located between Ontario and the Kickapoo Valley Reserve, contains steep wooded hills and sandstone cliffs. Several trout streams and a portion of the Kickapoo River flow through the park. Wildcat Mountain State Park offers camping, hiking, cross country ski trails, a canoe launch on the Kickapoo River, as well as one of the few horse camping facilities and trails in the State Park system.

The State Department of Transportation owns and operates public waysides and there are public fishing easements scattered throughout the County and are held and managed by either the Wisconsin DNR or Vernon County LWCD.

Federal agencies operate the US Fish and Wildlife Service (USFWS) Wildlife Refuge, Army Corps of Engineers Blackhawk Park, and the USFWS Fish Hatchery in Genoa.

### ***COUNTY OPERATED PARKS AND FACILITIES***

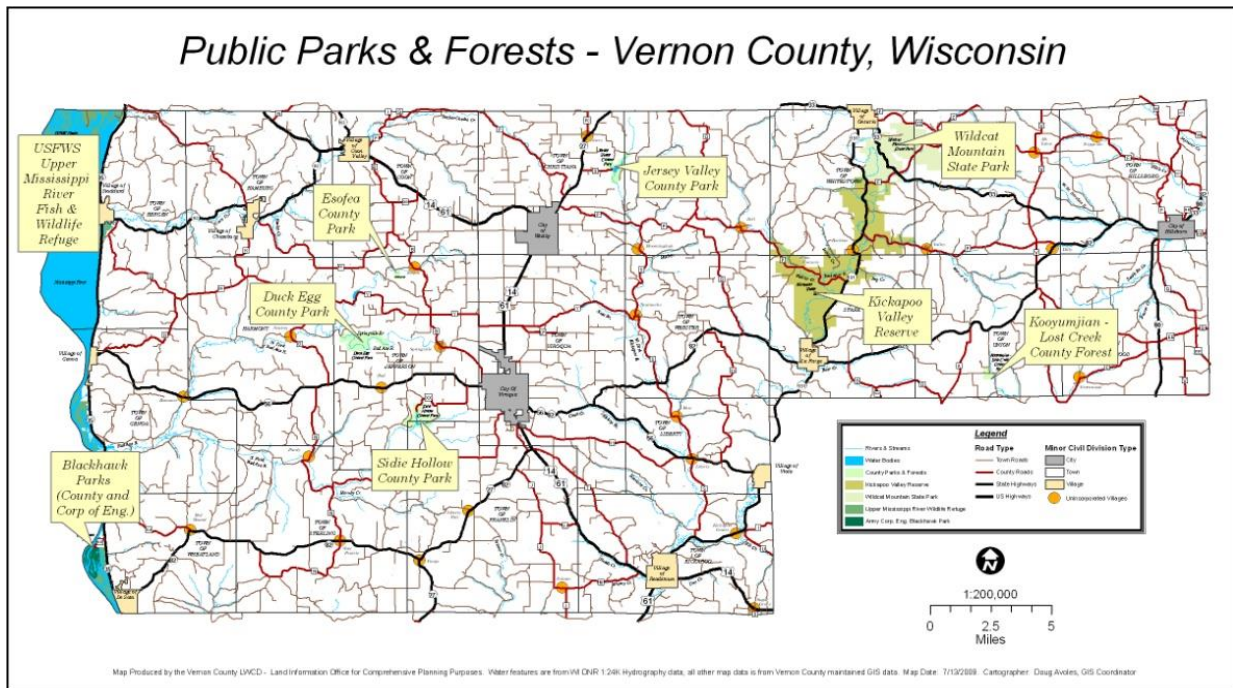
Vernon County has established Park and Recreation Areas on six public properties: three County Park properties, two County Forest lands and one combination County Park and County Forest land. Vernon County also manages the boat landing and fishing pier at Runge Hollow Lake. Within these properties there are 2 campgrounds with 100 total campsites, 10 miles of hiking trails, 3 miles of mountain bike trails, 4 boat ramps, 3 picnic shelters, and a swimming beach. Jersey Valley and Sidie Hollow are operated by the county through a recreational easement. Currently Vernon County is in the final stages of purchasing these properties from the WI DNR.

Outdoor recreation has expanded rapidly in recent years in Vernon County. Vernon County is working to meet this demand for recreational opportunities by providing developed facilities such as parks, beaches, campgrounds, shower-houses, picnic areas, waysides, boat landings, canoe campsites, and multi-use trails for hiking, biking, hunter access, walking, cross country skiing, and horseback riding, etc.

The county forests also provide tremendous opportunities for informal recreational pursuits not requiring park level developments. The management strategy for Vernon County's Forest properties is to limit development so as to maintain and foster ecosystems that are largely

undisturbed for optimum benefit to wildlife. Recreational opportunities in our county forests include hunting, fishing, berry picking, mushroom hunting, bird watching, and sightseeing. The Vernon County Outdoor Recreation Plan and the Mississippi River Regional Planning Commission Outdoor Recreation Plan both address recreational activities and opportunities in Vernon County in further detail.

Figure 6- Vernon County Parks





## Forests And Woodlands

Of the 509,000 acres of land in Vernon County, approximately 225,000 of those acres are forested. The majority of forested acres are owned by private landowners. Table 28 provides a more detailed picture of public versus private forest acreage.

*Table 13 Public vs. Private Forest Acreage with Breakdown of Private Forest Acreage*

	2000 Ac	2000 %	2008 Ac	2008 %
Public Forest	17016.24	10.65%	18687.80	11.21%
Private Forest	142763.69	89.35%	148083.07	88.79%
Productive Forest	115148.54	80.66%	31793.58	21.47%
FCL/MFL	27615.14	19.34%	56564.28	38.20%
Ag Forest	0.00	0.00%	59725.21	40.33%

Source: Derived from 2000 and 2008 Vernon County tax assessment data, Vernon County LWCD – Land Information Office.

### **VERNON COUNTY FOREST LANDS**

Vernon County has recently been enrolled (year 2000) in Wisconsin's County Forest Law Program. Vernon County, along with 29 other counties, has entered into an agreement with the State of Wisconsin DNR to manage their timberland in a sound and sustainable manner. Presently the State's County Forests totals more than 2,350,000 acres. The intent of this program is to maintain healthy productive forests that will provide public access for recreation, and also provide marketable forest commodities. (Addressed in the Forestry Section of the Multi-Year Work Plan, LWCD).

Including the new land purchase at Esofea-Rentz Memorial County Park/Forest, Vernon County owns 949 acres of County Forest land, and helps maintain another 891 acres for the State of Wisconsin (Jersey Valley and Sidie Hollow). These acres are open to the public for recreational purposes. These properties are being managed by the Vernon County Land and Water Conservation Department as recreational sites to include lakes, picnic areas, campgrounds and hiking trails. Vernon County has established Park and Recreation Areas within these forests at six separate locations.

### **PRIVATE FORESTS**

The Managed Forest Law (MFL) program requires that an owner have a forest management plan and follow that plan to ensure sustainable harvesting and planting. The benefit to the landowner is lower property tax obligation. If the landowner offers public access to the forest for hunting, then larger tax savings can be realized. The public and non public access alternatives are tabulated Table 5.5.2. When the program began the tax savings were substantial and reduced the income for local units of government. Presently, the tax savings are less with the new agreements.

Table 14 - Managed Forest Law Acres in Vernon County by Town

Town	Open to public (acres)	Closed (acres)	Total (acres)
Bergen	295.93	2304.31	2600.24
Christiana	26	1306.26	1332.26
Clinton	73	1293.733	1366.733
Coon	147.906	3497.01	3644.916
Coon Valley	0	10	10
Forest	409	1742.817	2151.817
Franklin	90	1130.68	1220.68
Genoa	403.335	2281.724	2685.059
Greenwood	145.69	3139.08	3284.77
Hamburg	318.84	3953.82	4272.66
Harmony	832.7	5243.422	6076.122
Hillsboro	242	1449.02	1691.02
Jefferson	79	2142.418	2221.418
Kickapoo	312.9	3569.733	3882.633
Liberty	242	1441.87	1683.87
Readstown	0	80	80
Stark	33.13	3586.61	3619.74
Sterling	0	1839.454	1839.454
Union	223.5	2696.571	2920.071
Viroqua ©	12	0	12
Viroqua (T)	193	2033.28	2226.28
Webster	95	1859.353	1954.353
Wheatland	857	2423.91	3280.91
Whitestown	266	1956.53	2222.53
Total	5297.931	50981.605	56279.536

Source: Vernon County LWCD

## Metallic and Non-Metallic Mineral Resources

### NON-METALLIC MINING ORDINANCE

Vernon County adopted a nonmetallic mining reclamation ordinance in response to Wis. Administrative Code NR135, and is being administered by the Land and Water Conservation Department. This ordinance requires operators of nonmetallic mining sites to plan for a specific post-mining land use once mining at their site has ceased.

With approximately 52 nonmetallic mines in the county, the Land and Water Conservation Department is well-occupied inspecting, making determinations in order to collect annual fees, measuring the acreage covered by mining activity, receiving and reviewing reclamation plans, and investigating complaints. The department also works closely with the Wisconsin Department of Natural Resources to assure that sediment -laden water does not negatively affect surrounding properties or surface waters.

Experience indicates that applications for new (nonmetallic mining reclamation) permits, associated fees and reclamation plans can be expected every year.

## **Wetlands and Floodplains**

### ***WETLANDS***

The steep topography of this basin is not conducive to many acres of wetlands; however, large expanses still exist near the mouths of the Bad Axe River, Coon Creek, and the La Crosse River. Due to the significant environmental functions served by wetlands, there is a complex set of local, state, and federal regulations which places limitations on the development and use of wetlands (and shoreland). Laws have slowed the pace of the destruction of wetlands, but they continue to be destroyed and degraded. The U.S. Army Corps of Engineers has authority over the placement of fill in wetlands connected to federally navigable waterways, while the USDA incorporates wetland preservation criteria into its crop price support programs. Therefore, prior to placing fill or altering a wetland resource, the appropriate agencies must be contacted to receive authorization.

### ***FLOODPLAIN***

For planning and regulatory purposes, a floodplain is normally defined as those areas, excluding the stream channel, that are subject to inundation by the 100-year recurrence interval flood event. This event has a one-percent chance of occurring in any given year. Because of this chance of flooding, development in the floodplain should be discouraged and the development of park and open space in these areas encouraged. The floodplain includes the floodway and flood fringe. The floodway is the portion of the floodplain that carries flood water or flood flows, while the flood fringe is the portion of the floodplain outside the floodway, which is covered by waters during a flood event. The flood fringe is generally associated with standing water rather than rapidly flowing water.

Wisconsin Statute 87.30 requires counties, cities, and village to implement floodplain zoning. In addition, the Federal Emergency Management Agency (FEMA) has developed flood hazard data. Under the authority of the National Flood Insurance Act of 1968, FEMA conducted studies to determine the location and extent of flood lands and the monetary damage risks related to the insurance of urban development in flood land areas.

### **P.L. 566 Flood Control Dams**

The Vernon County Land and Water Conservation Department (LWCD) has the legal responsibility to actively operate and maintain (O&M) twenty-two (22) large, earthen embankment flood control dams built in partnership with USDA/NRCS (then SCS), the LWCD (then Soil and Water Conservation District), and local community Watershed Associations (now defunct) between 1954 and 1988. The dams were built with federal funds and engineering, with some local funds going for right-of-way/easement acquisitions and administrative support. Reduction of serious flash flooding in the Driftless Area was the primary purpose of these dams. During that same time period, 66 similar dams were built throughout 13 counties in western Wisconsin.

## **PROJECTED LAND USE DEMAND**

The following projections of land use demand show that if population and household growth occur as projected, there will likely not be a tremendous amount of increased residential, commercial, and manufacturing acreage development over the next 20 years. The following projections do not take into account market factors such as interest rates, land prices, or availability of land and do not take into account land use regulations and policies that are used to control development. These estimates are a general representation of projected future land use and should only be used for planning purposes in combination with other indicators of land use demand.

### **Projected Land Demand Based on Population Change Projections**

Using population change trends as a basis, Table 16 estimates the acreage that may be demanded for agricultural, forest, undeveloped, residential, ag other (i.e. farm related lands with improvements), public (i.e. institutional), commercial, and manufacturing (i.e. industrial) land uses for five year increments from 2010 through the year 2030 in unincorporated areas. These projected estimates are based on applying the percentage of the projected population change for unincorporated areas of the county, Table 15, at each five year interval as a multiplier to project the future acreages needed for the increasing land uses. Then the land use categories that are assumed to be decreasing (i.e. agricultural, forest, undeveloped) are being reduced equally by the difference between the total increased acreage per time interval. The base acreage is from 2008 tax assessment data for un-incorporated areas described above. The first assumption is that the projected 2008 acreages will increase by 2/5ths (i.e. 2 of 5 years) of the population percent change between 2005 and 2010 to get the estimated 2010 acreages. Further the projection is based on the assumption that agricultural, forest, and undeveloped lands will have a slight decrease for the next 20 years, and that about an equal amount of land will come out of each of these 3 land use categories for development.

Table 15- Final Population Projections for Wisconsin Municipalities: 2005 – 2030 for Unincorporated Areas

MCD Type & Name (* indicates split muni)	C2000	Est2005	Proj2010	Proj2015	Proj2020	Proj2025	Proj2030	NumChg30yr	PctChg30yr
T Bergen	1317	1390	1453	1523	1593	1658	1714	397	30.1%
T Christiana	871	882	894	910	926	939	947	76	8.7%
T Clinton	1354	1451	1560	1677	1796	1908	2010	656	48.4%
T Coon	683	710	718	729	740	747	752	69	10.1%
T Forest	583	602	619	639	659	677	690	107	18.4%
T Franklin	923	985	1009	1038	1067	1092	1112	189	20.5%
T Genoa	705	723	733	745	758	768	774	69	9.8%
T Greenwood	770	846	923	1004	1086	1164	1237	467	60.6%
T Hamburg	848	923	982	1047	1111	1173	1228	380	44.8%
T Harmony	739	812	878	948	1019	1087	1149	410	55.5%
T Hillsboro	766	790	817	848	880	908	931	165	21.5%
T Jefferson	974	1044	1091	1144	1196	1245	1287	313	32.1%
T Kickapoo	566	590	617	645	675	702	726	160	28.3%
T Liberty	167	214	235	257	279	301	320	153	91.6%
T Stark	349	369	391	416	440	464	484	135	38.7%
T Sterling	713	708	725	745	765	783	796	83	11.6%
T Union	531	579	625	674	724	771	813	282	53.1%
T Viroqua	1560	1659	1694	1737	1778	1815	1842	282	18.1%
T Webster	676	730	780	835	889	941	987	311	46.0%
T Wheatland	533	598	651	707	763	816	866	333	62.5%
T Whitestown	509	533	557	582	608	632	653	144	28.3%
Unincorporated Totals	16137	17138	17952	18850	19752	20591	21318	5181	32.1%
5 Yr # Chg			814	898	902	839	727		
5 Yr % Chg (multiplier for incr. LU's)			0.047497	0.050022	0.047851	0.042477	0.035307		

Source: Demographic Services Center Division of Intergovernmental Relations, Wisconsin Department of Administration (2008); modified for unincorporated areas by Vernon County LWCD – Land Information Office.

Table 16 - Estimated Land Use Acreage 2010-2030 Based on % Change of Projected Population for Unincorporated Areas

Land Use Category	Assumptions	Rounded Base Values 2008 Ac	2010 Ac	2015 Ac	2020 Ac	2025 Ac	2030 Ac	2030 % Land Area
Agricultural	Steady/Slight Decrease	279528	279366	278931	278494	278087	277735	55.36%
Forest	Steady/Slight Decrease	166139	165977	165542	165105	164698	164346	32.76%
Undeveloped	Decrease	30427	30265	29830	29393	28986	28634	5.71%
Residential	Increase	13776	14038	14740	15445	16101	16670	3.32%
Ag Other	Increase	5341	5442	5715	5988	6243	6463	1.29%
Public/Institutional	Increase	5096	5193	5453	5713	5956	6166	1.23%
Commercial	Increase	917	934	981	1028	1072	1110	0.22%
Manufacturing	Increase	479	488	513	537	560	580	0.12%
<b>Totals</b>		501703	501703	501703	501703	501703	501703	100.00%
	Sum Increasing LU's	25608	26095	27400	28711	29930	30987	
		Increase Difference	487	1305	1311	1220	1057	
		Decrease Applied	162	435	437	407	352	

Source: Vernon County LWCD – Land Information Office.

### Projected Residential Land Demand Based on Projected Households

Table 17 provides household projections for unincorporated areas of Vernon County. This is a subset of the projection data developed by the Demographic Services Center Division of Intergovernmental Relations, Wisconsin Department of Administration (See Table 3).

Table 17- Final Household Projections for Unincorporated Areas: 2010 – 2030.

MCD Type & Name (* indicates split muni)	C2000	Est2005	Proj2010	Proj2015	Proj2020	Proj2025	Proj2030	NumChg30yr	PctChg30yr
T Bergen	491	517	546	578	609	638	669	178	36.3%
T Christiana	308	311	319	327	336	343	351	43	14.0%
T Clinton	313	334	364	395	426	455	487	174	55.6%
T Coon	262	272	278	284	291	296	302	40	15.3%
T Forest	199	205	213	222	230	239	246	47	23.6%
T Franklin	324	345	357	371	384	396	408	84	25.9%
T Genoa	285	292	299	306	314	321	327	42	14.7%
T Greenwood	201	221	243	267	291	314	338	137	68.2%
T Hamburg	311	337	363	391	418	444	471	160	51.4%
T Harmony	247	271	296	322	349	375	401	154	62.3%

MCD Type & Name (* indicates split muni)	C2000	Est2005	Proj2010	Proj2015	Proj2020	Proj2025	Proj2030	NumChg30yr	PctChg30yr
T Hillsboro	285	293	307	321	336	349	363	78	27.4%
T Jefferson	367	392	414	438	462	485	507	140	38.1%
T Kickapoo	194	202	213	225	237	249	261	67	34.5%
T Liberty	73	93	104	114	125	136	146	73	100.0%
T Stark	138	145	156	167	179	189	201	63	45.7%
T Sterling	234	232	240	249	258	265	274	40	17.1%
T Union	165	180	196	214	231	248	265	100	60.6%
T Viroqua	549	587	606	628	647	665	684	135	24.6%
T Webster	217	234	252	273	293	312	331	114	52.5%
T Wheatland	236	264	291	318	346	373	401	165	69.9%
T Whitestown	167	175	184	194	205	215	224	57	34.1%
Unincorporated Totals	5566	5902	6241	6604	6967	7307	7657	2091	28.4%

*Source: Demographic Services Center Division of Intergovernmental Relations, Wisconsin Department of Administration (2008); modified for unincorporated areas by Vernon County LWCD – Land Information Office.*

Using household change trends as a basis, one can estimate the acreage that may be expected for agricultural, forest, undeveloped, residential, agricultural other (i.e. farm related lands with improvements), public (i.e. Institutional), commercial, and manufacturing (i.e. industrial) land uses for five year increments from 2010 through 2030 in unincorporated areas of the county. These projected estimates were determined by first interpolating the number of estimated 2008 households (about 6105 households). Then the 2008 “acres per household” for each of the assumed increasing land use categories was computed by dividing the 2008 tax assessment base acreage by the 2008 estimate of households ( i.e. 2008 base ac/6105). The resulting 2008 “acres per household” for the land use categories that are expected to increase are as follows:

Residential	2.256363219 acres per household
Ag Other	0.874799358 acres per household
Public/Institutional	0.834670947 acres per household
Commercial	0.150194909 acres per household
Manufacturing	0.078455138 acres per household

A linear projection was then made by multiplying the projected number of total households for each 5 year increment from 2010-2030 by the computed acres per household listed above for each of the corresponding land use categories assumed to increase.

To complete the projection the assumed decreasing land use categories (i.e. agricultural, forest, undeveloped) were then reduced equally by the difference between the total increasing land use category acreage per time interval. This is based on the assumption that agricultural, forest, and undeveloped lands will have a slight decrease for the next 20 years, and that about an equal amount of land will come out of each of these 3 land use categories for development.

Table 18 - Estimated Land Use Acreage 2010-2030 Based on Projected Households

Land Use Category	Assumptions	Rounded Base Values 2008 Ac	2010 Ac	2015 Ac	2020 Ac	2025 Ac	2030 Ac	2030 % Land Area
Agricultural	Steady/Slight Decrease	279528	279338	278831	278323	277848	277359	55.28%
Forest	Steady/Slight Decrease	166139	165949	165442	164934	164459	163970	32.68%
Undeveloped	Decrease	30427	30237	29730	29222	28747	28258	5.63%
Residential	Increase	13776	14082	14901	15720	16487	17277	3.44%
Ag Other	Increase	5341	5460	5777	6095	6392	6698	1.34%
Public/Institutional	Increase	5096	5209	5512	5815	6099	6391	1.27%
Commercial	Increase	917	937	992	1046	1097	1150	0.23%
Manufacturing	Increase	479	490	518	547	573	601	0.12%
<b>Totals</b>		501703	501703	501703	501703	501703	501703	100.00%
	Sum Increasing LU's	25609	26178	27700	29223	30649	32117	
	Increase Difference		569	1523	1523	1426	1468	
	Decrease Applied		190	508	508	475	489	

Source: Vernon County LWCD – Land Information Office.

The two projections present very similar results for all land use categories. This should be expected since both are based on a measure of population. The second projection based on the number of projected households in 2030 results in a slightly higher need for developable residential acres (i.e. 607 ac more) which would likely result in a little more land being converted from agriculture and forest lands.

As stated at the beginning of this section, these projections do not take into account many factors which can affect land sales, development, and changes in use. The main point they show is that if population and household growth occur as projected, there will likely not be a tremendous amount of increased residential, commercial, and manufacturing acreage development over the next 20 years.

### Land Use Programs

The land use programs, agencies, and activities that are currently in use or available for use in Vernon County are addressed in other chapters of this plan.

### Land Use Trends and Outlook

Changes in land use are not isolated. They are related to changes in population, housing, transportation, community services, agriculture, natural resources, and economic development.

The following land use trends are anticipated within Vernon County over the next 20 years.



## **Housing, Population, and Land Use**

All population projections indicate that there will be a pretty significant increase in the County's population over the next 20 years. According to the 2008 projections developed by the Wisconsin Department of Administration Demographic Services Center this will be approximately 6,800 more people than reported by the 2000 Census.

While this is a significant increase in population, the impact on land demand is expected to be relatively small.

Most of this increase (i.e. about 5,200) is projected to occur in the un-incorporated areas of the county; the Towns of Clinton, Greenwood, Harmony, Bergen, Hamburg, Wheatland, Jefferson, and Webster are all projected to increase by over 300 people by 2030.

The number of persons per household is projected to remain fairly constant with 2.5 persons per household over the next 20 years.

The number of housing units in the county is projected to increase by about 700 to 1,400 units between 2010 and 2030.

The County's scenic shore land areas, woodlands, highland, and bluff areas will continue to be desired as residential and seasonal use building sites and subdivisions.

## **Transportation and Land Use**

Major highway intersections will continue to be targeted for commercial and industrial development.

US route access management will significantly impact land use development.

The regional highway system will offer efficient access to regional employment and recreation opportunities which will support growth and development trends.

Traffic volumes will likely continue to increase with population growth, development, and tourism.

Lower density development in rural areas will likely lead to increased costs of maintaining and developing transportation facilities.

## **Community Services and Land Use**

County and local government administration of land use regulations may need to increase in response to a growing population and the need to provide services at a lower cost and higher level of efficiency.

## **Agriculture, Natural Resources, and Land Use**

The sale of forested, open, and agricultural lands for conversion to more intensive development will continue but does not appear to be at rates where significant acreages will be converted or lost.

Agriculture will maintain a strong presence in the County.

The Working Lands Initiative (i.e. tax credits for preserving agricultural land) will likely encourage greater consideration and possible implementation of local and county land use policy and adoption of zoning.

Vernon County is very unlikely to enact any type of County-wide Zoning. The policy has been to encourage Towns to develop Farmland Preservation Zoning Ordinances if it is consistent with their goals and with their Comprehensive Plan. Vernon County will continue to encourage and promote Natural Resource and Agricultural programs that will help with the preservation and promotion of agriculture. This will be encouraged primarily through voluntary educational opportunities and for presentations made to local Towns when requested.

Programs like the Managed Forest Law (MFL) will continue to be used by land owners for property tax relief on forest lands.

Cash cropping and specialty farming will likely increase along with economic pressures for production farming to expand animal numbers and or acreage.

Nonmetallic mine sites will continue to be developed to meet demands for sand, gravel, and other resources.

Water quality management and coordination of development will likely become more prevalent and important, potentially impacting the allowable location and density of development.

## **NATURAL RESOURCE AND AGRICULTURAL PROMOTION PROGRAMS**

### **Federal Resources:**

- Backyard Conservation
- Conservation Reserve Program (CRP)
- Conservation Reserve Enhancement Program (CREP)
- Conservation Security Program (CSP)
- Emergency Watershed Protection Program (EWP)
- Environmental Quality Incentives Program (EQIP)
- Farmland Protection Program
- Forestry Incentive Program (FIP)
- Wetlands Reserve Program (WRP)
- Wildlife Habitat Incentives Program (WHIP):

### **State Resources:**

- Managed Forest Law
- Forest Land Enhancement Program (FLEP)
- Stewardship Incentive Program (SIP)
- Wisconsin Association of Resource Conservation and Development Council (RC&D)
- Wildlife Damage Abatement and Claim Program
- Wisconsin Farmland Preservation Program (FPP)
- Wisconsin Forest Landowner Grant Program (FLGP)
- Wisconsin Non-point Source Pollution Abatement Program

Potential Funding Sources or entities to partner and coordinate with for environmental preservation may come from the following:

### **Private and Non-profit Resources:**

- Private Foundations
- Individual Contributions
- Volunteers
- Conservation Organizations
- Outdoors Forever
- Pheasants Forever
- Trout Unlimited
- Ducks Unlimited
- Wisconsin Waterfowl Association
- Valley Stewardship Network

### **Local Government Sources:**

- Vernon County Land & Water Conservation Department
- Vernon County UW-Extension
- Vernon County Health Department
- Vernon County Highway Department
- Vernon County Revolving Loan Fund

### **State Government Resources:**

- Department of Natural Resources
- Department of Agriculture, Trade & Consumer Protection
- University of Wisconsin-Extension
- Priority Watershed Program
- New Nonpoint Sources
- Stewardship Grants
- Wisconsin Forest Landowner Grant Program
- Lakes Planning Grants
- Lakes Protection Grants
- Land & Water Management Plan Implementation Funds

## CHAPTER FIVE

### *Map Criteria*

#### **PLAN INTEGRATION AND CONSISTENCY**

From the beginning of the farmland preservation planning process, the foremost goal has been to attain integration and consistency with individual comprehensive plans and Farmland Preservation Zoning Ordinances adopted by the Towns within Vernon County. Vernon County twice failed to adopt a County Comprehensive Plan, and therefore the only specific direction for future land use within the county must come from these individual Town plans & zoning ordinances, as well as from the actual process for developing the Vernon County Farmland Preservation Plan itself. This farmland preservation plan stresses the importance of plans and planning policies that work together to arrive at mutually agreeable goals and objectives. It is generally consistent with the goals of individual Town comprehensive plans, and is consistent with the various tools used to implement those plans. As of this writing the Vernon County Towns with adopted Comprehensive Plans are: Christiana, Liberty, Stark, Viroqua, Webster, Whitestown, Coon, Harmony, Greenwood; and the Towns with Farmland Preservation Zoning are: Coon; Harmony; Christiana; and Stark

In order to apply fairness and equality county-wide, Vernon County has adopted criteria for determination of land eligible for the Farmland Preservation Program. The standards are applicable to each Town and are reflected on the individual Town Farmland Preservation Plan maps at the end of this plan document (see Appendix B).

The following criteria were determined by county staff aided by DATCP recommendations and staff of the department.

#### **Criteria for Determination of Farmland Preservation Areas (i.e. Farmland Preservation Overlay)**

Lands depicted on Town comprehensive plan future land use maps and/or Town Farmland Preservation Zoning maps as Agriculture.

Lands that have historically been in Agriculture, Forests, or other Agricultural related use including farm residences. This includes lands within the Kickapoo Valley Reserve which has current and historical agricultural and forest use.

Parcels that are tax exempt, such as churches, cemeteries, nonprofit entities, government-owned lands, utilities, and railroads unless they have already been removed from a Town's existing Farmland Preservation Zoning District.

Parcels with permitted/active non-metallic mining operations that are within a Farmland Preservation Zoning District as designated by a Town Zoning Ordinance.

#### **Criteria for Determination of Non-Farmland Preservation Areas**

Any existing non-farm residential parcels (note: In areas that have not yet been parcel mapped, these parcels may not have been removed from the Farmland Preservation Overlay).

Parcels with permitted/active non-metallic mining operations that are not in a Farmland Preservation Zoning District as designated by a Town Zoning Ordinance.

Any platted subdivisions and any group of parcels that resemble a subdivision ( e.g. small parcels typically less than ten (10) acres, having an access road to all parcels or road frontage to all parcels).

Existing land uses that are in conflict with Farmland Preservation.

Any parcels that are tax exempt, such as churches, cemeteries, nonprofit entities, government-owned lands, utilities, and railroads if they have already been removed from a Town's existing Farmland Preservation Zoning District.

Government owned lands that are in the Mississippi River corridor (e.g. Upper Mississippi River National Wildlife & Fish Refuge, United States Corp of Engineers Blackhawk Park, Blackhawk County Park).

All incorporated areas in the County (i.e. villages, cities).

## **Definitions of Map Legend Categories**

- **Eligible Farmland Preservation Areas** — Areas included in the Farmland Preservation Overlay.
- **Ineligible Farmland Preservation Areas** — Areas not included within the Farmland Preservation Overlay. These areas include recorded subdivision plats, certified survey maps, and parcels locally identified as not “used for or appropriate for agriculture”. Ineligible areas also include tax exempt parcels such as churches; cemeteries; non-profit entities; utilities; railroads; and non-recreational lands that are owned by Federal, State or local governments that have already been removed from a Town's existing Farmland Preservation Zoning District.

*(note: In areas that have not been parcel mapped, these parcels may not have been removed from the Farmland Preservation District Overlay).*

- **Public Lands** — Lands that are owned and managed by Federal, State or local governments for public recreational use. These areas are included within the Farmland Preservation Overlay unless they have already been removed from a Town's existing Farmland Preservation Zoning District.
- **Municipalities** — Areas within City or Village Limits. All of these areas are not included within the Farmland Preservation Overlay.

## **CHAPTER SIX**

### ***PLANNING***

#### **OVERVIEW**

This chapter will discuss the planning process as well as how others were drawn into this process.

#### **REQUIREMENTS**

The Farmland Preservation Plan must address certain elements as specified in Chapter 91, Wis. State Statutes. There are required plan elements that are mandatory for counties who want to make farmland preservation benefits available to eligible landowners; however flexibility is possible in how the plan is prepared.

The planning process needed to take into account existing and future agricultural conditions, the local economy, existing and future growth trends, current and future prospective participation in the program and coordinate all of this with other agencies who work with these same landowners as well as offer the public the opportunity to have input into the planning process.

The rural landscape has changed over the years and this planning process has offered the community to have a voice in how that change can be managed. A number of meetings were held in order to gather information from Federal, State and County agencies, townships, boards and the public on the direction they would like to see this plan take. All meetings were held in a public place easily accessible and in accordance with the Americans with Disabilities Act (ADA). They were advertised well ahead of time with phone numbers and names of contact persons in case of questions or comments. A public hearing was held as part of the formal plan adoption process and this too was published as required by law. Several objectives were met by holding these meetings:

- Participants of all races, ethnic backgrounds and economic levels had an equal opportunity to voice their opinion and be heard
- All residents of Vernon County had an opportunity to be aware of the planning process through the advertisement of the meeting and the stated objective of the Farmland Preservation Plan and mapping criteria
- Residents were also offered the opportunity to call or write to voice their comments if they were not able to make them in person
- Public involvement strengthens the sense of vested interest in the success of the process and in the community as a whole

# CHAPTER SEVEN

## *IMPLEMENTATION*

### OVERVIEW

This chapter will look at the tools available to landowners and those who work with landowners of the County. They also have the charge of implementing the standards and statutes filtered down from national and state agencies. All of this will affect how this Plan is implemented.

Freedom and property rights are very important to the citizens and leaders of Vernon County. Planning efforts, and any tools utilized, will have to balance property rights with land use protections. Vernon County will promote the use of farmland protection tools, with a strong emphasis on locally led decision making.

Agriculture was, is, and will continue to be the backbone of this community. The following tools listed will be encouraged and voluntarily utilized to help expand and promote the important components of a strong agricultural community.

### TOOLS

While some tools are specific, tangible and measurable, others are less tangible, such as education. Educating the public and local government agencies about the economic benefits of farming and the cost of converting/developing farmland to other uses is an important part of the implementation strategy. Equally important is showing the benefit of protecting the environment while gaining a financial benefit. Not all of these tools have funding available at any given time. Education through the Land Conservation Department, UW-Extension, and associated partners will continue to be at the heart of continued promotion and development of agriculture in Vernon County. Vernon County will continue to promote and work with Towns and groups interested in these following tools:

Agricultural Enterprise Areas (AEA). This is a tool set forth in Chapter 91 of the Wisconsin State Statutes. Designation of an AEA identifies the area as valuable for current and future agricultural use. Eligible farmers in an AEA can receive income tax credits per an agreement with DATCP.

General eligibility requirements are:

- Five eligible land owner participants
- All land in the proposed AEA area must be in the farmland preservation area
- Land must be contiguous
- Land must be primarily in agricultural use

Benefits of the AEA designation are that the land is identified as important for agricultural preservation. This designation provides reassurance about future farmland use and may encourage investment in agriculture.

Eligible landowners can enter into a voluntary Farmland Preservation Agreement that allows them to claim a tax credit in exchange for keeping land in agricultural use for 15 years and meeting conservation standards. (Appendix 7.1)

Purchase of Agricultural Conservation Easements (PACE Program). Agricultural Conservation Easements are deed restrictions that landowners voluntarily place on their properties to protect productive agricultural land. They sell a conservation easement to a government agency or private conservation organization. Landowners retain full ownership and continue to pay property taxes, and manage and operate the farm. Conservation easements are tailored to each property: purchasers and landowners decide which activities should be restricted or limited. When the landowner eventually sells the farmland, the development restrictions are passed on to the new owner.

Purchase of Development Rights (PDR). A similar program is the Purchase of Development Rights (PDR) where government agencies buy up the development rights to a property. The program does not give the government agency the right to develop the agricultural land; it simply permits it to extinguish those rights in return for appropriate compensation.

Transfer of Development Rights (TDR). These programs allow landowners to transfer the right to develop one parcel of land to a different parcel of land. The programs are usually established by local zoning ordinances, and they are used to shift development from agricultural areas to designate growth zones closer to municipal services. The parcel of land where the rights originate is called the “sending” parcel. Once the development rights are transferred from a sending parcel, the land is restricted with a permanent conservation easement. The rights are transferred to a “receiving” parcel, which allows an owner purchasing the rights to build at a higher density than ordinarily permitted by the base zoning. Most TDR transactions are between private landowners and developers. Local governments approve transactions and monitor easements. Some jurisdictions have created “TDR banks” that buy development rights with public funds and sell them to developers and other private landowners. TDR programs can prevent non-agricultural development of farmland, reduce the market value (and tax burdens) of protected farms and provide farmland owners with liquid capital that can be used to enhance farm viability.

Mitigation Ordinances. Mitigation ordinances require developers to permanently protect a certain amount of farmland for every acre of agricultural land they convert to other uses. Developers can place an agricultural conservation easement on farmland in another location or pay a fee to satisfy mitigation requirements.

- Comprehensive Land-Use Planning. The County and Towns can use their comprehensive plans as the basis for farmland preservation zoning ordinances. This not only protects these areas for agricultural uses but also offers a greater tax incentive for landowners.
- Farmland Preservation Zoning. Agricultural protection zoning ordinances (Farmland Preservation Zoning) allow some residential development but can restrict density. Such constraints on development potential can limit land speculation and keep land affordable to farmers. Keeping large areas relatively free of non-farm development can reduce the likelihood of conflicts between farmers and their non-farming neighbors.



Tax credits for land under Farmland Preservation Zoning are as follows:

- \$10.00/acre if land is zoned and located in an Agricultural Enterprise Area
- \$7.50/acre if land is zoned

## **MONITORING**

- Monitoring is an important step to the whole planning process in order to assess what is working and needs to be adjusted. The County will continually evaluate the plan and make sure that the decisions made remain consistent with the goals and objectives of the Farmland Preservation Plan.
- Any participants in the programs will be monitored according to rules and regulations set forth by the Federal, State or Local agencies participating in the program.

## **AMENDMENTS**

The plan has a long-term outlook, one that may need to be readjusted as policy or trends become irrelevant/contradictory or errors/omissions have been identified. The plan has been written with some flexibility incorporated so future amendments should be limited in scope. The process to amend the Plan is similar to that of writing this initial document. The steps to amend the document or the plan map will be as follows:

1. As a result of the request of a local government, a property owner or a developer, the County staff and Committee will evaluate the proposed amendment to see if it meets the goals and objectives of the Plan, the State requirements and any other laws or standards that may be in effect at the time of the request. If all is in order, the proposal will be brought before the County Board.
2. The County Board adopts a resolution outlining the proposal/amendment.
3. The County staff prepares the text and/or map that amend the specific part of the Farmland Preservation Plan or Plan map.
4. County Staff forward the amended materials required under Section 91.20, Wis.Stats. to DATCP for certification of the Plan amendment.
5. A public meeting is held for input on the amendment
6. A Class 1 notice is published at least 30 days before the County Board public hearing is held.
7. The County Board holds the formal public hearing on an ordinance that would incorporate the proposed Plan amendment into the County's Farmland Preservation Plan
8. Following the public hearing and DATCP certification, the County Board approves or denies the ordinance adopting the proposed Plan amendment.
9. County staff forward a copy of the adopted ordinance and Plan amendment to DATCP and any landowners who have requested a copy in writing as well as Township chairpersons.

## **Appendix A: Soil and Water Conservation Standards**

Soil and Water Conservation Standards for farmers who grow agricultural crops:

- Meet tolerable soil loss (“T”) on cropped fields.
- Follow a nutrient management plan designed to limit entry of nutrients into state waters (groundwater and surface water)

For farmers who raise, feed, or house livestock:

- Prevent direct runoff from feedlots or stored manure into state waters.
- Limit livestock access to state waters to avoid high concentrations of animals and maintain adequate or self-sustaining sod cover along waterways.
- Follow a nutrient management plan for manure application.

For farmers who have, or plan to build, a manure storage structure:

- Maintain structures to prevent overflow.
- Repair or upgrade any failing or leaking structures that pose an imminent health threat or that violate groundwater standards.
- Close abandoned structures according to accepted standards.
- Meet technical standards for newly constructed or substantially altered structures.

For farmers with land in a Water Quality Management Area (300 feet from a stream, 1,000 feet from a lake, or in areas susceptible to groundwater contamination):

- Do not stack manure in unconfined piles.
- Divert clean water away from feedlots, manure storage areas, and barnyards located within this area.

### NUTRIENT MANAGEMENT PLANS

To meet the new nutrient management standards, farmers may hire an agronomist or prepare their own nutrient management plans if they complete a DATCP-approved training course or otherwise demonstrate that they are qualified. These plans must:

- Rely on soil nutrient tests from a DATCP-certified laboratory.
- Comply with current NRCS Nutrient Management Standard 590.

**Appendix B: Farmland Preservation Maps**

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