CRAWFORD COUNTY FARMLAND PRESERVATION PLAN 2017

Prepared by the Mississippi River Regional Planning Commission under the direction of the Crawford County Land Conservation Committee

Adopted xxxx, xxxx

CRAWFORD COUNTY

Farmland Preservation Plan

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Executive Summary

Crawford County's 2009 - 2029 Comprehensive Plan includes information, goals and policies regarding agricultural land use. This Farmland Preservation Plan (which will, when adopted become part of the County's Comprehensive Plan) echoes the goals, objectives, and polices set forth in the County Comprehensive Plan with regards to agricultural protection and promotion.

The Comprehensive Plan, using information and recommendations from the eleven individual town plans, identifies areas where in the future agricultural lands should be maintained. In addition the Comprehensive Plan recommends that agricultural lands be preserved by guiding new developments into areas that have municipal services already in place.

The conversion of agricultural lands into non-agricultural uses is and will always be a threat to farming. The Crawford County Comprehensive Plan identifies this threat and presents goals, objectives and policies when considering this conversion. Individual Town Comprehensive Plans also made recommendations.

While the Crawford County Comprehensive Plan 2009 – 2029 has been, and will continue to be, influential in protecting agricultural areas of the county, cooperation and coordination with town and municipalities are vital components of protecting agricultural uses throughout the County. The adoption of the Farmland Preservation Plan adds another tool to use for the preservation of agricultural lands.

The formulation of this plan was done with the aid of all eleven towns. The towns reviewed farmland preservation maps and have guided the county as to how and where agricultural lands are to be preserved. Language regarding farmland preservation can be found in both the Farmland Preservation Plan and the County Comprehensive Plan in case of any inconsistencies, the Farmland Preservation Plan supersedes the Comprehensive Plan.

1.0 INTRODUCTION

Agriculture historically and today continues to be a vital component of Crawford County's economy, rural landscape, and social framework. Preserving agriculture continues to be a priority in Crawford County. Updating the County's Farmland Preservation Plan will help ensure the future of agriculture in the County. The plan will be prepared per Wisconsin State Statutes (ch. 91, Wis. Stats.) pertaining to farmland preservation plans.

HISTORY AND STATUS OF FARMLAND PRESERVATION IN CRAWFORD COUNTY

Crawford County's first Farmland Preservation Plan was implemented in 1981. Over the years, more than 128 different Farmland Preservation Agreements have been administered in the county, covering approximately 25,481 acres of land. For the last decade though, as these agreements have expired, many landowners were not interested in re-enrolling in the program. Then in 2009, Wisconsin implemented the Working Lands Initiative, which focused Farmland Preservation efforts into concentrated areas, such as in townships with Exclusive Ag Zoning, or in state-designated Ag Enterprise Areas. In 2009, there were 75 FPP Agreements in effect, scattered around the county, totaling 15,650 acres. With the implementation of the Working Lands Initiative, which prevents expiring agreements to simply be re-enrolled, the number of active agreements at the end of 2015 now sits at just 26, which total 5,827 acres. By the year 2020, only 5 agreements will remain in effect, totaling 1,425.51 acres.

While the number of FPP Agreements is declining due to the implementation of the Working Lands Initiative, the number of landowners claiming the FPP tax credit through Farmland Preservation Zoning is increasing. As Crawford County does not have county-wide zoning, the FPP tax credit is only available to landowners in townships or villages that have Exclusive Ag Zoning. In Crawford County, only Utica and Haney Townships, and the Village of Soldiers Grove have approved zoning ordinances that include Exclusive Ag Zoning.

The Farmland Preservation Program requires participants to meet the state's Conservation Standards, in exchange for obtaining an income tax credit on their acreage. The conservation standards include things like limiting soil erosion, manure storage safeguards, eliminating direct discharges to surface water, and nutrient management planning. The current tax credit for landowners claiming through zoning is $7.50 per acre. For landowners in a FPP Agreement, the rate varies (depending upon whether or not they have modified their agreement), but averages between $3-5 per acre. Landowners who successfully petition the state to create an Ag Enterprise Area which includes their land, and sign a farmland preservation agreement are eligible for $5 per acre. If the land is also within a certified Farmland Preservation Zoning District and the owner is enrolled in a farmland preservation agreement they are then eligible for $10 per acre. To date, no Ag Enterprise Areas have been created within Crawford County.

2.0 FARMLAND PRESERVATION PLAN UPDATE PROCESS

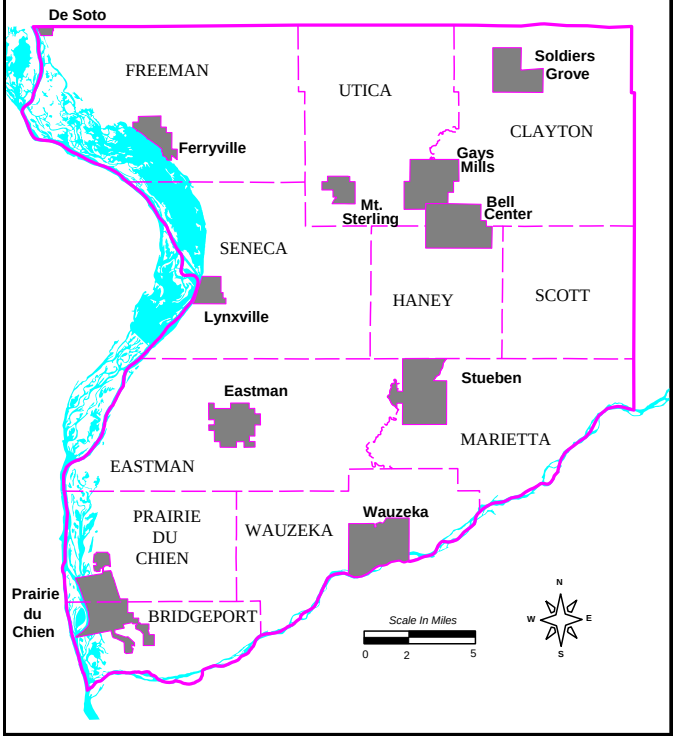
Requirements for participation in the Wisconsin Farmland Preservation Program are identified in Chapter 91, Wis. State Statutes and farmland preservation plans must address specified elements. Farmland Preservation Plan elements are mandatory for counties intending to make farmland preservation benefits available to eligible landowners, some flexibility exists in how counties prepare their farmland preservation plans.

Crawford County received a grant from the Wisconsin Department of Agriculture, Trade, and Consumer Protection to update the counties Farmland Preservation Plan. Crawford County contracted with the Mississippi River Regional Planning Commission to assist with updating the Farmland Preservation Plan to meet the requirements identified in Chapter 91.

The planning process was overseen by the Crawford County Land Conservation Committee with input from Town Boards, residents and landowners in Crawford County. The Crawford County Land Conservation Committee has representation from three county board members and two representatives from the public. The members are: Henry Esser, Chair; Wade Dull; David Olson; Harriet Behar and Don Dudenbostel.

The update process included reviewing and updating agriculture statistical information, develop or reaffirm farmland preservation goals, identifying farmland preservation areas, and meetings with Town Boards and applicable County Committees to gather information on farmland preservation. Specifically, MRRPC staff met with all eleven towns to draft, review, and finalize each town's Farmland Preservation Map. The town maps are what compose the Crawford County Farmland Preservation Map.

Map 1
Crawford County Municipalities



Public Input Opportunities

Public input opportunities were obtained in concert with the County's Comprehensive Planning process as well as at public meetings of the Land Conservation Committee and the meetings with the Town Boards.

Farmland Preservation Plan Consistency

The planning process for updating the Farmland Preservation Plan utilized information (public input, goals, objectives, etc.) from the Crawford County Comprehensive Plan to ensure the documents are consistent. Consistency will further be assured as once the Farmland Preservation Plan update is complete the Crawford County Comprehensive Plan will be updated to include findings from the Farmland Preservation Plan for Crawford County.

3.0 BACKGROUND INFORMATION – EXISTING CONDITIONS

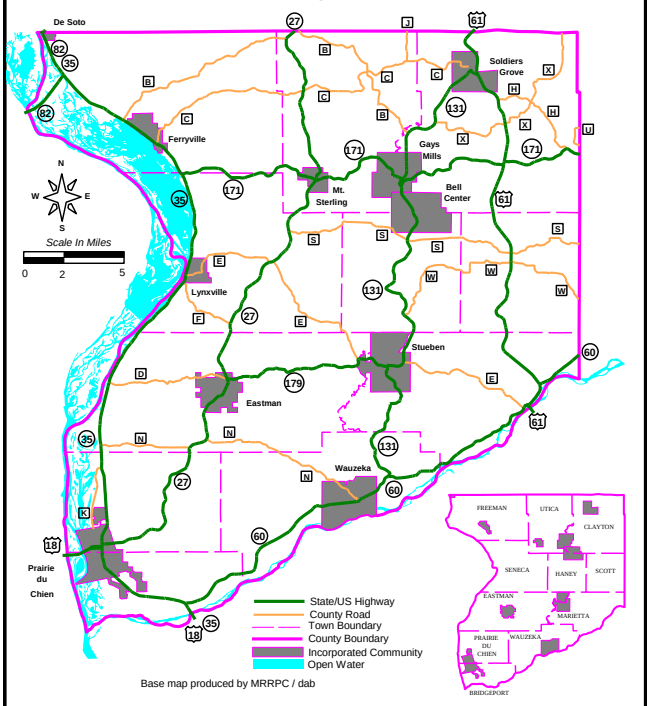
Crawford County, located in southwest Wisconsin, is approximately 600 square miles in size. The County contains 357,603 gross acres (22,260 acres are water and 335,343 acres are land). In 2010 the County had an estimated population of 16,644.

The County's boundary on the north is Vernon County, to the east is Richland County, the south is the Wisconsin River separating the County from Grant County, and west is the Mississippi River separating the County from the State of Iowa. The County is bisected from north to south by the scenic Kickapoo River.

Local Governments

The County's has 11 incorporated communities and 11 townships. The 11 town governments range in size from the Town of Bridgeport's 23 square miles to the Town of Freeman that covers 78 square miles. The villages range in size from De Soto's 1.3 square miles to the Village of Steuben with 6 square miles. The only city in the County, Prairie du Chien is approximately 6 square miles in size.

Map 2
Crawford County Wisconsin



Ecological Landscape

The Wisconsin Department of Natural Resources (DNR) has divided the state into 16 ecological landscapes based on topography, soils, aquatic features, current vegetation, past vegetation, and other factors. Crawford County's land area is within the Western Coulee and Ridges Landscape. This Landscape in southwestern and west central Wisconsin is characterized by its highly eroded, driftless topography and relatively extensive forested landscape. Soils are silt loams (loess) and sandy loams over sandstone residuum over dolomite. Several large rivers including the Wisconsin, Mississippi, and Kickapoo flow through or border this ecological landscape.

Driftless Area

The driftless area, an area covering 15,425,920 acres or 24,103 square miles covers all or part of 57 counties in southeast Minnesota, southwest Wisconsin, northeast Iowa and a small portion of northwest Illinois in the Upper Mississippi River Basin. Crawford County is part of this unique area, an area that was by-passed by the last continental glacier some 10,000 years ago resulting in a steep, rugged landscape. The area is characterized by karst topography with shallow limestone bedrock, caves and sinkholes.

County Landscape

Crawford County's landscape is inundated with steep sided valleys heavily forested with hardwoods. Elevation changes from valley floor to ridge top average 300-400 feet. Agricultural activities, primarily dairy and beef farming, are confined to the valley floors and ridge tops. Large and small meandering rivers and streams are also a characteristic, and Brown and Brook trout are common in the spring fed and coldwater streams. Soils are typically silt loams, and sandy loams in the uplands and alluvial or terrace deposits on the valley floors.

The most striking topographic features in the County are along the Mississippi, Wisconsin and Kickapoo Rivers. The Mississippi River makes up the County's western border coast with its steep limestone cliffs interspersed with forested bluffs and goat prairies. The Kickapoo River traversing the County north to south is considered one of the best Class 1 canoe

rivers. The Wisconsin River has high bluff escarpments and is filled with sand beach islands bordering the south edge of Crawford County.

Crawford County Existing Land Uses

Table 1 approximates the amount of land in each of the major classifications for Crawford County based on 2015 Tax Assessment data. Agriculture and Agriculture Forest land account for 237,629 acres or 83.66% of the county's land use. Forest lands and Un-developed lands account for 3.44% and 1.08% of land area respectively. The general definitions of the land use classifications follow:

Table 1 Crawford County Land Use By Acres Per Tax Assessment - 2015

Crawford County	Residential (1)	Commercial (1)	Mfg (1)	Agriculture (1)	Undeveloped (1)	Agriculture Forest (1)	Forest Lands (1)	Subtotal	Other	County Total
Acres	9,541	1,380	522	197,214	14,946	40,765	17,415	281,783	2,698	**284,481**
% of County	3.35	0.49	0.18	69.33	5.25	14.33	6.12	90.05	0.95	**100.00**
R.E. Eq. Value(2)	584,921,100	171,785,600	22,784,900	28,466,900	11,426,300	42,232,600	36,359,200	903,746,100	152,796,400	**1,056,542,500**
% of County	55.36	16.26	2.70	2.70	1.08	4.00	3.44	85.54	14.46	**100.00**

Source: (1) Acreages: Wis. Dep. of Revenue (WIDOR) 2015 Final Statement of Assessment; 2) Wisconsin Department of Revenue, Statement of Changes in Equalized Values by Class and Item (2015)

Residential **-** Residential land includes any land with a residential home that does not fall into the' agricultural land classification.

Commercial- Commercial land refers to any parcel that has a retail business or professional business establishment on it, but does not include industrial properties. This may be a convenience store, car wash, bank, grocery store, tavern, etc.

Manufacturing - Manufacturing land refers to business and industry that is engages in processing, manufacturing, packaging, treatment, or fabrication of materials and products.

Agricultural- Agricultural land includes land producing a crop (including Christmas trees, etc.), agricultural forest (forested land contiguous with agricultural lands), supports livestock, or is eligible for enrollment in specific federal agricultural programs.

Undeveloped - This land classification refers to areas that were formerly classified as swamp/waste. It includes bogs, marshes, lowlands brush land, and uncultivated land zoned as shore land and shown to be wetland.

Agriculture - means land, exclusive of buildings and improvements and the land necessary for their location and convenience, which is devoted primarily to agricultural use as defined by rule.

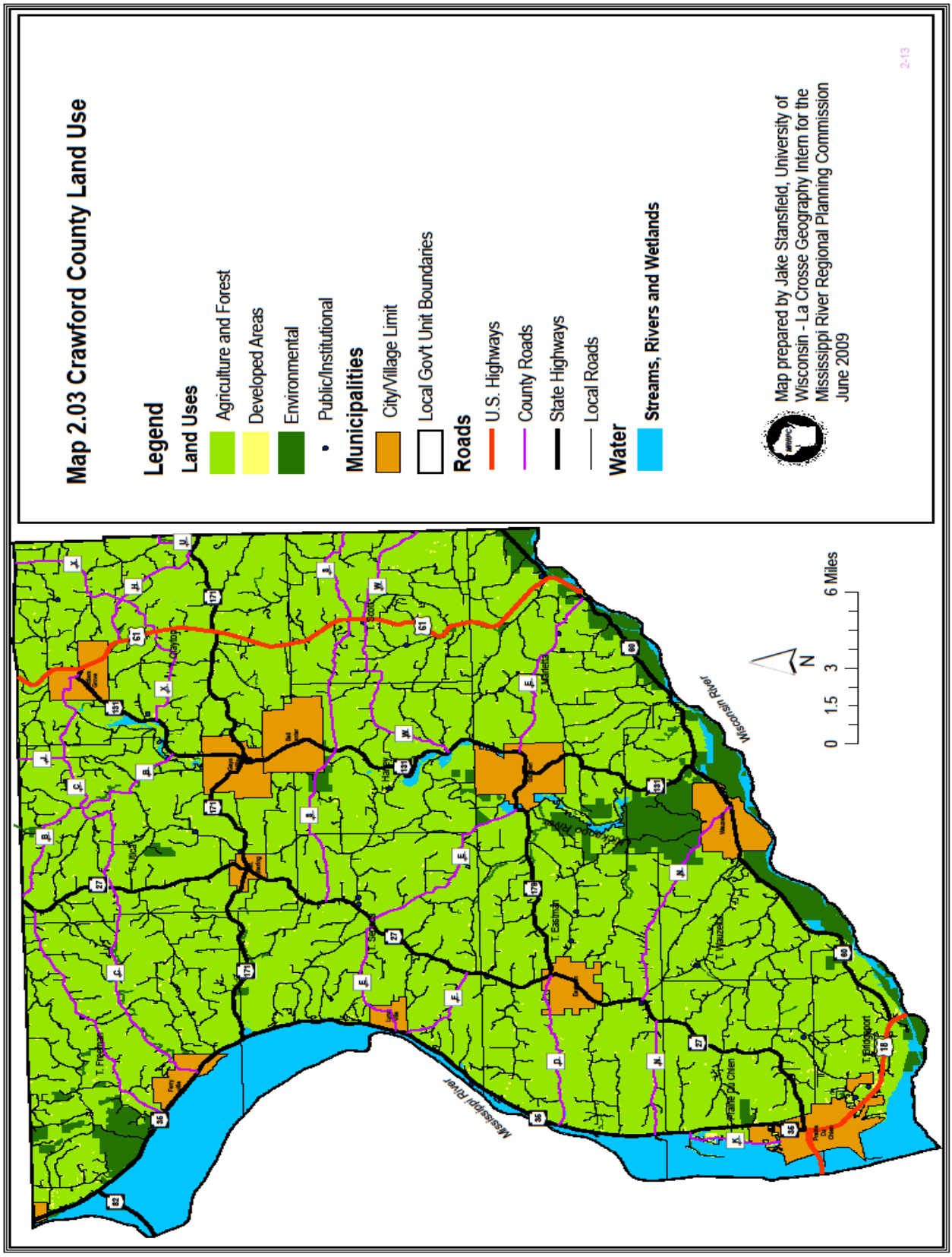
Forest Lands - means land that is producing or is capable of producing commercial forest products including WDNR-MFL lands.

Agricultural Forest Land - means land that is producing or is capable of producing commercial forest products, if the land satisfies any of the following conditions:

a. It is contiguous to a parcel that has been classified in whole as agricultural land under this subsection, if the contiguous parcel is owned by the same person that owns the land that is producing or is capable of producing commercial forest products. In this subdivision, "contiguous" includes separated only by a road.
b. It is located on a parcel that contains land that is classified as agricultural land in the property tax assessment on 1/1/2004, and on January 1 of the year of assessment.
c. It is located on a parcel at least 50 percent of which, by acreage, was converted to land that is classified as agricultural land in the property tax assessment on 1/1/2005, or thereafter.

Other - Remaining land types that do not fall into the above categories, including federal, state, and county lands, school property, and cemeteries.

Map 3 Primary Existing Land Uses



Source: Crawford County Comprehensive Plan 2009-2029

Natural Resources

Crawford County has an abundance of natural resources as well as opportunities to utilize and enjoy them. From rivers and streams to forests the resources are distributed throughout the county. To properly evaluate farmland preservation it is important to review and evaluate all natural resources. Natural areas within active agriculture areas provide wildlife habitat, stream buffers and provide link to larger open space areas. These areas also help protect the County's water supply and provide year-round recreation opportunities.

Surface Waters

Streams and wetlands are valuable natural features in Crawford County, providing a water supply, wildlife and aquatic habitat and buffers. Crawford County is located in the Bad Axe- La Crosse and Lower Wisconsin River Basins. There are six major watersheds in the county. The six major watersheds are: Knapp Creek, Lower Kickapoo River, Millviille Creek, Mississippi River, Reads and Tainter Creeks and Rush Creek.

Crawford County contains approximately 415 miles of streams (recent source – DNR personnel) (excluding the Mississippi River), with 51 different streams totaling 294.11 miles (or 71%) classified as trout streams. Of these, 176.38 miles of streams (or 43% of all streams) are classified Class I trout streams. There are no natural lakes in the county.

Because of the topography of Crawford County, sediment from eroding streambanks is a major contributor to the degradation of the counties surface waters. Streambank erosion occurs naturally at many sites. It is caused by steep stream gradients, which result in high stream velocities. Sites not pastured for extended periods typically grow trees and other woody vegetation that replace dense grass cover. This woody vegetation cover instead of a grass cover results in barer ground which erodes easier. Although streambank erosion occurs naturally, the problems are accelerated by erosive land use activities. Referring upstream to Monroe County's Middle Kickapoo River Watershed Inventory, 66% of the degraded streambanks had agricultural erosive impacts. This is a reasonable figure to apply to Crawford County. The Land Conservation Department staff believes this finding shows that cattle exclusion does not necessarily solve stream bank erosion problems.

Wetlands

Crawford County has experienced a decline in the number and quality of wetlands (source – NRCS). The DNR wetland inventory (1979) shows 27,331 acres or 7.5% of the total county acreage as wetlands, the majority being located along major stream corridors and in the lower Kickapoo River system as it approaches the confluence with the Wisconsin River. The substantial wetland acreage which can be found along the Mississippi and Wisconsin River valleys are managed by the US Fish and Wildlife Service in the Mississippi and the Wisconsin DNR respectively. The Wisconsin DNR and the US Army Corp of Engineers require mitigation (a creation) when natural wetland sites are destroyed. State and federal programs, primarily the Wetlands Reserve Program (WRP) administered by the NRCS have been available to cost-share with private landowners who wish to return their ditched, tiled, or drained fields to wetlands. Very few landowners are continuing to participate in this program

Groundwater

Groundwater supplies all of the human consumption needs in Crawford County. Due to the county's widespread bedrock fracture patterns, characteristic of the regional karst geology, groundwater and surface water are intimately interconnected. Polluted surface water can easily follow direct conduits into the groundwater through sinkholes, disappearing streams, caves, or other karst features. Nonpoint source pollutants are the primary cause of surface water quality problems in the county. Agriculture and to a lesser extent, urban land disturbing activities are the primary sources of pollutants to the county's surface water resources.

Sources of surface water pollutants include: barnyard runoff, nutrient and sediment runoff from cropped fields, manure runoff from improperly stacked/stored animal waste, concentrated flow erosion from cropped fields and logging trails, ephemeral erosion from cropped fields, and runoff from construction projects. In addition to the pollutants that flow into surface water resources, degradation and erosion of stream banks is a major source of sedimentation to the streambeds of many of the county watersheds. Table 2 illustrates conservation practices applied throughout the county from 2010-2013 the preserve water resources.

Table 2 Conservation Practices Applied On land

Conservation Practices Applied on Land						
NRCS	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Contracts	26	30	17	35	86	80
Cropland Soil Eronsion Control Plans (Acres)	0	0	0	0	0	0
Nutrient/Manure Management Plans (Acres)	190.4	469.9	899.2	1766.9	1844.4	1225.1
Barnyard Runoff Control Systems	0	0	0	0	0	0
Roofed Barnyard Runoff Control	0	0	1	1	1	1
Manure Storage		2	1	1	1	1
Manure Storage Closure	0	2	0	0	0	0
Livestock Fencing	17756	42170	1900	20232	18687	62592
Stream Crossings	1	4	1	1	5	3
Access Road (Feet)	1552	877		1255	5876	1199
Critical Area Stabilization(Acres)	0	0	0	0	16.2	14.2
Grade Stabilization Structures	5	5	5	8	24	15
Grassed Waterways(Acres)	7.3	3.2	1.2	3.5	3.1	3.4
Well Decommissioning	0	0	0	0	0	0
Stream RipRap (Feet)	764	539	377	275	692	1449

LCD	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Contracts	13	17	9	22	19	12
Cropland Soil Eronsion Control Plans (Acres)	0	0	0	0	0	0
Manure Management Plans (Acres)	0	124	0	500	502	763
Barnyard Runoff Control Systems	0	0	0	0	0	0
Roofed Barnyard Runoff Control	0	0	0	0	0	0
Manure Storage	0	0	0	0	0	0
Manure Storage Closure	0	0	0	0	1	0
Livestock Fencing	0	0	0	0	0	0
Stream Crossings	0	0	0	0	0	0
Access Road	1175	3216	0	0	5560	0
Critical Area Stabilization(Acres)	0	0	0	0	0	0
Grade Stabilization Structures	1	0	2	0	2	2
Grassed Waterways(Acres)	0.1	0	0	0	1	3.1
Well Decommissioning	4	6	4	9	6	3
Stream RipRap (Feet)	1022	1640	310	1014	721	250

Source Crawford County Land Conservation

Groundwater Resources

Water resources contributing to groundwater consist of rainfall and snow melt in Crawford County. Water movement from the land surface to deeper geology passes through several different kinds of soil and rock material. Although alluvial deposits contain quantities of groundwater the sandstone aquifer is the most common source of well water.

Non Metallic Mining

Non-metallic Mining in the last several years has become a significant land use issue affecting Crawford County. The use of frac (silica) sand in the oil and gas industry and the demand created for the sand has significantly impacted the County. The silica sands utilized for fracing are unique to this region. A frac sand moratorium was passed by the Crawford County board in April 2012 to allow the county time to study the issue and to work with towns and villages on developing plans/ safeguards. The county developed a template Licensing Ordinance that local municipalities could use to develop their own ordinance to help regulate frac sand mining as they saw fit. Crawford County would still regulate NR135, which deals with the reclamation of the mines. However, at this same time, Bridgeport Township adopted their own reclamation ordinance, thus taking that authority over from the county. As of 2015, there is currenlty only one frac sand mine in the county, which is located in Bridgeport Township. There is also a frac sand rail load-out facility located within the City of Prairie du Chien. Table 3 shows mining activity and permitting in the county from 2010-2014.

Table 3 Non-Metallic Mining & Reclamation Program

	2010	2011	2012	2013	2014
Total Permitted Mines	34	30	31	29	30
New Mines (Conditional Use Permit)	0	0	1	0	1
Total Active Acres	311.2	285.7	236.9	225.5	252.7
Acres Reclaimed	0	0	52.8	11.4	0
Completely reclaimed mines	0	0	0	0	0

Source: Crawford County Dept. of Land Conservation

Forested Lands

Maintaining productive forest lands is an increasing challenge due to land values. The ability of forest land to be productive is in part affected by the size of the forest blocks. As ownership size decreases, the ability to efficiently manage also decreases. These lands provide economic, environmental, and social benefits, and provide farm income and jobs to the rural areas in both forest products and tourism. Table 4 and Table 5 illustrate the forest acres in Crawford County and the total forest acres by species.

Table 4 Total Forest Acres

	All Forest Land(1)	Total Forest Crop/ Managed Forest Lands(2)
Crawford	146,900	45,861
State	16,037,200	NA

Source: (1) USDA Resource Bulletin NRS-24 "Wis. Forests, 2004: Statistics and Quality Assurance"; (2) Wisconsin Department of Revenue, Line Summary for 2012 Final Statement of Assessment

Table 5 Total Forest Acres (By Species)

	All Forest Land	White-Red Jack Pine	Spruce-Fir	Pinyon-Juniper	Exotic Soft-woods	Oak-Pine	Oak-Hickory	Elm-Ash-Cotton-wood	Maple-Beech-Birch	Aspen-Birch	Exotic Hard-woods	Non-Stocked
Crawford	146,900	-	-	700	-	2,200	92,000	10,300	35,900	4,500	-	1,500
State Total	16,037,200	1,461,600	1,342,100	18,300	22,200	543,800	3,428,600	1,347,500	4,448,600	3,265,600	4,600	153,100

Source: USDA Resource Bulletin NRS-24 "Wis. Forests, 2004: Statistics and Quality Assurance"

Parks & Recreation

With the abundance of natural resource the county has numerous county, state and federal lands open to the public providing access to the natural resources. Table 6 lists the names and locations of county, state and federal lands/facilities.

Table 6 Park and Recreation Facilities

Name of Facility	Location & Description
Upper Mississippi River Nat'l Wildlife & Fish Refuge	Refuge stretches for 261 miles along the Mississippi River, from Wabasha, MN, to nearly Rock Island, IL.
Hogback Prairie - Wisconsin State Natural Area	Hogback Prairie is located within the Kickapoo River Wildlife Area - Bell Center Unit a little over 2 miles northwest of the Village of Stueben. Hogback Prairie is situated on an impressive geological formation - a narrow, steep-sided limestone-capped ridge that rises 300' above the Citron Valley, a former oxbow of the nearby Kickapoo River. Hogback Prairie is owned by the DNR and was designated a State Natural Area in 2002.
Kickapoo Wild Woods - Wisconsin State Natural Area	Kickapoo Wild Woods is located within the Kickapoo River Wildlife Area 2 miles northeast of the Village of Wauzeka. Kickapoo Wild Woods is a relatively level ridgetop which is surrounded by hillsides which descend 350 feet to the Kickapoo River. This site contains one of the largest blocks of old forest remaining in the Driftless Area. Large diameter white oak, red oak, and sugar maple are found in the uplands while silver maple, hackberry, and cottonwood dominate the floodplain forest. Kickapoo Wild Woods is owned by the DNR and was designated a State Natural Area in 2008.
Kickapoo River Wildlife Area - Bell Center Unit	The Kickapoo River Wildlife Area is a 1,550-acre property located two miles south of Gays Mills along state Highway 131within the Lower Kickapoo and Kickapoo Conservation Opportunity Area and is of continental significance for its driftless area features. The Bell Center Unit is managed to provide opportunities for public hunting, fishing, trapping and other outdoor recreation while protecting the qualities of the unique native communities and associated species found on the property.
Limery Ridge Savanna - Wisconsin State Natural Area	Limery Ridge Savanna features one of the few remaining undeveloped bluffs overlooking the Mississippi River and consists of the steep slopes and rocky outcrops characteristic of Wisconsin's Driftless Area. Limery Ridge Savanna is owned by the DNR and was designated a State Natural Area in 2002. At present, there is no public access to this site.
Rush Creek - Wisconsin State Natural Area	Rush Creek is a two-mile long series of dry lime prairies situated on the steep southwest facing limestone-capped bluffs of the Mississippi River and is part of the most extensive dry prairie remnants left in the state. Rush Creek is owned by the DNR and was designated a State Natural Area in 1981.
Sugar Creek Bluff - Wisconsin State Natural Area	Sugar Creek Bluff located south of Ferryville features dry goat prairies on west and south-facing slopes, dry-mesic forest, and Sugar Creek, a Class 2 trout stream. The high quality prairie is situated on bluffs overlooking the Mississippi River. Sugar Creek Bluff is owned by the Mississippi Valley Conservancy and was designated a State Natural Area in 2002.
Wauzeka Bottoms - Wisconsin State Natural Area	Wauzeka Bottoms is located within the Lower Wisconsin State Riverway and is part of the Lower Wisconsin Riverway, Wauzeka Bottoms contains an extensive stand of mature floodplain forest on the north side of the Wisconsin River. Wauzeka Bottoms is owned by the DNR and was designated a State Natural Area in 1989.
DNR Fisheries Areas - La Crosse Area Comprehensive Fishery Area	La Crosse Area Comprehensive Fishery Area comprises many small parcels in Monroe, La Crosse, Vernon, and Crawford Counties. Names of properties in Crawford County include portions of Sugar Creek and Copper Creek.
DNR Fisheries Areas - Rush Creek Fishery Area	Rush Creek is a class 1 trout stream.

Socio-Economic Characteristics

The County's population has fluctuated over the decades increasing in one census only to decrease the next census. The County's 1960 population was16,351, it then decreased to 15,252 in 1970, increased to 16,556 in 1980, decreased again to 15,940 in 1990, increased to 17,243 in 2000 and then decreased again to 16,644 in 2010. Over the same time span of 1960 to 2000 the Towns of Bridgeport, Prairie du Chien and Seneca saw population increases of 178.1%, 93% and 0.3%. All of the other towns saw population decreases: Clayton -12.8%, Eastman -11.7%, Freeman -14.6%, Haney -32.8%, Marietta -30.2%, Scott -7.8%, Utica -32.5% and Wauzeka -2.5%. The Towns of Bridgeport and Prairie du Chien are both located adjacent to City of Prairie du Chien which recorded a 4.6% population increase from 1960-2010. As of the 2010 Census, the County had 54.1 percent of its population living in incorporated communities as compared to 53.8 percent in 1960.

As of 2010 census, 24.3% of the County's population was under age twenty, 26.3% fell in the 20-44 age group, 31.1% in the 45-64 age group, and 18.3% of the County's population was over age 65. The median age of a Crawford County resident according to 2010 U.S. Census was 44.7 as compared to 34.9 in 1990.

Crawford County's per capita income is consistently lower than both the State of Wisconsin and Nation. In 2000 Crawford's per capita personal income was $21,213 while the State's was $29,141 and the Nation's was $30,319. These figures increased to $31,204 for Crawford, $38,010 for Wisconsin and $39,791 for the Nation in 2010.

According to the U.S. Census Bureau, 2009-2013 American Community Survey the leading employment industry in Crawford County was "Educational, Health and Social Services" which employed 21.6% of the county's workforce. This was followed by "Manufacturing" with 17.7%, "Retail Trade" with 14.5% and "Agriculture, Forestry, Fisheries, Hunting & Mining" with 7.5%. See Table 7. Agriculture, Forestry, Fisheries, Hunting & Mining was a more prominent industry sector in 1990 accounting for 14.5 % of all workers in industry in Crawford County. By the 2000 Census employment in this sector dropped to 9.9% of the workers. The 2009-2013 American Community Survey estimates showed employment of 7.5% for this sector, a decrease of 2.4% since the 2000 Census.

Table 7 Crawford County Employment by Industry

Employment Sector	# Employed	% Employed
Agriculture, Forestry, Fisheries, Hunting & Mining	578	7.5
Construction	520	6.8
Manufacturing	1,355	17.7
Wholesale Trade	159	2.1
Retail Trade	1,110	14.5
Transportation & Warehousing and Utilities	342	4.5
Information	84	1.1
Finance, Insurance, Real Estate, and Rental and Leasing	216	2.8
Professional, Scientific, Management, Administrative and Waste Management Services	428	5.6
Educational, Health and Social Services	1,656	21.6
Arts, Entertainment, Recreation, Accommodation and Food Services	572	7.5
Other Services (except public administration)	237	3.1
Public Administration	416	5.4
Total	**7,673**	

Source: U.S. Census Bureau, 2009-2013 American Community Survey (Data is based on sampling and is subject to sampling variability)

Population, Housing, and Municipal Growth

Population and Housing Forecasts

In the last 5 decades Crawford County's population has fluctuated, with a high of 17,243 in 2000 and a low of 15,252 in 1970. The County's 2010 population of 16,644 is 599 people less than the highest census of 2000 (Table 8). According to the Wisconsin Department of Administration-Demographic Services Center by 2040, Crawford County's population is expected to decrease by 89 people or 0.5% to approximately 16,555 people (Table 9). Twelve of the twenty two municipalities are projected to decrease in population. Only 4 Towns (Eastman, Haney, Marietta and Scott) are projected to lose population. Of the 11 incorporated municipalities, eight are projected to lose population. Only the Villages of De Soto, Eastman and Ferryville are projected to increase in population.

Table 8 Crawford County Populations

	Population						% Chg	% Chg	% Chg	% Chg	% Chg
	1960(1)	1970(1)	1980(1)	1990(1)	2000(1)	2010(1)	60-70	70-80	80-90	90-00	00-10
Crawford County	**16,351**	**15,252**	**16,556**	**15,940**	**17,243**	**16,644**	**-6.7**	**8.5**	**-3.7**	**8.2**	**-3.5**
T Bridgeport	356	416	708	753	946	990	16.9	70.2	6.4	25.6	4.7
T Clayton	1,099	916	927	794	956	958	-16.7	1.2	-14.3	20.4	0.2
T Eastman	837	781	840	745	790	739	-6.7	7.6	-11.3	6.0	-6.5
T Freeman	803	677	796	692	719	686	-15.7	17.6	-13.1	3.9	-4.6
T Haney	460	387	404	384	330	309	-15.9	4.4	-5.0	-14.1	-6.4
T Marietta	673	601	568	532	510	470	-10.7	-5.5	-6.3	-4.1	-7.8
T Prairie du Chien	556	591	694	929	1,076	1,073	6.3	17.4	33.9	15.8	-0.3
T Scott	501	478	472	453	503	462	-4.6	-1.3	-4.0	11.0	-8.2
T Seneca	863	858	832	873	893	866	-0.6	-3.0	4.9	2.3	-3.0
T Utica	979	843	822	738	674	661	-13.9	-2.5	-10.2	-8.7	-1.9
T Wauzeka	433	390	445	399	369	422	-9.9	14.1	-10.3	-7.5	14.4
V Bell Center	155	110	124	127	116	117	-29.0	12.7	2.4	-8.7	0.9
V De Soto (pt)*	117	79	66	73	116	108	-32.5	-16.5	10.6	61.6	-8.5
V Eastman	348	319	371	369	437	428	-8.3	16.3	-0.5	18.4	-2.1
V Ferryville	194	183	227	154	174	176	-5.7	24.0	-32.2	13.0	1.1
V Gays Mills	634	623	627	578	625	491	-1.7	0.6	-7.3	8.1	-21.4
V Lynxville	183	149	174	153	176	132	-18.6	16.8	-12.1	15.0	-25.0
V Mount Sterling	161	181	223	217	215	211	-12.4	23.2	-2.7	-0.9	-1.9
V Soldiers Grove	663	514	622	564	653	592	-22.5	21.0	-9.3	15.8	-9.3
V Steuben	193	179	175	161	177	131	-7.3	-2.2	-8.0	9.9	-26.0
V Wauzeka	494	437	580	595	768	711	-11.5	32.7	2.6	29.1	-7.4
C Prairie du Chien	5,649	5,540	5,859	5,657	6,018	5,911	-1.9	5.8	-3.4	6.4	-1.8
State of Wis.	**3,951,777**	**4,417,821**	**4,705,642**	**4,891,769**	**5,363,715**	**5,686,986**	**11.8**	**6.5**	**4.0**	**9.6**	**6.0**
United States	**179,323,175**	**203,302,031**	**226,542,199**	**248,709,873**	**281,421,906**	**308,745,538**	**13.4**	**11.4**	**9.8**	**13.2**	**9.7**

(1) U.S. Dept. of Commerce-Bureau of the Census

Table 9 Crawford County Population Projections

		Population Projections						Projected % Change 10-40
	2010(1)	2015(2)	2020(2)	2025(2)	2030(2)	2035(2)	2040(2)	
Crawford County	**16,644**	**16,600**	**16,835**	**17,235**	**17,430**	**17,265**	**16,555**	**-0.5**
T Bridgeport	990	1,005	1,040	1,085	1,125	1,140	1,120	**13.1**
T Clayton	958	950	975	1,000	1,015	1,010	975	**1.8**
T Eastman	739	740	750	770	775	770	735	**-0.5**
T Freeman	686	695	715	735	750	750	720	**5.0**
T Haney	309	310	305	310	305	295	280	**-9.4**
T Marietta	470	470	470	475	475	460	435	**-7.4**
T Prairie du Chien	1,073	1,080	1,105	1,140	1,165	1,165	1,135	**5.8**
T Scott	462	450	445	450	445	430	400	**-13.4**
T Seneca	866	885	910	945	970	970	945	**9.1**
T Utica	661	670	680	695	705	700	675	**2.1**
T Wauzeka	422	420	435	450	460	465	450	**6.6**
V Bell Center	117	115	115	120	120	120	115	**-1.7**
V De Soto (pt.)*	108	105	110	110	115	115	110	**1.9**
V Eastman	428	425	435	450	455	455	440	**2.8**
V Ferryville	176	180	185	195	205	205	200	**13.6**
V Gays Mills	491	500	495	500	495	475	445	**-9.4**
V Lynxville	132	130	125	125	120	115	100	**-24.2**
V Mount Sterling	211	210	210	210	215	210	200	**-5.2**
V Soldiers Grove	592	575	570	575	565	550	515	**-13.0**
V Steuben	131	125	120	120	115	110	100	**-23.7**
V Wauzeka	711	695	700	710	710	695	660	**-7.2**
C Prairie du Chien	5,911	5,865	5,940	6,065	6,125	6,060	5,800	**-1.9**
State of Wis.	**5,686,986**	**5,783,015**	**6,005,080**	**6,203,850**	**6,375,910**	**6,476,270**	**6,491,635**	**14.1**
United States	**308,745,538**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

(1) U.S. Dept. of Commerce-Bureau of the Census; (2) Population Projection.-WI Dept. of Admin.-Demographic Services Ctr.

Household projections for the County forecast approximately 772 new households by the year 2040 in the County (Table10). Residential uses generally utilize between .5 acre and 1.5 acres in land area. Based on those acreages, forecasted future land area needed to accommodate the projected population rise is approximately an additional acreage on the low end of 386 acres and on the high end of 1,158 acres. It is anticipated some of this acreage will come from agricultural lands, while growth will also be absorbed by existing, vacant platted lots, marginal lands (slopes, poor agricultural soils) and in-fill development in cities and villages.

Table 10 Crawford County Household Projections

MCD Type & Name	2010 Census	Household Projections						% Change 10-40
		2015	2020	2025	2030	2035	2040	
T Bridgeport	392	412	435	463	488	501	498	27.0
T Clayton	389	399	419	438	452	455	445	14.4
T Eastman	288	298	309	323	331	333	322	11.8
T Freeman	312	327	344	360	374	379	368	17.9
T Haney	127	132	133	137	137	135	129	1.6
T Marietta	198	205	209	216	219	215	206	4.0
T Prairie du Chien	460	479	501	527	547	555	546	18.7
T Scott	183	184	186	192	193	189	178	-2.7
T Seneca	338	357	376	397	415	420	414	22.5
T Utica	267	280	290	302	312	314	306	14.6
T Wauzeka	167	172	182	192	199	204	200	19.8
V Bell Center	45	46	47	50	51	51	50	11.1
V De Soto (Pt.)*	46	46	50	50	54	54	53	15.2
V Eastman	168	173	181	190	196	198	194	15.5
V Ferryville	94	99	104	112	120	122	120	27.7
V Gays Mills	226	238	241	248	250	243	230	1.8
V Lynxville	63	64	63	64	63	61	54	-14.3
V Mount Sterling	88	91	93	94	98	97	94	6.8
V Soldiers Grove	251	253	257	264	263	258	243	-3.2
V Steuben	51	50	49	50	49	48	44	-13.7
V Wauzeka	273	276	284	294	299	296	285	4.4
C Prairie du Chien	2,386	2,459	2,554	2,655	2,715	2,707	2,606	9.2
Crawford Co.	**6,812**	**7,040**	**7,307**	**7,620**	**7,823**	**7,837**	**7,584**	**11.3**

Source: Wisconsin Department of Administration, Demographic Services Center, Household Projections

Municipal Growth Strategies

In an effort to increase preserve farmland and reduce the number of converted agricultural lands, the Crawford County Comprehensive Plan recommends a number of goals, objectives and actions to manage the location of future housing growth. Excerpts from the Crawford County Comprehensive Plan Land Use Element.

Goal ► Support a development pattern that preserves working agricultural lands and forests, protects the environment, and preserves quality of life and the rural landscape of Crawford County.

1. Encourage the use of residential conservation subdivisions to preserve agricultural land, open space, and natural resources. Evaluate existing conservation subdivision ordinances and develop model ordinance guidelines specific to Crawford County for local units of government to consider using.

   A conservation subdivision can be described as a development with common open space and compact clustered lots. Conservation subdivisions, when proposed/developed in the County will minimize future maintenance and service costs for the County, and the conservation subdivision will help preserve the rural character of the County. In contrast, traditional rural land use regulations and non-regulated rural developments typically create scattered large lot development patterns that consume large amounts of land, encourage inefficient land use, and facilitates land uses that compete with traditional agricultural.

2. Evaluate creating a minimum lot size for residential development in the unincorporated areas of the County.

3. Update the County's Farmland Preservation Plan based on the County Land Use Map. This is a requirement of the Working Lands Initiative.

4. Update the County's Subdivision Ordinance in an effort to meet the changing needs.

5. Inform/educate landowners and elected officials on the importance of forested lands in the County. Forested lands provide habitat for birds, animals, plants and flowers, all of which are vital to recreation and tourism opportunities.

6. Develop a land use map that encourages the preservation of working agricultural land (forests, open land that is pastured or tillable or capable of being pastured or tillable). The land use map is intended to be a direct reflection of input received by residents during the planning process.
7. Ensure that the County Land Use Map and Comprehensive Plan is consistent with the State of Wisconsin's Working Lands Initiative so landowners can benefit from this program.

Critical to implementing the housing policies is for the county, villages, cities, and towns follow their respective comprehensive plans regarding expansion of growth boundaries.

Transportation

There are 1,084 miles of public roads in Crawford County. Of these public roads, 183 miles are State Highways, 132 miles are County Roads and 769 miles are local roads. The County and Town roads make up the primary transportation network for agriculture throughout Crawford County. Essentially every public road in the county supports agricultural production and is used by agricultural uses. The county recognizes the importance of maintaining the public road infrastructure into the future.

U.S. Highways

U.S. Highway 61 traverses Crawford County in a north-south direction in the eastern portion of the county. The highway runs through the Towns of Clayton, Scott, Marietta and the Village of Soldiers Grove. U.S. Highway 18 runs for a short length in the southwestern part of the county. It enters the county in the City of Prairie du Chien across from Marquette Iowa and runs south along with STH 35 before leaving the county in the Town of Bridgeport.

State Highways

There are 7 State Highways in Crawford County. State Highways running north-south are STH 35 which is located along the Mississippi River, STH 27 which enters the county in the Town of Utica then runs south through the Villages of Eastman and Mt. Sterling before ending in the City of Prairie du Chien, STH 82 which enters the county from Vernon County in the Village of De Soto then runs jointly with STH 35 before leaving the county across from Lansing Iowa, STH 131 which enters the county along with USH 61 and goes into the Village of Soldiers Grove where is splits from USH 61 and then goes south through the Villages of Gays Mills, Bell Center and Steuben before ending at the junction with STH 60. East-West running state highways are STH 60 which runs along the Wisconsin River, STH 171 which begins at STH 35 in the Town of Seneca and runs east through the Villages of Mt. Sterling and Gays Mills before leaving the county in the Town of Clayton, and STH 179 which runs from STH 27 in the Village of Eastman to STH 131 in the Village of Steuben.

Interstates

No interstate system highways are located in Crawford County.

Freight Rail Service

Two rail lines are located in Crawford County. The Burlington Northern-Santa Fe rail line runs alongside the Mississippi River and the Wisconsin & Southern rail line runs along the Wisconsin River. Grain loading is available on rail cars in the City of Prairie Du Chien.

Water Transportation

The Port of Prairie du Chien is located on the Mississippi River in the southwest corner of the county. The types of cargo handled at the port are: cement, coal, fertilizer, grain, salt, sand, scrap metal and silicon carbide.

Utilities, Infrastructure, and Community Facilities

Adequate community facilities, utilities and infrastructure are important to support all forms of growth throughout the County. A goal of Crawford County is to protect agricultural lands within the county. One way of doing that is to guide new developments to areas that have adequate infrastructure to support this growth.

Wastewater Treatment & Public Water Facilities. There are eight wastewater treatment facilities in Crawford County see Table 11. There are also eight water facilities see Table 12. Concentrating residential development to areas with public sewer and water preserves agricultural land and is more sensitive to the environment.

Table 11 Wastewater Treatment Plants

Name of Facility	Location
Eastman	V. Eastman
Ferryville	V. Ferryville
Gays Mills	V. Gays Mills
Prairie du Chien	C. Prairie du Chien
Soldiers Grove	V. Soldiers Grove
Valley Ridge	STH 35, Lynxville
Wauzeka	V. Wauzeka
De Soto	V. De Soto

Table 12 Public Water Supply Systems

Name of Facility	Location
Eastman	V. Eastman
Ferryville	V. Ferryville
Gays Mills	V. Gays Mills
Prairie du Chien	C. Prairie du Chien
Soldiers Grove	V. Soldiers Grove
Valley Ridge	STH 35, Lynxville
Wauzeka	V. Wauzeka

Telecommunications
Crawford County has different options for internet access depending on the location within the county. Wired options providers are: Centurylink, Richland-Grant Telephone Cooperative, Mediacom Wisconsin or Vernon Communications Cooperative. Satellite options are available to those areas where wired options are not. The satellite options are Dishnetwork or HughesNet. While access is available countywide, slow download speeds are a major concern.

Electric Service
Crawford County residents receive electrical service from one of four providers. These are Scenic River Energy Cooperative, Wisconsin Power and Light, Richland. There are no power generating plants located in Crawford County.

Gas Service
Gas service is provided to most of the county by Madison Gas and Electric. However, the Towns of Marietta, Scott and Freeman along with the Villages of Ferryville and De Soto do not have any gas providers.

Police and Fire Departments
The City of Prairie du Chien is the only incorporated municipality which maintains a police department (Table 13). The Crawford County Sheriff's office provides coverage to unincorporated areas of the county and all of the Villages. Eight volunteer fire/rescue departments (Table 13) provide fire protection and emergency services for county residents.

Table 13 Law Enforcement and Fire and Rescue

Name of Facility	Location
Crawford County Sheriff's Office	C. Prairie du Chien
Prairie du Chien Police Dept	C. Prairie du Chien
Bridgeport Volunteer Fire Dept	C. Prairie du Chien
Eastman Volunteer Fire Dept	V. Eastman
Ferryville Volunteer Fire Dept	V. Ferryville
Gays Mills Volunteer Fire Dept	V. Gays Mills
Prairie du Chien Fire Dept	C. Prairie Du Chien
Seneca Volunteer Fire Dept	T. Seneca
Soldiers Grove Fire Dept	V. Soldiers Grove
Wauzeka Volunteer Fire Dept	V. Wauzeka

Health Care services are provided throughout the county (Table 14). There is one hospital and two clinics located in the City of Prairie du Chien and one clinic located in the Village of Soldiers Grove.

Table 14 Health Care – Hospitals and Clinics

Name of Facility	Location
Crossing Rivers Health	C. Prairie du Chien
Mayo Clinic Health System - Prairie du Chien	C. Prairie du Chien
Gundersen Health-Prairie du	C. Prairie du Chien
Kickapoo Valley Medical Clinic	V. Soldiers Grove

Educational facilities are important for future development and growth of a population. Crawford County is served by 8 school districts. Four of the school districts cover areas within the county but do not have school facilities located within the county. Only the North Crawford, Seneca, Wauzeka-Steuben, and Prairie du Chien School Districts have facilities located within the county. There are 12 public, 5 private schools and one university facility located within Crawford County (Table 15).

Table 15 Schools

Facility	Municipality
Public Schools	
BA Kennedy School	Prairie du Chien
Bluff View Intermediate	Prairie du Chien
Prairie du Chien High School	Prairie du Chien
Prairie du Chien Correctional Institute	Prairie du Chien
Seneca Elementary	Seneca
Seneca Jr High School	Seneca
Seneca High School	Seneca
North Crawford Elementary	Soldiers Grove
North Crawford High School	Soldiers Grove
Wauzeka Elementary	Wauzeka
Wauzeka Jr. High	Wauzeka
Wauzeka High School	Wauzeka
Private Schools	
St. Gabriel Elementary & St. John	Prairie du Chien
Prairie Christian Academy	Prairie du Chien
Grace Evangelical Lutheran	Prairie du Chien
United Methodist PreSchool	Prairie du Chien
Universities	
Upper Iowa University- PDC Campus	Prairie du Chien

Agricultural Resources and Land Uses

Crawford County today is a result of its rich agricultural history and abundance of agricultural resources and land uses. Agriculture as an industry continues to contribute significantly to the economic, environmental, and social vitality of the county, and its communities. Preserving the agricultural resources remains a challenge as it was in 1981 when Crawford County adopted its first Farmland Preservation Plan as demonstrated from the following excerpt from the 1981 plan.

"The following areas of concern are addressed in many of the Crawford County Township"

1. *Loss of Farmland. Valuable Crawford county farmland has already been lost. The need to preserve and maintain valuable ag lands is an important factor in maintaining the rural way of life and the county economy.*
2. *Rising Tax Assessments. Small acreage sales at high prices are resulting in increased farmland values which, in turn, result in higher property taxes.*
3. *Right to Farm. Urban sprawl is resulting in some land-use conflicts. Crawford County farmers are concerned that the farming operations have priority.*
4. *Poor Land-Use Practices. There is some evidence of Land abuse in this county especially by absentee owners and renter.*
5. *Provision of Services by Township. In many cases rural development is occurring in rather inaccessible locations such as on hillsides and hilltops. Town officials are concerned about providing services to such areas but feel obligated to do so. Accordingly, Town Boards would like to be informed before development occurs to advise of potential problems.*
6. *Zoning. Several townships would like to address township zoning if other land-use policies or controls are not effective*
7. *Natural Areas. There have been some instances of development on valuable and irreplaceable areas of wildlife habitat, and areas of scenic or recreational potential. Such development changes the rural character of the land or may render it useless for more appropriate use.*

Many of the same agriculture concerns exist today as residential (urban) development continues to threaten farmland and the farming lifestyle. New pressures such and frac sand mining that will potentially take land out of agricultural production and recreational landowners who see the value of the land differently from a traditional agricultural perspective. These changes often lead to farmers reconsidering future investment into their farm operations as development in the midst of an agricultural area also may interfere with farming operations and new residents may view farm practices such as manure spreading and nighttime harvesting as nuisances. Another change that is occurring is the change in buying habits of residents. Households are getting smaller and this changes the buying habits of households as most no longer buy meat in bulk. In 2016 there were 2 animal processing/meat lockers. One of them is closing and the other is currently for sale. It is important to recognize potential threats to agriculture and evaluate existing agricultural land uses and resources when making farmland preservation decisions. The following tables will assist in review agricultural trends in land use and land value in Crawford County.

Trends in agricultural resources and agricultural land were evaluated by reviewing Agricultural Census findings over the last ten years. Table 16 illustrates changes in the number of farms and land in farms between 2002, 2007 and 2012. In the past ten years the number of farms decreased 13.5% from 1,278 farms in 2002 to 1,105 farms in 2012. In addition to the number of farms decreasing, the size of farms (acreage) also decreased slightly from 199 acres in 2002 to 196 acres in 2012. An important item to note is that the total farm acreage in Crawford County dropped over the ten year period from 254,755 acres in 2002 to 216,584 acres in 2012 a loss of 38,171 acres. Fifty seven percent of the acres lost have come in the last 5 years. While the average size of farms dropped by only 3 acres between the years 2002 – 2012, the number of farms by acreage changed significantly. In 2002 the category with the largest number of farms was “260 - 499 acres” (210 farms). In 2012 the leading category was “10 – 49 acres” with 235 farms.

Crawford County has been fortunate in the agricultural supply and distribution component as little has changed. The county has adequate seed and fertilizer dealers, Co-Ops, milk purchaser and veterinarians. Although the county does not have any implement dealers, several are located in adjacent counties.

Contour stripping example

Table 16 Land in Farms – 2002, 2007, and 2012

Crawford County	2002		2007		2012		2002-2012	
	No. of farms	No. of Acres	No. of farms	No. of Acres	No. of farms	No. of Acres	% Change No. of Farms	% Change No. of Acres
Number of Farms	1,278		1,347		1,105		-13.5	
Land in Farms		254,755		238,225		216,584		-15.0
Average Size of Farm		199		177		196		-1.5
Approx. Total Land Area		366,522		365,224		365,222		-0.4
Percent of Land in Farms	69.50%		65.20%		59.30%			
Size of Farm:								
1 to 9 acres	42	231	54	282	31	115	-26.2	-50.2
10 to 49 acres	202	5,888	303	8,763	235	7,064	16.3	20.0
50 to 69 acres	87	5,089	99	5,875	77	4,407	-11.5	-13.4
70 to 99 acres	176	14,670	174	14,453	137	11,666	-22.2	-20.5
100 to 139 acres	139	16,124	165	19,069	157	18,432	12.9	14.3
140 to 179 acres	130	20,541	127	20,002	101	16,405	-22.3	-20.1
180 to 219 acres	128	25,294	92	18,194	80	15,818	-37.5	-37.5
220 to 259 acres	71	16,938	74	17,566	57	13,638	-19.7	-19.5
260 to 499 acres	210	72,297	181	63,362	154	54,566	-26.7	-24.5
500 to 999 acres	70	45,015	59	39,298	53	36,276	-24.3	-19.4
1,000 to 1999 acres	19	23,913	13	16,242	20	28,598	5.3	19.6
2,000 acres or more	4	8,755	6	15,119	3	9,599	-25.0	9.6

Source: http://www.agcensus.usda.gov/Publications/index.php; USDA – 2002, 2007 and 2012 Census of Agriculture

Table 17 illustrates farm land uses in the County between 2002 and 2012. The amount of pastureland and cropland used for pastureland had the largest reductions with a loss of 13,687 acres or 79.0% of the 2002 total acreage. Other categories which saw a loss of acreage are: Harvested Cropland (-4.6%); Total Woodland (-16.3%); Pastureland all types (-18.5%), Land used for vegetable harvest (-21.7%) and Land in Orchards (-31.8%). Two categories, Permanent pasture (other than cropland or wooded) and Land in farmsteads (bldgs, livestock, facilities, ponds, roads, etc.) pasture saw an increase of 55.8% and 4.8% respectively.

Table 17 Farm Land Uses – 2002, 2007 and 2012

Crawford County	2002		2007		2012		2002-2012	2002-2012
	No. of Farms	No. of Acres	No. of Farms	No. of Acres	No. of Farms	No. of Acres	% Change No. of Farms	% Change No. of Acres
Total Cropland	1,154	129,755	1,121	105,353	934	98,342	-19.1	-24.2
Harvested Cropland	790	88,583	764	77,348	761	84,513	-3.7	-4.6
Cropland Used Only for Pasture or Grazing	410	17,329	248	7,989	114	3,642	-72.2	-79.0
Total Woodland	957	99,148	1,021	92,596	861	82,962	-10.0	-16.3
Permanent pasture (other than cropland or wooded pasture)	380	15,827	641	27,359	563	24,663	48.2	55.8
Land in farmsteads (bldgs, livestock, facilities, ponds, roads, etc.)	726	10,025	884	12,917	765	10,507	5.4	4.8
Pastureland, all types	859	79,876	912	71,326	757	65,066	-11.9	-18.5
Land used for vegetables and vegetables harvested for sale(1)	24	83	31	147	15	65	-37.5	-21.7
Land in orchards	22	707	27	737	31	461	40.9	-34.8

Source: http://www.agcensus.usda.gov/Publications/index.php; USDA – 2002, 2007 and 2012 Census of Agriculture

Land Values

According to a WASS report, agricultural land values in Crawford County have risen dramatically from 2000 to 2013. Table 18 shows the value of agricultural land with farm buildings and the value of agricultural land without buildings. Over the 13 year period, agricultural land without buildings increased by 102% from $1,321 per acre in 2000 to $2,672 per acre in 2013. Agricultural land with buildings increased at a higher percentage (142%) over the twelve year period from $1,504 per acre to $3,730 per acre.

Table 19 illustrates whether agricultural land sold remained in agriculture or was diverted to another use. Within Crawford County most agricultural lands sold are remaining in agriculture. In 2012 and 2013 only 23 acres (0.7%) out of 3,300 acres sold was diverted from agriculture to other uses. This trend is different from most of the State of Wisconsin which is seeing agricultural lands sold being diverted to other uses.

Table 18 Crawford County Farmland Average Price Per Acre, 2000-2013

Year	Ag Land Without Buildings	Ag Land with Buildings
2000	$1,321	$1,504
2001	$1,326	$1,508
2002	$1,400	$1,887
2003	$1,782	$1,766
2004	$1,563	$2,011
2005	$2,048	$2,829
2006	$2,086	$2,682
2007	$2,258	$3,621
2008	$2,427	$3,435
2009	$2,530	$3,035
2010	$2,646	$3,041
2011	$2,238	$2,964
2012	$2,618	$3,298
2013	$2,672	$3,730
% Chge 2000-2012	**102.3**	**148.0**

Source:http://www.nass.usda.gov/Statistics_by_State/Wisconsin/Publications/Land_Sales/, USDA Nat'l Ag. Statistics Service

Table 19 Crawford County Agricultural Land Sales

Year	Agricultural Land Continuing in Agricultural Use		Agricultural Land Being Diverted to Other Uses		Total of all Ag Land	
	No. Acres Sold	$ per Acre	No. Acres Sold	$ per Acre	No. Acres Sold	$ per Acre
2000	3,115	1,368	2,363	1,522	5,478	1,434
2001	2,543	1,314	1,477	1,663	4,020	1,442
2002	2,070	1,468	954	1,865	3,024	1,593
2003	1,114	1,502	1,146	2,032	2,260	1,771
2004	1,342	1,751	880	1,806	2,222	1,773
2005	2,347	2,335	848	2,810	3,195	2,461
2006	1,540	2,377	562	2,499	2,102	2,410
2007	998	2,957	260	4,571	1,258	3,290
2008	1,558	3,045	112	2,920	1,670	3,037
2009	339	2,826	106	2,943	445	2,854
2010	1,241	2,927	173	3,030	1,414	2,940
2011	1,430	2,826	196	2,784	1,626	2,821
2012	1,343	3,102	23	3,435	1,366	3,108
2013	1,934	3,478	0	0	1,934	3,478
% Change 2000-2013	**-37.9**	**154.2**	**-100.0**	**-100.0**	**-64.7**	**142.5**

Source: http://www.nass.usda.gov/Statistics_by_State/Wisconsin/Publications/Land_Sales/, USDA National Ag. Statistics Service

Table 20 shows the market value of farms within Crawford County. The market value of farms in the county increased between the years 2002 – 2012 as the number of farms declined during that same time period. In addition, the average market value per acre has also increased. The average market value per farm grew 63.3% in a ten-year time period (Table 20). This further illustrates a strong agricultural economy in Crawford County.

Table 20 Farms Market Value

	2002		2007		2012	
	No. of Farms	$ Amount	No. of Farms	$ Amount	No. of Farms	$ Amount
Est. Market value of land & bldgs.	1,278	415,379,000	1,347	618,420,000	1,105	586,133,000
Average market value per farm		324,768		459,109		530,437
Average market value per acre		1,737		2,596		2,706

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA, Census of Agriculture

Table 21 shows the number of farms in selected value ranges for the years 2002, 2007 and 2012. In each of the years shown the greatest number of farms can be found in $200,000 to $499,999 range followed by $100,000 to $199,000 range. One interesting fact is that in 2002 only 1 farm had a value of $5,000,000 or more. This number increased to 5 in 2012 with 1 of those farms having a value of $10,000,000 or more.

Table 21 Farm Values

Crawford County Market value of farm land and bldgs	2002 Number of Farms	2007 Number of Farms	2012 Number of Farms	% Difference 2002-2007	% Difference 2007-2012	% Difference 2002-2012
$1 to $49,999	115	93	78	-19.1	-16.1	-32.2
$50,000 to $99,999	150	132	82	-12.0	-37.9	-45.3
$100,000 to $199,999	262	259	224	-1.1	-13.5	-14.5
$200,000 to $499,999	567	505	378	-10.9	-25.1	-33.3
$500,000 to $999,999	128	227	197	77.3	-13.2	53.9
$1,000,000 to $1,999,999	42	94	99	123.8	5.3	135.7
$2,000,000 to $4,999,999	14	32	42	128.6	31.3	200.0
$5,000,000 to $9,999,999	1	3	4	200.0	33.3	300.0
$10,000,000 or more		2	1	NA	-50	NA

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

AGRICULTURE ECONOMIC GROWTH AND BUSINESS DEVELOPMENT

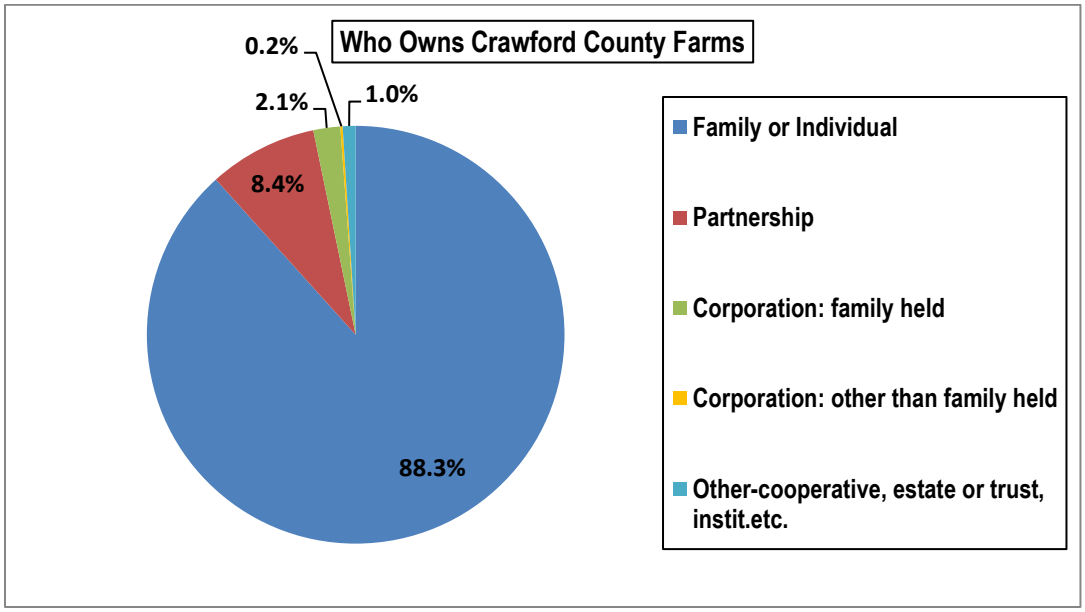
Agriculture remains a vital to Crawford County's economic well-being. Agriculture provides economic growth, jobs and opportunities for business development. From a UW-Extension "Crawford County Agriculture: Value and Economic Impact, 2014 Report" agriculture provides 35% of jobs (1,034 jobs) in the county and generates $148.7 million in economic activity. Agriculture also contributes $55.4 million to the county's income and accounts for about $1.9 million in taxes. The following tables and charts will help define in greater detail the economic influences and impacts that agriculture has on Crawford County. Defining the economic and business impacts of agriculture on the county will help in determining the best ways to secure agricultures future through farmland preservation planning.

Table 22 and Figure 1 illustrate how farm ownership is organized. Over the period of 2002 – 2012 the number of family or individual owned farms, partnership farms and corporate family owned farms has decreased by 12.3%, 32.6% and 3.9% respectively. However, the vast majority of farms in the county are still family or individually owned (976 farms or 88%).

Table 22 Type of Farm Organization

Crawford County	2002		2007		2012		% Change 2002-2007		% Change 2007-2012		% Change 2002-2012	
	No. of Farms	No. of Acres	No. of Farms	No. of Acres	No. of Farms	No. of Acres	No. of Farms	No. of Acres	No. of Farms	No. of Acres	No. of Farms	No. of Acres
Family or Individual	1,136	194,091	1,177	181,827	976	168,991	3.6	-6.3	-17.1	-7.1	-14.1	-12.9
Partnership	115	47,732	124	39,291	93	32,161	7.8	-17.7	-25.0	-18.1	-19.1	-32.6
Corporation: family held	22	12,208	29	11,973	23	11,735	31.8	-1.9	-20.7	-2.0	4.5	-3.9
Corporation: other than family held	-	-	6	776	2	NA	NA	NA	-66.7	NA	NA	NA
Other-cooperative, estate or trust, instit.etc.	5	724	11	4,358	11	NA	120.0	501.9	0.0	NA	120.0	NA
Total Farms	1,278	-	1,347	-	1,105	-	5.4	-	-18.0	-	-13.5	-

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture



Source: http://www.agcensus.usda.gov/Publications/index.php, 2012 USDA Census of Agriculture

Table 23 indicates the number of farms by livestock, poultry, and crops in the County. The information illustrates the changes in farming as the number of farms with milk cows in the county dropped by 45.2% from 2002-2012 but the number of milk cows only dropped by 28.2%. The number of farms with beef cattle and the number of beef cattle both increased by 4.9% and 16.1 respectively from 2002. The number of Farms with Hogs and pigs sold saw a decline of 38 farms over the 10-year period. In addition, Sheep & Lamb inventory increased 112.1% while Milk goat inventory saw an increase in the number of farms but a decrease in the number of animals.

Table 23 Livestock and Poultry

Crawford County	2002		2007		2012		# Change 2002-2012	% Chang 2002-2012
	# of Farms	# of Animals	# of Farms	# of Animals	# of Farms	# of Animals	# of Farms	# of Animals
Cattle & calves inventory	682	38,152	696	37,158	566	32,307	-17.0	-15.3
Beef cattle	325	6,948	377	8,770	341	8,066	4.9	16.1
Milk cows	221	10,362	165	8,935	121	7,440	-45.2	-28.2
Cattle & calves sold	535	15,384	551	15,868	473	14,209	-11.6	-7.6
Hogs & pigs inventory	50	12,600	49	5,836	23	NA	-54.0	NA
Hogs & pigs sold	54	21,564	50	33,517	16	NA	-70.4	NA
Sheep & lamb inventory	16	282	29	403	20	598	25.0	112.1
Milk goat inventory	8	942	10	NA	9	474	12.5	-49.7
Broilers & other meat-type chickens sold	16	991	14	810	12	671	-25.0	-32.3
Layers inventory	63	1,868	120	4,844	77	1,118	22.2	-40.1

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Dairy farming is a large part of Crawford County's agricultural economy as there are 3 plants that process dairy products in Crawford County according to Wis. DATCP Wisconsin Dairy Plant Directory. On-farm milk production accounts for 443 jobs, and dairy processing accounted for 31 jobs and at the County level, each dairy cow generated $4,675 in on-farm sales to producers, while at the state level each dairy cow generated $34,000 in total sales (Source: UW Extension – Crawford County Agriculture: Value and Economic Impact, 2014).

Corn is the largest crop by acreage grown in the County in 2012 with 31,576 acres. Forage land used for hay, grass silage & green chop is second at 29,629 acres followed by soybeans at 15,002 acres. Two notes of interest is that Wheat for grain increased from 2007 to 2012 by 157.9%, and the number of acres in Forage land used for hay, grass silage & green chop decreased by 5,357 acres (Table 24).

Table 24 Crawford County Crops

Crawford County	2007			2012			% Change 2007-2012	% Change 2007-2012	% Change 2007-2012
	No. of Farms	No. of Acres	No. of bushels/ tons	No. of Farms	No. of Acres	No. of bushels/ tons	No. of Farms	No. of Acres	No. of bushels/tons
Corn for grain	363	26,096	3,914,451	399	31,576	3,813,598	9.9	21.0	-2.6
Corn for silage or greenchop (1)	150	3,335	59,755	157	4,615	65,681	4.7	38.4	9.9
Wheat for grain	11	387	21,988	16	693	56,710	45.5	79.1	157.9
Oats for grain	117	1,952	110,083	105	1,635	94,270	-10.3	-16.2	-14.4
Barley for grain	11	107	5,002	10	302	8,135	-9.1	182.2	62.6
Soybeans for beans	102	10,209	451,615	184	15,002	546,586	80.4	46.9	21.0
Forage–land used for all hay & all haylage, grass silage, & greenchop (1)	658	34,986	104,017	599	29,629	82,529	-9.0	-15.3	-20.7
Vegetables harvested for sale	31	147		15	65		-51.6	-55.8	NA
Land in orchards	27	737		31	461		14.8	-37.4	NA

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture (1) = crops shown are in tons

Specialty Crops, Nurseries, Etc.

Specialty crop farming may provide additional agricultural production opportunities within developing commercial and residential areas where large tracts of agricultural lands are not available. Unlike traditional crops such as corn or soybeans, the profitability of farming nontraditional crops is not closely tied to large acreage requirements. Specialty crops can provide substantial revenues to the County's economy while diversifying and stabilizing the agricultural industry in the face of increased development pressures. They can provide supplemental income opportunities for traditional farm operations as well as opportunities for hobby farms and recreational landowners. Having a local market for specialty crops is also important to enhance the growth of the sector.

Farming operations, other than dairying, corn and soybean, include those identified in Tables 25 and 26. The information illustrates that floriculture and Maple Syrup saw a

decline in the number of farms between 2007 and 2012. Floriculture Crops saw a decline from 18 farms down to 13 farms and Maple Syrup's decline was from 23 farms down to 14 farms. The County saw a growth in Maple syrup farms between 2002 and 2007, but then declined by 2012. The Number of taps in 2012 is almost the same as the number of taps in 2002 but the amount of maple syrup produced declined from 152 gallons in 2002 to 103 gallons in 2012.

Table 25: Floriculture Crops - Bedding/Garden Plants, Cut Flowers and Cut Florist Greens, Foliage Plants, Potted Flowering Plants, And Other Floriculture and Bedding Crops

Crawford County	2007	2012
Number of Farms	18	13
Sq. Ft. Under Glass or Other Protection	18,884	9,616
Value of Sales	$1,426,100	NA

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Table 26: Maple Syrup

Crawford County	2002	2007	2012	% Change 2002 - 2012
Number of Farms	8	17	11	37.5
Number of Taps	740	1,270	744	0.5
Syrup Produced (Gallons)	152	231	103	-32.2

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Organic Farming in Crawford County

Wisconsin has experienced dramatic growth in organic agriculture since the National Organic Program was enacted in 2002. The number of organic farms in Wisconsin grew 157 percent between 2002 and 2007. Within Crawford County there were 35 farms used for organic production in 2007, this number declined to 23 in 2012. While the number of organic farms declined the value of organic products sold rose from $778,000 in 2007 to $1,093,000 in 2012, a 40.5% increase. The following table taken from the 2007 and 2012 Census of Agriculture shows the number and acreage of organic farms in Crawford County. Unfortunately, the 2012 Census of Agriculture did not report organic farm acreage.

Table 27: Organic Agriculture

Crawford County	2007			2012		
	No. of farms	No. of acres	Total Organic product sales	No. of farms	No. of acres	Total Organic product sales
Farms & acres used for organic production	35	2,493	778,000	23	NA	1,093,000
Farms & acres from which organic crops were harvested	29	1,379	NA	7	NA	NA
Farms & acres of organic pastureland	17	631	NA	NA	NA	NA
Farms & acres being converted to organic production	20	637	NA	5	NA	NA

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Federal support for organic production systems, including financial assistance for farmers completing the certification process and funding for organic research, has increased in each of the last three farm acts. The continued support for organic farming will provide growth opportunities for organic farming in Crawford County. The Agricultural Act of 2014 states:

- Expands funding to assist organic producers and handlers with the cost of organic certification. Mandatory funding more than doubles from the 2008 Farm Act's mandate to $57.5 million over the lifespan of the 2014 Act.
- Continues mandatory funding to improve economic data on the organic sector at $5 million over the lifespan of the Act; another $5 million is added to upgrade the database and technology systems of USDA's National Organic Program.
- Expands total mandatory organic research funding to $100 million. Authorized funding for the National Organic Program expands to $15 million annually.
- Exempts certified organic producers from having to pay for conventional commodity promotion programs on their organic production, and establishes the option for an organic promotion program.
- Requires improvements in crop insurance for organic producers and strengthens enforcement of organic regulations.

Table 28 identifies Crawford County farm operations by NAIC classification. "Other Crop farming" (325), "Beef Cattle farming" (278), "Oilseed and Grain farming" (260), and "Dairy Cattle and Milk Production" (113) and make up 88% percent of the farming operations in Crawford County. The category with the largest increase in number of farms between the years 2002-2012 was "Oilseed and Grain farming" which grew by 149 farms or 134.2%. The category with the largest decrease for that same time period was "Other Crop farming" which decreased by 165 farms or 33.7%

Table 28: Farms by North American Industrial Classification System

Crawford County	2002	2007	2012	% Change 2002-2007	% Change 2007-2012	% Change 2002-2012
	No. of farms	No. of farms	No. of farms			
Total farms	**1,278**	**1,347**	**1,105**	**5.4**	**-18.0**	**-13.5**
Oilseed and grain farming (1111)	111	125	260	12.6	108.0	134.2
Vegetable and melon farming (1112)	15	17	9	13.3	-47.1	-40.0
Fruit and tree nut farming (1113)	18	25	26	38.9	4.0	44.4
Greenhouse, nursery & floriculture prod. (1114)	17	21	15	23.5	-28.6	-11.8
Other crop farming (1119)	490	449	325	-8.4	-27.6	-33.7
Beef cattle ranching and farming (112111)	250	375	278	50.0	-25.9	11.2
Cattle feedlots (112112)	58	36	10	-37.9	-72.2	-82.8
Dairy cattle and milk production (11212)	207	155	113	-25.1	-27.1	-45.4
Hog and pig farming (1122)	7	19	5	171.4	-73.7	-28.6
Poultry and egg production (1123)	6	34	6	466.7	-82.4	0.0
Sheep and goat farming (1124)	13	11	9	-15.4	-18.2	-30.8
Other animal production (1129)	86	80	49	-7.0	-38.8	-43.0

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Table 29 illustrates various farm practices in Crawford County in 2012. It shows the number of farms that produced and sold value added commodities, market directly to retail outlets, or have on farm packing facilities and demonstrate the different business practices used by agricultural producers.

Table 29 Selected Practices in Crawford County – 2012

Practiced alley cropping or silvopasture (farms)	Harvested biomass for use in renewable energy (farms)	Practiced rotational or management intensive grazing (farms)	Marketed products directly to retail outlets (farms)	Produced and sold value-added commodities (farms)	Marketed products through community supported agriculture (CSA) (farms)	Raised or sold veal calves (farms)	On-farm packing facility (farms)
2	11	152	23	40	6	13	16

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Market value of agricultural products sold on Crawford County farms and the Average sales per farm has been increasing. The 2007 and 2012 Census of Agriculture shows that the Market value of agricultural products sold and the Average sales per farm in Crawford County increased from the previous agricultural census. Between the years 2002 and 2012 total value increased by 79.5% and the average sales per farms increased 107.6% (Table 30). According to the UW-Extension "Crawford County Agriculture: Value and Economic Impact, 2014 Report", the number one commodity sold in Crawford County by dollar value is Grain with a value of $29.9 million. This was followed by Other Crops and Hay ($2.9 million), Nursery & greenhouse ($0.55 million), Sheep & goats ($0.21 million) and Horses & others ($0.17 million).

Table 30: Total Market Value of Agricultural Products Sold (1000's) – 2002, 2007, and 2012

	2002		2007		2012		2002-2007		2007-2012		2002-2012	
	No. of farms	Amount ($1,000s)/ dollars	No. of farms	Amount ($1,000s)/ dollars	No. of farms	Amount ($1,000s)/ dollars	% Chge No. of Farms	% Chge Market Value	% Chge No. of Farms	% Chge Market Value	% Chge No. of Farms	% Chge Market Value
Total sales	1,278	41,725	1,347	61,112	1,105	74,900	5.4	46.5	-18.0	22.6	-13.5	79.5
Average sales per farm (1)		32,649		45,369		67,782		39.0		49.4		107.6
Value of sales:												
Less than $1,000	518	16	565	54	320	36	9.1	237.5	-43.4	-33.3	-38.2	125.0
$1,000 to $2,499	99	155	91	154	77	124	-8.1	-0.6	-15.4	-19.5	-22.2	-20.0
$2,500 to $4,999	91	325	98	359	95	338	7.7	10.5	-3.1	-5.8	4.4	4.0
$5,000 to $9,999	90	655	142	1,000	81	585	57.8	52.7	-43.0	-41.5	-10.0	-10.7
$10,000 to $19,999	102	1,485	94	1,374	121	1,757	-7.8	-7.5	28.7	27.9	18.6	18.3
$20,000 to $24,999	33	721	31	680	52	1,142	-6.1	-5.7	67.7	67.9	57.6	58.4
$25,000 to $39,999	69	2,213	64	1,972	57	1,798	-7.2	-10.9	-10.9	-8.8	-17.4	-18.8
$40,000 to $49,999	34	1,505	35	1,562	36	1,618	2.9	3.8	2.9	3.6	5.9	7.5
$50,000 to $99,999	127	9,171	61	4,596	97	7,000	-52.0	-49.9	59.0	52.3	-23.6	-23.7
$100,000 to $249,999	90	14,631	104	16,237	93	15,090	15.6	11.0	-10.6	-7.1	3.3	3.1
$250,000 to $499,999	19	6,054	36	12,233	44	14,990	89.5	102.1	22.2	22.5	131.6	147.6
$500,000 or more	6	4,792	26	20,892	32	30,422	333.3	336.0	23.1	45.6	433.3	534.8

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture (1) Dollars

Crawford County's market value of livestock, dairy, and poultry products increased from $28,549,000 I 2002 to $37,247,000 in 2012 a 30.5% rise. While some 2012 amounts are not available, Poultry and eggs showed a 100% increase in market value between the years 2002-2012 (Table 31). During this same time period, the average farm production expenses increased by 85.9% (Table 32). Similarly, average farm-related income grew by 101.5% percent (Table 33).

Table 31: Market Value of Livestock & Poultry Products Sold – 2002, 2007, and 2012

Crawford County	2002		2007		2012		% Change 2002-2007		% Change 2007-2012		% Change 2002-2012	
	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)
Total livestock, poultry, & their products	613	28,549	670	40,200	543	37,247	9.3	40.8	-19.0	-7.3	-11.4	30.5
Poultry and eggs	34	16	118	142	49	32	247.1	787.5	-58.5	-77.5	44.1	100.0
Cattle and calves	535	8,615	551	10,866	473	NA	3.0	26.1	-14.2	NA	-11.6	NA
Milk & other dairy products from cows	219	18,296	NA	NA	121	NA	NA	NA	NA	NA	-44.7	NA
Hogs and pigs	54	1,220	50	1,428	16	NA	-7.4	17.0	-68.0	NA	-70.4	NA
Sheep, goats and their products	28	244	NA	NA	30	209	NA	NA	NA	NA	7.1	-14.3

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Table 32: Farm Production Expenses - 2002, 2007 and 2012

	2002		2007		2012		Percent Chge 2002-2007		Percent Chge 2007-2012		Percent Chge 2002-2012	
Crawford County	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)	No. of farms	Amt ($1,000)
Total farm production expenses	1,278	39,039	1,347	50,946	1,105	62,701	5.3	30.5	-18.0	23.1	-13.6	60.6
Average per farm		30,523		37,822		56,743	-	23.9	-	50.0	-	85.9
Property taxes paid	1,139	2,981	1,262	4,013	1,044	3,921	10.8	34.6	-17.3	-2.3	-8.3	31.5

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Table 33: Income from Farm-related Sources – 2002, 2007 and 2012

Crawford County	2002		2007		2012		% Change 2002-2007		% Change 2007-2012		% Change 2002-2012	
	No. of farms	Amount ($1,000)	No. of farms	Amount ($1,000)	No. of farms	Amount ($1,000)	No. of farms	Amount ($1,000)	No. of farms	Amount ($1,000)	No. of farms	Amount ($1,000)
Total income from farm related sources, gross before taxes and expenses	471	2,006	542	2,684	549	4,711	15.1	33.8	1.3	75.5	16.6	134.8
Average per farm		4,260		4,953		8,582		16.3		73.3		101.5

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Agri-Tourism

Agri-tourism is another opportunity that can benefit small- and medium-sized farms and enhance the local economy. Agri-tourism can potentially be an economic development engine providing support to local businesses by creating demand for new services and providing supplemental income to agricultural operations. Sales made directly to consumers through roadside stands, farmers' markets, auctions, pick-your-own operations, and community supported agriculture (CSA) often result in greater returns to the grower than if agricultural commodities are sold at wholesale prices. In addition, it provides a direct connection between locally owned and operated producer and the consumer, educating the consumer about agriculture and its importance. According to a UW Extension report – "Crawford County Agriculture Value and Economic Impact 2014", Forty Eight farms generated $1,351,000 in local food sales.

Agricultural Infrastructure (businesses and services)

Farming infrastructure includes businesses and services such as a feed mills, equipment vendors, farm supply businesses, and food processing facilities. Table 34 provides a small sampling of one aspect of infrastructure capacity available in Crawford County, showing the latest numbers for grain storage capacity in the County, with capability of almost 2.7 million bushels of storage. Over the 10 year period the number farms with grain storage facilities and the number of bushels stored both decreased. The number of farms decreased by 39.2% and the average bushels stored decreased by 11.3%.

Table 34 Grain Storage Capacity - 2012

Crawford County	2002	2007	2012	% Change 2002-2007	% Change 2007-2012	% Change 2002-2012
Number of farms	309	254	188	-17.8	-26.0	-39.2
Number of bushels	3,083,298	3,464,750	2,733,959	12.4	-21.1	-11.3
Average bushels per farm	9,978	13,641	14,542	36.7	6.6	45.7

Source: http://www.agcensus.usda.gov/Publications/index.php, USDA Census of Agriculture

Agricultures Economic Impact

The economic contribution of agriculture through producers purchases of seed, feed, fertilizer, fuel, agricultural chemicals, and equipment from suppliers, and the commodities produced that are subsequently sold at market is significant. In addition to farm operations, several agricultural businesses located within the County such as seed dealers; grain elevators; dairy product processors, sales, and distribution; equipment dealers; roadside farm stands; specialty crop sales; and farm chemical, fuel, and supply dealers contribute to the County's economy through property taxes, sales tax, and employment. Information from the UW Extension report – "Crawford County Agriculture Value and Economic Impact 2014" best summarizes the impact of agriculture on Crawford County's economy. In 2014 agriculture generated $148.7 million in business sales in Crawford County. Agricultures direct effect equaled $108.9 million in the sale of farm products, processed and value added products. Purchases of agriculture and food processing along with services and equipment accounted for $26.3

million in business sales. $13.6 million in business sales was a result of business to business activity. Agriculture in Crawford County accounts for approximately $55.4 million of the County's total income.

Maintaining the agricultural base and preserving farmland is important to maintaining existing public services and infrastructure and to provide for future public services and infrastructure. Agricultural land and production generates tax dollars with little expenses for local governments. The Chart below shows that agriculture pays about $1.9 million in taxes. This figure does not include all property taxes paid to support local schools. If it did, the number would be much higher.

Taxes Generated by Agriculture

Income Tax - $0.81 million

Property Tax - $0.37 million

Sales Tax - $0.26 million

Other - $0.41 million

Total = $1.9 **million**

Source: UW Extension – Crawford County Agriculture: Value and Economic Impact, 2014

4.0 GOALS AND POLICIES/OBJECTIVES TO GUIDE FARMLAND PRESERVATION

A key element of the farmland preservation planning process is to establish Farmland Preservation Goals and develop plan objectives/policies that will enhance and preserve farmland in Crawford County. An additional aspect of Farmland Preservation Planning is to ensure that the Farmland Preservation goals and objectives/policies are consistent with County Comprehensive Plan goals.

The Land Conservation Committee reviewed the goals from the 1981 Crawford County Farmland Preservation Plan and goals associated with farmland preservation from the Crawford County Comprehensive Plan. The committee determined that *the goals identified in the Comprehensive Plan are the goals which will be used to guide farmland preservation planning* in Crawford County. Incorporating the Comprehensive Goals into this Farmland Preservation Plan provides a consistency between the two documents.

Listed below are the Farmland Preseravation Plan goals and objectives/policies to be used in guiding Farmland Preservation within Crawford County.

Public Participation

Goal A	Provide the opportunity for public input throughout the planning process and future updates.

The Crawford County Comprehensive Plan will be updated at a minimum once every 10 years. During the plan update process resident involvement will be solicited through public meetings or reassessing and updating the resident survey. A public hearing will be held on any modifications made to the plan. The plan update will include measuring plan performance at achieving goals, revising statistical information, and updating projections and analysis of past projections. The final stage of the update process will include revising and/or updating implementation strategies to meet the changing needs of Crawford County.

Goal B	Balance individual property rights with community interests and goals.

1. Continue to follow the planning process in the adopted "Crawford County Public Participation Plan" which details activities to gain public input through public meetings, public surveys, and general public awareness of the planning process. Following the public participation plan will ensure that balance in the form of public input and opinions will be achieved during the planning process.
2. Utilize public input in the planning process and update the comprehensive plan a minimum of once every 10 years.

Residential & Commercial Growth Goals

Goal A	Minimize incompatible land uses by guiding commercial, industrial, and residential development to areas where public sewer and water services are available.

1. Explore opportunities for Towns to work collaboratively with incorporated communities in the County. A possibility is for the County to facilitate or organize informational meetings for local units of government regarding annexation, intergovernmental service agreements, revenue sharing, extra-territorial zoning, etc.

2. In an effort to protect scenic vistas continue enforcement of Crawford County's Telecommunications Regulations and Standards ordinance. The ordinance regulates the location and height of communication facilities (towers).

3. Evaluate policies, programs and/or ordinances aimed at guiding commercial, industrial and residential development to areas served by public infrastructure. Resident input gathered through survey responses expressed the desire for commercial, industrial and residential development to locate near or adjacent to incorporated communities and/or sanitary districts where public infrastructure services are available.

4. Guide future industrial development to established industrial/business parks within the County. There are five industrial/business parks within Crawford County that are served by public sewer and water and are ideal locations for businesses to locate or expand.

5. Encourage new or expanding commercial businesses to locate in areas served by public sewer, water and adequate transportation facilities. Throughout the County there are vacant business sites/parcels that are served by public facilities. Encouraging these areas to infill with development versus expanding to undeveloped areas will assist in preserving the County's rural landscape.

Goal B	Locate housing in areas with appropriate infrastructure.

1. Require legally binding user agreements prior to building permit approvals for rural housing developments (two or more housing units), proposing shared wells.

2. Encourage higher density residential housing subdivisions and multifamily developments (defined as 3 or more living units in a single structure) be located in areas served by public sewer and water systems.

Agriculture Goals

Goal A	Preserve land for agricultural use.

1. Explore the development of a regional purchase of development rights program in order to leverage state and federal funding for the preservation of agricultural land. This would include working with neighboring counties to create a program that would benefit local landowners and assist in meeting the preservation goal of the comprehensive plan.

2. In terms of Crawford County agricultural use is defined as uses of the land for services, the production of goods, consumptive products, and the keeping or maintenance, sale, lease or personal use of plants/trees and animals. In order to preserve land for agricultural use, it is important that the term is defined for Crawford County.

3. Update Crawford County's Farmland Preservation Plan by 2016. As part of Wisconsin's Working Lands Initiative (modification to Wisconsin's Farmland Preservation Law) Crawford County is required to update its Farmland Preservation Plan by the year 2016. Updating the Farmland Preservation Plan will provide landowners the opportunity to receive tax incentives to maintain land in agriculture.

Goal B	Support a development pattern that preserves working agricultural lands and forests, protects the environment, and preserves quality of life and the rural landscape of Crawford County.

1. Encourage the use of residential conservation subdivisions to preserve agricultural land, open space, and natural resources. Evaluate existing conservation subdivision ordinances and develop model ordinance guidelines specific to Crawford County for local units of government to consider using.

2. A conservation subdivision can be described as a development with common open space and compact clustered lots. Conservation subdivisions, when proposed/developed in the County will minimize future maintenance and service costs for the County, and the conservation subdivision will help preserve the rural character of the County. In contrast, traditional rural land use regulations and non-regulated rural developments typically create scattered large lot development patterns that consume large amounts of land, encourage inefficient land use, and facilitates land uses that compete with traditional agricultural.

3. Evaluate creating a minimum lot size for residential development in the unincorporated areas of the County.

4. Update the County's Farmland Preservation Plan based on the County Land Use Map. This is a requirement of the Working Lands Initiative.

5. Update the County's Subdivision Ordinance in an effort to meet the changing needs.

6. Inform/educate landowners and elected officials on the importance of forested lands in the County. Forested lands provide habitat for birds, animals, plants and flowers, all of which are vital to recreation and tourism opportunities.

7. Develop a land use map that encourages the preservation of working agricultural land (forests, open land that is pastured or tillable or capable of being pastured or tillable). The land use map is intended to be a direct reflection of input received by residents during the planning process.

8. Ensure that the County Land Use Map and Comprehensive Plan is consistent with the State of Wisconsin's Working Lands Initiative so landowners can benefit from this program.

Commercial & Industry Goals

Goal A	Minimize incompatible land uses by guiding commercial, industrial, and residential development to areas where public sewer and water services are available

1. Explore opportunities for Towns to work collaboratively with incorporated communities in the County. A possibility is for the County to facilitate or organize informational meetings for local units of government regarding annexation, intergovernmental service agreements, revenue sharing, extra-territorial zoning, etc.

2. In an effort to protect scenic vistas continue enforcement of Crawford County's Telecommunications Regulations and Standards ordinance. The ordinance regulates the location and height of communication facilities (towers).

3. Evaluate policies, programs and/or ordinances aimed at guiding commercial, industrial and residential development to areas served by public infrastructure. Resident input gathered through survey responses expressed the desire for commercial, industrial and residential development to locate near or adjacent to incorporated communities and/or sanitary districts where public infrastructure services are available.

4. Guide future industrial development to established industrial/business parks within the County. There are five industrial/business parks within Crawford County that are served by public sewer and water and are ideal locations for businesses to locate or expand.

5. Encourage new or expanding commercial businesses to locate in areas served by public sewer, water and adequate transportation facilities. Throughout the County there are vacant business sites/parcels that are served by public facilities. Encouraging these areas to infill with development versus expanding to undeveloped areas will assist in preserving the County's rural landscape.

Goal B	Create and maintain an economic environment that encourages sustainability and sustainable use of natural resources.

1. Define "sustainability" in terms of economic development for the County.

In general terms, sustainability is meant to ensure that the natural resources and environment that generate economic activity are protected and enhanced in order for future generations to gain the same (or increased) economic benefit. The Natural Step Framework and many communities use the following four considerations to evaluate economic and community development decisions:

- Does it increase the amount of substances extracted from the Earth's crust?
- Does it increase the concentration of man-made substances?
- Does it physically degrade the natural environment?
- Does it undermine people's capacity to meet their basic needs?[1]

2. Continue to promote policies and programs aimed at growing the local agricultural economy. Crawford County is rural, and agriculture and agriculture related businesses have been the backbone of the local economy. Input during the planning process indicates that residents wish for the County to remain rural and that agriculture remain a vital part of the local economy.

3. Support various forms of agriculture including organic and conventional agriculture, orchards, vineyards, value added agriculture, and forestry etc. as a way of providing more agricultural opportunities in the local economy.

Utilities & Community Facilities Goals

Goal A	Ensure that the natural resources of the County are protected in the development of utilities and community facilities.

1. Encourage communities to adopt wellhead protection ordinances when new municipal wells are installed in Crawford County.

2. Monitor the Wisconsin Department of Natural Resources enforcement of pre and post construction stormwater runoff regulations in Crawford County to ensure the water resources of the County are protected.

3. Identify strategies to promote stormwater management runoff alternatives (Best Management Practices, detention/retention ponds etc.) to be used on public/private construction projects.

Natural Resources Goals

Goal A	Preserve and protect the County's natural resources.

1. Evaluate local, state, and federal policies and programs to identify opportunities to maintain and preserve the natural resources and natural areas of the County. Crawford County is in the enviable position of having an abundance of pristine natural resources and natural areas and it is imperative for the local economy and quality of life of residents that the resources and natural areas are preserved. The economic opportunities (tourism, agriculture, forestry, etc.) provided by the resources and natural areas is the economic backbone of the County. Possible tools to evaluate include land use regulations, purchase of development rights programs, conservancy organizations, landowner information/education programs, etc.

2. Identify conservancy organizations and make information available to landowners regarding land preservation options available through land conservancy organizations.

3. Inform/educate landowners on the importance of utilizing the natural resources of the County in a sustainable manner to ensure future generations gain the same benefits and opportunities from the resources.

4. Improve and enhance the natural resources of the County by encouraging landowners to take advantage of the County Tree and Shrub program and Clean Sweep Days. Support river (Mississippi, Kickapoo, and Wisconsin Rivers) cleanup days sponsored by various organizations.

Goal B	Preserve forested lands to maintain and enhance their economic value (recreation, timber harvest, biomass, etc.)

1. Inform/educate elected officials, business owners and landowners of the importance of preserving and maintaining the County's forests in a sustainable manner. Public and private forested lands throughout the County are a vital part of Crawford County's rural landscape, local economy, and recreational opportunities. It is important that the value of forests is recognized. The economic value of forests encompasses a wide range of activities/interests including but not limited to timber value, biomass production, ginseng production, wildlife, recreation, and tourism all of which are key components of the local economy and vital to the County's economic future.

2. Encourage landowners to use Forest Best Management Practices in maintaining the County's forests and woodlots. Woodlots and forested slopes enhance the County's natural beauty and provide excellent habitat for wildlife. In addition, the hardwood forests support the local economy by providing valuable forest products. Forest BMP's will enhance woodlots and forested lands and ensure they remain a valuable natural resource. BMP's will also reduce erosion on the County's forested hillsides.

3. Support activities of the Wisconsin Woodland Owner's Bad Axe Chapter to enhance and preserve forests with the County.

Soil and Water Conservation Goal

Goal A	Protect surface and groundwater resources of Crawford County.

1. Support the revision and implementation of the Crawford County Land and Water Resources Plan. The Crawford County Land Conservation Department is beginning the process of updating the County Land and Water Resources Plan. During the comprehensive planning process utilize public input opportunities to gain resident input on the revision to the Crawford County Land and Water Resources Plan.

2. Continue enforcement of the county Private Onsite Sanitary Sewer Ordinance and evaluate requirements for privies/portable sanitary facilities to ensure surface and groundwater resources are protected.

3. Explore activities to monitor and protect the surface waters of the County to insure they are safe for whole body contact recreation activities. Such monitoring will assist streams and rivers in meeting their fishing potential.

4. Explore policies to protect the groundwater resources of the County from users that could deplete or degrade the resource. Groundwater is a valuable resource in Crawford County and it is important to protect the resource for future residents.

5. Encourage cooperation among local units of government in the location, service area, and installation of public water, sewer, and stormwater systems. The intended outcome of cooperation will be more locations served by public infrastructure.

6. Continue enforcement of the County's Floodplain, Shoreland and Wetland ordinances. Enforcement of such ordinance protects surface and groundwater resources in the County.

7. Promote the use of Agricultural Best Management Practices (BMP'S) by landowners and agricultural producers in Crawford County.

8. Increase resident knowledge regarding the "karst" geology of the County and associated environmental impacts. "Karst" is the term to describe areas where the bedrock, usually limestone or dolomite, has been (or has the potential to be) easily dissolved by surface water or groundwater. Karst landscapes may have deep bedrock fractures, caves, disappearing streams, springs, or sinkholes. Karst features can act as direct conduits for pollutants to enter groundwater, wells, springs, and streams. Crawford County is located in an area of Wisconsin where there is shallow karst potential (5 feet or less). (Source: Wisconsin Geological and Natural History Survey)

9. Encourage collaboration between groups and organizations working on watershed issues.

10. Encourage preservation and protection of environmental corridors for habitat, wildlife, and water quality.

Goal B	Encourage sustainable land use practices that do not negatively impact groundwater, surface water, scenic vistas, air quality, and other natural resources of the County and provide for the needs of future and existing residents.

1. Continue enforcement of the County's Floodplain, Shoreland and Wetland ordinances. The State of Wisconsin Department of Natural Resources delegates enforcement of Floodplain, Shoreland and Wetland ordinances to counties. Survey responses from residents overwhelmingly supported the protection of natural resources as over 80% of respondents believed it is important to protect wetlands, groundwater, rivers and streams.

2. Continue to evaluate the "Wisconsin Ag Siting Law" and determine its impacts on Crawford County's ability to manage the location of CAFO's and the County's local decision making power.

3. Promote the use of Agricultural Best Management Practices (BMP'S) by landowners and agricultural producers in Crawford County.

4. Protect the County's "dark skies" from light pollution sources. This in part can be accomplished by informing/educating residents, businesses, and elected officials on methods to manage light sources. Other methods to consider would be creating lighting standards/requirements for significant light sources. Such activities will conserve energy resources and preserve the County's "dark skies".

5. Work to manage noxious weeds and nuisance species in the County. To address this issue, provide information to residents about the effects of noxious weeds and nuisance species.

6. Support local, state, and federal policies and programs aimed at assisting land uses that will use and enhance the natural resources of the County and benefit the local economy.

5.0 Farmland Preservation Mapping

Determining Farmland Preservation Areas

Farmland Preservation areas were determined based on citizen and local elected officials input (town boards, county board and committees), review of existing farmland preservation lands (lands under existing farmland preservation contracts), historical farmland preservation areas (1981 Farmland Preservation Plan), and land use designations derived from the County's Comprehensive Planning process (County Land Use Map). Integrating citizen and local elected officials input with existing farmland preservation activities and current conditions resulted in criteria for designating farmland preservation in this farmland preservation plan update.

Criteria for Determination of Farmland Preservation Areas

Lands designated on Town future land use maps as Agriculture, Forest, Natural Areas or Mining. The lands have historically been in agriculture, forestry, or other agricultural related use or are comprised of soils compatible for agricultural use.

Criteria for Determination of Non-Farmland Preservation Areas

Non-Farmland Preservation areas were designated based on existing development (platted subdivisions, groups of small parcels resembling a subdivision, and clusters of parcels 0-10 acres in size), areas adjacent or near to cities and villages designated as residential or commercial on town land use maps. Additionally, parcels that are tax exempt, such as churches, cemeteries, non-profit entities, government-owned lands, utilities, railroads and incorporated villages and cities with the exceptions of the Villages of Bell Center, Soldiers Grove and Steuben who have elected to be part of the plan are considered non-farmland preservation areas.

Farmland Preservation Map

MRRPC and Land Conservation staff consulted with each town and village to draft, review, and finalize each town's and village's Farmland Preservation Map. These maps were then consolidated to form the Crawford County Farmland Preservation Map.

6.0 AGRICULTURE CHALLENGES/TRENDS

Agriculture Challenges/Trends

Agriculture has influenced Crawford County's landscape, communities and its people. Residents have a historical bond to the land and the agricultural traditions that have shaped the county. Preserving farmland is vital to preserving the county residents enjoy. Agriculture faces many challenges and trends in agriculture provide some definition to the challenges. As part of the Farmland Preservation Plan update the Crawford County UW-Extension Agricultural Agent provided some insight into agricultural trends and future challenges.

Trends

Crawford County Highlights (data from 2007 and 2012 census of agriculture)

- 2012 – 1,105 farms, down 242 from 2007
- Average farm size 196 acres, up 19 acres from 2007
- Family Farms down 17.1% from 1,177 in 2007 to 976 in 2012
- Corn for grain acres up 5,480, total corn for grain acres 31,576 for 2012
- Land in Orchards down 37.4% from 737 acres in 2007 to 461 acres in 2012
- Total Cropland down 24% from 105,353 acres in 2007 to 98,342 acres in 2012
- Dairy cow numbers down by 1,495 to 7,440 cows
- Beef cow numbers down 704 head from 2007 to 8,066 head in 2012
- Only 23 acres of farmland sold in 2012 & 2013 was converted from agriculture

Challenges

Crawford County faces many challenges and opportunities as we move forward. The drop in dairy cow numbers reflects the sharp downturn in milk prices that was experienced in 2009. This drop in milk prices was accompanied by a large increase in corn prices. This is reflected in the loss of dairy cows and dairy farms. The loss of cows was partially offset by larger dairies adding cows. Some of the cows just changed zip codes. Cows are being concentrated on fewer but larger farms. Hay acres also dropped because of the high corn prices and loss of dairy cows. When new data becomes available we should see a return of hay acres because hay prices were up significantly because of widespread drought and national hay acres being converted to row crops. (Add additional info)

Soil conservation is a big challenge as we lose dairy cow numbers and add corn acres. Contour strip cropping and contour buffer strips are being lost with high grain prices. Heavy spring rain events have caused catastrophic erosion."

Additional Trends/Challenges

Additional trends and challenges that point to the need for farmland preservation planning.

- Residential expansion in agricultural areas as commuting and work from home occupations is growing.
- Non-farmers or hobby farmers looking for rural quality of life, lower taxes, and other rural lifestyle benefits are residing in agricultural areas.
- The scale of farming has changed and modern farms require substantial economic investments and financial uncertainties. Today's feedlots and animal confinements, for example, have different needs and characteristics than traditional farming operations.
- Nonfarm growth pressures have increased the opportunities to "cash-out" through farm sales or farmland conversion.

7.0 FARMLAND PRESERVATION PLAN IMPLEMENTATION

The Farmland Preservation Plan for Crawford County will not be effective unless implemented. There are several different options available to implement the plan and depending on the option chosen will determine the level of successful farmland preservation in the county. The most effective and efficient tool to implement the Farmland Preservation Plan on a countywide basis would be for the county to develop a comprehensive zoning ordinance and develop a farmland preservation zoning district and have the towns adopt county zoning. The new zoning district should be created to meet the state criteria for farmland preservation. This method would also ensure that all eligible property owners (land designated as a farmland preservation area and meets farm income eligibility requirements) in the county would be able to receive the financial benefits of farmland preservation. If the towns opt not to adopt county zoning and pursue their own zoning ordinance then getting the towns to create a farmland preservation zoning district which meets the state criteria would be the next best option.

If comprehensive zoning either countywide or by town is not utilized as an implementation tool, a second option available to Crawford County would be to implement the Farmland Preservation Plan using Agricultural Enterprise Zones (AEA). This would require the county and/or towns to work with land owners to designate an area as an AEA. To create an AEA a minimum of five adjoining landowners that have been designated in the farmland preservation district would have to agree to form an AEA. Then landowners within the AEA would be eligible to voluntarily enter into an AEA Farmland Preservation Contract with the Department of Trade and Consumer Protection (DATCP) to preserve farmland for at least 15 years in exchange for tax benefits. AEA's can be used in conjunction with farmland preservation zoning and eligible property owners located in both an AEA and zoned as farmland preservation will be eligible for the maximum tax credit of $10 per acre. If only the AEA zones are used, they could potentially be less effective as farmland would be preserved in a "piecemeal" fashion and many areas of the county farmland would not be preserved.

Additional Farmland Preservation Implementation Tools

Specific tools that have proven effective in helping ensure the economic viability of agriculture are described below.

Agricultural Conservation Easements

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, such as residential development, 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)

In a similar program, Purchase of Development Rights (PDR), 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 (such rights may be eligible for use by the purchaser in a Transfer of Development Rights program). It simply permits it to extinguish those rights in return for appropriate compensation.

Transfer of Development Rights (TDR)

TDR 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 designated 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

Another farmland-protection technique is to establish a mitigation ordinance. One example would be an ordinance that requires developers to permanently protect one acre 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.

Comprehensive Land-Use Planning

The County and Towns can use their comprehensive plans as the basis for farmland preservation zoning ordinances that identify areas to protect for agricultural use and areas where growth will be encouraged.

Resources to Assist in the Preservation of Agricultural Lands

Federal Resources

* Conservation Stewardship Program (CSP)
* Conservation Reserve (CRP)
* Agricultural Conservation Easement Program
* Environmental Quality Incentive Program (EQIP)
* Technical Service Provider (TSP)
* Regional Conservation Partnership Program

University of Wisconsin-Extension, Cooperative Extension Resources

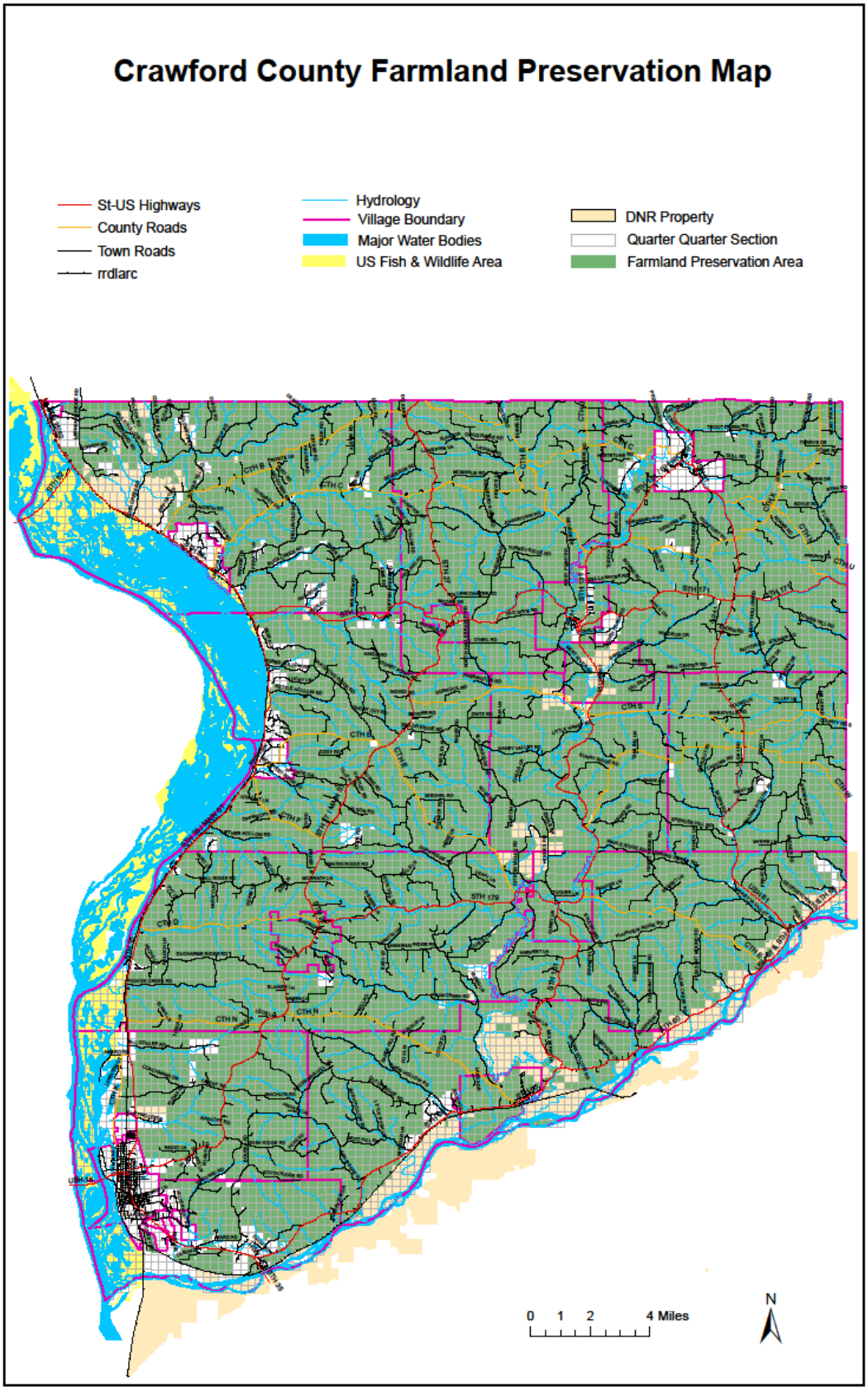
* UW-Extension Farmer to Farmer Corn and Forage List
* Managed Grazing Outreach
* Buying and Selling Hay and Straw FA Webpage

Programs Administered by the Crawford County Land & Water Conservation Department

* Water quality improvement
* Soil conservation
* Groundwater protection
* Nonpoint water pollution abatement
* Erosion control
* Wildlife habitat improvement and damage abatement
* Farmland preservation
* Animal manure management (NR243 Animal Waste Management)
* Streambank improvement cost sharing
* Conservation reserve enhancement
* LWRM - Land and Water Resource Management Grants
* TRM – Targeted Runoff Management Grants
* County Comprehensive Zoning Ordinance
* Shoreland and Wetland Protection Ordinance
* Local Livestock Ordinance
* Nutrient Management Planning (590)
* Well Abandonment
* Ag Performance Standards – NR 151
* Crawford County Sanitary and Private Sewerage System Ordinance

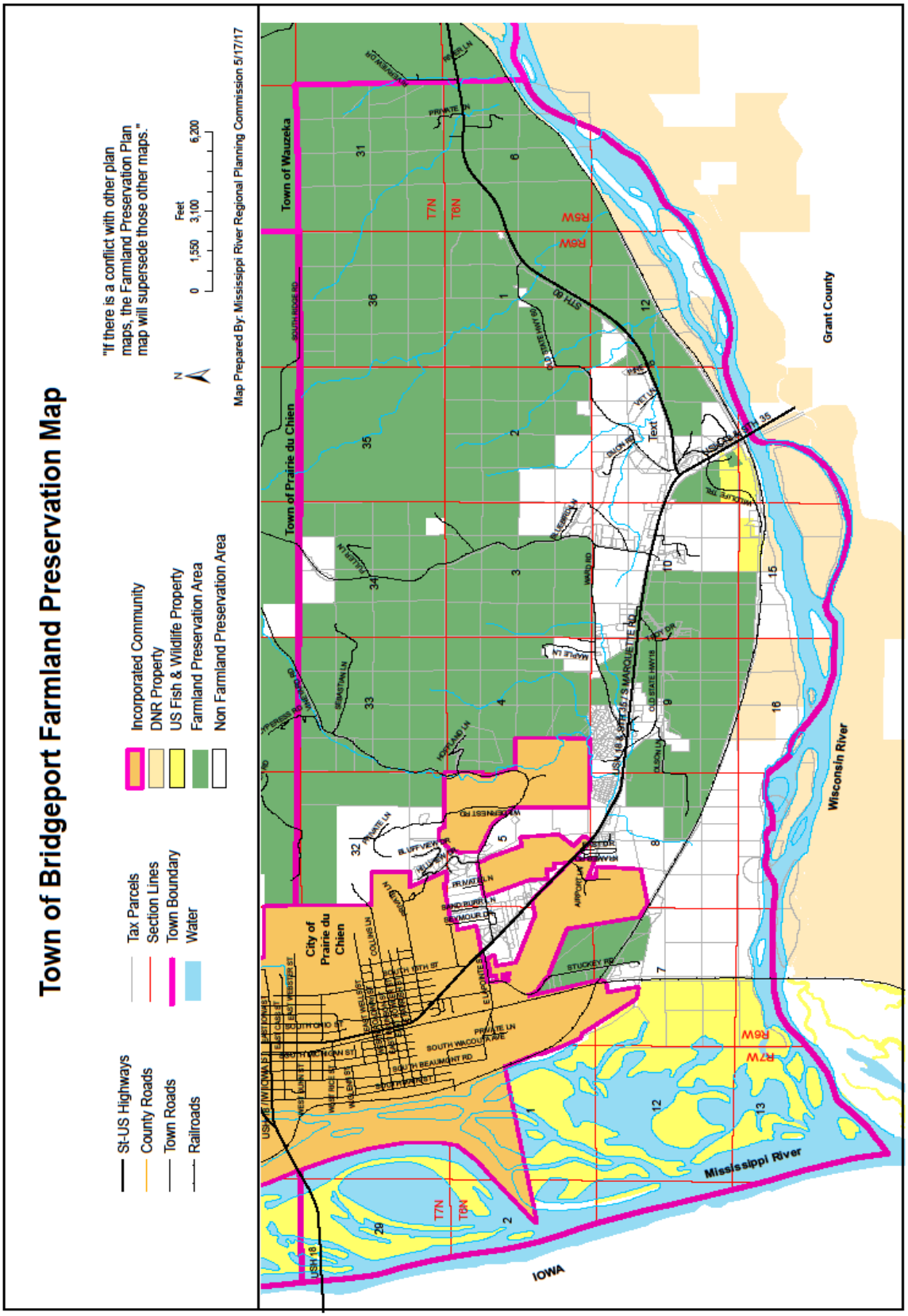
APPENDIX A

Crawford County Farmland Preservation Map


Crawford County Farmland Preservation Map
St-US Highways
County Roads
Town Roads
rrdlarc
Hydrology
Village Boundary
Major Water Bodies
US Fish & Wildlife Area
DNR Property
Quarter Quarter Section
Farmland Preservation Area
0 1 2 4 Miles
N

APPENDIX B

Individual Town and Village Farmland Preservation Maps


Town of Bridgeport Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Tax Parcels
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
N
0 1,550 3,100 6,200
Feet
Map Prepared By: Mississippi River Regional Planning Commission 5/17/17
Town of Wauzeka
Town of Prairie du Chien
City of Prairie du Chien
Grant County
Wisconsin River
Mississippi River
IOWA
T7N
T6N
R5W
R6W
R7W

Town of Clayton Farmland Preservation Map

St-US Highways
County Roads
Town Roads
Railroads
Tax Parcel Lines
Section Lines
Town Boundary

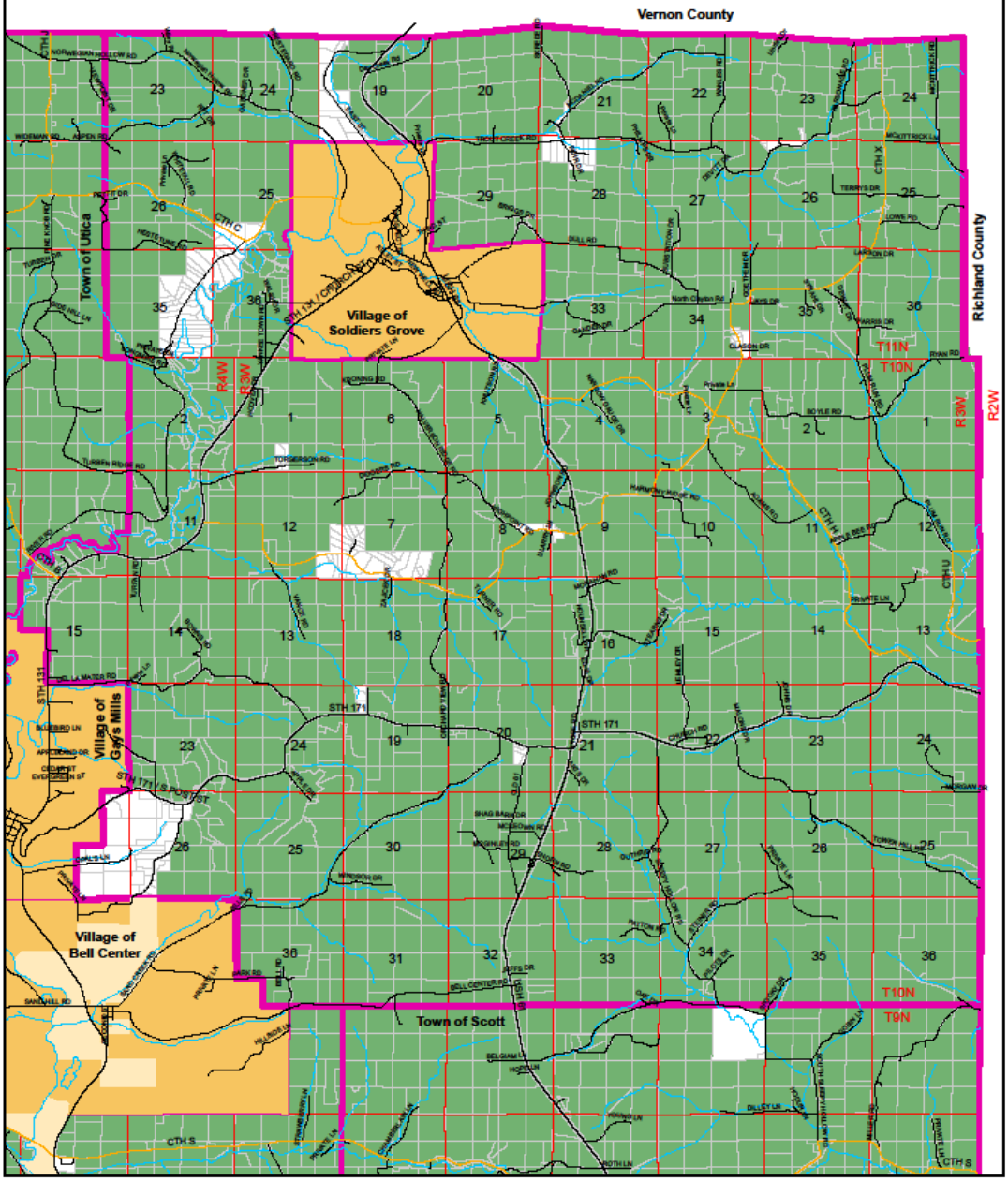
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area

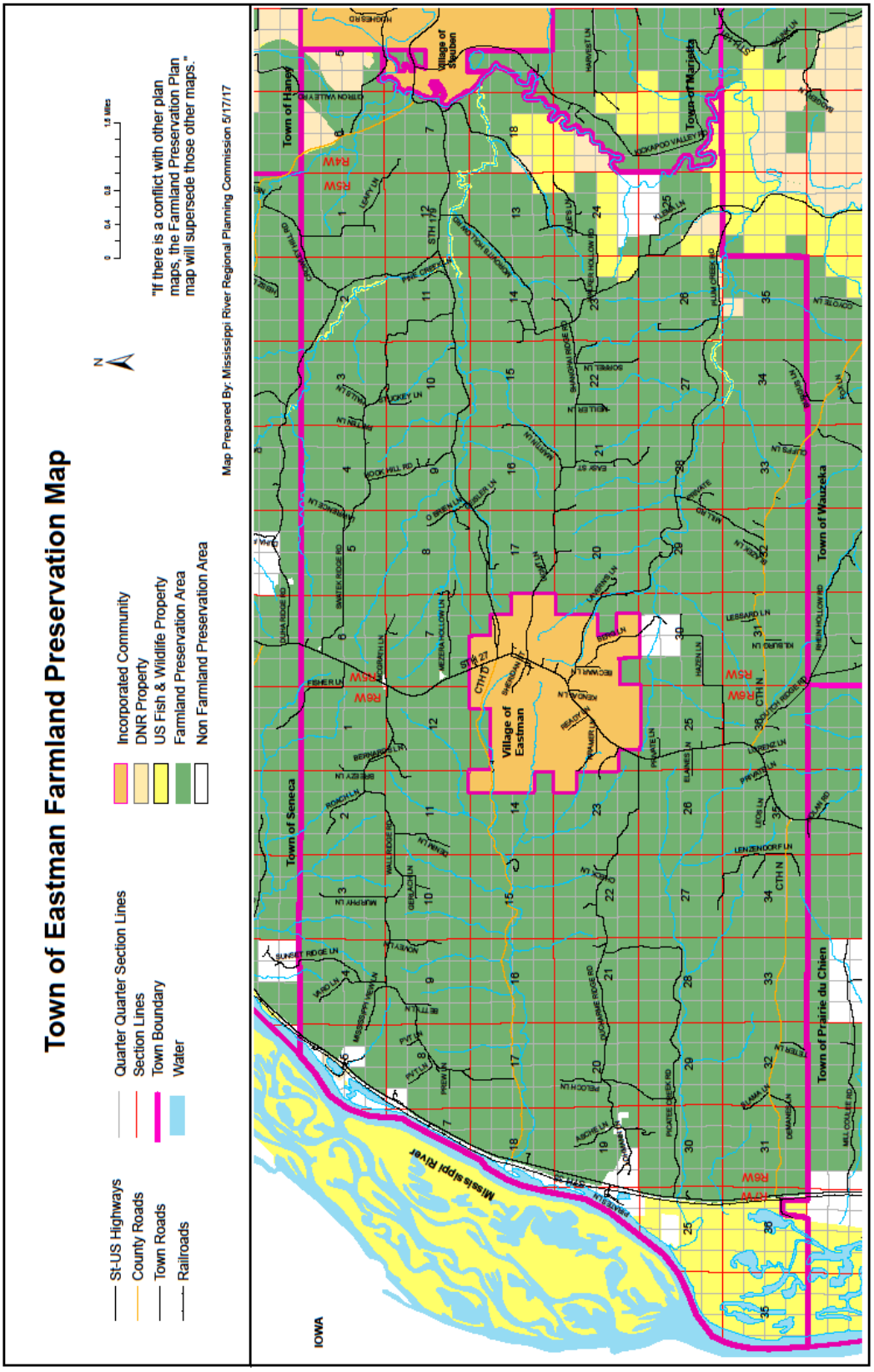
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."

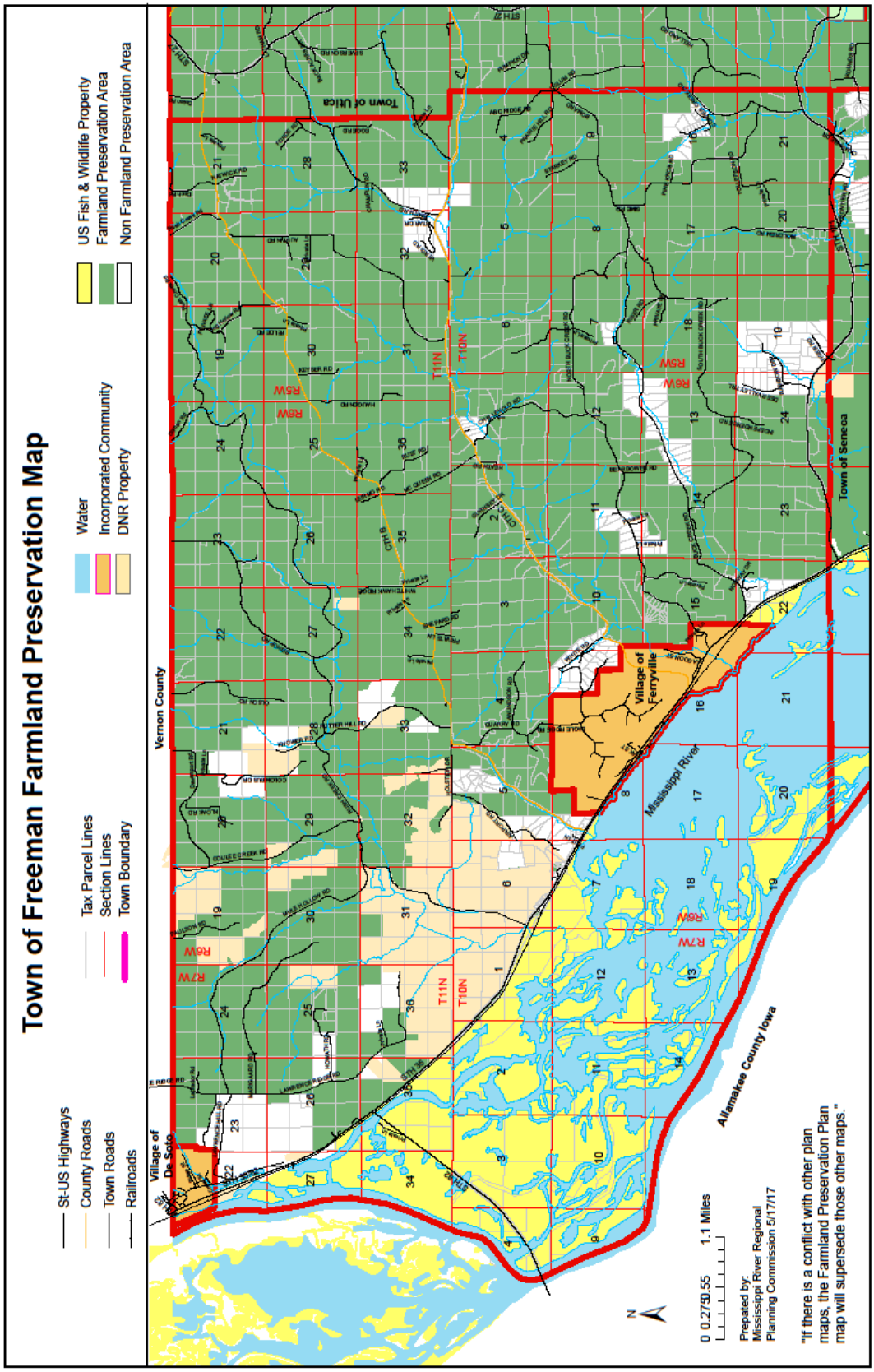
0 0.375 0.75 1.5 Miles

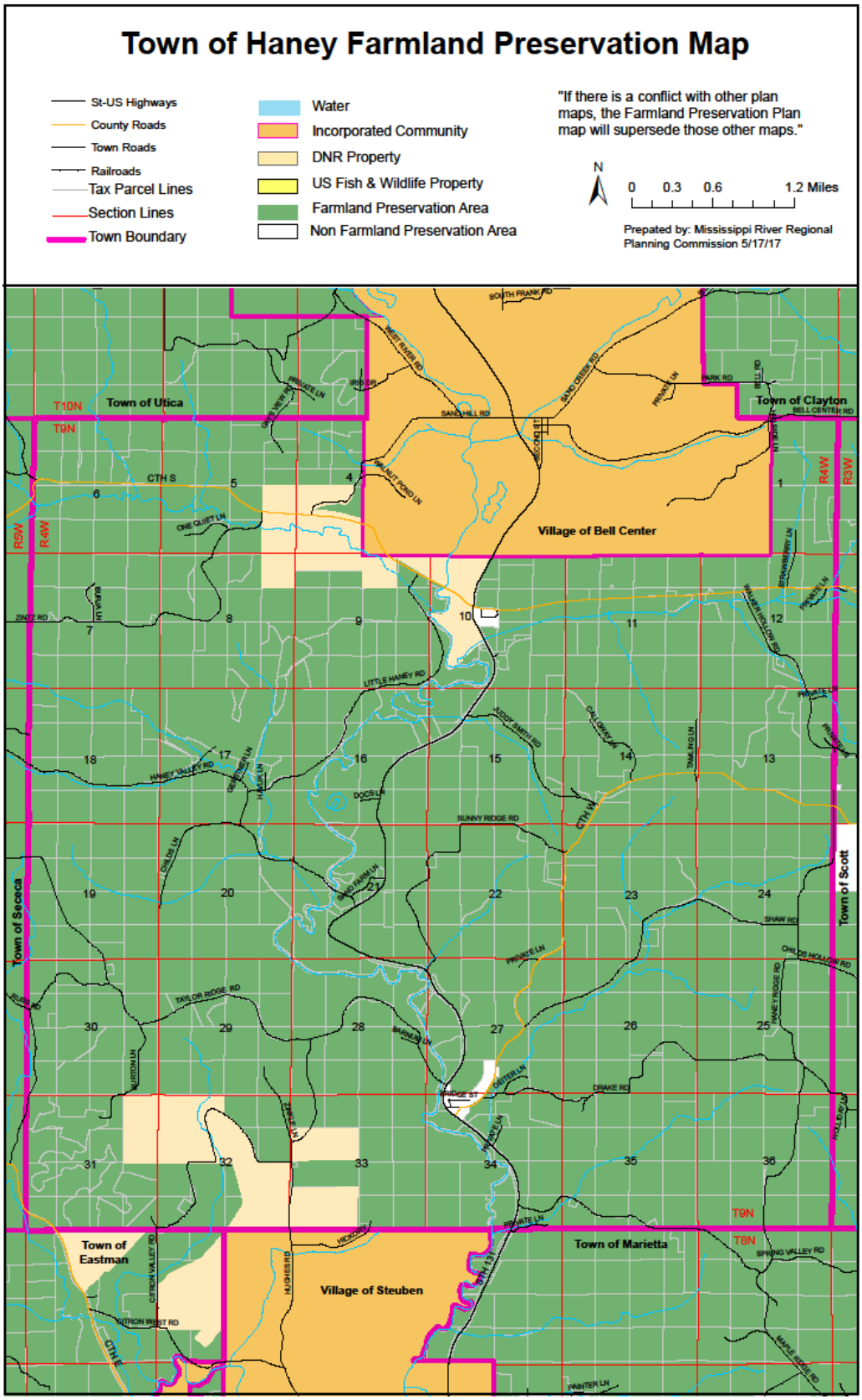
N

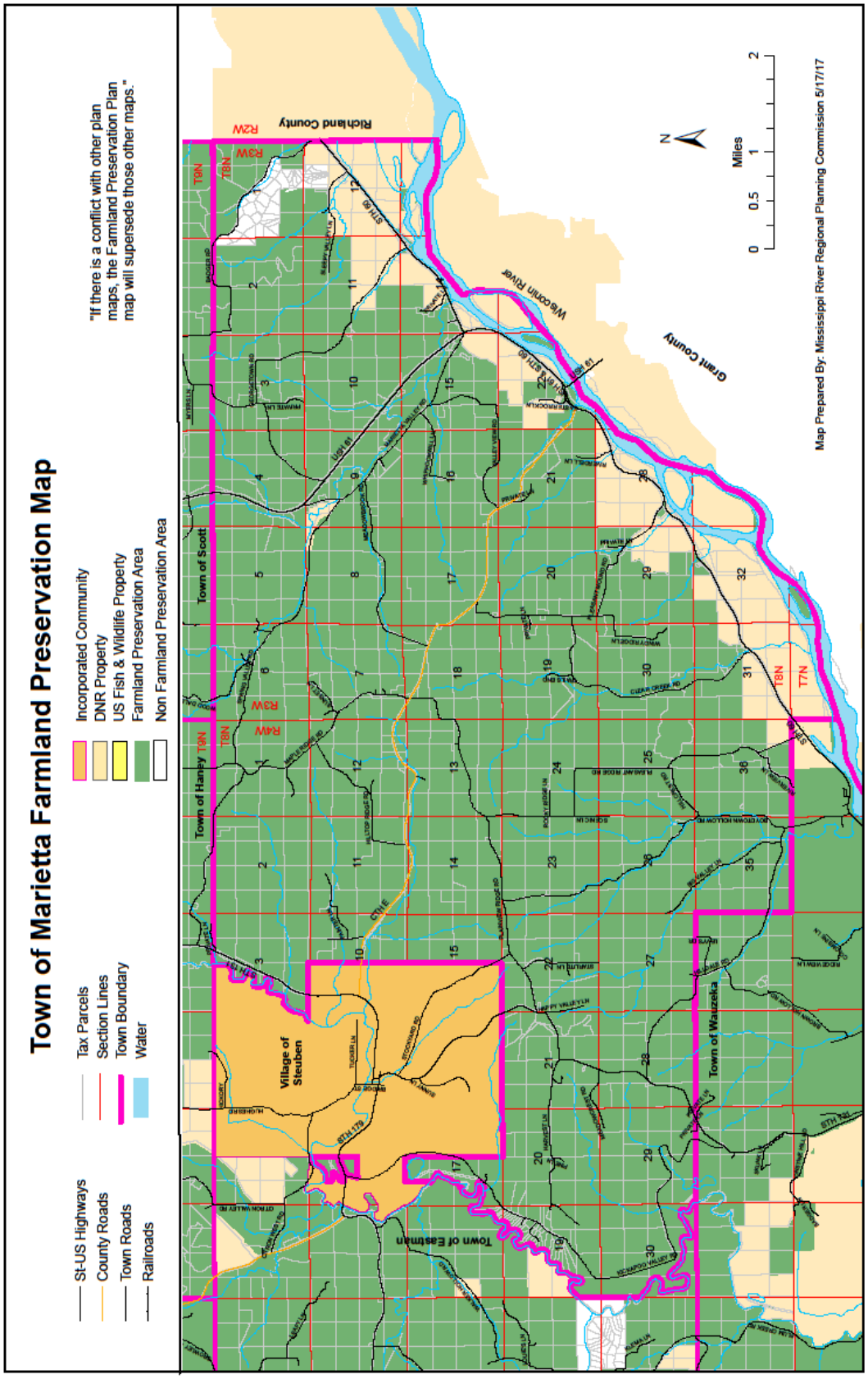
Prepated by: Mississippi River Regional Planning Commission 5/17/17

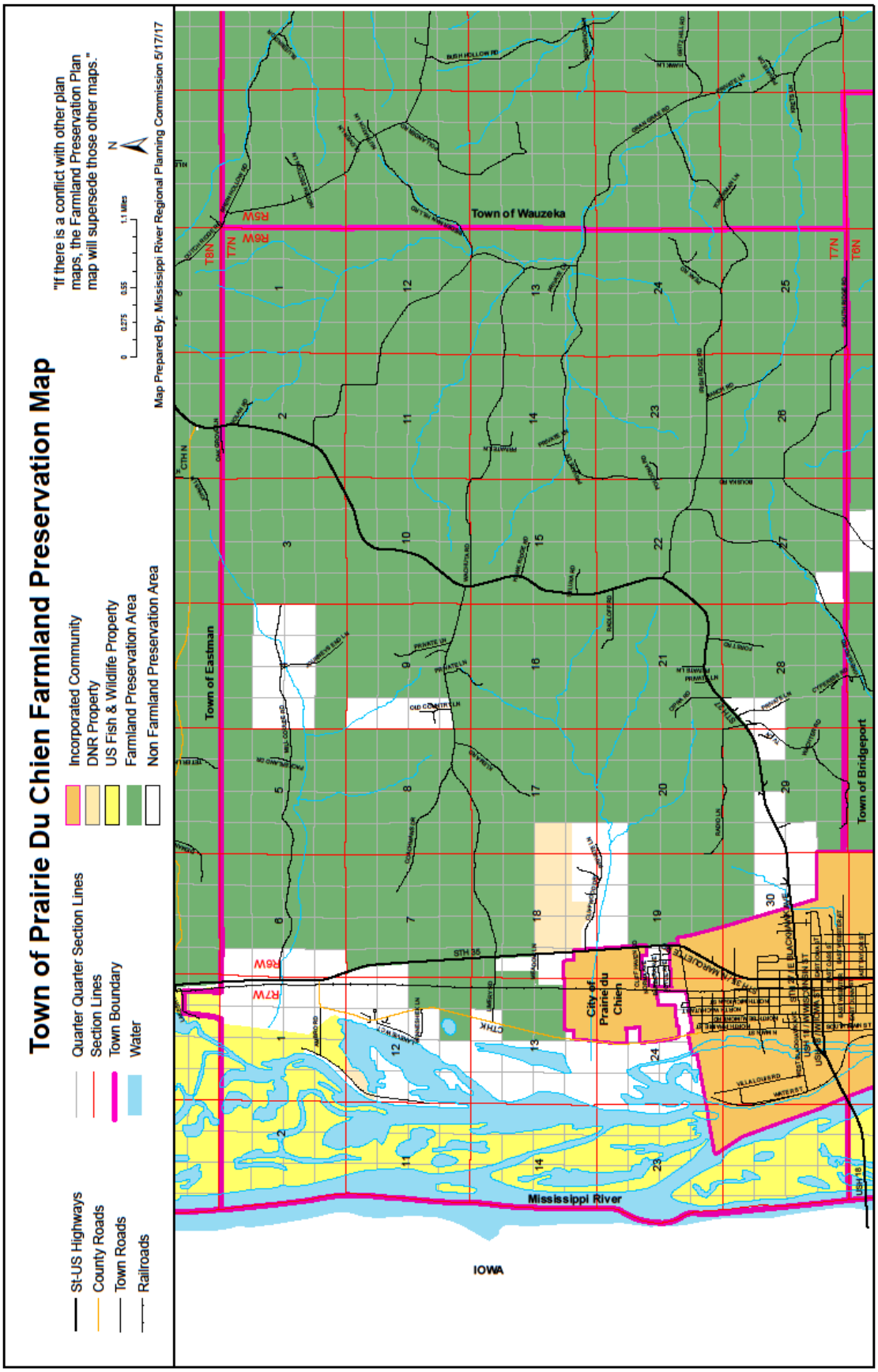


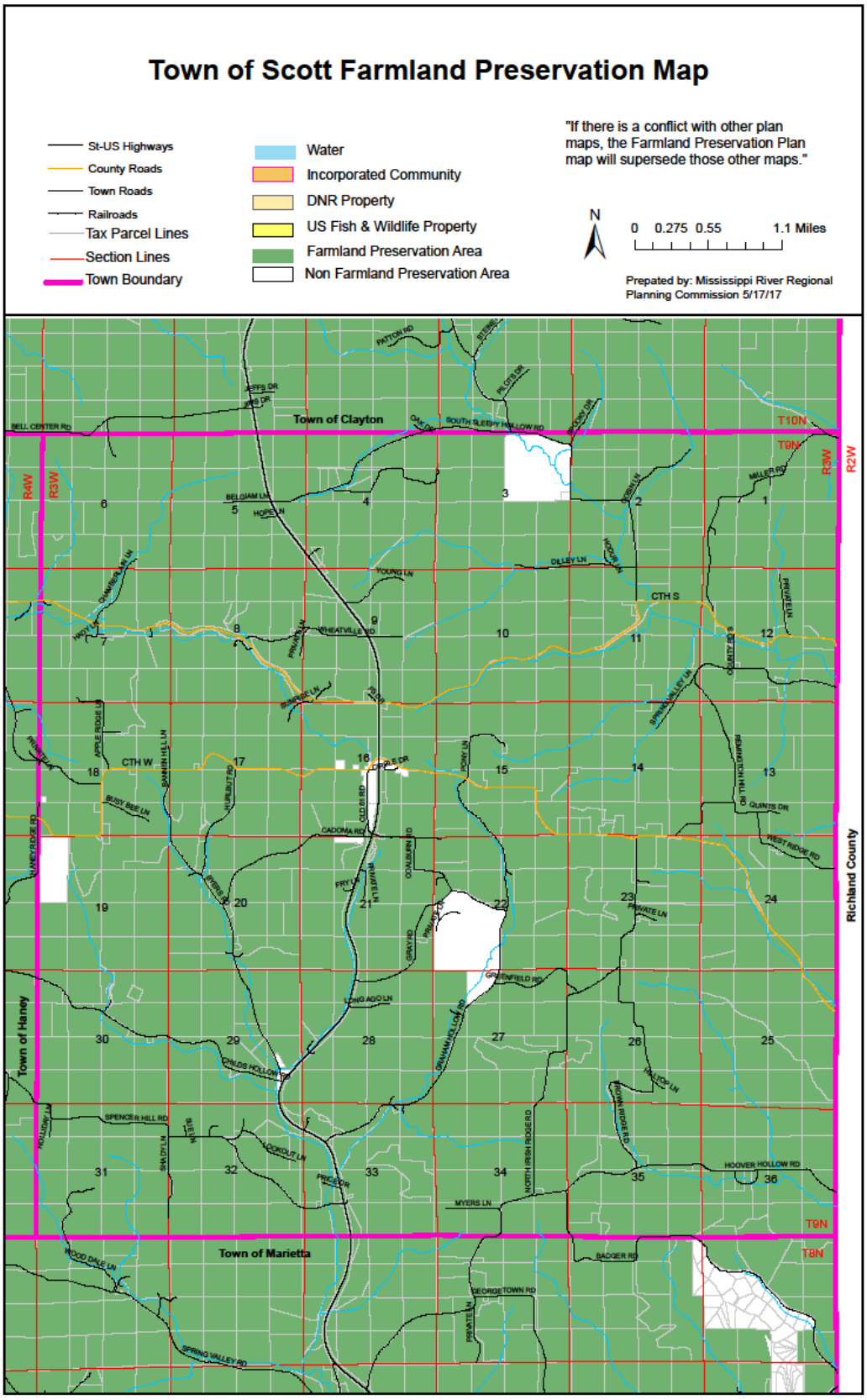

Town of Eastman Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Quarter Quarter Section Lines
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
N
0 0.4 0.8 1.6 Miles
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
Map Prepared By: Mississippi River Regional Planning Commission 5/17/17
Town of Seneca
Village of Eastman
Town of Wauzeka
Town of Prairie du Chien
Mississippi River
IOWA


Town of Freeman Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Tax Parcel Lines
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
Village of De Soto
Vernon County
Town of Ulica
Village of Ferryville
Mississippi River
Allamakee County Iowa
Town of Seneca
T11N
T10N
R6W
R7W
0 0.275 0.55 1.1 Miles
Prepared by:
Mississippi River Regional
Planning Commission 5/17/17
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."

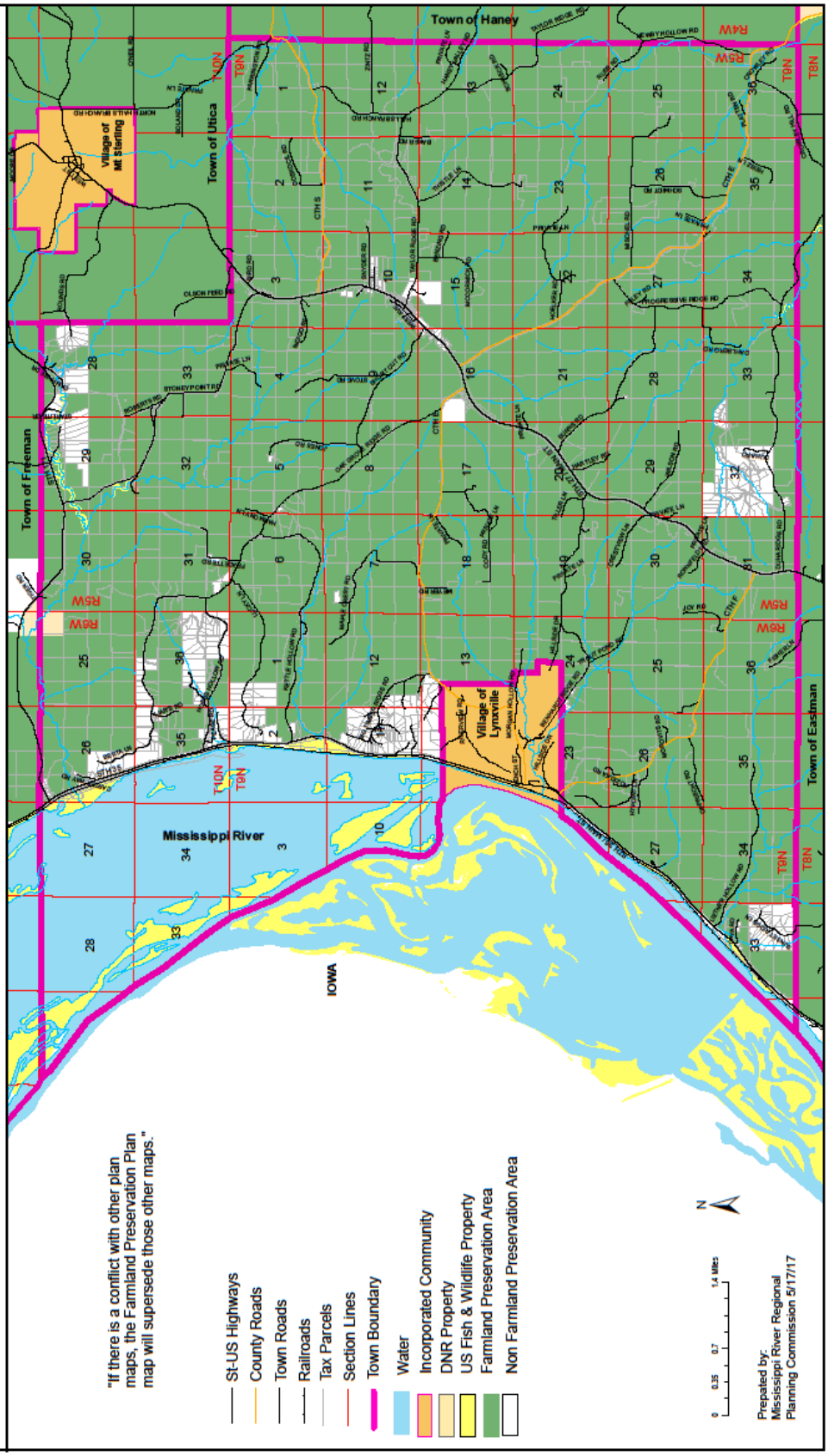

Town of Haney Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Tax Parcel Lines
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
N
0 0.3 0.6 1.2 Miles
Prepated by: Mississippi River Regional Planning Commission 5/17/17
Town of Utica
Town of Clayton
Village of Bell Center
Town of Seneca
Town of Scott
Town of Eastman
Village of Steuben
Town of Marietta
T10N
T9N
T8N
R5W
R4W
R3W

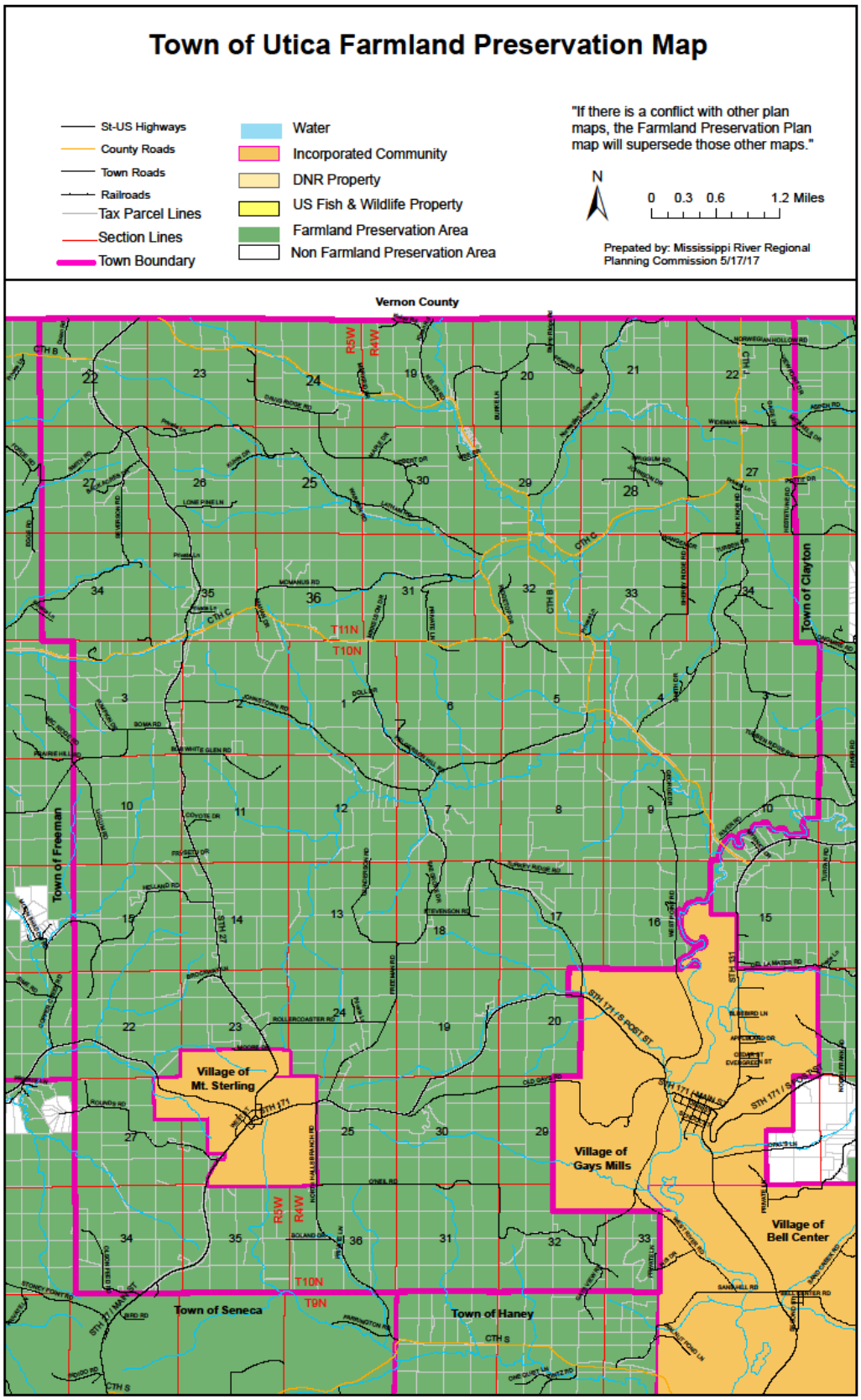

Town of Marietta Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Tax Parcels
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
Richland County
Grant County
Wisconsin River
Town of Scott
Town of Haney
Village of Steuben
Town of Eastman
Town of Wauzeka
R4W
R3W
R2W
T8N
T7N
0 0.5 1 2
Miles
N
Map Prepared By: Mississippi River Regional Planning Commission 5/17/17

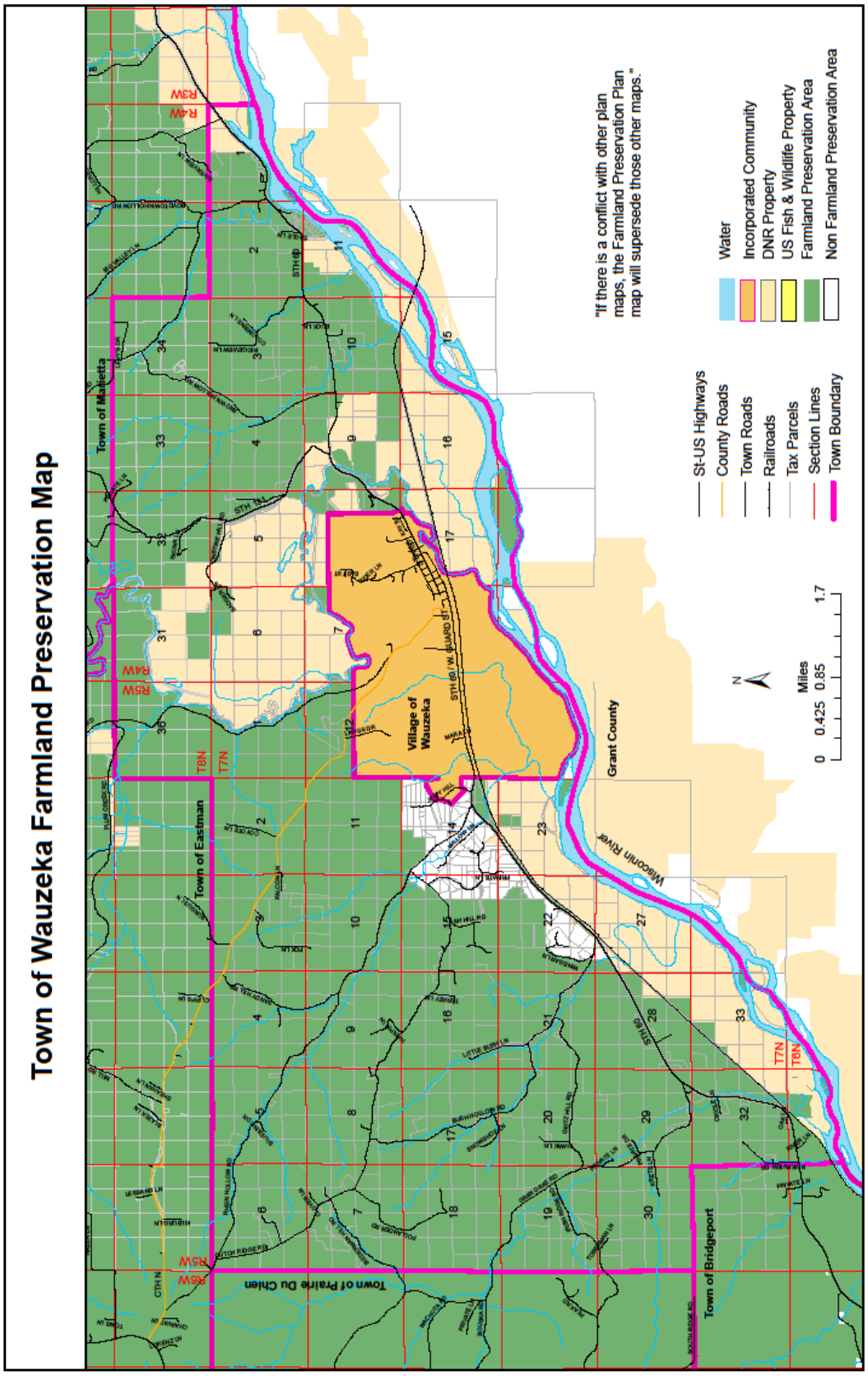

Town of Prairie Du Chien Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Quarter Quarter Section Lines
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
0 0.275 0.55 1.1 Miles
N
Map Prepared By: Mississippi River Regional Planning Commission 5/17/17
Town of Wauzeka
Town of Eastman
Town of Bridgeport
City of Prairie du Chien
Mississippi River
IOWA
T8N
T7N
R6W
R7W
STH 35
CTHK
USH 18

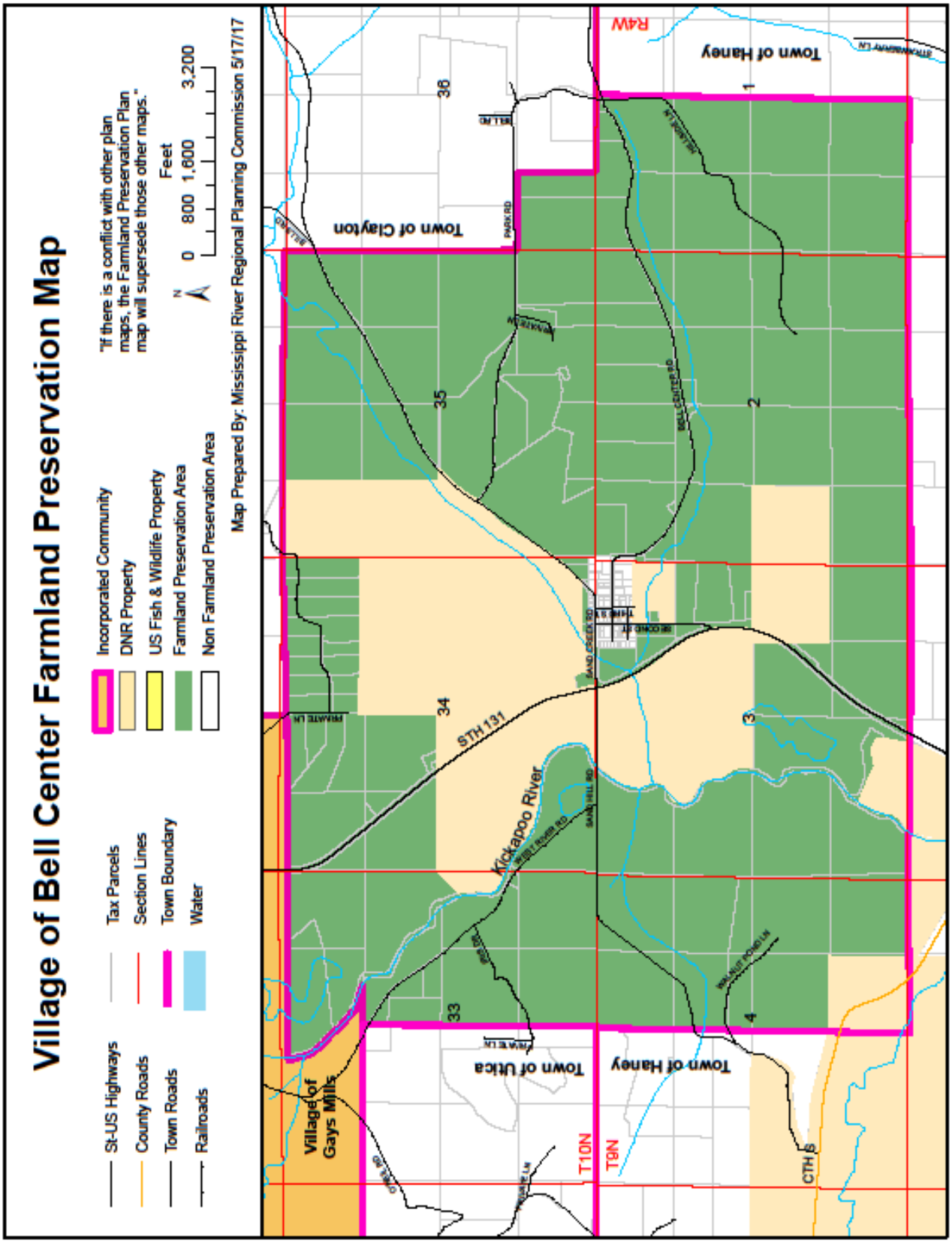

Town of Scott Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Tax Parcel Lines
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
N
0 0.275 0.55 1.1 Miles
Prepated by: Mississippi River Regional Planning Commission 5/17/17
Town of Clayton
Town of Haney
Town of Marietta
Richland County
T10N
T9N
R4W
R3W
R2W
CTH S
CTH W

Town of Seneca Farmland Preservation Map




Town of Utica Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Tax Parcel Lines
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
N
0 0.3 0.6 1.2 Miles
Prepated by: Mississippi River Regional Planning Commission 5/17/17
Vernon County
Town of Freeman
Town of Clayton
Village of Mt. Sterling
Village of Gays Mills
Village of Bell Center
Town of Seneca
Town of Haney
T11N
T10N
T9N
R5W
R4W


Town of Wauzeka Farmland Preservation Map
Town of Marietta
Town of Eastman
Town of Prairie Du Chien
Town of Bridgeport
Village of Wauzeka
Grant County
Wisconsin River
T8N
T7N
R6W
R5W
R4W
R3W
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
St-US Highways
County Roads
Town Roads
Railroads
Tax Parcels
Section Lines
Town Boundary
N
Miles
0 0.425 0.85 1.7


Village of Bell Center Farmland Preservation Map
St-US Highways
County Roads
Town Roads
Railroads
Tax Parcels
Section Lines
Town Boundary
Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."
N
0 800 1,600 3,200
Feet
Map Prepared By: Mississippi River Regional Planning Commission 5/17/17
Town of Clayton
Town of Hanley
Town of Utica
Village of Gays Mills
Kickapoo River
STH 131
CTH S
T10N
T9N
R4W
36
35
34
33
1
2
3
4

Village of Soldiers Grove Farmland Preservation Map

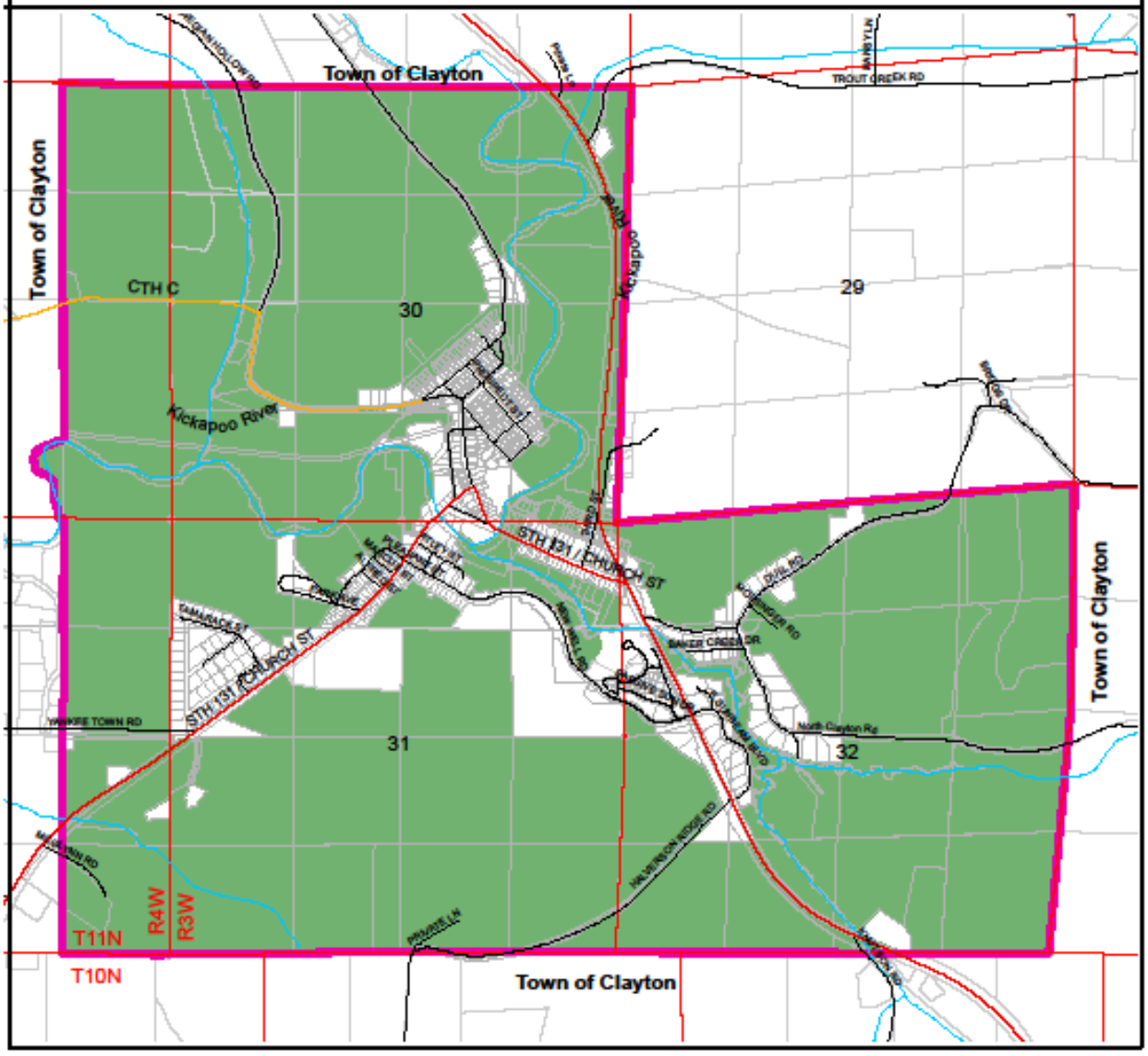
"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."

- St-US Highways
- County Roads
- Town Roads
- Tax Parcels
- Section Lines
- Town Boundary
- Water
- Incorporated Community
- DNR Property
- US Fish & Wildlife Property
- Farmland Preservation Area
- Non Farmland Preservation Area

N

Feet
0 600 1,200 2,400

Map Prepared By: Mississippi River Regional Planning Commission 5/17/17



Village of Steuben Farmland Preservation Map

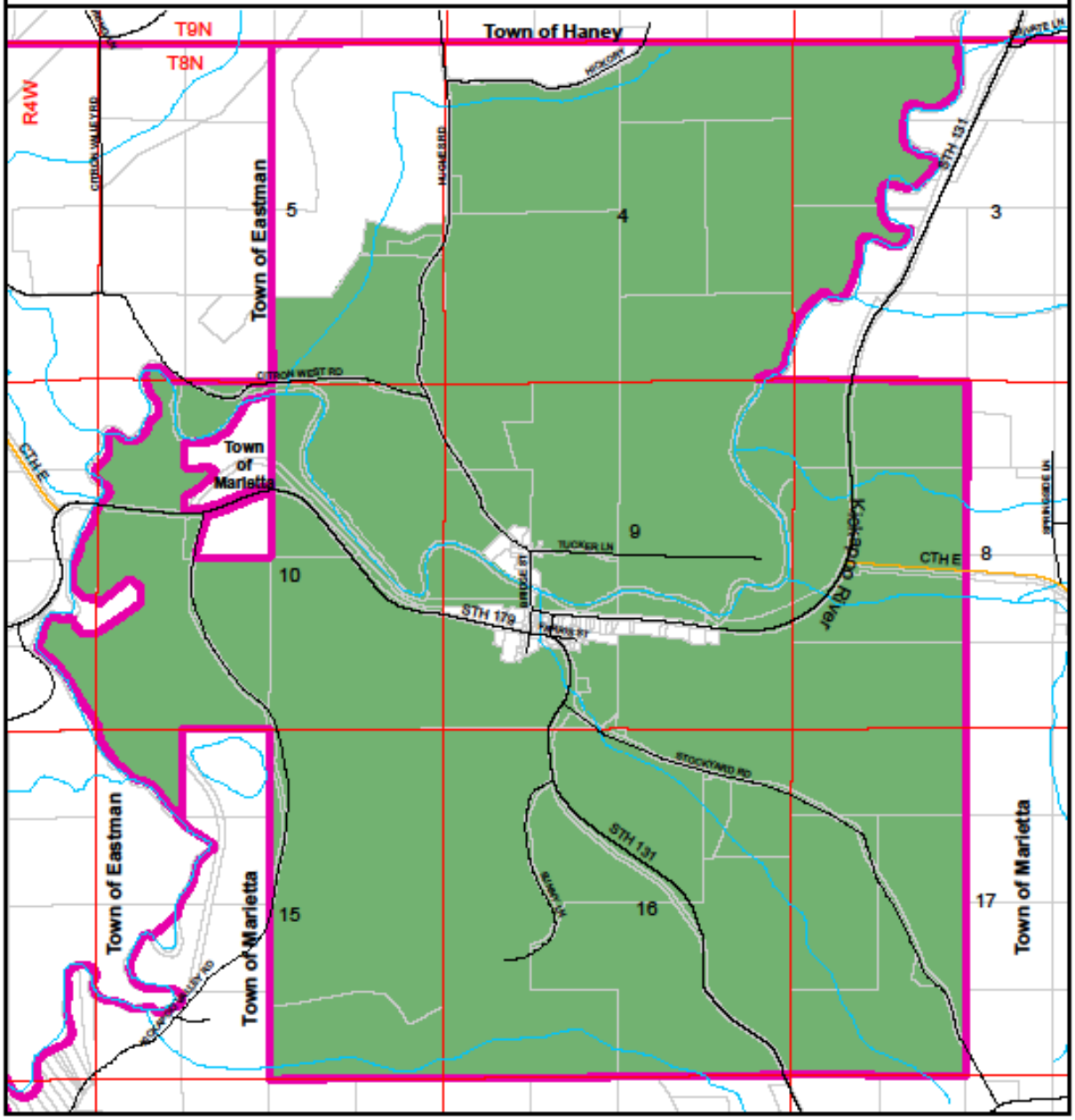
St-US Highways
County Roads
Town Roads
Tax Parcels
Section Lines
Town Boundary

Water
Incorporated Community
DNR Property
US Fish & Wildlife Property
Farmland Preservation Area
Non Farmland Preservation Area

"If there is a conflict with other plan maps, the Farmland Preservation Plan map will supersede those other maps."

N
Feet
0 750 1,500 3,000

Map Prepared By: Mississippi River Regional Planning Commission 5/17/17



APPENDIX C

Notice of Public Hearing

NOTICE OF PUBLIC HEARING

Notice of Public Hearing

Crawford County Land Conservation Committee

NOTICE IS HEREBY GIVEN that a Public Hearing will be conducted by the Crawford County Land Conservation Committee on Tuesday, June 13, 2017, beginning at 10:00 a.m. at the Crawford County Administration Building, 225 N. Beaumont Rd., Room 215, Prairie du Chien, WI 53821, to consider a proposed amendment to the Crawford County Comprehensive Plan. The purpose of the public hearing is to accept public comments on the proposed amendment.

Crawford County is currently in the process of updating its Farmland Preservation Plan and Maps. Part of this process is to ensure that the Farmland Preservation Plan and the Comprehensive Plan are compatible. The proposed changes to the Comprehensive Plan include wording that should any discrepancies between the two plans occur, the Farmland Plan supersedes the Comprehensive Plan. The Farmland Preservation Plan is also being attached to the Comprehensive Plan as Appendix 5.

The public may review copies of the Farmland Preservation Plan and the Comprehensive Plan at the Land Conservation Department or the County Clerk's office during regular office hours. Interested parties may make arrangements with Land Conservation Department staff to obtain a copy of the plan amendments at 608-326-0270 or dtroester@crawfordcountywi.org.

During the Public Hearing, the public is invited to speak on the proposed plan amendment. Written comments may be submitted to the Land Conservation Department until 4:00 p.m. on June 12 and shall become part of the record. The Public Hearing shall be closed when all interested parties in attendance have had an opportunity to offer comment.

Upon the close of the Public Hearing, a meeting of the Land Conservation Committee shall be called to order and the amended Comprehensive Plan shall be addressed per the agenda.