Village of Cross Plains Annex

Community Profile

The Village of Cross Plains is located in the western area of the County, just north of the Town of Cross Plains, east of Black Earth, and south of the Town of Berry. Land use is primarily residential. According to the United States Census Bureau, the Village of Cross Plains has a total area of 1.17 square miles.

As of the 2010 Census, there are 3,538 people, 1386 households, and 966 families residing in the Village of Cross Plains. The population density is 2,014per square mile. There are 1,452 housing units at an average density of 826.5 per square mile. The municipality population distributed by the Wisconsin Department of Administration indicates that the 2015 population for Village of Cross Plains was 3,396 people. Table 1 shows the population profile by age for the Village of Cross Plains according to the 2010 Census.

Table 1 Population Profile of Village of Cross Plains

Category	Number	Percent
Total population	3,538	100.0
Under 5 years	258	7.3
5 to 9 years	286	8.1
10 to 14 years	269	7.6
15 to 19 years	226	6.4
20 to 24 years	187	5.3
25 to 29 years	188	5.3
30 to 34 years	267	7.5
35 to 39 years	264	7.5
40 to 44 years	295	8.3
45 to 49 years	302	8.5
50 to 54 years	278	7.9
55 to 59 years	216	6.1
60 to 64 years	175	4.9
65 to 69 years	108	3.1
70 to 74 years	65	1.8
75 to 79 years	65	1.8
80 to 84 years	44	1.2
85 years and over	45	1.3

Data Source: 2010 U.S. Census

American Community Survey estimates for 2014 indicate that the median income for a household in the Village of Cross Plains is \$74,104 and the median income for a family is \$90,025. The per capita income for the Village of Cross Plains is \$32,689. 94.2% of the population has at least a high school degree, while 34.4% of the population holds at least a bachelor's level degree.

Hazard Identification and Risk Assessment

The first step in a hazard analysis is to identify which hazards the community is vulnerable to. Table 2 outlines the hazard identification for the Village of Cross Plains based on the Data Collection Guide.. The Data Collection Guide listed all of the hazards that could impact anywhere in Dane County. The purpose of this worksheet was to identify and rank the hazards and vulnerabilities specific to the jurisdiction. The Village of Cross Plain's planning team members were asked to complete the matrix by ranking each category on a scale of 0 to 5 based on the experience and perspective of each planning team member. A ranking of 0 indicated "no concern" while a ranking of 5 indicated "highest concern." This matrix appears as Table 2. This matrix reflects the significance of the hazards relative to one another.

This matrix reflects that the Village of Cross Plains is most vulnerable to tornadoes, wind storms, and winter storms. The vulnerability established here is a qualitative assumption based on the impacts, geographic extent, probability of future occurrence, and magnitude/severity. On the county level, these vulnerabilities were calculated with quantitative data as well.

Table 2 Vulnerability Assessment Matrix for the Village of Cross Plains

						Impact Attrib	utes (0-5)			
	Ha	azard Attributes (1-5)	Primary Impact (Short Term – Life and Property)			Secondary Impact (Long Term- Community Impacts)			
Hazard	Area of Impact	Past History, Probability of Future Occurrence	Short Term Time Factors	Impact on General Structures	Impact on Critical Facilities	Impact on At- Risk Populations	Social Impact	Economic Impact	Severity of other associated secondary hazards	Total
Dam failure	1	1	1	0	0	0	0	0	0	3
Extreme Cold	4	2	1	1	3	3	1	1	1	17
Extreme Heat	4	3	2	1	1	4	2	2	2	21
Drought	2	1	1	1	2	1	2	3	1	14
Erosion	1	1	1	0	0	0	0	0	0	3
Flood	3	1	3	3	2	2	1	2	1	18
Fog	3	3	3	1	1	1	1	1	1	15
Hail Storm	4	1	2	3	3	1	1	1	1	17
Landslide	2	1	2	3	1	1	1	1	1	13
Lightning	5	3	4	3	3	2	1	1	2	24
Tornado	5	1	4	5	5	3	4	5	3	35
Wildfire	2	1	2	2	2	1	1	1	1	13
Windstorm	5	3	4	4	3	3	4	4	3	33
Winter Storm	4	3	3	2	2	2	2	2	1	21
Train Derailment	3	1	2	2	3	1	1	1	2	16
Chemical Spill	2	1	2	2	2	2	1	2	2	16

Data Source: Village of Cross Plains Data Collection Guide.

Previous Hazard Events

Through the Data Collection Guide, the Village of Cross Plains noted specific historic hazard events to include in the community profile. These events have been incorporated into the appropriate hazard chapters in the base plan. These events had a particular impact on the community beyond the impacts and events recorded in the Dane County Hazard Mitigation Plan. This is not a comprehensive summary of past incidents, as the hazard profiles collected in the main Mitigation Plan include other events that may have historically impacted the jurisdiction. The events noted by this jurisdiction in the Data Collection Guide include:

Flood: June 7, 8, & 12, 2008

Heavy rains resulted in flash flooding as water reached depths of 3 feet or more and several cars stalled. This was the last of 6 flash floods in Dane County on 3 different days. The first one occurred on June 7th, the next two on June 8th, and the last three on June 12th. In all six cases, damage to homes, businesses, and crops was noted. It was nearly impossible to break down the damages by flash flood event. Therefore, the collective breakdown is provided in this last June 12th flash flood Storm Data entry for Dane County. Some farm fields remained flooded into early July. The breakdown for residential home losses were: 2,020 minimally affected, 248 with minor damage, 109 with major damage, and 3 destroyed (total of \$6.797 million). The breakdown for business losses were: 152 with minor damage, and 3 with major damage (total of \$677 thousand). Crop losses were estimated at \$64.6 million. Public sector damage was about \$6.067 million. Several roads and bridges sustained damage. A series of clusters of strong to severe storms ahead of a cold front moved east/northeast across south-central and southeast Wisconsin. Copious amounts of moisture were available that allowed repeated heavy rains. Additionally, there was sufficient vertical wind shear to allow for the generation of supercell thunderstorms with rotating updrafts that led to seven tornadoes in this part of the state of Wisconsin.

Tornado/Windstorm: June 21, 2010

A 40-yard wide EF1 tornado with 90 mph winds was on the ground for .3 miles from on Sylvia Pine Street from the American Legion to Caesar Street. The area surrounding SFX Church and Elmwood Crossing also sustained damage in the accompanying windstorm. The tornado damaged roofs, and removed shingles and siding from homes. No total losses of homes were reported. Roads were closed for 2-3 hours for debris cleanup following the storm.

Winter Storm: December 20th, 2012

The large storm that struck more of the County closed schools and roads in Cross Plains. The total clean-up effort after the storm for the Village cost around \$15,000.

Extreme Cold: December, 2013 and February, 2014

Extended below zero temperatures and deep frost struck Cross Plains in these two time periods. In the course of these two months, 24 water mains broke in the Village. Schools also closed due to the extreme

cold. Residential pipes also burst, and furnaces were in need of repair, but exact numbers for these private properties are not known.

Asset Inventory

Assets include the people, property, and critical facilities within the Village of Cross Plains that are exposed to hazards in general. Inventories of property, essential infrastructure, and natural, cultural or historic resources help provide a comprehensive picture of the community and provide a method of assessing exposure to hazards by establishing the improved and total values, capacities and populations for these assets. It also forms the basis for estimating potential losses, where possible.

Population

Table 3 Vulnerable Population Summary

Disability Status from the 2014 American Community Survey	Number	Percent of Group with Disability
Population Under 5 years old with a Disability	0	0%
Population 5-17 years old with a Disability	43	5.8
Population 18-64 with a Disability	147	6.2
Population Over 65 years old with a Disability	84	22.2
Total Population with Disability	274	7.3

Other Vulnerable Populations	Estimate	Percentage
Families Below Poverty Level	48	4.6
Individuals Below Poverty Level	143	3.8
Of those poverty: Individuals Under 18	46	4.7
Of those poverty: Individuals Over 65	2	0.5
Total Population Over 5 who Speak English less than "very well"	22	0.6
2014 ACS Total Population Estimate	3,755	100%

Data Source: 2014 American Community Survey

General Property

Table 4 Property Exposure Summary

Property Type	Total Parcel Count	Improved Parcel Count	Improved Values (\$)	Content (\$)	Total Value (\$)
Totals	1,259	1,136	218,671,500	109,335,750	328,007,250
Agriculture	4	0	0	0	0
Commercial	40	35	18,488,200	9,244,100	27,732,300
Utilities	5	0	0	0	0
Industrial	4	3	3,339,900	1,669,950	5,009,850
Institutional/ Governmental	17	2	855,500	427,750	1,283,250
Other	97	22	5,168,400	2,584,200	7,752,600
Residential	1,092	1,074	190,819,500	95,409,750	286,229,250

Data Source: Dane County Land Information Office

Critical Facilities

Table 5 Specific Assets and Critical Facilities for the Village of Cross Plains

Name of Asset	ame of Asset Type* Replacement Occupancy/ Value (\$) Capacity (#)/Notes		Hazard Specific Issues	
Wastewater Treatment Plant	EI	9,000,000	.563mgd	flooding – lightning strike - tornado
Well # 1	EI	500,000	180gpm	lightening strike – tornado
Well # 2	EI	750,000	450gpm	Lightning strike - tornado
Large Reservoir	EI	1,750,000	500,000gallon	Tornado, Windstorm
Fire station	EI	9,000,000	District	Tornado – lightning strike
EMS Building	EI	4,500,000	District	Tornado – lightning strike
Village Office	VF	4,000,000	30	Lightning strike – tornado
Library	VF	8,000,000	200	Lightning strike – tornado
Schools – total of 3	VF	200,000,000	2,250 total students	Lightning strike – tornado
Day Care – total of 3	VF	1,000,000	80 kids	Lightning Strike – tornado
Elderly Housing – total of 4	VF	5,000,000	75+ Residents	Lightning strike – tornado
Healthcare – total of 2	VF	1,750,000	Doctor, Dentist	Lightning, Tornado, Wind storm
County Highway P Bridge	EI	1,000,000	6,500 adt	Flood

Name of Asset	Туре*	Replacement Value (\$)	Occupancy/ Capacity (#)/Notes	Hazard Specific Issues
County Highway KP Bridge	EI	1,000,000	4,000 adt	Flood
US Highway 14 Bridge	EI	750,000	10,000 adt	Flood
Cellular Telephone Tower	EI	Unknown	ATT	Lightning, Tornado, Wind Storm
Public Facilities	EI	5,000,000	Public Works Operation	Lightning, Tornado, Windstorm
Gas Station	НМ	1,500,000	Kwik Trip	Lightning, Tornado, Windstorm
Manufacturing	нм	3,500,000	Plastic Ingenuity	Lightning, Tornado, Windstorm
Black Earth Creek	NA	Unknown	Class A Trout Stream	Extreme Heat, Drought, Flood
Brewery Creek	NA	Unknown	Local Stream	Extreme Heat, Drought, Flood
Conservation Lands	onservation Lands NA Unknown Blut		Bluffs	Landslide, Lightning, Tornado, Wildfire, Wind Storm.

Data Source: Data Collection Guide

Vulnerability to Specific Hazards

This section details vulnerability to specific hazards, where quantifiable, and where it differs from that of the overall County. The previous inventory tables quantify what is exposed to the various hazards within Village of Cross Plains. Table 6 cross-references the hazards with the various tables where exposure or vulnerability specifics are found. The intent of Table 6 is to quantify, where possible, future impacts of each hazard on the jurisdiction. In many cases it is difficult to estimate potential losses, so the overall exposure of populations, structures, and critical facilities is referenced.

Table 6 Hazard Vulnerability Specifics

Hazard Populations		Structures	Critical Facilities	Future Damage Potential	
Dam Failure Unknown		Unknown	Unknown	Specifics unknown; See hazard profile in County Plan	
Drought Minimal		None	Minimal	Specifics unknown; See hazard profile in County Plan	
Flooding See section below		See section below	See section below	See section below	
Fog	Minimal	None	None	Specifics unknown; See hazard profile in County Plan	
Hailstorm	Minimal	See Property Exposure table 3	See Critical Facility Inventory Table(s)	Specifics unknown; See hazard profile in County Plan	
Landslide/ Sinkholes/ Erosion	Unlikely	Unlikely	Unlikely	Specifics unknown; See hazard profile in County Plan	

Hazard Populations		Structures	Critical Facilities	Future Damage Potential
Lightning See Table 2 Population		See Table 3 Property Exposure	See Critical Facility Inventory Table(s)	Specifics unknown; See hazard profile in County Plan
Severe Cold See Table 2 Population		See Table 3 Property Exposure	See Critical Facility Inventory Table(s)	Specifics unknown; See hazard profile in County Plan
Severe Heat	Severe Heat See Table 2 Population None		Minimal	Specifics unknown; See hazard profile in County Plan
Severe Winter Storm	See Table 2 Population	See Table 3 Property Exposure	See Critical Facility Inventory Table(s)	Specifics unknown; See hazard profile in County Plan
Tornado	See Table 2 Population	See section below	See Critical Facility Inventory Table(s)	See section below
Wildfire	Minimal	Minimal	Minimal	Specifics unknown; See hazard profile in County Plan
Windstorm	See Table 2 Population	See Table 3 Property Exposure	See Critical Facility Inventory Table(s)	Specifics unknown; See hazard profile in County Plan

Flood

Structures and Properties in the Floodplain

Refer to the flood profile in the mitigation plan for a description of the methodology used to identify potentially flood-prone properties. Figure 1 shows mapped floodplains, future growth areas, and critical or vulnerable facilities. Tables 7 and 8 outline the primary structures and properties with primary structures on them within the Village of Cross Plains. Potential number of individuals at risk figures are based on primary residential structures and the average household size within Dane County.

Table 7 Primary Structures in the Floodplain

Total Floodway Structures	Floodway Residential Structures	Total Structures in 100 year Floodplain	Residential Structures in 100 year Floodplain	Potential Number of Individuals at Risk in 100 year Flood	Total Structures in 500 year Floodplain	Residential Structures in 500 year Floodplain	Potential Number of Individuals at Risk in 500 year Flood
0	0	25	18	41.94	45	38	88.54

Source: Analysis based on Dane County Land Information Office Data

Table 8. Properties with Primary Structures in the Floodplain

Total Floodway Properties	Floodway Improved Values	Floodway Residential Properties	Total Properties in 100 year Floodplain	Total Improved Value of Properties in 100 year Floodplain	Residential Properties in 100 year Floodplain	Total Properties in 500 year Floodplain	Total Improved Value of Properties in 500 year Floodplain	Residential Properties in 500 year Floodplain
0	\$0	0	25	\$7,492,600	18	45	\$6,660,900	38

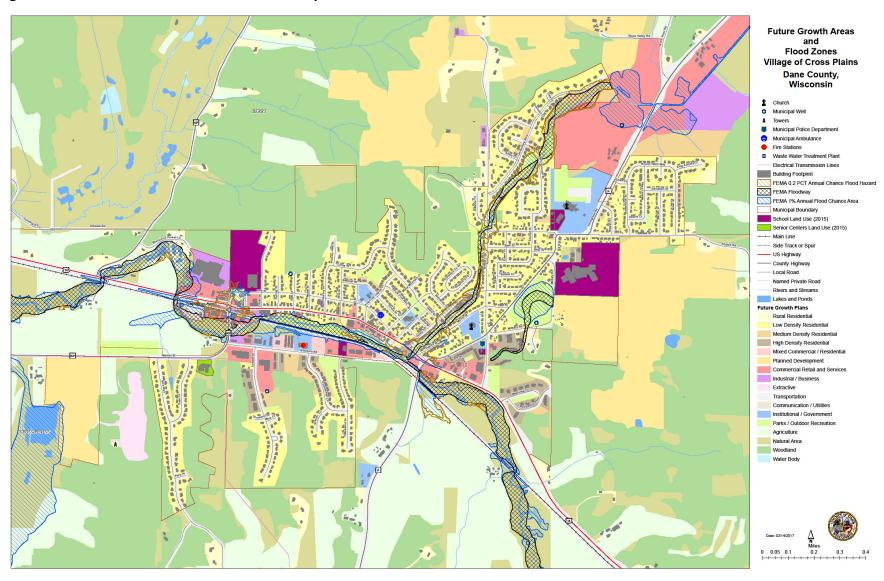
Source: Analysis based on Dane County Land Information Office Data

Repetitive Loss Properties and Flood Insurance Polices

There are no repetitive loss properties in the Village of Cross Plains.

According to FEMA Policy and Claim Statistics for Flood Insurance, the community has 19 flood insurance polices, with a total coverage amount of \$5,333,600. There has been 1 claim and \$1,724 in losses paid in flood insurance claims since 1978.

Figure 1 Flood Hazards and Future Land Use Map



Tornado

While it is difficult to estimate specific losses to a tornado due to the random nature of the event, a methodology was developed that was applied to each jurisdiction during the update. The table below estimates the percent area of the jurisdiction that could be impacted based on the average sized tornado (F2) in Dane County. High value exposure is based on 100% loss, medium 50% loss, and low is 25% loss to the property potentially impacted. The loss ratio, which is the ratio of the damaged building value to total exposed building value, is a measure of the impact to the jurisdiction as a whole. Communities with loss ratios 10% or more may have difficulty recovering from a disaster. Refer to the tornado hazard profile in the main mitigation plan for more details on this methodology.

Table 9 Tornado Loss Estimate

% Area of Impact	Improved Parcel Count	Affected Structure Estimate	Total Exposed Value	Estimated Loss \$ - High Damage Range	Estimated Loss \$ -Moderate Damage Range	Estimated Loss \$ - Low Damage Range	Loss Ratio for Moderate Damage Range
50.22%	1341	673	\$379,566,000	\$190,600,672	\$95,300,335.79	\$47,650,167.90	25.1%

Data Source: Analysis based on Dane County Land Information Office's data.

Growth and Development Trends

Planned land use is shown in Figure 1, in relation to the flood hazard. Table 10 illustrates how the Village of Cross Plains has grown in terms of population and number of housing units between 2010 and 2014-15. Housing data is to 2014 due to data availability. Table 11, drawn from the Demographics Services Center at the Wisconsin Department of Administration, shows population projections through 2035.

Table 10. Village of Cross Plains Change in Population and Housing Units, 2010-2014/15

2010	2015	Percent Change	2010 # of	2014 # of	Percent Change
Population	Population	(%) 2010-2015	Housing Units	Housing Units	(%) 2010-2014
3,538	3,696	4.47%	1,452	1,564	7.7%

Data Source: Dane County Human Services

Table 11. Village of Cross Plains Population Projections, 2010-2035

Population Change	5 year Growth %	2,015	2,020	2,025	2,030	2,035
Increase by same percentage each year	0.88%	3,696	3,858	4,027	4,204	4,389

Data Source: Demographic Services Center, Wisconsin Department of Administration

Problems or Additional Vulnerability issues

The Village has not annexed any new property for development since 2009. Growth focus has been on infill development and internal residential and commercial structures. Several residential and commercial development projects, as well as public improvements have been made near Black Earth Creek in recent years. Future growth is planned to the Southwest, East, and North, adjacent to some areas of environmental concern.

Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment summarizes regulatory mitigation capabilities, administrative and technical mitigation capabilities, and fiscal mitigation capabilities for the Village of Cross Plains.

Mitigation Capabilities Summary

Table 12 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities, or by themselves contribute to reducing hazard losses. The table also indicates which of these tools are currently utilized in the Village of Cross Plains.

Table 12 Village of Cross Plains Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General or Comprehensive plan	Yes	Revised May 19, 2014
Zoning ordinance	Yes	Chapter 84: Re-codified and approved 1/1/2015
Subdivision ordinance	Yes	Chapter 83: Re-Codified and approved 5/20/2013
Growth management ordinance	No	
Floodplain ordinance	Yes	Chapter 85: Re-Codified and approved 8/25/2014
Other special purpose ordinance (stormwater, steep slope, wildfire)	Yes	Chapter 12 (Emer Mgmt); Chapter 33 (Fire Prev)
Building code	Yes	Chapter 31: Re-Codified and approved 5/20/2013
Fire department ISO rating	Yes	Class 4 for 1 and 2 family dwellings and all other uses
Erosion or sediment control program	Yes	Chapter 65: Re-Codified and approved 5/20/2013
Stormwater management program	Yes	Chapter 65: Re-Codified and approved 5/20/2013
Site plan review requirements	Yes	Chapter 84
Capital improvements plan	Yes	Annual Plan adopted through budget, multi-year plan under development
Economic development plan	Yes	TID #3 Project Plan adopted by JRB 9/16/2013
Local emergency operations plan	Yes	Approved in 2003
Other special plans	No	
Flood insurance study or other engineering study for streams	Yes	
Elevation certificates (for floodplain development)	No	

Data Source: Village of Cross Plains Data Collection Guide

Table 13 identifies the personnel responsible for mitigation and loss prevention activities as well as related data and systems in the Village of Cross Plains.

Table 13 Responsible Personnel and Departments for the Village of Cross Plains

Personnel Resources	Yes/No	Department/Position	Comments	
Planner/engineer with knowledge of land development/land management practices	Yes	Contracted- Planner, Engineer Staff- Public Facilities Director		
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Contracted- Planner, Engineer Staff- Public Facilities Director		
Planner/engineer/scientist with an understanding of natural hazards	Yes	Contracted- Planner, Engineer Staff- Public Facilities Director		
Personnel skilled in GIS	Yes	Contracted-Engineer		
Full-time Building Official	Yes	Contracted – Building Inspector		
Floodplain Manager	Yes	Zoning Administrator Consultant		
Emergency Manager	Yes	Administrator/Clerk – Treasurer		
Grant Writer	Yes	Village Staff, Consultant as needed		
Other Personnel	Yes	Police Chief, Fire Chief (District), Dane County Police Chief		
GIS Data Resources – (land use, building footprints, etc.)	Yes	Some internal capabilities, data provided by Dane County	Also through contracted engineer	
Warning systems/services (Reverse 9- 11, cable override, outdoor warning signals)	Yes	County Dispatching, Local Radio, Internal Public Communications, Sirens		

Data Source: Village of Cross Plains Data Collection Guide

Table 14 identifies financial tools or resources that the Village of Cross Plains could potentially use to help fund mitigation activities.

Table 14 Financial Resources for the Village of Cross Plains

Financial Resources	Accessible/Eligible to Use (Yes/No)	Comments	
Community Development Block Grants	Yes		
Capital improvements project funding	Yes	Paid with borrowed money adopted by annual budget	
Authority to levy taxes for specific purposes	Yes	Levied through general fund	

Fees for water, sewer, gas, or electric services	Yes	Gas and Electric through MG&E
Impact fees for new development	Yes	Parks and Sewer
Incur debt through general obligation bonds	Yes	As needed for capital projects and other adopted expenses
Incur debt through special tax bonds	Yes	

Data Source: Village of Cross Plains Data Collection Guide

Additional Capabilities

The Village has mandated several projects to incorporate modern stormwater management and treatment techniques into their projects helping to protect Black Earth Creek and reduce the potential for flooding in some cases. These changes came about through new requirements on managing stormwater but none the less have good outcomes for mitigation as well. Additionally, subtle changes have occurred with public improvements, general operations, and other activities to help mitigate some vulnerabilities.

National Flood Insurance Program Participation

The Village of Cross Plains participates in the NFIP program. As of January 2009, the initial FHBM was identified on 5/24/1974. The initial FIRM identification date is 2/16/1983, with a current effective map update to be effective 6/16/2016.

Public Involvement Activities

The Village of Cross Plains community participated in the County public outreach process. This was a series of public workshops held around the County in which an overview of natural hazard mitigation was given and the County plan was discussed. Residents were then given the opportunity to give their input on mitigation actions that could be taken, and filled out informational surveys that assessed the level of risk the perceived within their own community. More information on these meetings can be found in the County base plan.

Mitigation Actions

Completed Mitigation Actions

Since the adoption of its 2010 Natural Hazard Mitigation Plan, the Village of Cross Plains has worked to decrease the risk of life or property loss from natural hazards. Actions taken include:

 Reconstruction of road, larger sewer helped to create a new interceptor from what used to be two poorly performing mains (i.e. – large amount of inflow and infiltration from leaky pipes).
 Will serve existing users better and allow for proper growth of the Village. Work completed by WisDOT in conjunction with the Village as part of the reconstruction of Highway 14 in 2015. • 2013 Black Earth Creek Improvement Project converted the creek from straight alignment to natural meandering flow. This also removed some structure from the creek providing for a reduction in the floodplain to adjacent properties as well as upstream.

Proposed Mitigation Actions

The Village of Cross Plains will continue to lessen its vulnerability to natural hazards through the following proposed actions, both of which are continuations from the 2010 Plan with added information and updates:

<u>Objective 1</u>: Replace/update and complement existing two-way radio communication devices in the Village of Cross Plains Emergency Management Department and Emergency Warning Sirens to become compatible with new Dane County Radio Communication System.

Steps:

- 1) Determine what type of radios will provide compliance with the new system Done.
- 2) Obtain funding for purchase and installation of radios.

Lead Implementing Agency: Village of Cross Plains

Supporting Agencies:

- Dane County Emergency Management
- Wisconsin Department of Emergency Management
- Federal Emergency Management

Possible Funding and Technical Assistance:

- Dane County Emergency Management
- Wisconsin Department of Emergency Management
- Federal Emergency Management

Timeline: In process.

Priority: High.

Estimated Costs: \$35,000-50,000.

<u>2017 Update:</u> All sirens are up to date and compatible with the County System. Village agreed to join DaneCom in 2012/13. Updated radio frequencies in order to prepare for the switch. Still waiting for DaneCom to come online.

<u>Objective 2</u>: Continue to implement sound floodplain management practices through continued compliance with the National Flood Insurance Program, to include floodplain ordinance enforcement

and periodic review, promoting the benefits of flood insurance, and continued staff training and development in floodplain management.

<u>Background and Benefits:</u> Brewery Creek runs from north to south in the Village eventually emptying into Black Earth Creek within the central point of the Village. Throughout the lengths of these two creeks within the Village there are various changes in topography, crossings, meanders, and obstructions that effect the flow of water during high rain events. As such, FEMA has mapped out the modeled effects of these flows in order to create the flood plain within the Village. The DNR has developed standards by which the Village administers zoning within the flood plain in order for the Village to remain within the National Flood Insurance Program that allows homeowners accessibility to these policies that otherwise would not be available.

Property owners with improvements located within the mapped flood plain are frequently required to take out an insurance policy by their local banks in order to protect their investment via a mortgage. The Village's inclusion within the NFIP allows property owners to access these policies they would not otherwise be able to. Proper administration of the flood plain also helps to prevent against allowing construction to adversely alter the flow of water and/or putting people into dangerous situations if a large flood were to occur.

Steps:

- 1) Evaluate through the existing staff, County planning staff, and additional DNR staff if necessary, the regulatory deficiencies and enforcement shortcomings in flood-related ordinances and programs (see related County objective).
- 2) Periodically update ordinances as necessary.
- 3) Ensure that stop work orders and other means of compliance are being used as authorized by each ordinance.
- 4) Suggest changes to improve enforcement of and compliance with regulations and programs.
- 5) Encourage floodplain management staff to become Certified Floodplain Managers (CFM) or maintain their CFM status.
- 6) Participate in Flood Insurance Rate Map updates by adopting new maps or amendments to maps.
- 7) Utilize recently completed Digital Flood Insurance Rate maps in conjunction with GIS to improve floodplain management, such as improved risk assessment and tracking of floodplain permits.
- 8) Promote and disperse information on the benefits of flood insurance, with assistance from partners such as the County, WDNR, or ASFPM.
- 9) Evaluate the potential costs and benefits of becoming a participant in the Community Rating System.

Lead Implementing Agency: Village of Cross Plains Floodplain Manager

Supporting Agencies:

- Dane County Planning and Development
- Lakes and Watershed Commission
- Land Conservation Department
- Association of State Floodplain Managers

• Wisconsin Department of Natural Resources

Possible Funding and Technical Assistance:

Staff Time

Timeline: Ongoing

Priority: High

Estimated Costs: Low; can be accomplished with existing staff and within existing department budget.

<u>2017 Update:</u> Village updated the Flood Plain Zoning Ordinance in 2014 and 2016. New code has been accepted by DNR in order to remain within the NFIP. New maps will be effective in June of this year. Continued application of code requirements to maintain inclusion in the NFIP.