
Town of Berry Annex

Community Profile

The Town of Berry is located in the northwest quadrant of the County, north of the Village of Cross Plains, east of the Village of Black Earth, and south of the Town of Roxbury. Land use is dominated by agriculture and woodlands, and dispersed one- and two-family homes. According to the United States Census Bureau, the Town has a total area of 35.5 square miles.

As of the 2010 Census, there are 1,127 people, 472 households, and 354 families residing in the Town. The population density is 31.7 people per square mile. There are 494 housing units at an average density of 13.9 per square mile. The municipality population distributed by Wisconsin Department of Administration the 2015 population of the Town of Berry is 1,138. Table 1 represents a population profile by age for the Town as of 2010.

Table 1 Population Age Profile

Category	Number	Percent
Total Population	1,127	100
Under 5 years	42	3.7
5 to 9 years	54	4.8
10 to 14 years	67	5.9
15 to 19 years	59	5.2
20 to 24 years	39	3.5
25 to 29 years	39	3.5
30 to 34 years	51	4.5
35 to 39 years	57	5.1
40 to 44 years	67	5.9
45 to 49 years	102	9.1
50 to 54 years	146	13.0
55 to 59 years	138	12.2
60 to 64 years	101	9.0
65 to 69 years	66	5.9
70 to 74 years	46	4.1
75 to 79 years	29	2.6
80 to 84 years	12	1.1
85 years and over	12	1.1

Source: U.S. Census 2010

According to the 2014 American Community Survey, the median income for a household in the Town of Berry is \$85,000 and the median income for a family is \$94,469. The per capita income for the Town of Berry is \$41,002. 96% of the population has at least a high school degree, while 33.8% of the population holds at least a bachelor's level degree.

Hazard Identification and Risk Assessment

A hazard identification and vulnerability analysis was completed for the Town of Berry using the same methodology in the base plan. The information to support the hazard identification and risk assessment for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality to complete.

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 Town of Berry 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 Town's planning team members were asked to complete the matrix by ranking each category on a scale of 0 to 3 based on the experience and perspective of each planning team member. A ranking of 0 indicated "no concern" while a ranking of 3 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 Town of Berry is most vulnerable to winter storms, windstorm and flood. The Town has a medium vulnerability to extreme heat and cold, erosion, tornado, and a lower vulnerability to dam failures, drought, fog, hail storm, lightning, wildfires, and subsidence. The vulnerability established here is a qualitative assumption based on the impacts, geographic extent, probability of future occurrence, and magnitude/severity.

Table 2 Vulnerability Assessment Matrix for the Town of Berry

Hazard	Hazard Attributes (1-2-3)			Impact Attributes (0-1-2-3)						Total
				Primary Impact (Short Term – Life and Property)			Secondary Impact (Long Term- Community Impacts)			
	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	
Dam failure	1	1	1	0	0	0	0	0	0	3
Extreme Cold	2	2	2	1	1	2	2	1	1	14
Extreme Heat	2	2	2	1	1	2	2	1	1	14
Drought	1	1	1	0	0	1	2	2	2	10
Erosion	2	3	2	0	0	1	2	1	1	12
Flood	2	2	2	2	2	2	2	2	2	18
Fog	1	1	1	0	0	1	1	1	0	6
Hail Storm	1	1	1	1	1	1	1	1	0	8
Landslide	1	1	1	0	0	0	0	0	0	3
Lightning	1	1	1	1	1	1	1	1	1	9
Tornado	2	1	1	2	2	2	2	2	2	15
Wildfire	1	1	1	1	1	1	1	1	1	9
Windstorm	2	2	2	2	2	2	2	2	2	18
Winter Storm	3	3	3	1	1	1	2	2	2	18
Subsidence	1	1	1	0	0	0	0	0	0	3

Data Source: Town of Berry Data Collection Guide

Previous Hazard Events

Through the Data Collection Guide, the Town of Berry 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:

June 2008: Flood

Flooding in the Town caused runoff; sediment washed into ditches, eroded and plugged culverts, and placed sediment onto the roads. The event occurred in various areas of the Town. There were no deaths or injuries reported, but there was reported damage to property, infrastructure, crop, business and economic impacts. Exact numbers were not available. Road closures impacted the community while culverts were replaced. The Town received FEMA funds to help recover from the hazard, which helped pay for repairs to roads, ditches and culverts, including labor. The Town planning members feel such an event is very likely to occur again.

February 5-6 2008: Winter Storm

Record snow fall affected the entire town during early February of 2008. There were no reports of injuries, deaths, property, crop or infrastructure damage, but impacts on business and the economy were unavailable. The snow resulted in delays and closures along roadways, and in schools and businesses. The Town received FEMA funds to help cover the expenses of salt/sand, labor and maintenance of vehicles used to remove the snow. The Town planning members feel such an event is very likely to occur again.

Asset Inventory

Assets include the people, property, and critical facilities within the Town of Berry 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	7	4.1%
Population 18-64 with a Disability	30	4.0%
Population Over 65 years old with a Disability	51	23%
Total Population with Disability	88	7.4%

Data Source: 2014 American Community Survey

Other Vulnerable Populations	Estimate	Percentage
Families Below Poverty Level	16	4.5%
Individuals Below Poverty Level	73	6.2%
Of those poverty: Individuals Under 18	22	10.3%
Of those poverty: Individuals Over 65	6	2.7%
Total Population Over 5 who Speak English less than "very well"	4	.4%
2014 ACS Total Population Estimate	1188	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	1,139	499	111,401,600	55,700,800	167,102,400
Agriculture	680	235	51,100,300	25,550,150	76,650,450
Commercial	2	2	369,400	184,700	554,100
Utilities	1	0	0	0	0
Industrial	4	4	439,600	219,800	659,400
Institutional/ Governmental	3	0	0	0	0
Other	175	6	941,400	470,700	1,412,100
Residential	274	252	58,550,900	29,275,450	87,826,350

Data Source: Wisconsin Department of Administration and Dane County Planning

Critical Facilities

The Town of Berry has identified the following critical facilities important to protect from disaster impacts. These are collected in Table 5, which is based on the 2015 Data Collection Handbook.

Table 5 Facility Summary

Facility Type	Type*	Replacement Value (\$)
Town Hall/Shelter	EI	400,000
Town Garage/Salt Shed	EI	800,000
Growmark Cooperative	HM	359,000
Frederick Shumann Farmstead	N/A	243,300
Scherbel Road Bridge	EI	Unknown
TOTAL		1,802,600

Data Source: Town of Berry Data Collection Handbook 2015

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 the Town of Berry. Table 5 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	None	None	None	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	Minimal	Minimal	Minimal	Specifics unknown; See hazard profile in County Plan
Lightning	See Table 2 Population	See Table 3 Property Exposure	See Critical Facility Inventory Table(s)	Specifics unknown; See hazard profile in County Plan

Hazard	Populations	Structures	Critical Facilities	Future Damage Potential
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	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 Town of Berry. 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	4	3	6.99	4	3	6.99

Source: Analysis based on Dane County Land Information Office Data

Table 8 Properties with Primary Structures in the Floodplain

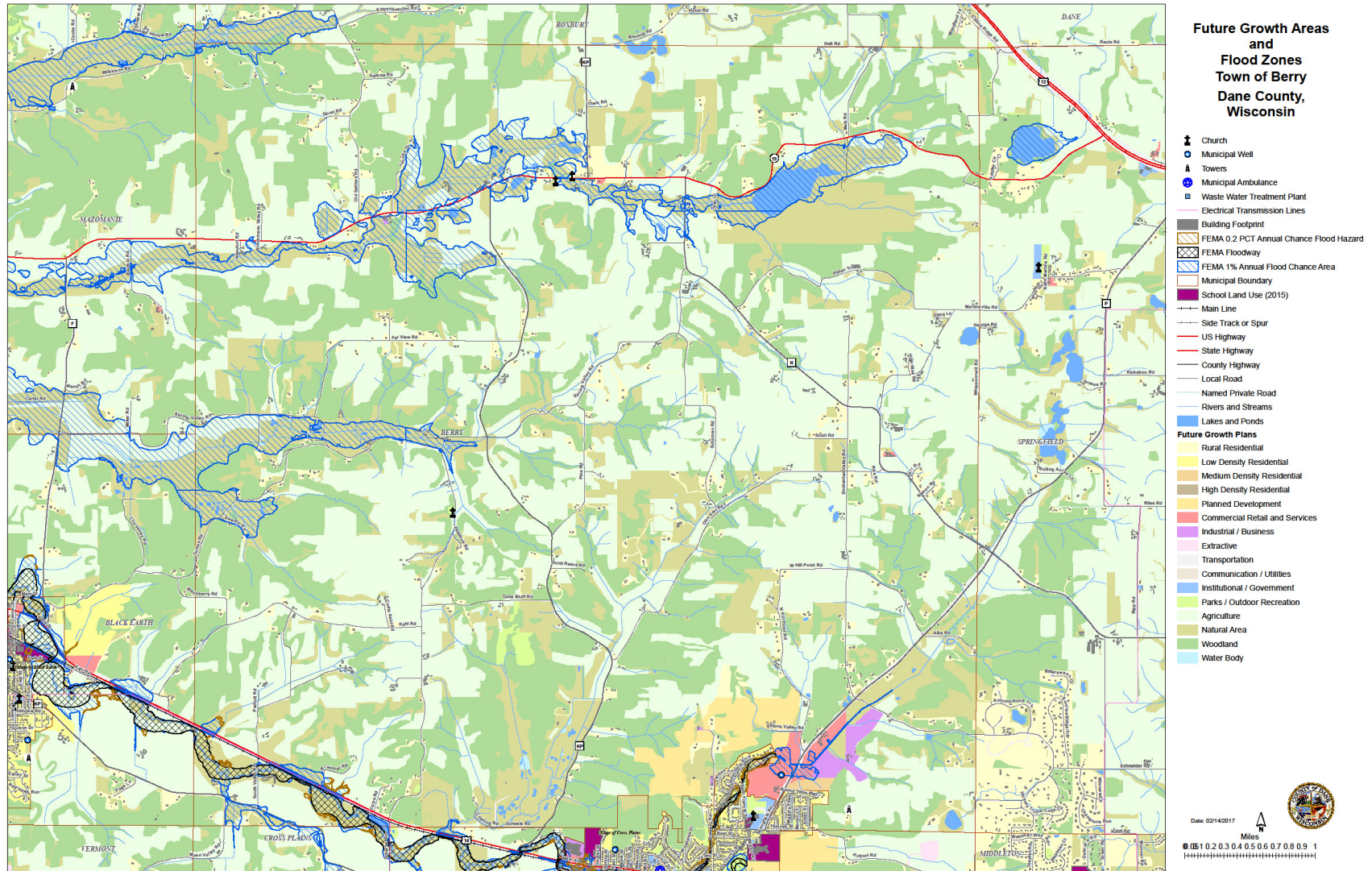
Total Floodway Properties	Floodway Improved Values	Floodway Residential Properties	Total Properties in 100 year Floodplain	Total Improved Value of Properties in 100 year Floodplain	Residential Properties in 100 year Floodplain	Total Properties in 500 year Floodplain	Total Improved Value of Properties in 500 year Floodplain	Residential Properties in 500 year Floodplain
0	\$0	0	4	\$1,006,900	3	4	\$1,006,900	3

Source: Analysis based on Dane County Land Information Office Data

Repetitive Loss Properties and Flood Insurance Policies

No repetitive losses have been reported. Flood insurance policies and loss statistics are included as part of the County plan.

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 2009 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
2.35%	525	12	\$177,903,600	\$4,187,575	\$2,093,787.40	\$1,046,893.70	1.2%

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 Town of Berry has grown in terms of population and number of housing units between 2010 and 2014. Table 11 shows long term population projections, grown by the same percentage each year, based on Wisconsin Department of Administration figures.

Table 10 Town of Berry Change in Population and Housing Units, 2000-2014/15

2010 Population	2015 Population	Percent Change (%) 2000-2008	2010 # of Housing Units	2015 # of Housing Units*	Percent Change (%) 2010-2014
1,127	1,128	.95%	494	527	6.6%

* Extrapolated at the projection contained in the data collection guide of 5 new units/year.

Data Source: Dane County and the Town of Berry Data Collection Guide

Table 11 Town of Berry Population Projections, 2015-2025

Population Change	5 year Annual Average Growth %	2015	2020	2025	2030	2035
Increase by same percentage each year	0.19%	1138	1149	1160	1172	1183

Data Source: Wisconsin Department of Administration

The Data Collection Guide issued in 2015 provided additional insight into growth and development for the Town of Berry. Although subdivisions are not permitted, the Town of Berry averages 5 new homes a year. This small increase in housing units indicates there is only a minor concern about increased exposure and vulnerability to hazards based on growth and development.

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 Town of Berry.

Mitigation Capabilities Summary

Table 12 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation and which of these tools are currently utilized in the Town of Berry.

Table 12 Town of Berry Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General or Comprehensive plan	Yes	www.townofberry.org
Zoning ordinance	Yes	Town Ordinances
Subdivision ordinance	Yes	www.townofberry.org
Growth management ordinance	No	
Floodplain ordinance	No	
Other special purpose ordinance (stormwater, steep slope, wildfire)	No	
Building code	Yes	www.townofberry.org
Fire department ISO rating	No	Cross Plains/Berry Fire District & Black Earth Fire District
Erosion or sediment control program	No	Dane County Ordinances
Stormwater management program	No	Dane County Ordinances
Site plan review requirements	Yes	
Capital improvements plan	No	
Economic development plan	No	
Local emergency operations plan	No	Cross Plains/Berry Fire District & Black Earth Fire District
Other special plans	No	
Flood insurance study or other engineering study for streams	No	
Elevation certificates (for floodplain development)	No	

Data Source: Town of Berry Data Collection Guide

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

Table 13 Responsible Personnel and Departments for the Town of Berry

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General or Comprehensive plan	Yes	www.townofberry.org
Zoning ordinance	Yes	Town Ordinances
Subdivision ordinance	Yes	www.townofberry.org
Growth management ordinance	No	
Floodplain ordinance	No	
Other special purpose ordinance (stormwater, steep slope, wildfire)	No	
Building code	Yes	www.townofberry.org
Fire department ISO rating	No	Cross Plains/Berry Fire District & Black Earth Fire District
Erosion or sediment control program	No	Dane County Ordinances
Stormwater management program	No	Dane County Ordinances
Site plan review requirements	Yes	
Capital improvements plan	No	
Economic development plan	No	
Local emergency operations plan	No	Cross Plains/Berry Fire District & Black Earth Fire District
Other special plans	No	
Flood insurance study or other engineering study for streams	No	
Elevation certificates (for floodplain development)	No	

Data Source: Dane County and the Town of Berry Data Collection Guide

Table 14 identifies financial tools or resources that could potentially fund mitigation activities.

Table 14 Financial Resources for the Town of Berry

Financial Resources	Accessible/Eligible to Use (Yes/No)	Comments
Community Development Block Grants	No	
Capital improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	
Fees for water, sewer, gas, or electric services	No	
Impact fees for new development	No	
Incur debt through general obligation	Yes	

bonds		
Incur debt through special tax bonds	No	
Incur debt through private activities	No	

Data Source: Dane County and the Town of Berry Data Collection Guide

Additional Capabilities

National Flood Insurance Program Participation

The Town of Berry does not participate in the National Flood Insurance Program as a stand-alone entity, but is covered under the County's ordinance.

Public Involvement Activities

The Town of Berry 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

The Town of Berry has chosen to continue with projects it submitted in the 2010 Natural Hazard Mitigation Process. While progress has been made, these are long term projects that will continue to be part of the resilience strategy for the Town. They are listed below.

Objective 1: Locate a storm shelter location on town site which would be suitable and add standby electrical power.

Steps:

- 1) Determine what structural changes need to be made
- 2) Determine costs and benefits of project
- 3) Identify funding sources
- 4) Obtain funding and complete project

Lead Implementing Agency: Town of Berry

Supporting Agencies:

- Dane County Emergency Management

Possible Funding and Technical Assistance:

- Staff time

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- FEMA – Hazard Mitigation Grant Program
 - FEMA – Pre-disaster Mitigation Grant Program

Time Line: Begin immediately after plan adoption

Priority: High

Estimated Cost: unknown

Update: This project is ongoing. It has been modified. The former title was: Modify existing Town hall so it can act as a storm shelter during tornado, high wind, power outage, and cold and extreme heat events.

Objective 2: Assess potential locations and effectiveness of check dams on hillsides as a flood mitigation measure.

Steps:

- 1) Hire hydrologist to perform a hydrologic study of the effectiveness of this solution in decreasing water into rivers and creeks and property damage due to high water
- 2) Determine if solution is cost-effective
- 3) Identify funding source
- 4) Acquire funding and begin project
- 5) Assess effectiveness to project during and after heavy rain events

Lead Implementing Agency: Town of Berry

Supporting Agencies:

- Dane County Land & Water Resources Department - Land Conservation Division
- Dane County Emergency Management

Possible Funding and Technical Assistance:

- Staff time
- Operational Budget
- FEMA – Hazard Mitigation Grant Program
- FEMA – Flood Mitigation Assistance
- FEMA – Pre-disaster Mitigation Grant Program
- U.S. Army Corps of Engineers Small Flood Control Projects
- DNR – Municipal Flood Control Grant Program

Time Line: Begin immediately after plan adoption

Priority: Medium

Estimated Cost: unknown

Update: This project is ongoing.

Objective 3: Develop an emergency operations plan with Dane County Emergency Management in order to better develop communications with the elderly during extreme heat and cold events, integrate projects contained in this document, and provide a comprehensive and strategic plan to manage natural and other disasters. Further explore possible reverse 911 application.

Steps:

- 6) Contact Dane County Emergency Management staff to receive guidance on plan formation
- 7) Dedicate needed resources to complete the plan
- 8) Draft plan and modify as necessary

Lead Implementing Agency: Town of Berry

Supporting Agencies:

- Dane County Emergency Management

Possible Funding and Technical Assistance:

- Staff time

Time Line: Begin immediately after plan adoption

Priority: High

Estimated Cost: unknown

Update: This project is incomplete. Further exploration into reverse 911 system is necessary.

Objective 4: Protect the elderly or other special populations who are adversely affected by extreme cold by winterizing homes where desired and needed.

Steps:

- 1) Determine number and location of special populations, reach out to people of need with newsletter
- 2) Determine the need for home winterization
- 3) Determine costs for the winterization
- 4) Acquire funding
- 5) Implement project
- 6) Assess effectiveness of project

Lead Implementing Agency: Town of Berry

Supporting Agencies:

- Dane County Human Services
- Dane County Emergency Management

Possible Funding and Technical Assistance:

- Staff time
- FEMA – Hazard Mitigation Grant Program
- FEMA – Pre-disaster Mitigation Grant Program

Time Line: Begin immediately after plan adoption

Priority: Medium

Estimated Cost: unknown

Update: This project is incomplete.