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## Town of Pleasant Springs Annex

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### Community Profile

The Town of Pleasant Springs is located in the southeast quadrant of Dane County, west of the Town of Christiana, north of the town of Dunkirk, and east of the town of Dunn. Land use is primarily rural agricultural and residential. There are urban density subdivision areas surrounding the lakeshore.

According to the United States Census Bureau, the Town of Pleasant Springs has a total area of 35.5 square miles, 33.36 square miles of it is land and 2.23 square miles is water.

As of the 2010 Census, there are 3,184 people, 1193 households, and 949 families residing in the Town of Pleasant Springs. The population density is 96 per square mile. There are 1,327 housing units at an average density of 40.4 per square mile. The municipality population distributed by the Wisconsin Department of Administration indicates that the 2015 population for Town of Pleasant Springs was 3,217 people. Table 1 shows the population profile by age for the Town of Pleasant Springs according to the 2010 Census.

**Table 1 Population Profile of Town of Pleasant Springs**

Category	Number	Percent
Total population	3,154	100.0
Under 5 years	112	3.6
5 to 9 years	193	6.1
10 to 14 years	235	7.5
15 to 19 years	207	6.6
20 to 24 years	129	4.1
25 to 29 years	101	3.2
30 to 34 years	97	3.1
35 to 39 years	150	4.8
40 to 44 years	232	7.4
45 to 49 years	345	10.9
50 to 54 years	342	10.8
55 to 59 years	319	10.1
60 to 64 years	263	8.3
65 to 69 years	185	5.9
70 to 74 years	102	3.2
75 to 79 years	62	2.0
80 to 84 years	45	1.4
85 years and over	35	1.1

Data Source: 2010 U.S. Census

American Community Survey estimates for 2014 indicate that the median income for a household in the Town of Pleasant Springs is \$90,815 and the median income for a family is \$101,776. The per capita income for the Town of Pleasant Springs is \$42,727. 94.6% of the population has at least a high school degree, while 34.4% of the population holds at least a bachelor's level degree.

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## **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 Town of Pleasant Springs 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 of Pleasant Springs'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 Town of Pleasant Springs is most vulnerable to tornadoes and winter storms. The Town of Pleasant Springs has a lower vulnerability to dam/levee failures, extreme cold and heat, drought, flood, fog, hail storm, landslides, lightning, tornado, subsidence, wildfire, windstorm, and winter storm. 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 Town of Pleasant Springs**

Hazard	Hazard Attributes			Impact Attributes						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	
	(1-5)	(1-5)	(1-5)	(0-5)	(0-5)	(0-5)	(0-5)	(0-5)	(0-5)	
Dam Failure	1	1	1	0	0	0	0	0	0	3
Extreme Cold	1	1	1	1	1	2	1	1	1	10
Extreme Heat	1	1	1	1	1	2	1	1	1	10
Drought	1	1	1	0	0	1	1	1	1	7
Expansive soils	1	1	1	0	0	0	0	0	0	3
Flood	2	2	2	1	1	2	2	1	2	15
Fog	1	2	2	1	1	1	1	1	1	11
Hail Storm	1	1	1	1	1	1	1	1	1	9
Landslide	1	1	1	0	0	0	0	0	0	3
Lightning	3	1	1	2	2	2	1	1	1	14
Tornado	3	3	2	2	3	2	3	2	2	22
Wildfire	1	1	1	1	1	1	1	1	1	9
Windstorm	1	1	1	1	1	1	1	1	1	9
Winter Storm	3	3	2	2	2	2	2	2	2	20

Source: Town of Pleasant Springs Data Collection Guide, 2015

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## **Previous Hazard Events**

Through the Data Collection Guide, the Town of Pleasant Springs 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:

### ***Tornado: August 2005***

An F-3 tornado occurred on August 18, 2005, following a 6.5 mile storm path west to east and affecting portions of sections 29 through 36. One death occurred, and approximately twenty injuries were directly attributable to the event. Property, infrastructure, crop, business impacts, road/school closures, other damage, and insured losses are documented by Dane County Emergency Government sources. No FEMA declarations were issued for this event, as uninsured losses did not exceed the federal minimums. A 2006 state disaster relief fund reimbursed the town \$134,000 in assistance for costs associated with the event. The Town of Pleasant Springs planning members cannot predict if such an event of this nature is very likely to occur again.

### ***Winter Storm: February 5-6 2008***

Record snow fall affected the entire Town of Pleasant Springs in early February of 2008. There were no reports of injuries, deaths, property, crop or infrastructure damage. Quantifiable financial impacts on business and the economy were unavailable. The snow resulted in delays and closures along roadways, and in schools and businesses. The Town of Pleasant Springs received a FEMA declaration 3285-EM-WI Project DDA 023 amount of \$7124.00 to reimburse funds expended to repair damage to public property. The Town of Pleasant Springs planning members cannot predict if an event of this nature is very likely to occur again.

### ***Flood: June 2008***

Heavy rains over a twenty day period, preceded by a storm event with straight-line winds, caused property damage and flooding. The effects were localized to the NW of section 18, NE of section 17, SW of sec 18, and very localized in the NW quadrant of sec 19 and NE & NW quadrants of section 30. There were no deaths or injuries reported. Property, infrastructure, crop, business, and economic damages were insured and largely unreported. Sand bagging of residences prevented extensive damage. Road closures due to flooding impacted the community for four days. Other damage included road washouts, shoulder washouts, and culvert blockages. Insured losses were at 100%. The Town of Pleasant Springs received a FEMA declaration 1768-DR-WI amount of \$7657.00 to reimburse funds expended to repair damage to public property. The Town of Pleasant Springs planning members cannot predict if an event of this nature is very likely to occur again.

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### **Winter Storm: February 1-3, 2011**

20 inches of snow left schools closed and led to some temporary road closures. FEMA Disaster Declaration 1966-DR-WI resulted in the Town receiving \$6,684.95 in reimbursements for cleanup after this storm.

### **Winter Storm: December 20-21, 2012**

Approximately 15.2 inches of snow fell on the Town leading to school closings. The Town applied for emergency funds, but a FEMA disaster was not declared.

### **Asset Inventory**

Assets include the people, property, and critical facilities within the Town of Pleasant Springs 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**

<b>Disability Status from the 2014 American Community Survey</b>	<b>Number</b>	<b>Percent of Group with Disability</b>
Population Under 5 years old with a Disability	0	0%
Population 5-17 years old with a Disability	25	4.2
Population 18-64 with a Disability	219	10.9
Population Over 65 years old with a Disability	110	19.0
Total Population with Disability	354	10.9

<b>Other Vulnerable Populations</b>	<b>Estimate</b>	<b>Percentage</b>
Families Below Poverty Level	6	0.6
Individuals Below Poverty Level	69	2.1
Of those poverty: Individuals Under 18	6	0.9
Of those poverty: Individuals Over 65	6	1.0
Total Population Over 5 who Speak English less than "very well"	0	0
2014 ACS Total Population Estimate	3552	100%

Data Source: 2010 US Census, 2014 American Community Survey

## General Property

**Table 4 Property Exposure Summary**

Property Type	Total Parcel Count	Improved Parcel Count	Improved Values (\$)	Content (\$)	Total Value (\$)
<b>Totals</b>	<b>2,135</b>	<b>1,381</b>	<b>268,262,800</b>	<b>134,131,400</b>	<b>402,394,200</b>
Agriculture	650	226	38,408,800	19,204,400	57,613,200
Commercial	22	20	5,234,500	2,617,250	7,851,750
Utilities	3	0	0	0	0
Industrial	6	6	1,135,200	567,600	1,702,800
Institutional/ Governmental	1	0	0	0	0
Other	246	30	8,709,700	4,354,850	13,064,550
Residential	1,207	1,099	214,774,600	107,387,300	322,161,900

Data Source: Dane County Land Information Office

## Critical Facilities

The Town of Pleasant Springs has identified the following critical facilities important to protect from disaster impacts. These are collected in Table 5, which is based on the Town's Data Collection Guide. The Town did not report replacement values for these structures.

**Table 5 Critical Facility Summary/Essential Infrastructures**

Facility	Type*
Williams Drive Bridge	EI
Williams Pt Drive Bridge	EI
Spring Road Bridge	EI
Cell Towers 1749 Skidmore 2799 CTH MN 2189 Rinden Road 1685 Drotning Road 2489 Rinden Road CTH B/Tower Drive	EI
Alliant Energy Transmission Station	EI
I90 ROW State Patrol w/ Cell	EI
ATC Transmission Line	EI
Milwaukee Gas Line	EI
Badger Pipeline	EI
PSSD Pumping Stations	EI
PW Garage, 2354 CTH N	EI
Town Hall	EI

Facility	Type*
Dane County Sheriff Office Precinct	EI
Viking Village, 1648 CTH N	VF
Badgerland Campground, 2671 Circle Drive	VF
Holly's House, 1902 Spring Road	VF
Frontier FS Coop	HM
Road Ranger LLC	HM
BP Amoco	HM
Krueger Gravel Pit	HM
Thunder Cat Fireworks	HM
Corner Store	HM
Yahara River	NA
Lake Kegonsa	NA
Door Creek Watershed	NA
Town Ditches/Swales	NA

Data Source: Town of Pleasant Springs Data Collection Guide

\*EI: Essential Infrastructure; VF: Vulnerable Facilities; HM: Hazardous Materials Facilities; NA: natural assets

### 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 Pleasant Springs. 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
<b>Dam Failure</b>	None	None	None	Specifics unknown; See hazard profile in County Plan
<b>Drought</b>	Minimal	None	Minimal	Specifics unknown; See hazard profile in County Plan
<b>Flooding</b>	See section below	See section below	See section below	See section below
<b>Fog</b>	Minimal	None	None	Specifics unknown; See hazard profile in County Plan
<b>Hailstorm</b>	Minimal	See Property Exposure table 3	See Critical Facility Inventory Table(s)	Specifics unknown; See hazard profile in County Plan

Hazard	Populations	Structures	Critical Facilities	Future Damage Potential
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
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 Hazard***

### **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 Sun Prairie. 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	13	13	30.29	46	46	107.18

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	12	\$933,500	12	46	\$6,537,800	46

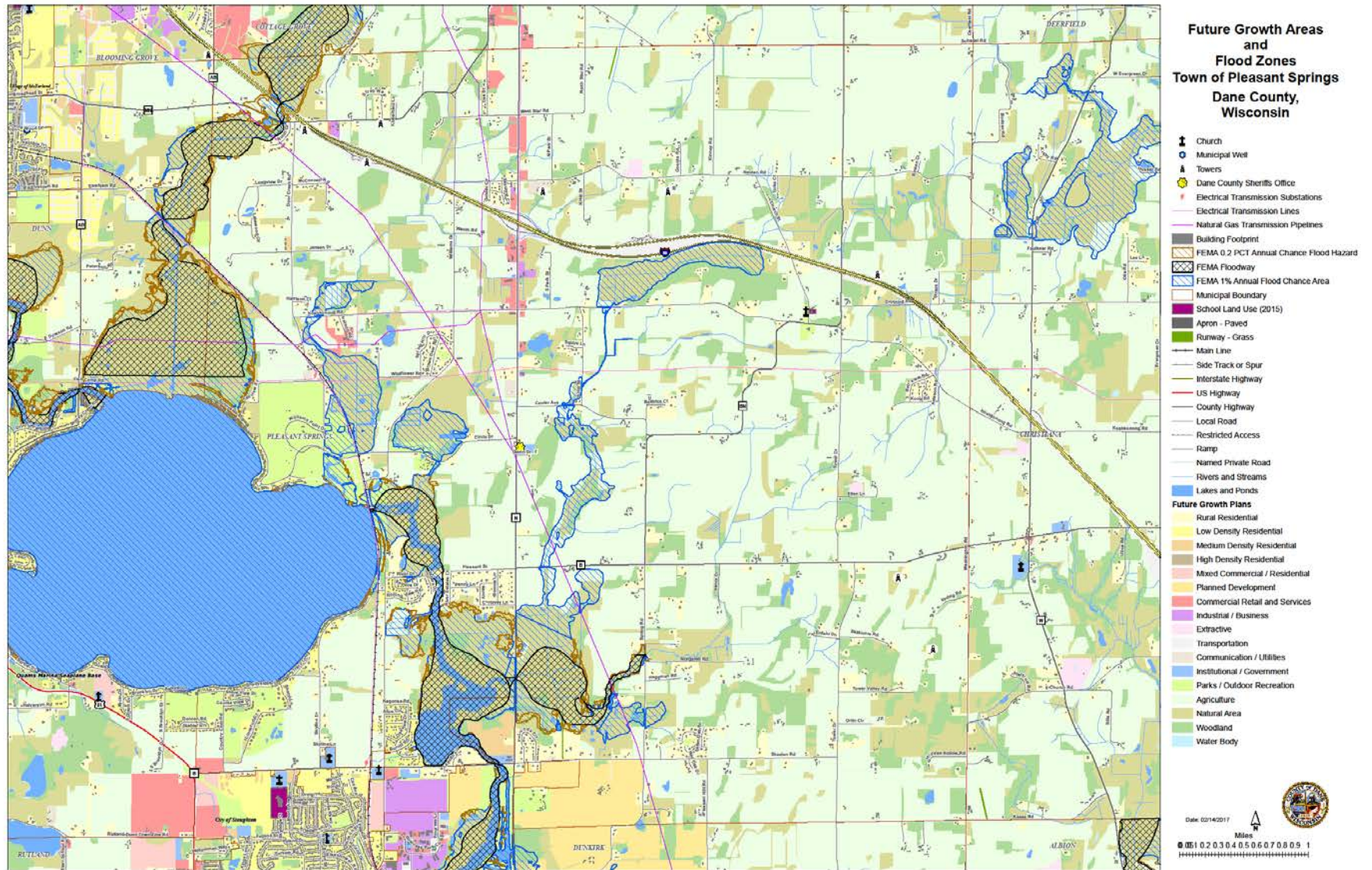
Source: Analysis based on Dane County Land Information Office Data

**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.

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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
2.56%	1440	37	\$416,957,400	\$10,678,338	\$5,339,168.87	\$2,669,584.44	1.3%

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 Pleasant Springs 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 Town of Pleasant Springs Change in Population and Housing Units, 2010-2014/15**

2010 Population	2015 Population	Percent Change (%) 2010-2015	2010 # of Housing Units	2014 # of Housing Units	Percent Change (%) 2010-2014
3154	3217	2.00%	1,327	1,412	6.4%

Data Source: Dane County Planning and Development, U.S. Census Bureau

**Table 11 Town of Pleasant Springs Population Projections, 2005-2035**

Population Change	5 year Growth %	2015	2020	2025	2030	2035
Increase by same percentage each year	0.40%	3,217	3,281	3,346	3,412	3,480

Data Source: Demographic Services Center, Wisconsin Department of Administration 2015

The Data Collection Guide issued in 2015 provided additional insight into growth and development for the Town of Pleasant Springs.

- The towns comprehensive plan projects slow to moderately slow growth and stresses development as a rural town.
- Commercial development will be at N and CTH I-90, this development could increase as an interchange upgrade is projected for 2017
- Subdivision growth is severely limited by the Town's density policy.

- Growth plans present no additional hazard or vulnerability concerns.

**Problems or Additional Vulnerability issues**

- Town maintains no database of special needs populations.
- 1902 Spring Road is the only licensed care facility for elderly population & maximum.

**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 Pleasant Springs.

**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 Town of Pleasant Springs.

**Table 12 Town of Pleasant Springs Regulatory Mitigation Capabilities**

<b>Regulatory Tool (ordinances, codes, plans)</b>	<b>Yes/No</b>	<b>Comments</b>
General or Comprehensive plan	Yes	Local and Dane County
Zoning ordinance	Yes	Dane County Code of Ordinances Ch 10
Subdivision ordinance	Yes	Local and Dane County
Growth management ordinance	Yes	Local and Dane County Comp Plans
Floodplain ordinance	Yes	Dane County Code of Ordinances Ch. 17
Other special purpose ordinance (stormwater, steep slope, wildfire)	Yes	Dane County
Building code	Yes	
Fire department ISO rating	No	
Erosion or sediment control program	Yes	Dane County Code of Ordinances Ch. 14, Dane County Land & Water Resources
Storm water management program	Yes	Local NR 216 compliance and Dane County Code of Ordinances Ch. 11& 13
Site plan review requirements	No Local Yes	Dane County
Capital improvements plan	No Local Yes	Dane County
Economic development plan	Yes	Local and Dane County Comp Plans
Local emergency operations plan	Yes	
Other special plans	No	
Flood insurance study or other engineering study for streams	No Local	Dane County maintains floodplain data/compliance
Elevation certificates (for floodplain development)	No Local	Dane County maintains these records.

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

**Table 13 Responsible Personnel and Departments for the Town of Pleasant Springs**

Personnel Resources	Yes/No	Department/Position
Planner/engineer with knowledge of land development/land management practices	No Local Yes	Dane County Zoning/Planning & Development
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Contracted Service
Planner/engineer/scientist with an understanding of natural hazards	Unknown	
Personnel skilled in GIS	Yes	Dane County
Full-time Building Official	No	Part time contracted service
Floodplain Manager	No Local Unknown	Dane County
Emergency Manager	Yes	Dane County
Grant Writer	No Local Yes	Dane County
Other Personnel	Yes	Dane County
GIS Data Resources – (land use, building footprints, etc.)	Yes	All at Dane County
Warning systems/services (Reverse 9-11, cable override, outdoor warning signals)	Yes	NOAA Radios Reverse 9-1-1 Through Dane County

Data Source: Town of Pleasant Springs Data Collection Guide

Table 14 identifies financial tools or resources that the Town of Pleasant Springs could potentially use to help fund mitigation activities.

**Table 14. Financial Resources for the Town of Pleasant Springs**

Financial Resources	Accessible/Eligible to Use (Yes/No)
Community Development Block Grants	Yes
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	Severely Limited
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No

Financial Resources	Accessible/Eligible to Use (Yes/No)
Incur debt through private activities	No

Data Source: Town of Pleasant Springs Data Collection Guide

### **Additional Capabilities**

- Household preparedness after 2005 tornado.
- Flood mitigation as part of NR216 compliance through creation, maintenance and planning for infrastructure related to water quality.
- Education of Town’s Fire Prevention Ordinance
- The Town provides information on sandbagging and distributes FEMA publications.
- Distribute Dane County Public Health information on Drinking Water/Well Testing, mold abatement and related issues.

### ***National Flood Insurance Program Participation***

The Town of Pleasant Springs does not participate in the National Flood Insurance Program as a stand-alone entity, but is covered by the County’s ordinance.

### **Public Involvement Activities**

The Town of Pleasant Springs 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 Pleasant Springs regularly undertakes hazard mitigation activities through education, flood mitigation compliance, and emergency preparedness actions. The objective below is proposed to continue to bolster the actions already underway.

Objective 1: Undertake public information activities to advise property owners, renters, businesses and vulnerable populations about hazards and recommended course of action to minimize damage and to protect people from harm.

#### Steps:

- 1) Create literature to distribute to affected populations.
- 2) Work with Dane County Emergency Management to develop/distribute materials.

Lead Implementing Agency: Town of Pleasant Springs Board

Supporting Agencies: Dane County Emergency Management

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Possible Funding and Technical Assistance: Dane County Emergency Management

Timeline: 3-4 years

Priority: Moderate

Estimated Costs: Low. Some can be accomplished with existing staff time and budget.

Status: Continuing from 2009

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