



**2018 HENNEPIN COUNTY**

**ALL-JURISDICTION**

**HAZARD MITIGATION PLAN**

**Volume 3**

**Community and Mitigation  
Strategies(R)**

01 February 2018

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**HENNEPIN COUNTY EMERGENCY MANAGEMENT**

1600 Prairie Drive, Medina, Minnesota 55304

Phone 612-596-0250

February 1, 2018

On behalf of Hennepin County (HCEM), is pleased to present the 2018 Hennepin County Multi-Jurisdictional Hazard Mitigation Plan (Plan) Update.

The purpose of this plan is to identify the Counties major hazards, assess the vulnerability, and to reduce risk using a variety of data and best practice measures to implement mitigation projects. The plan identifies goals and recommended actions and initiatives for each jurisdiction within this county to reduce and/prevent injury and damage from hazardous events. The intent of the Plan is to provide unified guidance for ensuring coordination of recovery-related hazard mitigation efforts following a major emergency/disaster, and to implement an on-going comprehensive county hazard mitigation strategy intended to reduce the impact of loss of life and property due to effects of natural hazards.

Through continued collaboration with each jurisdiction by providing staff expertise, support, training and education opportunities, Hennepin County Emergency Management will continue to increase its resiliency to the effects of natural hazards.

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<b>SECTION 1</b>	<b>MITIGATION STRATEGY, GOALS AND OBJECTIVES</b>
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**1.1. INTRODUCTION**

The mitigation strategy provides a blueprint for Hennepin County to follow to become less vulnerable to its identified hazards. It is based on general consensus of the Planning Team, the findings and conclusions of the Risk Assessment, and input from the public and stakeholders. The mitigation strategy includes hazard mitigation objectives and hazard mitigation actions. The objectives serve as the guiding principles for local future mitigation policy and project administration; actions serve as implemental items that support and provide a way to reach those objectives. The mitigation strategy includes a process for evaluating mitigation actions to ensure actions are feasible based on community capabilities, tied to plan goals, and effective in reducing hazard losses for current and future structures and populations. This section outlines the goals, objectives, and mitigation action evaluation and prioritization process undertaken in Hennepin County. Each jurisdiction provided objectives, actions and prioritization and are included in the Mitigation Action Plan (MAP), which can be found for each jurisdiction located in Section 3: Mitigation Plans

**1.2. 2018 HENNEPIN COUNTY HAZARD MITIGATION PLAN GOALS**

The plan goals are broad, but reflect current needs and priorities of the county and are intended to reduce long-term vulnerability to all hazards identified in this plan. The 2018 Hennepin County AHMJMP goals were developed by the Mitigation Steering Committee and presented at the planning team kickoff meeting in July 2015. The planning team reviewed the goals and opted to keep the goals as written. The mitigation planning goals are listed in **TABLE 1-2A**

**TABLE 1-2A Hennepin County Mitigation Goals**

Goal Number	Goal
1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards
2	Increase education, outreach, and awareness
3	Protect natural and cultural resources
4	Identify areas of greatest impact from hazards
5	Enhance hazard mitigation coordination and communication with federal, state and local governments.
6	Promote disaster-resistant future development
7	Build and support local capacity and commitment to become less vulnerable to hazards

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<b>SECTION 2</b>	<b>MITIGATION ACTION PLAN</b>
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### 2.1. SELECTION OF MITIGATION ACTIONS

Selected objectives and actions are provided in the MAP, which is presented in the following section. The MAP is a functional plan for action and is considered to be the most essential outcome of the mitigation planning process. The MAP includes a prioritized listing of proposed hazard mitigation actions (policies and projects) for the county and each participating jurisdiction that could be implemented. Each action includes accompanying information such as the department responsible for completing the action, timeline, and cost estimate.

The MAP provides each jurisdiction or assigned individuals a description of their plan in implementing mitigation actions providing an opportunity to reduce vulnerability over time. Further, the map provides a mechanism to monitor progress over time. Each action also considers the benefits and costs of an action, to ensure it is cost effective, which is included in the priority.

### 2.2. PRIORITIZATION OF MITIGATION ACTIONS

All actions are considered cost-effective including a cost-benefit review for prioritization. In addition, local knowledge or need, may necessitate a change in priority from the guidelines presented for priority below: A priority number scale has been used with 1 being top priority and sequential numbers being less priority. The scale may be limited on the number of identified actions for any objective listed.

- **Low Priority Projects:** Projects that is associated with low or infrequent hazard probability and least likely to prevent loss of life. (Scale 8-10)
- **Medium Priority Projects:** Projects associated with a less probable hazard with potential to save lives or damage to property. (Scale 4-7)
- **High Priority Projects:** Projects identified in response to one or more of the highest probability hazards combined with the ability to save lives. (Scale 1-3)

### 2.3. IMPLEMENTATION OF MITIGATION ACTIONS

The MAP includes several measures to ensure actions are implemented. HCEM will serve as the coordinating agency. However, each action is tied to a responsible agency or individual who will be responsible for leading the completion of the mitigation action. By assigning responsibility, it increases accountability and the likelihood of action.

In addition to the assignment of a local lead department or agency, an implementation time period or a specific implementation date has been considered in order to assess whether actions are being implemented in a timely fashion. Further, the county will seek outside funding sources to implement mitigation projects in both the pre-disaster and post-disaster environments. Potential funding sources have been identified for proposed actions listed in the MAP.

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<b>SECTION 3</b>	<b>MITIGATION PLANS</b>
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**3.1. JURISDICTION PARTICIPATION**

The following list contains each jurisdiction, the point of contact, title, agency and which group they have planning membership. Each planning group routinely meets 4-12 times a year to meet the planning needs and requirements for their jurisdiction. Each planning group accounts for its own membership, participation and completion of the requirements within this plan. Participation is voluntary.

Jurisdiction	Point of Contact	Title	Agency	How participated
Bloomington	U. Seal	Fire Chief	Fire Department	South Region Planning
Brooklyn Center	G. Hendrickson	Fire Chief	Fire Department	North Region Planning
Brooklyn Park	T. Seitz	Fire	Fire Department	North Region Planning
Champlin	T. Schmidt	Police Chief	Law Enforcement	North Region Planning
Corcoran	M. Gottschalk	Police Chief	Law Enforcement	Lakes Region Planning
Crystal	A. Norris	City Admin	City of Crystal	North Region Planning
Dayton	P. Enga	Police Chief	Law Enforcement	North Region Planning
Deephaven	C. Johnson	Police Chief	Law Enforcement	Lakes Region Planning
Eden Prairie	G. Esbensen	Fire Chief	Fire Department	South Region Planning
Edina	T. Schmitz	Fire Chief	Fire Department	South Region Planning
Excelsior	M. Meehan	Police Chief	Law Enforcement	Lakes Region Planning
Fort Snelling	C. Kummers	MAC Comms	MSP Airport	County Planning
Golden Valley	J. Crelly	Fire Chief	Fire Department	North Region Planning
Greenfield	B. Ritter	City Admin	City of Greenfield	Lakes Region Planning
Greenwood	M. Meehan	Police Chief	Law Enforcement	Lakes Region Planning
Hanover	S. Berg	Emergency Mgr.	Wright County	County Planning
Hopkins	D. Specken	Fire Chief	Fire Department	South Region Planning
Independence	G. Kroells	Police Chief	Law Enforcement	Lakes Region Planning
Long Lake	M. Risvold	Police Chief	Law Enforcement	Lakes Region Planning
Loretto	E. Belland	Police Chief	Law Enforcement	Lakes Region Planning
Maple Grove	S. Anderson	Fire Chief	Fire Department	North Region Planning
Maple Plain	G. Kroells	Police Chief	Law Enforcement	Lakes Region Planning
Medicine Lake	T. Melander	City Admin	City of Medicine Lake	
Medina	E. Belland	Police Chief	Law Enforcement	Lakes Region Planning
Minneapolis	B. Lane	Emergency Mgr.	City Official	County Planning
Minnnetonka Beach	C. Faniok	Police Chief	Law Enforcement	Lakes Region Planning
Minnnetonka	J. Flanders	Fire Chief	Fire Department	South Region Planning
Minnetrista	P. Falls		Law Enforcement	Lakes Region Planning
Mound	G. Pederson	Fire Chief	Fire Department	Lakes Region Planning

Minneapolis/St. Paul International Airport	K. Rollwagen	Emergency Mgr.	MSP Airport	County Planning
New Hope	K. McDonald	City Admin	City of New Hope	North Region Planning
Orono	C. Farniok	Police Chief	Law Enforcement	Lakes Region Planning
Osseo	S. Mikkelson	Police Chief	Law Enforcement	North Region Planning
Plymouth	M. Goldstein	Police Chief	Law Enforcement	North Region Planning
Richfield	J. Henthorne	Police Chief	Law Enforcement	South Region Planning
Robbinsdale	J. Franzen	Police Chief	Law Enforcement	North Region Planning
Rockford	C. Keuseman	Fire	Fire Department	County Planning
Rogers	B. Feist	Fire Chief	Fire Department	North Region Planning
Shorewood	M. Meehan	Police Chief	Law Enforcement	Lakes Region Planning
Spring Park	C. Farniok	Police Chief	Law Enforcement	Lakes Region Planning
St. Anthony	M. Sitarz	Fire Chief	Fire Department	North Region Planning
St. Bonifacius	P. Falls	Police Chief	Law Enforcement	Lakes Region Planning
St. Louis Park	S. Koering	Fire Chief	Fire Department	South Region Planning
Tonka Bay	M. Meehan	Police Chief	Law Enforcement	Lakes Region Planning
Wayzata	M. Risvold	Police Chief	Law Enforcement	Lakes Region Planning
Woodland	C. Johnson	Police Chief	Law Enforcement	Lakes Region Planning
Hopkins Public Schools	J. Goldy	School Safety	Hopkins School District	County Planning
Minneapolis Public Schools	J. Matlock	School Safety	Minneapolis School District	County Planning
Osseo Public Schools	D. Olsen	School Safety	Osseo School District	County Planning
Rockford Public Schools	K. Ehlers	School Safety	Rockford School District	County Planning
St. Anthony Public Schools	T. Urdahl	School Safety	St. Anthony School District	County Planning
Bassett Creek Watershed	L. Jester	Organization Rep	Bassett Creek	County Planning
Minnehaha Creek Watershed	T. Schaufler	Organization Rep	Minnehaha Creek	County Planning
Hennepin County Emergency Management	D. Bovitz	Organization Rep	Hennepin County Emergency Management	County Planning

**3.1.1. CITY OF BLOOMINGTON**

**Hennepin County- Bloomington**

Bloomington is the fifth largest city in Minnesota. Located on the north bank of the Minnesota River above its confluence with the Mississippi River, Bloomington lies at the heart of the southern metro area, 10 miles (16) south of downtown Minneapolis.



Bloomington was established as a Post-World War II housing boom suburb connected to the urban street grid of Minneapolis and serviced by two major highways, Interstate 35W and Interstate 494. Bloomington's residential areas include upper-tier households in the western Bush Lake area and traditional middle-class families in its rows of single-family homes in the central to eastern portions. Large-scale commercial development is concentrated along the Interstate 494 corridor. Besides an extensive park system, with over 1,000feet (93<sup>2</sup>) of parkland per capita, the city's south border with the Minnesota River is buffered by the Minnesota Valley National Wildlife Refuge.

Bloomington has more jobs per capita than either Minneapolis or St. Paul. Its economy includes headquarters of major companies such as Ceridian, HealthPartners and Toro. The city is a hospitality and retail magnet, recognized nationally for the United States' largest enclosed shopping center, Mall of America.

Latitude/Longitude: 44.824372, -93.298096  
 Area: 38.40 sq. miles  
 Area - Land only: 34.67 sq. miles (90%)  
 Area - Water only: 3.73 sq. miles (10%)  
 Population: 82,893  
 Housing Units: 37,641

- Mitigation Priority 1
- Mitigation Priority 2
- Mitigation Priority 3

**School District**  
 • 271 Bloomington

**Vulnerability**

- Bridges 165
- Functional Needs 991
- Rail
- Mall of America
- Blue Line: Light Rail
- Monticello NPP: 40 miles

**Corporate/Employers**

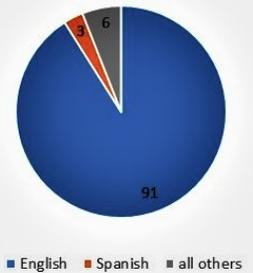
- Mall of America 13,000
- Health Partners 2,666
- Bloomington School District 1,743
- Normandale Community College



**Capability**

- Law Enforcement
- Fire Protection
- CERT Team
- Animal Control/Shelter
- Bloomington Public Health Division
- Bloomington Human Services
- GIS Mapping
- Streets and Highways Dept (342 miles)
- Park and Recreation Dept (700 Acres)
- Sewage
- Water Supply
- 1 Heliport- Mandarin Yen So (7MN9)
- FCC Registered amateur radio licenses: 380

**Language**



**BLOOMINGTON MITIGATION PLAN**

**POC: ULIE SEAL**

**A. Bloomington Objectives and Actions**

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
1A: Flooding/Dam Failure: Develop a comprehensive approach to reducing the possibility of damage and losses due to failure		1A1: Update inundation map every 10 years
		1A2: Review and compare existing flood control standards, zoning, and building requirements
		1A3: Review and update policies that discourage growth in flood-prone areas
		1A4: Review and update city wide evacuation plan
		1A5: Periodically exercise flood/dam failure response actions
		1A6: Update flooding/dam failure response actions in Regional EOP
1B: Wildland Fire:		1B1: Develop and publicize evacuation plans and routes in areas threatened by wildland fires, as resources are available

Develop a comprehensive approach reducing the possibility of damage and losses due to wildfire	1B2: Ensure defensible firefighting space is afforded adjacent to wildland and open space areas in new developments, as resources are available
1C: Hazardous Material Release	1C1: Facility inspections for code compliance and planning to include protect in place/evacuation strategies
	1C2: Maintain data on materials in fixed facilities
	1C3: Train/plan for transportation related HazMat emergencies
	1C4: Train for HazMat emergencies in fixed facilities
1D: Terrorism	1D1: Continue to collaborate with LE, MNJAC and emergency service partners to maintain situational awareness of possible threats
	1D2: Plan/Train for terrorism incident response and recovery
	1D3: Maintain basic terrorism response capabilities- Chempack, detection, decon, etc.
1E: Severe Weather	1E1: Maintain outdoor warning/alert capability- cities 22 warning sirens
	1E2: Increase severe weather awareness
	1E3: Encourage severe weather planning in residential and commercial occupancies.
1F: Critical Infrastructure Failure	1F1: Critical infrastructure failure planning- water systems, communication systems and power
	1F2: Maintain/Revise the city's Continuity of Operations (COOP) and Emergency Operations Plan (EOP)
	1F3: Contingency planning for vulnerable populations

<b>Goal 2</b>	Increase education, outreach, and awareness	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
2A: Educate the Public to increase awareness of hazards and opportunities for mitigation actions	2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions	
	2A2: Provide information to the public on the city website and through public education opportunities	
2B: Promote partnerships between the state, county, local jurisdictions and partner agencies to identify, prioritize, and implement mitigation actions	2B1: Participate as a member in local or regional hazard mitigation planning groups	
	2B2: Support or provide public sector events, workshops, symposiums and continued education opportunities	
2C: Work with Chamber of Commerce, businesses and other local agencies to promote hazard mitigation in local community	2C1: Increase awareness and knowledge of hazard mitigation principles and practices	
	2C2: Encourage businesses to develop and implement hazard mitigation actions	
	2C3: Support or provide private sector events, workshops, symposiums and continued education opportunities	

<b>Goal 3</b>	Protect natural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
3A: Work with watershed districts to address water quality and storm water planning	3A1: Update/adjust comprehensive plan to reflect system capabilities for extreme events	3A2: Monitor current systems for potential weakness or failures and ability to adjust
3B: Maintain protections and monitor the Native American burial mounds on public and private properties	3B1: Continue to monitor public and private properties for development/encroachments into protected sites	
3C: Maintain parks and support National Wildlife Refuge	3C1: Monitor for drought impact and invasive species	
	3C2: Wildfire suppression/ and assist in wildland management of fuels	

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: Update flood zone maps	4A1: Work with FEMA, Watershed Districts, and City Engineer to update/maintain current flood zone maps to reflect current and potential event predictions. Evaluate new models that increase impacted properties and intense event levels	
4B: Update/maintain vulnerable populations locations and readiness capabilities	4B1: Identify nursing homes, assisted living care facilities and group homes COOP planning and resilience/self-reliance capabilities and measures	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A: Utilize current models and predictions for development requirements	6A1: Enforce existing codes to ensure developments meet standards	
	6A2: Encourage disaster resistant development plans for new developments and redevelopments	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Maintain COOP planning effort	7A1: Update the city COOP	

	7A2: TTX the COOP to identify gaps
7B: Maintain EOP/EOC planning effort and capabilities	7B1: Update the EOP
	7B2: TTX the EOP and practice EOC activation
7C: Encourage EOP/COOP planning effort for our business and non-profit partners in the community	7C1: Outreach and assist community business and non-profit in the EOP/COOP planning effort to increase community resiliency

**B. Bloomington Mitigation Actions**

Mitigation Action Name (41)	Analysis not completed	Estimated Cost	Rank	Timeline
1A1: Update inundation map every 10 years				
1A2: Review and compare existing flood control standards, zoning, and building requirements				
1A3: Review and update policies that discourage growth in flood-prone areas				
1A4: Review and update city wide evacuation plan				
1A5: Periodically exercise flood/dam failure response actions				
1A6: Update flooding/dam failure response actions in Regional EOP				
1B1: Develop and publicize evacuation plans and routes in areas threatened by wildland fires, as resources are available				
1B2: Ensure defensible firefighting space is afforded adjacent to wildland and open space areas in new developments, as resources are available				
1C1: Facility inspections for code compliance and planning to include protect in place/evacuation strategies				
1C2: Maintain data on materials in fixed facilities				
1C3: Train/plan for transportation related HazMat emergencies				
1C4: Train for HazMat emergencies in fixed facilities				
1D1: Continue to collaborate with LE, MNJAC and emergency service partners to maintain situational awareness of possible threats				
1D2: Plan/Train for terrorism incident response and recovery				
1D3: Maintain basic terrorism response capabilities- Chempack, detection, decon, etc.				
1E1: Maintain outdoor warning/alert capability- cities 22 warning sirens				
1E2: Increase severe weather awareness				
1E3: Encourage severe weather planning in residential and commercial occupancies.				
1F1: Critical infrastructure failure planning- water systems, communication systems and power				
1F2: Maintain/Revise the city's Continuity of Operations (COOP) and Emergency Operations Plan (EOP)				
1F3: Contingency planning for vulnerable populations				

2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions			
2A2: Provide information to the public on the city website and through public education opportunities			
2B1: Participate as a member in local or regional hazard mitigation planning groups			
2B2: Support or provide public sector events, workshops, symposiums and continued education opportunities			
2C1: Increase awareness and knowledge of hazard mitigation principles and practices			
2C2: Encourage businesses to develop and implement hazard mitigation actions			
2C3: Support or provide private sector events, workshops, symposiums and continued education opportunities			
3A1: Update/adjust comprehensive plan to reflect system capabilities for extreme events			
3A2: Monitor current systems for potential weakness or failures and ability to adjust			
3B1: Continue to monitor public and private properties for development/encroachments into protected sites			
3C1: Monitor for drought impact and invasive species			
3C2: Wildfire suppression/ and assist in wildland management of fuels			
4A1: Work with FEMA, Watershed Districts, and City Engineer to update/maintain current flood zone maps to reflect current and potential event predictions. Evaluate new models that increase impacted properties and intense event levels			
4B1: Identify nursing homes, assisted living care facilities and group homes COOP planning and resilience/self-reliance capabilities and measures			
6A1: Enforce existing codes to ensure developments meet standards			
6A2: Encourage disaster resistant development plans for new developments and redevelopments			
7A1: Update the city COOP			
7A2: TTX the COOP to identify gaps			
7B1: Update the EOP			
7B2: TTX the EOP and practice EOC activation			
7C1: Outreach and assist community business and non-profit in the EOP/COOP planning effort to increase community resiliency			

**C. Bloomington Mitigation Strategies** **Analysis not completed**

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1							
2							
3							
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39							
40							
41							
<b>TOTAL</b>						<b>\$ 0</b>	

**D. Bloomington 2010 Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Use Urban Area Security Initiative (UASI) dollars to fund the upgrades to the radios and decoder boards on the sirens in an effort to not only reach compliance with the new FCC narrow banding standards, but as well as to implement a new storm-based polygon warning system</b>	
Responsible Agency	HCEM and Sheriff's Radio	
Contact Name	Ulise Seal	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Assess and upgrade the city/county warning system as necessary</b>	
Responsible Agency	Bloomington Fire	
Contact Name	Ulise Seal	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Increase coordination with the State Duty Officer for highway spills</b>	



Hennepin County Multi-Jurisdictional Hazard Mitigation Plan  
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Responsible Agency	Bloomington Fire
Contact Name	Ulise Seal
Contact Phone/Email	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:
Summary of Project	<b>Update not submitted</b>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Work with city, state and federal agencies and private industries to share information on types and locations of hazardous materials that have the potential to affect the county and region</b>	
Responsible Agency	Bloomington Fire and Health Department	
Contact Name	Ulise Seal	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#5 Ensure that all the essential first responder agencies have the latest edition of the Emergency Response Guidebook.</b>	
Responsible Agency	Bloomington Fire	
Contact Name	Ulise Seal	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	

Name of Reviewer		
<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#6 Maintain links to other sources of reliable information about infectious diseases and prevention</b>	
Responsible Agency	Bloomington Public Health Department	
Contact Name	Ulie Seal	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#7 Continue to partner with local/regional hospitals and clinics in developing plans and roles in infectious disease response, including quarantine</b>	
Responsible Agency	Bloomington Public Health Department	
Contact Name	Ulie Seal	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

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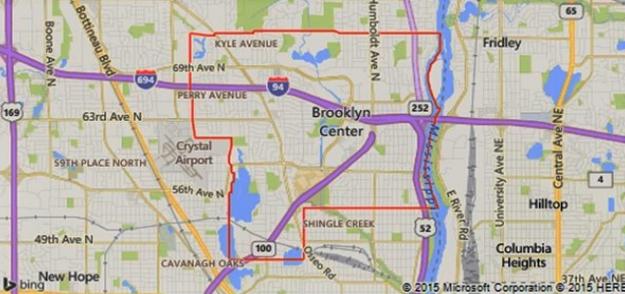
**3.1.2. CITY OF BROOKLYN CENTER**

### Hennepin County- Brooklyn Center

Brooklyn Center lies on the west bank of the Mississippi River on the northwest border of Minneapolis in Hennepin County. Brooklyn Center is one of the oldest inner-ring suburbs of Minneapolis-St. Paul, with about 3.2 million residents.

Formed as the center of local trade in Brooklyn Township since 1873, the rural area farmed market gardening for the nearby growing population of Minneapolis. The village incorporated in 1911, splitting from Brooklyn Township, to avoid annexation from the expanding city of Minneapolis. The city became a bedroom community and industrial job center following postwar growth. Brooklyn Center is known its regional mall Brookdale Center, and the headquarters of Caribou Coffee moved into the city in 2004.

Latitude/Longitude: 45.063637, -93.3159775  
 Area: 8.33 sq. miles  
 Area - Land only: 7.95 sq. miles (95%)  
 Area - Water only: 0.38 sq. miles (5%)  
 Population: 30,104  
 Housing Units: 11,640

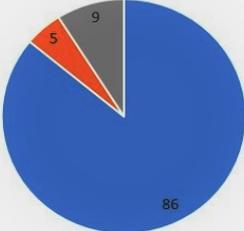
**School District**

- 279 Osseo
- 286 Brooklyn Center

**Capability**

- Law Enforcement
- FBI Regional Field Office
- Parks and Recreation Dept.
- Fire Protection
- Sewer

**Language**



■ English ■ Hmong ■ All Others

**Vulnerability**

- Bridges 90
- Functional Need 182
- Monticello NPP: 27 Miles

**Corporate/Employer**

- Medtronic
- MTC Bus Garage
- Surely Brewery
- Cass Screw

**1** Mitigation Priority 1

- Upgrade technology in EOC
- Improve back up EOC capability

**2** Mitigation Priority 2

- Purchase an emergency notification system
- Purchase reader boards

**7** Mitigation Priority 3

- Bury power lines
- Add emergency generator at city hall/community ctr

**BROOKLYN CENTER MITIGATION PLAN**

**POC: GARY HENDRICKSON**

**A. Brooklyn Center Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Preparation for Severe Weather Response	1A1: Upgrade technology within the EOC to aid in better mitigation of a natural or manmade disaster. 1A2: Improve the capability of the communities backup EOC.
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Educate and inform the public and local businesses on how to better prepare and protect themselves from the impacts of severe weather.	2A1: Develop an Emergency Preparedness website which could educate the public and local businesses about how to prepare their homes and businesses from effects of severe weather. Due to the diversity within the

	community this information will need to be translated into various languages.
2B: Notify and inform the public.	2B1: Purchase and install electronic reader boards at key critical infrastructure locations to aid in the dissemination of emergency information.
	2B2: Purchase an emergency notification system such as Everbridge to aid in the dissemination of emergency information.

<b>Goal 3</b>	Protect natural and cultural resources
<b>OBJECTIVES</b> <span style="float: right;"><b>ACTIONS</b></span>	
None	

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b> <span style="float: right;"><b>ACTIONS</b></span>	
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b> <span style="float: right;"><b>ACTIONS</b></span>	
None	

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b> <span style="float: right;"><b>ACTIONS</b></span>	
None	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b> <span style="float: right;"><b>ACTIONS</b></span>	
7A: Bury All Overhead Power lines	7A1: Work within the community and Xcel Energy to identify all power lines which could be buried to reduce significant power failures throughout the community.
7B: Provide auxiliary power.	7B1: Install an emergency generator at City Hall/Community Center so the facility could be used as a congregate care facility.

**B. Brooklyn Center Mitigation Actions**

Mitigation Actions (7)	Estimated Cost	Rank	Timeline
1A1: Upgrade technology within the EOC to aid in better mitigation of a natural or manmade disaster.	\$50,000	1	Short

1A2: Improve the capability of the communities backup EOC.	\$25,000	2	Medium
2B2: Purchase an emergency notification system such as Everbridge to aid in the dissemination of emergency information.	\$50,000	3	Short
2B1: Purchase and install electronic reader boards at key critical infrastructure locations to aid in the dissemination of emergency information.	\$120,000	4	Medium
2A1: Develop an Emergency Preparedness website which could educate the public and local businesses about how to prepare their homes and businesses from effects of severe weather. Due to the diversity within the community this information will need to be translated into various languages.	\$25,000	5	Long
7A1: Work within the community and Xcel Energy to identify all power lines which could be buried to reduce significant power failures throughout the community.	\$1,000,000	6	Long
7B1: Install an emergency generator at City Hall/Community Center so the facility could be used as a congregate care facility.	\$60,000	7	Medium

**C. Brooklyn Center Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A1	City of Brooklyn Center Emergency Management, IT, and Tierney Brothers	50K	City of Brooklyn Ctr.	Short
2	1	1A	1A2	City of Brooklyn Center Emergency Management, IT, and Tierney Brothers	25K	City of Brooklyn Ctr.	Medium
3	2	2B	2B2	City of Brooklyn Center Emergency Management, IT, and Everbridge	50K	City of Brooklyn Ctr.	Short
4	2	2B	2B1	City of Brooklyn Center Emergency Management, IT, Community Activities Recreational Services (CARS) and Stewart Signs	120K	City of Brooklyn Ctr.	Medium
5	2	2A	2A1	City of Brooklyn Center Emergency Management, IT, City Communications, and ECHO	25K	City of Brooklyn Ctr.	Long
6	7	7A	7A1	City of Brooklyn Center Emergency Management, Public Works, and Xcel Energy	1M	City of Brooklyn Ctr.	Long
7	7	7B	7B1	City of Brooklyn Center Emergency Management, Public	60K	City of Brooklyn Ctr.	Medium

				Works, Community Activities Recreational Services (CARS)			
<b>TOTAL</b>					<b>\$1,330,000</b>		

**D. Brooklyn Center Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Create a smoke detector program that would provide smoke detectors to the general public for free</b>	
Responsible Agency	Brooklyn Center Fire	
Contact Name	John Polz	
Contact Phone/Email	(763)549-3639	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	5 Year project with a cost estimate of \$5600.00	
Name of Reviewer		

**3.1.3. BROOKLYN PARK**

### Hennepin County- Brooklyn Park

Brooklyn Park lies on the west bank of the Mississippi River upstream from downtown Minneapolis in northern Hennepin County. Brooklyn Park is the fourth-largest suburb of Minneapolis/St. Paul. The city is known for Edinburgh USA Golf Course, North Hennepin Community College and a campus of Hennepin Technical College. A traditional bedroom community of both major cities, Target Corporation is currently expanding its Northern Campus into a \$1.78 billion dollar office, retail, and housing city center providing 26,600 jobs. Once Brooklyn Township, the township split in 1860 with the southeastern village incorporating into Brooklyn Center and Crystal Lake

Latitude/Longitude: 45.108821, -93.3403165  
 Area: 26.58 sq. miles  
 Area - Land only: 26.10 sq. miles (98%)  
 Area - Water only: 0.48 sq. miles (2%)  
 Population: 75,781  
 Housing Units: 27,841




**School District**

- 279 Osseo
- 11 Anoka-Hennepin

**Vulnerability**

- Functional Need 209
- Bridges 69
- Monticello NPP: 26 miles

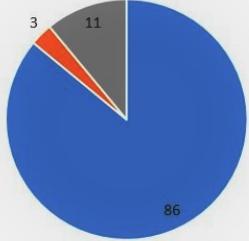
**Corporate/Employer**

- North Hennepin Community College
- Hennepin Technical College

**Capability**

- Law Enforcement
- Fire Protection
- Park And Recreation
- FCC Amateur Radio Licenses 131

**Language**



Language	Percentage
English	86%
Spanish	3%
All Others	11%

Mitigation Priority 1

Mitigation Priority 2

Mitigation Priority 3

**BROOKLYN PARK MITIGATION PLAN**

**POC: TODD SEITZ**

**A. Brooklyn Park Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards
<b>OBJECTIVES</b>	
1A: Improve preparation for Serve Weather Response	<p>1A1: Upgrade technology within the EOC to aid in a better mitigation of a natural or manmade disaster.</p> <p>1A2: Improve the capability of the community back-up EOC.</p>
<b>ACTIONS</b>	
<b>Goal 2</b>	Increase education, outreach, and awareness
<b>OBJECTIVES</b>	
2A: Educate and inform the public and local businesses on how to better prepare and protect themselves from the impacts of severe weather.	<p>2A1: Update the department website to include sections for Emergency Preparedness which could educate the public and local businesses about how to prepare their homes and businesses from effects of severe weather. Due to the diversity within the community this</p>
<b>ACTIONS</b>	

	information will need to be translated into various languages.
2B: Notify and inform the public.	2B1: Purchase an emergency notification system such as Everbridge to aid in the dissemination of emergency information.

<b>Goal 3</b>	Protect natural and cultural resources
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
4A: Develop a comprehensive approach to reducing the possibility of damage and losses due to a hazardous materials spill.	4A1: Continue to use Brooklyn Park GIS to map and update locations of fixed facilities using hazardous materials and associated transportation routes in a timely manner. 4A2: Provide Railroad & Pipeline Safety Awareness Level training for First Responders.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
7A: Bury All Overhead Power lines.	7A1: Work within the community and Xcel Energy to identify all power lines which could be buried to reduce significant power failures throughout the community.
7B: Educate first responders to increase awareness of hazards and opportunities for mitigation actions.	7B1: Ensure that all essential city departments (police, fire, public works) have the latest edition of the Emergency Response Guidebook

**B. Brooklyn Park Mitigation Actions**

Mitigation Actions (8)	Estimated Cost	Rank	Timeline
1A1: Upgrade technology within the EOC to aid in a better mitigation of a natural or manmade disaster.	\$50,000	2	Short
1A2: Improve the capability of the community back-up EOC.	\$20,000	4	Medium
2A1: Update the department website to include sections for Emergency Preparedness which could educate the public and local businesses about how to prepare their homes and businesses from effects of severe weather. Due to the diversity within the community this information will need to be translated into various languages.	\$10,000	3	Short
2B1: Purchase an emergency notification system such as Ping4Alerts to aid in the dissemination of emergency information.	\$20,000	6	Short
4A1: Continue to use Brooklyn Park GIS to map and update locations of fixed facilities using hazardous materials and associated transportation routes in a timely manner.	No Cost	5	Ongoing
4A2: Provide Railroad & Pipeline Safety Awareness Level training for First Responders.	No Cost	7	Short/Ongoing
7A1: Work within the community and Xcel Energy to identify all power lines which could be buried to reduce significant power failures throughout the community.	\$2,500,000	8	Long
7B1: Ensure that all essential city departments (police, fire, public works) have the latest edition of the Emergency Response Guidebook	No Cost	1	Ongoing

**C. Brooklyn Park Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	7	7B	7B1	The ERG is released every four years and will be distributed to city departments that have a role in a hazardous materials response.	0	Brooklyn Park Fire/EM Department	Ongoing
2	1	1A	1A1	Update fiber/communications connections including AV updates- City of BP FD/EM, ITS, and Tierney Brothers	50K	Brooklyn Park Fire/EM Department	Short
3	2	2A	2A1	Addition Staff Time to website – BP FD/EM, ITS, Communications	10K	Brooklyn Park Fire/EM Department	Short

4	1	1A	1A2	Add fiber/communication to site-City of BP EM, ITS, and Tierney Brothers	20K	Brooklyn Park Fire/EM Department	Medium
5	4	4A	4A1	Create GIS maps of Hazardous fixed facilities within the city and create evacuation zones.	0	Brooklyn Park Fire/EM Department	Ongoing
6	2	2B	2B1	Add Ping4Alerts and create web communication device and message program	20K	Brooklyn Park Fire/EM Department	Short
7	4	2A	4A2	Provide Railroad & Pipeline Awareness training for the First Responder in Brooklyn Park	0	Brooklyn Park Fire/EM Department	Annual Training
8	7	1A	7A1	Identify area of redevelopment that could include burying the power lines – City of BP FD/EM, Community Development, Xcel Energy, Public works.	2.5M	Brooklyn Park Fire/EM Department	Long
<b>TOTAL</b>					<b>\$2,600,000</b>		

**D. Brooklyn Park Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Review/Update Local Emergency Operations Plan</b>	
Responsible Agency	Brooklyn Park Fire/Emergency Management Department	
Contact Name	Todd Seitz	
Contact Phone/Email	763-493-8131 / todd.seitz@brooklynpark.org	
Project Status	<input checked="" type="checkbox"/> Project Completed	
Summary of Project	Brooklyn Park EM Staff completed a review and update of the city EOP this past summer.	
Name of Reviewer	Todd Seitz, Fire Chief (Interim)	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Designate equipment/personnel for tornado response</b>	
Responsible Agency	Brooklyn Park Fire/Emergency Management Department	
Contact Name	Todd Seitz	
Contact Phone/Email	763-493-8131 / todd.seitz@brooklynpark.org	
Project Status	<input type="checkbox"/> Project Completed <input type="checkbox"/> Project Canceled <input checked="" type="checkbox"/> Project on Schedule <input type="checkbox"/> Anticipated completion date: _____ <input type="checkbox"/> Project is delayed	

Summary of Project	A designate personnel list was created and training completed for the responsibilities in the case of a tornado/wind event in our city. This remains an ongoing activity due to staff changes.
Name of Reviewer	Todd Seitz, Fire Chief (Interim)

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Train local emergency disaster responders</b>	
Responsible Agency	Brooklyn Park Fire/Emergency Management Department	
Contact Name	Todd Seitz	
Contact Phone/Email	763-493-8131 / todd.seitz@brooklynpark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Staff training is ongoing in this area. Semi-annual training completed with department directors and emergency responders looking at a variety of different emergencies.	
Name of Reviewer	Todd Seitz, Fire Chief (Interim)	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Maintain a list of shelters for evacuation</b>	
Responsible Agency	Brooklyn Park Fire/Emergency Management Department	
Contact Name	Todd Seitz	
Contact Phone/Email	763-493-8131 / todd.seitz@brooklynpark.org	
Project Status	<input checked="" type="radio"/> Project Completed	
Summary of Project	A list of multiple shelters has been determined along with a list of contact names and numbers with the EOP for these shelters in case of an emergency.	
Name of Reviewer	Todd Seitz, Fire Chief (Interim)	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#5 Develop/update/publicize city evacuation plans</b>	
Responsible Agency	Brooklyn Park Fire/Emergency Management Department	
Contact Name	Todd Seitz	
Contact Phone/Email	763-493-8131 / todd.seitz@brooklynpark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> Anticipated completion date: <u>This is an ongoing project</u>	

	<ul style="list-style-type: none"> <li>○ Project is delayed</li> </ul>
Summary of Project	While the project was started with some of the hazard sites, schools, and other identified locations we still have several to update and complete.
Name of Reviewer	Todd Seitz, Fire Chief (Interim)

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#6 Continue to use city and county GIS to map and update locations of fixed facilities using hazardous materials/waste and associated transportation routes in a timely manner</b>	
Responsible Agency	Brooklyn Park Fire/Emergency Management Department	
Contact Name	Todd Seitz	
Contact Phone/Email	763-493-8131 / todd.seitz@brooklynpark.org	
Project Status	<ul style="list-style-type: none"> <li>○ Project Completed</li> <li>○ Project Canceled</li> <li>○ Project on Schedule</li> <li><b>X</b> Anticipated completion date: <u><b>This is an ongoing project</b></u></li> <li>○ Project is delayed</li> </ul>	
Summary of Project	Brooklyn Park GIS updates locations of fixed facilities using hazardous materials and associated transportation routes on an annual basis.	
Name of Reviewer	Todd Seitz, Fire Chief (Interim)	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#7 Work with city, state, federal agencies and private industries to share information on types and locations of hazardous material that have the potential to affect the county and the region</b>	
Responsible Agency	Brooklyn Park Fire/Emergency Management Department	
Contact Name	Todd Seitz	
Contact Phone/Email	763-493-8131 / todd.seitz@brooklynpark.org	
Project Status	<ul style="list-style-type: none"> <li>○ Project Completed</li> <li>○ Project Canceled</li> <li>○ Project on Schedule</li> <li><b>X</b> Anticipated completion date: <u><b>This is an ongoing project</b></u></li> <li>○ Project is delayed</li> </ul>	
Summary of Project	Brooklyn Park FD and inspections are looking to identify and updates locations of fixed facilities using hazardous materials and reporting as found.	
Name of Reviewer	Todd Seitz, Fire Chief (Interim)	

**3.1.4. CITY OF CHAMPLIN**

## Hennepin County- Champlin

The city of Champlin is located along the Mississippi River, surrounded by the cities of Anoka, Dayton, Brooklyn Park, Maple Grove and Coon Rapids, about 18 miles northwest of Minneapolis. According to the U.S. Census Bureau, the city has a total area of 8.8 square miles, of which, 8.2 miles of it is land and 0.6 square miles is water. The average elevation is 875 feet above sea level.

The settlement of the Champlin area began when Father Louis Hennepin, a Franciscan priest from whom Hennepin County gets its name, Michael Accut and Peter Dulay were captured by the Sioux Indians. An Indian trading post was eventually established in the area. Charles Miles created the first permanent settlement in what came to be called the Marshall Township. In 1859, it was split into two towns, Champlin and Dayton.

Latitude/Longitude: 45.1815475, -93.3755805  
 Area: 8.73 sq. miles  
 Area - Land only: 8.17 sq. miles (94%)  
 Area - Water only: 0.56 sq. miles (6%)  
 Population: 24,570  
 Housing Units: 8,598

**School District**

- 11 Anoka-Hennepin

**Vulnerability**

- Bridges 5
- Functional Needs 25
- Monticello NPP: 21 miles
- Elm Creek Dam
- Father Hennepin Festival

**Capability**

- Law Enforcement
- Fire Protection (shared)
- Park And Recreation
- Streets and Highways
- FCC Amateur Radio Licenses 66

**Corporate/Employer**

- Industrial on Trunk Highway 169/109<sup>th</sup> Ave

**3 Mitigation Priority 1**

- Improve shoreline stabilization on the Mississippi River and repair riverbank erosion

**3 Mitigation Priority 2**

- Improve shoreline stabilization on the Champlin Mill Pond and repair reservoir erosion.

**3 Mitigation Priority 3**

- Improve shoreline stabilization on Elm Creek

**Language**

■ English ■ Spanish ■ All Others

**CHAMPLIN MITIGATION PLAN**

**POC: TY SCHMIDT**

**A. Champlin Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Flood Forecasting	1A1: Work with a wide range of stakeholders to have a river gauge installed on the Mississippi river
	1B: Effective No Wake Activation	1B1: Work with a wide range of stakeholders to have a river gauge installed on the Mississippi river
	1C: Wellhead Protection	1C1: The wellhead protection plan identifies potential hazards to the groundwater supply from infiltration of wells that are not properly capped or protected.
	1D: Protection and Safeguarding of Vital City Data	1D1: Improve the Data Backup and protection Protocols for City records

<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>

2A: Flood Forecasting	2A1: Work with a wide range of stakeholders to have a river gauge installed on the Mississippi river
2B: Shoreline Stabilization	2B1: Work with a wide range of stakeholders to improve shoreline stabilization on Elm Creek and the Mississippi River
2C: Wellhead Protection Plan	2C1: The wellhead protection plan is updated every 10 years and identifies potential hazards to the groundwater supply from infiltration of wells that are not properly capped or protected.

<b>Goal 3</b>	Protect natural and cultural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
3A: Shoreline Stabilization	3A1: Work with a wide range of stakeholders to improve shoreline stabilization on the Mississippi River and repair riverbank erosion	
	3A2: Work with a wide range of stakeholders to improve shoreline stabilization on the Champlin Mill Pond and repair reservoir erosion.	
	3A3: Work with a wide range of stakeholders to improve shoreline stabilization on Elm Creek	
3B: Wellhead protection plan	3B1: The wellhead protection plan is updated every 10 years and identifies potential hazards to the groundwater supply from infiltration of wells that are not properly capped or protected.	

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: Wellhead protection plan	4A1: Update the wellhead protection plan to identify potential hazards to the groundwater supply from infiltration of wells that are not properly capped or protected.	
4B: Flood forecasting	4B1: Work with a wide range of stakeholders to install a river gauge	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Flood forecasting	5A1: Work with a wide range of stakeholders to install a river gauge	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards. Ensure continuity of local government operations.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Protection and Safeguarding of vital City data	7A1: Improve the data backup and protection protocols for city records	

**B. Champlin Mitigation Actions**

Mitigation Action Name (15)	Estimated Cost	Priority	Timeline
1A1, 1B1, 2A1, 4B1: Work with a wide range of stakeholders to install a river gauge	\$ 40,000 Installation	4	3-5 yrs.
1B1: Work with a wide range of stakeholders to have a river gauge installed on the Mississippi river	\$40,000 \$18,000	5	3-5 yrs.
2B1, 3A1, 3A2, 3A3: Work with a wide range of stakeholders to improve shoreline stabilization on Elm Creek(3), Mill Pond(2) and the Mississippi River(1) (priority)	\$150,000 x3= \$450,000.00	1 2 3	20 yr.
5A1 : Work with a wide variety of stakeholders to have a river gauge installed on the Mississippi River	\$18,000 Annual Maintenance	4	ongoing
7A1, 1D1: Improve the data backup and protection protocols for city records	\$22,000 \$4,000	6	5 yr.
1C1, 2C1, 3B1, 4A1: Update the wellhead protection plan to identify potential hazards to the groundwater supply from infiltration of wells that are not properly capped or protected.	\$20,000	7	10 yr.

**C. Champlin Mitigation Strategy**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	3	3A, 2B	3A1 2B1	Shoreline Stabilization Mississippi, Mill Pond, Elm Creek	150K	City/NNR/ Watershed	(L)20yr
2	3	3A, 2B	3A2 2B1	Shoreline Stabilization Mississippi, Mill Pond, Elm Creek	150K	City/NNR/ Watershed	(L)20yr
3	3	3A, 2B	3A3 2B1	Shoreline Stabilization Mississippi, Mill Pond, Elm Creek	150K	City/NNR/ Watershed	(L)20yr

4	1	1A	1A1	River Gauge Install- one time	40K	City/DNR	(L)3-5yrs
4	1	1B	1B1	River Gauge Install		City/DNR	(L)3-5yrs
4	2	2A	2A1	River Gauge Install		City/DNR	(L)3-5yrs
4	4	4B	4B1	River Gauge Install		City/DNR	(L)3-5yrs
4	5	5A	5A1	River Gauge Annual Maintenance	18K	City/DNR	(L)3-5yrs
5	1	1B	1B1	River Gauge Annual Maintenance		City/DNR	(L)3-5yrs
6	1	1D	1D1	Data Protection	22K	City IT	(M)5yrs
6	7	7A	7A1	Data Protection	4K	City IT	(M)5yrs
7	1	1C	1C1	Wellhead protection	20K	City Engineer	(M)10yrs
7	2	2C	2C1				
7	3	3B	3B1				
7	4	4A	4A1				
<b>TOTAL</b>					<b>\$554,000</b>		

**D. Champlin Mitigation Action Progress Report Form**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2009	To Date: 2014
Project Title/Action	<b>#1 Well Head Protection Plan</b>	
Responsible Agency	City Engineer (Planning & Zoning)	
Contact Name	Tim Hanson	
Contact Phone/Email	(763)421-8100	
Project Status	<b>X Project Completed</b>	
Summary of Project	The well head protection plan is updated on an ongoing basis. It was last completed in 2010 and is due for another update between 2016 and 2021.	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2011	To Date: 2017
Project Title/Action	<b>#2 Mill Pond Dam Stream Stabilization Project</b>	
Responsible Agency	City Engineer (Planning & Zoning)	
Contact Name	Tim Hanson	
Contact Phone/Email	(763)421-8100	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input checked="" type="radio"/> <b>Anticipated completion date: 2017</b> <input type="radio"/> Project is delayed	
Summary of Project	Dam is currently under construction and shoreline stabilization is to follow	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2012	To Date: 6-1-2016
Project Title/Action	<b>#3 Millpond Dam safety improvement project</b>	
Responsible Agency	City Engineer	
Contact Name	Tim Hanson	
Contact Phone/Email	(763)421-8100	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input checked="" type="radio"/> <b>Anticipated completion date: 6-1-2016</b> <input type="radio"/> Project is delayed	
Summary of Project	Dam is under construction with completion expected 6-1-16	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2016	To Date: 2018
Project Title/Action	<b>#4 Development of Mill Pond reservoir</b>	
Responsible Agency	City Engineer	
Contact Name	Tim Hanson	
Contact Phone/Email	(763)421-8100	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: 2018</b> <input type="radio"/> Project is delayed	
Summary of Project	Development is currently in the planning stage with City Commissions and staff.	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2015	To Date: 2017
Project Title/Action	<b>#5 Run-Off Reduction Plan TMDL</b>	
Responsible Agency	City Engineer	
Contact Name	Tim Hanson	
Contact Phone/Email	(763)421-8100	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: 2017</b> <input type="radio"/> Project is delayed	
Summary of Project	Study is currently in progress. Effects of completed dam and shoreline stabilization are needed.	

Name of Reviewer	Kolb
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<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2015	To Date: 2017
Project Title/Action	<b>#6 Elm Creek Watershed run-off reduction plan</b>	
Responsible Agency	City Engineer	
Contact Name	Tim Hanson	
Contact Phone/Email	(763)421-8100	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: 2017</b> <input type="radio"/> Project is delayed	
Summary of Project	Study is currently in progress. Effects of completed dam and shoreline stabilization are needed.	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2011	To Date: 2011
Project Title/Action	<b>#7 Flood Management training</b>	
Responsible Agency	Planning & Zoning	
Contact Name		
Contact Phone/Email		
Project Status	<b>X Project Completed</b>	
Summary of Project	Training completed in 2011	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2012	To Date: 2012
Project Title/Action	<b>#8 Back-up location for city records</b>	
Responsible Agency	City I.T.	
Contact Name	Todd Beisang	
Contact Phone/Email	(763)421-8100	
Project Status	<b>X Project Completed</b>	
Summary of Project	Tape back-up stored off site. 24 to 72 hour delay.	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2012	To Date: 2017
Project Title/Action	<b>#9 Wild Fire Protection Plan</b>	
Responsible Agency	Fire Department	
Contact Name	Charlie Thompson	

Contact Phone/Email	(763)421-8100
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed
Summary of Project	Update of grass rig fire vehicles. This is an on-going CIP project
Name of Reviewer	Kolb

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2013	To Date: 2013
Project Title/Action	<b>#10 Sand Bag Plan of residents subject to floodway</b>	
Responsible Agency	Police	
Contact Name	Dave Kolb	
Contact Phone/Email	(763)421-2971	
Project Status	<input checked="" type="radio"/> <b>Project Completed</b>	
Summary of Project	2013 Update of emergency operations plan (section P) includes a provision of distribution of sandbags to residents if available.	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2014	To Date: 2014
Project Title/Action	<b>#11 Elm Creek lower channel study</b>	
Responsible Agency	City Engineer	
Contact Name	Tim Hanson	
Contact Phone/Email	(763)421-8100	
Project Status	<input checked="" type="radio"/> <b>Project Completed</b>	
Summary of Project	Study was completed as precursor to dam construction and as part of run-off and shoreline stabilization projects	
Name of Reviewer	Kolb	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2016	To Date: 2017
Project Title/Action	<b>#12 Stream bank Restoration Plan</b>	
Responsible Agency	City Engineer	
Contact Name	Tim Hanson	
Contact Phone/Email	(763)421-8100	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	



Hennepin County Multi-Jurisdictional Hazard Mitigation Plan  
Volume 3- Community and Mitigation Strategies

Summary of Project	Study in progress. Dam project to completed first
Name of Reviewer	Kolb

**3.1.5. CITY OF CORCORAN**

### Hennepin County- Corcoran

Corcoran was settled in 1855 and was organized on May 11, 1858. The city is named after Patrick B. Corcoran, the first schoolteacher, merchant, and postmaster of the town. The city of Corcoran was incorporated on December 4, 1948.

Latitude/Longitude: 45.1091235, -93.5841165  
 Area: 36.00 sq. miles  
 Area - Land only: 35.71 sq. miles (99%)  
 Area - Water only: 0.28 sq. miles (1%)  
 Population: 5,379  
 Housing Units: 1,919



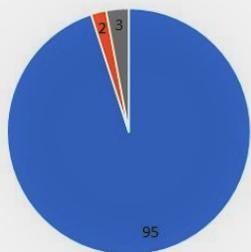

**School District**

- 877 Buffalo-Hanover-Montrose
- 883 Rockford
- 279 Osseo
- 879 Delano
- 284 Wayzata

**Capability**

- Law Enforcement
- Public Works
- Fire (shared)
- Parks and Recreation
- FCC Registered Amateur Radio Licenses: 15

**Language**



English 95, Spanish 3, All Others 2

**7** Mitigation Priority 1  
Regional Study to build public safety center

**5** Mitigation Priority 2  
Update road and infrastructure maps

**1** Mitigation Priority 3  
Improve flood areas; roads, drainage, debris removal

**CORCORAN MITIGATION PLAN**

**POC: MATT GOTTSCHALK**

**A. Corcoran Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Improve storm water drainage capacity	1A1: Identify and improve streets that are repeatedly flooded and washed away with improvements that include modifying and raising roads/streets, providing improved drainage, and storm damage removal.
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Increase severe weather awareness information for citizens.	2A1: Create and distribute severe weather awareness information for citizens in print and on the internet.
<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>

None	
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<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
5A: Improve Area coverage maps	5A1: Update all City road and infrastructure maps in digital and print formats.

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
6A: Improve Outdoor Warning Siren Coverage	6A1: Install an outdoor warning siren in the City's northeast industrial district.
6B: Improve Outdoor Warning Siren Coverage	6B1: Install an outdoor warning siren in the City's northwest region.
6C: Upgrade outdated warning Sirens	6C1: Develop a replacement schedule for all outdoor warning sirens.

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
7A: Locate and develop sites to build a public safety center, fire station(s), and storm shelter.	7A1: Conduct a regional study for future public safety infrastructure including a public safety center (possibly including a training center), fire station(s), and storm shelters, including site plan development, in order to support disaster response.

**B. Corcoran Mitigation Actions**

Mitigation Action Name (7)	Estimated Cost	Priority	Timeline
1A1: Identify and improve streets that are repeatedly flooded and washed away with improvements that include modifying and raising roads/streets, providing improved drainage, and storm damage removal.	\$3,300,000.00	3	10 Years
2A1: Create and distribute severe weather awareness information for citizens in print and on the internet.	\$2,000.00	5	3 years
5A1: Update all City road and infrastructure maps in digital and print formats.	\$10,000.00	2	5 Years

6A1: Install an outdoor warning siren in the City’s northeast industrial district.	\$25,000.00	4	5 years
6B1: Install an outdoor warning siren in the City’s northwest region.	\$25,000.00	6	10 Years
6C1: Develop a replacement schedule for all outdoor warning sirens.	Staff Time	7	1 year
7A1: Conduct a regional study for future public safety infrastructure including a public safety center (possibly including a training center), fire station(s), and storm shelters, including site plan development, in order to support disaster response.	\$100,000.00	1	5 Years

**C. Corcoran Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	7	7A	7A1	City working with vendor on site plan development for Public Safety Center in Corcoran.	100K	City	5 yrs.
2	5	5A	5A1	City working with planner and engineer to develop maps.	10K	City	5 yrs.
3	1	1A	1A1	Public Works working with engineering to identify and repair roads.	3.3M	City	10 yrs.
4	6	6A	6A1	City and Emergency Management to secure property and funding to install an outdoor warning siren.	25K	EM/City	5 yrs.
5	2	5A	5A1	Emergency Management to obtain and distribute severe weather info in digital and print formats.	2K	EM	3 yrs.
6	6	6B	6B1	City and Emergency Management to secure property and funding to install an outdoor warning siren.	25K	EM/City	10 yrs.
7	6	6C	6C1	Emergency Management to develop a replacement schedule for existing outdoor warning siren network.	Staff Time	EM	1 yr.
<b>TOTAL</b>					<b>\$3,462,000</b>		

**D. Corcoran Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
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<b>Project Title/Action</b>	<b>#1 Create severe weather awareness campaigns for citizens.</b>
Responsible Agency	Corcoran Police
Contact Name	Sean Gormley
Contact Phone/Email	(763)400-7001
Project Status	<b>X Project Completed</b>
Summary of Project	Engaged community members in the highest risk neighborhoods for severe weather awareness and provided bilingual weather information pamphlets.
Name of Reviewer	Matt Gottschalk

**3.1.6. CITY OF CRYSTAL**

### Hennepin County- Crystal

The city is bordered on the north by the city of Brooklyn Park, on the east by Brooklyn Center and Robbinsdale, on the south by Golden Valley and on the west by New Hope. Crystal has been awarded the "Minnesota Star City" designation for economic development. Minnesota State Highway 100 and County Road 81 are two of the main arterial routes in the city. Crystal Airport, a small general aviation field, is also located within the city limits.

Latitude/Longitude: 45.0361855, -93.361999  
 Area: 5.88 sq. miles  
 Area - Land only: 5.78 sq. miles (98%)  
 Area - Water only: 0.10 sq. miles (2%)  
 Population: 22,151  
 Housing Units: 9,634




**School District**

- 281 Robbinsdale

**Vulnerability**

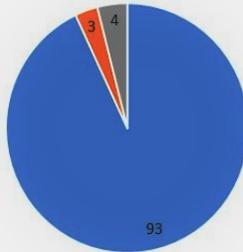
- Bridges 1
- Soo Line RR
- Crystal Airport
- Monticello NPP: 28 Miles

**Corporate/Employer**

**Capability**

- Law Enforcement
- West-Metro Fire (shared)
- Parks and Recreation
- Water/Sewer
- Crystal Airport
- Housing and Community Development
- FCC Registered Amateur Radio Licenses: 87

**Language**



Language	Percentage
English	93%
Spanish	3%
All others	4%

**Mitigation Priority 1**

- Establish a Joint EOC with the city of New Hope

**Mitigation Priority 2**

- Develop and implement a multi-hazard public awareness program.

**Mitigation Priority 3**

- Determine a 1/2 mile path on either side of the rail-GIS Map

**CRYSTAL /WEST METRO FIRE MITIGATION PLAN**

**POC: ADAM WOTKE**

**A. Crystal Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
1A: Increase Hail Risk Awareness		1A1: Mail brochures with water bills.
		1A2: Post warnings at parks and public buildings.
		1A3: Social Media
1B: Lightning: Protect Critical Facilities and Equipment from Lightning.		1B1: Install lightning protection devices.
		1B2: Install surge protection.
1C: Protect Power Lines and Infrastructure from Severe Winds.		1C1: Establish standards for all utilities regarding tree pruning around lines.
		1C2: Continue to trim Boulevard trees
1D: Protect Public Buildings and Infrastructure from Extreme Winter Weather.		1D1: Add insulation to walls and attics
		1D2: Retrofit buildings to withstand snow loads and prevent roof collapse.
1E: Extreme Winter Weather		1E1: Identify specific at risk populations

Assist Vulnerable Populations.	1E2: Organize outreach programs.
1F: Protect Power Lines from Extreme Winter Weather.	1F1: Bury existing power lines when possible.

Goal 2	Increase education, outreach, and awareness	
OBJECTIVES	ACTIONS	
2A: Extreme Cold Educate property owners about freezing pipes.	2A1: Educate homeowners and builders on how to protect their pipes, including locating water pipes on the inside of the building insulation or keeping them out of attics, crawl spaces and outside walls.	
	2A2: Educate homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipe and avoid bursting.	
2B: Conduct Lightning Awareness Programs	2B1: Post warning signs at parks and public buildings.	
2C: Increase Severe Wind Risk Awareness	2C1: Inform residents of shelter locations.	
	2C2: Ensure school district is aware of the best area of refuge in their buildings.	
2D: Conduct Winter Weather Risk Awareness Actives	2D1: Inform the public about severe winter weather impacts.	
2E: Conduct Tornado Awareness Activities	2E1: Educate citizens through media outlets.	
	2E2: Conduct tornado drills at schools and public buildings.	
2F: Increase Hazard Education and Risk Awareness.	2F1: Develop and implement a multi-hazard public awareness program.	
2G: Perform Home Safety Inspections	2G1: Maintain an in home inspection program promoting fire safety.	
	2G2: Install smoke detectors and CO detectors in homes.	
2H: Create a severe weather awareness campaign for citizens that covers sirens information, NOAA Weather Radios, How the National Weather Service issues warnings and the hazards that affect Hennepin County.	2H1: Distribute info via variety media sources	
2I: Educate the community on recreational fires and prohibit open burning.	2I1: Make recreational fire regulations readily available to community.	
	2I2: Use local media to increase awareness.	

Goal 3	Protect natural and cultural resources.	
OBJECTIVES	ACTIONS	

3A: Continue to use Surface Water Management Plan approved by both the Bassett Creek and Shingle Creek Water Management Commissions.	3A1: Submit development plans for review
3B: Monitor Water Supply	3B1: Regularly check for leaks to minimize water supply losses.
	3B2: Improve water supply monitoring.
	3B3: Replace/ Upgrade water pipes in conjunction with street projects

Goal 4	Identify areas of greatest impact from hazards	
OBJECTIVES	ACTIONS	
4A: Improve Storm Water Management Planning	4A1: Complete storm water drainage study for known problem areas.	
	4A2: Prepare and adopt a storm water drainage plan and ordinance.	
	4A3: Replace/ Upgrade sewer and storm system in conjunction with street projects	
4B: Join or Improve Compliance with National Flood Insurance Program (NFIP)	4B1: Participating in NFIP	
	4B2: Adopt ordinances that meet minimum Federal and State requirements to comply with NFIP.	
4C: Improve Storm Water Drainage System Capacity	4C1: Increase the capacity of storm drainage system.	
	4C2: Install rain gardens to slow runoff and improve water quality	
	4C3: Continue with the established sewer maintenance program of jetting pipes.	
4D: Reduce Extreme Winter Weather impact to Roadways	4D1: Plan for and maintain adequate road and debris clearing capabilities.	
4E: Assess Overall Community Risk, Identify Target Hazards in Community	4E1: Obtain local data, list all properties that have the potential greatest impact on community safety. Include public buildings, private business, places of gathering, and other locations, maintain the database	

Goal 5	Enhance hazard mitigation coordination and communication with federal, state and local government	
OBJECTIVES	ACTIONS	
5A: Update local emergency plans as needed and work with neighboring cities on their plan	5A1: Meet with neighboring cities about emergency plans (each department)	
	5A2: Establish Joint EOC	

Goal	Promote disaster-resistant future development
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6	
OBJECTIVES	ACTIONS
6A: Incorporate Flood Mitigation in Local Planning	6A1: Mitigating hazards during infrastructure planning.
	6A2: Obtaining easements for planned and regulated public use of privately-owned land for temporary water retention and drainage
6B: Adopt and Enforce Building Codes to protect against extreme winter weather	6B1: Adopt International Building Code and International Residential Code.
6C: Map and Assess Vulnerability to Subsidence	6C1: Use GIS to map areas that are susceptible to subsidence.
6D: Ensure building compliance inspections are conducted on new construction projects.	6D1: Review sites on scheduled basis
	6D2: Update and enforce zoning ordinances

Goal 7	Build and support local capacity and commitment to become less vulnerable to hazards
OBJECTIVES	ACTIONS
7A: Create evacuation plan for a railroad emergency	7A1: Determine a 1/2mile path on either side of the rail line.
	7A2: Educate the community on the evacuation plan.
7B: Identify businesses in the community that have hazardous processes and/or materials.	7B1: Pre plan businesses with inspections.

### B. Crystal Mitigation Actions

Mitigation Actions (50)	Estimated Cost	Rank	Timeline
1A1: Mail brochures with water bills.	Company- City Admin of Crystal Households in Crystal= 9252 Brochure .07 x 9252= \$648.00	11	Annual each Spring
1A2: Post warnings at parks and public buildings.	Company- My Warning Sign Parks in Crystal= 28 Public Bldgs Crystal=16 Warning Signs \$5.85 X 44= \$258.00	10	Spring 2017
1A3: Social Media	Website maintenance \$240.00/year	45	Annual
1B1: Install surge protection.	Company- Lightning Eliminators Dissipation Array System X 2= \$10,250	12	Spring 2016
1C1: Establish standards for all utilities regarding tree pruning around lines.		6	
1C2: Continue to trim Boulevard trees		7	
1D1: Add insulation to walls and attics	\$40,000	28	Spring 2018
1D2: Retrofit buildings to withstand snow loads and prevent roof collapse.	Estimates for each project needed	21	Spring 2018
1E1: Identify specific at risk populations	Staff Hours for Community Development, Inspections	22	Fall 2017

1E2: Organize outreach programs.	Staff Hours for Public education programs	23	Fall 2017
1F3: Bury existing power lines when possible.	Cost in Utility bills, Work with Utility Companies	8	Summer 2016
2A1: Educate homeowners and builders on how to protect their pipes, including locating water pipes on the inside of the building insulation or keeping them out of attics, crawl spaces and outside walls.	Brochures \$500	31	Annually
2A2: Educate homeowners that letting a faucet drop during extreme cold weather can prevent the buildup of excessive pressure in the pipe and avoid bursting.	\$0	32	Annually
2B1: Post warning signs at parks and public buildings.	Signs \$200 Each Total \$2000	43	Spring 2018
2C1: Inform residents of shelter locations.	Fall Billing \$500	46	Spring Billing
2C2: Ensure school district is aware of the best area of refuge in their buildings.	Public Education Presentations Cost is Staff Hours	47	Annual
2D1: Inform the public about severe winter weather impacts.	\$200 for Billing Inserts	48	Annual Fall Billing
2E1: Educate citizens through media outlets	Free Media \$0	39	Ongoing
2E2: Conduct tornado drills at schools and public buildings.	Drills \$0	34	Spring Annually
2F1: Develop and implement a multi-hazard public awareness program.	Use FEMA available material at no cost. Minimal Cost to create Local specific material.	2	Spring 2016
2G1: Maintain an in home inspection program promoting fire safety.	Batteries and needed material \$8000	40	Jan 2017
2G2: Install smoke detectors and CO detectors in homes.	Purchase needed detectors \$500	19	Feb 2016
2H1: Distribute info via variety media sources	No Cost, use Social Media and Cable 12	44	On Going
2I1: Make recreational fire regulations readily available to community.	Post on West Metro and Cities Web Site	36	May 2016
2I2: Use local media to increase awareness	Interview on Local TV \$0	35	Spring 2016
3A1: Submit development plans for review	\$0	33	Spring 2017
3B1: Regularly check for leaks to minimize water supply losses.	\$10,000	26	Ongoing
3B2: Improve water supply monitoring.	\$3,000	9	On-Going

3B3: Replace/ Upgrade water pipes in conjunction with street projects	Build cost into future street projects	29	Spring 2019
4 A1: Complete storm water drainage study for known problem areas.		13	Fall 2016
4A2: Preparing and adopting a storm water drainage plan and ordinance.		14	Spring 2017
4A3: Replace/ Upgrade sewer and storm system in conjunction with street projects.		15	Spring 2017
4B1: Participating in NFIP	\$0	41	On Going
4B2: Adopt ordinances that meet minimum Federal and State requirements to comply with NFIP.	\$0	42	On Going
4C1: Increase the capacity of storm drainage system.	Varies based on project	16	Fall 2017
4C2: Install rain gardens to slow runoff and improve water quality	\$1000 per rain garden Est 100 Homes= \$100,000	17	On Going
4C3: Continue with the established sewer maintenance program of jetting pipes	\$10,000	18	Spring 2016
4D1: Plan for and maintain adequate road and debris clearing capabilities		21	
4E1: Obtain local data, list all properties that have the potential greatest impact on community safety. Include public buildings, private business, places of gathering, and other locations, maintain the database		4	
5A1: Meet with neighboring cities about emergency plans (each department)	Meetings \$0	5	June 2016
5A2: Establish Joint EOC	Equipment Upgrades/ Staff Hours \$80,000	1	Dec 2015-finish 2018
6A1: Mitigating hazards during infrastructure planning.	Project Dependent	24	Fall 2017
6A2: Obtaining easements for planned and regulated public use of privately-owned land for temporary water retention and drainage		25	Spring 2016
6B1: Adopt International Building Code and International Residential Code.	\$0	38	On Going
6C1: Use GIS to map areas that are susceptible to subsidence.	\$500 to Print Maps	37	Spring 2018
6D1: Review sites on scheduled basis	Inspection Hours	49	On Going
6D2: Update and enforce zoning ordinances	Inspection Hours	50	On Going

7A1: Determine a 1/2mile path on either side of the rail line.	County- GIS map development \$0	4	January 2016
7A2: Educate the community on the evacuation plan.	Local media/ social media \$1000	27	Dec 2017
7B1: Pre plan businesses with inspections.	Meetings with business \$0	30	Dec 2016

**C. Crystal Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	5	5A	5A2	Establish Joint EOC- Deployed in 3 phases.	100K	West Metro, Both Cities	Project Began December 2015
2	2	2F	2F1	Develop and implement a multi-hazard public awareness program.- Use FEMA Material, Minimal Cost	1K	West Metro Fire/HSEM	June 2016
3	7	7A	7A1	Determine a 1/2mile path on either side of the rail-GIS Map	1K	County-GIS	March 2016
4	4	4E	4E1	List all properties that have the potential greatest impact on community safety. Include public buildings, private business, places of gathering, and other locations- CIKR	0	FD	Spring 2016
5	5	5A	5A1	Meet with neighboring cities about emergency plans (each department)	0	City Managers	Summer 2016
6	1	1C	1C1	Establish standards for all utilities regarding tree pruning around lines.	0	Utilities Dept.	Annually
7	1	1C	1C2	Continue to trim Boulevard trees	3K	Utilities Dept.	Annually
8	1	1F	1F3	Bury existing power lines when possible.	?	Utilities Dept.	On-Going
9	3	3B	3B2	Improve water supply monitoring.	3K	Utilities Dept.	On Going
10	1	1A	1A2	Post warnings at parks and public buildings.	\$258	Parks Dept.	Spring 2017
11	1	1A	1A1	Mail brochures with water bills.	\$648	City Admin	Annually
12	1	1B	1B1	Install lightning protection devices.	20K	Public Works	Spring 2017

13	4	4A	4A1	Complete storm water drainage study for known problem areas.	20K	Public Works	Spring 2017
14	4	4A	4A2	Preparing and adopting a storm water drainage plan and ordinance.	0	Commercial Dev	Spring 2017
15	4	4A	4A3	Replace/ Upgrade sewer and storm system in conjunction with street projects.	Varies	Public Works	Fall 2017
16	4	4C	4C1	Install re-route, increase the capacity of storm drainage system.	Varies	Utilities	On Going
17	4	4C	4.C.2	Install rain gardens to slow runoff and improve water quality.	Varies	Engineering	On Going- Seeking improvement
18	4	4C	4C3	Continue with the established sewer maintenance program of jetting pipes	10K	Public Works	Spring 2016, Ongoing
19	2	2G	2G2	Install smoke detectors and CO detectors in homes.	500	FD	On Going
20	1	1D	1D2	Retrofit public buildings to withstand snow loads and prevent roof collapse.	EST	City Eng	Spring 2018
21	4	4D	4D1	Plan for and maintain adequate road and debris clearing capabilities	0	Public Works	Spring 2017
22	1	1E	1E1	Identify specific at risk populations	0	PD/FD	Fall 2017
23	1	1E	1E2	Organize outreach programs.	0	PD/FD	Fall 2017
24	6	6A	6A1	Mitigating hazards during infrastructure planning.	0	Commercial Dev	Fall 2017
25	6	6A	6A2	Obtaining easements for planned and regulated public use of privately-owned land for temporary water retention and drainage	0	Commercial Dev	Spring 2018
26	3	3B	3B1	Regularly check for leaks to minimize water supply losses.	10K	Public Works	On Going
27	7	7A	7A2	Educate the community on the evacuation plan- Social Media, Mailings	1K	Billing	Winter 2017
28	1	1D	1D1	Add insulation to walls and attics	40K	Public Works	Spring 2018

29	3	3B	3B3	Replace/ Upgrade water pipes in conjunction with street projects		City Management	Spring 2018
30	7	7B	7B1	Pre plan businesses with inspections- Meetings	0	FD	Spring 2017
31	2	2A	2A1	Educate homeowners and builders on how to protect their pipes, including locating water pipes on the inside of the building insulation or keeping them out of attics, crawl spaces and outside walls.	500	Community Development	Annually
32	2	2A	2A2	Educate homeowners that letting a faucet drop during extreme cold weather can prevent the buildup of excessive pressure in the pipe and avoid bursting.	0	Community Development	Annually
33	3	3A	3A1	Submit development plans for review	0	Community Development	Spring 2017
34	2	2E	2E2	Conduct tornado drills at schools and public buildings.	0	Parks and Rec	Spring Annually
35	2	2I	2I2	Use local media to increase awareness: Cable 12	0	FD	Spring Annually
36	2	2I	2I1	Make recreational fire regulations readily available to community.		FD	On Going
37	6	6C	6C1	Use GIS to map areas that are susceptible to subsidence.- Maps	500	LOGIS/County	Spring 2018
38	6	6B	6B1	Adopt International Building Code and International Residential Code.	0	Inspections	On Going
39	2	2E	2E1	Educate citizens through media outlets	0	Billing	On Going
40	2	2G	2G1	Maintain an in home inspection program promoting fire safety.	8K	FD	On Going
41	4	4B	4B1	Participate in NFIP	0	Community Development	On Going
42	4	4B	4B2	Adopt ordinances that meet minimum Federal and State	0	Community Development	On Going

				requirements to comply with NFIP.			
43	2	2B	2B1	Post warning signs at parks and public buildings.	2K	Park and Rec	Spring 2018
44	2	2H	2H1	Distribute info via variety media sources	0	IT	On Going
45	1	1A	1A3	Social Media	240/yr.	IT Dept.	Annual
46	2	2C	2C1	Inform residents of shelter locations.	200	Parks and Recreation	Spring Billing
47	2	2C	2C2	Ensure school district is aware of the best area of refuge in their buildings.	0	PD/FD	Annual
48	2	2D	2D1	Inform the public about severe winter weather impacts.	200	Utilities	Fall Billing
49	6	6D	6D1	Review sites on scheduled basis- Inspect	Staff Hours	Inspections	On Going
50	6	6D	6D2	Update and enforce zoning ordinances-Review	Staff Hours	Inspections	Annual
<b>TOTAL</b>					<b>\$222,046</b>		

**D. Crystal Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date:2010 Plan	To Date: 2017
Project Title/Action	<b>#1 Participate in National Flood Insurance Program</b>	
Responsible Agency	Crystal	
Contact Name	Adam Wodtke	
Contact Phone/Email	763-592-9532	
Project Status	<input checked="" type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: <u>WITH NEW 2018 PLAN</u></b> <input type="radio"/> Project is delayed	
Summary of Project	All projects will be moved to new plan	
Name of Reviewer	Adam Wodtke	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date:2010 Plan	To Date: 2017
Project Title/Action	<b>#2 Create a severe weather awareness campaign for citizens that covers siren information, NOAA Weather Radios, how the National Weather Service issues warnings and the hazards that affect Hennepin County.</b>	
Responsible Agency	Crystal	
Contact Name	Adam Wodtke	

Contact Phone/Email	763-592-9532
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: <u>WITH NEW 2018 PLAN</u></b> <input type="radio"/> Project is delayed
Summary of Project	All projects will be moved to new plan
Name of Reviewer	Adam Wodtke

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date:2010 Plan	To Date: 2017
Project Title/Action	<b>#3 Ensure building code compliance inspections are conducted on new construction projects.</b>	
Responsible Agency	Crystal	
Contact Name	Adam Wodtke	
Contact Phone/Email	763-592-9532	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: <u>WITH NEW 2018 PLAN</u></b> <input type="radio"/> Project is delayed	
Summary of Project	All projects will be moved to new plan	
Name of Reviewer	Adam Wodtke	

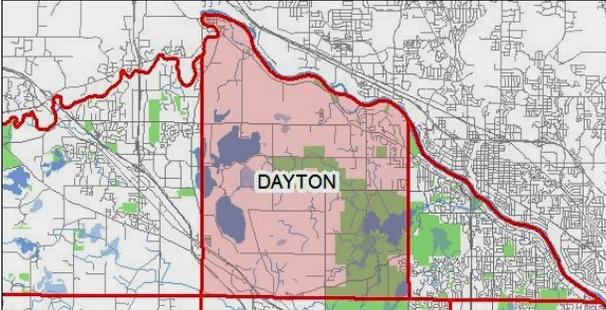
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**3.1.7. CITY OF DAYTON**

### Hennepin County- Dayton

Dayton is located in both Hennepin and Wright counties. It is the northernmost city in Hennepin County. The city of Dayton, platted in 1855, is named for city founder Lyman Dayton. Through his finances, Lyman Dayton was instrumental in bringing the railroad into Minnesota and development of the Lake Superior and Mississippi Railroad, of which he was President until 1865.

Latitude/Longitude: 45.199291, -93.471923  
 Area: 25.14 sq. miles  
 Area - Land only: 23.25 sq. miles (92%)  
 Area - Water only: 1.90 sq. miles (8%)  
 Population: 4,671  
 Housing Units: 1,699

**School District**

- 11 Anoka-Hennepin

**Vulnerability**

- Burlington Northern Railroad
- St. John the Baptist Catholic Church
- Monticello NPP: 14 miles

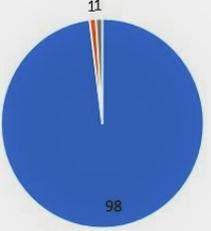
**Corporate/Employer**

- Local retail
- Golf courses (4)

**Capability**

- Law Enforcement
- Fire
- Public Works
- FCC Registered Amateur Radio Licenses: 10

**Language**



English 98 Spanish 11 All Others 1

**1** Mitigation Priority 1

- Replace the storm shelter with a safe room at the Dayton Park Properties
- Update Dayton's warning siren system.

**5** Mitigation Priority 2

- a river gauge installed on the Crow River at the discharge into the Mississippi.
- Maintain sandbags and flood fighting equipment

**3** Mitigation Priority 3

- Improve bank stabilization along Oakview Ln wetlands and repair culverts.

**DAYTON MITIGATION PLAN**

**POC: PAUL ENGA**

**A. Dayton Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Improve water system in NW Dayton	1A1: Establish backup water supply source for system users in case of well failure 1A2: Construct water storage to provide fire suppression 1A3: Explore emergency water supply connection to adjacent community system.
	1B: Purchase Property in Flood Zone Area	1B1: Update inundation map every 10 years
		1B2: Review and update policies that discourage growth in flood-prone areas
		1B3: Educate homeowners in flood zone areas on options that can be offered to them.
		1B4: Promote the purchase of flood insurance for all residents in the flood zone

	1B5: Promote community participation in the National Flood Insurance Program.
	1B6: Maintain sandbags and flood fighting equipment
1C: Flood Forecasting	1C1: Work with a wide range of stakeholders to have a river gauge installed on the Crow River at the discharge into the Mississippi.
1D: Wild land fire:	1D1: Develop and publicize evacuation plans and routes in areas threatened by wild land fires.
	1D2: Enforce burning restrictions
	1D3: Encourage citizens to purchase and use smoke detectors.
1E: Severe Weather/Tornado Response	1E1: Replace the storm shelter with a safe room at the Dayton Park Properties
	1E2: Encourage residents with slab on grade homes to install a safe room during construction
	1E3: Update Dayton’s warning siren system.
	1E4: Upgrade EOC and Equipment for Severe Weather/Tornado Response.
	1E5: Purchase generators or Install generators at Critical Infrastructure points in the city.

<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	

<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
3A: Shoreline/Bank Stabilization		3A1: Work with a wide range of stakeholders to improve shoreline stabilization on the Mississippi River and repair riverbank erosion
		3A2: Work with a wide range of stakeholders to improve shoreline stabilization on the Crow River and repair riverbank erosion.
		3A3: Work with a wide range of stakeholders to improve bank stabilization along Oakview Ln wetlands and repair culverts.

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
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OBJECTIVES	ACTIONS
None	

Goal 6	Promote disaster-resistant future development	
OBJECTIVES	ACTIONS	
6A: Outdoor Warning Siren	6A1 Identify future sites for new sirens in the new developments	
6B: Purchase/Install generators	6B1 Review and Install generators during construction process of development	

Goal 7	Build and support local capacity and commitment to become less vulnerable to hazards	
OBJECTIVES	ACTIONS	
7A: Bury Power Lines	7A1 Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	

**B. Dayton Mitigation Actions**

Mitigation Actions (24)	Estimated Cost	Rank	Timeline
1A1: Establish backup water supply source for system users in case of well failure	\$1 Mil	3	Short
1A2: Construct water storage to provide fire suppression	\$2 Mil	2	Short
1A3: Explore emergency water supply connection to adjacent community systems	\$800,000	4	Short
1B1: Update inundation map every 10 years	\$5000	11	Long
1B2: Review and update policies that discourage growth in flood-prone areas	\$1,000	13	Medium
1B3: Educate homeowners in flood zone areas on options that can be offered to them.	\$1,000	12	Medium
1B4: Promote the purchase of flood insurance for all residents in the flood zone	\$1,000	14	Medium
1B5: Promote community participation in the National Flood Insurance Program.	\$1,000	15	Medium
1B6: Maintain sandbags and flood fighting equipment	\$20,000	9	Long
1C1: Work with a wide range of stakeholders to have a river gauge installed on the Crow River at the discharge into the Mississippi.	\$200,000	8	Long
1D1: Develop and publicize evacuation plans and routes in areas threatened by wild land fires.	\$1,000	21	Medium
1D2: Enforce burning restrictions	\$1,000	22	Medium

1D3: Encourage citizens to purchase and use smoke detectors.	\$1,000	23	Medium
1E1: Replace the storm shelter with a safe room at the Dayton Park Properties	\$353,000	1	Short
1E2: Encourage residents with slab on grade homes to install a safe room during construction	\$1,000	16	Long
1E3: Update Dayton’s warning siren system.	\$150,000	5	Long
1E4: Upgrade EOC and Equipment for Severe Weather/Tornado Response.	\$200,000	6	Long
1E5: Purchase generators or Install generators at Critical Infrastructure points in the city.	\$300,000	7	Long
3A1: Work with a wide range of stakeholders to improve shoreline stabilization on the Mississippi River and repair riverbank erosion	\$600,000	17	Long
3A2: Work with a wide range of stakeholders to improve shoreline stabilization on the Crow River and repair riverbank erosion.	\$600,000	18	Long
3A3: Work with a wide range of stakeholders to improve bank stabilization along Oakview Ln wetlands and repair culverts.	\$170,000	10	Long
6A1: Identify future sites for new sirens in the new developments	\$150,000	19	Long
6B1: Review and Install generators during construction process of development	\$300,000	20	Long
7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	\$450,000	24	Long

**C. Dayton Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	1E	1E1	City of Dayton, Dayton Park Properties, Contractors	353K	City of Dayton	Short
2	1	1A	1A2	City of Dayton, WENCK Engineering, Contractor	2M	City of Dayton	Short
3	1	1A	1A1	City of Dayton, WENCK Engineering, Contractor	1M	City of Dayton	Short
4	1	1A	1A3	City of Dayton , WENCK Engineering, Contractor	800K	City of Dayton	Short
5	1	1E	1E3	City of Dayton, Federal Signal, Contractor	150K	City of Dayton	Long
6	1	1E	1E4	Emergency Management, City of Dayton, Hennepin County Radio	200K	City of Dayton	Long
7	1	1E	1E5	City of Dayton, Public Works	300K	City of Dayton	Long
8	5	1C	1C1	City of Dayton, MN DNR	200K	City of Dayton	Long
9	1	1B	1B6	City of Dayton, Dayton Public Works	20K	City of Dayton	Long

10	3	3A	3A3	City of Dayton, Dayton Public Works, Wenck Engineering, Contractor	170K	City of Dayton	Long
11	9	1B	1B1	Wenck Engineering, GIS	5K	Wenck Engineering	Long
12	1	1B	1B3	City of Dayton	1K	City of Dayton	Medium
13	1	1B	1B2	City of Dayton, Engineering, GIS	1K	City of Dayton	Medium
14	1	1B	1B4	City of Dayton	1K	City of Dayton	Medium
15	1	1B	1B5	City of Dayton	1K	City of Dayton	Medium
16	1	1E	1E2	City of Dayton Planning	1K	City of Dayton	Long
17	3	3A	3A1	City of Dayton, Hennepin County, Engineering, Contractors	600K	City of Dayton	Long
18	3	3A	3A2	City of Dayton, Hennepin County, Engineering, Contractors	600K	City of Dayton	Long
19	6	6A	6A1	City of Dayton	150K	City of Dayton	Long
20	6	6B	6B1	City of Dayton, Engineering, Public Works	300K	City of Dayton	Long
21	1	1D	1D1	Dayton Police, Dayton Fire, City of Dayton	1K	City of Dayton	Medium
22	1	1D	1D2	Dayton Fire	1K	City of Dayton	Medium
23	1	1D	1D3	Dayton Fire	1K	City of Dayton	Medium
24	7	7A	7A1	City of Dayton, Engineering, Utility Companies	450K	City of Dayton	Long
<b>TOTAL</b>					<b>\$7,306,000</b>		

**D. Dayton Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Renovate and update the storm shelter at Dayton Mobile Home Park</b>	
Responsible Agency	Dayton Police	
Contact Name	Paul Enga	
Contact Phone/Email	763-427-2017/penga@daytonpolice.org	
Project Status	○ Project Completed	

	<ul style="list-style-type: none"> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input checked="" type="radio"/> <b>Project is delayed</b></li> </ul> <p><b>Explain: Received Federal Grant / Awaiting for Dayton Park Properties 25% Match prior to starting construction</b></p>
Summary of Project	
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Promote the purchase of Flood Insurance for all residents in the high risk area</b>	
Responsible Agency	Dayton Police	
Contact Name	Paul Enga	
Contact Phone/Email	763-427-2017/penga@daytonpolice.org	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input checked="" type="radio"/> <b>Project on Schedule</b></li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul>	
Summary of Project	Continue to educate residents on the Purchase of Flood Insurance in the High Risk flood zones.	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Promote community participation in the National Flood Insurance program</b>	
Responsible Agency	Dayton Police	
Contact Name	Paul Enga	
Contact Phone/Email	763-427-2017/penga@daytonpolice.org	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input checked="" type="radio"/> <b>Project on Schedule</b></li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul>	
Summary of Project	Continue to educate residents and Promote participation in the National Flood Insurance program.	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Enforce burning Restrictions</b>	

Responsible Agency	Dayton Fire
Contact Name	Jason Mickelson
Contact Phone/Email	763-323-4001/jmickelson@cityofdaytonmn.com
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed
Summary of Project	Fire Department continues to enforce burning restrictions and educates residents when burning restrictions have been put in place.
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#5 Encourage citizens to purchase and use smoke detectors</b>	
Responsible Agency	Dayton Fire	
Contact Name	Jason Mickelson	
Contact Phone/Email	763-323-4001/jmickelson@cityofdaytonmn.com	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Fire Department continues to encourage citizens to purchase and use smoke detectors.	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#6 Update Dayton's warning (siren) system</b>	
Responsible Agency	Dayton Police	
Contact Name	Paul Enga	
Contact Phone/Email	763-427-2017/penga@daytonpolice.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Added a new siren using a federal grant in the area of N. Diamond Lake Rd/Zanzibar Ln. Replaced one siren on Fernbrook Ln/114 <sup>th</sup> Ave N and looking at adding two sirens in 2016.	
Name of Reviewer		

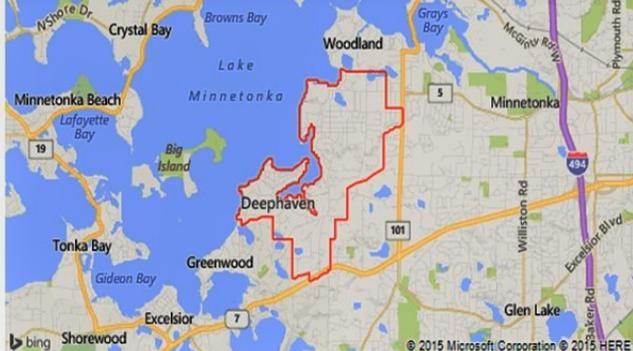
<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#7 Maintain sandbags and flood fighting equipment</b>	
Responsible Agency	Dayton Police	
Contact Name	Paul Enga	
Contact Phone/Email	763-427-2017/penga@daytonpolice.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Continue to monitor sandbag condition and supply	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#8 Designate equipment and personnel for a tornado response</b>	
Responsible Agency	Dayton Police	
Contact Name	Paul Enga	
Contact Phone/Email	763-427-2017/penga@daytonpolice.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Continuing to look into ways to provide extra equipment and supplies to upgrade the EOC.	
Name of Reviewer		

**3.1.8. CITY OF DEEPHAVEN**

### Hennepin County- Deephaven

Deephaven is located on the shores of Lake Minnetonka. It is 16 miles from Minneapolis and Minnetonka Boulevard serves as a main transportation route for the city. Deephaven is home to the Minnetonka Yacht Club and the historic Cottagewood General Store.

Latitude/Longitude: 44.927662, -93.52581  
 Area: 2.42 sq. miles  
 Area - Land only: 2.37 sq. miles (98%)  
 Area - Water only: 0.06 sq. miles (2%)  
 Population: 3,642  
 Housing Units: 1,423

**Mitigation Priority 1**

- Publicize and encourage the adoption of appropriate hazard mitigation actions.
- Provide information to the public on the city website

**Mitigation Priority 2**

- attend or join emergency management associations
- Continue participation in multi-jurisdictional/ multi-agency table top, drill and full-scale exercises.

**Mitigation Priority 3**

- Bury Power lines

**School District**

- 276 Minnetonka

**Vulnerability**

- Historic Cottagewood General store
- Function needs 48
- Monticello NPP: 29 miles

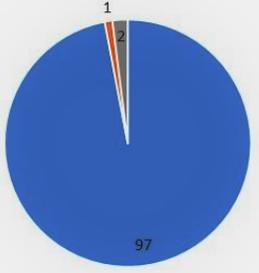
**Corporate/Employer**

- Minnetonka Yacht Club

**Capability**

- Law Enforcement
- Police Chaplains Group
- Fire (shared with Excelsior)
- FCC Registered Amateur Radio Licenses: 7

**Language**



**DEEPHAVEN MITIGATION PLAN**

**POC: CORY JOHNSON**

**A. Deephaven Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury and damage to property, the economy, and the environment from natural and man-made hazards.	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	NONE	
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Educate the public to increase awareness of hazards and opportunities for mitigation actions.	2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions. 2A2: Provide information to the public on the city website and through public education opportunities
	2B: Promote partnerships between the state, counties, local jurisdictions, and partner agencies to identify, prioritize, and implement mitigation actions.	2B1: Participate as a member in local or regional hazard mitigation planning group 2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.

<b>Goal 3</b>	Protect natural and cultural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
NONE		

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
NONE		

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Continue the promotion of partnerships with federal, state and local entities to develop successful mitigation plans and operational strategies. Work towards a common comprehensive emergency operation plan that can be utilized on a larger regional platform.		5A1: Continue affording the opportunity for City Staff to attend or join emergency management associations like Lakes Area Emergency Management Planning Group, MEMA (Metropolitan Emergency Managers Association) and AMEM (Association of Minnesota Emergency Managers). 5A2: Continue participation in multi-jurisdictional / multi-agency table top, drill and full-scale exercises. 5A3: Research and implement lessons learned from actual hazardous events from local, regional and national jurisdictions to avoid probable mistakes from repeating themselves.

<b>Goal 6</b>	Promote disaster resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
NONE		

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A. Bury power lines		7A1: Work with the community to identify power lines which could be buried to reduce power failures.

**B. Deephaven Mitigation Actions**

Mitigation Action (8)	Estimated Cost	Rank	Timeline
2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions.	\$5,000.00	1	Ongoing

2A2: Provide information to the public on the city website and through public education opportunities			
2B1: Participate as a member in local or regional hazard mitigation planning group			
2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.			
5A1: Continue affording the opportunity for City Staff to attend or join emergency management associations like Lakes Area Emergency Management Planning Group, MEMA (Metropolitan Emergency Managers Association) and AMEM (Association of Minnesota Emergency Managers).	\$20,000.00	3	Ongoing
5A2: Continue participation in multi-jurisdictional / multi-agency table top, drill and full-scale exercises.			
5A3: Research and implement lessons learned from actual hazardous events from local, regional and national jurisdictions to avoid probable mistakes from repeating themselves.			
7A1: Work with the community to identify power lines which could be buried to reduce power failures.	\$500,000.00	2	Ongoing

**C. Deephaven Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	2	2A	2A1	Update website, update material handouts	5K	LE, City Staff	Medium
1	2	2A	2A2				
1	2	2B	2B1				
1	2	2B	2B2				
2	7	7A	7A1	Promote and participate in work groups, home owner assessments	500K	LE, City Staff, City Council, Zoning, Xcel Energy	Long
3	5	5A	5A1	Work with HCEM, AMEM and State and local affiliates.	20K	LE, HCEM, State and Local Affiliates.	Long
3	5	5A	5A2				
3	5	5A	5A3				
<b>TOTAL</b>					<b>\$525,000</b>		

**D. Deephaven Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: July 10, 2015
<b>Project Title/Action</b>	<b>#1 Enforce Burning Restrictions</b>	

Responsible Agency	Police Department and Zoning Coordinator
Contact Name	Cory Johnson
Contact Phone/Email	952-474-7555 coryj@deephavenpolice .com
Project Status	<b>X Project Completed</b>
Summary of Project	Updated Ordinances and enforcement actions
Name of Reviewer	Cory Johnson

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Maintain, enforce and update zoning Ordinances</b>	
Responsible Agency	Planning Commission and Zoning Coordinator	
Contact Name	Cory Johnson	
Contact Phone/Email	952-474-7555 coryj@deephavenpolice.com	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Anticipated completion date: Ongoing</b> <input type="radio"/> Project is delayed	
Summary of Project	Constant review and updating as issues arise.	
Name of Reviewer	Cory Johnson	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Dispense educational materials to citizens about potential disasters.</b>	
Responsible Agency	State Emergency Management, Local LE, HCEM	
Contact Name	Cory Johnson	
Contact Phone/Email	952-474-7555 coryj@deephavenpolice.com	
Project Status	<input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: Ongoing</b> <input type="radio"/> Project is delayed	
Summary of Project	Continue to get new and up to date material for handouts, and update website.	
Name of Reviewer	Cory Johnson	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: July 10, 2015
<b>Project Title/Action</b>	<b>#4 Revise/Update local emergency Management plans</b>	
Responsible Agency	Lakes Area Emergency Management, HCEM	
Contact Name	Cory Johnson	
Contact Phone/Email	952-474-7555 coryj@deephavenpolice.com	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Anticipated completion date: September 2015</b>	

	<ul style="list-style-type: none"><li>○ Project is delayed</li></ul>
Summary of Project	Plan will be finalized and is out for review.
Name of Reviewer	Cory Johnson

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**3.1.9. CITY OF EDEN PRAIRIE**

### Hennepin County- Eden Prairie

Eden Prairie is a suburb 12 miles southwest of downtown Minneapolis. The city lies on the north bank of the Minnesota River, upstream from the confluence with the Mississippi River. Eden Prairie is the seventh largest suburb and is composed of large lakes and ponds, and has more than 170 miles of multi-use trails, 2,250 acres of parks, and 1,300 acres of open space. The city is home to more than 2,200 businesses and headquarters of Supervalu, ADC Telecommunications, MTS Systems Corporation and the Minnesota Vikings. Regionally known for Eden Prairie Center, it is also the hub for South West Transit, serving public transportation to three adjacent suburbs..

Latitude/Longitude: 44.8454845, -93.459376  
 Area: 35.24 sq. miles  
 Area - Land only: 32.51 sq. miles (92%)  
 Area - Water only: 2.73 sq. miles (8%)  
 Population: 60,797  
 Housing Units: 25,075

**School District**

- 272 Eden Prairie

**Vulnerability**

- Hennepin Technical College
- Functional Needs 208
- Bridges 68
- Monticello NPP: 35 miles

**Corporate/Employees**

1 Optum	4,000
2 C. H. Robinson Worldwide	1,517
3 Eden Prairie Schools	1,500
4 Starkey Hearing Technologies	1,440
5 Cigna	950
6 Eaton	850
7 SUPERVALU	850
8 Kroll Inc.	808
9 MTS Systems Corporation	808
10 Dell Compellent	750

**Capability**

- CodeRED
- Law Enforcement
- Fire Dept
- Public Works
- Park and Recreation
- FCC Registered Amateur Radio Licenses: 202

**Language**

Language	Percentage
English	90%
Spanish	5%
Russian	2%
Chinese	1%
All Others	11%

Mitigation Priority 1

Mitigation Priority 2

Mitigation Priority 3

**EDEN PRAIRIE MITIGATION PLAN**

**POC: GEORGE ESBENSEN**

**A. Eden Prairie Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Identify potential hazards with other city state and Federal groups	1A1: Incorporate mitigation strategies in EOP
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Develop new programs, collaterals and talking points to use at specific public events	2A1: Use the following areas to increase our touch points: Open House, Web Page, National Night Out, School Program
<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>

3A: Work with other city resources for identification	3A1: Incorporate in Emergency Operations Plan
-------------------------------------------------------	-----------------------------------------------

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: Gather information on potential impacted areas	4A1: Incorporate in Emergency Operations Plan	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Coordination with other agencies	5A1: Joint Operations exercises	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None	None	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: CERT and CSU Team Growth and Capabilities	7A1: Recruitment of new members	
	7A2: Monthly Training in house/with other CERT groups	

**B. Eden Prairie Mitigation Actions**

Mitigation Actions (7)	Estimated Cost	Priority	Timeline
1A1: Incorporate mitigation strategies in EOP	0	1	Complete
2A1: Use the following areas to increase our touch points: Open House, Web Page, National Night Out, School Program	500	4	On-going
3A1: Incorporate in Emergency Operations Plan	TBD	7	TBD
4A1: Incorporate in Emergency Operations Plan	0	5	Complete
5A1: Joint Operations exercises	1000	6	TBD
7A1: Recruitment of new members	2500	3	On-going
7A2: Monthly Training in house/with other CERT groups	2500	2	On-going

**C. Eden Prairie Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A1		0	EPFD	Complete

2	7	7A	7A1	City Depts., FEMA, Hennepin County	2500	EPFD	Ongoing
3	7	7A	7A2	City Depts., FEMA, Hennepin County	2500	EPFD	Ongoing
4	2	2A	2A1	Fire Prevention group / CERT	500	EPFD	July 2017
5	4	4A	4A1	EPFD	0	EPFD	Complete
6	5	5A	5A1	EPFD, FEMA STATE Hennepin County	1000	EPFD	Sep 2017
7	3	3A	3A1	EPFD, CERT, CSU	5000	EPFD	Sep 2017
<b>TOTAL</b>					<b>\$ 11,500</b>		

**D. Eden Prairie Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	1. Continue to enforce zoning and permits in the floodplains	
Responsible Agency	Building and Zoning	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	2. Ensure building code compliance and inspections are conducted	
Responsible Agency	Building and Zoning	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	3. Enforce floodplain management	
Responsible Agency	Building and Zoning	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	4. Update land use plans.	
Responsible Agency	Building and Zoning	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	5. Ensure that all first responders agencies have the latest edition of the Emergency Response Guidebook	
Responsible Agency	EPFD	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	

Summary of Project	<b>Update not submitted</b>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	6. Initiate dialog with the State Duty Officer on increase coordination on spills for highway and rail accidents involving hazardous materials	
Responsible Agency	EPFD	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	7. Create a strategy to work with city, state, and federal agencies as well as private industries to share information on known types and locations of hazardous material that have the potential to affect the City of Eden Prairie, County and region.	
Responsible Agency	EPFD	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	8. Partner with local/regional hospitals and clinics in developing plans and procedures in infectious disease response, including quarantine contingencies.	
Responsible Agency	EPFD	
Contact Name	Esbensen	

Contact Phone/Email	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:
Summary of Project	<b>Update not submitted</b>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	9. Work with the Minnesota Department of Public Health on dispensing of the Strategic National Stockpile.	
Responsible Agency	EPFD	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	10. Promote the use of NOAA Weather Radios	
Responsible Agency	EPFD	
Contact Name	Esbensen	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>Update not submitted</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
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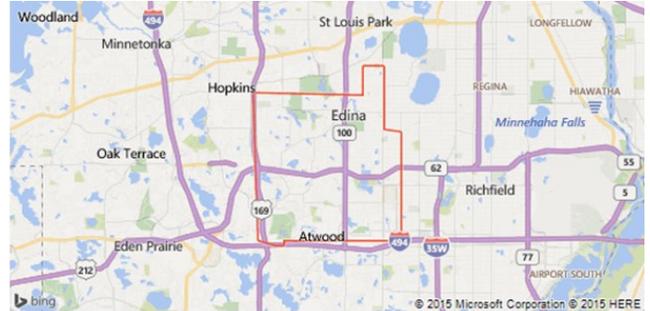
<b>Project Title/Action</b>	11. Develop an awareness campaign for citizens on: How the National Weather Service issues warning and hazards that affected Hennepin County, and siren information as well as NOAA Radios and their use.
Responsible Agency	EPFD
Contact Name	Esbensen
Contact Phone/Email	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul> Explain:
Summary of Project	<b>Update not submitted</b>
Name of Reviewer	

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**3.1.10. CITY OF EDINA**

## Hennepin County- Edina

Edina is a first-ring suburb situated immediately southwest of Minneapolis. Edina began as a small farming and milling community in the 1860's and is today 95 percent developed metropolitan community. Edina began as part of Richfield Township 1850's. In 1888, the residents of the township held a meeting to consider founding a new village, thus separating themselves from Richfield Township. The idea was favorably accepted by those within the community and a committee was established to oversee the transition. Many major highways run through or are close to Edina, making it accessible to all within the metropolitan area. Minnesota State Highways 62 and 100 divide the city into four sections. U.S. Route 169 and Minnesota State Highway 100 extend north and south. Interstate 494 and Minnesota State Highway 62 east and west.



Latitude/Longitude: 44.895282, -93.360126  
 Area: 15.97 sq. miles  
 Area - Land only: 15.45 sq. miles (97%)  
 Area - Water only: 0.52 sq. miles (3%)  
 Population: 47,941  
 Housing Units: 22,560

**School District**  
 • 273 Edina

**Vulnerability**  
 • Functional Needs: 370  
 • Bridges: 76  
 • Monticello NPP: 36 miles

**Corporate/Employer**  
 • Jerry's Foods HQ  
 • Dow Chemical (Filmtex)  
 • Seagate  
 • Regis Corp  
 • Lund Foods HQ  
 • Dairy Queen HQ  
 • Orange Julius HQ  
 • Fairview Southdale Hospital  
 • Macy's

**Capability**  
 • Law Enforcement  
 • Fire  
 • Parks and Recreation  
 • Public Works  
 • Fairview Southdale Hospital with Heliport  
 • FCC Registered Amateur Radio Licenses: 149



- 1** Mitigation Priority 1  
• EOP Updates
- 2** Mitigation Priority 2  
• FEMA Training
- 5** Mitigation Priority 3  
• Text Message/Pager System

**EDINA MITIGATION PLAN** **POC: TOM SCHMITZ**

**A. Edina Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
1A: Review/update local emergency operations plan	1A1: Twice a year review EOP to ensure all positions are updated with correct personnel and contact numbers.	
Goal	Increase education, outreach, and awareness	
2	OBJECTIVES	ACTIONS
2A: Prepare position aids (job descriptions) for key EOC personnel	2A1: Develop laminated JD for each of the key positions in the CFLOP organizational structure. These will be available for EOC personnel to reference during training or actual events.	
2B: Conduct in-house IS 100 and 200 training for EOC personnel	2B1: Provide another option for staff to obtain the necessary FEMA/DHS minimum training through classroom session.	

2C: Provide IS 300 training for key EOC personnel	2C1: Identify key personnel to advance to IS 300 training. Bring in a training organization to provide training
---------------------------------------------------	-----------------------------------------------------------------------------------------------------------------

<b>Goal 3</b>	Protect natural and cultural resources
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
4A: Review/update FEMA and local watershed flood maps	4A1: Work with Engineering Department to insure updated maps are readily available. Have printed copies in EOC storage room.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
5A: Prepare and have on hand in the EOC key City maps and essential ICS wall charts and forms	5A1: Work with local All Hazards Incident Management Team to develop similar wall posters for our EOC.
5B: Set up a pager group within our City CAD system for all primary and alternate EOC personnel and conduct test pages quarterly.	5B1: Work with our Communications Center to put together a text message pager group for EOC personnel and conduct quarterly test pages.

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
6A: Incorporate Heritage Resources Disaster Management Planning report from Preservation Planning Consultant as reference to the City EOP	6A1: Obtain report from Heritage Preservation Consultant to have as a reference to the EOP. The report outlines the important disaster management practices recommended by the consultant.

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
7A: Develop city damage assessment plan (DAP)	7A1: Prepare written DAP that outlines key personnel and their responsibilities. Send draft document out to all entities listed in the plan to gain their feedback before final plan. Provide training to all key personnel and evaluate and adjust plan accordingly.
7B: Conduct one Technology EOC activation and one Full EOC activation annually.	7B1: Technology activation brings in our IT Department to setup all the computers and phones and update any

	necessary software. The Full EOC activation will bring primary and alternate EOC personnel together.
--	------------------------------------------------------------------------------------------------------

**B. Edina Mitigation Actions**

Mitigation Actions (10)	Estimated Cost	Priority	Timeline
1A1: Twice a year review EOP to ensure all positions are updated with correct personnel and contact numbers.	\$0	1	Biannually
2A1: Develop laminated JD for each of the key positions in the CFLOP organizational structure. These will be available for EOC personnel to reference during training or actual events.	\$200	3	2017
2B1: Provide another option for staff to obtain the necessary FEMA/DHS minimum training through classroom session.	\$100	2	2017
2C1: Identify key personnel to advance to IS 300 training. Bring in a training organization to provide training	\$2500	6	2018/19
4A1: Work with Engineering Department to insure updated maps are readily available. Have printed copies in EOC storage room.	\$300	5	2017/18
5A1: Work with local All Hazards Incident Management Team to develop similar wall posters for our EOC.	\$300	4	2017
5B1: Work with our Communications Center to put together a text message pager group for EOC personnel and conduct quarterly test pages.	\$0	2	2017
6A1: Obtain report from Heritage Preservation Consultant to have as a reference to the EOP. The report outlines the important disaster management practices recommended by the consultant.	\$0	8	2017
7A1: Prepare written DAP that outlines key personnel and their responsibilities. Send draft document out to all entities listed in the plan to gain their feedback before final plan. Provide training to all key personnel and evaluate and adjust plan accordingly.	\$500	7	2017/18
7B1: Technology activation brings in our IT Department to setup all the computers and phones and update any necessary software. The Full EOC activation will bring primary and alternate EOC personnel together.		9	Annually

**C. Edina Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A1	EOP contacts review	0	Fire	Biannual
2	2	2B	2B1	FEMA Training	100	Fire	2017
2	5	5B	5B1	Text message pager system	0	Dispatch	2017
3	2	2A	2A1	Create job description sheet	200	Fire	2017
4	5	5A	5A1	Wall Posters	300	Fire	2017
5	4	4A	4A1	Map updates	300	Engineer	2017/18
6	2	2C	2C1	IS 300 Training	2500	TBD	2018/19

7	7	7A	7A1	Prepare DAP	500	Fire	2017/18
8	6	6A	6A1	Consultant Services	0	Planning	2017
9	7	7B	7B1	EOC Set up	0	IT/Fire	Annual
<b>TOTAL</b>					<b>\$3,900</b>		

#### D. Edina Mitigation Action Progress Report

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	Develop/update/publicize city evacuation plans.	
Responsible Agency	Edina Fire	
Contact Name	Tom Schmitz	
Contact Phone/Email	952-826-0332/tschmitz@edinamn.gov	
Project Status	<input checked="" type="checkbox"/> <b>Anticipated completion date: 2018</b> <input type="checkbox"/> Project is delayed <b>Explain: this was overlooked during the last EOP revision. No significant changes from the 2008 plan but will update.</b>	
Summary of Project	Staff Activity	
Name of Reviewer	BRK- HCEM	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	Review/update local Emergency Operations Plan	
Responsible Agency	Edina Fire	
Contact Name	Tom Schmitz	
Contact Phone/Email	952-826-0332/tschmitz@edinamn.gov	
Project Status	<input checked="" type="checkbox"/> <b>Project Completed</b>	
Summary of Project	Staff Activity	
Name of Reviewer	BRK- HCEM	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	Maintain/update hazardous Materials Emergency plan	
Responsible Agency	Edina Fire	
Contact Name	Tom Schmitz	
Contact Phone/Email	952-826-0332/tschmitz@edinamn.gov	
Project Status	<input checked="" type="checkbox"/> <b>Project Completed</b>	
Summary of Project	Staff Activity	
Name of Reviewer	BRK- HCEM	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	Maintain/update plan to contact utility companies	
Responsible Agency	Edina Fire	

Contact Name	Tom Schmitz
Contact Phone/Email	952-826-0332/tschmitz@edinamn.gov
Project Status	<b>X Project Completed</b>
Summary of Project	Staff Activity
Name of Reviewer	BRK- HCEM

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**3.1.11. CITY OF EXCELSIOR**

Hennepin County- Excelsior

Excelsior was founded in the 1850s as a destination for vacationers, primarily from the cities of Minneapolis and St. Paul. Throughout the years, Excelsior's Water Street has been the home to many businesses, including hotels, restaurants, and merchants. Minnesota State Highway 7 serves as a main transportation route.



Latitude/Longitude: 44.902228, -93.5658285  
 Area: 0.69 sq. miles  
 Area - Land only: 0.63 sq. miles (91%)  
 Area - Water only: 0.06 sq. miles (9%)  
 Population: 2,188  
 Housing Units: 1,254

**2** Mitigation Priority 1  
 • Certify Storm Ready Program

**6** Mitigation Priority 2  
 • Design and implement checklists with timelines for all new building projects.

**2** Mitigation Priority 3  
 • Host annual severe weather awareness courses.

**School District**  
 • 276 Minnetonka

**Vulnerability**  
 • Bridges 4  
 • Functional Needs 103  
 • Monticello NPP: 30 miles

**Corporate/Employer**  
 • Retail  
 • Recreation

**Capability**  
 • Public Works  
 • Fire Department  
 • South Lake Police  
 • Police Chaplains Group  
 • Park and Recreation  
 • FCC Registered Amateur Radio Licenses: 31



12

**EXCELSIOR MITIGATION PLAN**

**POC MIKE MEEHAN**

**A. Excelsior Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 2</b>	Increase education, outreach, and awareness
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
2A: Achieve certification in the National Weather Service Storm Ready Program	2A1: Achieve certification in the National Weather Service Storm Ready Program
2B: Improve citizens understanding of available communications for notification of severe weather warnings.	2B1: Host annual severe weather awareness courses.
	2B2: Host annual SkyWarn course for local citizens and first responders.

<b>Goal 3</b>	Protect natural and cultural resources
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	

None	
------	--

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
6A: Ensure building code compliance and inspections are conducted on new construction projects.	6A1: Design and implement checklists with timelines for all new building projects.

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

**B. Excelsior Mitigation Actions**

Mitigation Action (4)	Estimated Cost	Priority	Timeline
2A1: Achieve certification in the National Weather Service Storm Ready Program	Staff time	1	2016
2B1: Host annual severe weather awareness courses.	Staff time	3	Ongoing
2B2: Host annual SkyWarn course for local citizens and first responders.	Staff time	4	Ongoing
6A1: Design and implement checklists with timelines for all new building projects.	Staff time	2	2016

**C. Excelsior Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	2	2A	2A1	Achieve certification in the NWS Storm Ready program.	Staff time	SLMPD	1-2yrs
2	6	6A	6A1	Design and implement checklists with timelines for all new building projects.	Staff time	Planning	3-5yrs

3	2	2B	2B1	Host annual severe weather awareness courses.	Staff time	SLMPD	3-5yrs
4	2	2B	2B2	Host annual SkyWarn course for local citizens and first responders.	Staff time	SLMPD	3-5yrs
<b>TOTAL</b>					<b>\$0</b>		

**D. Excelsior Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Achieve certification in the National Weather Services Storm Ready Program.</b>	
Responsible Agency	South Lake PD	
Contact Name	Meehan	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Promote the use of NOAA Weather Radios for early warning and post event information.</b>	
Responsible Agency	South Lake PD	
Contact Name	Meehan	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Create a severe weather awareness campaign for our citizens.</b>	

Responsible Agency	South Lake PD
Contact Name	Meehan
Contact Phone/Email	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul> Explain:
Summary of Project	<b>UPDATE NOT SUBMITTED</b>
Name of Reviewer	

**3.1.12. FORT SNELLING**

Hennepin County- Fort Snelling

Fort Snelling, originally known as Fort St. Anthony, is a former military fortification located at the confluence of the Minnesota and Mississippi Rivers in Hennepin County. The original installation was constructed between 1820 and 1824 as Fort St. Anthony. It received its current name upon its completion in 1824 in honor of Colonel Josiah Snelling, who commanded the regiment that built it, and oversaw its construction. The 2000 census listed Fort Snelling as an unorganized territory (a designation it has carried since it was founded) with a total population of 442 people. As of the 2000 census, there were 442 people residing in the unorganized territory. According to the U.S. Census Bureau, the unorganized territory has a total area of 6.7 miles. Additionally, 4.65% of the total area of Fort Snelling is covered by water.



**Capability**

**Corporate/Employer**

- Air Force Reserve
- Army Reserve
- VA medical center
- MAC

**Vulnerability**

- Monticello NPP: 41 miles
- Military Installations
- Federal Buildings



Mitigation Priority 1

Mitigation Priority 2

Mitigation Priority 3



**Mitigation Plan not submitted; Region has a variety of partners that will determine mitigation strategies**

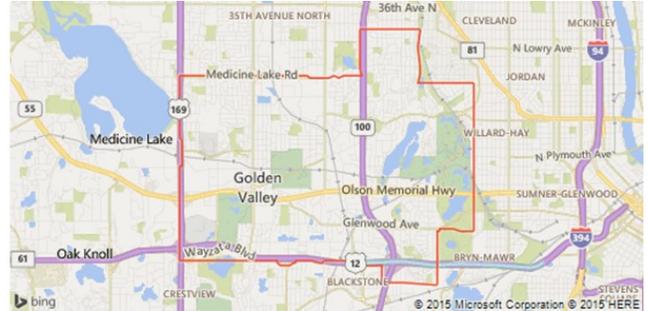
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**3.1.13. CITY OF GOLDEN VALLEY**

## Hennepin County- Golden Valley



Golden Valley is a western suburb of Minneapolis and is the main corporate headquarters of General Mills and Pentair. More than 30,000 people work in Golden Valley due to the presence of large employers such as General Mills, Honeywell, and Pentair. Interstate 394, U.S. Route 169, and Minnesota State Highways 55 and 100 are four of the main arterial routes in the city



Latitude/Longitude: 44.991724, -93.359641  
 Area: 10.57 sq. miles  
 Area - Land only: 10.23 sq. miles (97%)  
 Area - Water only: 0.35 sq. miles (3%)  
 Population: 20,371  
 Housing Units: 9,349

**School District**

- 270 Hopkins
- 281 Robbinsdale

**Capability**

- Police
- Fire
- FCC Registered Amateur Radio Licenses: 88

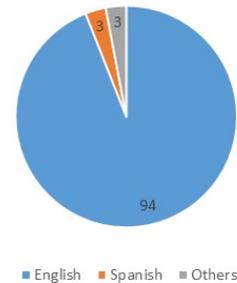
**Vulnerability**

- Functional needs 1223
- Bridges 112
- Monticello NPP: 30 miles

**Corporate/Employer**

- General Mills 5,500
- Allianz Life 2,047
- Optum Health 1,764
- Honey well 1,732
- Mortenson Construction 798
- Buffalo Wild Wings HQ

Language



Mitigation Priority 1

Mitigation Priority 2

Mitigation Priority 3

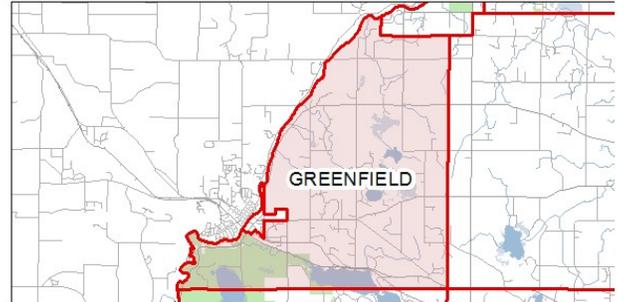
**Mitigation plan not submitted**

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**3.1.14. CITY OF GREENFIELD**

Hennepin County- Greenfield

Greenfield sits along the Crow River in Hennepin County. The Village of Greenfield, now known as the City of Greenfield, was set apart by the Hennepin County Commissioners on April 10, 1858. It encompassed that portion of Township 119, range West, lying east of the Crow River. The original name, Greenwood, reflected the appearance of the terrain, which was commonly referred to by native Sioux, Chippewa and Ojibway as "Big Woods".



Latitude/Longitude: 45.1078495, -93.705623  
 Area: 21.55 sq. miles  
 Area - Land only: 20.40 sq. miles (95%)  
 Area - Water only: 1.15 sq. miles (5%)  
 Population: 2,777  
 Housing Units: 970

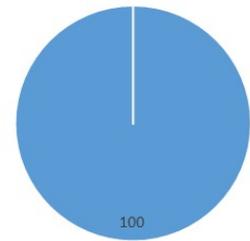
**School District**  
 • 877 Buffalo-Hanover-Montrose  
 • 883 Rockford

**Capability**  
 • Public Works  
 • Hanover/Loretto/Rockford Fire  
 • FCC Registered Amateur Radio Licenses: 2

**Vulnerability**  
 • Monticello NPP: 15 Miles

**Corporate/Employer**

Language



**6** Mitigation Priority 1  
 • Install the remaining four sirens at the sites that have been identified

**3** Mitigation Priority 2  
 • Apply for grants from BWSR and Hennepin County to fund projects that will reduce phosphorous levels coming from the Dance Hall Creek Sub-watershed for water quality

**4** Mitigation Priority 3  
 • Adopt and implement storm water utility plan for future water quality.

**GREENFIELD MITIGATION PLAN**

**POC: BONNIE RITTER**

**A. Greenfield Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Drainage/Culvert Improvements: Develop a repair/replacement plan for ditching and culvert replacement	1A1: Implement storm water management plan 1A2: Implement capital improvement program projects intended to reduce flood potential
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Educate the public to increase awareness of hazards and opportunities for mitigation action	2A1: Provide information to the public on the City website and other opportunities.
<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>

3A: Promote storm water management	3A1: Adopt and implement storm water utility plan for future water quality.
3B: Reduce phosphorous levels of Lake Sarah	3B1: Apply for grants from BWSR and Hennepin County to fund products that will reduce phosphorous levels coming from the Dance Hall Creek Sub-watershed for water quality
	3B2: Work with Pioneer-Sarah Creek Watershed to identify and carry out projects to reduce TMDL levels

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
4A: Assess areas that are predisposed to natural disasters or manmade hazards that could be responsible for financial and/or personal impact.		4A1: Review areas of impact with staff – secure portable generator for Water Plant

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
5A: Wellhead Protection Plan		5A1: Continue to meet State and Federal regulations with the plan

<b>Goal 6</b>	Promote disaster-resistant future development	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
6A: Complete City coverage with outdoor warning sirens		6A1: Install the remaining four sirens at the sites that have been identified

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
None		

**B. Greenfield Mitigation Actions**

Mitigation Actions (9)	Estimated Cost	Rank	Timeline
1A1: Implement storm water management plan	\$15,000/year	5	Ongoing
1A2: Implement capital improvement program projects intended to reduce flood potential			
2A1: Provide information to the public on the City website and other opportunities.	Staff time	7	Ongoing
3A1: Adopt and implement storm water utility plan for future water quality.	Staff time	3	By end 2015

3B1: Apply for grants from BWSR and Hennepin County to fund products that will reduce phosphorous levels coming from the Dance Hall Creek Sub-watershed for water quality	Staff time + \$5000	2	Ongoing
3B2: Work with Pioneer-Sarah Creek Watershed to identify and carry out projects to reduce TMDL levels	Staff time	8	
4A1: Review areas of impact with staff – secure portable generator for Water Plant	Staff time + \$50,000 for generator	4	Ongoing
5A1: Continue to meet State and Federal regulations with the plan	Staff time	6	Ongoing
6A1: Install the remaining four sirens at the sites that have been identified	\$90,000	1	Ongoing

**C. Greenfield Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	6	6A	6A1	Vendor-Federal Signal (4 each model #2001-30) with installation by Ready Watt. Locations as designated on Siren & Location Map	90K	City of Greenfield	Ongoing
2	3	3B	3B1	Hennepin Co. Environmental Services, BWSR and Watershed	5K grants	City of Greenfield, financial partners, Watershed	Ongoing
3	3	3A	3A1	Greenfield Public Works	Staff Time	City of Greenfield	End of 2015
4	4	4A	4A1	City Staff with City Assessor	50K	City of Greenfield	Ongoing
5	1	1A	1A1	Greenfield Public Works	15K/yr.	City of Greenfield	Ongoing
			1A2				
6	5	5A	5A1	City Staff with Veolia Water	Staff time	City of Greenfield	Ongoing
7	2	2A	2A1	City Staff/City Website	Staff time	City of Greenfield	Ongoing
8	3	3B	3B2	Collaborate with Sarah Creek Watershed	Staff time	Greenfield/Watershed	Ongoing
<b>TOTAL</b>					<b>\$220,000</b>		

**D. Greenfield Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b># 1 Citizen public education and awareness of severe weather</b>	
Responsible Agency	Greenfield Emergency Management	
Contact Name	Bonnie Ritter	
Contact Phone/Email	612-751-4515 britter@ci.greenfield.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	Emergency Management Plan was discussed at public Council meeting, along with articles in the quarterly City newsletter. Although this project is marked complete, it is an ongoing effort that will continue and be a part of the 2015 plan.	
Name of Reviewer		

**3.1.15. CITY OF GREENWOOD**

Hennepin County- Greenwood

Founded in 1956, Greenwood is located 20 minutes west of Minneapolis on Highway 7.

Latitude/Longitude: 44.910854, -93.5519775  
 Area: 0.61 sq. miles  
 Area - Land only: 0.36 sq. miles (59%)  
 Area - Water only: 0.25 sq. miles (41%)  
 Population: 688  
 Housing Units: 327



- 6** Mitigation P1-Upgrade storm water infrastructure
  - Identify storm water problem areas and incorporate improvements into capital plan.
- 6** Mitigation P2- Bury Power Lines
  - Include language in building code recommending buried power lines.
- 2** Mitigation P3-Improve citizens understanding of available communications for notification of severe weather warnings.
  - Host annual Skywarn course for local citizens and first responders.

**School District**

- 276 Minnetonka

**Vulnerability**

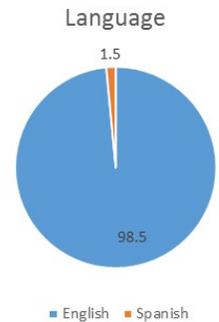
- Flooding location
- Monticello NPP: 29 miles

**Corporate/Employer**

- Bridgewater Bank

**Capability**

- Police- Southlake
- Police Chaplains Group
- Fire-Excelsior
- Public Works- Deephaven
- FCC Registered Amateur Radio Licenses: 1



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**GREENWOOD MITIGATION PLAN**

**POC: MIKE MEEHAN**

**A. Greenwood Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Improve citizens understanding of available communications for notification of severe weather warnings.	2A1: Host annual severe weather awareness courses. 2A2: Host annual SkyWarn course for local citizens and first responders.
<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
6A: Upgrade storm water infrastructure	6A1: Identify storm water problem areas and incorporate improvements into capital plan.
6B: Encourage new or existing power lines to be buried for the reduction of future power outages	6B1: Include language in building code recommending buried power lines.

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

**B. Greenwood Mitigation Actions**

Mitigation Actions (4)	Estimated Cost	Priority	Timeline
2A1: Host annual severe weather awareness courses.	Staff time	3	Ongoing
2A2: Host annual Skywarn course for local citizens and first responders.	Staff time	4	Ongoing
6A1: Identify storm water problem areas and incorporate improvements into capital plan.	\$30,000	1	Ongoing
6B1: Include language in building code recommending buried power lines.	Staff time	2	2016

**C. Greenwood Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	6	6A	6A1	Identify storm water problem areas and incorporate improvements into capital plan.	\$30,000	Public Works	5 years
2	6	6B	6B1	Include language in building code recommending buried power lines.	Staff time	Zoning	2016

3	2	2A	2A1	Host annual severe weather awareness courses.	Staff time	SLMPD	Ongoing
4	2	2A	2A2	Host annual SkyWarn course for local citizens and first responders.	Staff time	SLMPD	Ongoing
<b>TOTAL</b>					<b>\$30,000.00</b>		

**D. Greenwood Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Achieve certification in the National Weather Services Storm Ready Program.</b>	
Responsible Agency	South Lake PD	
Contact Name	Meehan	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Promote the use of NOAA Weather Radios for early warning and post event information.</b>	
Responsible Agency	South Lake PD	
Contact Name	Meehan	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Create a severe weather awareness campaign for our citizens.</b>	
Responsible Agency	South Lake PD	

Contact Name	Meehan
Contact Phone/Email	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:
Summary of Project	<b>UPDATE NOT SUBMITTED</b>
Name of Reviewer	

**3.1.16. CITY OF HANOVER**

Hennepin County- Hanover

Hanover is located in both Wright and Hennepin Counties, just a few miles southwest of St. Michael/Albertville. The North Crow River flows right through the downtown district and serves as the dividing line between Hennepin and Wright county. County Road 19 serves as a main route of transportation for Hanover



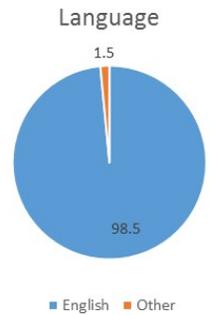
Latitude/Longitude: 45.1558775, -93.668205  
 Area: 5.60 sq. miles  
 Area - Land only: 5.46 sq. miles (97%)  
 Area - Water only: 0.14 sq. miles (3%)  
 Population: 2,938  
 Housing Units: 950

**School District**  
 • 877 Buffalo-Hanover-Montrose

**Capability**  
 • Shares law enforcement coverage between Wright and Hennepin County Sheriffs office  
 • Fire Department

**Vulnerability**  
 • Crow River Flooding  
 • 1895 Historic Bridge  
 • Monticello NPP: 12 Miles

**Corporate/Employer**



**Mitigation Priority 1**

**Mitigation Priority 2**

**Mitigation Priority 3**

**Although Hanover City limits are in both Hennepin and Wright County, Wright County Maintains the Mitigation Planning for Hanover. The river determines the boundary for the two counties.**

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**3.1.17. CITY OF HOPKINS**

Hennepin County- Hopkins

The first settlers of Hopkins arrived in 1852 as land surrounding Minneapolis was opening up and being explored by members stationed at Fort Snelling. However, the roots of the town began in 1887 with the building of the Minneapolis Threshing Machine Company, later called Minneapolis—Moline, to make farm equipment. At this time, the name of the community was West Minneapolis. In 1928, the name of the village was changed to Hopkins after Harley H. Hopkins, who was among its first homesteaders and was the community's first postmaster. Hopkins is approximately four square miles in size and is surrounded by the larger, western suburban communities of Minnetonka, St. Louis Park, and Edina. Hopkins is about 98% developed with little remaining vacant land. U.S. Route 169 and Minnesota State Highway 7 are two of the main arterial routes in the city.



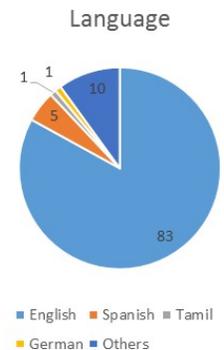
Latitude/Longitude: 44.927667, -93.400172  
 Area: 4.11 sq. miles  
 Area - Land only: 4.08 sq. miles (99%)  
 Area - Water only: 0.03 sq. miles (1%)  
 Population: 17,591  
 Housing Units: 8,987

**School District**  
 • 270 Hopkins

**Vulnerability**  
 • Functional Needs: 443  
 • Bridges: 16  
 • Monticello NPP: 32 miles

**Corporate/Employer**  
 • Hopkins Center for the Arts  
 • Hopkins Pavilion  
 • Hopkins Activity Center

**Capability**  
 • Law Enforcement  
 • Fire  
 • Public Works  
 • Citizens Academy  
 • Hopkins Activity Center  
 • FCC Registered Amateur Radio Licenses: 62



- 2** Mitigation Priority 1  
 • Publicize and encourage the adoption of appropriate hazard mitigation actions.
- 1** Mitigation Priority 2  
 • Periodically exercise flood response actions  
 • Review and update city wide evacuation plan
- 4** Mitigation Priority 3  
 • Partnering with PW, assess areas of city that may be vulnerable to disasters.

**HOPKINS MITIGATION PLAN**

**POC: DALE SPECKEN**

**A. Hopkins Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the Environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
1A Flooding- Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding.		1A1: Update inundation map every 10 years
		1A2: Review and compare existing flood control standards, zoning, and building requirements
		1A3: Review and update policies that discourage growth in flood-prone areas
		1A4: Review and update city wide evacuation plan
		1A5: Periodically exercise flood response actions
		1A6: Update flooding response actions in Regional Emergency Operations Plan
2	OBJECTIVES	ACTIONS
	Increase education, outreach, and awareness	

2A: Educate the public to increase awareness of hazards and opportunities for mitigation actions.	2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions.
	2A2: Provide information to the public on the city website and through public education opportunities.
2B: Promote partnerships between the state, counties, local jurisdictions, and partner agencies to identify, prioritize, and implement mitigation actions.	2B1: Participate as a member in local or regional hazard mitigation planning group
	2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.
2C: Work with Civic groups, businesses and other local agencies to promote hazard mitigation in local community.	2C1: Increase awareness and knowledge of hazard mitigation principles and practices
	2C2: Encourage businesses to develop and implement hazard mitigation actions
	2C3: Support or provide the private sector events, workshop, symposium, and continued education opportunities.

<b>Goal 3</b>	Protect natural and cultural resources
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
3A: Prevent from building and encroaching on natural resources without effecting other cultural	3A1: Work with Ed and Cultural groups to preserve resources

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
4A: Assess areas of the city for the impacts of natural disaster.	4A1: Partnering with PW, assess areas of city that may be vulnerable to disasters.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
5A: Work with state, county and local officials to enhance mitigation strategies.	5A1: Meet with officials to see how we can mitigate potential mitigation issues

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
6A: Work with City Departments to make sure that future development is disaster resistance.	6A1: Promote disaster resistance Buildings

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
---------------	--------------------------------------------------------------------------------------

OBJECTIVES	ACTIONS
7A: Work to make city less vulnerable to disasters	7A1: Work with new contractors and developers to build strong and less vulnerable.

**B. Hopkins Mitigation Actions**

Mitigation Action(18)	Estimated Cost	Rank	Timeline
1A1 Update inundation map every 10 years	Time: 10 \$10,000.00	6	Annual 10 yr. update Long
1A2 Review and compare existing flood control standards, zoning, and building requirements	Man hours: 10 \$600.00	3	Annual- 1 <sup>st</sup> QTR Short
1A3 Review and update policies that discourage growth in flood-prone areas	Man hours:15 \$450.00	4	Annual 2 <sup>nd</sup> QTR Med
1A4 Review and update city wide evacuation plan	Man hours: 15 \$450.00	2	Annual- 2 <sup>nd</sup> QTR Med
1A5 Periodically exercise flood response actions	Man Hours: 150 \$5,000.00	1	Annual- 4 <sup>th</sup> QTR Long
1A6 Update flooding response actions in Regional Emergency Operations Plan	Man Hours: 10 \$300.00	5	Annual- 4 <sup>th</sup> QTR Long
2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions.	Man Hours: 20 \$1,200.00	1	Annual 3 <sup>rd</sup> QRT
2A2: Provide information to the public on the city website and through public education opportunities	\$0	3	Long
2B1: Participate as a member in local or regional hazard mitigation planning group	Man Hours: 10	2	Annual 1 <sup>st</sup> QRT
2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.	\$0	2	Med
2C1: Increase awareness and knowledge of hazard mitigation principles and practices	Man Hours: 10 \$7,500.00	3	Annual 2 <sup>nd</sup> QRT
2C2: Encourage businesses to develop and implement hazard mitigation actions.		3	
2C3: Support or provide the private sector events, workshop, symposium, and continued education opportunities.		3	
3A1: Work with Education and Cultural groups to protect and preserve our natural resources	Man Hours: 20 \$450.00	1	Annual
4A1: Partnering with PW, assess areas of city that may be vulnerable to disasters.	Man Hours: 20 \$500.00	1	Annual
5A1: Meet with officials to see how we can mitigate potential mitigation issues.	Man Hours: 8 \$500.00	1	Annual 1 <sup>st</sup> and 4 <sup>th</sup> QRT
6A1: Promote disaster resistance buildings	Man Hours: 10 \$500.00	1	Annual
7A1: Work with new contractors and developers to build strong and less vulnerable to all types of disaster	Man Hours: \$100.00	1	Annual

**C. Hopkins Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A5	Exercise emergency response to flooding in low lying areas.	5K	EM Exercise team	3-5yrs
1	2	2A	2A1	Work with ED Department and Planning to work on hazard mitigation policies.	1.2K	EM/PD/FD	1-2yrs
1	3	3A	3A1	Working with Multi Cultural Advisory Group (MAC) to preserve natural resource without effecting other cultures	450	EM/PW/Ed	3-5yrs
1	4	4A	4A1	Working with other city departments to find areas of city that would be vulnerable to natural disasters	500	EM	2-3yrs
1	5	5A	5A1	Continue to meet with state and county officials to continue enhancing mitigation planning.	500	EM/Ed	3-5yrs
1	6	6A	6A1	Work with planning and ED to work with developers to promote disaster resistance construction.	500	EM	3-5yrs
1	7	7A	7A1	Work with developers to build cost effective disaster resistant construction.	100	EM, ED, PW	Annually
2	1	1A	1A4	Work with PD and PW to keep evacuation plan updated.	450	LE/Fire/EM	2-3yrs
2	2	2B	2B1	Continue to be a part of or assign someone to participate in local and regional planning	0	Fire /EM	2-3 yrs
2	2	2B	2B2	Continue to provide seminars and workshops to private sector with opportunities on Emergency Management functions	0	EM	2-3 yrs
3	1	1A	1A2	Annual review with dept. heads on flood control standards and zoning policies.	600	EM/ City Planner	1-2yrs
3	2	2A	2A2	Work with web designer to keep website updated with public education	2.5K	EM	1-4 yrs

3	2	2C	2C1	Will work with the community by giving talks and presentations on hazard mitigation practices.	2.5K	EM	1-4 yrs
3	2	2C	2C2	Work with business to develop mitigation plans and strategies	2.5K	EM	1-4 yrs
3	2	2C	2C3	Continue to provide seminars and workshops to private sector with opportunities on Emergency Management functions	2.5K	EM	1-4 yrs
4	1	1A	1A3	Review policy annually to discourage building in flood prone areas.	450	City/Watershed	2-3yrs
5	1	1A	1A6	Keep regional plan updated for flood response	300	EM/Plans Team	3-5yrs
6	1	1A	1A1	Work with GIS dept to update flood inundation maps	10K	PW/GIS/EM	3-5
<b>TOTAL</b>					<b>\$30,050</b>		

**D. Hopkins Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Develop a public awareness campaign for citizens on how the National Weather Service issues warnings and the hazards that affect Hennepin County. Also to include information on siren activation as well as the importance of NOAA Weather Radios.</b>	
Responsible Agency	Hopkins Fire	
Contact Name	Specken	
Contact Phone/Email		
Project Status	<b>X Project Completed</b>	
Summary of Project		
Name of Reviewer		

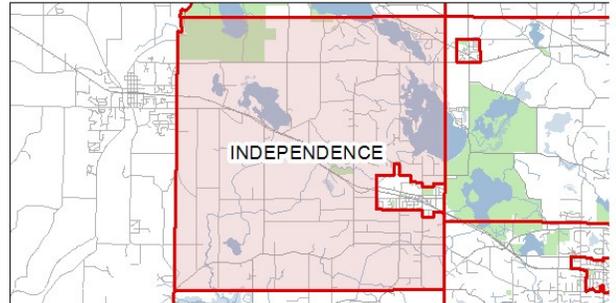
<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Prevention: Continue to enforce zoning and permit regulations in the floodplains.</b>	
Responsible Agency	Planning	
Contact Name	Specken	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule	

	<input checked="" type="radio"/> <b>Anticipated completion date: Ongoing</b> <input type="radio"/> Project is delayed
Summary of Project	
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Property Protection: Enforce floodplain management rules and guidelines requiring new structures be elevated above Base Floodplain Elevation.</b>	
Responsible Agency	Planning	
Contact Name	Specken	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: Ongoing</b> <input type="radio"/> Project is delayed	
Summary of Project		
Name of Reviewer		

**3.1.18. CITY OF INDEPENDENCE**

Hennepin County- Independence



Independence Township was organized on April 11, 1858, and became the Village of Independence on January 8, 1957, and the city of Independence on April 9, 1974. Independence is located on the western edge of Hennepin. Two major Three River parks; Rebecca and Baker, can be accessed directly from Independence and the popular Luce Line recreation trail crosses the south side of the city. U.S. Route 12 serves as a main arterial route to the community

Latitude/Longitude: 45.021528, -93.706355  
 Area: 34.56 sq. miles  
 Area - Land only: 32.37 sq. miles (94%)  
 Area - Water only: 2.19 sq. miles (6%)  
 Population: 3,504  
 Housing Units: 1,305

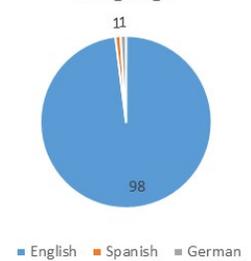
**School District**

- 278 Orono
- 879 Delano
- 277 Westonka

**Capability**

- Law Enforcement West Hennepin
- Police Chaplains Group
- Fire: Delano, Loretto and Maple Plain
- Park and Recreation
- FCC Registered Amateur Radio Licenses: 4

**Language**



**2** Mitigation Priority 1

- Purchase Code Red
- Improve Public Education/Awareness

**2** Mitigation Priority 2

- Work with Local Business in Mitigation

**7** Mitigation Priority 3

- Install Generator Power

**Vulnerability**

- Functional Needs: 24
- Bridges: 3
- Monticello NPP: 20 Miles

**Corporate/Employer**

- Homestead Orchard
- L and S Orchard
- Camp Iduhapi

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**INDEPENDENCE MITIGATION PLAN**

**POC: GARY KROELLS**

**A. Independence Objectives and Actions**

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
	1A: Flooding Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding.	1A1: Review and compare existing flood control standards, zoning, and building requirements. Review and develop engineering plans with new street improvements, storm sewer runoff design, and INI improvements. 1A2: Review and update policies that discourage growth in flood-prone areas
	1B: Gas Line Protection Develop a comprehensive approach with gas line companies to reduce the possibility of damage to gas line in City of Independence.	1B1: Develop emergency management plans with gas companies to protect the underground and above ground gas lines/values.
	1C: Main transmission electrical lines through Independence.	1C1: Identify the different main transmission lines through Independence between Xcel Energy, Great River Energy and Wright Hennepin

<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Invest in a comprehensive emergency notification system to immediately notify all citizens of an emergency, the action plan, and response to the emergency.	2A1: Work with Independence to purchase Code Red or Ever bridge notification system for our residents.
	2B: Educate the public to increase awareness of hazards and opportunities for mitigation actions.	2B1: Provide information to the public on the city website and through public education opportunities.
	2C: Work with citizens, businesses and other local agencies to promote hazard mitigation in local community.	2C1: Encourage businesses to develop and implement hazard mitigation actions.

<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	3A: Reduction of waste and runoff into our lakes, streams, and watersheds.	3A1: Work with our local watershed districts to make improvements to protect our lakes and streams for water quality.

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	4A: Overhead power lines within the city.	4A1: Work with Excel Energy to remove and install underground power on future development projects.
	4B: West Hennepin Police Department	4B1: Security Protection, building upgrades, backup generator installed.
	4C: Highway 12 Corridor Improvements	4C1: Complete redesign of Highway 12 through Independence.
	4D: Burlington Northern Santa Fe Railroad	4D1: Identify and train staff on emergency response to a railroad disaster on the rail road. Develop an emergency response evacuation plan, educate citizens and train on it.
	4E: Lake Sarah and Lake Independence, local parks and Lake Rebecca.	4E1: Installation of outdoor warning sirens to cover the Lake Sarah, Lake Independence, Rebecca Park, and all local parks within Independence.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>

5A: Wellhead Protection Plan	5A1: Continue to meet the state and Federal regulations with the protection plan.
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<b>Goal 6</b>	Promote disaster-resistant future development	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	6A: Outdoor Warning Sirens	6A1: Identify future sites for new sirens if new development and future group occurs.
	6B: In ground electrical lines.	6B1: Work with city engineers to promote and require all new development to includes in ground power lines vs. overhead power lines.
	6C: Backup generators for sewer lift stations.	6C1: All future and current sewer lift stations must require a backup generator to operate the system.

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	7A: Bury all power lines.	7A1: Work with the community and Excel to identify power lines that could be buried to reduce power failures in Independence.
	7B: Trim back all trees/brush around Xcel energy power lines to require road right of way setbacks.	7B1: City and County Public Works and Excel energy remove trees causing hazard to our power lines.
	7C: Backup generator installed for West Hennepin Public Safety Department.	7C1: Install backup generator to operate West Hennepin Police Department.
	7D: Backup generators for sewer lift stations.	7D1: All future and current sewer lift stations must require a backup generator to operate the system.

**B. Independence Mitigation Actions**

Mitigation Actions (20)	Estimated Cost	Priority	Timeline
1A1: Review and compare existing flood control standards, zoning, and building requirements. Review and develop engineering plans with new street improvements, storm sewer runoff design, and INI improvements.	\$10,000	4	5 years
1A2: Review and update policies that discourage growth in flood-prone areas			
1B1: Develop emergency management plans with gas companies to protect the underground and above ground gas lines/values.			
1C1: Identify the different main transmission lines through Independence between Xcel Energy, Great River Energy and Wright Hennepin			

2A1: Work with Independence to purchase Code Red or Ever bridge notification system for our residents.	\$5,000	1	1 year
2B1: Provide information to the public on the city website and through public education opportunities.	annually		
2C1: Encourage businesses to develop and implement hazard mitigation actions.	annually		
3A1: Work with our local watershed districts to make improvements to protect our lakes and streams for water quality.	\$10,000 paid annually by city to participate in watershed districts.	6	3-5 years
4A1: Work with Excel Energy and other power companies to remove and install underground power on future development projects.	>\$1,000,000	2	10-20 years
4B1: Security Protection, building upgrades	\$10,000		3 years
4 C. 1: Complete redesign of Highway 12 through Independence.	>\$1,000,000		5-20 years
4 D.1: Identify and train staff on emergency response to a railroad disaster on the rail road. Develop an emergency response evacuation plan, educate citizens and train on it.	\$10,000		2 years
4. E 1: Outdoor warning sirens to cover Lake Sarah and Lake Independence, local parks and Lake Rebecca Park Reserve.	Unit purchase, Installation, Labor and Sustainment		5 plus years
5 A.1: Continue to meet the state and Federal regulations with the protection plan.	Staff Time		7
6 A.1: Identify future sites for new sirens if new development and future group occurs.	Staff time plus siren install of \$40,000	5	On-Going development
6 B.1: Work with city engineers to promote and require all new development to includes in ground power lines vs. overhead power lines.	Staff Time, developer costs.		

6 C.1: All future and current sewer lift stations must require a backup generator to operate the system.	Backup generator cost		
7 A. 1: Work with the community and Excel to identify power lines that could be buried to reduce power failures in Independence.	Staff time and > \$1,000,000	3	On-Going
7 B. 1: City and County Public Works and Excel energy remove trees causing hazard to our power lines.	\$50,000 and staff time.	3	3-5 years
7 C. 1: Install backup generator to operate West Hennepin Police	\$40,000	1	1 year

**C. Independence Mitigation Strategy**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	2	2A	2A1	Work with Independence to purchase Code Red or Ever bridge notification system for our residents.	\$5,000	City Staff	1 year
1	2	2B	2B1	Provide information to the public on the city website and through public education opportunities.	Staff Time	City Staff. West Hennepin Police	1 year
1	2	2C	2C1	Encourage businesses to develop and implement	Staff Time	City Staff. West Hennepin Police	1 year
1	7	7C	7C1	Install generator	\$40,000	City	1 year
2	4	4A	4A1	Work with Excel Energy to remove and install underground power on future development projects.	>\$1,000,000	City Engineer, Staff, Xcel Energy.	10-20 years
2	4	4B	4B1	Security Protection, building upgrades	\$10,000	City and West Hennepin Police, Wright Hennepin.	2 years

2	4	4C	4C1	Complete redesign of Highway 12 through Independence. Identify and train staff on emergency response to a railroad disaster on the rail road.	>\$1,000,000	City and West Hennepin Police, Wright Hennepin.	5-20 years
2	4	4D	4D1	Develop an emergency response evacuation plan, educate citizens and train on it.	\$10,000	City and West Hennepin Police, Wright Hennepin.	Ongoing
2	4	4E	4E1	Installation of outdoor warning sirens to cover the Lake Sarah, Lake Independence, Rebecca Park, and all local parks within Independence.	TBD	City and West Hennepin Police, Wright Hennepin.	3 years
3	7	7A	7A1	Work with the community and Excel to identify power lines that could be buried to reduce power failures in Independence.	Staff time >\$1,000,000	City planner, engineer, city staff.	On-Going
3	7	7B	7B1	City and County Public Works and Excel energy remove trees causing hazard to our power lines.	\$50,000 Staff time	Public Works, Xcel energy and other power companies.	3-5 years
4	1	1A	1A1	Review and compare existing flood control standards, zoning, and building requirements.	\$10,000	Public Works, Engineers, and water shed districts.	5 years
4	1	1A	1A2	Review and develop engineering plans with new street improvements, storm sewer runoff design, and INI improvements. Review and update policies that discourage		Public Works, Engineers, and water shed districts.	5 years

				growth in flood-prone areas			
4	1	1B	1B1	Gas Line Protection Develop a comprehensive approach with gas line companies to reduce the possibility of damage to gas line in City of Independence.		Public Works, Engineers, and water shed districts.	5 years
4	1	1C	1C1	Main transmission electrical lines through Independence.		Public Works, Engineers, and water shed districts.	5 years
5	6	6A	6 A.1	Identify future sites for new sirens if new development and future group occurs.	Staff time siren install \$40,000.	City Staff and Public Works, West Hennepin Police.	On-Going as development occurs.
5	6	6B	6B1	Work with city engineers to promote and require all new development to includes in ground power lines vs. overhead power lines.	Staff Time, developer costs.	City Staff and Public Works, West Hennepin Police.	On-Going as development occurs.
5	6	6C	6C1	All future and current sewer lift stations must require a backup generator to operate the system.	Staff Time, developer costs.	City Staff and Public Works, West Hennepin Police.	On-Going as development occurs.
6	3	3A	3A1	Reduction of waste and runoff into our lakes, streams, and watersheds.	\$10,000 annually	City engineers, watershed districts, Public Works	3-5 years

7	5	5A	5A1	Continue to meet the state and Federal regulations with the protection plan.	Staff time	City Staff, Public Works	On-Going
<b>TOTAL</b>					<b>\$3,175,000.00</b>		

**D. Independence Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Disaster Response Training</b>	
Responsible Agency	West Hennepin PS	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	Staff Time, Present	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Review/Update local mitigation Plans</b>	
Responsible Agency	West Hennepin PS	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	Staff Time, Present	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Back up city files to an offsite location</b>	
Responsible Agency	West Hennepin PS	
Contact Name	Kroells	
Contact Phone/Email		

Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:
Summary of Project	\$3,500.00, 1-2 year completion
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Install siren warning system</b>	
Responsible Agency	West Hennepin PS	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	\$100,000.00, 7 years	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#5 Install water impervious manhole covers</b>	
Responsible Agency	Public Works	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	Staff Time, 1-3 years	
Name of Reviewer		

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**3.1.19. CITY OF LONG LAKE**

Hennepin County- Long lake

Long Lake was established in 1855 and was called Cumberland Town. U.S. Route 12 serves as a main route of transportation for the city

Latitude/Longitude: 44.9836635, -93.5670485  
 Area: 0.93 sq. miles  
 Area - Land only: 0.83 sq. miles (89%)  
 Area - Water only: 0.10 sq. miles (11%)  
 Population: 1,768  
 Housing Units: 765

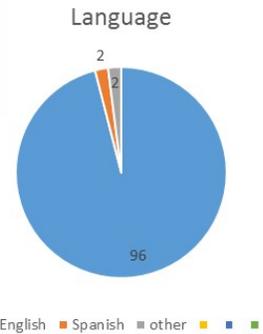


**School District**

- 278 Orono

**Capability**

- Fire Department
- Law Enforcement- Wayzata
- Police Chaplains Group
- Public Works
- FCC Registered Amateur Radio Licenses: 19



**Vulnerability**

- Functional Needs: 70
- Bridges: 6
- Monticello NPP: 25 miles

**Corporate/Employer**

- Town Center Shopping Center
- UPS
- Americinn

- 1

**Mitigation Priority 1**

  - Review available products and vendors offering notification systems
  - Implement "Next Door" program for neighborhood specific notifications.
- 1

**Mitigation Priority 2**

  - Prepare Community Presentation on emergency response/notification.
- 2

**Mitigation Priority 3**

  - Storm Ready. Meet requirements of the program.

**LONG LAKE MITIGATION PLAN**

**POC: MICHAEL RISVOLD**

**A. Long lake Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
	1A: Improve Community Notification Capabilities	1A1: Review available products and vendors offering notification systems
		1A2: Implement "Next Door" program for neighborhood specific notifications.
		1A3: Prepare Community Presentation on emergency response/notification.
Goal	Increase education, outreach, and awareness	
2	OBJECTIVES	ACTIONS
	2A: Achieve certification in National Weather Service StormReady program.	2A1: Meet requirements of the program.
		2A2: Prepare Community Presentation on severe weather awareness.

<b>Goal 3</b>	Protect natural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: Insure water runoff choke points have adequate infrastructure to withstand flood.	4A1: Inventory critical choke points and inspect and/or improve infrastructure.	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Bury Power Lines	7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	

**B. Long lake Mitigation Actions**

Mitigation Action Name (7)	Estimated Cost	Rank	Timeline
1A1: Review available products and vendors offering notification systems	Unknown	1	2 years
1A2: Implement "Next Door" program for neighborhood specific notifications.	Staff Time	1	2 years
1A3: Prepare Community Presentation on emergency response/notification.	Staff Time	1	2 years
2A1: Meet requirements of the program.	Staff Time	1	2 years
2A2: Prepare Community Presentation on severe weather awareness.	\$1000	2	2 years
4A1: Inventory critical choke points and inspect and/or improve infrastructure.	Staff Time	3	2 years

7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	Unknown	4	2 years
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**C. Long Lake Mitigation Strategies**

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A1	Police Department	Unknown	EM Director	2 years
1	1	1A	1A2	Police Department, Crime Prevention Coalition	Staff Time	EM Director	2 years
1	1	1A	1A3	Police Department, Fire Department, Public Works	Staff time	EM Director	2 years
2	2	2A	2A1	Police Department	Training Time	EM Director	2 years
2	2	2A	2A2	Police Department	1K	EM Director	2 years
3	4	4A	4A1	Police Department, Public Works	Unknown	EM Director EM Coord	2 years
4	7	7A	7A1	Public Works, Planning Department	Staff Time	EM Director EM Coord	Ongoing
<b>TOTAL</b>					<b>\$1,000.00</b>		

**D. Long Lake 2010 Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Continue to participate in the National Flood Insurance Program</b>	
Responsible Agency	Orono Police	
Contact Name	Farniok/Risvold	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Update land use plans and identified areas where development should be restricted</b>	
Responsible Agency	Orono Police	

Contact Name	Farniok/Risvold
Contact Phone/Email	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:
Summary of Project	<b>UPDATE NOT SUBMITTED</b>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Continue to use city GIS to map and update locations of fixed facilities using hazardous materials</b>	
Responsible Agency	Orono Police	
Contact Name	Farniok/Risvold	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Ensure that all essential first responders have the current version of the Emergency Response Guidebook</b>	
Responsible Agency	Orono Police	
Contact Name	Farniok/Risvold	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

**3.1.20. CITY OF LORETTO**

Hennepin County- Loretto

Loretto, originally a Soo Line railway village, was founded in 1886 and settled by German and Dutch immigrants. Loretto was named for a Roman Catholic mission for refugees of the Huron Indians near Quebec, Canada, called Lorette, and for the village of Loretto, Kentucky, where a society of Catholic "Sisters of Loretto at the Foot of the Cross" was founded in 1812. The original source of the name is Loreto, a small town in Italy, which has a noted shire of pilgrimage. The city of Loretto was incorporated in 1940, County Roads 11 and 19 are the two major routes of transportation for the city



Latitude/Longitude: 45.0547105, -93.63492  
 Area: 0.29 sq. miles  
 Area - Land only: 0.29 sq. miles (100%)  
 Area - Water only: 0.00 sq. miles (0%)  
 Population: 650  
 Housing Units: 278

**School District**

- 879 Delano

**Vulnerability**

- CP Railway
- Hillcrest Senior Apartments 25 units
- Monticello NPP: 19 miles

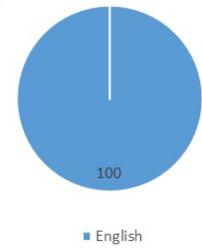
**Corporate/Employer**

- City Hall
- 21<sup>st</sup> Century Bank
- Gary's diesel
- Yocum Oil
- Rasco Industries

**Capability**

- Law Enforcement
- Police Chaplains Group
- Fire Department
- Public Works
- FCC Registered Amateur Radio Licenses: 2

Language



- 7 Mitigation Priority 1**  
• Build a Storm shelter in the City park for severe weather incidents.
- 4 Mitigation Priority 2**  
• Connect old sewer ponds to the metro sewer system.
- 6 Mitigation Priority 3**  
• Work with the County to improve the intersection over the Canadian Pacific Railroad crossing for a future quiet zone.

**LORETTO MITIGATION PLAN**

**POC: ED BELLAND**

**A. Loretto Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	
<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	3A Establish Multi-Jurisdictional partnership to reduce runoff	3A1 Work with the local water sheds to continue to protect our lakes and streams for future water quality.
<b>Goal</b>	Identify areas of greatest impact from hazards	

<b>4</b>	
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
4A Sewer Pond Connection to Sewer Line	4A1 Connect old sewer ponds to the metro sewer system.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
5A Wellhead Protection Plan	5A1 Work with the State and County to meet their requirements.

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
6A Outdoor Warning Siren	6A1 Replace aging siren
6B Improve Intersection at Railroad crossing for quiet zone.	6B1 Work with the County to improve the intersection over the Canadian Pacific Railroad crossing for a future quiet zone

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
7A Storm Shelter- South of Railroad Crossing	7A1 Build a Storm shelter in the City park for sever weather incidents.

### B. Loretto Mitigation Actions

Mitigation Action Name (6)	Estimated Cost	Rank	Timeline
3A1 Work with the local water sheds to continue to protect our lakes and streams for future water quality.	\$7,500.00	4	5 Years
4A1 Connect old sewer ponds to the metro sewer system.	\$850,000.00	2	5 Years
5A1 Work with the State and County to meet their requirements.	Staff Time	6	On-Going
6A1 Replace aging siren	\$29,000.00	5	3 Years
6B1 Work with the County to improve the intersection over the Canadian Pacific Railroad crossing for a future quiet zone	\$240,000.00	3	On-Going
7A1 Build a Storm shelter in the City park for sever weather incidents.	\$600,000.00	1	5 Years

### C. Loretto Mitigation Strategies

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	7	7A	7A1	Parks Department , Public works Department, and Emergency Management	600K	City of Loretto	5 Years

2	4	4A	4A1	Public Works Department, Administrative Department	850K	City of Loretto	5 Years
3	6	6B	6B1	Public works, Canadian Pacific Railroad, Hennepin County Transportation Department	240K	City of Loretto	Ongoing
4	3	3A	3A1	Water shed district, Public works department	7.5K	City of Loretto	5 Years
5	6	6A	6A1	Public Works, Emergency Management, federal Warning Systems.	29K	City of Loretto	3 Years
6	5	5A	5A1	Public Works Department State and County Agencies.	Staff Time	City of Loretto	Ongoing
<b>TOTAL</b>					<b>\$1,726,500</b>		

**D. Loretto Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Well Head Protection Plan</b>	
Responsible Agency	City of Loretto	
Contact Name	Ed Belland	
Contact Phone/Email		
Project Status	<b>X Project Completed</b>	
Summary of Project	\$30,000.00- Ongoing	
Name of Reviewer	Ed Belland	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Maintain Inter County Roads</b>	
Responsible Agency	City of Loretto	
Contact Name	Ed Belland	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input checked="" type="radio"/> <b>Project is delayed</b> <b>Explain: Funding</b>	
Summary of Project	\$230,000.00- Ongoing	
Name of Reviewer	Ed Belland	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Establish multi-jurisdiction partnership to reduce runoff</b>	

Responsible Agency	City of Loretto
Contact Name	Ed Belland
Contact Phone/Email	
Project Status	<b>X Project Completed</b>
Summary of Project	\$200,00.00- 5 years
Name of Reviewer	Ed Belland

**3.1.21. CITY OF MAPLE GROVE**

## Hennepin County- Maple Grove

Winnemago Indians were the only inhabitants in the area of Maple Grove until 1851 when Louis Gervais arrived and settled. Four years later, in 1855, city growth included a church, town hall and many homes. The city was known for its large stands of maple trees and was, therefore, a significant source for maple syrup. With the completion and major upgrades to Interstates 94/694, 494, and U.S. Route 169, Maple Grove has grown at a rapid pace since the 1970's.



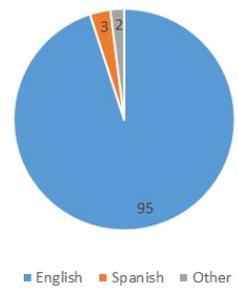
Latitude/Longitude: 45.108528, -93.464404  
 Area: 35.01 sq. miles  
 Area - Land only: 32.63 sq. miles (93%)  
 Area - Water only: 2.38 sq. miles (7%)  
 Population: 61,567  
 Housing Units: 23,626

**School District**  
 • 279 Osseo

**Capability**

- Law Enforcement
- Citizens' Academy
- Fire Department
- Public Works
- Parks and Recreation
- City Website: EM
- North Memorial Hospital LVL 1
- Sports Dome
- Community Center
- FCC Registered Amateur Radio Licenses: 180

Language



**Vulnerability**

- Functional Needs: 118
- Bridges: 49
- Monticello NPP: 23 Miles

**Corporate/Employer**

- North Memorial Hospital: 5000
- The Fountains at Arbor Lakes
- Grove Square Shopping Mall
- Boston Scientific: 3000

- 7 Mitigation Priority 1**  
 • Distro latest edition of the Emergency Response Guidebook
- 4 Mitigation Priority 2**  
 • GIS to map and update locations of fixed facilities using hazardous materials
- 7 Mitigation Priority 3**  
 • Link city radio assets by fiber optics.  
 • Implement/ utilize VHF radio systems to provide backup paging and communication capability.

**MAPLE GROVE MITIGATION PLAN** **POC: KURT KRAMER**

**A. Maple Grove Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury and damage to property, the economy, and the environment from natural and man-made hazards.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
NONE	
<b>Goal 2</b>	Increase education, outreach, and awareness
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
NONE	
<b>Goal 3</b>	Protect natural and cultural resources
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
NONE	
<b>Goal 4</b>	Identify areas of greatest impact from hazards

OBJECTIVES	ACTIONS
4A: Develop a comprehensive approach to reducing the possibility of damage and losses due to a hazardous materials spill.	4A1: Continue to use Maple Grove and Hennepin County GIS to map and update locations of fixed facilities using hazardous materials and associated transportation routes in a timely manner.
	4A2: Provide Railroad & Pipeline Safety Awareness Level training for First Responders

Goal 5	Enhance hazard mitigation coordination and communication with federal, state and local governments	
OBJECTIVES	ACTIONS	
NONE		

Goal 6	Promote disaster resistant future development	
OBJECTIVES	ACTIONS	
NONE		

Goal 7	Build and support local capacity and commitment to become less vulnerable to hazards	
OBJECTIVES	ACTIONS	
7A: Educate first responders to increase awareness of hazards and opportunities for mitigation actions.	7A1: Ensure that all essential city departments (police, fire, public works) have the latest edition of the Emergency Response Guidebook	
7B: Develop redundancy in communication infrastructure for routine and emergency notification.	7B1: Link city radio assets by fiber optics.	
	7B2: Implement/utilize VHF radio systems to provide backup paging and communication capability.	
	7B3: Institute SkyWarn warning base with multimode communication capability.	

**B. Maple Grove Actions**

Mitigation Actions (6)	Estimated Cost	Rank	Timeline
4. A.1 Continue to use Maple Grove and Hennepin County GIS to map and update locations of fixed facilities using hazardous materials and associated transportation routes in a timely manner.	No Cost	2	Ongoing
4. A.2 Provide Railroad & Pipeline Safety Awareness Level training for First Responders	No Cost	6	Ongoing
7. A.1: Ensure that all essential city departments (police, fire, public works) have the latest edition of the Emergency Response Guidebook	No cost	1	Ongoing
7. B.1 Link city radio assets by fiber optics.	\$25,000	3	2020

7. B.2 Implement/ utilize VHF radio systems to provide backup paging and communication capability.	\$10,000	4	2020
7. B.3: Institute Skywarn warning base with multimode communication capability.	\$5,000	5	2020

### C. Maple Grove Mitigation Strategies

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	7	7 A	7A1	The ERG is released every four years and will be distributed to city departments that have a role in a hazardous materials response.	0	Maple Grove Fire Department	Ongoing
2	4	4 A	4A1	GIS map production of location of fixed facilities using hazardous materials in Maple Grove	0	Maple Grove Fire Department	Ongoing
3	7	7 B	7B1	Contract Fiber Optics	25K	Maple Grove Fire Department	2020
4	7	7 B	7B2	Add VHF Radio Systems	10K	Maple Grove Fire Department	2020
5	7	7 B	7B3	Add Skywarn	5K	Maple Grove Fire Department	2020
6	4	4A	4A2	Railroad & Pipeline Awareness Level training for first responders in Maple Grove.	0	Maple Grove Fire Department	Annual Training
<b>TOTAL</b>					<b>\$ 40,000.00</b>		

### D. Maple Grove Mitigation Action Progress Report

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 12/2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Continue to use Maple Grove and Hennepin County GIS to map and update locations of fixed facilities using hazardous materials and associated transportation routes in a timely manner.</b>	
Responsible Agency	Maple Grove Fire Department	
Contact Name	Kurt Kramer	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: This project is ongoing.</b>	

	<ul style="list-style-type: none"> <li>○ Project is delayed</li> </ul>
Summary of Project	Maple Grove GIS updates locations of fixed facilities using hazardous materials and associated transportation routes on a yearly basis.
Name of Reviewer	Kurt Kramer, Deputy Fire Chief

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date:12/2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Ensure that all essential city departments (police, fire, public works) have the latest edition of the Emergency Response Guidebook</b>	
Responsible Agency	Maple Grove Fire Department	
Contact Name	Kurt Kramer	
Contact Phone/Email		
Project Status	<ul style="list-style-type: none"> <li>○ Project Completed</li> <li>○ Project Canceled</li> <li>○ Project on Schedule</li> <li><b>X Anticipated completion date: This project is ongoing.</b></li> <li>○ Project is delayed</li> </ul>	
Summary of Project	The Emergency Response Guidebook is released every four years. Maple Grove Fire Department not only ensures that the latest edition of the ERG is provided to all essential city departments, but they also coordinate distribution of updated ERG's to all 46 cities in Hennepin County.	
Name of Reviewer	Kurt Kramer, Deputy Fire Chief	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 12/2010	To Date: 8/2015
<b>Project Title/Action</b>	<b>#3 Assess, augment, upgrade the city outdoor warning system to achieve &gt;98% coverage of the city geography with outdoor sirens.</b>	
Responsible Agency	Maple Grove Fire Department	
Contact Name	Kurt Kramer	
Contact Phone/Email		
Project Status	<b>X Project Completed</b>	
Summary of Project	Increased the number of solar sirens to allow better placement and not dependent on utilities.	
Name of Reviewer	Kurt Kramer, Deputy Fire Chief	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 12/2010	To Date: 8/2015
<b>Project Title/Action</b>	<b>#4 All siren activation radios converted to narrow band capable radios by first quarter 2012.</b>	
Responsible Agency	Hennepin County Emergency Management	
Contact Name	Kurt Kramer	
Contact Phone/Email		
Project Status	<b>X Project Completed</b>	

Summary of Project	Hennepin County Emergency Management utilized Urban Area Security Initiative (UASI) funds to narrow band all sirens in Hennepin County. This was accomplished in 2013.
Name of Reviewer	Kurt Kramer, Deputy Fire Chief

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**3.1.22. CITY OF MAPLE PLAIN**

## Hennepin County- Maple Plain

Maple Plain is located 25 miles west of Minneapolis on Route 12 and is named for the many sugar maples in its surrounding forests. Early settlement of the area started in 1854 and revolved around lake Independence to its north, and its outflow Pioneer Creek. In 1868 and 1869, the St. Paul, Pacific and Manitoba Railroad was built through Maple Plain. The city was incorporated as a village in 1912.



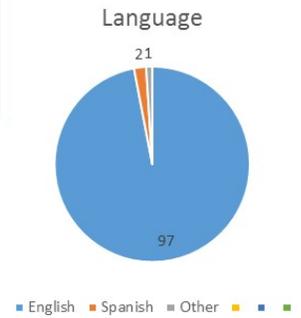
Latitude/Longitude: 45.010244, -93.660833  
 Area: 1.12 sq. miles  
 Area - Land only: 1.11 sq. miles (100%)  
 Area - Water only: 0.00 sq. miles (0%)  
 Population: 1,768  
 Housing Units: 775

**School District**  
 • 278 Orono

**Capability**  
 • Law Enforcement- West Hennepin Public Safety  
 • Fire Department  
 • Police Chaplains Group  
 • Public Works  
 • FCC Registered Amateur Radio Licenses: 19

**Vulnerability**  
 • Functional needs: 127  
 • Bridges: 1  
 • BNSF Rail goes through city  
 • Monticello NPP: 22 miles

**Corporate/Employer**  
 • Innovex Inc



- 2** Mitigation Priority 1
  - Purchase Code Red or Ever bridge notification System
- 2** Mitigation Priority 2
  - Improve information through city website and public education platforms
- 7** Mitigation Priority 3
  - Install generator capacity

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**MAPLE PLAIN MITIGATION PLAN** **POC: GARY KROELLS**

**A. Maple Plain Objectives and Actions**

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
	1A: Flooding Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding.	1A1: Review and compare existing flood control standards, zoning, and building requirements. Review and develop engineering plans with new street improvements, storm sewer runoff design, and INI improvements.  1A2: Review and update policies that discourage growth in flood-prone areas
Goal 2	Increase education, outreach, and awareness	
	OBJECTIVES	ACTIONS

2A: Invest in a comprehensive emergency notification system to immediately notify all citizens of an emergency, the action plan, and response to the emergency.	2A1: Work with Maple Plain to purchase Code Red or Ever bridge notification system for our residents.
2B: Educate the public to increase awareness of hazards and opportunities for mitigation actions.	2B1: Provide information to the public on the city website and through public education opportunities.
2C: Work with Chamber of Commerce, businesses and other local agencies to promote hazard mitigation in local community.	2C1: Encourage businesses to develop and implement hazard mitigation actions.

<b>Goal 3</b>	<b>Protect natural and cultural resources</b>	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	3A: Reduction of waste and runoff into our lakes, streams, and watersheds.	3A1: Work with our local watershed districts to make improvements to protect our lakes and streams for water quality.

<b>Goal 4</b>	<b>Identify areas of greatest impact from hazards</b>	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	4A: Overhead power lines within the city.	4A1: Work with Excel Energy to remove and install underground power on future development projects.
	4B: Maple Plain Water Treatment Facility.	4B1: Security Protection, building upgrades, backup generator installed.
	4C: Highway 12 Corridor Improvements	4C1: Complete redesign of Highway 12 through Independence.
	4D: Burlington Northern Santa Fe Railroad	4D1: Identify and train staff on emergency response to a railroad disaster on the rail road. Develop an emergency response evacuation plan, educate citizens and train on it.

<b>Goal 5</b>	<b>Enhance hazard mitigation coordination and communication with federal, state and local governments.</b>	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	5A: Wellhead Protection Plan	5A1: Continue to meet the state and Federal regulations with the protection plan.

<b>Goal 6</b>	<b>Promote disaster-resistant future development</b>	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>

6A: Outdoor Warning Sirens	6A1: Identify future sites for new sirens if new development and future group occurs.
6B: In ground electrical lines.	6B1: Work with city engineers to promote and require all new development to includes in ground power lines vs. overhead power lines.

Goal 7	Build and support local capacity and commitment to become less vulnerable to hazards	
OBJECTIVES	ACTIONS	
7A: Bury all power lines.	7A1: Work with the community and Excel to identify power lines that could be buried to reduce power failures in Maple Plain.	
7B: Trim back all trees/brush around Xcel energy power lines to require road right of way setbacks.	7B1: City and County Public Works and Excel energy remove trees causing hazard to our power lines.	
7C: Backup generator installed for West Hennepin Public Safety Department.	7C1: Install backup generator to operate West Hennepin Police Department.	

**B. Maple Plain Mitigation Actions**

Mitigation Actions (15)	Estimated Cost	Rank	Timeline
1A1: Review and compare existing flood control standards, zoning, and building requirements. Review and develop engineering plans with new street improvements, storm sewer runoff design, and INI improvements.	\$10,000	4	5 years
1A2: Review and update policies that discourage growth in flood-prone areas			
2A1: Work with Maple Plain to purchase Code Red or Ever bridge notification system for our residents.	\$5,000 annually	1	1 year
2B1: Provide information to the public on the city website and through public education opportunities.			
3A1: Work with our local watershed districts to make improvements to protect our lakes and streams for water quality.	\$10,000 paid annually by city to participate in watershed districts.	6	3-5 years
4A1: Work with Excel Energy and other power companies to remove and install underground power on future development projects.	>\$1,000,000	2	10-20 years
4B1: Security Protection, building upgrades	\$10,000		3 years
4C1: Complete redesign of Highway 12 through Independence.	>\$1,000,000		5-20 years

4D1: Identify and train staff on emergency response to a railroad disaster on the rail road. Develop an emergency response evacuation plan, educate citizens and train on it.	\$10,000		2 years
5A1: Continue to meet the state and Federal regulations with the protection plan.	Staff Time	7	On-going
6A1: Identify future sites for new sirens if new development and future group occurs.	Staff time plus siren install of \$40,000	5	On-Going development
6B1: Work with city engineers to promote and require all new development to includes in ground power lines vs. overhead power lines.	Staff Time, developer costs.		
7A1: Work with the community and Excel to identify power lines that could be buried to reduce power failures in Maple Plain.	Staff time and > \$1,000,000	3	On-Going
7B1: City and County Public Works and Excel energy remove trees causing hazard to our power lines.	\$50,000 and staff time.	3	3-5 years
7C1: Install backup generator to operate West Hennepin Police	\$40,000	1	1 year

**C. Maple Plain Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	2	2A	2A1	Work with Maple Plain to purchase Code Red or Ever bridge notification system for our residents.	\$5,000	City Staff	1 year
1	2	2B	2B1	Provide information to the public on the city website and through public education opportunities.		City Staff. West Hennepin Police	1 Year
1	7	7C	7C1	Install generator	\$40,000	City	1 Year
2	4	4A	4A1	Work with Excel Energy to remove and install underground power on future development projects.	>\$1,000,000	City Engineer, Staff, Xcel Energy.	10-20 years

2	4	4B	4B1	Security Protection, building upgrades	\$10,000	City and West Hennepin Police, Wright Hennepin.	2 years
2	4	4C	4C1	Complete redesign of Highway 12 through Independence.	>\$1,000,000	City and West Hennepin Police, Wright Hennepin.	5-20 years
2	4	4D	4D1	Develop an emergency response evacuation plan, educate citizens and train on it. Identify and train staff on emergency response to a railroad disaster on the rail road.	\$10,000	City and West Hennepin Police, Wright Hennepin.	Ongoing
3	7	7A	7A1	Work with the community and Excel to identify power lines that could be buried to reduce power failures in Maple Plain.	Staff time >\$1,000,000	City planner, engineer, city staff.	On-Going
3	7	7B	7B1	City and County Public Works and Excel energy remove trees causing hazard to our power lines.	\$50,000 Staff time	Public Works, Xcel energy and other power companies.	3-5 years
4	1	1A	1A1	Review and compare existing flood control standards, zoning, and building requirements.	\$10,000	Public Works, Engineers, and water shed districts.	5 years
4	1	1A	1A2:	Review and develop engineering plans with new street improvements, storm sewer runoff design, and INI improvements.		Public Works, Engineers, and water shed districts.	5 Years

				Review and update policies that discourage growth in flood-prone areas.			
5	6	6A	6A1	Identify future sites for new sirens if new development and future group occurs.	Staff time siren install	City Staff and Public Works, West Hennepin Police.	On-Going as development occurs.
5	6	6B	6B1	Work with city engineers to promote and require all new development to include in ground power lines vs. overhead power lines.	\$40,000.	City Staff and Public Works, West Hennepin Police.	On-Going as development occurs.
6	3	3A	3A1	Reduction of waste and runoff into our lakes, streams, and watersheds.	\$10,000 annually	City engineers, watershed districts, Public Works	3-5 years
7	5	5A	5A1	Continue to meet the state and Federal regulations with the protection plan.	Staff time	City Staff, Public Works	On-Going
<b>TOTAL</b>					<b>\$3,175,000.00</b>		

**D. Maple Plain Mitigation Action Progress Report Form**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Disaster Response Training</b>	
Responsible Agency	West Hennepin PS	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	

	Explain:
Summary of Project	Staff Time, Present
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Review/Update local mitigation Plans</b>	
Responsible Agency	West Hennepin PS	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	Staff Time, Present	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Well Head Protection</b>	
Responsible Agency	Planning	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	\$5,000.00, 2-3 year completion	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Replace undersized sewer</b>	
Responsible Agency	Public Works	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____	

	<input type="radio"/> Project is delayed Explain:
Summary of Project	Staff Time, 1-4 years
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#5 Install water impervious manhole covers</b>	
Responsible Agency	Public Works	
Contact Name	Kroells	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	Staff Time, 1-3 years	
Name of Reviewer		

**3.1.23. CITY OF MEDICINE LAKE**

## Hennepin County- Medicine Lake

The City of Medicine Lake is nestled in the western suburbs on the large peninsula within Medicine Lake, the second largest lake in the Twin Cities. The city is completely surrounded by the city of Plymouth, and forms a peninsula stretching into the lake that is its namesake.

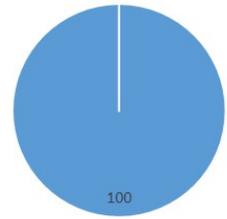


Latitude/Longitude: 44.9988085, -93.420831  
 Area: 0.32 sq. miles  
 Area - Land only: 0.18 sq. miles (54%)  
 Area - Water only: 0.15 sq. miles (46%)  
 Population: 371  
 Housing Units: 174

**School District**  
 • 284 Wayzata

**Capability**  
 • Fire Department/MOA with other fire  
 • Law Enforcement: HCSO

**Language**



**Vulnerability**  
 • Monticello NPP: 28 Miles  
 • No city water; access through Plymouth  
 • Resident well systems  
 • Chicago Northwestern Railroad Track

**Corporate/Employer**

Mitigation Priority 1

Mitigation Priority 2

Mitigation Priority 3

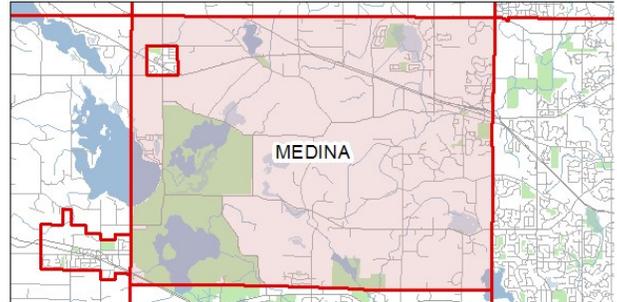
**Mitigation plan not submitted**

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**3.1.24. CITY OF MEDINA**

Hennepin County- Medina

Medina is located 16 miles west of Minneapolis. Polaris Industries, a snowmobile and ATV manufacturing company, is based in the city of Medina. Minnesota State Highway 55 serves as the main route of transportation for the city



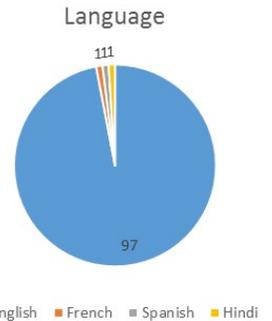
Latitude/Longitude: 45.0326135, -93.584011  
 Area: 27.01 sq. miles  
 Area - Land only: 25.46 sq. miles (94%)  
 Area - Water only: 1.55 sq. miles (6%)  
 Population: 6,800  
 Housing Units: 1,780

- School Districts**
- 278 Orono
  - 284 Wayzata
  - Delano and Rockford

- Vulnerability**
- Monticello NPP: 21 Miles
  - Functional Needs: 8
  - Bridges: 2
  - Hennepin County Public Works
  - Three Rivers Parks

- Corporate/Employer**
- Polaris Industries
  - Loram Corporation
  - OSI

- Capability**
- Law Enforcement and Fire
    - Hamel
    - Loretto
    - Maple Plain
    - Long Lake
  - Police Chaplains Group
  - FCC Registered Amateur Radio Licenses: 5



**6** Mitigation Priority 1

- Work with the State and County to improve intersections with high accident rates

**7** Mitigation Priority 2

- Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas

**6** Mitigation Priority 3

- Identify future sites for new sirens in the new developments

**MEDINA MITIGATION PLAN**

**POC: ED BELLAND**

**A. Medina Objectives and the actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	
<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	3A Establish Multi-Jurisdictional partnership to reduce runoff	3A1 Work with the local watersheds to continue to protect our lakes and streams for future water quality
<b>Goal</b>	Identify areas of greatest impact from hazards	

<b>4</b>	
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A Wellhead Protection Plan		5A1 Continue to meet the State and Federal regulations with the protection plan

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A Outdoor Warning Siren		6A1 Identify future sites for new sirens in the new developments
6B Maintain Inter County Roads		6B1 Work with the State and County to improve intersections with high accident rates

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A Bury Power Lines		7A1 Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas

**B. Medina Mitigation Actions**

Mitigation Actions (5)	Estimated Cost	Rank	Timeline
3A1 Work with the local watersheds to continue to protect our lakes and streams for future water quality	\$ 20,000.00	4	On-Going
5A1 Continue to meet the State and Federal regulations with the protection plan	Staff Time	5	On-Going
6A1 Identify future sites for new sirens in the new developments	\$ 90,000.00	3	On-Going
6B1 Work with the State and County to improve intersections with high accident rates	\$ 50,000.00	1	On-Going
7A1 Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	\$450,000.00	2	On-Going

**C. Medina Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	6	6B	6B1	Public Works Department and Administration Department.	50K	City of Medina	Ongoing

2	7	7A	7A1	Public Works Department , Planning Department Administration Department, Excel Energy and Wright Hennepin Electric	450K	City of Medina	Ongoing
3	6	6A	6A1	Emergency Management, Planning Department, Federal Warning Systems	90K	City of Medina	Ongoing
4	3	3A	3A1	Public Works Department, Watershed Districts	20K	City of Medina	Ongoing
5	5	5A	5A1	Public Works and Planning Department	Staff time	City of Medina	Ongoing
<b>TOTAL</b>					<b>\$ 610,000.00</b>		

**D. Medina Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
Project Title/Action	<b>#1 Well Head Protection Plan</b>	
Responsible Agency	City of Medina	
Contact Name	Ed Belland	
Contact Phone/Email		
Project Status	<b>X Project Completed</b>	
Summary of Project	\$30,000.00- Ongoing	
Name of Reviewer	Ed Belland	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
Project Title/Action	<b>#2 Maintain Inter County Roads</b>	
Responsible Agency	City of Medina	
Contact Name	Ed Belland	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: 2018</b> <input type="radio"/> Project is delayed	
Summary of Project	\$230,000.00- Ongoing	
Name of Reviewer	Ed Belland	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
Project Title/Action	<b>#3 Establish multi-jurisdiction partnership to reduce runoff</b>	
Responsible Agency	City of Medina	
Contact Name	Ed Belland	

Contact Phone/Email	
Project Status	<b>X Project Completed</b>
Summary of Project	\$200,00.00- 5 years
Name of Reviewer	Ed Belland

**3.1.25. CITY OF MINNEAPOLIS**

## Hennepin County- Minneapolis

Minneapolis is the largest city in Minnesota and is the county seat for Hennepin County. The city lies on both banks of the Mississippi River, just north of the river's confluence with the Minnesota River, and adjoins Saint Paul, the state's capital. The city is abundantly rich in water with over twenty lakes and wetlands, the Mississippi riverfront, creeks and waterfalls, many connected by parkways in the Chain of Lakes and Grand Rounds Scenic Byway. Minneapolis was once the world's flour milling capital and a hub for timber, and today is the primary business center between Chicago, Illinois and Seattle, Washington. Minneapolis is nicknamed the "City of Lakes and "Mill City". Minneapolis has numerous routes of transportation including Interstate 494 and 694, Interstate 35W, Minnesota State Highway 62 and 77, U.S Route 169 and Minnesota State Highway 100 to name a few.



Latitude/Longitude: 44.9705185, -93.2616155  
 Area: 57.49 sq. miles  
 Area - Land only: 54.01 sq. miles (94%)  
 Area - Water only: 3.48 sq. miles (6%)  
 Population: 382,578  
 Housing Units: 178,287

**Corporate/Employer**

- University of Minnesota 25,836
- Target Corporation
- US Bancorp
- Ameriprise Financial
- Xcel Energy

**School District**

- 1 Minneapolis

**Vulnerability**

- Functional Needs 9326
- Target Center
- U.S. Bank Stadium
- University of Minnesota 871
- Bridges
- Rail
- Monticello NPP: 34 miles

**Capability**

- Hospitals 6
- International Airport
- Law Enforcement
- Fire Protection
- Streets and Highways
- Park and Recreation
- FCC Amateur Radio 1058

**1** Mitigation Priority 1

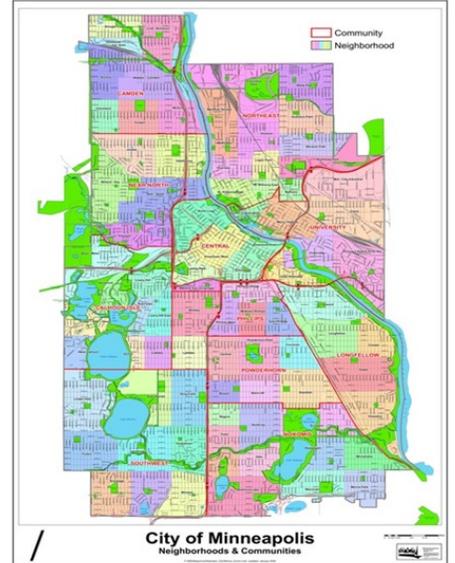
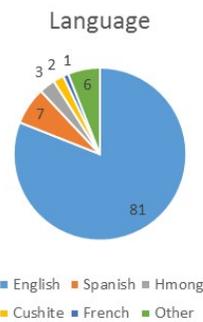
- UASI funds to upgrade radios and decoder boards

**6** Mitigation Priority 2

- Bury power lines

**4** Mitigation Priority 3

- GIS mapping updates



26

**Minneapolis Mitigation Plan**

**POC: TOM MILLER**

**A. Minneapolis Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
	1.A: Spring thaw and water bodies rising	1A1 Improve Storm-water Management Planning 1A2 Adopt Polices to Reduce Storm-water Runoff
	1.B: Short term flooding from torrential rain	1B1 Improve Storm-water Management Planning 1B2 Adopt Polices to Reduce Storm-water Runoff
	1.C: Unusual snow event	1C1 Adopt and Enforce Building Codes 1C2 Protect Buildings and Infrastructure 1C3 Protect Power Lines 1C4 Reduce Impacts to Roadways
	1.D: Wind/tornadoes	1D1 Encourage Construction of Safe Rooms 1D2 Require Wind-Resistant Building Techniques
	1.E: Evacuation routes-downtown, rail/hazmat	1E1 Assess Community Risk
	1.F: Landslides/subsidence	1F1 Map and Assess Vulnerability to Landslides 1F2 Prevent Impacts to Roadways

	1F3 Map and Assess Vulnerability to Subsidence 1F4 Manage Development in High-Risk Areas 1F5 Consider Subsidence in Building Design 1F6 Monitor Subsidence Risk Factors 1F7 Remove Existing Structures from Subsidence Hazard Areas
1.G: Vulnerable populations, lack of resiliency	1G1 Improve Household Disaster Preparedness 1G2 Increase Hazard Education and Risk Awareness 1G3 Assist Vulnerable Populations
1.H: Warning notification –downtown	1H1 Assess Community Risk 1H2 Assist Vulnerable Populations
1.I: Severe cold; close schools, impact on infrastructure	1I1 Reduce Urban Heat Island Effect 1I2 Increase Awareness of Extreme Temperature Risk and Safety 1I3 Educate Property Owners About Freezing Pipes
1.J: Severe hot weather	1J1 Reduce Urban Heat Island Effect 1J2 Increase Awareness of Extreme Temperature Risk and Safety
1.K: Lightning strikes	1K1 Protect Critical Facilities and Equipment
1.L: Fire with high winds, structure and conflagration	1L1.....

Goal 2	Increase education, outreach, and awareness	
	OBJECTIVES	ACTIONS
	2.A: Public outreach-rail corridor	2A1 Improve Household Disaster Preparedness 2A2 Increase Hazard Education and Risk Awareness 2A3 Integrate Mitigation into Local Planning
	2.B: Evacuation routes-downtown, rail/hazmat	2B1 Protect Infrastructure and Critical Facilities 2B2 Increase Hazard Education and Risk Awareness 2B3 Improve Household Disaster Preparedness
	2.C: Wind/tornadoes	2C1 Conduct Tornado Awareness Activities 2C2 Increase Hazard Education and Risk Awareness 2C3 Improve Household Disaster Preparedness
	2.D: Power grid down interruption: Address heat and cold conditions	2D1 Protect Infrastructure and Critical Facilities 2D2 Reduce Urban Heat Island Effect 2D3 Increase Awareness of Extreme Temperature Risk and Safety 2D4 Protect Power Lines 2D5 Increase Hazard Education and Risk Awareness 2D6 Improve Household Disaster Preparedness
	2.E: Vulnerable populations, lack of resiliency	2E1 Improve Household Disaster Preparedness 2E2 Increase Hazard Education and Risk Awareness 2E3 Assist Vulnerable Populations
	2.F: Warning notification –downtown	2F1 Assess Community Risk

	2F2 Assist Vulnerable Populations 2F3 Increase Hazard Education and Risk Awareness
2.G: Severe cold; close schools, impact on infrastructure	2G1 Increase Awareness of Extreme Temperature Risk and Safety 2G2 Increase Hazard Education and Risk Awareness
2.H: Severe hot weather	2H1 Increase Awareness of Extreme Temperature Risk and Safety 2H2 Increase Hazard Education and Risk Awareness 2H3 Improve Household Disaster Preparedness
2.I: Lightning strikes	2I1 Conduct Lightning Awareness Programs 2I2 Increase Hazard Education and Risk Awareness 2I3 Improve Household Disaster Preparedness
2.J: Unusual snow event	2J1 Conduct Winter Weather Risk Awareness Activities 2J2 Increase Awareness of Extreme Temperature Risk and Safety 2J3 Increase Hazard Education and Risk Awareness 2J4 Improve Household Disaster Preparedness
2.K: Landslides/subsidence	2K1 Educate Residents about Subsidence 2K2 Increase Hazard Education and Risk Awareness

<b>Goal 3</b>	Protect natural resources and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	3.A: Tree canopy decline	3A1 Reduce Urban Heat Island Effect
	3.B: Landslides/subsidence	3B1 Map and Assess Vulnerability to Landslides 3B2 Prevent Impacts to Roadways 3B3 Map and Assess Vulnerability to Subsidence 3B4 Manage Development in High-Risk Areas 3B5 Consider Subsidence in Building Design 3B6 Monitor Subsidence Risk Factors 3B7 Remove Existing Structures from Subsidence Hazard Areas

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	4.A: Security of water plant	4A1 Protect Infrastructure and Critical Facilities
	4.B: Power grid down interruption: Address heat and cold conditions	4B1 Protect Infrastructure and Critical Facilities 4B2 Reduce Urban Heat Island Effect
	4.C: Landslides/subsidence	4C1 Map and Assess Vulnerability to Landslides 4C2 Map and Assess Vulnerability to Subsidence 4C3 Monitor Subsidence Risk Factors 4C4 Map and Assess Vulnerability to Landslides

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5.A: Evacuation routes-downtown, rail/hazmat	5A1 Assess Community Risk 5A2 Map Community Risk 5A3 Adopt Development Regulations in Hazard Areas 5A4 Limit Density in Hazard Areas 5A5 Protect Structures 5A6 Protect Infrastructure and Critical Facilities	
5.B: Major planned events and their impact on the community-scenario planning	5B1 Assess Community Risk 5B2 Map Community Risk 5B3 Protect Infrastructure and Critical Facilities	
5.C: Civil disturbance	5C1 Assess Community Risk 5C2 Map Community Risk 5C3 Protect Infrastructure and Critical Facilities	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6.A: Landslides/subsidence	6A 1 Map and Assess Vulnerability to Landslides 6A2 Map and Assess Vulnerability to Subsidence 6A3 Monitor Subsidence Risk Factors 6A4 Prevent Impacts to Roadways 6A5 Manage Development in High-Risk Areas 6A6 Consider Subsidence in Building Design 6A7 Remove Existing Structures from Subsidence_and Landslide Hazard Areas	
6.B: Short-term flooding from torrential rain	6B1 Incorporate Flood Mitigation in Local Planning 6B2 Limit or Restrict Development in Floodplain Areas 6B3 Adopt and Enforce Building Codes and Development Standards 6B4 Adopt Policies to Reduce Storm water Runoff 6B5 Protect Infrastructure 6B6 Protect Critical Facilities	
6.C: Rail Corridor	6C1 Protect Sensitive Uses from Rail Corridors Potentially Carrying Hazardous Materials	
6.D: Extreme Heat	6D1 Reduce the Urban Heat Island Effect	
6.E: Wind/Tornadoes	6E1 Promote or Require Site and Building Design Standards to Minimize Wind Damage 6E2 Protect Power Lines and Infrastructure	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>

7.A: Infrastructure failure-water main e.g.	7A1 Protect Infrastructure and Critical Facilities
7.B: Drought; drinking water, source/intake	7B1 Protect Infrastructure and Critical Facilities
7.C: Wind/tornadoes	7C1 Conduct Tornado Awareness Activities 7C2 Increase Hazard Education and Risk Awareness 7C3 Improve Household Disaster Preparedness
7.D: River contamination; drinking water, contamination	7D1 Protect Infrastructure and Critical Facilities
7.E: Evacuation routes-downtown, rail/hazmat	7E1 Protect Infrastructure and Critical Facilities 7E2 Increase Hazard Education and Risk Awareness 7E3 Improve Household Disaster Preparedness
7.F: Landslides/subsidence	7F1 Map and Assess Vulnerability to Landslides 7F2 Map and Assess Vulnerability to Subsidence 7F3 Monitor Subsidence Risk Factors 7F4 Prevent Impacts to Roadways 7F5 Manage Development in High-Risk Areas 7F6 Consider Subsidence in Building Design 7F7 Remove Existing Structures from Subsidence Hazard Areas
7.G: Vulnerable populations, lack of resiliency	7G1 Improve Household Disaster Preparedness 7G2 Increase Hazard Education and Risk Awareness 7G3 Assist Vulnerable Populations

**B. Minneapolis Mitigation Actions**

Mitigation Actions (173)	Estimated Cost	Rank	Timeline
<b>Goal 1</b>			
1A1: Improve Storm-water Management Planning	\$2,500,000.00	1	2017
1K1: Protect Critical Facilities and Equipment	\$300,000.00	1	2017
1C3: Protect Power Lines	\$5 million	1	2018
1E1: Assess Community Risk 1H1: Assess Community Risk	\$250,000.00	1	2018
1F1: Map and Assess Vulnerability to Landslides 1F2: Prevent Impacts to Roadways 1F3: Map and Assess Vulnerability to Subsidence 1F6: Monitor Subsidence Risk Factors	\$500,000.00	1	2017
1G1: Improve Household Disaster Preparedness 1G2: Increase Hazard Education and Risk Awareness 1G3: Assist Vulnerable Populations 1H2:	\$250,000.00	1	2017
1I1: Reduce Urban Heat Island Effect 1I2: Increase Awareness of Extreme Temperature Risk and Safety 1J1: Reduce Urban Heat Island Effect 1J2: Increase Awareness of Extreme Temperature Risk and Safety	\$250,000.00	1	2018
1F1: Map and Assess Vulnerability to Landslides 1F2: Prevent Impacts to Roadways	\$500,000.00	2	2018

1F3: Map and Assess Vulnerability to Subsidence 1F6: Monitor Subsidence Risk Factors			
1K1: Protect Critical Facilities and Equipment	\$100,000.00	2	2018
1F1: Map and Assess Vulnerability to Landslides 1F2: Prevent Impacts to Roadways 1F3: Map and Assess Vulnerability to Subsidence 1F6: Monitor Subsidence Risk Factors	\$250,000.00	3	2019
1A2: Adopt Policies to Reduce Storm-water Runoff 1B1: Improve Storm-water Management Planning 1B2: Adopt Policies to Reduce Storm-water Runoff 1C1: Adopt and Enforce Building Codes 1C2: Protect Buildings and Infrastructure 1C4: Reduce Impacts to Roadways			

Mitigation Actions Goal 2	Estimated Cost	Rank	Timeline
2A2: Increase Hazard Education and Risk Awareness 2B2: Increase Hazard Education and Risk Awareness 2C2: Increase Hazard Education and Risk Awareness 2D5: Increase Hazard Education and Risk Awareness 2E2: Increase Hazard Education and Risk Awareness 2F3: Increase Hazard Education and Risk Awareness 2H2: Increase Hazard Education and Risk Awareness 2I2: Increase Hazard Education and Risk Awareness 2J3: Increase Hazard Education and Risk Awareness 2K2: Increase Hazard Education and Risk Awareness	\$150,000.00 annually	1	2016-21
2E3: Assist Vulnerable Populations 2F2: Assist Vulnerable Populations	\$150,000 annually	1	2016-21
2A2: Increase Hazard Education and Risk Awareness 2B2: Increase Hazard Education and Risk Awareness 2C2: Increase Hazard Education and Risk Awareness 2D5: Increase Hazard Education and Risk Awareness 2E2: Increase Hazard Education and Risk Awareness 2F3: Increase Hazard Education and Risk Awareness 2H2: Increase Hazard Education and Risk Awareness 2I2: Increase Hazard Education and Risk Awareness 2J3: Increase Hazard Education and Risk Awareness 2K2: Increase Hazard Education and Risk Awareness	\$150,000.00 annually	2	2016-21
2A1: Improve Household Disaster Preparedness 2B3: Improve Household Disaster Preparedness 2C1: Conduct Tornado Awareness Activities 2C3: Improve Household Disaster Preparedness 2D6: Increase Hazard Education and Risk Awareness 2E1: Improve Household Disaster Preparedness	\$150,000 annually	3	2016-21

2H3: Improve Household Disaster Preparedness 2I3: Improve Household Disaster Preparedness 2J4: Improve Household Disaster Preparedness			
2A3: Integrate Mitigation into Local Planning 2B1: Protect Infrastructure and Critical Facilities 2D1: Protect Infrastructure and Critical Facilities 2D2: Reduce Urban Heat Island Effect 2D3: Increase Awareness of Extreme Temperature Risk and Safety 2D4: Protect Power Lines 2F1: Assess Community Risk 2G1: Increase Awareness of Extreme Temperature Risk and Safety 2G2: Increase Hazard Education and Risk Awareness 2H1 Increase Awareness of Extreme Temperature Risk and Safety 2I1: Conduct Lightning Awareness Programs 2J1 Conduct Winter Weather Risk Awareness Activities 2J2: Increase Awareness of Extreme Temperature Risk and Safety 2K1: Educate Residents about Subsidence			

Mitigation Actions Goal 3	Estimated Cost	Rank	Timeline
3A1: Reduce Urban Heat Island Effect	\$94,075	1	Ongoing
3B1: Map and Assess Vulnerability to Landslides 3B2: Prevent Impacts to Roadways 3B3: Map and Assess Vulnerability to Subsidence 3B6: Monitor Subsidence Risk Factors	\$500,000.00	1	2017
3B1: Map and Assess Vulnerability to Landslides 3B2: Prevent Impacts to Roadways 3B3: Map and Assess Vulnerability to Subsidence 3B6: Monitor Subsidence Risk Factors	\$500,000.00	2	2018
3B1: Map and Assess Vulnerability to Landslides 3B2: Prevent Impacts to Roadways 3B3: Map and Assess Vulnerability to Subsidence 3B6: Monitor Subsidence Risk Factors	\$250,000.00	3	2019
3B4 Manage Development in High-Risk Areas 3B5 Consider Subsidence in Building Design 3B7 Remove Existing Structures from Subsidence Hazard Areas			

Mitigation Actions Goal 4	Estimated Cost	Rank	Timeline
4A1: Protect Infrastructure and Critical Facilities	\$300,000.00	1	2017
4B1: Protect Infrastructure and Critical Facilities	\$500,000.00	1	2017
4C1: Map and Assess Vulnerability to Landslides 4C2: Map and Assess Vulnerability to Subsidence 4C3: Monitor Subsidence Risk Factors	\$500,000.00	1	2017

4C4: Map and Assess Vulnerability to Landslides			
4B1: Protect Infrastructure and Critical Facilities	\$400,000.00	2	2018
4C1: Map and Assess Vulnerability to Landslides 4C2: Map and Assess Vulnerability to Subsidence 4C3: Monitor Subsidence Risk Factors 4C4: Map and Assess Vulnerability to Landslides	\$500,000.00	2	2018
4C1: Map and Assess Vulnerability to Landslides 4C2: Map and Assess Vulnerability to Subsidence 4C3: Monitor Subsidence Risk Factors 4C4: Map and Assess Vulnerability to Landslides	\$250,000.00	3	2019
4B2: Reduce Urban Heat Island Effect			

Mitigation Actions Goal 5	Estimated Cost	Rank	Timeline
5A1: Assess Community Risk 5A2: Map Community Risk 5A5: Protect Structures 5A6: Protect Infrastructure and Critical Facilities	\$250,000.00	1	2017
5B1: Assess Community Risk 5B2: Map Community Risk 5B3: Protect Infrastructure and Critical Facilities	\$250,000.00	1	2017
5C1: Assess Community Risk 5C2: Map Community Risk 5C3: Protect Infrastructure and Critical Facilities	\$250,000.00	1	2017
5A1: Assess Community Risk 5A2: Map Community Risk 5A5: Protect Structures 5A6: Protect Infrastructure and Critical Facilities	\$250,000.00	2	2018
5A3: Adopt Development Regulations in Hazard Areas 5A4: Limit Density in Hazard Areas			

Mitigation Actions Goal 6	Estimated Cost	Rank	Timeline
6A1: Map and Assess Vulnerability to Landslides	\$50,000.00	1	2016
6A2 Map and Assess Vulnerability to Subsidence	\$50,000.00	1	2016
6A3 Monitor Subsidence Risk Factors	\$30,000.00/yr.	1	2016
6A4 Prevent Impacts to Roadways	0	1	2016
6A5 Manage Development in High-Risk Areas	0	1	2016
6A6 Consider Subsidence in Building Design	\$40,000.00	1	2017
6A7 Remove Existing Structures from Subsidence and Landslide Hazard Areas	\$5 million	1	2018
6B1 Incorporate Flood Mitigation in Local Planning	\$100,000/yr.	1	Ongoing
6B3 Adopt and Enforce Building Codes and Development Standards	\$100,000/yr.	1	Ongoing

6B5 Protect Infrastructure	\$5 million over five years	1	Ongoing
6B6 Protect Critical Facilities	\$11.2 million	1	Ongoing
6C1 Protect Sensitive Uses from Rail Corridors Potentially Carrying Hazardous Materials	\$50,000.00	1	2016
6D1 Reduce the Urban Heat Island Effect	\$150,000.00 yr.	1	2016
6E1 Promote or Require Site and Building Design Standards to Minimize Wind Damage	0	1	2016
6E2 Protect Power Lines and Infrastructure	\$5 million	1	2016
6A1: Map and Assess Vulnerability to Landslides	\$15,000.00	2	2017
6A2 Map and Assess Vulnerability to Subsidence	\$25,000.00	2	2017
6A4 Prevent Impacts to Roadways	\$100,000.00	2	2016
6A5 Manage Development in High-Risk Areas	0	2	2017
6B5 Protect Infrastructure	\$10,000/yr.	2	Ongoing
6C1 Protect Sensitive Uses from Rail Corridors Potentially Carrying Hazardous Materials	\$25,000.00	2	2017
6D1 Reduce the Urban Heat Island Effect	0	2	2017
6E1 Promote or Require Site and Building Design Standards to Minimize Wind Damage	0	2	2017
6A1: Map and Assess Vulnerability to Landslides	\$75,000.00	3	2018
6A4 Prevent Impacts to Roadways	\$500,000.00	3	2017
6C1 Protect Sensitive Uses from Rail Corridors Potentially Carrying Hazardous Materials	\$5 million	3	2018
6D1 Reduce the Urban Heat Island Effect	\$50,000.00	3	2016
6A4 Prevent Impacts to Roadways	0	4	2018
6B2 Limit or Restrict Development in Floodplain Areas			
6B4 Adopt Policies to Reduce Storm water Runoff			

Mitigation Actions Goal 7	Estimated Cost	Rank	Timeline
7A1 Protect Infrastructure and Critical Facilities	\$5,000,000	1	2018
7B1 Protect Infrastructure and Critical Facilities	\$25,000,000	1	2020
7C1 Conduct Tornado Awareness Activities	\$100,000.00	1	2017
7D1 Protect Infrastructure and Critical Facilities	\$25,000,000	1	2020
7E1 Protect Infrastructure and Critical Facilities	\$250,000.00	1	2017
7F4 Prevent Impacts to Roadways	\$500,000.00	1	2016
7G3 Assist Vulnerable Populations	\$150,000 annually	1	2016-2021
7C2 Increase Hazard Education and Risk Awareness	\$100,000.00	2	2018
7E1 Protect Infrastructure and Critical Facilities	\$250,000.00	2	2018
7E2 Increase Hazard Education and Risk Awareness	\$100,000.00	2	2018
7F1 Map and Assess Vulnerability to Landslides	\$500,000.00	2	2017

7G2 Increase Hazard Education and Risk Awareness	\$100,000.00	2	2018
7C3 Improve Household Disaster Preparedness	\$100,000.00	3	2019
7E3 Improve Household Disaster Preparedness	\$100,000.00	3	2019
7F6 Consider Subsidence in Building Design	\$500,000.00	3	2018
7G1 Improve Household Disaster Preparedness	\$100,000.00	3	2019
7F2 Map and Assess Vulnerability to Subsidence	\$250,000.00	4	2019
7F3 Monitor Subsidence Risk Factors	\$250,000.00	5	2020
7F5 Manage Development in High-Risk Areas			
7F7 Remove Existing Structures from Subsidence Hazard Areas			

**C. Minneapolis Mitigation Strategies**

Priority	Goal 1	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A1	Plan for flooding scenarios in the city by completing a flooding model in Minneapolis using 10 year and 100 year events.	2.5M		2017
1	1	1C	1C3	Protect power lines by burying overhead power line or other means of protection.	5M		2018
1	1	1E 1H	1E1 1H1	Develop evacuation routes for downtown corridor and rail/hazmat locations	250K		2018
1	1	1F	1F1 1F2 1F3 1F6	Improve the data and mapping on specific landslide risks in Minneapolis by: 1. Studying areas where riparian landslides may occur. 2. Completing an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides. 3. Using GIS to identify and map landslide hazard areas. 4. Developing and maintaining a database to track community vulnerability to landslides.	500K		2018
1	1	1G	1G1 1G2 1G3 1H2	Educating the public on how to prepare for hazards and disasters to include: 1. Hazard education and awareness activities that address multiple hazards	250K		2017

				<p>2. Organizing outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.</p> <p>3. Requiring minimum temperatures in housing/landlord codes.</p> <p>4. Creating a database to track those individuals at high risk of death, such as the elderly, homeless, etc.</p>			
1	1	1I	1I1	<p>Reduce Urban Heat Island Effect by :</p> <p>1. Increasing tree plantings around buildings to shade parking lots and along public rights-of-way.</p> <p>2. Educating citizens regarding the dangers of extreme heat and cold and the steps they can take to protect themselves when extreme temperatures occur.</p>	250K		2018
1	1	1K	1K1	<p>Protect drinking water supply by completing an all-hazards vulnerability assessment for drinking water system from source to tap.</p>	300K		2017
2	1	1F	1F1 1F2 1F3 1F6	<p>Prevent roadway damage and traffic disruptions from landslides by:</p> <p>1. Implementing monitoring mechanisms and or procedures (i.e., visual inspection or electronic monitoring systems).</p> <p>2. Applying soil stabilization measures, such as planting soil-stabilizing vegetation on steep, publicly-owned slopes.</p> <p>3. Using debris-flow measures that may reduce damage in sloping areas, such as</p>	500K		2018

				stabilization, energy dissipation, and flow control measures.			
2	1	1K	1K1	Strengthen relationships and procedures with partner departments and agencies. Improve internal emergency planning and protocols.	100K		2018
3	1	1F	1F1 1F2 1F3 1F6	Map and Assess Vulnerability to Subsidence by: 1. Using GIS to map areas that are susceptible to subsidence. 2. Using ground-penetrating radar to detect karsts and map their location. 3. Supporting mapping efforts to identify areas of existing permafrost. 4. Improving accuracy of hazard area maps to educate residents about unanticipated risks. Upgrading maps provides a truer measure of risks to a community. Storing digital or hard copies of public records in low-risk, offsite locations.	250K		2019
			1A2 1B1 1B2 1C1 1C2 1C4				

Priority	Goal 2	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
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1	2	2A 2B 2C 2D 2E 2F 2H 2I 2J 2K	2A2 2B2 2C2 2D5 2E2 2F3 2H2 2I2 2J3 2K2	Provide leadership and coordination to ensure an increase in a sustained and trained volunteer workforce able to respond and assist in exercises, response, and recovery. This refers to and includes an engaged and expanded Citizen Emergency Response Teams, Cultural Service Unit, Medical Reserve Corp, and corporate teams.	150K		2016-21
1	2	2E 2F	2E3 2F2	Assist CBOs who provide critical services needed after a disaster such as food, medical care, shelter, translation, or medical supplies and equipment to vulnerable populations with development of continuity of operations plans through provision of grants and technical assistance.	150K		2016-21
2	2	2A 2B 2C 2D 2E 2F 2H 2I 2J 2K	2A2 2B2 2C2 2D5 2E2 2F3 2H2 2I2 2J3 2K2	Provide accessible tools and training to faith groups, community based organizations, and neighborhood groups which could include web pages, resource kits, speaker's bureaus, workshops, and related materials and encourage programs and activities to increase citizen knowledge and understanding of risk and readiness needs.	150K		2016-21
3	2	2A 2B 2C 2C 2D 2E 2H 2I 2J	2A1 2B3 2C1 2C3 2D6 2E1 2H3 2I3 2J4	Establish a community outreach and training program to teach personal and household preparedness.	150K		2016-21
			2A3				

			2B1 2D1 2D2 2D3 2D4 2F1 2G1 2G2 2H1 2I1 2J1 2J2 2K1				
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Priority	Goal 3	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	3	3A	3A1	Protect the tree canopy with work on updating the Urban Forestry Policy and funding the Forestry Preservation Coordinator Position	94K		Ongoing
1	3	3B 3B 3B 3B	3B1 3B2 3B3 3B6	Improve the data and mapping on specific landslide risks in Minneapolis by: 1. Studying areas where riparian landslides may occur. 2. Completing an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides. 3. Using GIS to identify and map landslide hazard areas. 4. Developing and maintaining a database to track community vulnerability to landslides.	500K		2017
2	3	3B 3B 3B 3B	3B1 3B2 3B3 3B6	Prevent roadway damage and traffic disruptions from landslides by: 1. Implementing monitoring mechanisms and or procedures (i.e., visual inspection or electronic monitoring systems).	500K		2018

				<p>2. Applying soil stabilization measures, such as planting soil-stabilizing vegetation on steep, publicly-owned slopes.</p> <p>3. Using debris-flow measures that may reduce damage in sloping areas, such as stabilization, energy dissipation, and flow control measures.</p>			
3	3	<p>3B</p> <p>3B</p> <p>3B</p> <p>3B</p>	<p>3B1</p> <p>3B2</p> <p>3B3</p> <p>3B6</p>	<p>Map and Assess Vulnerability to Subsidence by:</p> <p>1. Using GIS to map areas that are susceptible to subsidence.</p> <p>2. Using ground-penetrating radar to detect karsts and map their location.</p> <p>3. Supporting mapping efforts to identify areas of existing permafrost.</p> <p>4. Improving accuracy of hazard area maps to educate residents about unanticipated risks. Upgrading maps provides a truer measure of risks to a community. Storing digital or hard copies of public records in low-risk, offsite locations.</p>	250K		2019
			<p>3B4</p> <p>3B5</p> <p>3B7</p>				

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	4	4A	4A1	Protect drinking water supply by completing an all-hazards vulnerability assessment for drinking water system from source to tap.	300K		2017
1	4	4B	4B1	Protect Infrastructure and Critical Facilities by installing quick-connect emergency generator hook-ups for critical facilities	500K		2017

1	4	4C	4C1 4C2 4C3 4C4	<p>Improve the data and mapping on specific landslide risks in Minneapolis by:</p> <ol style="list-style-type: none"> <li>1. Studying areas where riparian landslides may occur.</li> <li>2. Completing an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.</li> <li>3. Using GIS to identify and map landslide hazard areas.</li> <li>4. Developing and maintaining a database to track community vulnerability to landslides.</li> </ol>	500K		2017
2	4	4B	4B1	<p>Reduce Urban Heat Island Effect by</p> <ol style="list-style-type: none"> <li>1. Increasing tree plantings around buildings to shade parking lots and along public rights-of-way.</li> <li>2. Encouraging installation of green roofs, which provide shade and remove heat from the roof surface and surrounding air.</li> <li>3. Using cool roofing products that reflect sunlight and heat away from a building.</li> </ol>	400K		2018
2	4	4C	4C1 4C2 4C3 4C4	<p>Prevent roadway damage and traffic disruptions from landslides by:</p> <ol style="list-style-type: none"> <li>1. Implementing monitoring mechanisms and or procedures (i.e., visual inspection or electronic monitoring systems).</li> <li>2. Applying soil stabilization measures, such as planting soil-stabilizing vegetation on steep, publicly-owned slopes.</li> <li>3. Using debris-flow measures that may reduce damage in sloping areas, such as</li> </ol>	500K		2018

				stabilization, energy dissipation, and flow control measures.			
3	4	4C	4C1 4C2 4C3 4C4	Map and Assess Vulnerability to Subsidence by: 1. Using GIS to map areas that are susceptible to subsidence. 2. Using ground-penetrating radar to detect karsts and map their location. 3. Supporting mapping efforts to identify areas of existing permafrost. 4. Improving accuracy of hazard area maps to educate residents about unanticipated risks. Upgrading maps provides a truer measure of risks to a community. Storing digital or hard copies of public records in low-risk, offsite locations.	250K		2019
			4B2				

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	5	5A	5A1 5A2 5A5 5A6	Assess the community risks in evacuating a large population from the downtown core in the event of a disaster	250K		2017
1	5	5B	5B1 5B2 5B3	Assess the community risks with major planned events and their impact on community scenario planning, infrastructure and critical facilities	250K		2017
1	5	5C	5C1 5C2 5C3	Assess the community risks with civil disturbance events and	250K		2017

				their impact on infrastructure and critical facilities			
2	5	5B	5A1 5A2 5A5 5A6	Assess and update the downtown evacuation plan utilized in the event of a disaster	250K		2018
			5A3 5A4				

Priority	Goal 6	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	6	6A	6A1	Use GIS to identify and map landslide hazard areas	50K		2016
1	6	6A	6A2	Use GIS to map areas that are susceptible to subsidence	50K		2016
1	6	6A	6A3	Monitor areas at risk to subsidence by remaining aware of changes in groundwater levels.	30K		2016
1	6	6A	6A4	Establish setback requirements and using large setbacks when building roads near slopes of marginal stability	0		2016
1	6	6A	6A5	Prohibit development in areas that have been identified as at-risk to subsidence	0		2016
1	6	6A	6A6	Educate design professionals about where to locate information on subsidence rates and maps	40K		2017
1	6	6A	6A7	Acquire and demolish or relocate at-risk buildings and infrastructure and enforce permanent restrictions on development after land and structure acquisition.	5M		2018
1	6	6B	6B1	Enforce current ordinances and look for opportunities to enhance requirements to mitigate flooding hazards and protect infrastructure.	100K		Ongoing
1	6	6B	6B3	Enforce current ordinances and look for opportunities to enhance requirements to	100K		Ongoing

				mitigate flooding hazards and protect infrastructure.			
1	6	6B	6B5	Perform condition assessment of the system (via televising) to identify needed repairs.	5M		Ongoing
1	6	6B	6B6	Upgrade sewage lift stations and storm pump stations to improve reliability	11.2M		Ongoing
1	6	6C	6C1	Study the minimum safe distance between rail corridors and sensitive uses	50K		2016
1	6	6D	6D1	Increase tree plantings around buildings to shade parking lots and along public rights-of-way. Costs borne by developer on private lands	150K		2016
1	6	6E	6E1	Protect tree roots from being cut during sidewalk maintenance and replacement	0		2016
1	6	6E	6E2	Bury power lines to provide uninterrupted power after severe winds, considering both maintenance and repair issues	5M		2016
2	6	6A	6A1	Complete an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides	15K		2017
2	6	6A	6A2	Improve accuracy of hazard area maps to educate residents about unanticipated risks.	25K		2016
2	6	6A	6A4	Apply soil stabilization measures, such as planting soil-stabilizing vegetation on steep, publicly-owned slopes	100K		2016
2	6	6A	6A5	Restrict development in areas with soil that is considered poor or unsuitable for development	0		2017
2	6	6B	6B5	Focused catch basin cleaning effort each spring to reduce chances of localized flooding due to run-off or spring storms.	10K		Ongoing
2	6	6C	6C1	Adopt land use regulations that buffer sensitive uses from rail	25K		2017

				corridors by at least the minimum distance to be safe from accidents			
2	6	6D	6D1	Encourage the installation of green roofs, which provide shade and remove heat from the roof surface	UNK		2017
2	6	6E	6E1	Use natural environmental features as wind buffers in site design	UNK		2017
3	6	6A	6A1	Assess vegetation in landslide hazard areas to prevent landslides (e.g., encourage plants with strong root systems)	75K		2018
3	6	6A	6A4	Install catch-fall nets for rocks at steep slopes near roadways	500K		2017
3	6	6C	6C1	Remove existing structures that are located within the safe buffer area of rail corridors	5M		2018
3	6	6D	6D1	Study the effectiveness of cool roofing products that reflect sunlight and heat away from a building to determine their benefits or costs in the Minnesota climate	50K		2016
4	6	6A	6A4	Use debris-flow measures that may reduce damage in sloping areas, such as stabilization, energy dissipation, and flow control measures	0		2018
			6B2 6B4				

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	7	7A	7A1	Protect Infrastructure and Critical Facilities by incorporating mitigation retrofits for public facilities into the annual capital improvements program	5M		2018
1	7	7B	7B1	Protect Infrastructure and Critical Facilities by designing and building water tanks or	25M		2020

				wells for use in times of water outage			
1	7	7C	7C1	Conduct Tornado Awareness Activities Supporting severe weather awareness week and promoting use of National Oceanic and Atmospheric Administration (NOAA) weather radios.	100K		2017
1	7	7D	7D1	Infrastructure and critical facilities can be protected from damage by designing and building water tanks or wells for use in times of water outage	25M		2020
1	7	7E	7E1	Assess the community risks in evacuating a large population from the downtown core in the event of a disaster	250K		2017
1	7	7F	7F4	Prevent Impacts to Roadways by 1. Implementing monitoring mechanisms/procedures (i.e., visual inspection or electronic monitoring systems). 2. Applying soil stabilization measures, such as planting soil-stabilizing vegetation on steep, publicly-owned slopes. 3. Using debris-flow measures that may reduce damage in sloping areas, such as stabilization, energy dissipation, and flow control measures. 4. Establishing setback requirements and using large setbacks when building roads near slopes of marginal stability. 5. Installing catch-fall nets for rocks at steep slopes near roadways.	500K		2016
1	7	7G	7G3	Assist CBOs who provide critical services needed after a disaster such as food, medical care, shelter, translation, or medical supplies and equipment to	150K		2016-21

				vulnerable populations with development of continuity of operations plans through provision of grants and technical assistance.			
2	7	7C	7C2	<p>Increase Hazard Education and Risk Awareness by:</p> <ol style="list-style-type: none"> <li>1. Developing and implementing a multi-hazard public awareness program.</li> <li>2. Providing information on all types of hazards, preparedness and mitigation measures, and responses during hazard events.</li> <li>3. Establishing a “hazard awareness week” in coordination with the media to promote hazard awareness (seasonal).</li> <li>4. Establishing an interactive website for educating the public on hazard mitigation and preparedness measures.</li> <li>5. Annually hosting a public hazards workshop or exposition for all residents.</li> <li>6. Establishing hazard information centers.</li> <li>7. Enhancing hazard awareness of the private sector, particularly lenders, insurance agents, and realtors.</li> <li>8. Scheduling an annual “what’s new in mitigation” briefing</li> </ol>	100K		2019
2	7	7E	7E1	Assess and update the downtown evacuation plan utilized in the event of a disaster	250K		2018
2	7	7E	7E2	<p>Increase Hazard Education and Risk Awareness by:</p> <ol style="list-style-type: none"> <li>1. Developing and implementing a multi-hazard public awareness program.</li> <li>2. Providing information on all types of hazards, preparedness</li> </ol>	100K		2018

				<p>and mitigation measures, and responses during hazard events.</p> <p>3. Establishing a “hazard awareness week” in coordination with the media to promote hazard awareness (seasonal).</p> <p>4. Establishing an interactive website for educating the public on hazard mitigation and preparedness measures.</p> <p>5. Annually hosting a public hazards workshop or exposition for all residents.</p> <p>6. Establishing hazard information centers.</p> <p>7. Enhancing hazard awareness of the private sector, particularly lenders, insurance agents, and realtors.</p> <p>8. Scheduling an annual “what’s new in mitigation” briefing</p>			
2	7	7F	7F1	<p>Map and Assess Vulnerability to Landslides by</p> <p>1. Studying areas where riparian landslides may occur.</p> <p>2. Completing an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.</p> <p>3. Using GIS to identify and map landslide hazard areas.</p> <p>4. Developing and maintaining a database to track community vulnerability to landslides.</p>	500K		2017
2	7	7G	7G2	<p>Increase Hazard Education and Risk Awareness by:</p> <p>1. Developing and implementing a multi-hazard public awareness program.</p> <p>2. Providing information on all types of hazards, preparedness</p>	100K		2018

				<p>and mitigation measures, and responses during hazard events.</p> <p>3. Establishing a “hazard awareness week” in coordination with the media to promote hazard awareness (seasonal).</p> <p>4. Establishing an interactive website for educating the public on hazard mitigation and preparedness measures.</p> <p>5. Annually hosting a public hazards workshop or exposition for all residents.</p> <p>6. Establishing hazard information centers.</p> <p>7. Enhancing hazard awareness of the private sector, particularly lenders, insurance agents, and realtors.</p> <p>8. Scheduling an annual “what’s new in mitigation” briefing</p>			
3	7	7C	7C3	<p>Improve Household Disaster Preparedness by:</p> <p>1. Encouraging property owners to purchase hazard insurance not as an alternative to mitigation, but rather to add financial protection if damage does occur.</p> <p>2. Encouraging residents to prepare by stocking up the necessary items and planning for how family members should respond during a disaster. Publicized information about household preparedness can be found at <a href="http://www.ready.gov">www.ready.gov</a>.</p> <p>3. Providing hazard vulnerability checklists for homeowners to conduct their own inspections.</p>	100K		2019

				<p>4. Promoting the purchase and use of NOAA weather radios by residents.</p> <p>5. Encouraging citizens to secure loose items (i.e., patio furniture).</p> <p>6. Participating in Nation Weather Service Storm Ready Program.</p> <p>7. Purchasing and installing NOAA weather radios in schools, government buildings, parks, etc.</p> <p>8. Storing digital or hard copies of public records in low-risk, offsite locations</p>			
3	7	7E	7E3	<p>Improve Household Disaster Preparedness by:</p> <p>1. Encouraging property owners to purchase hazard insurance not as an alternative to mitigation, but rather to add financial protection if damage does occur.</p> <p>2. Encouraging residents to prepare by stocking up the necessary items and planning for how family members should respond during a disaster. Publicized information about household preparedness can be found at <a href="http://www.ready.gov">www.ready.gov</a>.</p> <p>3. Providing hazard vulnerability checklists for homeowners to conduct their own inspections.</p> <p>4. Promoting the purchase and use of NOAA weather radios by residents.</p> <p>5. Encouraging citizens to secure loose items (i.e., patio furniture).</p>	100K		2019

				<p>6. Participating in Nation Weather Service Storm Ready Program.</p> <p>7. Purchasing and installing NOAA weather radios in schools, government buildings, parks, etc.</p> <p>8. Storing digital or hard copies of public records in low-risk, offsite locations</p>			
3	7	7F	7F6	<p>Consider Subsidence in Building Design by</p> <p>Educating design professionals about where to locate information on subsidence rates and maps.</p> <p>1. Incorporating structural designs that can resist loading associated with subsidence.</p> <p>2. Adopting an ordinance promoting permafrost sensitive construction practices.</p> <p>3. Including potential subsidence in freeboard calculations for buildings in flood-prone areas.</p>	500K		2019
3	7	7G	7G1	<p>Improve Household Disaster Preparedness by:</p> <p>1. Encouraging property owners to purchase hazard insurance not as an alternative to mitigation, but rather to add financial protection if damage does occur.</p> <p>2. Encouraging residents to prepare by stocking up the necessary items and planning for how family members should respond during a disaster.</p> <p>Publicized information about household preparedness can be found at <a href="http://www.ready.gov">www.ready.gov</a>.</p>	100K		2019

				<p>3. Providing hazard vulnerability checklists for homeowners to conduct their own inspections.</p> <p>4. Promoting the purchase and use of NOAA weather radios by residents.</p> <p>5. Encouraging citizens to secure loose items (i.e., patio furniture).</p> <p>6. Participating in Nation Weather Service Storm Ready Program.</p> <p>7. Purchasing and installing NOAA weather radios in schools, government buildings, parks, etc.</p> <p>8. Storing digital or hard copies of public records in low-risk, offsite locations.</p>			
4	7	7F	7F2	<p>Map and Assess Vulnerability to Subsidence by</p> <p>1. Using GIS to map areas that are susceptible to subsidence.</p> <p>2. Identifying and mapping old mining areas or geologically unstable terrain so that development can be prevented or eliminated.</p> <p>3. Using ground-penetrating radar to detect lava tubes and map their location.</p> <p>4. Supporting mapping efforts to identify areas of existing permafrost.</p> <p>5. Improving accuracy of hazard area maps to educate residents about unanticipated risks.</p>	250K		2019
5	7	7F	7F3	<p>Monitor Subsidence Risk Factors by</p> <p>Monitoring areas at risk to subsidence by remaining aware of changes in groundwater levels.</p>	250K		2020

				1. Monitoring areas where natural resources are removed from underground. 2. Filling or buttressing subterranean open spaces, as with abandoned mines, to prevent or alleviate collapse.			
			7F5 7F7				
<b>TOTAL</b>						<b>\$106,059,000.00</b>	

**D. Minneapolis 2010 Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Use UASI funds dollars and other sources to fund the upgrades to the radios and decoder boards on the sirens in an effort to not only reach compliance with the new FCC narrow band standards, but as well as to implement a new storm-based polygon warning system</b>	
Responsible Agency	OEM	
Contact Name	Miller/Lakso	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Encourage new power lines to be buried to reduce power outages</b>	
Responsible Agency	OEM	
Contact Name	Miller/Lakso	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	

Name of Reviewer	
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<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Continue to use GIS to map and update locations of fixed facilities using hazardous materials/waste and associated transportation routes in a timely manner</b>	
Responsible Agency	OEM	
Contact Name	Miller/Lakso	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

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**3.1.26. CITY OF MINNETONKA BEACH**

Hennepin County- Minnetonka Beach

Minnetonka Beach can be traced back as early as 1855, with records listing early settlers. However, the Village was not officially opened for settlement until 1872. The present area of the Village was surveyed, platted and named Minnetonka Beach in 1883. Construction of the first road through the Village in 1887, further insured the popularity of Minnetonka Beach as a resort area for the rich and famous of the time. The Village of Minnetonka Beach was incorporated in 1894, with a resident population of 209. In 1922, by adoption of the present home rule charter, the Village was incorporated as a city of the fourth class. Now, officially The City of the Village of Minnetonka Beach, the Beach remains one of the smallest incorporated cities in the state. A boot-shaped peninsula jutting out into the center of the waters of Lake Minnetonka, the Village is comprised of a total area of some 296 acres, less than a half section of land.



Latitude/Longitude: 44.938181, -93.5899  
 Area: 0.47 sq. miles  
 Area - Land only: 0.47 sq. miles (98%)  
 Area - Water only: 0.01 sq. miles (2%)  
 Population: 539  
 Housing Units: 231

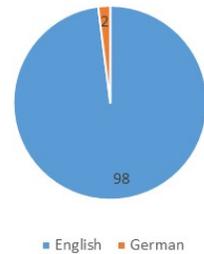
**School District**  
 • 278 Orono

**Capability**  
 • Law Enforcement covered by Orono  
 • Fire Department covered by Mound  
 • Police Chaplains Group

**Vulnerability**  
 • Monticello NPP: 27 Miles

**Corporate/Employer**  
 • Lafayette Club

Language



- 5** Mitigation Priority 1  
 • meet the State and Federal regulations with the protection plan
- 7** Mitigation Priority 2  
 • Bury power lines
- 2** Mitigation Priority 3  
 • Increase awareness and knowledge of hazard mitigation principles and practices

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**CITY OF MINNETONKA BEACH**

**POC: CORREY FARNIOK**

**A. Minnetonka Beach Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Flooding: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding	1A1: Review and update policies that discourage growth in flood-prone areas 1A2: Continue to participate in the National Flood Insurance Program
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Work with Chamber of Commerce, businesses and other local agencies to promote hazard mitigation in local community.	2A1: Increase awareness and knowledge of hazard mitigation principles and practices
<b>Goal</b>	Protect natural and cultural resources	

<b>3</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>
3A: Establish Multi-Jurisdictional partnership to reduce runoff	3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality	

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Wellhead Protection Plan	5A1: Continue to meet the State and Federal regulations with the protection plan	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Bury Power Lines	7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	

**B. Minnetonka Beach Mitigation Actions**

Mitigation Actions (6)	Estimated Cost	Priority	Timeline
1A1: Review and update policies that discourage growth in flood-prone areas	Staff Time	5	On-going
1A2: Continue to participate in the National Flood Insurance Program	Staff Time	6	On-going
2A1: Increase awareness and knowledge of hazard mitigation principles and practices	Staff Time	3	On-going
3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality	\$ 20,000	4	On-going
5A1: Continue to meet the State and Federal regulations with the protection plan	Staff Time	1	On-going
7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	\$100,000	2	On-going

**C. Minnetonka Beach Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost Breakdown	Responsible Agency	Timeline
1	5	5A	5A1	Public Works, Planning Department	Staff time	City of Orono	Ongoing
2	7	7A	7A1	Public Works Department , Planning Department Administration Department, Excel Energy and Wright Hennepin Electric	Plans Construction	City of Orono	Ongoing
3	2	2A	2A1	Administration, Police Department	Staff time	City of Orono	Ongoing
4	3	3A	3A1	Public Works Department, Watershed Districts	Cost for construction of holding ponds Design Construction	City of Orono	Ongoing
5	1	1A	1A1	Planning Department	Staff Time	City of Orono	Ongoing
6	1	1A	1A2	Planning Department	Staff Time	City of Orono	Ongoing
<b>TOTAL</b>					<b>\$0.00</b>		

**D. Minnetonka Beach Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
Project Title/Action	#1 Continue to participate in the National Flood Insurance Program.	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<b>X Project Completed 12/14/15</b>	
Summary of Project		
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
Project Title/Action	#2 Update land use plans and identified areas where development should be restricted.	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	o Project Completed	

	<input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule-Ongoing /up to date</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:
Summary of Project	
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
Project Title/Action	#3 Continue to use city GIS to map and update locations of fixed facilities using hazardous materials.	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule- Ongoing /up to date</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project		
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
Project Title/Action	#4 Ensure that all essential first responders have the current version of the Emergency Response Guidebook.	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: 1-1-16 waiting for manuals</b> <input type="radio"/> Project is delayed Explain:	
Summary of Project	2016 ERG distribution by the State	
Name of Reviewer		

**3.1.27. CITY OF MINNETONKA**

## Hennepin County- Minnetonka

Located just 8 miles west of Minneapolis, Minnetonka is a fully developed suburban community making it the 14th largest city in Minnesota. Minnetonka has a long and interesting history, from when the land was first settled by Dakotah and Ojibway Indians, to its inclusion in the 1803 Louisiana Purchase, to its first recorded exploration by European settlers in 1822, to its mid-to-late 1800s reputation as a center for saw and flour mills and the building of the Burwell House, to its progression from a township to a village, and finally to city. The word "Minnetonka" comes from the Dakota Indian mni tanka meaning "great water"



Latitude/Longitude: 44.935059, -93.4612015  
 Area: 28.19 sq. miles  
 Area - Land only: 26.90 sq. miles (95%)  
 Area - Water only: 1.29 sq. miles (5%)  
 Population: 49,734  
 Housing Units: 23,294

**School District**

- 276 Minnetonka
- 270 Hopkins

**Vulnerability**

- Monticello NPP: 31 Miles
- Functional Needs: 1015
- Bridges: 90

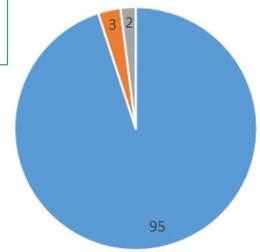
**Corporate/Employer**

- Carlson
- United Health Group
- Michael Foods Group
- Famous Dave's
- Cargill
- Shock Doctor Sports

**Capability**

- Law Enforcement
- Fire Department
- Parks and recreation
- FCC Registered Amateur Radio Licenses: 204

**Language**



**1** Mitigation Priority 1

- Distribute Emergency Response guidebooks

**2** Mitigation Priority 2

- promote Storm Ready ideals of awareness, outreach, and preparation.

**3** Mitigation Priority 3

- participate in the National Flood Insurance Program.

**MINNETONKA MITIGATION PLAN**

**POC: JIM FLANDERS**

**A. Minnetonka Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Ensure that all essential city first responders have the current version of the Emergency Response Guidebook.	1A1: Distribute guidebooks when updated ones are received from Hennepin County, and assure responders are trained on their use.
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Maintain the city's National Weather Service Storm Ready certification.	2A1: Continue to promote Storm Ready ideals of awareness, outreach, and preparation.
<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>

3A: Assure continued compliance and participation in the National Flood Insurance Program	3A1: Continue to participate in the National Flood Insurance Program.
-------------------------------------------------------------------------------------------	-----------------------------------------------------------------------

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
4A: Utilize GIS data for identification of areas		4A1: Update GIS data based on changing city development and criteria evolution.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
5A: Promote the use of WebEOC for communication with Hennepin County, for relaying to state and federal agencies.		5A1: Conduct WebEOC training sessions for key staff once the major software updates are installed.
5B: Tabletop exercise		5B1: Conduct a tabletop exercise in the city's emergency operations center for city staff.

<b>Goal 6</b>	Promote disaster-resistant future development	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
6A: Provide for compliant development.		6A1: Continue to enforce permitting, building, floodplain, and fire code compliance on all development.

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
7A: Advocate for the use of buried power utilities and sound floodplain management.		7A1: Continue to encourage the use of buried power lines and floodplain mitigation in all development.

**B. Minnetonka Mitigation Action**

Mitigation Actions (8)	Estimated Cost	Rank	Timeline
1A1: Distribute guidebooks when updated ones are received from Hennepin County, and assure responders are trained on their use.	Staff time	1	Ongoing
2A1: Continue to promote Storm Ready ideals of awareness, outreach, and preparation.	Staff time	1	Ongoing
3A1: Continue to participate in the National Flood Insurance Program.	Staff time	1	Ongoing
4A1: Update GIS data based on changing city development and criteria evolution.	Staff time	1	Ongoing
5A1: Conduct WebEOC training sessions for key staff once the major software updates are installed.	Staff time	3	Summer of 2016

5B1: Conduct a tabletop exercise in the city’s emergency operations center for city staff.	Staff time	3	Summer of 2016
6A1: Continue to enforce permitting, building, floodplain, and fire code compliance on all development.	Staff time	2	Ongoing
7A1: Continue to encourage the use of buried power lines and floodplain mitigation in all development.	Staff time	2	Ongoing

**C. Minnetonka Mitigation Strategies**

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A1	Update	Staff time	Minnetonka Fire and E/M	Ongoing
1	2	2A	2A1	Update	Staff time	Minnetonka Fire and E/M	Ongoing
1	3	3A	3A1	Update	Staff time	Minnetonka Community Development and Engineering	Ongoing
1	4	4A	4A1	Update	Staff time	Minnetonka Engineering	Ongoing
2	6	6A	6A1	Update	Staff time	Minnetonka Community Development	Ongoing
2	7	7A	7A1	Update	Staff time	Minnetonka Community Development Engineering, Fire, and Xcel Energy	Ongoing
3	5	5A	5A1	Training	Staff time	Minnetonka Fire and E/M	Summer of 2016
3	5	5B	5B1	Tabletop	Staff time	Minnetonka Fire and E/M	Summer of 2016
<b>TOTAL</b>					<b>\$0.00</b>		

**D. Minnetonka Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	#1 Continue to participate in the National Flood Insurance Program (NFIP)	
Responsible Agency	Minnetonka Fire	
Contact Name	Vacant – Water Resources Engineer	
Contact Phone/Email	TBA / 952-939-8200	
Project Status	✓ <b>Project Completed and Ongoing</b>	

Summary of Project	Cost: Staff Time On-Going
Name of Reviewer	Jim Flanders

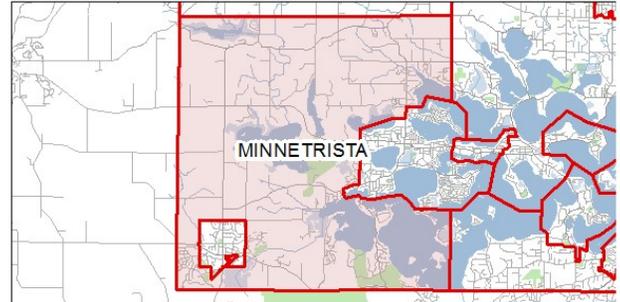
<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Ensure that all essential first responders have the latest edition of the Emergency Response Guide</b>	
Responsible Agency	Minnetonka Fire	
Contact Name	Jim Flanders	
Contact Phone/Email	952-939-8598 / jflanders@eminnetonka.com	
Project Status	✓ <b>Project Completed and Ongoing (2016)</b>	
Summary of Project	Cost: Staff Time On-Going	
Name of Reviewer	Jim Flanders	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Continue to maintain its National Weather Service StormReady Certification</b>	
Responsible Agency	Minnetonka Fire	
Contact Name	Jim Flanders	
Contact Phone/Email	952-939-8598 / jflanders@eminnetonka.com	
Project Status	✓ <b>Project Completed and Ongoing</b>	
Summary of Project	Cost: Staff Time On-Going	
Name of Reviewer	Jim Flanders	

**3.1.28. CITY OF MINNETRISTA**

## Hennepin County- Minnetrista

On April 10, 1858, Hennepin County Commissioners set apart Town 117, range 24 as German Home Township, named for the large number of residents of German stock. In 1859, the town government was organized when voters met in Mathias S. Cook's log cabin. During this meeting, there were several proposals to change the name of the town and the name "Minnetrista" was chosen. Minnetrista Township continued until 1960, when the government was adopted municipal structure and became known as the Village of Minnetrista. In the early 1970s Minnetrista was formally incorporated as a statutory city. County Roads 15, 44, and 110 are the three main transportation routes for the city.



Latitude/Longitude: 44.9346535, -93.706418  
 Area: 30.76 sq. miles  
 Area - Land only: 25.82 sq. miles (84%)  
 Area - Water only: 4.94 sq. miles (16%)  
 Population: 6,384  
 Housing Units: 2,336

**School District**

- 879 Delano
- 110 Waconia
- 111 Watertown-Mayer
- 277 Westonka

**Vulnerability**

- Monticello NPP: 26 Miles
- Minnehaha Creek Watershed
- Pioneer-Sarah Creek Watershed
- 6 mile creek
- Bridges: 6

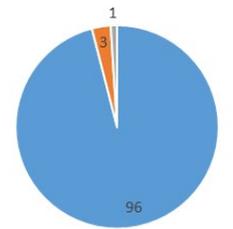
**Corporate/Employer**

- Crown College
- Agriculture and Farming

**Capability**

- Law Enforcement
- Fire Department
- Police Chaplains Group
- Public Works
- Emergency Management on city website
- FCC Registered Amateur Radio Licenses: 5

**Language**



**5** Mitigation Priority 1

- Continue to meet the State and Federal regulations with the protection plan

**7** Mitigation Priority 2

- Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas

**2** Mitigation Priority 3

- Increase awareness and knowledge of hazard mitigation principles and practices

**MINNETRISTA MITIGATION PLAN**

**POC: PAUL FALLS**

**A. Minnetrista Objectives and actions**

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
	1A: Flooding: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding	1A1: Review and update policies that discourage growth in flood-prone areas 1A2: Continue to participate in the National Flood Insurance Program

Goal 2	Increase education, outreach, and awareness	
	OBJECTIVES	ACTIONS
	2A: Work with local agencies to promote hazard mitigation in local community.	2A1: Increase awareness and knowledge of hazard mitigation principles and practices

Goal 3	Protect natural resources	
	OBJECTIVES	ACTIONS

3A: Establish Multi-Jurisdictional partnership to reduce runoff	3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality
-----------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
5A: Wellhead Protection Plan	5A1: Continue to meet the State and Federal regulations with the protection plan

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
7A: Bury Power Lines	7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas

**B. Minnetrista Mitigation Actions**

Mitigation Action Name (6)	Estimated Cost	Rank	Timeline
1A1: Review and update policies that discourage growth in flood-prone areas	Staff Time	5	On-going
1A2: Continue to participate in the National Flood Insurance Program	Staff Time	6	On-going
2A1: Increase awareness and knowledge of hazard mitigation principles and practices	Staff Time	3	On-going
3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality	Unknown	4	On-going
5A1: Continue to meet the State and Federal regulations with the protection plan	Staff Time	1	On-going
7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	Unknown	2	On-going

**C. Minnetrista Mitigation Strategies**

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	5	5A	5A1	Public Works, Planning Department	Staff time	City of Minnetrista	Ongoing
2	7	7A	7A1	Public Works Department , Planning Department Administration Department, Excel Energy and Wright Hennepin Electric	Plans Construction	City of Minnetrista	Ongoing
3	2	2A	2A1	Administration, Police Department	Staff time	City of Minnetrista	Ongoing
4	3	3A	3A1	Public Works Department, Watershed Districts	Cost for construction of holding ponds Design Construction	City of Minnetrista	Ongoing
5	1	1A	1A1	Planning Department	Staff Time	City of Minnetrista	Ongoing
6	1	1A	1A2	Planning Department	Staff Time	City of Minnetrista	Ongoing
<b>TOTAL</b>					<b>\$0.00</b>		

**D. Minnetrista Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Obtain and maintain NFIP FIRMS to identify community flood plans</b>	
Responsible Agency	PD	
Contact Name	Falls	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
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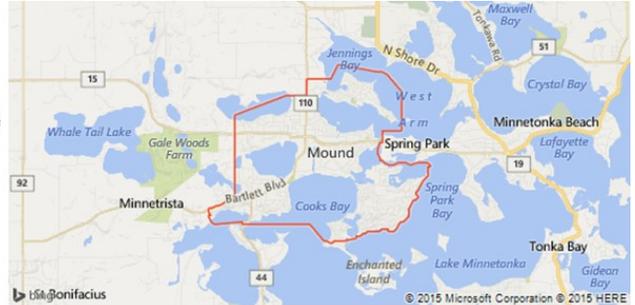
<b>Project Title/Action</b>	<b>#2 Continue to participate in the National Flood Insurance Plan</b>
Responsible Agency	PD
Contact Name	Falls
Contact Phone/Email	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul> Explain:
Summary of Project	<b>UPDATE NOT SUBMITTED</b>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Map areas of repeated flooding in the county</b>	
Responsible Agency	PD	
Contact Name	Falls	
Contact Phone/Email		
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul> Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

**3.1.29. CITY OF MOUND**

Hennepin County- Mound

Mound derived its name from the Indian mounds once found within the present day limits. They were not built by the Dakota Indians, but made by prehistoric Indians. Mound is also the birthplace of the Tonka truck, which is named after Lake Minnetonka. The "Tonka Toys" headquarters was originally located in Mound, until business picked up and they needed a more suitable location for supplies to be delivered to. Considering Mound is half water, it was very hard to navigate



Latitude/Longitude: 44.9345775, -93.660618  
 Area: 4.95 sq. miles  
 Area - Land only: 2.86 sq. miles (58%)  
 Area - Water only: 2.10 sq. miles (42%)  
 Population: 9,052  
 Housing Units: 4,379

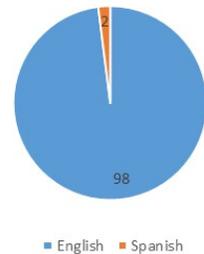
**School District**  
 • 277 Westonka

**Vulnerability**  
 • Monticello NPP: 26 Miles  
 • Bridges: 2

**Corporate/Employer**  
 • Commerce Place Shopping Center  
 • Shoreline Plaza Shopping Center

**Capability**  
 • Fire Department  
 • Law Enforcement- Orono  
 • Police Chaplains Group  
 • Public Works  
 • FCC Registered Amateur Radio Licenses: 43

Language



- 2** Mitigation Priority 1  
• Mass Notification System
- 3** Mitigation Priority 2  
• Floodplain Management
- 7** Mitigation Priority 3  
• Develop Resources List

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**MOUND MITIGATION PLAN**

**POC: GREG PEDERSON**

**A. Mound Objectives and Actions**

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
1A: Develop and Implement a basic "Hazard Assessment- Risk Reduction Plan" in an effort to circumvent loss of life, injuries or disasters.		1A1: Require Proper utility locates are completed per city ordinance and state laws 1A2: Designate and/or create storm shelters within the community, and communicate to public
1B: Maintain or replace warning sirens on a regular basis or as necessary to insure siren functionality and effectiveness		1B1: Replace two (2) outdoor warning sirens that were installed in 1987: due to age, system failures, and normal system life expectancy. 1B2: Ensure all outdoor warning sirens have a back-up power source (i.e.: battery or solar power back-up system). 1B3: Continue to monitor outdoor warning siren test results to identify any required maintenance needs.

1C: Ensure that all of the essential city first responders have the current version of the Emergency Response Guidebooks (ERG)	1C1: Distribute ERG guidebooks when the updated version is received from Hennepin County and ensure responders are well trained on use of ERG.
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<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: A. Maintain the city of Mound Weather Ready Nation Ambassador program and increase the public’s knowledge and awareness with regard to Severe Weather Risks.	2A1: Continue to promote Weather Ready ideals of awareness, outreach, and preparation.
		2A2: Continue to promote the use of NOAA Weather Radios in all government-owned facilities, childcare centers, and in facilities with vulnerable populations.
		2A3: Continue to take steps toward achieving Storm Ready Community Certification
	2B: Maintain the city of Mound operation of a mass-notification system	2B1: Continue to promote enrollment in the city of Mound mass-notification system.
		2B2: Continue to utilize newsletters, social media, and other outreach program methods to inform the public about life safety risks and pre-emptive actions related to weather emergencies
		2B3: Expand the use of the existing city mass notification system to include all-hazards and Weather Ready information.

<b>Goal 3</b>	Protect natural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	3A: Assurance continued compliance and participation in the National Flood Insurance Program	3A1: Community to adopt and enforce a floodplain management ordinance to reduce future flood risks.
		3A2: Continue to participate in the National Flood Insurance Program.

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	4A: Assess community for potential hazards and identification of greatest risk	4A1: Promote community wide (citizen) participation in threat and hazard identification and risk assessment process.
		4A2: Promote the use of the Calculated Priority Risk Index formula to prioritize identified threats and hazards.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
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OBJECTIVES		ACTIONS	
5A: Promote the use of the WebEOC for communication tool within Hennepin County, for relay of information to local, state and federal agencies		5A1: Conduct WebEOC training sessions for key staff.	
		5A2: Continue to review and update our equipment capabilities in the WebEOC database, as required.	
5B: Ensure all first responders radio equipment is ARMER compatible.		5B1: Continue to replace obsolete or non-supported handheld and console radios for all first responders as required.	

Goal 6	Promote disaster-resistant future development		
OBJECTIVES		ACTIONS	
6A: Provide for compliant development to ensure that new or remodeled commercial and residential structures are designed and built to the current state codes; i.e. building code, electrical code, and fire code.		6A1: Continue to adopt and enforce the applicable codes, i.e. Minnesota State Codes and International Property Maintenance Code.	
		6A2: Enforce zoning, floodplain, permitting, building, and fire code compliance on development.	
		6A3: Continue to utilize building official in the issuance of required permits and inspections.	
		6A4: Review and update city building and zoning codes as required.	

Goal 7	Build and support local capacity and commitment to become less vulnerable to hazards		
OBJECTIVES		ACTIONS	
7A: Advocate for the jurisdictional infrastructure improvements that eliminate or reduces life safety threats caused by severe weather or other natural disaster type hazards.		7A1: Bury power lines whenever possible and as practical to reduce the potential for life safety hazards.	
		7A2: Improve roads, road elevation levels, and retaining walls to assure roadway access for emergency response vehicles and others that are providing basic core services	
7B: Develop and maintain a Sanitary Sewer Lift Station Renewal Plan		7B1: Renew and properly size pump and force main components to ensure better coordination of system demand.	
		7B2: Install or maintain permanent on-site back-up power system to prevent back flow and back-up of black water during high flow and storm events.	
7C: Develop and Implement a storm, surface water, and flood response plan		7C1: Develop critical infrastructure protection plans, asset prioritizing, and a response procedure to ensure early detection and effective response to storm, outage, and flood events to minimize inundation, risk and property damage.	
7D: Continue to maintain a Debris Management Plan		7D1: Develop City of Mound overlay plan to supplement the Lakes Area EOP and Resource Manuals.	

7E: Preplan and Prepare for both man-made and natural disasters within the Community.	7E1: Develop and Maintain a prearranged incident Resource List of suppliers and contractors that can quickly respond to assist in time of need or crisis.
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**B. Mound Mitigation Actions**

Mitigation Action Name (30)	Estimated Cost	Rank	Timeline
1A1: Require proper utility locates are completed per city ordinance and state laws.		1	
1A2: Designate and/or create storm shelters within community, and communicate to public.		5	
1B1: Replace two (2) outdoor warning sirens installed in 1987, due to age and system life expectancy.		3	
1B2: Ensure all outdoor warning sirens have a back-up power source (i.e.: battery or solar power back-up system).		4	
1B3: Continue to review daily outdoor warning siren test results to identify any required maintenance needs.		2	
1C1: Distribute ERG guidebooks when updated version is received from Hennepin County and ensure are well trained on the use of ERG.		6	
2A1: Continue to promote Weather Ready ideals of awareness, outreach, and preparation.		4	
2A2: Continue to promote the use of NOAA Weather Radio in all government- owned facilities, childcare centers, and for vulnerable populations.		6	
2A3: Take steps toward achieving Storm Ready Community Certification.		5	
2B1: Continue to promote enrollment in the City of Mound mass-notification system.		1	
2B2: Continue to utilize newsletters, social media, and other outreach program methods to inform the public about life safety risks and pre-emptive actions related to weather emergencies.		2	
2B3: Expand the use of the city's mass-notification system to include all-hazards and Weather Ready information.		3	
3A1: Community to adopt, update, and enforce a floodplain management ordinance to reduce future flood risks		1	
3A2: Continue to participate in the National Flood Insurance Program		2	
4A1: Promote community wide (citizen) participation in threat and hazard identification and risk assessment processes.		2	
4A2: Promote the use of Calculated Priority Risk Index tool to prioritize identified threats and hazards.		1	
5A1: Conduct WebEOC training sessions for key staff.		2	
5A2: Continue to review and update equipment capabilities in WebEOC, as required.		3	
5B1: Continue to replace obsolete or non-supported handheld radios for all first responders as required.		1	

6A1: Continue to adopt and enforce applicable codes: I.e. Minnesota State Codes and International Property Maintenance Code.		3	
6A2: Enforce zoning, floodplain, permitting, building, and fire code compliance on all development.		1	
6A3: Continue to utilize building official in the issuance of required permits and inspections.		2	
6A4: Review and update city building and zoning codes as required.		4	
7A1: Bury power lines whenever possible and as practical to reduce the potential for life safety hazards.		7	
7A2: Improve roads, road elevation levels, and retaining walls to assure roadway access for emergency response vehicles and others that are providing basic core services.		3	
7B1: Renew and properly size pump and force main components to ensure better coordination of system demand.		6	
7B2: Install or maintain permanent on-site back-up power system to prevent back flow and back-up of black water during high flow and storm events.		4	
7C1: Develop critical infrastructure protection plans, asset prioritizing, and a response procedure to ensure early detection and effective response to storm, outage, and flood events to minimize inundation, risk and property damage.		5	
7D1: Develop City of Mound overlay plan to supplement the Lakes Area EOP and Resource Manuals.		2	
7E1: Develop and Maintain a prearranged Incident Resource List of suppliers and contractors that can quickly respond to assist in time of need or crisis.		1	

### C. Mound Mitigation Strategies

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A1	Utility locates are completed			
1	2	2B	2B1	Mass-notification system.			
1	3	3A	3A1	Floodplain management			
1	4	4A	4A2	Use Priority Risk Index tool			
1	5	5B	5B1	Replace handheld radios			
1	6	6A	6A2	Compliance development			
1	7	7E	7E1	Develop resource list			
2	1	1B	1B3	Siren Maintenance			
2	2	2B	2B2	Public Informed			
2	3	3A	3A2	NFIP			
2	4	4A	4A1	Community Involvement			
2	5	5A	5A1	WebEOC Training			
2	6	6A	6A3	Permits and Inspections			

2	7	7D	7D1	Regional Planning/EOP			
3	1	1B	1B1	Replace 2 sirens			
3	2	2B	2B3	Mass Notification			
3	5	5A	5A2	WebEOC capability review			
3	6	6A	6A1	Adopt /enforce codes			
3	7	7A	7A2	Road improvement			
4	1	1B	1B2	Siren back up power			
4	2	2A	2A1	Weather ready community			
4	6	6A	6A4	Review zoning codes			
4	7	7B	7B2	Back flow power system			
5	1	1A	1A2	Storm Shelter			
5	2	2A	2A3	Storm Ready certification			
5	7	7C	7C1	CIKR update			
6	1	1C	1C1	Distro ERG Guide			
6	2	2A	2A2	NOAA Radios			
6	7	7B	7B1	Proper size pump			
7	7	7A	7A1	Bury power lines			
<b>TOTAL</b>					<b>\$0.00</b>		

**D. Mound Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 7/312015
<b>Project Title/Action</b>	<b># 1 - Ensure building code compliance inspections are conducted on new construction projects</b>	
Responsible Agency	City of Mound – Community Development	
Contact Name	Sarah Smith, Community Development Director	
Contact Phone/Email	952-472-0604 / sarahsmith@cityofmound.com	
Project Status	<b>X Project Completed</b>	
Summary of Project	City’s Building Official ensures compliance with current building codes. Funded through City Permit and Inspection Fees.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 - Encourage city/county participation in FEMA’s Community Rating System Program</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____	

	<b>X Project is delayed</b> Explain: <b>Anticipated project to begin in 2016</b>
Summary of Project	No significant progress. Responsible Agency should be changed from Mound Police to City of Mound Community Development.
Name of Reviewer	City of Mound Mitigation Committee

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 7/31/2015
<b>Project Title/Action</b>	<b>#3 – Participate in the National Flood Insurance Program</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	Continued participation and is an objective on the 2015 Mitigation Plan. Responsible agency should be changed from Mound Police to City of Mound Community Development.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#4 – Identify and improve streets that are repeatedly flooded and washed away with improvements that include modifying and raising roads/streets, providing improved drainage and storm water removal, and creating buffers.</b>	
Responsible Agency	City of Mound Public Works	
Contact Name	Eric Hoversten, Public Works Director	
Contact Phone/Email	952-472-0636 / erichoversten@cityofmound.com	
Project Status	<b>X Project Completed</b>	
Summary of Project	Significant progress on inspection, maintenance, repair, and renewal of capital infrastructure used to manage and control storm water run-off.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#5 – Municipalities should adopt or update floodplain ordinances as needed</b>	
Responsible Agency	City of Mound Community Development	
Contact Name	Sarah Smith, Director of Community Development	
Contact Phone/Email	952-472-0604 / sarahsmith@cityofmound.com	
Project Status	<b>X Project Completed</b>	
Summary of Project	Enforced per City of Mound Ordinances and ordinances are updated as necessary.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#6 – Educate the public on practices and programs that assist in diminishing the effects of flooding</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	Education and information provided to the public through media releases and mass communication system. Responsible Agency should be changed from Mound Police to City of Mound Emergency Management	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#7 – Develop a resource list of available sandbag distributors</b>	
Responsible Agency	City of Mound Public Works	
Contact Name	Eric Hoversten, Public Works Director	
Contact Phone/Email	952-472-0636 / erichoversten@cityofmound.com	
Project Status	<b>X Project Completed</b>	
Summary of Project	Included in the Lakes Area Emergency Management Resource Manual as part of the Emergency Operations Plan. Sandbag resources utilizing Hennepin County and City of Mound.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#8 – Work with city, state, and federal agencies and private industries to share information on types and locations of hazardous material that have the potential to affect the county and region</b>	
Responsible Agency	Mound Fire Department	
Contact Name	Greg Pederson, Fire Chief	
Contact Phone/Email	952-472-3533 / gpederson@moundfire.com	
Project Status	<b>X Project Completed</b>	
Summary of Project	Hazardous Materials identified as part of the Tier II reporting system and information as available from fire department pre-plans.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#9 – Continue to use city and county GIS to map and update locations of fixed facilities using hazardous materials/waste storage and associated transportation routes in a timely manner</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	

Contact Name	Chris Fischer, Deputy Chief
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us
Project Status	<b>X Project Completed</b>
Summary of Project	Would defer to county to utilize Hennepin County Resources.
Name of Reviewer	City of Mound Mitigation Committee

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#10 – Ensure that all essential first responder agencies have the latest edition of the Emergency Response Guidebook</b>	
Responsible Agency	Mound Fire Department	
Contact Name	Greg Pederson, Fire Chief	
Contact Phone/Email	952-472-3533 / gpederson@moundfire.com	
Project Status	<b>X Project Completed</b>	
Summary of Project	2012 Emergency Response Guidebook received and distributed to all Emergency Agencies (Fire and Police).	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#11 – Continue to partner with local/regional hospitals and clinics in developing plans and roles in infectious disease response, including quarantine</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	New detailed procedures and protocols developed and implemented through a cooperative effort including Metro Area EMS Medical Directors, Hospitals, Fire Chiefs, Police Chiefs and County Emergency Management. Responsible Agency should be changed from Mound Police to City of Mound Emergency Management.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#12 – Maintain links to other sources of reliable information about infectious diseases and prevention</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	New detailed procedures and protocols developed and implemented through a cooperative effort including Metro Area EMS Medical Directors, Hospitals,	

	Fire Chiefs, Police Chiefs and County Emergency Management. Responsible Agency should be changed from Mound Police to City of Mound Emergency Management.
Name of Reviewer	City of Mound Mitigation Committee

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#13 – Continue to work with Public Affairs to disseminate information about infectious diseases and prevention</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	New detailed procedures and protocols developed and implemented through a cooperative effort including Metro Area EMS Medical Directors, Hospitals, Fire Chiefs, Police Chiefs and County Emergency Management. Education and information provided to the public through media releases and mass communication system. Responsible Agency should be changed from Mound Police to City of Mound Emergency Management.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#14 – Encouraging new power lines to be buried to reduce power outages</b>	
Responsible Agency	City of Mound Community Development	
Contact Name	Sarah Smith, Community Development Director	
Contact Phone/Email	952-472-0604 / sarahsmith@cityofmound.com	
Project Status	<b>X Project Completed</b>	
Summary of Project	No progress made due to ownership and control of power line management by Xcel Energy. Responsible Agency should be changed from Mound Police to City of Mound Community Development.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#15 – Promoting enhanced building techniques to reduce structural damage due to high wind damage</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	City's building official ensures compliance with current building codes. Funded thru city permit and inspection fees This project was combined with Mound project #1	

	Responsible agency should be changed from Mound Police to City of Mound Community Development
Name of Reviewer	City of Mound Mitigation Committee

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#16 – Improve citizens’ understanding of available communications from the National Weather service for notification of severe weather watches and warnings such as NOAA Weather Radios</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	Recognized Weather Ready Nation Ambassador on staff that provides ongoing public information and education through city newsletters, social media and mass communications system. Responsible Agency should be changed from Mound Police to City of Mound Emergency Management.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#17 – Create severe weather awareness campaigns for citizens</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	Recognized Weather Ready Nation Ambassador on staff that provides ongoing public information and education through city newsletters, social media and mass communications system. Responsible Agency should be changed from Mound Police to City of Mound Emergency Management.	
Name of Reviewer	City of Mound Mitigation Committee	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#18 – Promote the use of the NOAA Weather Radio for early warning and post event information in government-owned facilities, child care centers, and for vulnerable populations</b>	
Responsible Agency	Mound Police (Contract services from Orono Police Dept.)	
Contact Name	Chris Fischer, Deputy Chief	
Contact Phone/Email	952-249-4722 / cfischer@ci.orono.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	Weather radios currently installed in all City of Mound owned buildings. Responsible Agency should be changed from Mound Police to City of Mound Emergency Management.	

Name of Reviewer	City of Mound Mitigation Committee
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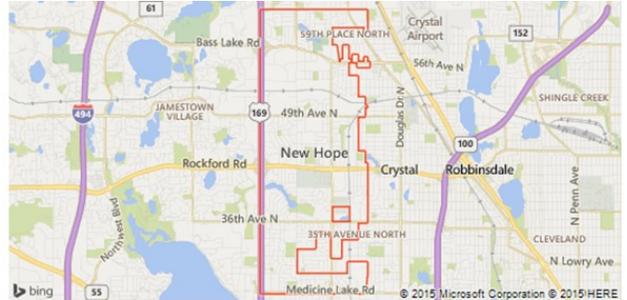


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**3.1.31. CITY OF NEW HOPE**

## Hennepin County- New Hope

New Hope was originally a farming community in Crystal Lake Township. In 1936 the city of Crystal, Minnesota was incorporated, taking up all of former Crystal Lake Township. The farmers in the western part of the city broke off and formed New Hope Township. In 1953 with suburbia moving in and farmers moving out, New Hope was re-incorporated as a borough.

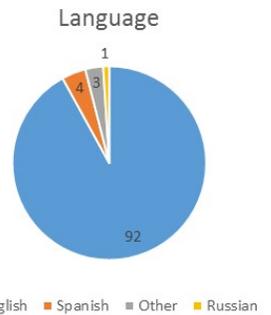


Latitude/Longitude: 45.0365255, -93.384971  
 Area: 5.12 sq. miles  
 Area - Land only: 5.06 sq. miles (99%)  
 Area - Water only: 0.06 sq. miles (1%)  
 Population: 20,339  
 Housing Units: 9,051

**School District**  
 • 281 Robbinsdale

**Capability**

- Law Enforcement
- Fire Department: West Metro Fire
- Public Works
- Helical Anchors, Inc- Soil Stabilization
- Wenck Response Services- Emergency Spill Response
- FCC Registered Amateur Radio Licenses: 58



**5 Mitigation Priority 1**  
 • Establish Joint EOC with City of Crystal

**2 Mitigation Priority 2**  
 • Develop and implement a multi-hazard public awareness program

**7 Mitigation Priority 3**  
 • Determine a 1/2 mile path on either side of the rail-GIS Map

**Vulnerability**

- Monticello NPP: 27 Miles
- Functional Needs: 1899
- Nursing Homes: 3
- Bridges: 2

**Corporate/Employer**  
 • Shopping Center

31

**NEW HOPE /WEST METRO FIRE MITIGATION PLAN**

**POC: ADAM WOTKE**

**A. New Hope Objectives and Actions**

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
1A: Increase Hail Risk Awareness		1A1: Mail brochures with water bills.
		1A2: Post warnings at parks and public buildings.
		1A3: Social Media
1B: Lightning: Protect Critical Facilities and Equipment from Lightning.		1B1: Install lightning protection devices.
		1B2: Install surge protection.
1C: Protect Power Lines and Infrastructure from Severe Winds.		1C1: Establish standards for all utilities regarding tree pruning around lines.
		1C2: Continue to trim Boulevard trees
1D: Protect Public Buildings and Infrastructure from Extreme Winter Weather.		1D1: Add insulation to walls and attics
		1D2: Retrofit buildings to withstand snow loads and prevent roof collapse.
1E: Extreme Winter Weather Assist Vulnerable Populations.		1E1: Identify specific at risk populations
		1E2: Organize outreach programs.

1F: Protect Power Lines from Extreme Winter Weather.	1F1: Bury existing power lines when possible.
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Goal 2	Increase education, outreach, and awareness	
OBJECTIVES	ACTIONS	
2A: Extreme Cold Educate property owners about freezing pipes.	2A1: Educate homeowners and builders on how to protect their pipes, including locating water pipes on the inside of the building insulation or keeping them out of attics, crawl spaces and outside walls.	
	2A2: Educate homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipe and avoid bursting.	
2B: Conduct Lightning Awareness Programs	2B1: Post warning signs at parks and public buildings.	
2C: Increase Severe Wind Risk Awareness	2C1: Inform residents of shelter locations.	
	2C2: Ensure school district is aware of the best area of refuge in their buildings.	
2D: Conduct Winter Weather Risk Awareness Actives	2D1: Inform the public about severe winter weather impacts.	
2E: Conduct Tornado Awareness Activities	2E1: Educate citizens through media outlets.	
	2E2: Conduct tornado drills at schools and public buildings.	
2F: Increase Hazard Education and Risk Awareness.	2F1: Develop and implement a multi-hazard public awareness program.	
2G: Perform Home Safety Inspections	2G1: Maintain an in home inspection program promoting fire safety.	
	2G2: Install smoke detectors and CO detectors in homes.	
2H: Create a severe weather awareness campaign for citizens that covers sirens information, NOAA Weather Radios, How the National Weather Service issues warnings and the hazards that affect Hennepin County.	2H1: Distribute info via variety media sources	
2I: Educate the community on recreational fires and prohibit open burning.	2I1: Make recreational fire regulations readily available to community.	
	2I2: Use local media to increase awareness.	

Goal 3	Protect natural and cultural resources.	
OBJECTIVES	ACTIONS	
3A: Continue to use Surface Water Management Plan approved by both the Bassett Creek and Shingle Creek Water Management Commissions.	3A1: Submit development plans for review	

3B: Monitor Water Supply	3B1: Regularly check for leaks to minimize water supply losses.
	3B2: Improve water supply monitoring.
	3B3: Replace/ Upgrade water pipes in conjunction with street projects

Goal 4	Identify areas of greatest impact from hazards	
OBJECTIVES	ACTIONS	
4A: Improve Storm Water Management Planning	4A1: Complete storm water drainage study for known problem areas.	
	4A2: Prepare and adopt a storm water drainage plan and ordinance.	
	4A3: Replace/ Upgrade sewer and storm system in conjunction with street projects	
4B: Join or Improve Compliance with National Flood Insurance Program (NFIP)	4B1: Participating in NFIP	
	4B2: Adopt ordinances that meet minimum Federal and State requirements to comply with NFIP.	
4C: Improve Storm Water Drainage System Capacity	4C1: Increase the capacity of storm drainage system.	
	4C2: Install rain gardens to slow runoff and improve water quality	
	4C3: Continue with the established sewer maintenance program of jetting pipes.	
4D: Reduce Extreme Winter Weather impact to Roadways	4D1: Plan for and maintain adequate road and debris clearing capabilities.	
4E: Assess Overall Community Risk, Identify Target Hazards in Community	4E1: Obtain local data, list all properties that have the potential greatest impact on community safety. Include public buildings, private business, places of gathering, and other locations, maintain the database	

Goal 5	Enhance hazard mitigation coordination and communication with federal, state and local government	
OBJECTIVES	ACTIONS	
5A: Update local emergency plans as needed and work with neighboring cities on their plan	5A1: Meet with neighboring cities about emergency plans (each department)	
	5A2: Establish Joint EOC	

Goal 6	Promote disaster-resistant future development	
OBJECTIVES	ACTIONS	
	6A1: Mitigating hazards during infrastructure planning.	

6A: Incorporate Flood Mitigation in Local Planning	6A2: Obtaining easements for planned and regulated public use of privately-owned land for temporary water retention and drainage
6B: Adopt and Enforce Building Codes to protect against extreme winter weather	6B1: Adopt International Building Code and International Residential Code.
6C: Map and Assess Vulnerability to Subsidence	6C1: Use GIS to map areas that are susceptible to subsidence.
6D: Ensure building compliance inspections are conducted on new construction projects.	6D1: Review sites on scheduled basis
	6D2: Update and enforce zoning ordinances

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards		
<b>OBJECTIVES</b>		<b>ACTIONS</b>	
7A: Create evacuation plan for a railroad emergency	7A1: Determine a 1/2mile path on either side of the rail line.		
	7A2: Educate the community on the evacuation plan.		
7B: Identify businesses in the community that have hazardous processes and/or materials.	7B1: Pre plan businesses with inspections.		

**B. New Hope Mitigation Actions**

Mitigation Actions (50)	Estimated Cost	Rank	Timeline
1A1: Mail brochures with water bills.	Company- City Admin of New Hope Households in New Hope= 8427 Brochure .07 x 8427= \$590.00	11	Annual each Spring
1A2: Post warnings at parks and public buildings.	Company- My Warning Sign Parks in New Hope= 20 Public Bldgs New Hope= 13  Warning Signs \$5.85 X 33= \$193.00	10	Spring 2017
1A3: Social Media	Website maintenance \$240.00/year	45	Annual
1B1: Install surge protection.	Company- Lightning Eliminators Dissipation Array System X 2= \$10,250	12	Spring 2016
1C1: Establish standards for all utilities regarding tree pruning around lines.		6	
1C2: Continue to trim Boulevard trees		7	
1D1: Add insulation to walls and attics	\$40,000	28	Spring 2018
1D2: Retrofit buildings to withstand snow loads and prevent roof collapse.	Estimates for each project needed	21	Spring 2018
1E1: Identify specific at risk populations	Staff Hours for Community Development, Inspections	22	Fall 2017
1E2: Organize outreach programs.	Staff Hours for Public education programs	23	Fall 2017

1F3: Bury existing power lines when possible.	Cost in Utility bills, Work with Utility Companies	8	Summer 2016
2A1: Educate homeowners and builders on how to protect their pipes, including locating water pipes on the inside of the building insulation or keeping them out of attics, crawl spaces and outside walls.	Brochures \$500	31	Annually
2A2: Educate homeowners that letting a faucet drop during extreme cold weather can prevent the buildup of excessive pressure in the pipe and avoid bursting.	\$0	32	Annually
2B1: Post warning signs at parks and public buildings.	Signs \$200 Each Total \$2000	43	Spring 2018
2C1: Inform residents of shelter locations.	Fall Billing \$500	46	Spring Billing
2C2: Ensure school district is aware of the best area of refuge in their buildings.	Public Education Presentations Cost is Staff Hours	47	Annual
2D1: Inform the public about severe winter weather impacts.	\$200 for Billing Inserts	48	Annual Fall Billing
2E1: Educate citizens through media outlets	Free Media \$0	39	Ongoing
2E2: Conduct tornado drills at schools and public buildings.	Drills \$0	34	Spring Annually
2F1: Develop and implement a multi-hazard public awareness program.	Use FEMA available material at no cost. Minimal Cost to create Local specific material.	2	Spring 2016
2G1: Maintain an in home inspection program promoting fire safety.	Batteries and needed material \$8000	40	Jan 2017
2G2: Install smoke detectors and CO detectors in homes.	Purchase needed detectors \$500	19	Feb 2016
2H1: Distribute info via variety media sources	No Cost, use Social Media and Cable 12	44	On Going
2I1: Make recreational fire regulations readily available to community.	Post on West Metro and Cities Web Site	36	May 2016
2I2: Use local media to increase awareness	Interview on Local TV \$0	35	Spring 2016
3A1: Submit development plans for review	\$0	33	Spring 2017
3B1: Regularly check for leaks to minimize water supply losses.	\$10,000	26	Ongoing
3B2: Improve water supply monitoring.	\$3,000	9	On-Going
3B3: Replace/ Upgrade water pipes in conjunction with street projects	Build cost into future street projects	29	Spring 2019

4 A1: Complete storm water drainage study for known problem areas.		13	Fall 2016
4A2: Preparing and adopting a storm water drainage plan and ordinance.		14	Spring 2017
4A3: Replace/ Upgrade sewer and storm system in conjunction with street projects.		15	Spring 2017
4B1: Participating in NFIP	\$0	41	On Going
4B2: Adopt ordinances that meet minimum Federal and State requirements to comply with NFIP.	\$0	42	On Going
4C1: Increase the capacity of storm drainage system.	Varies based on project	16	Fall 2017
4C2: Install rain gardens to slow runoff and improve water quality	\$1000 per rain garden Est 100 Homes= \$100,000	17	On Going
4C3: Continue with the established sewer maintenance program of jetting pipes	\$10,000	18	Spring 2016
4D1: Plan for and maintain adequate road and debris clearing capabilities		21	
4E1: Obtain local data, list all properties that have the potential greatest impact on community safety. Include public buildings, private business, places of gathering, and other locations, maintain the database		4	
5A1: Meet with neighboring cities about emergency plans (each department)	Meetings \$0	5	June 2016
5A2: Establish Joint EOC	Equipment Upgrades/ Staff Hours \$80,000	1	Dec 2015- finish 2018
6A1: Mitigating hazards during infrastructure planning.	Project Dependent	24	Fall 2017
6A2: Obtaining easements for planned and regulated public use of privately-owned land for temporary water retention and drainage		25	Spring 2016
6B1: Adopt International Building Code and International Residential Code.	\$0	38	On Going
6C1: Use GIS to map areas that are susceptible to subsidence.	\$500 to Print Maps	37	Spring 2018
6D1: Review sites on scheduled basis	Inspection Hours	49	On Going
6D2: Update and enforce zoning ordinances	Inspection Hours	50	On Going

7A1: Determine a 1/2mile path on either side of the rail line.	County- GIS map development \$0	4	January 2016
7A2: Educate the community on the evacuation plan.	Local media/ social media \$1000	27	Dec 2017
7B1: Pre plan businesses with inspections.	Meetings with business \$0	30	Dec 2016

**C. New Hope Mitigation Strategies**

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	5	5A	5A2	Establish Joint EOC- Deployed in 3 phases.	100K	West Metro, Both Cities	Project Began December 2015
2	2	2F	2F1	Develop and implement a multi-hazard public awareness program.- Use FEMA Material, Minimal Cost	1K	West Metro Fire/HSEM	June 2016
3	7	7A	7A1	Determine a 1/2mile path on either side of the rail- GIS Map	1K	County-GIS	March 2016
4	4	4E	4E1	List all properties that have the potential greatest impact on community safety. Include public buildings, private business, places of gathering, and other locations- CIKR	0	FD	Spring 2016
5	5	5A	5A1	Meet with neighboring cities about emergency plans (each department)	0	City Managers	Summer 2016
6	1	1C	1C1	Establish standards for all utilities regarding tree pruning around lines.	0	Utilities Dept.	Annually
7	1	1C	1C2	Continue to trim Boulevard trees	3K	Utilities Dept.	Annually
8	1	1F	1F3	Bury existing power lines when possible.	?	Utilities Dept.	On-Going
9	3	3B	3B2	Improve water supply monitoring.	3K	Utilities Dept.	On Going
10	1	1A	1A2	Post warnings at parks and public buildings.	\$193	Parks Dept.	Spring 2017
11	1	1A	1A1	Mail brochures with water bills.	\$590	City Admin	Annually

12	1	1B	1B1	Install lightning protection devices.	20K	Public Works	Spring 2017
13	4	4A	4A1	Complete storm water drainage study for known problem areas.	20K	Public Works	Spring 2017
14	4	4A	4A2	Preparing and adopting a storm water drainage plan and ordinance.	0	Commercial Dev	Spring 2017
15	4	4A	4A3	Replace/ Upgrade sewer and storm system in conjunction with street projects.	Varies	Public Works	Fall 2017
16	4	4C	4C1	Install re-route, increase the capacity of storm drainage system.	Varies	Utilities	On Going
17	4	4C	4C2	Install rain gardens to slow runoff and improve water quality.	Varies	Engineering	On Going- Seeking improvement
18	4	4C	4C3	Continue with the established sewer maintenance program of jetting pipes	10K	Public Works	Spring 2016, Ongoing
19	2	2G	2G2	Install smoke detectors and CO detectors in homes.	\$500	FD	On Going
20	1	1D	1D2	Retrofit public buildings to withstand snow loads and prevent roof collapse.	EST	City Eng.	Spring 2018
21	4	4D	4D1	Plan for and maintain adequate road and debris clearing capabilities	0	Public Works	Spring 2017
22	1	1E	1E1	Identify specific at risk populations	0	PD/FD	Fall 2017
23	1	1E	1E2	Organize outreach programs.	0	PD/FD	Fall 2017
24	6	6A	6A1	Mitigating hazards during infrastructure planning.	0	Commercial Dev	Fall 2017
25	6	6A	6A2	Obtaining easements for planned and regulated public use of privately-owned land for temporary water retention and drainage	0	Commercial Dev	Spring 2018

26	3	3B	3B1	Regularly check for leaks to minimize water supply losses.	10K	Public Works	On Going
27	7	7A	7A2	Educate the community on the evacuation plan- Social Media, Mailings	1K	Billing	Winter 2017
28	1	1D	1D1	Add insulation to walls and attics	40K	Public Works	Spring 2018
29	3	3B	3B3	Replace/ Upgrade water pipes in conjunction with street projects	City Planning	City Management	Spring 2018
30	7	7B	7B1	Pre plan businesses with inspections- Meetings	0	FD	Spring 2017
31	2	2A	2A1	Educate homeowners and builders on how to protect their pipes, including locating water pipes on the inside of the building insulation or keeping them out of attics, crawl spaces and outside walls.	\$500	Community Development	Annually
32	2	2A	2A2	Educate homeowners that letting a faucet drop during extreme cold weather can prevent the buildup of excessive pressure in the pipe and avoid bursting.	0	Community Development	Annually
33	3	3A	3A1	Submit development plans for review	0	Community Development	Spring 2017
34	2	2E	2E2	Conduct tornado drills at schools and public buildings.	0	Parks and Rec	Spring Annually
35	2	2I	2I2	Use local media to increase awareness: Cable 12	0	FD	Spring Annually
36	2	2I	2I1	Make recreational fire regulations readily available to community.		FD	On Going
37	6	6C	6C1	Use GIS to map areas that are susceptible to subsidence.- Maps	\$500	LOGIS/County	Spring 2018
38	6	6B	6B1	Adopt International Building Code and International Residential Code.	0	Inspections	On Going

39	2	2E	2E1	Educate citizens through media outlets	0	Billing	On Going
40	2	2G	2G1	Maintain an in home inspection program promoting fire safety.	8K	FD	On Going
41	4	4B	4B1	Participating in NFIP	0	Community Development	On Going
42	4	4B	4B2	Adopt ordinances that meet minimum Federal and State requirements to comply with NFIP.	0	Community Development	On Going
43	2	2B	2B1	Post warning signs at parks and public buildings.	2K	Park and Rec	Spring 2018
44	2	2H	2H1	Distribute info via variety media sources	0	IT	On Going
45	1	1A	1A3	Social Media	\$240/yr.	IT Dept.	Annual
46	2	2C	2C1	Inform residents of shelter locations.	\$200	Parks and Recreation	Spring Billing
47	2	2C	2C2	Ensure school district is aware of the best area of refuge in their buildings.	0	PD/FD	Annual
48	2	2D	2D1	Inform the public about severe winter weather impacts.	\$200	Utilities	Fall Billing
49	6	6D	6D1	Review sites on scheduled basis- Inspect	Staff Hours	Inspections	On Going
50	6	6D	6D2	Update and enforce zoning ordinances-Review	Staff Hours	Inspections	Annual
<b>TOTAL</b>					<b>\$222,643.00</b>		

**D. New Hope Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date:2010 Plan	To Date: 2017
Project Title/Action	<ol style="list-style-type: none"> <li>1. Continue to use the Surface Water Management Plan approved by both the Bassett Creek and Shingle Creek Water Management Commissions.</li> <li>2. Update and enforce zoning ordinances.</li> <li>3. Limit recreational fires and prohibit open burning.</li> <li>4. Continue to trim boulevard trees.</li> <li>5. Require developers/builders to provide retention ponds as part of their storm water management plan.</li> <li>6. Upgrade existing retention ponds as needed.</li> </ol>	

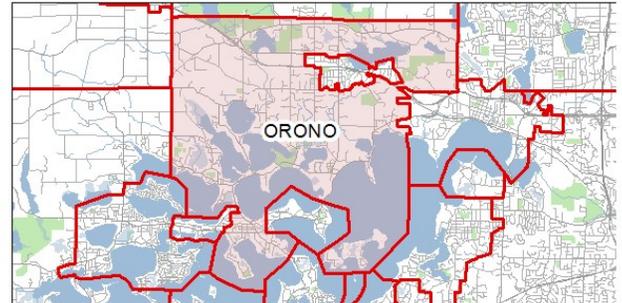
	<p><b>7. Require and inspect to confirm that all sump pump discharges groundwater to daylight.</b></p> <p><b>8. Require developers to provide areas for snow storage.</b></p> <p><b>9. Bury overhead power lines whenever possible.</b></p> <p><b>10. Replace and upgrade sewer and storm water pipes in conjunction with street projects.</b></p> <p><b>11. Continue with the established sewer maintenance program of jetting pipes.</b></p> <p><b>12. Update local emergency plans as needed, and work with neighboring cities with their plan.</b></p> <p><b>13. Work with neighboring cities on overall plan as to how New Hope impacts them and Vice Versa</b></p>
Responsible Agency	New Hope
Contact Name	N/A
Contact Phone/Email	
Project Status	<ul style="list-style-type: none"> <li>○ Project Completed</li> <li>○ Project Canceled</li> <li>○ Project on Schedule</li> <li>○ <b>Anticipated completion date: <u>WITH NEW 2018 PLAN</u></b> Project is delayed</li> </ul> <p>Explain: _____</p>
Summary of Project (address changes, accomplishments, funding, lessons learned, new actions, intended or unintended results, did it have the political support etc.)	All items will move to 2017 plan
Name of Reviewer	Adam Wodtke 763-592-9532

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**3.1.32. CITY OF ORONO**

### Hennepin County- Orono

Orono Township was created in 1889 and incorporated in 1955. Located approximately 15 miles west of downtown Minneapolis on the north shore of Lake Minnetonka.



Latitude/Longitude: 44.9598775, -93.583897  
 Area: 25.15 sq. miles  
 Area - Land only: 15.99 sq. miles (64%)  
 Area - Water only: 9.16 sq. miles (36%)  
 Population: 7,437  
 Housing Units: 3,209

**5** Mitigation P1- Wellhead Protection Plan  
 • Continue to meet the State and Federal regulations with the protection plan

**7** Mitigation P2- Bury Power Lines  
 • Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas

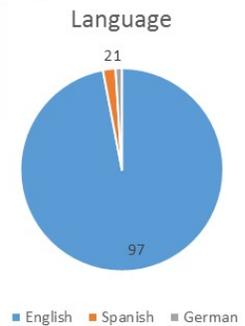
**2** Mitigation P3- Work with Chamber of Commerce, businesses and other local agencies to promote hazard mitigation in local community.  
 • Increase awareness and knowledge of hazard mitigation principles and practices

**School District**  
 • 278 Orono

**Vulnerability**  
 • Monticello NPP: 25 Miles  
 • Functional Needs: 16  
 • Bridges: 26

**Corporate/Employer**

**Capability**  
 • Law Enforcement  
 • Police Chaplains Group  
 • Public Works  
 • FCC Registered Amateur Radio Licenses: 4



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**ORONO MITIGATION PLAN** **POC: CORREY FARNIOK**

**A. Orono Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Flooding: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding	1A1: Review and update policies that discourage growth in flood-prone areas 1A2: Continue to participate in the National Flood Insurance Program
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Work with Chamber of Commerce, businesses and other local agencies to promote hazard mitigation in local community.	2A1: Increase awareness and knowledge of hazard mitigation principles and practices
<b>Goal</b>	Protect natural and cultural resources	

<b>3</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>
3A: Establish Multi-Jurisdictional partnership to reduce runoff	3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality	

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Wellhead Protection Plan	5A1: Continue to meet the State and Federal regulations with the protection plan	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Bury Power Lines	7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	

**B. Orono Mitigation Actions**

Mitigation Action Name (6)	Estimated Cost	Priority	Timeline
1A1: Review and update policies that discourage growth in flood-prone areas	Staff Time	5	On-going
1A2: Continue to participate in the National Flood Insurance Program	Staff Time	6	On-going
2A1: Increase awareness and knowledge of hazard mitigation principles and practices	Staff Time	3	On-going
3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality	\$ 20,000.00	4	On-going
5A1: Continue to meet the State and Federal regulations with the protection plan	Staff Time	1	On-going
7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	\$100,000	2	On-going

**C. Orono Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost Breakdown	Responsible Agency (POC)	Timeline
1	5	5A	5A1	Public Works, Planning Department	Staff time	City of Orono	Ongoing
2	7	7A	7A1	Public Works Department, Planning Department Administration Department, Excel Energy and Wright Hennepin Electric	100K	City of Orono	Ongoing
3	2	2A	2A1	Administration, Police Department	Staff time	City of Orono	Ongoing
4	3	3A	3A1	Public Works Department, Watershed Districts	20K	City of Orono	Ongoing
5	1	1A	1A1	Planning Department	Staff Time	City of Orono	Ongoing
6	1	1A	1A2	Planning Department	Staff Time	City of Orono	Ongoing
<b>TOTAL</b>					<b>\$120,000.00</b>		

**D. Orono Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#1 Continue to participate in the National Flood Insurance Program.</b>	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<b>X Project Completed: 12/17/15</b>	
Summary of Project		
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Update land use plans and identified areas where development should be restricted.</b>	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<b>X Project Completed- Ongoing- completed 12/17/15</b>	
Summary of Project		
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
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<b>Project Title/Action</b>	<b>#3 Continue to use city GIS to map and update locations of fixed facilities using hazardous materials.</b>
Responsible Agency	Orono Police
Contact Name	Farniok
Contact Phone/Email	
Project Status	<b>X Project Completed- Ongoing- completed 12/17/15</b>
Summary of Project	
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Ensure that all essential first responders have the current version of the Emergency Response Guidebook.</b>	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	Project Completed Project Canceled Project on Schedule <b>X Anticipated completion date: Spring 2016</b> Project is delayed Explain:	
Summary of Project	New 2016 guide to be distro'd in the spring of 2016	
Name of Reviewer		

**3.1.33. CITY OF OSSEO**

## Hennepin County- Osseo

The City of Osseo is located in the northeastern part of Hennepin County. Originally, Osseo was under the government of the townships of Brooklyn Park and Maple Grove. In the spring of 1875, by an act of the state legislature, Osseo became incorporated. It is said that Osseo is a Native American name, "Waseia" meaning 'there is light'. According to the 2000 census, Osseo has a population of 2,434 people and the city has a total area of 0.8 square miles of land. U.S. Route 169, County Road 81, and Central Avenue/Old Jefferson Highway are the three main arterial routes in the city



Latitude/Longitude: 45.1164835, -93.4013225  
 Area: 0.75 sq. miles  
 Area - Land only: 0.75 sq. miles (100%)  
 Area - Water only: 0.00 sq. miles (0%)  
 Population: 2,430  
 Housing Units: 1,217

**School District**  
 • 279 Osseo

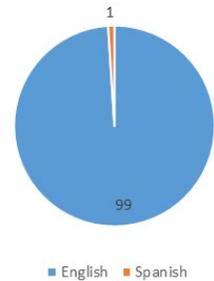
**Vulnerability**  
 • Monticello NPP: 23 Miles  
 • Functional needs: 266

Corporate/Employer

**Capability**

- Law Enforcement
- FCC Registered Amateur Radio Licenses: 8

**Language**



**6** Mitigation Priority 1  
 • Install Generation Support for EOC

**2** Mitigation Priority 2  
 • Improve Public education safety awareness

Mitigation Priority 3

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**OSSEO MITIGATION PLAN**

**POC: SHANE MIKKELSON**

**A. Osseo Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 2</b>	Increase education, outreach, and awareness
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
2A: Continue to educate the public using several safety programs	2A1: Work in purchasing material that can be sent to residents and using both Police and Fire

<b>Goal 3</b>	Protect natural and cultural resources
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal</b>	Identify areas of greatest impact from hazards
-------------	------------------------------------------------

<b>4</b>	
<b>OBJECTIVES</b>	<b>ACTIONS</b>
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	<b>ACTIONS</b>
None	

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	<b>ACTIONS</b>
6A: Generator at City Hall/Police Department	6A1: Have generator installed at City Hall/Police Department to operate E.O.C

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	<b>ACTIONS</b>
None	

**B. Osseo Mitigation Actions**

Mitigation Actions (2)	Estimated Cost	Priority	Timeline
2A1: Work in purchasing material that can be sent to residents and using both Police and Fire	\$500.00	2	On-Going
6A1: Have generator installed at City Hall/Police Department to operate E.O.C	\$20,000.00	1	2017

**C. Osseo Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	6	6A	6A1	Install generator at City Hall and Police Department	20K	City Of Osseo	2017
2	2	2A	2A1	Continue to educate the public using several safety programs	500	City of Osseo	On-Going
<b>TOTAL</b>					<b>\$520,000.00</b>		

**D. Mitigation Action Progress Report Form**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
Project Title/Action	#1 Continue to educate the public using several safety programs	
Responsible Agency	PD	
Contact Name	Mikkelson	

Contact Phone/Email	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input checked="" type="radio"/> <b>Anticipated completion date: On-Going</b></li> <li><input type="radio"/> Project is delayed</li> </ul> <p>Explain:</p>
Summary of Project (address changes, accomplishments, funding, lessons learned, new actions, intended or unintended results, did it have the political support etc.)	Staff time-Ongoing-Osseo Police
Name of Reviewer	

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**3.1.34. CITY OF PLYMOUTH**

Hennepin County- Plymouth

Plymouth's history can be traced back to the pre-Columbian period, 1400-1500 A.D. The original inhabitants were the Dakota. Their encampment was at the north end of Medicine Lake. Medicine Lake is derived from the Native American word "Mdeewakan", meaning "Lake of the Spirit". The Dakota named it after a warrior overturned his canoe and his body was never recovered. As the new settlers came to the area, they decided to organize. The Hennepin County Board of Commissioners named the new settlement Plymouth. As the community began to evolve, so did local government. Plymouth became incorporated as a village on May 18, 1955. Plymouth became a statutory city on February 7, 1974. Plymouth is the seventh largest city in Minnesota. Located 15 miles northwest of Minneapolis, the city is the third largest suburb of Minneapolis. Interstate 494, U.S. Route 169, and Minnesota State Highway 55 are the main transportation routes of the city. The city of Medicine Lake is within the borders of Plymouth and is seen on the map with the red kidney bean shape.



Latitude/Longitude: 45.022325, -93.461539  
 Area: 35.28 sq. miles  
 Area - Land only: 32.64 sq. miles (93%)  
 Area - Water only: 2.64 sq. miles (7%)  
 Population: 70,576  
 Housing Units: 29,982

**School District**

- 284 Wayzata

**Vulnerability**

- Bridges: 56
- Monticello NPP: 26 miles
- 12 HI Mobile Home Park: 300
- Functional Needs: 1007

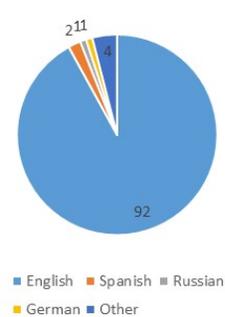
**Corporate/Employer**

- Christopher and Bank's
- Select Comfort
- The Mosaic Company
- Urologix, Inc.

**Capability**

- Law Enforcement
- Fire Department
- Parks and Recreation
- FCC Registered Amateur Radio Licenses: 258

**Language**



- 1** Mitigation Priority 1  
• Review and update policies that discourage growth in flood-prone areas
- 2** Mitigation Priority 2  
• Publicize and encourage the adoption of appropriate hazard mitigation actions.
- 3** Mitigation Priority 3  
• Update and review any plans and budgetary resources to maintain and promote the identified historic locations of the City.

**PLYMOUTH MITIGATION PLAN**

**POC: DAN PLEKKENPOL**

**A. Plymouth Objectives and Actions**

Goal 1	Minimize loss of life, injury and damage to property, the economy, and the environment from natural and man-made hazards.	
	OBJECTIVES	ACTIONS
1A: Flooding/Dam Failure: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding and dam failure		1A1: Update inundation map every 10 years (FEMW map panes)
		1A2: Review and compare existing flood control standards, zoning, and building requirements
		1A3: Review and update policies that discourage growth in flood-prone areas
		1A4: Periodically exercise flood/dam failure response actions
		1A5: Update flood prone area mitigation protocol
		1A6: Implement capital improvement program projects intended to reduce/alienate flood potential
1B: Wild land fire: Develop a comprehensive approach reducing the possibility of damage and losses due to wildfire		1B1: Develop and publicize evacuation plans and routes in areas threatened by wild land fires, as resources are available.

	1B2: Ensure defensible fire-fighting space is afforded adjacent to wild land and open space areas in new developments, as resources are available.
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Goal 2	Increase education, outreach, and awareness	
OBJECTIVES	ACTIONS	
2A: Educate the public to increase awareness of hazards and opportunities for mitigation actions.	2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions.	
	2A2: Provide information to the public on the city website and through public education opportunities	
2B: Promote partnerships between the state, counties, local jurisdictions, and partner agencies to identify, prioritize, and implement mitigation actions.	2B1: Participate as a member in local or regional hazard mitigation planning group	
	2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.	
2C: Work with Chamber of Commerce, businesses and other local agencies to promote hazard mitigation in local community.	2C1: Increase awareness and knowledge of hazard mitigation principles and practices	
	2C2: Encourage businesses to develop and implement hazard mitigation actions.	
	2C3: Support or provide the private sector events, workshop, symposium, and continued education opportunities.	

Goal 3	Protect natural and cultural resources	
OBJECTIVES	ACTIONS	
3A: Promote continued maintenance and management practices of water resources, green space.	3A1: Update and review City Park / Recreation and Community Development policies to ensure continued best practices.	
	3A2: Maintain wetland and natural resource inventories	
3B: Promote maintenance and management of historic locations and buildings within the City	3B1: Update and review any plans and budgetary resources to maintain and promote the identified historic locations of the City.	

Goal 4	Identify areas of greatest impact from hazards	
OBJECTIVES	ACTIONS	
4A: To assess specific geographical areas within the City that are predisposed to natural disasters and or man-made hazardous situations, both of which could be responsible for financial and/or personal impact or loss of life.	4A1: Annually review and update the City Risk / Threat Assessment document and distribute the new version to the City Manager all City Division Directors.	

Goal 5	Enhance hazard mitigation coordination and communication with federal, state and local governments	
OBJECTIVES		ACTIONS
5A: Continue the promotion of partnerships with federal, state and local entities to develop successful mitigation plans and operational strategies. Work towards a common comprehensive emergency operation plan that can be utilized on a larger regional platform.	5A1: Continue affording the opportunity for Plymouth City Staff to attend or join emergency management associations like NSEMPG (North Suburban Emergency Management Planning Group), MEMA (Metropolitan Emergency Managers Association) and AMEM (Association of Minnesota Emergency Managers).	
	5A2: Continue participation in multi-jurisdictional / multi-agency table top, drill and full-scale exercises.	
	5A3: Research and implement lessons learned from actual hazardous events from local, regional and national jurisdictions to avoid probable mistakes from repeating themselves.	

Goal 6	Promote disaster resistant future development	
OBJECTIVES		ACTIONS
6A: Reduce the risk factor of private business, family and public structures in addition to at risk populations.	6A1: Use risk assessment modeling tools and resources / statistical information to determine the highest risk areas in order to avoid overpopulation or injection of at risk groups like children or the elderly in pre-identified high risk hazardous locations.	
	6A2: The Plymouth Community Development Department will continue to ensure that building permits and codes are current or exceed industry standards.	
	6A3: The Plymouth Park and Recreation Department will give concentrated consideration of not developing park areas near pre-identified high risk hazardous locations.	

Goal 7	Build and support local capacity and commitment to become less vulnerable to hazards	
OBJECTIVES		ACTIONS
7A: Develop community stakeholders in mitigation strategies by use of local resources.	7A1: Encourage and continue development of CERT Teams and Neighborhood Watch groups to assist in citizens to be self-reliant and responsible for their own safety measures lessening the burden on the local government so a more concentrated effort can be placed on the execution of COOP plans.	
	7A2: Continue to monitor and document the completion of mandatory NIMS training necessary for national compliance standards.	

**B. Mitigation Action Plan**

Mitigation Actions (27)	Estimated Cost	Priority	Timeline
1A1: Update inundation map every 10 years (FEMW map panes)	Staff time: 10 hours	5	Review annually and update on the 10 <sup>th</sup> year-Long
1A2: Review and compare existing flood control standards, zoning, and building requirements	Staff time: 5 hours Community Develop Staff, Engineering Staff, Special Assessments	2	Annually Short
1A3: Review and update policies that discourage growth in flood-prone areas	Staff hours: 3	1	Annually Short
1A4: Periodically exercise flood/dam failure response actions	Staff hours: 40 Workshop, tabletops, drills and actual events	3	Ongoing Long
1A5: Update flood prone area mitigation protocol	Staff hours: 3	4	Annually Short
1A6: Implement capital improvement program projects intended to reduce/alienate flood potential	Staff hours: 4	2	bi-annually match City Budget Short
1B1: Develop and publicize evacuation plans and routes in areas threatened by wild land fires, as resources are available.	Staff time: 10 hours	2	Annually Short
1B2: Ensure defensible fire-fighting space is afforded adjacent to wild land and open space areas in new developments, as resources are available.	Staff time: 10 hours Community Develop Staff Fire Department Staff	1	Annually On-going Medium
2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions.	Staff time: 10 hours	1	Annually On-going Short
2A2: Provide information to the public on the city website and through public education opportunities	Staff time: 30 hours	2	Annually On-going Medium
2B1: Participate as a member in local or regional hazard mitigation planning group	Staff time: 25 hours	1	Monthly participation Medium
2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.	Staff time: 10	2	Annually Short
2C1: Increase awareness and knowledge of hazard mitigation principles and practices	Staff time: 6 hours	2	On-Going Short

2C2: Encourage businesses to develop and implement hazard mitigation actions.	Staff time: 25 hours	1	On-going Medium
2C3: Support or provide the private sector events, workshop, symposium, and continued education opportunities.	Staff time: 10 hours	3	On-going Short
3A1: Update and review City Park / Recreation and Community Development policies to ensure continued best practices.	Staff time: 15	1	Annually Medium
3A2: Maintain wetland and natural resource inventories	Staff hours: 3	3	Annually Short
3B1: Update and review any plans and budgetary resources to maintain and promote the identified historic locations of the City.	Staff time: 1	1	Annually Short
4A1: Annually review and update the City Risk / Threat Assessment document and distribute the new version to the City Manager all City Division Directors.	Staff time: 30 hours	1	Annually Medium
5A1: Continue affording the opportunity for Plymouth City Staff to attend or join emergency management associations like NSEMPG (North Suburban Emergency Management Planning Group), MEMA (Metropolitan Emergency Managers Association) and AMEM (Association of Minnesota Emergency Managers).	Staff time: 30 hours	1	Monthly meetings Medium
5A2: Continue participation in multi-jurisdictional / multi-agency table top, drill and full-scale exercises.	Staff time: 16 hours	3	Annually as scheduled Short
5A3: Research and implement lessons learned from actual hazardous events from local, regional and national jurisdictions to avoid probable mistakes from repeating themselves.	Staff time: 8 hours	2	Annually Short
6A1: Use risk assessment modeling tools and resources / statistical information to determine the highest risk areas in order to avoid overpopulation or injection of at risk groups like children or the elderly in pre-identified high risk hazardous locations.	Staff time: 30 hours	1	Annually Long
6A2: The Plymouth Community Development Department will continue to ensure that building permits and codes are current or exceed industry standards.	Staff time: 15 hours	2	Annually On-Going Medium
6A3: The Plymouth Park and Recreation Department will give concentrated consideration of not developing park areas near pre-identified high risk hazardous locations.	Staff time: 5 hours	3	Annually On-Going Short
7A1: Encourage and continue development of CERT Teams and Neighborhood Watch groups to assist in	Staff Time: 50 hours	1	Annually On-going

citizens to be self-reliant and responsible for their own safety measures lessening the burden on the local government so a more concentrated effort can be placed on the execution of COOP plans.	Crime prevention budget Emergency Management budget		Long
7A2: Continue to monitor and document the completion of mandatory NIMS training necessary for national compliance standards.	Staff hours: 15 hours	2	Annually On-going Medium

### C. Mitigation Strategies

Priority	Goal	Objective	Action	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A3	Update	\$90.00	Eng/Water Resource	Short
1	1	1B	1B2	Develop	\$900.00	Fire/ Comm	Medium
1	2	2A	2A1	Publicize	\$300.00	EM/Fire	Short
1	2	2B	2B1	Participate	\$750.00	EM	Medium
1	2	2C	2C2	Development	\$750.00	EM	Medium
1	3	3A	3A1	Update and Review	\$450.00	EM	Medium
1	3	3B	3B1	Update and Review	\$150.00	ParkRec/ Comm Dev	Short
1	4	4A	4A1	Update and Review	\$900.00	Comm Dev	Medium
1	5	5A	5A1	Attend	\$900.00	EM/All	Medium
1	6	6A	6A1	Modeling	\$900.00	EM	Long
1	7	7A	7A1	Development	\$1500.00	Eng/Comm Dev	Long
2	1	1A	1A2	Review	\$150.00	Eng/Water Resource	Short
2	1	1A	1A6	Ensure	\$120.00	Eng/Water Resource	Short
2	1	1B	1B1	Ensure	\$300.00	Develop	Short
2	2	2A	2A2	Promote	\$900.00	EM	Medium
2	2	2B	2B2	Provide/Support	\$300.00	EM	Short
2	2	2C	2C1	Increase Awareness	\$180.00	EM	Short
2	5	5A	5A3	Research	\$240.00	EM/ All	Short
2	6	6A	6A2	Ensure	\$450.00	EM	Long
2	7	7A	7A2	Monitor	\$450.00	Comm Dev	Medium
3	1	1A	1A4	Review and Update	\$90.00	EM	Short
3	2	2C	2C3	Provide/Support	\$300.00	EM	Short
3	3	3A	3A2	Monitor and Support	\$90.00	Eng/Water Resource	Short
3	5	5A	5A2	Participate	\$480.00	EM/All	Short
3	6	6A	6A3	Development	\$150.00	EM	Long
4	1	1A	1A5	Exercise	\$1,200.00	Eng/Water Resource	Long

5	1	1A	1A1	Update	\$300.00	Eng/Water Resource	Short
<b>TOTAL</b>					<b>\$12,390.00</b>		

**D. Mitigation Action Progress Report Form**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Improve Citizen Access to severe weather warnings</b>	
Responsible Agency	Emergency Management / Engineering	
Contact Name	Dan Plekkenpol / Doran Cote	
Contact Phone/Email	763-509-5187 / 763-509-5501	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: July 2016</b> <input type="radio"/> Project is delayed Explain: _____	
Summary of Project	<p>Two additional outdoor warning sirens have been installed in the north and northeast sectors of the City with another planned to be installed by a new elementary school in northwest Plymouth.</p> <p>The City of Plymouth has enacted a mass notification system name ALERT Plymouth. This system will only be used to issue public safety and emergency messages.</p>	
Name of Reviewer	Dan Plekkenpol	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Create factual and timely information about hazardous materials / waste stored in or transported through Hennepin County.</b>	
Responsible Agency	Emergency Management	
Contact Name	Dan Plekkenpol	
Contact Phone/Email	763-509-5187	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b> <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain: _____	
Summary of Project	<p>The North Suburban Emergency Managers Planning Group (NSEMPG) which Plymouth is a member, has been working towards the development and initiation of a GIS program to identify the above mentioned locations. Maple Grove Fire has been coordinating this project with their City GIS staff and the project is close to completion. This mapping program will enhance the</p>	

	ability to locate Sara Title 3 facilities within the 13 city emergency management consortium known as NSEMPG
Name of Reviewer	Dan Plekkenpol

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: July 10, 2015
<b>Project Title/Action</b>	<b>#3 Ensure that all first responders have ready access to the latest edition of the Emergency Response Guidebook</b>	
Responsible Agency	Emergency Management	
Contact Name	Dan Plekkenpol	
Contact Phone/Email	763-509-5187	
Project Status	<b>X Project Completed</b>	
Summary of Project	The 2012 version of the Emergency Response Guidebook has been acquired and distributed to the appropriate departments and has been made readily accessible in the proper emergency or response vehicles.	
Name of Reviewer	Deputy Chief Dan Plekkenpol	

**3.1.35. CITY OF RICHFIELD**

## Hennepin County- Richfield

Long before suburban homes were built here, Richfield was characterized by its abundance of rich farmland (hence the name) as the Minneapolis and St. Paul area was beginning to grow. In 1908, Richfield officially became a city by adopting a President/Trustee form of government. However, residents of Richfield held town meetings dating back to May 11, 1858—the date on which Congress admitted Minnesota into the Union. Richfield is an inner-ring suburb and is bordered by Minneapolis to the north, Minneapolis/St. Paul International Airport to the east, Bloomington to the south, and Edina to the west. Interstates 35W and 494 and Minnesota State Highways 62 and 77 are the four main arterial routes for the city.



Latitude/Longitude: 44.8762525, -93.282074  
 Area: 6.99 sq. miles  
 Area - Land only: 6.85 sq. miles (98%)  
 Area - Water only: 0.14 sq. miles (2%)  
 Population: 35,228  
 Housing Units: 15,735

**Infrastructure:**

Streets 142 mi.  
 Sidewalks 40 mi.  
 Water System 122 mi.  
 Sanitary Sewer 120 mi.

**School District**

• 280 Richfield

**Vulnerability**

• Bridges 39  
 • Functional Needs 347  
 • Airport to East  
 • Monticello NPP: 38 Miles

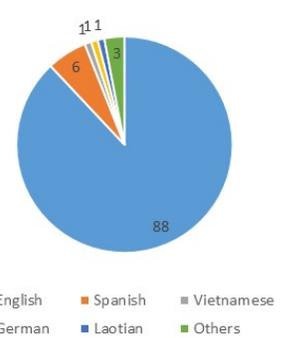
**Corporate/ Employer**

• Best Buy HQ 5200  
 • US Bank 1600  
 • Target 375

**Capability**

- Fire Department
- Police Department
- Streets and Highways
- Parks and Recreation
- Public Safety
- Water Supply
- FCC Registered Amateur Radio Licenses: 123

**Language**



**1** Mitigation P1- Upgrade City Warning System

- Update evacuation and shelter plans for municipal buildings
- Create a schedule to replace warning siren systems

**2** Mitigation P2- Increase Public Awareness

- Publicize and adopt hazard mitigation actions
- Public awareness through city website and public education

**6** Mitigation P3- Future Community Development

- Review city ordinance
- Conduct study session with city council to develop protocols

**RICHFIELD MITIGATION PLAN**

**POC: JAY HENTHORNE**

**A. Richfield Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
	1A: Asses and upgrade the City/County warning system	1A1: Creating a schedule to replace warning siren systems within next 7 years 1A2: Update our evacuation and sheltering plans for Municipal buildings in 1 year. 1A3: Update our Emergency Operations Center (EOC) concerning technology in 1 year. Table Top exercise and activation of EOC within 1 year. 1A4: Perform exercises to test the various components of the EOC within 1 year 1A5: Develop more information to warn/mitigate disasters on our social media in 6 months 1A6: Use of our EVERBRIDGE system to warn residents of hazardous weather or man-made hazards

1B: Maintain Links to other sources of reliable information about infectious disease response, including quarantine	1B1: Maintain Contracts with Bloomington Public Health for ongoing services
	1B2: Provide educational material along with the location of vaccination clinics to employees and the public.
	1B3: Working with our diverse community through community outreach groups on educational material regarding vaccinations and illnesses.
	1B4: Review and Update EBOLA Response Plan Protocols.

<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Educate the public to increase awareness of hazards and opportunities for mitigation actions.	2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions.
		2A2: Provide information to the public on the city website and through public education opportunities
	2B: Promote partnerships between the state, counties, local jurisdictions, and partner agencies to identify, prioritize, and implement mitigation actions.	2B1: Participate as a member in local or regional hazard mitigation planning group
		2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.
	2C: Work with Chamber of Commerce, businesses and other local agencies to promote hazard mitigation in local community.	2C1: Increase awareness and knowledge of hazard mitigation principles and practices
		2C2: Encourage businesses to develop and implement hazard mitigation actions.
		2C3: Ensure that Police and Fire have the latest edition of the Emergency Response Guidebook

<b>Goal 3</b>	Protect natural and cultural resources	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	None	

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	4A: Create a strategy to work with private industry and businesses to identify locations of hazardous materials	4A1: Meet with Hazardous material producers to review state and federal guidelines.
		4A2: Receive updated emergency operations plans for private industry on their protocols responding to Hazardous material incidents

	4A3: Receive updated locations of where Hazardous materials are stored on site.
4B: Share SARA information with other city departments through ACTIVE 911 App.	4B1: Have access through the Fire Department to other ACTIVE 911 User to receive the SARA information overlay for other departments specifically police.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with Federal, State and Local Governments	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Increase coordination with the State Duty Officer for Highway spills		5A1: Work with the Fire Department and Public works on spill protocols 5A2: Update information with State Duty Officer.
5B: Maintain and Update plan to contact Utility Companies		5B1: Provide contact information for City personnel to Utility Companies
5C: Active Shooter situation. Coordination and Training with all local, county, and state agencies		5C1: Continue to develop "Play Book" for active shooter incidents. 5C2: Continue to train with Fire Department and other agencies in response protocols and procedures. 5C3: Apply and receive grant funding to train on a more regional basis.
5D: CERT Training and Regional Asset sharing of resources		5D1: Continue to recruit and train CERT volunteers 5D2: Work with local jurisdictions on exercises and events. 5D3: Apply and receive grant funding to offset the cost of the CERT Program.

<b>Goal 6</b>	Promote Disaster-Resistant future Development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A: Work in Partnership with Community Development on education contractors and new developers on Hazard Mitigation		6A1: Review and implement if possible changes in city ordinances 6A2: Conduct Study Sessions with City Council on new development possibilities and include Hazard Mitigation/Disaster protocols

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Training for Police, Fire, and Public Works personnel in response protocols to hazards		7A1: Update training protocols and plans for all City departments on hazard response including evacuation.
7B: Continue with Business CERT and TEEN CERT models in the community		7B1: Train more businesses in the CERT Model and solicit more volunteers.

	7B2: Continue to train TEEN CERT volunteers in our community.
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**B. Richfield Mitigation Actions**

*Objective: 1. 1A: Asses and Upgrade the City/County Warning system*

Mitigation Action (35)	Estimated Cost	Rank	Timeline
1A1: Creating a schedule to replace warning siren systems within next 7 years- 5 sirens out of the 7 need to be replaced	Man hours: unknown Police Federal Signal	2	Long
1A2: Update our evacuation and sheltering plans for Municipal buildings in 1 year.	Man hours: 10 Local EM, Fire and Executive Admin	1	1 <sup>st</sup> quarter of 2016 Short
1A3: Update our Emergency Operations Center (EOC) concerning technology in 1 year. Table Top exercise and activation of EOC within 1 year.	Man hours: 25 Local EM, All City Departments	3	1 <sup>st</sup> quarter of 2016 Short
1A4: Perform exercises to test the various components of the EOC within 1 year	Man hours: 10 Police and Fire, All City Departments	5	3 <sup>rd</sup> and 4 <sup>th</sup> quarter of 2016 Long
1A5: Develop more information to warn/mitigate disasters on our social media in 6 months	Man Hours: 10 Police and Executive Admin	4	1 quarter 2016 Short
1A6: Use of our EVERBRIDGE system to warn residents of hazardous weather or man-made hazards	Man Hours: 5 Police	6	As Needed for Warning Community

*Objective: 1. 2B: Maintain links to other sources of reliable information about infectious disease response including quarantine*

Mitigation Action	Estimated Cost	Priority	Timeline
1B1: Maintain Contracts with Bloomington Public Health for ongoing services	Man hours: 5 Bloomington Public Health, Police City Council	2	Annually/1 <sup>st</sup> quarter of every year Short
1B2: Provide educational material along with the location of vaccination clinics to employees and the public.	Man hours: 20 Local EM, Police, Bloomington Public Health	3	3 <sup>rd</sup> Quarter 2016 Medium
1B3: Working with our diverse community through community outreach groups on educational material regarding vaccinations and illnesses.	Man hours: 30 Local EM, Police and Fire, JCCP	1	1 <sup>st</sup> Quarter 2016 Short
1B4: Review and Update EBOLA Response Plan Protocols.	Man hours: 20 Police and Fire All City Departments	4	Annually/1 <sup>st</sup> quarter of every

	Bloomington Public Health		year Short
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*Objective 2: 2A: Educate the public to increase awareness of hazards and opportunities for mitigation actions.*

Mitigation Action	Estimated Cost	Priority	Timeline
2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions.	Man hours: 5 Police and Fire, Local EM	1	1 <sup>st</sup> quarter of 2016 Short
2A2: Provide information to the public on the city website and through public education opportunities	Man hours: 5 Local EM, Police	2	1 <sup>st</sup> quarter of 2016 Short

*Objective: 2. 2B: Promote partnerships between the state, counties, local Jurisdictions, and partner agencies to identify prioritize, and implement mitigation actions*

Mitigation Action	Estimated Cost	Priority	Timeline
2B1: Participate as a member in local or regional hazard mitigation planning group	Man hours: 5 Local EM Police and Fire	5	Annually/1 <sup>st</sup> Quarter of each year Short
2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.	Man hours: 20 Local EM, Police and Fire	4	3 Years Long

*Objective: 2. 2C: Work with the Chamber of Commerce, businesses, and other local agencies to promote hazard mitigation in the local community*

Mitigation Action	Estimated Cost	Priority	Timeline
2C1: Increase awareness and knowledge of hazard mitigation principles and practices	Man hours: 50 Local EM, Police and Fire	3	Annually/2 <sup>nd</sup> quarter of 2016 Medium
2C2: Encourage businesses to develop and implement hazard mitigation actions.	Man hours: 30 Local EM, Police and Fire	6	Annually/2 <sup>nd</sup> Quarter of 2016 Medium
2C3: Ensure that Police and Fire have the latest edition of the Emergency Response Guidebook	Man hours: 3 Police and Fire Local EM	7	Annually 4 <sup>th</sup> quarter of each year Long

*Objective: 4. 4A: Create a strategy to work with private industry and businesses to identify locations of hazardous materials*

Mitigation Action	Estimated Cost	Priority	Timeline
4A1: Meet with Hazardous material producers to review state and federal guidelines.	Man hours: 25 Local EM, Police and Fire, Business Community	1	Annually 3 <sup>rd</sup> Quarter of each year Medium
4A2: Receive updated emergency operations plans for private industry on their protocols responding to Hazardous material incidents	Man hours: 10 Local EM, Police and Fire, Business Community	3	Annually/1 <sup>st</sup> Quarter of each year Short
4A3: Receive updated locations of where Hazardous materials are stored on site.	Man hours: 10 Local EM, Police and Fire, Business Community	2	Annually/1 <sup>st</sup> Quarter of each year Short

*Objective: 4. 4B: Provide SARA Information for Police and Fire on ACTIVE 911 Application*

Mitigation Action	Estimated Cost	Priority	Timeline
4B1: Have access through the Fire Department to other ACTIVE 911 User to receive the SARA information overlay for other departments specifically police.	Man hours: 5 Police/Fire	4	Annually/1 <sup>st</sup> Quarter of each year Short

*Objective: 5. 5A: Increase coordination with the State Duty Officer for Highway Spills*

Mitigation Action	Estimated Cost	Priority	Timeline
5A1: Work with the Fire Department and Public works on spill protocols	Man hours: 10 Local EM, Police and Fire	8	Annually/3 <sup>rd</sup> Quarter of each year Medium
5A2: Update information with State Duty Officer.	Man hours: 5 Local EM, Police and Fire	7	Annually/1 <sup>st</sup> Quarter of each year Short

*Objective: 5. 5B: Maintain and Update plan to contact Utility Companies*

Mitigation Action	Estimated Cost	Priority	Timeline
5B1: Provide contact information for City personnel to Utility Companies	Man hours: 5 Local EM, Police and Fire	6	Annually/3 <sup>rd</sup> Quarter of each year Medium

*Objective: 5. 5C: Active Shooter Situation. Coordination with all Local, State agencies*

Mitigation Action	Estimated Cost	Priority	Timeline
5C1: Continue to develop “Play Book” for active shooter incidents.	Man hours: 25 Local EM, Police and Fire	1	Annually/3rd Quarter of each year Medium
5C2: Continue to train with Fire Department and other agencies in response protocols and procedures.	Man hours: 25 Local EM, Police and Fire	2	Every 2 years Long
5C3: Apply and receive grant funding to train on a more regional basis.	Man Hours: 25 Local EM, Police and Fire	3	3 Years Long

*Objective: 5. 5D: CERT Training and Regional Asset sharing of resources*

Mitigation Action	Estimated Cost	Priority	Timeline
5D1: Continue to recruit and train CERT volunteers	Man hours: 60 Local EM, CERT Administrators, Regional Partners	4	Twice per year Short
5D2: Work with local jurisdictions on exercises and events.	Man hours: 50 Local EM, CERT Administrators, Regional Partners	5	2 Years Long
5D3: Apply and receive grant funding to offset the cost of the CERT Program.	Man Hours: 25 Local EM, CERT Administrators, Regional Partners	9	2 Years Long

*Objective: 6. 6A: Work in Partnership with Community Development on education contractors and new developers on Hazard Mitigation.*

Mitigation Action	Estimated Cost	Priority	Timeline
6A1: Review and implement if possible changes in city ordinances	Man hours: 200 Local EM, Police, Fire, City Attorney, Community Development, City Council	1	2 Years Long
6A2: Conduct Study Sessions with City Council on new development possibilities and include Hazard Mitigation/Disaster protocols	Man hours: 200 Local EM, Police, Fire, City Attorney,	2	3 Years Long

	Community Development, City Council		
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*Objective: 7. 7A: Build and support local capacity and commitment to become less vulnerable to hazards*

Mitigation Action	Estimated Cost	Priority	Timeline
7A1: Update training protocols and plans for all City departments on hazard response including evacuation.	Man hours: 50 Local EM, Police, Fire, City Departments	1	Annually/4 <sup>th</sup> Quarter of every year Long

*Objective: 7. 7B: Continue with Business CERT and TEEN CERT models in the community*

Mitigation Action	Estimated Cost	Priority	Timeline
7B1: Train more businesses in the CERT Model and solicit more volunteers.	Man hours: 50 Local EM, Police, Fire, CERT Administrators, Business Community	2	Twice per year Short
7B2: Continue to train TEEN CERT volunteers in our community.	Man hours: 50 Local EM, Police, Fire, CERT Administrators, Park and Rec, Schools	3	Annually/2 <sup>nd</sup> Quarter of each year Medium

### C. Richfield Mitigation Strategies

Priority	Goal	Objective	Action Name	Description	Estimated Project Cost	Responsible Agency	Time line
1	1	1A	1A2	Review	500	EM/Fire/Police/Exec.	Long
1	1	1B	1B3	Update	1.5K	EM/Police/Fire/JCCP	Short
1	2	2A	2A1	Publicize	500	EM/Police/Fire	Short
1	4	4A	4A1	Review	1.2K	EM/Police/Fire/Bus	Medium
1	5	5C	5C1	Review	1.5K	EM/Police/Fire	Medium
1	6	6A	6A1	Review	5K	EM/Police/Fire	Long
1	7	7A	7A1	Training	1.5K	EM/Police/Fire/City	Long
2	1	1A	1A1	Update	100K	Police	Long
2	1	1B	1B1	Review	200	BPH/Police/City Gov.	Short
2	2	2A	2A2	Update	500	EM/Police	Short
2	4	4A	4A3	Update	800	EM/Police/Fire/Bus	Short
2	5	5C	5C2	Exercise	1.5K	EM/Police/Fire	Long
2	6	6A	6A2	Update	5K	Attorney/CD/City Counsel	Long
2	7	7B	7B1	Training	1.5K	EM/Police/Fire/CERT Admin/Businesses/Park and Rec	Short

3	1	1A	1A3	Exercise	1K	EM/All Depts.	Short
3	1	1B	1B2	Review	1K	EM/Police/BPH	Medium
3	2	2C	2C1	Publicize	2K	EM/Police/Fire	Medium
3	4	4A	4A2	Review	500	EM/Police/Fire/Bus	Short
3	5	5C	5C3	Update	1.5K	EM/Police/Fire	Long
3	7	7B	7B2	Training	1.5K	EM/Police/Fire/CERT Admin/Businesses/ Park and Rec	Medium
4	1	1A	1A5	Update	200	Police/Exe	Short
4	1	1B	1B4	Review	1K	All Depts./BPH	Short
4	2	2B	2B2	Training	1.5K	EM/Police/Fire	Long
4	4	4B	4B1	Update	500	Police/Fire	Short
4	5	5D	5D1	Training	3K	EM/Police/Fire	Short
5	1	1A	1A4	Exercise	1K	EM/All Depts.	Short
5	2	2B	2B1	Participate	500	Police/Fire	Short
5	5	5D	5D2	Exercise	2K	EM/Police/Fire	Long
6	1	1A	1A6	Update	300	Police	Long
6	2	2C	2C2	Training	1K	EM/Police/Fire	Medium
6	5	5B	5B1	Update	500	EM/Police/Fire	Medium
7	2	2C	2C3	Training	500	EM/Police/Fire	Long
7	5	5A	5A2	Update	500	EM/Police/Fire	Short
8	5	5A	5A1	Update	700	EM/Police/Fire	Medium
9	5	5D	5D3			EM, CERT Admin, Regional Partners	Long
<b>TOTAL</b>					<b>\$141,900.00</b>		

**D. Mitigation Action Progress Report Form**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: September 18, 2010	To Date: Dec 2015
<b>Project Title/Action</b>	<b>#1 Exercise</b>	
Responsible Agency	Richfield Police Department	
Contact Name	Chief Jay Henthorne	
Contact Phone/Email	612-861-9828 JHenthorne@cityofrichfield.org	
Project Status	<b>X Project Completed</b>	
Summary of Project	A full scale exercise was conducted on September 18, 2010 involving the Hennepin County WMD Team, 55 <sup>th</sup> Civil Support Unit, and Richfield Fire Department. This exercise was listed in our 2010 Mitigation plan. The exercise focused on a major biological spill at Best Buy World Headquarters. We learned several things from the exercise. We discovered that communications with different agencies needed to improve, the police and fire departments resources were quickly used up thus we needed our mutual aid partners, and with a facility as large as Best Buy we needed	

	support staff from the facility onsite with us. We did have political support and overall it was a successful exercise.
Name of Reviewer	

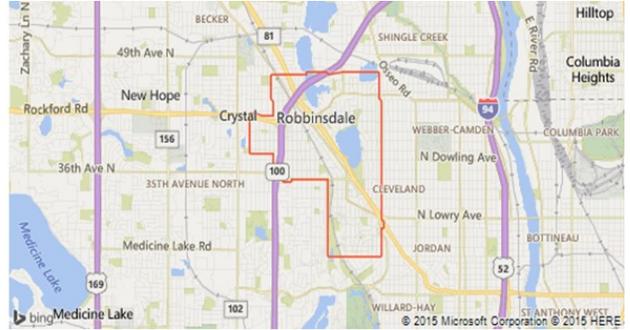
<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: April 11 , 2012	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Replace Warning Sirens</b>	
Responsible Agency	Richfield Police Department	
Contact Name	Chief Jay Henthorne	
Contact Phone/Email	612-861-9828 JHenthorne@cityofrichfield.org	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input checked="" type="radio"/> <b>Anticipated completion date: Within 7_Years</b></li> <li><input type="radio"/> Project is delayed</li> </ul> Explain:	
Summary of Project	We had our second schedule warning siren replaced at 67 <sup>th</sup> and Morgan Avenue. This siren was over 50 years old. This is the second siren that we have replaced out of the seven that we have in our 8 square mile community. We are on schedule over the next 7 years to replace the remaining 5.	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: July 15, 2015	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Exercise</b>	
Responsible Agency	Richfield Police Department	
Contact Name	Chief Jay Henthorne	
Contact Phone/Email	612-861-9828 JHenthorne@cityofrichfield.org	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input checked="" type="radio"/> <b>Anticipated completion date: Ongoing</b></li> <li><input type="radio"/> Project is delayed</li> </ul> Explain:	
Summary of Project	We participated with Bloomington Public Health in a dispensing exercise of employees within the police department to test our response level. We learned that our plans and strategies for dispensing medication to our employees in cases of possible exposure to anthrax or other chemicals is fairly sound and needs some adjustment. We were given high marks for how organized and quickly we accomplished the task.	
Name of Reviewer		

**3.1.36. CITY OF ROBBINSDALE**

Hennepin County- Robbinsdale

Once property of the Village of Crystal, Robbinsdale became a village on April 19, 1893 after a special election was held to dissolve the Village of Crystal. The geographical area of Robbinsdale has remained at 2.9 square miles since that time. Robbinsdale was also the first suburb of Minneapolis and was named for Andrew Robbins, an entrepreneur who purchased 90 acres of land for the purpose of making the area a suburban town. Robbinsdale is home to North Memorial Medical Center, which is one of the state's Level 1 Trauma Center and also operates "AirCare", an air medical transport service. Minnesota State Highway 100 and County Road 81 are the two main transportation routes of the city.



Latitude/Longitude: 45.024446, -93.337332  
 Area: 2.98 sq. miles  
 Area - Land only: 2.79 sq. miles (94%)  
 Area - Water only: 0.19 sq. miles (6%)  
 Population: 13,953  
 Housing Units: 6,416

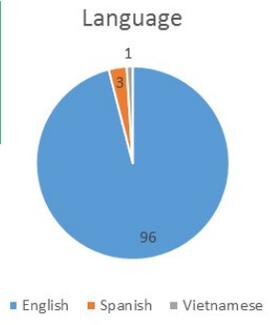
- 5** Mitigation Priority 1  
• Assist Elected Officials/Department Heads in acquiring basic EM/FEMA knowledge with opportunity training.
- 1** Mitigation Priority 2  
• Update EOC-Provide ongoing training for EOC users.
- 1** Mitigation Priority 3  
• Retrofit water main from Minneapolis to Crystal.

**School District**  
• 281 Robbinsdale

**Vulnerability**  
 • Monticello NPP: 29 Miles  
 • Functional Needs: 511  
 • Bridges: 29  
 • Historic Terrace Theater  
 • Broadway Court Senior Apartments: 57 Units  
 • Clare House: 150 Individuals  
 • Copperfield Hill Assisted Living

**Corporate/Employer**  
• North Memorial Hospital: 725

**Capability**  
 • Law Enforcement  
 • Fire Department  
 • North Memorial Hospital (Trauma level 1)  
   • 8 helicopters  
   • 120 Ambulances  
 • FCC Registered Amateur Radio Licenses: 39



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**ROBBINSDALE MITIGATION PLAN**

**POC: PATRICK FOLEY**

**A. Robbinsdale Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
	1A: Retrofit/Upgrade/Repair water main from Minneapolis to Crystal	1A1: Inspect main to ensure its durability.
	1B: Provide a Mobile Command Post for use during critical incidents.	1B1: Conduct meetings with Police and Fire personnel to determine vehicle needs and capabilities. 1B2: Purchase a multi-use Command Post Vehicle for use by Police and Fire units.
	1C: Update EOC	1C1: Review current technology and make upgrades as necessary. 1C2: Provide ongoing training for EOC users.

Goal	Increase education, outreach, and awareness	
2	OBJECTIVES	ACTIONS

2A: Put information on city website providing up-to-date disaster awareness information.	2A1: Create a page and/or links on the City website related to disaster awareness and preparedness.
	2A2: Assign personnel to periodically update the website to ensure accurate and up-to-date information is available to citizens.

<b>Goal 3</b>	Protect natural and cultural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
3A: Reducing Phosphorus in Crystal Lake.	3A1: Ensure newly installed Flocculation Plant is fully operational and reducing Phosphorus according to plan and maintain a safe level.	
	3A2: Continue testing throughout year and tracking data.	

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: Monitor Burlington Northern Railway Blue Line Construction Project	4A1: Attend meetings and engage Engineers and Designers of new system throughout the construction process	
	4B: Partner with Burlington Northern to understand what Hazmat controls and response would be needed once construction completed	4B1: With chemicals being transported through the city. Create an “emergency action plan” with Burlington Northern using hazardous material release scenario.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Maintaining City Staff/Elected Officials that are aware of Emergency Management plans and procedures.	5A1: Require that all applicable city personnel receive training in current Emergency Management and FEMA practices.	
	5A2: Ensure that Disaster Plans are maintained and applicable city personnel are familiar with them.	
	5A3: Provide information and instructions on how they can access or enroll in classes toward state certification.	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A: Maintain City Building Codes to ensure to most up-to-date and disaster resistant designs are used for future construction and renovations.	6A1: Require that applicable city engineers and inspectors receive adequate training in current building designs and renovation processes that provide enhanced disaster resistance.	

	6A2: Assist Elected Officials/Department Heads in reviewing and implementing building codes that promote enhanced safety and integrity of structures.
--	-------------------------------------------------------------------------------------------------------------------------------------------------------

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Bury All Overhead Power lines		7A1: Work within the community and Xcel Energy to identify all power lines which could be buried to reduce significant power failures throughout the community.

**B. Robbinsdale Mitigation Actions**

Mitigation Actions (17)	Estimated Cost	Rank	Timeline
1A1: Inspect main to ensure its durability.	\$300,000	3	Short
1B1: Conduct meetings with Police and Fire personnel to determine vehicle needs and capabilities.	\$500	9	Short
1B2: Purchase a multi-use Command Post Vehicle for use by Police and Fire units.	\$400,000	15	Medium
1C1: Review current technology and make upgrades as necessary.	\$30,000	10	Short
1C2: Provide ongoing training for EOC users.	\$20,000	2	Long
2A1: Create a page and/or links on the City website related to disaster awareness and preparedness.	\$5000	12	Short
2A2: Assign personnel to periodically update the website to ensure accurate and up-to-date information is available to citizens.	\$5000	14	Long
3A1: Ensure newly installed Flocculation Plant is fully operational and reducing Phosphorus according to plan and maintain a safe level.	\$5,000	4	Short
3A2: Continue testing and tracking data.	\$10,000	17	Long
4A1: Attend meetings and engage Engineers and Designers of new system throughout the construction process	\$2000	5	Short
4B1: With chemicals being transported through the city create an "emergency action plan" with Burlington Northern using hazardous material release scenario.	\$25,000	13	Medium
5A1: Assist Elected Officials/Department Heads in acquiring basic EM/FEMA knowledge with opportunity training.	\$5000	1	Short
5A2: Ensure that Disaster Plans are maintained and applicable city personnel are familiar with them.	\$5000	6	Long
5A3: Provide information and instructions on how they can access or enroll in classes toward state certification.	\$500	7	Medium
6A1: Require that applicable city engineers and inspectors receive adequate training in current building designs and renovation processes that provide enhanced disaster resistance.	\$5000	8	Short

6A2: Assist Elected Officials/Department Heads in reviewing and implementing building codes that promote enhanced safety and integrity of structures.	\$1000	11	Short
7A1: Work within the community and Xcel Energy to identify all power lines which could be buried to reduce significant power failures throughout the community.	\$3,000,000	16	Long

**C. Robbinsdale Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency (POC)	Timeline
1	5	5A	5A1	City of Robbinsdale Emergency Management	\$5000	City of Robbinsdale	Short
2	1	1C	1C2	Robbinsdale Police Department	\$20000	City of Robbinsdale	Long
3	1	1A	1A1	Robbinsdale Public Works/City of Crystal/Valley Rich	\$300,000	City of Crystal	Short
4	3	3A	3A1	Robbinsdale Engineering Department/WSB	\$5,000	City of Robbinsdale	Short
5	4	4A	4A1	Robbinsdale Public Works	\$2000	City of Robbinsdale	Short
6	5	5A	5A2	City of Robbinsdale Emergency Management	\$5000	City of Robbinsdale	Short
7	5	5A	5A3	City of Robbinsdale Emergency Management	\$500	City of Robbinsdale	Short
8	6	6A	6A1	Robbinsdale Engineering Department/ City of Robbinsdale Emergency Management	\$5000	City of Robbinsdale	Short
9	1	1B	1B1	Robbinsdale Police Department/Robbinsdale Fire Department	\$500	City of Robbinsdale	Short
10	1	1C	1C1	Robbinsdale Police Department/Robbinsdale Fire Department/ City of Robbinsdale Emergency Management	\$30,000	City of Robbinsdale	Short
11	6	6A	6A2	Robbinsdale Engineering Department/ City of Robbinsdale Emergency Management	\$1000	City of Robbinsdale	Short
12	2	2A	2A1	City of Robbinsdale Emergency Management/IT	\$5000	City of Robbinsdale	Short

13	4	4B	4B1	Robbinsdale Police Department/Robbinsdale Fire Department/ City of Robbinsdale Emergency Management/BNSF	\$25,000	City of Robbinsdale	Medium
14	2	2A	2A2	City of Robbinsdale Emergency Management/IT	\$5000	City of Robbinsdale	Long
15	1	1B	1B2	Robbinsdale Police Department/Robbinsdale Fire Department		City of Robbinsdale	
16	7	7A	7A1	Robbinsdale Engineering Department/ City of Robbinsdale Emergency Management/ Xcel Energy	\$3,000,000	City of Robbinsdale	Long
17	3	3A	3A2	Robbinsdale Engineering Department/WSB	\$10,000	City of Robbinsdale	Long
<b>TOTAL</b>					<b>\$13,419,000.00</b>		

**D. Robbinsdale Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Update and publicize city evacuation plans</b>	
Responsible Agency	Robbinsdale Police	
Contact Name	Chief Jim Franzen	
Contact Phone/Email	jfranzen@ci.robbinsdale.mn.us – 763-531-1220	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input checked="" type="radio"/> <b>Project is delayed</b> <b>Explain: <u>Reprioritized due to other projects</u></b>	
Summary of Project	N/A	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Promote safe rooms in schools and community facilities</b>	
Responsible Agency	Robbinsdale Police	
Contact Name	Chief Jim Franzen	
Contact Phone/Email	jfranzen@ci.robbinsdale.mn.us – 763-531-1220	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Project on Schedule</b>	

	<p><b>X Anticipated completion date: <u>Early 2017</u></b></p> <p><input type="radio"/> Project is delayed Explain: _____</p>
Summary of Project	<p>Cameras in Robbinsdale Middle School were upgraded this year and School Resource Officer provided input on best locations for them. School Resource Officer meets with the three (3) schools within the City and provides information from a safety assessment stand point. Our Police Community Action Coordinator (PCAC) completes a safety assessment to the City Hall and Robbinsdale Community Center and provides safety tips. Currently working on the City Council Meeting and Chambers to upgrade in lieu of recent shooting at the New Hope City Hall.</p>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#3 Continue to enforce snow removal policies and ordinances</b>	
Responsible Agency	Robbinsdale Public Works	
Contact Name	Rob Skurka	
Contact Phone/Email	rskurka@ci.robbinsdale.mn.us – 763-442-1573	
Project Status	<b>X Project Completed</b>	
Summary of Project	<p>Updated how Snow Emergency plan is executed. Allow Officers more time to enforce “Snow Birds” Ordinance before plows begin to clear the streets. Focus time on actual enforcement (citations) instead of impounding vehicles. 1<sup>st</sup> Snow Emergency consists of handing out warning placards to all vehicles in violation. Proceeding Snow Emergencies Officers will cite. Will not cancel Snow Emergency until Officers cover the whole city instead of when plows are complete.</p>	
Name of Reviewer		

**3.1.37. CITY OF ROCKFORD**

Hennepin County- Rockford

Rockford Village was formally incorporated on October 21, 1881, by an act of the Minnesota Legislature. The community remained small, numbering a few hundred, for most of its existence. In the 1970s it passed 1,000 in population as the Twin Cities suburban area continued to expand and people from this area started to commute to the metropolitan area for work. By 1980, the population had more than tripled from a 1970 figure of 730 to 2,408. The April 6, 2006 population estimate is 3,603. Rockford is located in both Hennepin and Wright counties. Minnesota State Highway 55 is the main route in the city. The majority of land mass is in Wright County. Wright County provides emergency services to Rockford with Hennepin County supporting Wright County.



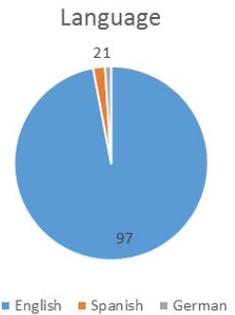
Latitude/Longitude: 45.0939095, -93.7469775  
 Area: 2.67 sq. miles  
 Area - Land only: 2.61 sq. miles (98%)  
 Area - Water only: 0.06 sq. miles (2%)  
 Population: 4,316  
 Housing Units: 1,693

**School District**  
 • 883 Rockford

**Vulnerability**  
 • Monticello NPP: 15 Miles  
 • Bridges: 3

**Corporate/Employer**  
 • Bankwest  
 • Diversifoam  
 • Rockford HS and MS

**Capability**  
 • Fire Department  
 • Public Works  
 • Wright County Sheriff  
 • Hennepin County Sheriff  
 • Parks and Recreation  
 • FCC Registered Amateur Radio Licenses: 6



- Mitigation Priority 1**  
• Plan under Wright County
- Mitigation Priority 2**  
• Plan under Wright County
- Mitigation Priority 3**  
• Plan under Wright County

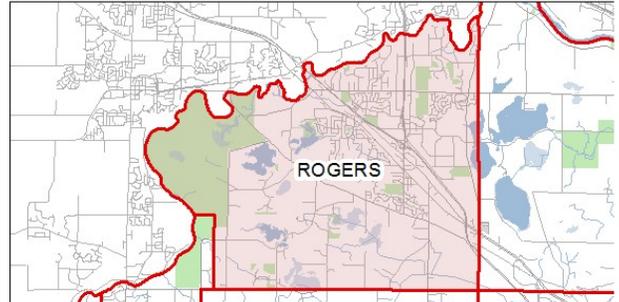
**Although Rockford city limits are in both Hennepin and Wright County, Wright County Maintains the Mitigation Planning for Rockford. The Crow River determines the boundary for the two counties.**

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**3.1.38. CITY OF ROGERS**

## Hennepin County- Rogers

Rogers became incorporated on February 17, 1914 and was named after Thomas Rogers. This followed a fashion of the time in the growing villages and towns of the new states to name towns after individual or family names. The growth of Rogers from a village to a town was based on manufacturing, distribution and service industries. Hassan Township encircles the City of Rogers. Interstate 94 and Minnesota State Highway 101 are the main transportation routes for Rogers.



Latitude/Longitude: 45.192536, -93.590128  
 Area: 26.34 sq. miles  
 Area - Land only: 25.49 sq. miles (97%)  
 Area - Water only: 0.85 sq. miles (3%)  
 Population: 11,983  
 Housing Units: 3,014

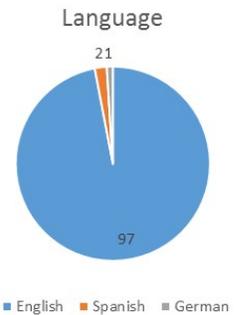
**School District**  
 • 278 Elk River

**Vulnerability**  
 • Monticello NPP: 14 Miles  
 • Functional Needs: 106  
 • Wellstead Senior Living  
 • Country Acres Mobile Home Park

**Corporate/Employer**

**Disaster History**  
 16Sept06- F2 Tornado damaged 300 homes with 7 injuries/1 casualty over 10 Million in damages

**Capability**  
 • Law Enforcement  
 • Fire Department  
 • Public Works  
 • Parks and Recreation  
 • FCC Registered Amateur Radio Licenses: 33



- 1** Mitigation Priority 1  
 • Storm Shelters- Provide shelters for severe weather
- 1** Mitigation Priority 2  
 • Reduce travel time to fill fire apparatus in non-hydrant areas- Water Fill Stations
- 5** Mitigation Priority 3  
 • Meet with Hennepin County Dispatch on existing radio coverage- BDA Equipment  
 • Code Red Emergency Notification System

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**ROGERS MITIGATION PLAN**

**POC: BRAD FEIST**

**A. Rogers Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
1A: Storm Shelter		1A1: Construct a shelter in a Senior Development Area
		1A2: Construct a shelter in the New South Community Park
		1A3: Provide shelters for severe weather
		1A4: Approve construction documents
		1A5: Construct storm shelters in existing parks and school field areas
1B: Water Fill Station in the SW Quadrant of our City (Non-Hydrant area)		1B1: Fill Station for fire apparatus
		1B2: Reduce travel time to fill fire apparatus in our non-hydrant areas.
		1B3: Purchase Land
		1B4: Engineering Study for well site

Goal	Increase education, outreach, and awareness
------	---------------------------------------------

<b>2</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		
<b>Goal 3</b>	Protect natural and cultural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		
<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		
<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Bi – Directional Amplifiers (BDA) Equipment	5A1: Improve radio coverage in large buildings	
	5A2: Improve radio coverage at the Rogers High School for REP	
	5A3: Improve radio coverage in underground parking ramps and tunnels between buildings	
	5A4: Meet with building owners on installing a BDA system	
	5A5: BDA Engineer	
	5A6: Meet with Hennepin County Dispatch on existing radio coverage	
5B: Code Red Emergency Notification System	5B1: Distribute emergency messages via telephone.	
	5B2: Deliver Pre-recorded messages from the National Weather Service	
	5B3: Smart phone Code Red app	
	5B4: Promote the use of NOAA Weather Radios	
	5B5: Code Red Sales Engineer	
<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		
<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

**B. Rogers Mitigation Actions**

Mitigation Actions (20)	Estimated Cost	Rank/ Priority	Timeline
1A1: Construct a shelter in a Senior Development Area	\$25,000	3	2 Years
1A2: Construct a shelter in the New South Community Park	\$25,000	5	5 Years
1A3: Provide shelters for severe weather	Work with City Staff on locations in the City of Rogers	1	Ongoing
1A4: Approve construction documents	Architects Fees = \$15,000	2	1 Year
1A5: Construct Storm Shelters in existing parks & school field areas	\$100,000 x 4 = \$400,000	4	3 Years
1B1: Fill Station for Fire Apparatus	\$50,000	4	4 Years
1B2: Reduce travel time to fill fire apparatus in non-hydrant areas	Work with City Staff on location of fill station and future developments	1	Ongoing
1B3: Purchase Land	\$15,000	3	3 Years
1B4: Engineering Study for well site	\$25,000	2	1 Year
5A1: Improve radio coverage in Large buildings	5 buildings x \$20,000 = \$100,000	6	5 Years
5A2: Improve radio coverage at the Rogers High School for REP	\$20,000	4	2 Years
5A3: Improve radio coverage in underground parking garages and tunnels between buildings	3 buildings x \$20,000 = \$60,000	5	3 Years
5A4: Meet with building owners on installing a BDA system	Fire & Police staff will review buildings in City that have poor radio coverage- schedule meeting with owners	3	Ongoing
5A5: BDA Engineer	\$10,000 to study coverage area	2	1 Year
5A6: Meet with Hennepin County Dispatch on existing radio coverage	Review existing coverage map and future antenna repeaters schedule to be installed in Hennepin County	1	Ongoing
5B1: Distribute emergency messages via telephone/Smart phone	\$9,500 per year	2	2 Years
5B2: Deliver pre-recorded messages from the National Weather Service	\$3,500 per year	3	2 Years
5B3: Smart phone Code Red app	.99 cents per smart phone	4	Ongoing

5B4: Promote the use of NOAA Weather Radios	Flyers and add message to City of Rogers Webpage	5	Ongoing
5B5: Code Red Sales Engineer	Fire, Police, and P/W meet with Sales Engineer on the alert system	1	1 Year

**C. Rogers Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency (POC)	Timeline
1	1	1A	1A3	Review	Staff Time	EM/Fire/Police/PW	On-going
1	1	1B	1B2	Travel time reduction	Staff Time	EM/Fire/PW	On-going
1	5	5A	5A6	Meet/Time with HCSO	Staff Time	EM/Fire/Police	On-going
1	5	5B	5B5	Sales Engineer	Staff Time	EM/Fire/PD/PW	1
2	1	1A	1A4	Architect Design	15K	EM/PW	1
2	1	1B	1B4	Engineering study	25K	EM/PW	1
2	5	5A	5A5	Engineer study	10K	EM	1
2	5	5B	5B1	Alert Messages	9.5K	EM	2
3	1	1A	1A1	Construction	25K	EM/PW	2
3	1	1B	1B3	Land Purchase	15K	EM/PW	3
3	5	5A	5A4	Building Owners	Staff Time	EM/Fire/Police	On-going
3	5	5B	5B2	NWS Messages	3.5K	EM	2
4	1	1A	1A5	Construction	400K	EM/PW	3
4	1	1B	1B1	Fill Station in Use	50K	EM/Fire/PW	4
4	5	5A	5A2	HS radio Coverage	20K	EM	2
4	5	5B	5B3	Code Red Application renewal	\$1/year	EM	On-going
5	1	1A	1A2	Construction	25K	EM/PW	5
5	5	5A	5A3	Parking and Tunnels	60K	EM	3
5	5	5B	5B4	NOAA Radios	Staff Time	EM	On-going
6	5	5A	5A1	Large Buildings	100K	EM	5
<b>TOTAL</b>					<b>\$758,004.00</b>		

**D. Rogers Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	#1 Install three(3) outdoor warning sirens	
Responsible Agency	Rogers	
Contact Name	Brad Feist	
Contact Phone/Email		

Project Status	<b>X Project Complete</b>
Summary of Project	
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Develop a CERT program</b>	
Responsible Agency	Rogers	
Contact Name	Brad Feist	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input checked="" type="radio"/> <b>Project is delayed</b> <b>Explain: Need additional team members and a CERT Leader.</b>	
Summary of Project		
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Establish a recreational area storm shelter</b>	
Responsible Agency	Rogers	
Contact Name	Brad Feist	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input checked="" type="radio"/> <b>Project is delayed</b> <b>Explain: Funding</b>	
Summary of Project		
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Bury three(3) phase power lines along Hillplace Drive</b>	
Responsible Agency	Rogers	
Contact Name	Brad Feist	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____	

	<b>X Project is delayed</b> <b>Explain: Funding</b>
Summary of Project	
Name of Reviewer	



<b>3</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A: Ensure building code compliance and inspections are conducted on new construction projects.		6. A.1: Design and implement checklists with timelines for all new projects
6B: Encourage new or existing power lines to be buried for the reduction of future power outages.		6. B.1: Include language in building code recommending buried power lines.

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

**B. Shorewood Mitigation Actions**

Mitigation Actions (5)	Estimated Cost	Rank	Timeline
2A1: Achieve certification in the National Weather Service Storm Ready Program	Staff time	1	2016
2B1: Host annual severe weather awareness courses.	Staff time	4	Ongoing
2B2: Host annual Skywarn course for local citizens and first responders.	Staff time	5	Ongoing
6A1: Design and implement checklists with timelines for all new projects.	Staff time	2	Ongoing
6B1: Include language in building code recommending buried power lines.	Staff time	3	

**C. Shorewood Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	2	2A	2A1	Achieve certification in the NWS Storm Ready Program.	Staff Time	SMPD	2016
2	6	6A	6A1	Design and implement checklists with timelines for all new projects	Staff time	Inspections	2016
3	6	6B	6B1	Include language in building code recommending buried power lines	Staff time	Planning	2016
4	2	2B	2B1	Host annual severe weather awareness courses	Staff time	SLMPD	Ongoing
5	2	2B	2B2	Host annual Skywarn course for local citizens and first responders	Staff time	SLMPD	Ongoing
<b>TOTAL</b>					<b>\$0.00</b>		

**D. Shorewood Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Achieve certification in the National Weather Services Storm Ready Program.</b>	
Responsible Agency	South Lake PD	
Contact Name	Meehan	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain: _____ _____	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Promote the use of NOAA Weather Radios for early warning and post event information.</b>	
Responsible Agency	South Lake PD	
Contact Name	Meehan	

Contact Phone/Email	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul> Explain: _____ _____
Summary of Project	<b>UPDATE NOT SUBMITTED</b>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Create a severe weather awareness campaign for our citizens.</b>	
Responsible Agency	South Lake PD	
Contact Name		
Contact Phone/Email		
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul> Explain: _____ _____	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

**3.1.40. CITY OF SPRING PARK**

Hennepin County- Spring Park

Spring Park is located on Lake Minnetonka and has over 4 miles of shoreline while being less than a 1/2 square mile in area. Spring Park was incorporated in 1951 and at that time had a population of a little over 200. Spring Park fronts West Arm Bay, Black Lake, and Spring Park Bay.



Latitude/Longitude: 44.937347, -93.6304325  
 Area: 0.61 sq. miles  
 Area - Land only: 0.36 sq. miles (58%)  
 Area - Water only: 0.26 sq. miles (42%)  
 Population: 1,669  
 Housing Units: 1,072

**5** Mitigation P1- Wellhead Protection Plan  
 • Continue to meet the State and Federal regulations with the protection plan

**7** Mitigation P2- Bury Power Lines  
 • Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas

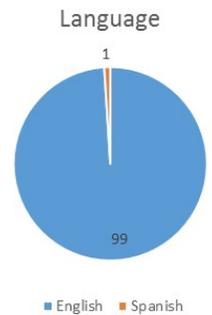
**2** Mitigation P3- Increase Awareness  
 • Increase hazard mitigation principles and practices with local leaders and community

**School District**  
 • 277 Westonka

**Vulnerability**  
 • Bridges 3  
 • Functional Needs 373  
 • Monticello NPP: 27 miles

**Corporate/Employer**

**Capability**  
 • Water Supply  
 • Law Enforcement- Orono  
 • Police Chaplains Group  
 • Fire  
 • Park and Recreation  
 • Solid Waste  
 • 1 FCC registered amateur radio license



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**SPRING PARK MITIGATION PLAN**

**POC: CORREY FARNIOK**

**A. Spring Park Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	1A: Flooding: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding	1A1: Review and update policies that discourage growth in flood-prone areas 1A2: Continue to participate in the National Flood Insurance Program
<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>OBJECTIVES</b>	<b>ACTIONS</b>
	2A: Work with Chamber of Commerce, businesses and other local agencies to promote hazard mitigation in local community.	2A1: Increase awareness and knowledge of hazard mitigation principles and practices

<b>Goal 3</b>	Protect natural and cultural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
3A: Establish Multi-Jurisdictional partnership to reduce runoff	3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality	

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Wellhead Protection Plan	5A1: Continue to meet the State and Federal regulations with the protection plan	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Bury Power Lines	7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	

**B. Spring Park Mitigation Actions**

Mitigation Action Name (6)	Estimated Cost	Rank/Priority	Timeline
1A1: Review and update policies that discourage growth in flood-prone areas	Staff Time	5	On-going
1A2: Continue to participate in the National Flood Insurance Program	Staff Time	6	On-going
2A1: Increase awareness and knowledge of hazard mitigation principles and practices	Staff Time	3	On-going
3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality	\$ 20,000.00	4	On-going
5A1: Continue to meet the State and Federal regulations with the protection plan	Staff Time	1	On-going
7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	\$100,000	2	On-going

**C. Spring Park Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency (POC)	Timeline
1	5	5A	5A1	Public Works, Planning Department	Staff time	City of Orono	Ongoing
2	7	7A	7A1	Public Works Department , Planning Department Administration Department, Excel Energy and Wright Hennepin Electric	100K	City of Orono	Ongoing
3	2	2A	2A1	Administration, Police Department	Staff time	City of Orono	Ongoing
4	3	3A	3A1	Public Works Department, Watershed Districts	20K	City of Orono	Ongoing
5	1	1A	1A1	Planning Department	Staff Time	City of Orono	Ongoing
6	1	1A	1A2	Planning Department	Staff Time	City of Orono	Ongoing
<b>TOTAL</b>					<b>\$120,000.00</b>		

**D. Spring Park Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
Project Title/Action	#1 Continue to participate in the National Flood Insurance Program.	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<b>X Project Completed- completion 12/17/15</b>	
Summary of Project		
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
Project Title/Action	#2 Update land use plans and identified areas where development should be restricted.	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<b>X Project Completed-ongoing- completion 12/17/15</b>	
Summary of Project		
Name of Reviewer		

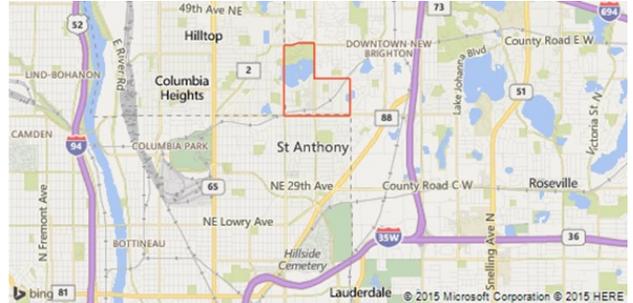
<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
Project Title/Action	#3 Continue to use city GIS to map and update locations of fixed facilities using hazardous materials.	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<b>X Project Completed-Ongoing-Completion 12/17/15</b>	
Summary of Project		
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
Project Title/Action	#4 Ensure that all essential first responders have the current version of the Emergency Response Guidebook.	
Responsible Agency	Orono Police	
Contact Name	Farniok	
Contact Phone/Email		
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><b>X Anticipated completion date: Spring of 2016</b></li> <li><input type="radio"/> Project is delayed</li> </ul> Explain:	
Summary of Project	New 2016 guide will be distro'd when available	
Name of Reviewer		

**3.1.41. CITY OF ST. ANTHONY**

Hennepin County- St. Anthony

St. Anthony is located in both Ramsey and Hennepin counties. The City is a "first-ring" suburb of Minneapolis and as such is part of the metropolitan area. It is located 5 miles northeast of downtown Minneapolis and eight miles northwest of downtown St. Paul. The population was 8,012 during the 2000 census. About 5,500 residents live in the large Hennepin County part of the city, with about 3,100 residents in the Ramsey County portion. St. Anthony was also the name of the older twin city of Minneapolis, located across from downtown Minneapolis on the east bank of the Mississippi River. Minneapolis and St. Anthony merged in 1872. St. Anthony has a total area of 2.4 square miles and is easily accessible via I-35W, I-694, and Minnesota State Highway 10.



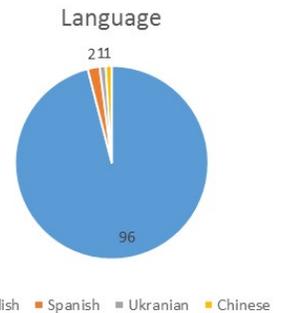
Latitude/Longitude: 45.03 N, 93.22 W  
 Area: 2.37 sq. miles  
 Area - Land only: 2.25 sq. miles  
 Area - Water only: 0.12 sq. miles  
 Population: 8,583 (5500 in Hennepin) (3100 in Ramsey)  
 Housing Units: 3,778

**School District**  
 • 282 St. Anthony-New Brighton

**Vulnerability**  
 • Monticello NPP: 34 Miles  
 • Functional Needs: 314  
 • Bridges: 2

Corporate/Employer

**Capability**  
 • Fire Department  
 • Law Enforcement  
 • Parks and Recreation  
 • Ramsey County shares portion of city  
 • FCC Registered Amateur Radio Licenses: 4



- 7** Mitigation Priority 1  
 • Upgrade SCADA System
- 1** Mitigation Priority 2  
 • Procure reflective signage for intersections during power outages
- 2** Mitigation Priority 3  
 • Continue implementation of wellhead protection plan

**ST. ANTHONY MITIGATION PLAN**

**POC: MARK SITARZ**

**A. St. Anthony Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
1	1A: Working in Hazardous Environment: Allow our Police Officers functional capabilities in a hazardous or potentially hazardous environment.	1A1: Obtain 20 PAPRS/TYVEK Suits
		1A2: Training Officers in Donning and Doffing
		1A3: Train Officers to work in the gear.
	1B: Connect all city facilities to City Hall along with security system cameras and access key cards: develop the ability to provide a secure environment both from an entry access and visual standpoint of all city facilities from a central location. Facilities include water treatment plant, well houses, city hall, fire station, public works, park shelters/warming houses and storage garage.	1B1: Complete Fiber Optic Connections to all city facilities.
		1B2: Purchase card system able to be controlled through one central secure location.
		1B3: Purchase camera system able to be controlled through one central location.

1C: Provide traffic control upon signal failure: Obtain 50 temporary, portable stop signs	1C1: Place reflective roll-up temporary stop signs with portable sign bases at all intersections with traffic signals as needed during a power outage.
	1C2: Provide neighboring municipalities with temporary stop signs by request during a power outage.
1D Severe Weather/Tornado Occurrence Develop safe policies, procedures and facilities to reduce injuries and losses resulting from severe weather	1D1: Annually review severe weather protocols and procedures with students, faculty and staff
	1D2: Publish and publicize procedures and plans for orderly and safe shelter of the community as a distribution center and resource.
	1D3: Develop facilities to serve community for emergency access for both summer and winter protection
1.E Dangerous Intruder Entry Develop safe policies, procedures and facilities to protect students, faculty and staff in situations with dangerous intruders have entered the campus	1E1: Annually review emergency evacuation and protection protocols with faculty, staff and emergency responders
	1E2: Identify safe gathering and retreat locations protected as against intruders and unwanted campus entry.
	1E3: Develop facilities to serve as retreat locations for safety and security of students, faculty and staff.
1F: Destruction of primary emergency infrastructure and facilities Develop contingency plans to ensure secure remote command center for local emergency responders in case of destruction or incapacity of primary facilities or infrastructure	1F1: Annually review protocols and responsibility shifting if critical infrastructure fails with local stakeholders at school, city, county, state and federal levels as necessary.
	1F2: Identify and construct contingency facilities capable of serving and supporting critical infrastructure upon failure of primary facilities.
1G: Prevent inflow and infiltration into sanitary sewer, prevent sanitary sewer system backups	1G1: Replace sanitary sewer pipe, manholes, and service pipe. This allows the City to provide proper sanitary sewer capacity and reduce the risk of sewer backups.
1H: Provide safe intersections for motorists and pedestrians	1H1: Install battery backup systems at all signalized intersections
1I: Increase fire flow capacity of water main, provide sufficient water to the public	1I1: Replacement of water main pipe, hydrants, and service pipe

<b>Goal 2</b>	Increase education, outreach, and awareness	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
2A: Protect the City's municipal water supply from contamination		2A1: Continue implementation of wellhead protection plan document, public education and outreach, and implement projects identified in wellhead protection plan.

<b>Goal 3</b>	Protect natural and cultural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		
<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: School Campus Identify ongoing concerns and risks facing facilities and spaces and identify critical infrastructure		4A1: Annually review procedures with interested persons including police, fire, medical regarding enhanced risks and concerns 4A2: Promulgate plans and contingencies to protect and support critical infrastructure and facilities 4A3: Identify and develop backup and support facilities and infrastructure in case of failure or emergency use.
4B: Community Parks Identify risks and issues preserving safety and security to users in parks and associated facilities shared by school district and city (LGUs).		4B1: Annually review emergency protocols with emergency responders and critical school stakeholders. 4B2: Identify and develop safe gathering and retreat locations protected as against hazards including natural disasters or man-made emergencies
<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Coordinate resources in shared environments Review and discuss coordination of responses in shared facilities and spaces		5A1: Determine line-of-command discussions and needs to alert protocol 5A2: Develop and enhance facilities to serve multiple jurisdictional needs and uses
<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A: Identify disaster-resistant components to new construction In a fully-developed community, determine design guidelines and facility needs required for inclusion in construction and remodeling of existing facilities		6A1: Identify best practices and procedures with police, fire, medical, and other interested parties for access, safety, and protection. 6A2: Determine novel multi-use facilities capable to serve multiple jurisdictional needs and priorities.
<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Increase the amount of storm water removed from surface grade during rain events.		7A1: Replacement of undersized storm sewer piping; this action allows the City to increase the amount of

	rainwater removed that may cause flooding and aids in prevention of structural damage.
7B: Provide for emergency functions at City Hall and neighboring municipalities.	7B1: Purchase a portable trailer mounted 300K Generator
	7B2: Configure separate circuit(s) for emergency functions
	7B3: Provide neighboring municipalities the ability to use the portable trailer mounted generator during power outage
7C: Locate and create facilities capable of providing protection against likely hazards Identify and construct optimal safe structures to protect against probable hazards	7C1: Identify and prioritize hazards likely to occur with police, fire, medical, and other interested parties for access, safety, and protection.
	7C2: Construct a shared, multi-season, multiple-use shelter to maximize safety from and resulting after severe weather, unwanted intruders, or other emergency situations affecting the community and school facilities, that will serve multiple-jurisdictional needs and be available and accessible for use by local cities and the general public community in case of emergency situations occurring either inside or outside Central Park including as a remote operations center for emergency services in case of failure of primary critical infrastructure.
7D: Prevent failure of control systems for water treatment facilities and municipal wells 3, 4, & 5.	7D1: Upgrade SCADA System

**B. St. Anthony Mitigation Actions**

Mitigation Action Name (36)	Estimated Cost	Rank	Timeline
1A1: Obtain 20 PAPRS/TYVEK Suits	\$100,320 Staff Time LE/EM	9	WFBA/Long
1A2: Training Officers in Donning and Doffing	Staff Time: 6 Hours LE/EM	10	Long
1A3: Train Officers to work in the gear.	Staff Time: 10 Hours	11	Long
1B1: Complete Fiber Optic Connections to all city facilities.	\$120,000 Engineering/PW	6	Medium
1B2: Purchase card system able to be controlled through one central secure location.	\$120,000 Engineering/PW	7	Long
1B3: Purchase camera system able to be controlled through one central location.	\$180,000 Engineering/PW	8	Long
1C1: Place reflective roll-up temporary stop signs with portable sign bases at all intersections with traffic signals as needed during a power outage.	\$12,000 PW	1	Medium
1C2: Provide neighboring municipalities with temporary stop signs by request during a power outage.	Staff Time PW	2	Medium

1D1: Annually review severe weather protocols and procedures with students, faculty and staff	Staff Time: 10 hours ISD Staff	12	Short
1D2: Publish and publicize procedures and plans for orderly and safe shelter of the community as a distribution center and resource.	Staff Time: 4 Hours ISD Staff	13	Medium
1D3: Develop facilities to serve community for emergency access for both summer and winter protection	Staff Time: 40 Hours ISD Staff	14	Long
1E1: Annually review emergency evacuation and protection protocols with faculty, staff and emergency responders	Staff Time: 10 Hours ISD Staff/EM/LE/Fire	15	Short
1E2: Identify safe gathering and retreat locations protected as against intruders and unwanted campus entry.	Staff Time: 10 Hours ISD Staff/LE	16	Medium
1E3: Develop facilities to serve as retreat locations for safety and security of students, faculty and staff.	Staff Time; 40 Hours ISD Staff	17	
1F1: Annually review protocols and responsibility shifting if critical infrastructure fails with local stakeholders at school, city, county, state and federal levels as necessary.	Staff Time: 16 Hours ISD Staff	18	Short
1F2: Identify and construct contingency facilities capable of serving and supporting critical infrastructure upon failure of primary facilities.	ISD Staff	19	Long
1G1: Replace sanitary sewer pipe, manholes, and service pipe. This allows the City to provide proper sanitary sewer capacity and reduce the risk of sewer backups.	\$185,000/Annually Engineering/PW	5	Ongoing with annual roadway reconstruction – to be complete in 2025
1H1: Install battery backup systems at all signaled intersections	\$6,000 per signaled intersection 9 signaled intersections \$54,000 total Engineering/PW	3	3 years
1I1: Replacement of water main pipe, hydrants, and service pipe	\$90,000 Engineering/PW	4	Annually until 2025
2A1: Continue implementation of wellhead protection plan document, public education and outreach, and implement projects identified in wellhead protection plan.	\$25,000 Engineering/PW	1	4 years/Medium
4A1: Annually review procedures with interested persons including police, fire, medical regarding enhanced risks and concerns	Nominal; use of existing capabilities Staff hours: 10 hours annually	1	Annually; short term

	ISD 282		
4A2: Promulgate plans and contingencies to protect and support critical infrastructure and facilities	Nominal; use of existing capabilities Staff hours: 10 hours annually ISD 282	2	Annually; short term
4A3: Identify and develop backup and support facilities and infrastructure in case of failure or emergency use.	Significant; coordinate regular meetings with interested parties to identify needs and concerns Staff hours: 40 hours annually ISD 282	3	Annually; short term
4B1: Annually review emergency protocols with emergency responders and critical school stakeholders.	Nominal; use of existing capabilities Staff hours: 10 hours annually ISD 282	4	Annually; short term
4B2: Identify and develop safe gathering and retreat locations protected as against hazards including natural disasters or man-made emergencies	Significant; coordinate regular meetings with interested parties to identify needs and concerns – ISD 282 Staff hours: 40 hours annually	5	Annually; short term
5A1: Determine line-of-command discussions and needs to alert protocol	Nominal; use of existing capabilities Staff hours: 10 hours annually ISD 282	1	Annually; short term
5A2: Develop and enhance facilities to serve multiple jurisdictional needs and uses	Significant; coordinate regular meetings with interested parties to identify needs and concerns Staff hours: 40 hours annually ISD 282	2	Annually; short term

6A1: Identify best practices and procedures with police, fire, medical, and other interested parties for access, safety, and protection.	Nominal; use of existing capabilities Staff hours: 10 hours annually ISD 282	1	Annually; short term
6A2: Determine novel multi-use facilities capable to serve multiple jurisdictional needs and priorities.	Nominal; use of existing capabilities Staff hours: 10 hours annually ISD 282	2	Medium
7A1: Replacement of undersized storm sewer piping; this action allows the City to increase the amount of rainwater removed that may cause flooding and aids in prevention of structural damage.	\$90,000/Annually Engineering/PW	5	Ongoing with annual roadway reconstruction – to be completed in 2025.
7B1: Purchase a portable trailer mounted 300K Generator	\$150,000 PW/EM	2	Long
7B2: Configure separate circuit(s) for emergency functions	\$35,000 PW/EM	3	Long
7B3: Provide neighboring municipalities the ability to use the portable trailer mounted generator during power outage	Staff Time PW	4	Long
7C1: Identify and prioritize hazards likely to occur with police, fire, medical, and other interested parties for access, safety, and protection.	Nominal; use of existing capabilities Staff hours: 10 hours annually ISD 282	7	Short
7C2: Construct a shared, multi-season, multiple-use shelter to maximize safety from and resulting after severe weather, unwanted intruders, or other emergency situations affecting the community and school facilities, that will serve multiple-jurisdictional needs and be available and accessible for use by local cities and the general public community in case of emergency situations occurring either inside or outside Central Park including as a remote operations center for emergency services in case of failure of primary critical infrastructure.	Significant and substantial; but substantial cost-benefit return, as it would provide a 24/7/365 accessible shelter from severe weather which would be the only publicly accessible location that would realistically be available for a population in excess of 25,000 people	6	From commencement to completion, 6 months.

	(including the City of St. Anthony, Northeast Minneapolis, and components of Roseville and New Brighton). Such would be multiple use and available, and is politically feasible and supported, and is championed by an organization that has a history of successfully completing projects. TBD for Contractor		
7D1:Upgrade SCADA System	\$100,000 Engineering/PW	1	2 years

**C. St. Anthony Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	1C	1C1	Update	12K	PW	Medium
1	2	2A	2A1	Update	25K	Eng./PW	Medium
1	4	4A	4A1	Review	Staff Time	ISD	Short
1	5	5A	5A1	Update	Staff Time	ISD	Short
1	6	6A	6A1	Update	Staff Time	ISD/EM/LE/Fire	Short
1	7	7D	7D1	Update	100K	Eng./PW	Medium
2	1	1C	1C2	Exercise	Staff Time	PW	Medium
2	4	4A	4A2	Review	Staff Time	ISD	Short
2	5	5A	5A2	Plan	10K	ISD	Medium
2	6	6A	6A2	Review	Staff Time	ISD	Short
2	7	7B	7B1	Update	150K	PW/EM	Long
3	1	1H	1H1	Update	54K	Eng./PW	Medium
3	4	4A	4A3	Plan	10K	ISD	Long
3	7	7B	7B2	Construct	35K	PW	Long
4	1	1I	1I1	Update	90K	Engineering	Annually
4	4	4B	4B1	Update	Staff Time	ISD/EM/LE/Fire	Short
4	7	7B	7B3	Update	Staff Time	PW	Long
5	1	1G	1G1	Update	185K	Engineering	Annually

5	4	4B	4B2	Review	Staff Time	ISD/EM/LE/Fire	Short
5	7	7A	7A1	Update	90K	Eng./PW	Annually
6	1	1B	1B1	Update	120K	Eng./PW	Medium
6	7	7C	7C2	Construct	1.5M	ISD	Long
7	1	1B	1B2	Update	120K	Eng./PW	Long
7	7	7C	7C1	Update	Staff Time	ISD	Long
8	1	1B	1B3	Update	180K	Eng./PW	Long
9	1	1A	1A1	Update	\$100,320	LE	Long
10	1	1A	1A2	Update	Staff Time	LE	Long
11	1	1A	1A3	Update	Staff Time	LE	Long
12	1	1D	1D1	Review	Staff Time	ISD	Short
13	1	1D	1D2	Create	Staff Time	ISD	Medium
14	1	1D	1D3	Plan	10K	ISD	Long
15	1	1E	1E1	Review	Staff Time	ISD	Long
16	1	1E	1E2	Create	Staff Time	ISD	Medium
17	1	1E	1E3	Plan	10K	ISD	Long
18	1	1F	1F1	Review	Staff Time	ISD	Short
19	1	1F	1F2	Plan	10K	ISD	Long
<b>TOTAL</b>					<b>\$2,811,320.00</b>		

**D. St. Anthony Mitigation Action Progress Report Form**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2011
<b>Project Title/Action</b>	<b>#1 Install a warning siren to cover new park on the north end of St. Anthony.</b>	
Responsible Agency	St. Anthony Fire	
Contact Name	Mark Sitarz	
Contact Phone/Email	612-782-3401/mark.sitarz@ci.saint-anthony.mn.us	
Project Status	<b>X Project Completed</b>	
Summary of Project	Project came in at \$18,446.00. Warnings are now heard at the new park on the north end of the city. Results are positive and the political support was there.	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#2 Backup/store city files and records in alternate location</b>	
Responsible Agency	St. Anthony Fire	
Contact Name	Mark Sitarz	
Contact Phone/Email	612-782-3401/mark.sitarz@ci.saint-anthony.mn.us	
Project Status	<b>X Project Completed</b>	

Summary of Project	Files are now stored offsite. Records have been moved to a new location. We are in the process of moving to laser fiche where records will be digitized. The city is also in the process of connecting fiber optic directly to our IT Provider which will increase our current direct connect speeds to optimize our data storing and digitizing.
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Replace Undersized Storm Water Pipes</b>	
Responsible Agency	St. Anthony Public Works\City Engineer	
Contact Name	Jay Hartman	
Contact Phone/Email	612-782-3314/Jay.Hartman@ci.saint-anthony.mn.us	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: 2025</b> <input type="radio"/> Project is delayed Explain: _____	
Summary of Project	This project is ongoing with our street reconstruction. The city is scheduled to be completed with that project at the end of 2025.	
Name of Reviewer		

**3.1.42. CITY OF ST. BONIFACIUS**

Hennepin County- St. Bonifacius

St. Bonifacius is located about 25 miles west of Minneapolis and is centered around Minnesota State Highway 7 and County Road 92. St. Bonifacius is completely surrounded by the city of Minnetrista.



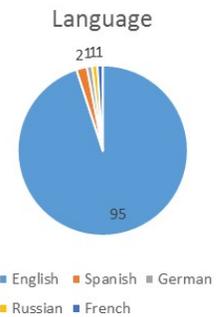
Latitude/Longitude: 44.903539, -93.7477605  
 Area: 1.06 sq. miles  
 Area - Land only: 1.06 sq. miles (100%)  
 Area - Water only: 0.00 sq. miles (0%)  
 Population: 2,283  
 Housing Units: 912

**School District**  
 • 110 Waconia

**Vulnerability**  
 • Monticello NPP: 28 Miles

**Corporate/Employer**  
 • Crown College

**Capability**  
 • Law Enforcement Minnetrista  
 • Fire Department  
 • CERT Program  
 • Police Chaplains Group  
 • FCC Registered Amateur Radio Licenses: 1



**5** Mitigation Priority 1  
 • Continue to meet the State and Federal regulations with the protection plan

**7** Mitigation Priority 2  
 • Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas

**2** Mitigation Priority 3  
 • Increase awareness and knowledge of hazard mitigation principles and practices

6MAV1965- A category F4 tornado (wind speeds of 207-260 mph) touched down 4.6 miles from the city center killing 3 and injuring 175 people causing 5-50 million in damages

42

**ST. BONIFACIUS MITIGATION PLAN**

**POC: PAUL FALLS**

**A. St. Bonifacius Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
<b>1</b>	1A: Flooding: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding	1A1: Review and update policies that discourage growth in flood-prone areas 1A2: Continue to participate in the National Flood Insurance Program
Goal	Increase education, outreach, and awareness	
	OBJECTIVES	ACTIONS
<b>2</b>	2A: Work with local agencies to promote hazard mitigation in local community.	2 A1: Increase awareness and knowledge of hazard mitigation principles and practices
Goal	Protect natural resources	
	OBJECTIVES	ACTIONS

3A: Establish Multi-Jurisdictional partnership to reduce runoff	3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality
-----------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
5A: Wellhead Protection Plan	5A1: Continue to meet the State and Federal regulations with the protection plan

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
7A: Bury Power Lines	7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas

**B. St. Bonifacius Mitigation Actions**

Mitigation Action Name (6)	Estimated Cost	Rank	Timeline
1A1: Review and update policies that discourage growth in flood-prone areas	Staff Time	5	On-going
1A2: Continue to participate in the National Flood Insurance Program	Staff Time	6	On-going
2A1: Increase awareness and knowledge of hazard mitigation principles and practices	Staff Time	3	On-going
3A1: Work with the local watersheds to continue to protect our lakes and streams for future water quality	Unknown	4	On-going
5A1: Continue to meet the State and Federal regulations with the protection plan	Staff Time	1	On-going
7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	Unknown	2	On-going

**C. St. Bonifacius Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	5	5A	5A1	Public Works, Planning Department	Staff time	City of St. Bonifacius	Ongoing
2	7	7A	7A1	Public Works Department , Planning Department Administration Department, Excel Energy and Wright Hennepin Electric	Plans Construction	City of St. Bonifacius	Ongoing
3	2	2A	2A1	Administration, Police Department	Staff time	City of St. Bonifacius	Ongoing
4	3	3A	3A1	Public Works Department, Watershed Districts	Cost for construction of holding ponds Design Construction	City of St. Bonifacius	Ongoing
5	1	1A	1A1	Planning Department	Staff Time	City of St. Bonifacius	Ongoing
6	1	1A	1A2	Planning Department	Staff Time	City of St. Bonifacius	Ongoing
<b>TOTAL</b>					<b>\$0.00</b>		

**D. St. Bonifacius Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Obtain and maintain NFIP FIRMS to identify community flood plans</b>	
Responsible Agency	PD	
Contact Name	Falls	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
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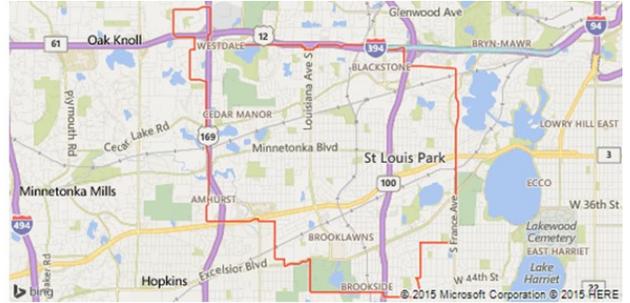
<b>Project Title/Action</b>	<b>#2 Continue to participate in the National Flood Insurance Plan</b>
Responsible Agency	PD
Contact Name	Falls
Contact Phone/Email	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:
Summary of Project	<b>UPDATE NOT SUBMITTED</b>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Map areas of repeated flooding in the county</b>	
Responsible Agency	PD	
Contact Name	Falls	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

**3.1.43. CITY OF ST. LOUIS PARK**

## Hennepin County- St. Louis Park

St. Louis Park is a "first-ring" city located immediately west of Minneapolis. The 1860s village that became St. Louis Park was originally known as Elmwood, which today is a neighborhood inside the city. St. Louis Park was incorporated into the Village of St. Louis Park on November 19, 1886. The name St. Louis Park was derived from the Minneapolis and St. Louis Railway that ran through the area. Interstate 394, U.S. Route 169, and State Highways 7 and 100 are the four main transportation routes in the city.



Latitude/Longitude: 44.9490655, -93.369591  
 Area: 10.84 sq. miles  
 Area - Land only: 10.62 sq. miles (98%)  
 Area - Water only: 0.22 sq. miles (2%)  
 Population: 45,250  
 Housing Units: 23,285

### School District

- 283 St. Louis Park

### Vulnerability

- Monticello NPP: 32 Miles
- Functional Needs: 754
- Bridges: 69

### Corporate/Employer

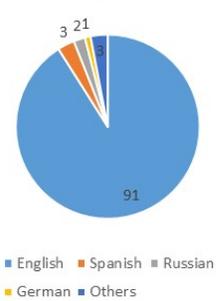
- Park Nicollet- 4500
- Japs Olson Printing- 600
- Travelers Express- 450
- Novartis- 400
- Benilde St. Margaret's School- 200

6MAY1965- A category F4 tornado (max wind speeds 207-260 mph) touched down 2.5 miles from the city center killing 6 and injuring 158 causing 5-50 million dollars in damage

### Capability

- Law Enforcement
- Fire Department
- Parks and Recreation
- Public Works
- FCC Registered Amateur Radio Licenses: 5

### Language



Mitigation Priority 1

Mitigation Priority 2

Mitigation Priority 3

**CITY OF ST LOUIS PARK** **POC: STEVE KOERING**

### A. St. Louis Park Objectives and Actions

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
1A: Spring thaw and water bodies rising		1A1: Improve storm water management planning
		1A2: Adopt policies to reduce storm water runoff
		1A3: Coordinate with Minnehaha Watershed
1B: Short term flooding from torrential rains		1B1: Improve storm water management planning
		1B2: Adopt policies to reduce storm water runoff
		1B3: Coordinate with Minnehaha Watershed
1C: Unusual snow event		1C1: Adopt and enforce building codes
		1C2: Protect buildings and infrastructure
		1C3: Protect power lines
		1C4: Reduce impacts to roadways
1D: Wind/Tornadoes		1D1: Encourage safe rooms
		1D2: Require wind resistant building techniques
		1D3: Protect power lines
1E: Evacuation routes rail or hazardous materials		1E1: Assess community risk

1F: Vulnerable populations	1F1: Improve household disaster preparedness
	1F2: Increase hazard education and risk awareness
	1F3: Assist vulnerable populations
1G: Severe cold, close schools, impact on infrastructure	1G1: Reduce the effects of the urban heat island effect
	1G2: Increase awareness of extreme temperature risk and safety
	1G3: Educate property owners on cold weather preparations
1H: Severe hot weather	1H1: Reduce urban heat island effect
	1H2: Increase awareness of extreme temperature risk and safety
	1H3: Manage cooling centers
1I: Lightning strikes	1I1: Protect critical infrastructure
1J: Wild land urban interface	1J1: Educate on the importance of maintaining debris and fuel loads close to structures
1K: Train derailment/crude oil, ethanol, or other hazardous materials	1K1: Improve communications between rail companies and responders
	1K2: Train for response and evacuation
	1K3: Educate stakeholders in high risk areas

Goal 2	Increase education, outreach, and awareness	
OBJECTIVES	ACTIONS	
2A: Public outreach –rail corridor	2A1: Improve household disaster preparedness	
	2A2: Increase hazard education and risk awareness	
	2A3: Assist vulnerable populations	
	2A4: Integrate mitigation into local planning	
2B: Evacuation routes rail and Hazardous materials	2B1: Protect infrastructure and critical facilities	
	2B2: Increase hazard education and risk awareness	
	2B3: Improve household disaster preparedness	
2C: Wind/Tornadoes	2C1: Conduct tornado awareness activities	
	2C2: Increase hazard education and risk awareness	
	2C3: Improve household disaster preparedness	
2D: Power grid down interruption: address heat and cold conditions	2D1: Protect infrastructure and critical facilities	
	2D2: Reduce urban heat island effect	
	2D3: Increase awareness of extreme temperature risk and safety	
	2D4: Protect power lines	
	2D5: Assess back-up generator capacity	
	2D6: Improve household disaster preparedness	
2E: Vulnerable populations, lack of resiliency	2E1: Improve household disaster preparedness	
	2E2: Increase hazard education and awareness	

	2E3: Assist vulnerable populations
	2E4: Assess vulnerable populations
2F: Warning notifications	2F1: Assess community risk
	2F2: Assist vulnerable populations
	2F3: Increase education and risk awareness
2G: Severe cold; close schools, impact on infrastructure	2G1: Increase awareness of extreme Temperature risk and safety
	2G2: Increase hazard education
2H: Severe hot weather	2H1: Increase awareness of extreme temperature risk and safety
	2H2: Increase hazard education and risk awareness
	2H3: Improve household disaster preparedness
	2H4: Assess cooling centers
2I: Lightning strikes	2I1: Conduct lightning awareness programs
	2I2: Increase hazard education and risk awareness
	2I3: Improve household disaster preparedness
2J: Unusual snow event	2J1: Conduct winter weather risk awareness activities
	2J2: Increase awareness of extreme temperature risk and safety
	2J3: Increase hazard education and risk awareness
	2J4: Improve household disaster preparedness

<b>Goal 3</b>	Protect natural and cultural resources
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
NONE	

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
4A: Security of water supply	4A1: Protect infrastructure and critical facilities
4B: Power grid down/interruption; Address heat and cold issues	4B1:

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
5A: Evacuation routes rail-hazardous materials	5A1: Assess community risk
	5A2: Map community risk
	5A3: Adopt development regulations in hazard areas
	5A4: Limit density in hazard areas

	5A5: Protect structures
	5A6: Protect infrastructure and critical facilities
5B: Major city events and their impact on planning	5B1: Assess community risk
	5B2: Map community risk
	5B3: Protect infrastructure and critical facilities
5C: Civil disturbance	5C1: Assess community risk
	5C2: Map community risk
	5C3: Protect critical infrastructure and critical facilities

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A: require fire sprinklers in all new construction	6A1: Increase education and risk awareness	
	6A2: Improve household disaster preparedness	
	6A3: Assess community risk	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None	None	

**B. St. Louis Park Mitigation Actions**

Mitigation Actions (81)	Estimated Cost	Rank (1-81)	Timeline (year of completion or ongoing)
1A1: Improve storm water management planning			Ongoing
1A2: Adopt policies to reduce storm water runoff			
1A3: Coordinate with Minnehaha Watershed			Ongoing
1B1: Improve storm water management planning			Ongoing
1B2: Adopt policies to reduce storm water runoff			
1B3: Coordinate with Minnehaha Watershed			Ongoing
1C1: Adopt and enforce building codes			Ongoing
1C2: Protect buildings and infrastructure			Ongoing
1C3: Protect power lines			Ongoing
1C4: Reduce impacts to roadways			Ongoing
1D1: Encourage safe rooms			
1D2: Require wind resistant building techniques			
1D3: Protect power lines			Ongoing
1E1: Assess community risk			Ongoing
1F1: Improve household disaster preparedness			Ongoing
1F2: Increase hazard education and risk awareness			Ongoing
1F3: Assist vulnerable populations			Ongoing
1G1: Reduce the effects of the urban heat island effect			

1G2: Increase awareness of extreme temperature risk and safety			
1G3: Educate property owners on cold weather preparations			
1H1: Reduce urban heat island effect			
1H2: Increase awareness of extreme temperature risk and safety			
1H3: Manage cooling centers			Ongoing
1I1: Protect critical infrastructure			Ongoing
1J1: Educate on the importance of maintaining debris and fuel loads close to structures			Ongoing
1K1: Improve communications between rail companies and responders			Ongoing
1K2: Train for response and evacuation			Ongoing
1K3: Educate stakeholders in high risk areas			
2A1: Improve household disaster preparedness			Ongoing
2A2: Increase hazard education and risk awareness			Ongoing
2A3: Assist vulnerable populations			Ongoing
2A4: Integrate mitigation into local planning			
2B1: Protect infrastructure and critical facilities			Ongoing
2B2: Increase hazard education and risk awareness			Ongoing
2B3: Improve household disaster preparedness			Ongoing
2C1: Conduct tornado awareness activities			Ongoing
2C2: Increase hazard education and risk awareness			Ongoing
2C3: Improve household disaster preparedness			Ongoing
2D1: Protect infrastructure and critical facilities			
2D2: Reduce urban heat island effect			
2D3: Increase awareness of extreme temperature risk and safety			
2D4: Protect power lines			Ongoing
2D5: Assess back-up generator capacity			Ongoing
2D6: Improve household disaster preparedness			Ongoing
2E1: Improve household disaster preparedness			Ongoing
2E2: Increase hazard education and awareness			Ongoing
2E3: Assist vulnerable populations			Ongoing
2E4: Assess vulnerable populations			Ongoing
2F1: Assess community risk			Ongoing
2F2: Assist vulnerable populations			Ongoing
2F3: Increase education and risk awareness			
2G1: Increase awareness of extreme Temperature risk and safety			
2G2: Increase hazard education			
2H1: Increase awareness of extreme temperature risk and safety			
2H2: Increase hazard education and risk awareness			
2H3: Improve household disaster preparedness			
2H4: Assess cooling centers			
2I1: Conduct lightning awareness programs			
2I2: Increase hazard education and risk awareness			

2I3: Improve household disaster preparedness			
2J1: Conduct winter weather risk awareness activities			
2J2: Increase awareness of extreme temperature risk and safety			
2J3: Increase hazard education and risk awareness			
2J4: Improve household disaster preparedness			
4A1: Protect infrastructure and critical facilities			
4B1:			
5A1: Assess community risk			Ongoing
5A2: Map community risk			
5A3: Adopt development regulations in hazard areas			Ongoing
5A4: Limit density in hazard areas			
5A5: Protect structures			
5A6: Protect infrastructure and critical facilities			Ongoing
5B1: Assess community risk			Ongoing
5B2: Map community risk			
5B3: Protect infrastructure and critical facilities			Ongoing
5C1: Assess community risk			Ongoing
5C2: Map community risk			
5C3: Protect critical infrastructure and critical facilities			Ongoing
6A1: Increase education and risk awareness			Ongoing
6A2: Improve household disaster preparedness			Ongoing
6A3: Assess community risk			Ongoing

**C. St. Louis Park Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
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81							
<b>TOTAL</b>							

**D. St. Louis Park Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#1 Use Urban Area Security (UASI) dollars to fund the upgrades to the radios and decoder boards on the sirens, in an effort to not only reach compliance with the new FCC narrow banding standards, but as well as to implement a new Storm-Based Polygon warning System.</b>	
Responsible Agency	Hennepin County EP & Hennepin County Sheriff's Office	
Contact Name	Steve Koering	
Contact Phone/Email	skoering@stlouispark.org	
Project Status	<b>X Project Completed</b>	
Summary of Project	\$15,000 2012	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Encourage new power lines to be buried to reduce power outages.</b>	
Responsible Agency	St. Louis Park Fire	

Contact Name	Steve Koering
Contact Phone/Email	Skoering@stlouispark.org
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed
Summary of Project	Staff Time: On-Going
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Promote the use of weather radios and when possible, purchase additional radios for the city.</b>	
Responsible Agency	St. Louis Park Fire	
Contact Name	Cary Smith	
Contact Phone/Email	Csmith@stlouispark.org	
Project Status	<b>X Project Completed</b>	
Summary of Project	Staff Time: On-Going Annually	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#4 Continue to use county and city GIS to map and update locations of fixed facilities using hazardous materials/waste and associated transportation routes in a timely manner</b>	
Responsible Agency	St. Louis Park Fire	
Contact Name	Steve Koering	
Contact Phone/Email	Skoering@stlouispark.org	
Project Status	<b>X Project Completed</b>	
Summary of Project	Staff Time: On-Going	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#5 Update land use plans to identify areas where development should be restrictive.</b>	
Responsible Agency	Com. Development	
Contact Name	Karen Barton	
Contact Phone/Email	kbaron@stlouispark.org	
Project Status	<b>X Project Completed</b>	
Summary of Project	Staff Time: On-Going	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#6 Utilize state, federal and local resources to prevent and control infectious diseases in the City.</b>	
Responsible Agency	St. Louis Park Fire	
Contact Name	Steve Koering	
Contact Phone/Email	Skoering@stlouispark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <b>X Project is delayed</b>	
Summary of Project	Staff Time: On-Going	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#7 Ensure that all first responder agencies have the latest edition of the Emergency Response Guidebook.</b>	
Responsible Agency	St. Louis Park Fire	
Contact Name	Steve Koering	
Contact Phone/Email	skoering@stlouispark.org	
Project Status	<b>X Project Completed</b>	
Summary of Project	Staff Time: Ongoing As updated	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#8 Ensure building code compliance inspections are conducted on new construction projects.</b>	
Responsible Agency	Com. Development	
Contact Name	Brian Hoffman	
Contact Phone/Email	Bhoffman@stlouispark.org	
Project Status	<b>X Project Completed</b>	
Summary of Project	Staff Time: Ongoing	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#9 Continue to enforce zoning and permit regulations in the floodplains.</b>	
Responsible Agency	Com. Development	
Contact Name	Deb Heiser	

Contact Phone/Email	Dheiser@stlouispark.org
Project Status	<b>X Project Completed</b>
Summary of Project	Staff Time: Ongoing
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#10 Continue to comply with drainage and erosion control plans.</b>	
Responsible Agency	Com. Development	
Contact Name	Karen Barton	
Contact Phone/Email	kbarton@stlouispark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Staff Time: Ongoing	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#11 Monitor construction, improvements, alterations, and development in the floodplains.</b>	
Responsible Agency	Com. Development	
Contact Name	Karen Barton	
Contact Phone/Email	Kbarton@stlouispark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Staff Time: Ongoing	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#12 Continue to use existing state dam safety programs (Minnesota Dam Safety Program) that maintain and oversee the structural integrity of dams.</b>	
Responsible Agency	Minnesota DNR	
Contact Name		
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled	

	<input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed
Summary of Project	Staff Time: Ongoing
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#13 Continue to work with watershed management commissions on all proposed projects impacting floodplain areas.</b>	
Responsible Agency	Com. Development	
Contact Name	Karen Barton	
Contact Phone/Email	kbaron@stlouispark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Staff Time: Ongoing	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#14 Continue to enforce storm water management ordinances that address land disturbing activity.</b>	
Responsible Agency	Com. Development	
Contact Name	Karen Barton	
Contact Phone/Email	kbaron@stlouispark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Staff Time: Ongoing	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#15 Encourage county/city participation in FEMA's Community Rating System Program</b>	
Responsible Agency	Com. Development	
Contact Name	Karen Barton	
Contact Phone/Email	Kbaron@stlouispark.org	
Project Status	<input type="radio"/> Project Completed	

	<input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed
Summary of Project	Staff Time: Ongoing
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#16 Increase coordination with State Duty Officer for highway spills.</b>	
Responsible Agency	St. Louis Park Fire	
Contact Name	Steve Koering	
Contact Phone/Email	Skoering@stlouispark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Staff Time: Ongoing	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#17 Continue to work with Public Affairs to disseminate information about infectious diseases.</b>	
Responsible Agency	St. Louis Park Fire	
Contact Name	Steve Koering	
Contact Phone/Email	skoering@stlouispark.org	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed	
Summary of Project	Staff Time: Ongoing	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#18 Maintain links to other sources of reliable information about infectious diseases and prevention.</b>	
Responsible Agency	St. Louis Park Fire	
Contact Name	Steve Koering	
Contact Phone/Email	skoering@stlouispark.org	
Project Status	<input type="radio"/> Project Completed	

	<ul style="list-style-type: none"> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul>
Summary of Project	Staff Time: Ongoing
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#19 Continue to partner with local/regional hospitals and clinics in developing plans and roles in infectious disease response, including quarantine.</b>	
Responsible Agency	St. Louis Park Fire	
Contact Name	Steve Koering	
Contact Phone/Email	skoering@stlouispark.org	
Project Status	<ul style="list-style-type: none"> <li><input type="radio"/> Project Completed</li> <li><input type="radio"/> Project Canceled</li> <li><input type="radio"/> Project on Schedule</li> <li><input type="radio"/> Anticipated completion date: _____</li> <li><input type="radio"/> Project is delayed</li> </ul>	
Summary of Project	Staff Time: Ongoing	
Name of Reviewer		

**3.1.44. CITY OF TONKA BAY**

## Hennepin County- Tonka Bay

Tonka Bay was incorporated as a village on September 11, 1901. The city, which has an area of about one square mile, is located between the upper and lower bodies of Lake Minnetonka. It has more Minnetonka shoreline than any other city of its size. Tonka Bay made history long before 1901. In 1853, Peter Gideon staked out a claim of 160 acres in what is now Tonka Bay and where Gideon's Bay still bears his name. Gideon successfully propagated his first apples, "The Wealthy," named for his wife, before he died in 1899.



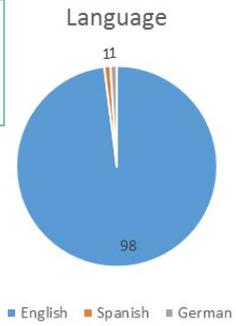
Latitude/Longitude: 44.9146405, -93.587792  
 Area: 0.99 sq. miles  
 Area - Land only: 0.93 sq. miles (94%)  
 Area - Water only: 0.06 sq. miles (6%)  
 Population: 1,475  
 Housing Units: 657

**School District**  
 • 276 Minnetonka

**Vulnerability**  
 • Monticello NPP: 29 Miles

**Corporate/Employer**  
 • Tonka Bay Marina  
 • The Caribbean Marina  
 • Country Club Lanes

**Capability**  
 • Fire Department- Excelsior  
 • Law Enforcement- South Lake Minnetonka  
 • Police Chaplains Group  
 • FCC Registered Amateur Radio Licenses: 1  
 • Public Works



- 2** Mitigation Priority 1
  - Obtain Storm Ready Program certification
- 1** Mitigation Priority 2
  - Reduce power outages by burying power lines
- 2** Mitigation Priority 3
  - Participate in NFIP

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**TONKA BAY MITIGATION PLAN**

**POC: MIKE MEEHAN**

**A. Tonka Bay Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
	1A: Reduce future losses to power lines due to severe storms.	1A1: Encourage new or existing power lines to be buried for the reduction of future power outages
	1B: Reduce future losses to Lift Stations during storms	1B1: Repair /reline all of Lift Station #7's lines.
		1B2: Reduce future flooding around Lift Station #9 by elevating the grade.
		1B3: Elevate land around Lift Station #1 & #2 above last known flood level near Woodpecker Ridge Road.
Goal	Increase education, outreach, and awareness	
2	OBJECTIVES	ACTIONS
	2A: Achieve certification in the National Weather Service Storm Ready Program	2A1: Achieve certification in the National Weather Service Storm Ready Program

2B: Improve citizens understanding of available communications for notification of severe weather warnings.	2B1: Host annual severe weather awareness courses.
	2B2: Host annual Skywarn course for local citizens and first responders.
2C: Reduce the impact of flooding on private and public structures.	2C1: Encourage participation in the National Flood Insurance Program (NFIP)

<b>Goal 3</b>	Protect natural resources
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
4A: Reduce future losses to due to flooding	4A1: Extend Woodpecker Ridge Road on the south end to prevent flood water from getting into sewer manhole.
	4A2: Elevate West Point Road & west Point Drive above last known flood level.
	4A3; Elevate crabapple Lane to the last known flood level.
	4A4: Build a berm along Woodpecker Ridge Road due to continual flooding.
	4A5: Elevate Sunrise Avenue due to continual flooding.
	4A6: Elevate power supply/transformer above last known flood level along Woodpecker Ridge Road.
	4A7: Identify and mitigate future sinkholes along Pleasant Park road.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	

None	
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**B. Tonka Bay Mitigation Actions**

Mitigation Action Name (15)	Estimated Cost	Rank	Timeline
1A1: Encourage new or existing power lines to be buried for the reduction of future power outages	NA	2	Staff Time
1B1: Repair /reline all of Lift Station #7's lines.	15,000	6	2-5 yrs
1B2: Reduce future flooding around Lift Station #9 by elevating the grade.	5,000	7	2-5 yrs
1B3: Elevate land around Lift Station #1 & #2 above last known flood level near Woodpecker Ridge Road.	9,000	8	2-5 yrs
2A1: Achieve certification in the National Weather Service Storm Ready Program	NA	1	2016
2B1: Host annual severe weather awareness courses.	NA	4	Ongoing
2B2: Host annual Skywarn course for local citizens and first responders.	NA	5	Ongoing
2C1: Encourage participation in the National Flood Insurance Program (NFIP)	NA	3	Ongoing
4A1: Extend Woodpecker Ridge Road on the south end to prevent flood water from getting into sewer manhole.	25,000	9	2-5 yrs
4A2: Elevate West Point Road & west Point Drive above last known flood level.	55,000	10	2-5 yrs
4A3: Elevate crabapple Lane to the last known flood level.	15,000	11	2-5 yrs
4A4: Build a berm along Woodpecker Ridge Road due to continual flooding	8,000	12	2-5 yrs
4A5: Elevate Sunrise Avenue due to continual flooding.	20,000	13	2-5 yrs
4A6: Elevate power supply/transformer above last known flood level along Woodpecker Ridge Road.	5,000	14	2-5 yrs
4A7: Identify and mitigate future sinkholes along Pleasant Park road.	9,000	15	2-5 yrs

**C. Tonka Bay Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	2	2A	2A1	Achieve certification in the NWS Storm Ready Program	Staff time	SLMPD	2016
2	1	1A	1A1	Encourage new or existing power lines to be buried for the reduction of power outages.	Staff time	PW	Ongoing

3	2	2C	2C1	Encourage participation in the National Flood Insurance program	NA	PW	Ongoing
4	2	2B	2B1	Host annual severe weather awareness course	Staff time	SLMPD	Ongoing
5	2	2B	2B2	Host annual Skywarn course for local citizens and first responders	Staff time	SLMPD	Ongoing
6	1	1B	1B1	Repair/reline all of lift station #7's lines	15,000	PW	2-5 yrs.
7	1	1B	1B2	Reduce future flooding around lift station #9 by elevating the grade	5,000	PW	2-5 yrs.
8	1	1B	1B3	Elevate land around lift station #1 & 2 above last known flood level near Woodpecker Ridge Rd.	9,000	PW	2-5 yrs.
9	4	4A	4A1	Extend Woodpecker Ridge Road on the south end to prevent floodwater from entering the sewer manhole	25,000	PW	2-5 yrs.
10	4	4A	4A2	Elevate West Point Rd. & West Point Dr. above last known flood level	55,000	PW	2-5 yrs.
11	4	4A	4A3	Elevate Crabapple Lane to the last known flood level.	15,000	PW	2-5 yrs.
12	4	4A	4A4	Build a berm along Woodpecker Ridge Rd. due to continual flooding.	8,000	PW	2-5 yrs.
13	4	4A	4A5	Elevate Sunrise Ave. due to continual flooding.	20,000	PW	2-5 yrs.
14	4	4A	4A6	Elevate power supply/transformer above last known flood level along Woodpecker Ridge Rd.	5,000	PW	2-5 yrs.
15	4	4A	4A7	Identify & mitigate future sinkholes along Pleasant Park Rd.	9,000	PW	2-5 yrs.
<b>TOTAL</b>					<b>\$166,000.00</b>		

**D. Tonka Bay Mitigation Action Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#1 Achieve certification in the NWS Storm Ready Program</b>	
<b>Responsible Agency</b>	PD	

Contact Name	Meehan
Contact Phone/Email	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:
Summary of Project	<b>UPDATE NOT SUBMITTED</b>
Name of Reviewer	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Promote the use of NOAA weather radios for early warning and post event information</b>	
Responsible Agency	PD	
Contact Name	Meehan	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#3 Create a severe weather awareness campaign for the residents</b>	
Responsible Agency	PD	
Contact Name	Meehan	
Contact Phone/Email		
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input type="radio"/> Anticipated completion date: _____ <input type="radio"/> Project is delayed Explain:	
Summary of Project	<b>UPDATE NOT SUBMITTED</b>	
Name of Reviewer		



**3.1.45. CITY OF WAYZATA**

Hennepin County- Wayzata

The name Wayzata is derived from the American Indian word Wazyata, which had almost mystical connotation to the Sioux tribes who originally inhabited the area. In 1852, pioneers began to settle in what is now the present site of Wayzata. A town site was laid out and several establishments sprang up, among them a general store, a sawmill, a post office, and a log schoolhouse. U.S. Route 12 serves as the main transportation route of the city.



Latitude/Longitude: 44.966787, -93.512716  
 Area: 3.16 sq. miles  
 Area - Land only: 3.08 sq. miles (98%)  
 Area - Water only: 0.08 sq. miles (2%)  
 Population: 3,688  
 Housing Units: 2,041

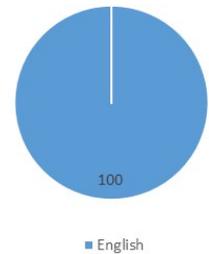
**School District**  
 • 284 Wayzata

**Vulnerability**  
 • Bridges 19  
 • Functional Needs 130  
 • Rail Miles 3  
 • Monticello NPP: 27 miles

**Corporate/Employer**  
 • TC Bank Corporation  
 • Wayzata Medical Center  
 • Cargill

**Capability**  
 • Law Enforcement  
 • Police Chaplains Group  
 • Streets and Highways Dept  
 • Park and Recreation Dept  
 • Sewage  
 • Water Supply  
 • FCC Registered amateur radio licenses:50

**Language**



**1 Mitigation Priority 1**  
 • Review available products and vendors offering notification systems

**1 Mitigation Priority 2**  
 • Implement "Next Door" program for neighborhood specific notifications.

**1 Mitigation Priority 3**  
 • Prepare Community Presentation on emergency response/notification.

**WAYZATA MITIGATION PLAN**

**POC: MICHAEL RISVOLD**

**A. Wayzata Objectives and Actions**

Goal	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
1	OBJECTIVES	ACTIONS
1A: Improve Community Notification Capabilities		1A1: Review available products and vendors offering notification systems
		1A2: Implement "Next Door" program for neighborhood specific notifications.
		1A3: Prepare Community Presentation on emergency response/notification.
Goal	Increase education, outreach, and awareness	
2	OBJECTIVES	ACTIONS
2A: Achieve certification in National Weather Service StormReady program.		2A1: Meet requirements of the program.
		2A2: Prepare Community Presentation on severe weather awareness.

<b>Goal 3</b>	Protect natural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: Insure water runoff choke points have adequate infrastructure to withstand flood.	4A1: Inventory critical choke points and inspect and/or improve infrastructure.	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Bury Power Lines	7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	

**B. Wayzata Mitigation Actions**

Mitigation Action Name (7)	Estimated Cost	Priority	Timeline
1A1: Review available products and vendors offering notification systems	Unknown	1	2 years
1A2: Implement "Next Door" program for neighborhood specific notifications.	Staff Time	1	2 years
1A3: Prepare Community Presentation on emergency response/notification.	Staff Time	1	2 years
2A1: Meet requirements of the program.	Staff Time	1	2 years
2A2: Prepare Community Presentation on severe weather awareness.	\$1000	2	2 years
4A1: Inventory critical choke points and inspect and/or improve infrastructure.	Staff Time	3	2 years

7A1: Work with the community to identify power lines that could be buried to reduce power failures in heavily populated areas	Unknown	4	2 years
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**C. Wayzata Mitigation Strategies**

Priority	Goal	Objective	Action	Description	Project Cost Breakdown	Responsible Agency (POC)	Timeline
1	1	1A	1A1	Police Department	Unknown	EM Director	2 years
1	1	1A	1A2	Police Department, Crime Prevention Coalition	Staff Time	EM Director	2 years
1	1	1A	1A3	Police Department, Fire Department, Public Works	Staff time	EM Director	2 years
2	2	2A	2A1	Police Department	Training Time	EM Director	2 years
2	2	2A	2A2	Police Department	1K	EM Director	2 years
3	4	4A	4A1	Police Department, Public Works	Unknown	EM Director EM Coord	2 years
4	7	7A	7A1	Public Works, Planning Department	Staff Time	EM Director EM Coord	Ongoing
<b>TOTAL</b>					<b>\$1,000.00</b>		

**D. Wayzata 2010 Progress Report**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#1 Enact an building code ordinance which will ensure new construction exceeding a predetermined number of square footage will have adequate in-building coverage for the 800 MHz trunked radio system</b>	
Responsible Agency	Building Inspections	
Contact Name	Don Johaneson	
Contact Phone/Email	952-404-5311 / djohaneson@wayzata.org	
Project Status	<b>X Project Completed</b>	
Summary of Project	\$1,000 cost	Timeline: 1 year
Name of Reviewer	Risvold	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#2 Public outreach through several vehicle to include city website, city newsletter, email, text message alerts, police department newsletter, and educational presentations to school age children as well as adults</b>	
Responsible Agency	Wayzata Police	
Contact Name	Risvold	
Contact Phone/Email	952-404-5343 / mrisvold@wayzata.org	
Project Status	<b>X Project Completed</b>	

Summary of Project	Staff Time- Ongoing
Name of Reviewer	Risvold

**3.1.46. CITY OF WOODLAND**

## Hennepin County- Woodland

Woodland is part of the "Big Woods" that once stretched from Owatonna to St. Cloud. The first dwelling was constructed in Woodland in 1867. Woodland was settled in 1882 by year-round residents. The Village of Woodland was incorporated in December 1948. The area of Woodland is 0.8 square miles, approximately 3.6 miles of public roads and 5.9 miles of shoreline on Lake Minnetonka. As of the 2000 census, the population of Woodland was 480 people.



Latitude/Longitude: 44.95018, -93.51618  
 Area: 0.57 sq. miles  
 Area - Land only: 0.53 sq. miles (93.5%)  
 Area - Water only: 0.04 sq. miles (6.5%)  
 Population: 443  
 Housing Units: 181

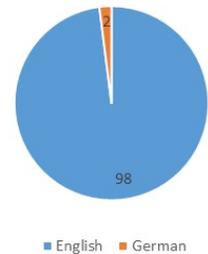
**School District**  
 • 284 Wayzata

**Vulnerability**  
 • Bridges 19  
 • Functional Needs 130  
 • Rail Miles 3  
 • Monticello NPP: 28 miles

**Corporate/Employer**

**Capability**  
 • Law Enforcement  
 • Streets and Highways Dept  
 • Park and Recreation Dept  
 • Sewage  
 • Water Supply

**Language**



**2** Mitigation Priority 1  
 • Provide information to the public on the city website and through public education opportunities

**7** Mitigation Priority 2  
 • Work with the community to identify power lines which could be buried to reduce power failures.

**5** Mitigation Priority 3  
 • Participation in multi-jurisdictional/ multi-agency table top, drill and full-scale exercises.

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**WOODLAND MITIGATION PLAN**

**POC: CORY JOHNSON**

**A. Woodland Objectives and Actions**

Goal 1	Minimize loss of life, injury and damage to property, the economy, and the environment from natural and man-made hazards.	
	OBJECTIVES	ACTIONS
NONE		

Goal 2	Increase education, outreach, and awareness	
	OBJECTIVES	ACTIONS
2A: Educate the public to increase awareness of hazards and opportunities for mitigation actions.		2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions. 2A2: Provide information to the public on the city website and through public education opportunities
2B: Promote partnerships between the state, counties, local jurisdictions, and partner agencies to identify, prioritize, and implement mitigation actions.		2B1: Participate as a member in local or regional hazard mitigation planning group 2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.

<b>Goal 3</b>	<b>Protect natural and cultural resources</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>	
NONE			

<b>Goal 4</b>	<b>Identify areas of greatest impact from hazards</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>	
NONE			

<b>Goal 5</b>	<b>Enhance hazard mitigation coordination and communication with federal, state and local governments</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>	
5A: Continue the promotion of partnerships with federal, state and local entities to develop successful mitigation plans and operational strategies. Work towards a common comprehensive emergency operation plan that can be utilized on a larger regional platform.		5A1: Continue affording the opportunity for City Staff to attend or join emergency management associations like Lakes Area Emergency Management Planning Group, MEMA (Metropolitan Emergency Managers Association) and AMEM (Association of Minnesota Emergency Managers).	
		5A2: Continue participation in multi-jurisdictional / multi-agency table top, drill and full-scale exercises.	
		5A3: Research and implement lessons learned from actual hazardous events from local, regional and national jurisdictions to avoid probable mistakes from repeating themselves.	

<b>Goal 6</b>	<b>Promote disaster resistant future development</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>	
NONE			

<b>Goal 7</b>	<b>Build and support local capacity and commitment to become less vulnerable to hazards</b>		
<b>OBJECTIVES</b>		<b>ACTIONS</b>	
7A: Bury power lines		7A1: Work with the community to identify power lines which could be buried to reduce power failures.	

**B. Woodland Mitigation Actions**

Mitigation Actions (8)	Estimated Cost	Priority	Timeline
2A1: Publicize and encourage the adoption of appropriate hazard mitigation actions.	\$5,000.00	1	Ongoing

2A2: Provide information to the public on the city website and through public education opportunities			
2B1: Participate as a member in local or regional hazard mitigation planning group			
2B2: Support or provide the public sector events, workshop, symposium, and continued education opportunities.			
5A1: Continue affording the opportunity for City Staff to attend or join emergency management associations like Lakes Area Emergency Management Planning Group, MEMA (Metropolitan Emergency Managers Association) and AMEM (Association of Minnesota Emergency Managers).	\$20,000.00	3	Ongoing
5A2: Continue participation in multi-jurisdictional / multi-agency table top, drill and full-scale exercises.			
5A3: Research and implement lessons learned from actual hazardous events from local, regional and national jurisdictions to avoid probable mistakes from repeating themselves.			
7A1: Work with the community to identify power lines which could be buried to reduce power failures.	\$500,000.00	2	Ongoing

### C. Woodland Mitigation Strategies

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency (POC)	Timeline
1	2	2A	2A1	Update website, update material handouts	5K	LE, City Staff	Medium
1	2	2A	2A2				
1	2	2A	2B1				
1	2	2A	2B2				
2	7	7A	7A1	Promote and participate in work groups, home owner assessments	500K	LE, City Staff, City Council, Zoning, Xcel Energy	Long
3	5	5A	5A1	Work with HCEM, AMEM and State and local affiliates.	20K	LE, HCEM, State and Local Affiliates.	Long
3	5	5A	5A2				
3	5	5A	5A3				
<b>TOTAL</b>					<b>\$525,000.00</b>		

### D. Woodland Mitigation Action 2010 Progress Report

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: July 10, 2015
<b>Project Title/Action</b>	#1 Enforce Burning Restrictions	
Responsible Agency	Police Department and Zoning Coordinator	
Contact Name	Cory Johnson	
Contact Phone/Email	952-474-7555 coryj@deephavenpolice .com	

Project Status	<b>X Project Completed</b>
Summary of Project	Updated Ordinances and enforcement actions
Name of Reviewer	Cory Johnson

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: 2017
<b>Project Title/Action</b>	<b>#2 Maintain, enforce and update zoning Ordinances</b>	
Responsible Agency	Planning Commission and Zoning Coordinator	
Contact Name	Cory Johnson	
Contact Phone/Email	952-474-7555 coryj@deephavenpolice.com	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Anticipated completion date: Ongoing</b> <input type="radio"/> Project is delayed Explain:	
Summary of Project	Constant review and updating as issues arise.	
Name of Reviewer	Cory Johnson	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: 2015
<b>Project Title/Action</b>	<b>#3 Revise/Update local emergency Management plans</b>	
Responsible Agency	Lakes Area Emergency Management, HCEM	
Contact Name	Cory Johnson	
Contact Phone/Email	952-474-7555 coryj@deephavenpolice.com	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input checked="" type="radio"/> <b>Anticipated completion date: September 2015</b> <input type="radio"/> Project is delayed Explain:	
Summary of Project	Plan will be finalized and is out for review.	
Name of Reviewer	Cory Johnson	

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: May 18, 2010	To Date: July 10, 2015
<b>Project Title/Action</b>	<b>#4 Dispense educational materials to citizens about potential disasters.</b>	
Responsible Agency	State Emergency Management, Local LE, HCEM	
Contact Name	Cory Johnson	
Contact Phone/Email	952-474-7555 coryj@deephavenpolice.com	
Project Status	<input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: Ongoing</b> <input type="radio"/> Project is delayed Explain:	

Summary of Project	Continue to get new and up to date material for handouts, and update website.
Name of Reviewer	Cory Johnson

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### 3.2. SCHOOL DISTRICTS

#### 3.2.1. HOPKINS PUBLIC SCHOOLS, ISD 270

POC: JEFF GOLDY

##### A. Hopkins Schools 270 Mitigation Objectives and Actions

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	Objectives	Actions
1A:	Severe Weather	1A1: Monitor trends in severe weather occurrences in the region and adapt plans to fit those changes
1B:	Tornado	1B1: Review all future renovation project plans for opportunities to add storm shelter space, especially through fire / storm doors installed in hallways
1C:	Flash Flood	1C1: Inspect and clean (as needed) all campus storm drains
		1C2: Maintain pond spillway at Eisenhower Community Center
1D:	Evacuation / Fire	1D1: Update floor plans and related crisis management maps each fall to account for buildings changes through renovations
1E:	Lockdown	1E1: Continue to improve physical security around established welcome centers at building main entrances
		1E2: Plan for architecturally appealing enhancements to physical security within and outside of buildings
1F:	Shelter Inside	1F1: Work with Police and Fire Departments to identify most common hazards and those with the highest risk
1G:	Stay In Place	1G1: Monitor use of common spaces in buildings for educational use and flexibility of relocation or staying in place as needed

Goal 2	Protect education, natural and cultural resources	
	Objectives	Actions
2A:	Building Maintenance	2A1: Continue to move toward preventative maintenance and avoid run to failure approaches
		2A2: Carry on planning and executing periodic renovation projects for all buildings to maintain and enhance their use
2B:	Campus Maintenance	2B1: Turf- Maintain healthy, watered turf and landscape
		2B2: Turf- Remove wild fire fuel by cleaning up leaves and other debris as needed seasonally and after severe weather
		2B3: Trees- Remove dead trees and tree limbs to prevent falling
		2B4: Trees- Trim trees away from buildings
		2B5: Trees- Work with utility providers to prevent trees from interfering with services
		2B6: Wetlands and Ponds- Foster ongoing relationships with watershed and conservation districts to maintain healthy wetlands and ponds on or adjacent to our campuses

<b>Goal 3</b>	Increase education, outreach, and awareness	
	<b>Objectives</b>	<b>Actions</b>
	3A: Promote Student, Staff and Community Awareness and Reporting	3A1: Through internal and external communications, educate students, parents, staff and communities regarding significant projects accomplishing the objectives and action items described in the first two goals above
	3B: Continue to build and promote partnerships between the local governments, Hennepin County and other partner agencies to identify, prioritize, and implement mitigation actions	3B1: Continue first responder involvement in planning and executing enhanced drills each year at all buildings
		3B2: Assist cities hosting our campuses with their own mitigation planning
		3B3: Attend regular Hennepin County Emergency Management (HCEM) planning meetings and assist with HCEM with special planning projects as requested

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>Objectives</b>	<b>Actions</b>
	4A: Continue to assess vulnerabilities in our buildings and on our grounds	4A1: Communicate the need to assess vulnerabilities in our buildings and on our grounds to district leadership, principals, staff and users in order to receive feedback on any needs that arise and develop plans to address those needs

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments	
	<b>Objectives</b>	<b>Actions</b>
	5A: Continue to build and promote partnerships between the local governments, Hennepin County and other partner agencies to identify, prioritize, and implement mitigation actions	5A1: Assist cities hosting our campuses with their own mitigation planning
		5A2: Attend regular Hennepin County Emergency Management (HCEM) planning meetings and assist with HCEM with special planning projects as requested
	5B: Work with local governments to ensure more uniform implementation of the district crisis management plan	5B1: Share our crisis management plan with cities hosting our campuses and provide input as they develop their own mitigation plans

<b>Goal 6</b>	Promote disaster-resistant future development including measures to enhance physical security and hazard survivability	
	<b>Objectives</b>	<b>Actions</b>
	6A: Work toward more tornado resistant buildings	6A1: Review all future renovation project plans for opportunities to add storm shelter space, especially through fire / storm doors installed in hallways
	6B: Continue to implement architecturally appealing physical	6B1: Continue to improve physical security around established welcome centers at building main entrances

security measures in buildings and on our campuses	6B2: Plan for architecturally appealing enhancements to physical security within and outside of buildings
----------------------------------------------------	-----------------------------------------------------------------------------------------------------------

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
	<b>Objectives</b>	<b>Actions</b>
	7A: Continue to build and maintain relationships with stakeholders in the district and within the communities we inhabit	7A1: Communicate the need to have feedback and observations regarding our buildings and grounds to district leadership, principals, staff and users in order to identify any needs that arise and develop plans to address those needs

### B. Hopkins Schools 270 Mitigation Actions

Mitigation Actions (29)	Estimated Cost	Rank	Timeline
1A1: Monitor trends in severe weather occurrences in the region and adapt plans to fit those changes	Crisis Management Leader (CML) Staff Time: 16 hours per yr.	4	Ongoing
1B1: Review all future renovation project plans for opportunities to add storm shelter space, especially through fire / storm doors installed in hallways	Buildings and Grounds (B&G) Leadership Staff Time: 8 hours per yr.	1	Annually / Fall Long Term 5 / 7 / 10 Year Cycles for Each Building
1C1: Inspect and clean (as needed) all campus storm drains	B&G Grounds Team: 3 x 24 hours per year	2	Annually / Spring
1C2: Maintain pond spillway at Eisenhower Community Center	B&G Grounds Team: 3 x 16 hours per year	3	Annually / Spring
1D1: Update floor plans and related crisis management maps each fall to account for buildings changes through renovations	Crisis Management (CM) Consultant: \$4500.00 / year	1	Annually / Fall
1E1: Continue to improve physical security around established welcome centers at building main entrances	Capital expense: ~\$20,000-\$100,000 per year	2	Annually / Fall Long Term 5 / 7 / 10 Year Cycles for Each Building
1E2: Plan for architecturally appealing enhancements to physical security within and outside of buildings	Capital expense: ~\$20,000-\$100,000 per year per building	1	Annually / Fall Long Term 5 / 7 / 10 Year Cycles for Each Building
1F1: Work with Police and Fire Departments to identify most common hazards and those with the highest risk	CML Staff Time: 16 hours per year	1	Ongoing
1G1: Monitor use of common spaces in buildings for educational use and flexibility of relocation or staying in place as needed	CML Staff Time: 16 hours per year	1	Ongoing
2A1: Continue to move toward preventative maintenance and avoid run to failure approaches	Asst. B&G Super: 48 hours per year	2	Ongoing

2A2: Carry on planning and executing periodic renovation projects for all buildings to maintain and enhance their use	B&G Leadership Staff Time: 16 hours per year	1	Annually / Fall Long Term 5 / 7 / 10 Year Cycles for Each Building
2B1: Maintain healthy, watered turf and landscape	B&G Grounds Team / Specialist: 5 x 40 hours per year	5	Ongoing Spring – Fall
2B2: Remove wild fire fuel by cleaning up leaves and other debris as needed seasonally and after severe weather	B&G Grounds Team: 3 x 40 hours per year	4	Annually / Fall As Needed
2B3: Remove dead trees and tree limbs to prevent falling	Contractor Expense: ~\$2000 -- \$15000 per year	1	Annually Spring – Fall
2B4: Trim trees away from buildings	Contractor Expense: ~\$500 -- \$5000 per year	2	Annually Spring – Fall
2B5: Work with utility providers to prevent trees from interfering with services	Contractor / Utility Expense: ~\$500 -- \$5000 per year	3	Annually Spring – Fall
2B6: Foster ongoing relationships with watershed and conservation districts to maintain healthy wetlands and ponds on or adjacent to our campuses	Asst. B&G Super: 16 hours per year CML Staff Time: 16 hours per year	6	Ongoing
3A1: Through internal and external communications, educate students, parents, staff and communities regarding significant projects accomplishing the objectives and action items described in the first two goals above	CML Staff Time: 16 hours per year	1	Ongoing
3B1: Continue first responder involvement in planning and executing enhanced drills each year at all buildings	CML Staff Time: 16 hours per year Crisis Management Consultant: \$4000 per year	1	Ongoing
3B2: Assist cities hosting our campuses with their own mitigation planning	CML Staff Time: 8 hours per year	3	Ongoing
3B3: Attend regular Hennepin County Emergency Management (HCEM) planning meetings and assist with HCEM with special planning projects as requested	CML Staff Time: 16 hours per year	2	Ongoing
4A1: Communicate the need to assess vulnerabilities in our buildings and on our grounds to district leadership, principals, staff and users in order to receive feedback on any needs	CML Staff Time: 8 hours per year	1	Ongoing

that arise and develop plans to address those needs			
5A1: Assist cities hosting our campuses with their own mitigation planning	CML Staff Time: 16 hours per year	2	Ongoing
5A2: Attend regular Hennepin County Emergency Management (HCEM) planning meetings and assist with HCEM with special planning projects as requested	CML Staff Time: 16 hours per year	1	Ongoing
5B1: Share our crisis management plan with cities hosting our campuses and provide input as they develop their own mitigation plans	CML Staff Time: 8 hours per year	1	Ongoing
6A1: Review all future renovation project plans for opportunities to add storm shelter space, especially through fire / storm doors installed in hallways	B&G Leadership Staff Time: 16 hours per year	1	Annually / Fall Long Term 5 / 7 / 10 Year Cycles for Each Building
6B1: Continue to improve physical security around established welcome centers at building main entrances	Capital expense: ~\$20,000-\$100,000 per year	2	Annually / Fall Long Term 5 / 7 / 10 Year Cycles for Each Building
6B2: Plan for architecturally appealing enhancements to physical security within and outside of buildings	Capital expense: ~\$20,000-\$100,000 per year per building	1	Annually / Fall Long Term 5 / 7 / 10 Year Cycles for Each Building
7A1: Communicate the need to have feedback and observations regarding our buildings and grounds to district leadership, principals, staff and users in order to identify any needs that arise and develop plans to address those needs	CML Staff Time: 8 hours per year	1	Ongoing

**C. Hopkins Schools 270 Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost/yr	Responsible Agency	Timeline
1	1	1B	1B1	Review and Update	932	B&G	Long
1	1	1D	1D1	Review and Update	4.5K	CML	Annual
1	1	1E	1E2	Review and Update	60Kcap	B&G	Long
1	1	1F	1F1	Review and Update	544	CML	Medium
1	1	1G	1G1	Review and Update	544	CML	Medium
1	2	2A	2A2	Review and Update	1864	B&G	Long
1	2	2B	2B3	Exercise	8.5K	B&G ground	Annual
1	3	3A	3A1	Exercise	544	CML	Long
1	3	3B	3B1	Exercise	4544	CML	Annual
1	4	4A	4A1	Exercise	272	CML	Long
1	5	5A	5A2	Exercise	544	CML	Long
1	5	5B	5B1	Exercise	272	CML	Long
1	6	6A	6A1	Review and Update	1864	B&G	Long
1	6	6B	6B2	Review and Update	60Kcap	B&G	Long
1	7	7A	7A1	Exercise	272	CML	Long
2	1	1C	1C1	Exercise	1440	B&G ground	Annual
2	1	1E	1E1	Review and Update	60Kcap	B&G	Long
2	2	2A	2A1	Review and Update	1800	Assist B&G	Long
2	2	2B	2B4	Exercise	2275	B&G ground	Annual
2	3	3B	3B3	Exercise	544	CML	Long
2	5	5A	5A1	Exercise	544	CML	Long
2	6	6B	6B1	Review and Update	60Kcap	B&G	Long
3	1	1C	1C2	Exercise	960	B&G ground	Annual
3	2	2B	2B5	Exercise	2275	B&G ground	Annual
3	3	3B	3B2	Exercise	272	CML	Long
4	1	1A	1A1	Review and Update	544	CML	Long
4	2	2B	2B2	Exercise	2400	B&G ground	Annual
5	2	2B	2B1	Exercise	4K	B&G ground	Annual
6	2	2B	2B6	Exercise	1144	Assist B&G	Long
<b>TOTAL</b>					<b>\$283,394</b>		

**3.2.2. MINNEAPOLIS PUBLIC SCHOOLS, ISD 1** **POC: JASON MATLOCK**

**A. Minneapolis Public Schools 1 Mitigation Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
<b>Objectives</b>		<b>Actions</b>
1A: MPS Emergency Planning: Promote emergency planning to ensure the safety of school children in the event of a disaster	1A1: Update and revise the district Emergency Operations Plan	
	1A2: Implement the district Continuity of Operations Plan	
	1A3: Expand emergency planning for students and staff with functional needs	
1B: Implement additional communication/warning systems district buildings	1B1: Upgrade public address systems in all buildings	
	1B2: Ensure that all district building have functioning weather radios	

<b>Goal 2</b>	Increase education, outreach, and awareness	
<b>Objectives</b>		<b>Actions</b>
2A: Educate district staff and families to increase awareness of hazards and opportunities for mitigation actions.	2A1: Expand training to all district stakeholders on emergency response procedures	
	2A2: Provide information to the public on the district website and through public education opportunities	
2B: Promote partnerships between Minneapolis Public Schools, City of Minneapolis agencies, and other school districts to identify, prioritize, and implement mitigation actions.	2B1: Continue to participate in local planning groups	
2C: Work with Schools and families to promote hazard mitigation in the district community.	2C1: Encourage district families to develop family emergency preparedness plans	

<b>Goal 3</b>	Protect natural and cultural resources	
<b>Objectives</b>		<b>Actions</b>
None		

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>Objectives</b>		<b>Actions</b>
4A: Hazardous Waste: Develop a comprehensive approach to reducing the possibility of damage and losses due to hazardous waste	4A1: Work with local agencies to share information on types and locations of hazardous material that have the potential to affect the district community	
	4A2: Develop a site based plan to identify and maintain chemical inventories	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>Objectives</b>		<b>Actions</b>
5A: Increase collaboration and coordination between the MPS, nearby schools, surrounding school districts, nearby communities, utilities, businesses and citizens to ensure the availability of adequate emergency and essential services for the District during and after disaster events.	5A1: Continue to participate in local and regional training and exercises	
	5A2: Continue memberships with local and regional emergency management and professional organizations	
	5A3: Maintain and pursue mutual aid agreements with local and agencies; area schools and districts; private sector businesses; and utilities	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>Objectives</b>		<b>Actions</b>
6A: Protect district buildings and infrastructure	6A1: Continue to administer total building assessments	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>Objectives</b>		<b>Actions</b>
7A: Flooding: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding or dam failure	7A1: Review and identify district property that resides in flood plains	
	7A2: Review and update district evacuation and relocation plans	
7B: Tornado: Develop a comprehensive approach to reducing the possibility of damage and losses due to tornados and damaging winds	7B1: Review and identify severe weather sheltering areas in all district buildings	
	7B2: Research and identify buildings and/or locations where safe room shelters could be constructed or rooms retrofitted.	

**B. Minneapolis Public Schools 1 Mitigation Actions**

Mitigation Action (19)	Estimated Cost	Rank	Timeline
1A1: Update and revise the district Emergency Operations Plan	\$1500; personnel hours	3	Annually
1A2: Implement the district Continuity of Operations Plan	\$1500; personnel hours	2	Annually
1A3: Expand emergency planning for students and staff with functional needs	\$1500; personnel hours	4	Annually
1B1: Upgrade public address systems in all buildings	\$2,000,000	5	2025
1B2: Ensure that all district building have functioning weather radios	\$2500	1	2016

2A1: Expand training to all district stakeholders on emergency response procedures	\$3000; personnel hours	1	2016
2A2: Provide information to the public on the district website and through public education opportunities	\$500; personnel hours	2	2016
2B1: Continue to participate in local planning groups	\$6000 annually	4	On-going
2C1: Encourage district families to develop family emergency preparedness plans	\$500; literature	3	2016
4A1: Work with local agencies to share information on types and locations of hazardous material that have the potential to affect the district community	\$500; personnel hours	2	2018
4A2: Develop a site based plan to identify and maintain chemical inventories	\$1500; personnel hours	1	2018
5A1: Continue to participate in local and regional training and exercises	\$2000	1	On-going
5A2: Continue memberships with local and regional emergency management and professional organizations	\$250; member dues	3	annually
5A3: Maintain and pursue mutual aid agreements with local and agencies; area schools and districts; private sector businesses; and utilities	\$1000; personnel hours	2	annually
6A1: Continue to administer total building assessments	\$2000	1	annually
7A1: Review and identify district property that resides in flood plains	\$500; personnel hours	4	2018
7A2: Review and update district evacuation and relocation procedures	\$1000; personnel hours	2	annually
7B1: Review and identify severe weather sheltering areas in all district buildings	\$3500; personnel hours	1	2018
7B2: Research and identify buildings and/or locations where safe room shelters could be constructed or rooms retrofitted.	\$1500; personnel hours	3	2018

### C. Minneapolis Public Schools 1 Mitigation Strategies

Priority	Goals	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	1B	1B2	Equipment	2.5K	MPS OSS	Short
2	1	1A	1A2	Update	1.5K	MPS OSS	Medium
3	1	1A	1A1	Review	1.5K	MPS OSS	Medium
4	1	1A	1A3	Implement	1.5K	MPS OSS	Medium
5	1	1B	1B1	Equipment	2M	MPS Facilities	Medium
1	2	2A	2A1	Update	3K	MPS OSS	Short
2	2	2A	2A2	Engagement	500	MPS OSS	Short
3	2	2C	2C1	Engagement	500	MPS OSS	Short
4	2	2B	2B1	Planning	6K	MPS OSS	Short
1	4	4A	4A2	Planning	1.5K	MPS OSS	Long

2	4	4A	4A1	Planning	500	MPS OSS	Long
1	5	5A	5A1	Planning	2K	MPS OSS	Long
2	5	5A	5A3	Planning	1K	MPS OSS	Long
3	5	5A	5A2	Professional Development	250	MPS OSS	Short
1	6	6A	6A1	Assessment	6K annual	MPS OSS	Short
1	7	7B	7B1	Review	3.5K	MPS OSS	Medium
2	7	7A	7A2	Review	1K	MPS OSS	Medium
3	7	7B	7B2	Review	1.5K	MPS OSS	Medium
4	7	7A	7A1	Review	500	MPS OSS/ Facilities	Long
<b>TOTAL</b>					<b>\$2,034,750</b>		

**3.2.3. OSSEO AREA SCHOOLS, ISD 279**

**POC: DEAN OLSEN**

**A. Osseo Schools 279 Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
<b>Objectives</b>		<b>Actions</b>
1A: Provide appropriate shelter areas in schools to reduce the possibility of injuries due to tornados or high winds.	1A1: Assess the adequacy of safe room facilities currently used in schools to identify areas needing improvement.	
	1A2: Design building modifications that will provide or improve safe room facilities capable of protecting all students and staff.	
	1A3: Retrofit or construct new storm shelter and safe room facilities in identified locations.	
	1A4: Create/update emergency maps showing updated shelter areas and evacuation routes.	
	1A5: Post updated maps in classrooms and assembly areas.	

<b>Goal 2</b>	Increase education, outreach, and awareness	
<b>Objectives</b>		<b>Actions</b>
2A: Promote partnerships between the state, counties, local jurisdictions, and partner agencies to identify, prioritize, and implement mitigation actions.	2A1: Continue participation in local or regional hazard mitigation planning group.	
	2A2: Continue participation in multi-jurisdictional / multi-agency table top, drill and full-scale exercises.	

**B. Osseo Schools 279 Mitigation Actions**

Mitigation Action (7)	Estimated Cost	Rank	Timeline
1A1: Review and assess the adequacy of existing tornado shelter areas in schools (32).	Architect/Engineer fees, Local EM and Staff Time (Estimated at \$1,000 per building)	1	Medium (6-8 months)
1A2: Design building modifications to provide/improve safe rooms/areas capable of protecting all students and staff.	Architect/Engineer Fees (Estimated at \$5,000 per building)	2	Medium (6-8 months)
1A3: Construct/reinforce safe rooms/areas.	Construction Costs and Staff Time (Estimated at \$10,000 per building)	3	Long (1-2 years)
1A4: Create/update emergency maps showing shelter areas and evacuation routes.	Publications Department or Vendor Fees (Estimated at \$500 per building)	4	Medium (6-8 months)
1A5: Post updated maps in classrooms and assembly areas.	District Staff Time (Estimated at \$150 per building)	5	Short (2-4 months)

2A1: Continue participation in local or regional hazard mitigation planning group.	District Staff Time (Estimated at \$500 per year)	6	Ongoing
2A2: Continue participation in multi-jurisdictional / multi-agency table top, drill and full-scale exercises.	District Staff Time (Estimated at \$1,000 per year)	7	Ongoing

**C. Osseo Schools 279 Mitigation Strategies**

Priority	Goal	Action Name	Description	Estimated Cost	Responsible Agency	Timeline
1	1	1A1	Review	32K	EM/A&E/District	Medium
2	1	1A2	Design	160K	A&E	Medium
3	1	1A3	Construct	320K	A&E/District	Long
4	1	1A4	Update	16K	District	Medium
5	1	1A5	Publicize	4.8K	District	Short
6	2	2A1	Attend	500	District	Annual
7	2	2A2	Participate	1K	District	Annual
<b>TOTAL</b>				<b>\$534,300.00</b>		

**D. Osseo Schools 279 Mitigation Action Progress Report Form**

<b>Mitigation Strategies 2010 Progress Report Period</b>	From Date: 2010	To Date: 2017
<b>Project Title/Action</b>	<b>Improve severe weather shelter areas in schools</b>	
Responsible Agency	Osseo Area Schools – ISD 279	
Contact Name	Dean Olsen	
Contact Phone/Email	763-391-7191 / olsendean@district279.org.	
Project Status	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project on Schedule <input checked="" type="radio"/> <b>Anticipated completion date: August, 2017</b> <input type="radio"/> Project is delayed Explain:	
Summary of Project		
Name of Reviewer		

**3.2.4. ROCKFORD PUBLIC SCHOOLS, ISD 883** **POC: KATHY EHLERS**

**A. Rockford Public Schools 883 Mitigation Objectives and Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
<b>Objectives</b>		<b>Actions</b>
1A: Ensure the safety of school children in the event of a disaster		1A1: Prevent diabetic problems, asthma, allergy situations during lockdown, evacuation, etc. by ensuring access to medicine
1B: Develop school plans for responding to pandemic illnesses		1B1: Purchase hand sanitizers for each room in schools
		1B2: Purchase masks for nurses offices and other areas
1C: Implement additional communication/warning systems for each building and fields.		1C1: Install public address system on the exterior of each building
		1C2: Install warning sirens/notification system on fields
		1C3: Install emergency lights in the parking lots

<b>Goal 2</b>	Increase education, outreach, and awareness	
<b>Objectives</b>		<b>Actions</b>
2A: Educate staff to increase awareness of hazards and opportunities for mitigation actions		2A1: Inform and encourage proper usage of the district Emergency Procedure Plans
2B: Promote partnerships between the law enforcement agencies, counties, state to identify, prioritize and implement mitigation actions		2B1: Participate as a member in local or regional hazard mitigation planning group
2C: Promote the National Weather Service's "Winter Hazard Awareness Week" in November of each year, to educate families on the dangers of winter weather and how to properly deal with it		2C1: Educate families on the dangers of winter weather and how to properly deal with it via newsletters and parent bulletins.
2D: Promote the National Weather Service's "Severe Weather Awareness Week" in November of each year, to educate families on the dangers of winter weather and how to properly deal with it.		2D1: Educate families on the dangers of severe weather and highlight the importance of preparing for severe weather before it strikes via newsletters and parent bulletins.

<b>Goal 3</b>	Protect natural and cultural resources	
<b>Objectives</b>		<b>Actions</b>
NONE		

<b>Goal</b>	Identify areas of greatest impact from hazards
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<b>4</b>		
<b>Objectives</b>		<b>Actions</b>
4A: Secure explosive materials	4A1: Purchase monitoring devices for the fuel tanks at schools	
4B: Protect emergency responders from hazardous materials	4B1: Inform local fire departments about hazardous storage location so emergency responders know what to expect.	
4C: Plan alternative transportation and emergency services in case of flooding	4C1: Identify areas in district that are prone to flooding and pursue planning and funding for making specific mitigation improvements to those identified infrastructure pieces (i.e. transportation, etc.)	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>Objectives</b>		<b>Actions</b>
5A: Communicate/Coordinate emergency planning with other agencies.	5A1: Share Emergency Procedures as updated annually with County Law enforcement	
5B: Keep communication systems in the schools up and running in the event of a power outage.	5B1: Identify and purchase backup generators (one per building) and related equipment (i.e. generator hook-ups) in order to keep the phone, public address system and other critical areas functional during a power outage.	
5C: Develop exterior signage for building doors, parking lots, streets for location purposes in an emergency	5C1: Plan, update and purchase door signage for all buildings.	
	5C2: Plan, update and purchase exterior signage for district "streets" and parking lots.	

<b>Goal 6</b>	Protect natural and cultural resources	
<b>Objectives</b>		<b>Actions</b>
NONE		

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>Objectives</b>		<b>Actions</b>
7A: Provide shelter from tornados or other extreme wind events	7A1: Research possible storm shelter and safe room locations in district buildings	
	7A2: Retrofit or construct new storm shelter and safe room facilities in identified locations.	

**B. Rockford Public Schools 883 Mitigation Actions**

Mitigation Actions (19)	Estimated Cost	Rank	Timeline
1A1: Prevent diabetic problems, asthma, allergy situations during lockdown, evacuation, etc. by ensuring access to medicine	\$400	1	Annually
1B1: Purchase hand sanitizers for each room in schools	\$1,500	5	Ongoing
1B2: Purchase masks for nurses offices and other areas	\$200	6	Ongoing
1C1: Install public address system on the exterior of each building	\$60,000	2	2018
1C2: Install warning sirens/notification system on fields	\$50,000	3	2018
1C3: Install emergency lights in the parking lots	\$150,000	4	2018
2A1: Inform and encourage proper usage of the district Emergency Procedure Plans	\$250	1	Annually
2B1: Participate as a member in local or regional hazard mitigation planning group	\$250	2	Ongoing
2C1: Educate families on the dangers of winter weather and how to properly deal with it via newsletters and parent bulletins.	\$250	3	Annually
2D1: Educate families on the dangers of severe weather and highlight the importance of preparing for severe weather before it strikes via newsletters and parent bulletins.	\$250	4	Annually
4A1: Purchase monitoring devices for the fuel tanks at schools	\$500	1	2015
4B1: Inform local fire departments about hazardous storage location so emergency responders know what to expect.	\$150	2	2016
4C1: Identify areas in district that are prone to flooding and pursue planning and funding for making specific mitigation improvements to those identified infrastructure pieces (i.e. transportation, etc.)	\$150	3	2018
5A1: Share Emergency Procedures as updated annually with County Law enforcement	\$500	4	Annually
5B1: Identify and purchase backup generators (one per building) and related equipment (i.e. generator hook-ups) in order to keep the phone, public address system and other critical areas functional during a power outage.	\$30,000	3	2020
5C1: Plan, update and purchase door signage for all buildings.	\$5,000	1	2018
5C2: Plan, update and purchase exterior signage for district "streets" and parking lots.	\$1,000	2	2018
7A1: Research possible storm shelter and safe room locations in district buildings	\$150	1	2018
7A2: Retrofit or construct new storm shelter and safe room facilities in identified locations.	\$200,000	2	2020

**C. Rockford School District 883 Mitigation Strategies**

Priority	Goals	Action Name	Description	Estimated Cost	Responsible Agency	Timeline
1	1	1A1	Review	400	Rockford Area Schools ISD 883	Annually
1	2	2A1	Review	250		Annually
1	4	4A1	Exercise	500		2015
1	5	5C1	Exercise	5K		2018
1	7	7A1	Exercise	150		2018
2	1	1C1	Exercise	60K		2018
2	2	2B1	Review	250		Ongoing
2	4	4B1	Review	150		2016
2	5	5C2	Exercise	1K		2018
2	7	7A2	Exercise	200K		2020
3	1	1C2	Exercise	50K		2018
3	2	2C1	Review	250		Annually
3	4	4C1	Review	150		2018
3	5	5B1	Exercise	30K		2020
4	1	1C3	Exercise	150K		2018
4	2	2D1	Review	250		Annually
4	5	5A1	Review	500		Annually
5	1	1B1	Exercise	1.5K		Ongoing
6	1	1B2	Exercise	200		Ongoing
<b>TOTAL</b>				<b>\$500,550</b>		

**3.2.5. ST. ANTHONY-NEW BRIGHTON SCHOOLS, ISD 282 POC: TROY URDAHL**

**A. St. Anthony- New Brighton Schools 282 Mitigation Objectives and Actions**

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	Objectives	Actions
1A: Review and exercise the school crisis management plans		1A1: Annually review school emergency response procedures with faculty staff, and students, and update procedures as needed.
		1A2: Conduct the required 5 lockdown, 5 fire and 1 tornado drill annually at each school.
		1A3: Work with local first responders to identify opportunities and resources for emergency management training exercises.
1B: Mitigate the risks of an Active Shooter or Violent Intruder incident occurring at our schools		1B1: Implement a new strategy for responding to Active Shooter and Violent Intruder incidents that gives students and staff options other than just locking down.
		1B2: Provide A.L.I.C.E. training for district leadership teams.
		1B3: Provide A.L.I.C.E training for faculty and staff.
		1B4: Replace classroom locks with ones that can be locked, without a key, from inside the classroom.
		1B5: Install panic buttons in each main office that will notify law enforcement of an intruder.
1C: Improve security by enhancing building access control at each school.		1C1: Investigate the feasibility of renovating schools to install a security vestibule at each main entrance.
		1C2: Transition to keyless entry system.
1D: Provide for basic emergency functions in the event of a power outage.		1D1: Purchase two generators that are capable of providing power to the school emergency communication, fire suppression and emergency lighting systems.
1E: Become a StormReady Supporter School District as recognized by the National Weather Service.		1E1: Complete the StormReady Supporter Application and submit to the National Weather Service.
		1E2: Provide Skywarn Storm Spotter training to key personnel.
1F: Enhance emergency notification and warning systems for school facilities		1F1: Install public address system on the exterior of each school
		1F2: Install strobe lights, as a secondary lockdown notification system, in parts of the buildings that are difficult to hear the PA system, and at public entrances on exterior of the buildings.

<b>Goal 2</b>	Increase education, outreach, and awareness	
	<b>Objectives</b>	<b>Actions</b>
	2A: Educate staff to increase awareness of hazards and opportunities for mitigation actions	2A1: Inform and encourage staff on the proper use of the school emergency response plans.
	2B: Promote partnerships between first responders, and emergency management agencies, to identify prioritize and implement mitigation actions	2B1: Participate as a member in local or regional emergency management planning group.
	2C: Promote the National Weather Service’s “Winter Hazard Awareness Week” in November of each year, to educate families on the dangers of winter weather, and recommendations on how to protect themselves.	2C1: Include winter weather hazard information and mitigation strategies in newsletters and parent bulletins.
	2D: Promote the National Weather Service’s “Severe Weather Awareness Week” in April of each year, to educate families on the dangers of tornadoes and severe thunderstorms, and how to protect themselves.	2D1: Include summer severe weather hazard information and mitigation strategies in newsletters and parent bulletins.

<b>Goal 3</b>	Protect natural and cultural resources	
	<b>Objectives</b>	<b>Actions</b>
	NONE	

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
	<b>Objectives</b>	<b>Actions</b>
	4A: Protect first responders from hazardous materials	4A1: Provide fire and police with school site plans that identify locations of hazardous materials and utility shut-offs.

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments	
	<b>Objectives</b>	<b>Actions</b>
	5A: Involve local first responders and city/county emergency management agencies to be part of the district’s emergency planning process	5A1: Invite local police and fire to take part in the annual review of the school emergency plans.
		5A2: Share school emergency plans with local first responders and city/county emergency management.

<b>Goal 6</b>	Promote disaster-resistant future development	
	<b>Objectives</b>	<b>Actions</b>

NONE	
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Goal 7	Build and support local capacity and commitment to become less vulnerable to hazards.	
	Objectives	Actions
	7A: Identify and construct a safe room to protect against probable hazards affecting students, faculty and staff, as well as surrounding community.	7A1: Work with the city and other local stakeholders to construct a shared, multi-season, multi-use shelter in Central Park, to mitigate risk from severe weather hazards, armed/violent intruders and other emergencies affecting students, school faculty and staff, and the residents of the surrounding community. The safe room will serve multiple jurisdictional needs and be available for use by local cities and the general public 24/7/365.

**B. St. Anthony- New Brighton Schools 282 Mitigation Actions**

Mitigation Action (23)	Estimated Cost	Rank	Timeline
1A1: Review school emergency response procedures with faculty staff, and students, and update procedures as needed.	\$1,000	13	Annually
1A2: Conduct the required 5 lockdown, 5 fire and 1 tornado drill annually at each school.	None	15	Annually
1A3: Work with local first responders to identify opportunities and resources for emergency management training exercises.	\$1000	14	Ongoing
1B1: Implement a new strategy for responding to Active Shooter and Violent Intruder incidents that gives students and staff options other than just locking down.	\$10,000	4	2017
1B2: Provide A.L.I.C.E. training for district leadership teams.	\$5000	5	2016
1B3: Provide A.L.I.C.E training for faculty and staff.	\$7000	6	2017
1B4: Replace classroom locks with ones that can be locked, without a key, from inside the classroom.	\$50,000	3	2020
1B5: Install panic buttons in each main office that will notify law enforcement of an intruder.	\$30,000	7	2018
1C1: Investigate the feasibility of renovating schools to install a security vestibule at each main entrance.	\$200,000	2	2019
1C2: Transition to keyless entry system.	\$50,000	12	2020
1D1: Purchase two generators that are capable of providing power to the school emergency communication, fire suppression and emergency lighting systems.	\$500,000	1	2020
1E1: Complete the StormReady Supporter Application and submit to the National Weather Service.	\$2000	10	2016
1E2: Provide Skywarn Storm Spotter training to key personnel.	\$1000	11	2016
1F1: Install public address system on the exterior of each school	\$30000	9	2020

1F2: Install strobe lights, as a secondary lockdown notification system, in parts of the buildings that are difficult to hear the PA system, and at public entrances on exterior of the buildings.	\$20000	8	2016
2A1: Inform and encourage staff on the proper use of the school emergency response plans.	No cost	2	Annually
2B1: Participate as a member in local or regional emergency management planning group.	\$2000	1	Ongoing
2C1: Include winter weather hazard information and mitigation strategies in newsletters and parent bulletins.	No cost	3	Annually
2D1: Include summer severe weather hazard information and mitigation strategies in newsletters and parent bulletins.	No cost	4	Annually
4A1: Provide fire and police with school site plans that identify locations of hazardous materials and utility shut-offs.	\$1k	1	2016
5A1: Invite local police and fire to take part in the annual review of the school emergency plans.	No cost	1	Annually
5A2: Share school emergency plans with local first responders and city/county emergency management.	No cost	2	Annually
7A1: Work with the city and other local stakeholders to construct a shared, multi-season, multi-use shelter in Central Park, to mitigate risk from severe weather hazards, armed/violent intruders and other emergencies affecting students, school faculty and staff, and the residents of the surrounding community. The safe room will serve multiple jurisdictional needs and be available for use by local cities and the general public 24/7/365.	\$2,000,000	1	2019

**C. St. Anthony- New Brighton Schools 282 Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Estimated Cost	Responsible Agency	Timeline
1	1	1D	1.D.1	Purchase/Install	500K	ISD 282	2020
1	2	2B	2.B.1	Participation	2K	ISD/EM	Ongoing
1	4	4A	4A1	Create/Share Floor Plans	1K	ISD 282	2016
1	5	5A	5.A.1	Review/Participation	No Cost	ISD/PD/Fire	Annually
1	7	7A	7A1	Planning/Construction	2M	ISD 282/ St. Anthony Village/Local Stakeholders	2019
2	1	1C	1C1	Renovation	200K	ISD 282	2019
2	2	2A	2A1	Training/Orientation	No Cost	ISD 282	Annually
2	5	5A	5A2	Share School EOPs	No Cost	ISD282	Annually
3	1	1B	1B4	Purchase/Install	50K	ISD 282	2020
3	2	2C	2C1	Correspondence	No Cost	ISD 282	Annually
4	1	1B	1B1	Develop/Implement	10K	ISD 282	2017
4	2	2D	2D1	Correspondence	No Cost	ISD 282	Annually
5	1	1B	1B2	Leadership Training	5K	ISD 282	2016
6	1	1B	1B3	Faculty/Staff Training	7K	ISD 282	2017

7	1	1B	1B5	Purchase/Install	30K	ISD 282	2018
8	1	1F	1F2	Purchase/Install	20K	ISD 282	2016
9	1	1F	1F1	Purchase/Install	30K	ISD 282	2020
10	1	1E	1E1	Participation/Support	2K	ISD 282	2016
11	1	1E	1E2	Staff Training	1K	ISD 282	2016
12	1	1C	1C2	Purchase/Install	50K	ISD 282	2020
13	1	1A	1A1	Review/Update	1K	ISD 282	Annually
14	1	1A	1A3	Planning/Exercise	1K	ISD/PD/Fire	Ongoing
15	1	1A	1A2	Exercise	None	ISD 282	Annually
<b>TOTAL</b>					<b>\$2,910,000</b>		

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### 3.3. WATERSHED DISTRICTS

#### 3.3.1. BASSETT CREEK WATERSHED

POC: LAURA JESTER

##### A. Bassett Creek Watershed Objectives and Actions

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
1A: Improve BCWMC Flood Control Project Structures to minimize property damage from flooding	1A1: Prevent flooding by rehabilitating Bassett Creek Tunnel, 2 <sup>nd</sup> Street section (Phase I)	
	1A2: Prevent flooding by rehabilitating Bassett Creek Tunnel, 3 <sup>rd</sup> Avenue section (Phase II)	
	1A3: Prevent flooding by rehabilitating Bassett Creek Tunnel, Double Box conduit (Phase III)	
	1A4: Prevent flooding by rehabilitating Flood Control Project structures in Golden Valley, Crystal, and Plymouth	

<b>Goal 2</b>	Increase education, outreach, and awareness	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
None		

<b>Goal 3</b>	Protect natural and cultural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
3A: Stabilize and restore streambanks to minimize erosion and improve conditions	3A1: Prevent erosion along Bassett Creek in Minneapolis with bank stabilization techniques including vegetation, sloping and grading, rock veins, stone toe, root wads, and rip rap (CR2017-M)	
	3A2: Stabilize banks and improve habitat along Plymouth Creek in Plymouth with bank stabilization techniques including vegetation, sloping and grading, rock veins, stone toe, root wads, and rip rap (CR2017-P)	
3B: Improve water quality through storm water management	3B1: Construct water quality improvement project in Theodore Wirth Park to treat untreated storm water runoff (BC-3)	
	3B2: Construct water quality improvement project at Sandburg Rd. and Louisiana Ave. to reduce phosphorus loading and flooding potential (BC-2/BC-8)	
	3B3: Construct water quality improvement project in or near Bryn Mawr Meadows (BC-5)	
	3B4: Construct water quality improvement project in or near Medley Park (ML-12)	
3C: Restore wetland functions and values	3C1: Evaluate wetlands throughout watershed	

	3C2: Prioritize and plan for wetland restoration projects
	3C3: Restore wetlands or create new wetlands

<b>Goal 4</b>	Identify areas of greatest impact from hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 6</b>	Promote disaster-resistant future development
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	
None	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards
<b>OBJECTIVES</b>	
<b>ACTIONS</b>	

**B. Bassett Creek Watershed Mitigation Actions**

Mitigation Actions (13)	Estimated Cost	Rank	Timeline
1A1: Prevent flooding by rehabilitating Bassett Creek Tunnel, 2 <sup>nd</sup> Street section (Phase I)	\$5,000,000	1	2029
1A2: Prevent flooding by rehabilitating Bassett Creek Tunnel, 3 <sup>rd</sup> Avenue section (Phase II)	\$1,700,000	1	2040
1A3: Prevent flooding by rehabilitating Bassett Creek Tunnel, Double Box conduit (Phase III)	\$6,000,000	1	2027
1A4: Prevent flooding by rehabilitating Flood Control Project structures in Golden Valley, Crystal, and Plymouth	\$3,100,000	1	2025
3A1: Prevent erosion along Bassett Creek in Minneapolis with bank stabilization techniques including vegetation, sloping and grading, rock veins, stone toe, root wads, and rip rap (CR2017-M)	\$800,000	2	2017
3A2: Stabilize banks and improve habitat along Plymouth Creek in Plymouth with bank stabilization techniques including vegetation, sloping and grading, rock veins, stone toe, root wads, and rip rap (CR2017-P)	\$600,000	2	2017
3B1: Construct water quality improvement project in Theodore Wirth Park to treat untreated stormwater runoff (BC-3)	\$1,100,000	2	2018

3B2: Construct water quality improvement project at Sandburg Rd. and Louisiana Ave. to reduce phosphorus loading and flooding potential (BC-2/BC-8)	\$500,000	2	2019
3B3: Construct water quality improvement project in or near Bryn Mawr Meadows (BC-5)	\$500,000	2	2019
3B4: Construct water quality improvement project in or near Medley Park (ML-12)	\$500,000	2	2020
3C1: Evaluate wetlands throughout watershed	\$50,000	3	2018
3C2: Prioritize and plan for wetland restoration projects	\$50,000	3	2019
3C3: Restore wetlands or create new wetlands	\$500,000	3	2020

**C. Bassett Creek Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	1A	1A1	Fill voids in tunnel, perform partial structure demolition and replacement, as needed	5M	BCWMC + City of MPLS	Long
1	1	1A	1A2	Fill voids in tunnel, perform partial structure demolition and replacement, as needed	1.7M	BCWMC + City of MPLS	Long
1	1	1A	1A3	Fill voids in tunnel, perform partial structure demolition and replacement, as needed	6M	BCWMC + City of MPLS	Long
1	1	1A	1A4	Perform partial structure demolition and replacement, as needed	3.1M	BCWMC + City of MPLS	Long
2	3	3A	3A1	Stabilize eroding streambanks using hard armoring and bioengineering	800K	BCWMC + City of MPLS	Medium
2	3	3A	3A2	Stabilize eroding streambanks and improve riparian habitat using bioengineering	600K	BCWMC + City of Plymouth	Medium
2	3	3B	3B1	Construct storm water pond or other water quality improvement project	1.1M	BCWMC + City of Golden Valley	Medium
2	3	3B	3B2	Construct storm water pond or other structure to reduce flooding risk to homes and improve water quality	500K	BCWMC + City of Golden Valley	Medium

2	3	3B	3B3	Construct storm water pond or other structure to treat runoff and provide storage	500K	BCWMC + City of MPLS	Medium
2	3	3B	3B4	Construct storm water pond or other structure to treat runoff and provide storage	500K	BCWMC + City of Golden Valley	Medium
3	3	3C	3C1	Use MN Rapid Assessment Method to inventory and evaluate the functions and values of wetlands throughout the watershed	50K	BCWMC	Medium
3	3	3C	3C2	Prioritize wetland restoration projects based on assessments	50K	BCWMC	Short
3	3	3C	3C3	Use prioritization to restore critical wetlands or create new wetlands in key locations to prevent flooding and improve water quality	500K	BCWMC	Long
<b>TOTAL</b>					<b>\$20,400,000.00</b>		

**3.3.2. MINNEHAHA CREEK WATERSHED DISTRICT** **POC: TIFFANY SCHAUFLE**

**A. Minnehaha Creek Watershed District Mitigation Actions**

<b>Goal 1</b>	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
1A: Dam Failure: Develop a comprehensive approach to reducing the possibility of damage and losses due to dam failure.	1A1: Annually inspect Gray’s Bay Dam infrastructure	
	1A2: Implement repairs identified during annual inspection of Gray’s Bay Dam	
	1A3: Update dam failure response actions into MCWD’s Response Plan	
1B: Flood Forecasting/Warning: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding.	1B1: Work with stakeholders to develop a river forecast point on Minnehaha Creek.	
	1B2: Develop an interactive flood inundation map during years when flooding is predicted	
	1B3: Partner with National Weather Service to model forecasts and their potential effect on Lake Minnetonka and Minnehaha Creek water levels	
1C: Maintenance of Public Ditches: Maintain conveyance capacity of Public Ditches	1C1: Remove debris from Public Ditches that pose an obstruction to flow or could cause an obstruction	
1D: Develop a MCWD Response Plan	1D1: Define MCWD’s role and department roles to mitigate and response to hazards	
	1D2: Draft Response Plan	

<b>Goal 2</b>	Increase education, outreach, and awareness	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
2A: Promote partnerships between the state, counties, local jurisdictions, and partner agencies to identify, prioritize, and implement mitigation actions.	2A1: Participate as a member in a local or regional hazard mitigation planning group	
	2B: Provide real time data to the public on Lake Minnetonka and Minnehaha Creek conditions	2B1: Continue to partner with U.S. Geological Survey (USGS) to operate level gauge on Lake Minnetonka
2B2: Continue to partner with U.S. Geological Survey (USGS) to operate level and flow gauge on Minnehaha Creek		
2C: Educate the public to increase awareness of hazards and opportunities for mitigation actions.	2C1: Publicize and encourage the adoption of appropriate hazard mitigation actions.	
	2C2: Provide information to the public on the MCWD website and through public education opportunities.	

	2C3: Build support through outreach materials, e.g. video, maps, etc.
	2C4: Support or provide events, workshops, trainings, and continued education opportunities.

<b>Goal 3</b>	Protect natural and cultural resources	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
3A: Shoreline/Bank Stabilization: Stabilize streambanks with bioengineering and hard armoring where necessary to reduce erosion		3A1: Work with a wide range of stakeholders to improve shoreline stabilization on Minnehaha Creek and repair streambank erosion
		3A2: Work with a wide range of stakeholders to improve shoreline stabilization on Painter Creek and repair streambank erosion
		3A3: Work with a wide range of stakeholders to improve shoreline stabilization on Long Lake Creek and repair streambank erosion
		3A4: Work with a wide range of stakeholders to improve shoreline stabilization on Gleason Lake Creek and repair streambank erosion
		3A5: Work with a wide range of stakeholders to improve shoreline stabilization on Classen Creek and repair streambank erosion
		3A6: Work with a wide range of stakeholders to improve shoreline stabilization on Six Mile Creek and repair streambank erosion
3B: Protect and maintain existing MCWD infrastructure and facilities		3B1: Continue to inspect MCWD infrastructure and facilities at least every spring and fall to identify needed repairs.
		3B2: Implement needed repairs to keep MCWD infrastructure and facilities operating as designed.
3C: Protect WPA walls along Minnehaha Creek		3C1: Coordinate with Minneapolis Park and Recreation Board and City of Minneapolis to inspect and identify needed repairs to WPA walls

<b>Goal 4</b>	Identify areas of greatest impact from hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: Utilize Atlas-14 precipitation data to identify potential changes in 100-year flood elevation		4A1: Develop a task force with affected municipalities to discuss and develop policies to address Atlas-14 changes
4B: Utilize the 2014 MCWD Flood Report data to coordinate with municipalities to		4B1: Meet with municipalities within MCWD to identify problem flooding areas

identify areas that repeatedly flood or have flood damage	4B2: Determine the flooding vulnerabilities within each community
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<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Identify adaptive strategies for communities to address climate change.		5A1: Identify state and federal resources to assist with developing a climate adaptation plan for communities.

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A: Implement MCWD regulations: Regulate future development to prevent increasing the volume of storm water that runs off the land and minimize development with the floodplain.		6A1: Work with wide range of stakeholders to continue to implement MCWD Permitting Program
6B: Provide technical assistance to municipalities on ordinance development and conservation planning.		6B1: Work with local municipalities to develop model ordinances to promote conservation development
6C: Develop a plan to inform elected officials on the results of the MCWD-NOAA climate adaptation study.		6C1: Work with stakeholders to implement climate adaptation planning into their decision framework for new development and redevelopment
6D: Provide incentives to public and private stakeholders to implement green infrastructure projects		6D1: Provide grants to public and private stakeholders

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Implement MCWD Education Program		7A1: Convene stakeholders to build social capacity and local capacity and identify local and regional actions to mitigate hazards

**B. Minnehaha Creek Watershed District Mitigation Action Plan**

Mitigation Actions (34)	Estimated Cost	Rank	Timeline
1A1: Annually inspect Gray's Bay Dam infrastructure	Staff time: 4	3	Annually
1A2: Implement repairs identified during annual inspection of Gray's Bay Dam	\$7,000	4	Annually
1A3: Update dam failure response actions into MCWD's Response Plan	Staff time: 5	8	Short
1B1: Work with stakeholders to develop a river forecast point on Minnehaha Creek.	Staff time: 20 NWS	16	Short

1B2: Develop an interactive flood inundation map during years when flooding is predicted	\$10,000	17	Short
1B3: Partner with National Weather Service to model forecasts and their potential effect on Lake Minnetonka and Minnehaha Creek water levels	Staff time: 20 NWS	15	Short
1C1: Remove debris from Public Ditches that pose an obstruction to flow or could cause an obstruction	\$10,000	5	Annually
1D1: Define MCWD's role and department roles to mitigate and response to hazards	Staff time: 20	6	Short
1D2: Draft Response Plan	Staff time: 40 HCEM	7	Short
2A1: Participate as a member in a local or regional hazard mitigation planning group	Staff time: 10	9	Short
2B1: Continue to partner with U.S. Geological Survey (USGS) to operate level gauge on Lake Minnetonka	\$3,500 USGS	14	Annually
2B2: Continue to partner with U.S. Geological Survey (USGS) to operate level and flow gauge on Minnehaha Creek	\$12,200 USGS	13	Annually
2C1: Publicize and encourage the adoption of appropriate hazard mitigation actions.	Staff time: 50	18	Annually
2C2: Provide information to the public on the MCWD website and through public education opportunities.	Staff time: 80	19	Annually
2C3: Build support through outreach materials, e.g. video, maps, etc.	Staff time: 100	20	Annually
2C4: Support or provide events, workshops, trainings, and continued education opportunities.	Staff time: 100	21	Annually
3A1: Work with a wide range of stakeholders to improve shoreline stabilization on Minnehaha Creek and repair streambank erosion	\$6,000,000	28	Medium
3A2: Work with a wide range of stakeholders to improve shoreline stabilization on Painter Creek and repair streambank erosion	\$2,000,000	29	Long
3A3: Work with a wide range of stakeholders to improve shoreline stabilization on Long Lake Creek and repair streambank erosion	\$1,000,000	30	Long
3A4: Work with a wide range of stakeholders to improve shoreline stabilization on Gleason Lake Creek and repair streambank erosion	\$500,000	32	Long
3A5: Work with a wide range of stakeholders to improve shoreline stabilization on Classen Creek and repair streambank erosion	\$300,000	33	Long
3A6: Work with a wide range of stakeholders to improve shoreline stabilization on Six Mile Creek and repair streambank erosion	\$200,000	31	Long
3B1: Continue to inspect MCWD infrastructure and facilities at least every spring and fall to identify needed repairs	Staff time: 200	1	Annually
3B2: Implement needed repairs to keep MCWD infrastructure and facilities operating as designed	\$600,000	2	Annually
3C1: Coordinate with Minneapolis Park and Recreation Board and City of Minneapolis to inspect and identify needed repairs to WPA walls	Staff time: 20 MPRB City of MPLS	34	Medium

4A1: Develop a task force with affected municipalities to discuss and develop policies to address Atlas-14 changes	Staff time: 40	10	Medium
4B1: Meet with municipalities within MCWD to identify problem flooding areas	Staff time: 70	23	Medium
4B2: Determine the flooding vulnerabilities within each community	Staff time: 40	24	Medium
5A1: Identify state and federal resources to assist with developing a climate adaptation plan for communities	Staff time: 20	22	Medium
6A1: Work with wide range of stakeholders to continue to implement MCWD Permitting Program	Staff time: 13,000	11	Annually
6B1: Work with local municipalities to develop model ordinances to promote conservation development	Staff time: 40	27	Medium
6C1: Work with stakeholders to implement climate adaptation planning into their decision framework for new development and redevelopment	Staff time: 50	25	Medium
6D1: Provide grants to public and private stakeholders	\$770,000	12	Annually
7A1: Convene stakeholders to build social capacity and local capacity and identify local and regional actions to mitigate hazards	Staff time: 60	26	Short

**C. Minnehaha Creek Watershed District Mitigation Strategies**

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	3	3B	3B1	Inspect Infrastructure	ST: 200		A
2	3	3B	3B2	Repair Infrastructure	600K		A
3	1	1A	1A1	Inspect Gray Bay Dam	ST: 4		A
4	1	1A	1A2	Repair Gray's Bay Dam	7K		A
5	1	1C	1C1	Remove debris obstruction	10K		A
6	1	1D	1D1	Define roles in mitigation and response	ST: 20		S
7	1	1D	1D2	Draft response plan	ST: 40		S
8	1	1A	1A3	Dam Failure Response	ST: 5		S
9	2	2A	2A1	Participate in Regional Grp	ST: 10		S
10	4	4A	4A1	Task Force Policy	ST: 40		M
11	6	6A	6A1	Stakeholder Permit Prog	ST: 13K		A
12	6	6D	6D1	Grants to stakeholders	770K		A
13	2	2B	2B2	Partner USGS	12.2K		A
14	2	2B	2B1	Partner USGS	3.5K		A
15	1	1B	1B3	Partner NWS	ST: 20		S
16	1	1B	1B1	Develop River forecast	ST: 20		S
17	1	1B	1B2	Interactive Flood Inundation map	10K		S
18	2	2C	2C1	Publicize and adopt Haz Mit Actions	ST: 50		A

19	2	2C	2C2	Public Education	ST: 80		A
20	2	2C	2C3	Outreach Materials	ST: 100		A
21	2	2C	2C4	Worshops/Trng/Cont Ed	ST: 100		A
22	5	5A	5A1	Develop climate Adapt pln	ST: 20		M
23	4	4B	4B1	ID problem Flood areas	ST: 70		M
24	4	4B	4B2	Flooding vulnerabilities	ST: 40		M
25	6	6C	6C1	Climate adaptation plans	ST: 50		M
26	7	7A	7A1	Meet with stakeholders to identify/mitigate Hazards	ST: 60		S
27	6	6B	6B1	Develop ordinance to promote conservation	ST: 40		M
28	3	3A	3A1	Improve Shoreline Stability	6M		M
29	3	3A	3A2	Improve Shoreline Stability	2M		L
30	3	3A	3A3	Improve Shoreline Stability	1M		L
31	3	3A	3A6	Improve Shoreline Stability	200K		L
32	3	3A	3A4	Improve Shoreline Stability	500K		L
33	3	3A	3A5	Improve Shoreline Stability	300K		L
34	3	3C	3C1	Repairs to WPA walls	ST: 20		M
<b>TOTAL</b>					<b>\$11,425,700.00</b>		

### 3.4. HENNEPIN COUNTY

**3.4.1. HENNEPIN COUNTY EMERGENCY MANAGEMENT** **POC: DAN BOVITZ**

#### A. Hennepin County Objectives and Actions

Goal 1	Minimize loss of life, injury, and damage to property, the economy, and the environment from natural and man-made hazards	
	OBJECTIVES	ACTIONS
	1A: Actively monitor hazards which threaten Hennepin County.	1A1: Implement integrated multi-hazard monitoring and detection mechanisms and procedures (i.e. visual observers, remove electronic sensors, social media monitoring, etc.)
		1A2: Develop and maintain a countywide network of stream sensors designed to monitor stream water levels in real-time and transmit the data to provide actionable flash flood warning.
		1A3: Implement a localized network of remove sensors for multi-hazard detection in near real-time for weather, hydrologic, geomagnetic, and hazardous material threat early warning.
		1A4: Increase a countywide lightning strike warning capability to the remove sensor network in order to protect people at outdoor mass gatherings or those engaged in outdoor activities.
		1A5: Expand the integrated used of Wet Bulb Globe (Wbgt0 and other specialized heat sensors in order to protect vulnerable children, elderly or those people with health concerns, or those engaged in outdoor work or sports.
		1A6: Expand the use of freezing rain sensors to immediately detect dangerous icing conditions in order to warn the public, as well as to allow transportation departments, electric utilities and communications operators to act to protect key infrastructure.
	1B: Develop specific mitigation actions	1B1: Identify flood susceptible roads and bridges and elevate them above base flood elevation to maintain mobility.
	1C: Improve disaster resilience for particularly vulnerable populations	1C1: Identifying specific at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.
	1D: Identify cultural, historical and sensitive natural areas and sites that require special protection against disaster damages and loss.	1D1: Conduct a cultural, historical and natural resources assessment of Hennepin County.
		1D2: Conduct outreach to museums, cultural sites and related facilities in Hennepin County to assist them to plan and protect them against disasters.

Goal 2	Increase education, outreach, and awareness	
OBJECTIVES	ACTIONS	
2A: Improve public awareness and outreach	2A1: Developing and implementing a multi-hazard public awareness program.	
	2A2: Conduct outreach activities to increase awareness of natural and man-made hazards that pose a risk to Hennepin County.	
	2A3: Promote the use of National Oceanic and Atmospheric Administration (NOAA) weather radios.	
	2A4: Support tornado/severe weather table-top drills for school districts within Hennepin County.	
	2A5: Support winter weather table-top drills for school districts within Hennepin County.	
	2A6: Support Severe Weather Awareness Week.	
	2A7: Establish an interactive website for educating the public on hazard mitigation and preparedness measures.	

Goal 3	Identify areas of greatest impact from hazards	
OBJECTIVES	ACTIONS	
3A: Develop partnerships, participate in programs and Identify specific cultural vulnerabilities and risks.	3A1: Develop and maintain a County Community Wildfire Protection Plan.	
	3A2: Participate in the NFPA’s Firewise Program.	
	3A3: Develop a historic database of natural and man-made hazards that post a risk to Hennepin County.	
	3A4: Identifying the most at-risk critical facilities and evaluating potential mitigation techniques.	
	3A5: Develop and maintaining a database to track community vulnerability (i.e., exposure in known hazard areas).	
3B: Assess hazards and susceptibility in Hennepin County	3B1: Minimize loss of life, injury and damage to property, the economy and the environment from landslides	
	3B2: Minimize loss of life, injury and damage to property, the economy and the environment from sinkholes	
	3B3: Produce and disseminate a detailed county-wide landslide hazard assessment atlas, alert criteria and model zoning ordinance	
	3B4: Conduct an assessment of active karst and sinkhole hazards in Hennepin County to determine specific hazard areas and degree of susceptibility and vulnerability	
	3B5: Conduct an assessment of geomagnetic induced current conductivity in Hennepin County	
	3B6: Conduct an assessment of background radiation levels in Hennepin County so set baseline values for use in emergency or contingency radiation surveys	

<b>Goal 4</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
4A: Develop and maintain a ready and deployable disaster cache	4A1: Develop a countywide disaster caches to build local capacity in the immediate aftermath of an incident/disaster.	
4B: Improve the county-wide comprehensive hazard assessment	4B1: Incorporating risk assessment and hazard mitigation principles into comprehensive planning efforts.	
4C: Develop a Hennepin County Disaster Recovery Plan	4C1: Developing a recovery plan to facilitate decision making following a hazard event/disaster.	

<b>Goal 5</b>	Enhance hazard mitigation coordination and communication with federal, state and local governments.	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
5A: Develop coalitions that share data and conduct joint hazard assessments	5A1: Form groups to share data and costs associated with hazard assessment to meet shared mitigation goals	
5B: Integrate local prevention and mitigation activities with state and federal objectives	5B1: When possible, coordinate and integrate disaster prevention and mitigation activities in Hennepin County with those of the state and federal governments	

<b>Goal 6</b>	Promote disaster-resistant future development	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
6A: Develop a model zoning ordinance for cities to use for landslides	6A1: Leverage the landslide hazard assessment to produce a set of specific local zoning ordinance recommendations	
6B: Develop a model zoning ordinance for cities to use for sinkholes	6B1: Leverage the pending sinkhole hazard assessment to produce a set of specific local zoning ordinance recommendations	
6C: Increase the rate of flood insurance participation in Hennepin County	6C1: Work with insurers and cities to better inform the public about the need and procedures for getting flood insurance	

<b>Goal 7</b>	Build and support local capacity and commitment to become less vulnerable to hazards	
<b>OBJECTIVES</b>		<b>ACTIONS</b>
7A: Ensure unity of effort between the county and cities mitigation programs	7A1: Ensure that cities and special jurisdictions are engaged in the mitigation assessment and planning process from the beginning and that they integrate their work with the county's.	
7B: Identify potential for multi-jurisdictional partnerships	7B1: Find and secure opportunities for cities to join each other and/or with the county to pursue mitigation projects and investments	
7C: Identify and secure alternative sources of prevention, mitigation and/or resilience funding	7C1: Scan for, identify and attempt to secure new forms of prevention, mitigation and resilience funding to be used for city and county projects.	

**B. Hennepin County Mitigation Actions**

Mitigation Actions (39)	Estimated Cost	Rank	Timeline
1A1: Implement integrated multi-hazard monitoring and detection mechanisms and procedures (i.e. visual observers, remove electronic sensors, social media monitoring, etc.)	\$70,000	4	3 years
1A2: Develop and maintain a countywide network of stream sensors designed to monitor stream water levels in real-time and transmit the data to provide actionable flash flood warning.	\$80,000	1	4 years
1A3: Implement a localized network of remove sensors for multi-hazard detection in near real-time for weather, hydrologic, geomagnetic, and hazardous material threat early warning.	\$200,000	2	3 years
1A4: Increase a countywide lightning strike warning capability to the remove sensor network in order to protect people at outdoor mass gatherings or those engaged in outdoor activities.	\$140,000	3	3 years
1A5: Expand the integrated used of Wet Bulb Globe (WBGT) and other specialized heat sensors in order to protect vulnerable children, elderly or those people with health concerns, or those engaged in outdoor work or sports.	\$50,000	5	3 years
1A6: Expand the use of freezing rain sensors to immediately detect dangerous icing conditions in order to warn the public, as well as to allow transportation departments, electric utilities and communications operators to act to protect key infrastructure.	\$50,000	6	3 years
1B1: Identify flood susceptible roads and bridges and elevate them above base flood elevation to maintain mobility.	\$250,000	39	3 years
1C1: Identifying specific at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	\$10,000	14	2 years
1D1: Conduct a cultural, historical and natural resources assessment of Hennepin County.	\$10,000	15	2 years
1D2: Conduct outreach to museums, cultural sites and related facilities in Hennepin County to assist them to plan and protect them against disasters.	0.00	32	Ongoing
2A1: Developing and implementing a multi-hazard public awareness program.	\$10,000	34	Ongoing
2A2: Conduct outreach activities to increase awareness of natural and man-made hazards that pose a risk to Hennepin County.	\$10,000	35	Ongoing
2A3: Promote the use of National Oceanic and Atmospheric Administration (NOAA) weather radios	0.00	23	Ongoing
2A4: Support tornado/severe weather table-top drills for school districts within Hennepin County.	0.00	22	Ongoing
2A5: Support winter weather table-top drills for school districts within Hennepin County.	0.00	21	Ongoing
2A6: Support Severe Weather Awareness Week.	0.00	13	Ongoing

2A7: Establish an interactive website for educating the public on hazard mitigation and preparedness measures.	\$5,000	12	3 years
3A1: Develop and maintain a County Community Wildfire Protection Plan.	0.00	33	2 years
3A2: Participate in the NFPA's Firewise Program.	0.00	38	2 years
3A3: Develop a historic database of natural and man-made hazards that post a risk to Hennepin County.	0.00	20	4 years
3A4: Identifying the most at-risk critical facilities and evaluating potential mitigation techniques.	0.00	11	4 years
3A5: Develop and maintaining a database to track community vulnerability (i.e., exposure in known hazard areas).	0.00	19	5 years
3B1: Minimize loss of life, injury and damage to property, the economy and the environment from landslides	0.00	31	Ongoing
3B2: Minimize loss of life, injury and damage to property, the economy and the environment from sinkholes	0.00	30	Ongoing
3B3: Produce and disseminate a detailed county-wide landslide hazard assessment atlas, alert criteria and model zoning ordinance	\$20,000	10	2 years
3B4: Conduct an assessment of active karst and sinkhole hazards in Hennepin County to determine specific hazard areas and degree of susceptibility and vulnerability	\$20,000	9	4 years
3B5: Conduct an assessment of geomagnetic induced current conductivity in Hennepin County	\$10,000	36	4 years
3B6: Conduct an assessment of background radiation levels in Hennepin County so set baseline values for use in emergency or contingency radiation surveys	\$40,000	29	4 years
4A1: Develop a countywide disaster caches to build local capacity in the immediate aftermath of an incident/disaster.	\$60,000	28	4 years
4B1: Incorporating risk assessment and hazard mitigation principles into comprehensive planning efforts.	0.00	27	Ongoing
4C1: Developing a recovery plan to facilitate decision making following a hazard event/disaster	0.00	7	2 years
5A1: Form groups to share data and costs associated with hazard assessment to meet shared mitigation goals	0.00	37	4 years
5B1: When possible, coordinate and integrate disaster prevention and mitigation activities in Hennepin County with those of the state and federal governments	0.00	26	Ongoing
6A1: Leverage the landslide hazard assessment to produce a set of specific local zoning ordinance recommendations	0.00	18	3 years
6B1: Leverage the pending sinkhole hazard assessment to produce a set of specific local zoning ordinance recommendations	0.00	17	4 years
6C1: Work with insurers and cities to better inform the public about the need and procedures for getting flood insurance	0.00	25	Ongoing

7A1: Ensure that cities and special jurisdictions are engaged in the mitigation assessment and planning process from the beginning and that they integrate their work with the county's.	0.00	8	Ongoing
7B1: Find and secure opportunities for cities to join each other and/or with the county to pursue mitigation projects and investments	0.00	16	Ongoing
7C1: Scan for, identify and attempt to secure new forms of prevention, mitigation and resilience funding to be used for city and county projects.	0.00	24	Ongoing

### C. Hennepin County Mitigation Strategies

Priority	Goal	Objective	Action Name	Description	Project Cost	Responsible Agency	Timeline
1	1	A2	1A2	Stream sensors	\$80,000	HCEM	4 years
2	1	A3	1A3	Multi-hazard detection	\$200,000	HCEM	3 years
3	1	A4	1A4	Lightning Detection	\$140,000	HCEM	3 years
4	1	A1	1A1	Multi-hazard monitoring	\$70,000	HCEM	3 years
5	1	A5	1A5	Wet Bulb Globe (WBGT)	\$50,000	HCEM	3 years
6	1	A6	1A6	Freezing Rain sensors	\$50,000	HCEM	3 years
7	4	C1	4C1	Recovery plan	0.00	HCEM	2 years
8	7	A1	7A1	Mitigation assessment	0.00	HCEM	Ongoing
9	3	B4	3B4	Karst/sinkhole assessment	\$20,000	HCEM	4 years
10	3	B3	3B3	Landslide Atlas	\$20,000	HCEM	2 years
11	3	A4	3A4	Critical facility mitigation	0.00	HCEM	4 years
12	2	A7	2A7	Hazard education website	\$5,000	HCEM	3 years
13	2	A6	2A6	Severe weather awareness	0.00	HCEM	Ongoing
14	1	C1	1C1	At risk populations	\$10,000	HCEM	2 years
15	1	D1	1D1	Culture/historic sites	\$10,000	HCEM	2 years
16	7	B1	7B1	Joint mitigation projects	0.00	HCEM	Ongoing
17	6	B1	6B1	Sinkhole ordinance	0.00	HCEM	4 years
18	6	A1	6A1	Landslide ordinance	0.00	HCEM	3 years
19	3	A5	3A5	Vulnerability database	0.00	HCEM	5 years
20	3	A3	3A3	Hazard database	0.00	HCEM	4 years
21	2	A5	2A5	Winter table-top drills	0.00	HCEM	Ongoing
22	2	A4	2A4	Severe weather drills	0.00	HCEM	Ongoing
23	2	A3	2A3	NOAA weather radios	0.00	HCEM	Ongoing
24	7	C1	7C1	Mitigation funding	0.00	HCEM	Ongoing
25	6	C1	6C1	Flood insurance informing	0.00	HCEM	Ongoing
26	5	B1	5B1	Integration State/Federal	0.00	HCEM	Ongoing
27	4	B1	4B1	Comprehensive planning	0.00	HCEM	Ongoing
28	4	A1	4A1	Disaster caches	\$60,000	HCEM	4 years
29	3	B6	3B6	Radiation levels	\$40,000	HCEM	4 years
30	3	B2	3B2	Sinkhole economic impact	0.00	HCEM	Ongoing
31	3	B1	3B1	Landslide economic impact	0.00	HCEM	Ongoing
32	1	D2	1D2	Museum/cultural protect	0.00	HCEM	Ongoing

33	3	A1	3A1	Wildfire protection plan	0.00	HCEM	2 years
34	2	A1	2A1	Public awareness program	\$10,000	HCEM	Ongoing
35	2	A2	2A2	Hazard outreach activities	\$10,000	HCEM	Ongoing
36	3	B5	3B5	Geomagnetic assessment	\$10,000	HCEM	4 years
37	5	A1	5A1	Mitigation groups	0.00	HCEM	4 years
38	3	A2	3A2	NFPA Firewise Program	0.00	HCEM	2 years
39	1	B1	1B1	Road & bridge elevation	\$250,000	Transportation	3 Years
<b>TOTAL</b>					<b>\$1,035,000</b>		

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<b>Section 4</b>	<b>Minnesota Mitigation Crosswalk</b>
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**4.1 Minnesota Crosswalk – Local Hazard Mitigation Plan Review Tool March 2013**

The Minnesota Crosswalk is a supplement to FEMA’s Local Mitigation Plan Review Guide, October 2011. This document is provided to assist planners in meeting the requirements in the development of local multi-jurisdiction mitigation plans. FEMA’s Mitigation Plan Review Tool lists all of the elements but not the requirements as in the previous FEMA Crosswalk.

The Regulation Checklist lists the requirements under each element for easy reference. The planner should indicate the location of the plan to indicate where the requirement is met.

All jurisdictions participating in the mitigation planning process must show evidence of participation in Elements A thru E of the Regulation Checklist. The Multi-Jurisdictional Summary Sheet from FEMA guidance was edited for use by planners. The summary sheet is a way to track participation by jurisdiction.

HSEM asks that a Minnesota Crosswalk be completed when the plan is sent to HSEM for review. This document will facilitate the state review by illustrating where and how requirements were met.

<b>Jurisdiction:</b> Hennepin County	<b>Title of Plan:</b> Hennepin County Hazard Mitigation Plan	<b>Date of Plan:</b> 2018
<b>Local Point of Contact:</b> Bruce Kelii		<b>Address:</b> 1600 Prairie Dr. Medina, MN, 55340
<b>Title:</b> Emergency Manager		
<b>Agency:</b> Emergency Management		
<b>Phone Number:</b> 612-596-0246		<b>E-Mail:</b> bruce.kelii@hennepin.us

<b>State Reviewer:</b> Jennifer Nelson	<b>Title:</b> SHMO	<b>Date:</b> 04/23/18
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<b>FEMA Reviewer:</b> Christine Meissner	<b>Title:</b> Mitigation Planner	<b>Date:</b>
<b>Date Received in FEMA Region</b> <i>(insert #)</i>	04/23/18	
<b>Plan Not Approved</b>		
<b>Plan Approvable Pending Adoption</b>		
<b>Plan Approved</b>	x	

**4.1.1 REGULATION CHECKLIST**

**INSTRUCTIONS:** The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been ‘Met’ or ‘Not Met.’ The ‘Required Revisions’ summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is ‘Not Met.’ Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this *Plan Review Guide* in Section 4, Regulation Checklist.

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b>	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
<b>ELEMENT A. PLANNING PROCESS</b>				
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Vol. 1, Pg. 15-29: Hennepin County spearheaded plan update in Feb 2015, the planning process included steering committee meetings, planning team meetings,  Vol. 1, Appendix A: Steering Committee Meeting Minutes; Appendix B: Social media engagement; Appendix C: Questionnaire; Appendix D: Press Releases; Appendix E: Capability Questionnaire.		x	
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Vol. 1, Pg. 15-29: Neighboring counties, special districts, and departments involved in land use were reached out to or served on the planning team or participated in a survey.		x	

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b>	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Vol. 1, Pg. 15-29: Public engaged through social media, media press releases, municipal websites, a questionnaire, and public and stakeholder meetings.		x	
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Vol.1, Pg. 21-22: Review of existing plans consisted of mitigation plans of neighboring counties and the state hazard mitigation plan as well as data collection and sharing through the HCEM Regional Emergency Management Planning Reference Collection (REMPC)		x	
A5. Is there discussion of how the community (ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Vol. 1, Pg. 72-73: Continued outreach plan identified.		x	
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	Vol.1, Pg. 70-75: Plan monitoring and evaluation process identified.		x	
<b><u>ELEMENT A: REQUIRED REVISIONS</u></b>				
<b><u>ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT</u></b>				
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	Vol. 2, Pg. 5-218: Natural hazards profiles include geographic scope and magnitude for the following—Landslide, sinkhole, soil frost, volcanic ash, climate change, tornado, high winds, hail, lightning, extreme rainfall, extreme heat, drought, dust storms, extreme cold, winter storms, ice storms, flooding, wildland fires.		x	
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Vol. 2, Pg. 5-218: previous occurrences include historic data and declaration history; probability includes discussion of trends and projections. Climate change is included in the plan as well.		x	

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b>	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
<p>B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))</p>	<p>Vol. 2, Pg. 5-218: Each hazard profile includes discussion on primary consequences, secondary consequences and cascading effects.</p> <p>Vol. 2, Pg. 219-239: Maps for each hazard conveying high, medium and low risk within the county.</p> <p>Vol. 2, Pg. 241-313: asset inventory including building type and replacement costs.</p> <p>The Hennepin County Critical Infrastructure and Facilities Critical Facility Index (CFI) Priority Ranking Aid was used to estimate losses.</p>	<p>x</p>		
<p>B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))</p>	<p>Vol.1 Pg. 67: Aggregated RLP map.</p>	<p>x</p>		
<b>ELEMENT B: REQUIRED REVISIONS</b>				
<b>ELEMENT C. MITIGATION STRATEGY</b>				
<p>C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))</p>	<p>Vol. 1, Pg. 60-66: All municipalities in the county filled out a survey on their planning, administrative and technical, and training and education capabilities.</p> <p>Vol.1, Appendix E: sample questionnaire</p>	<p>x</p>		

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b>	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Vol.1, Pg. 64-66: List of NFIP participating communities. Part of the outreach survey asked questions about whether homeowners have an NFIP regarding the NFIP policy.		x	
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Vol. 3, pg. 9: Seven mitigation goals listed.		x	
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	Vol. 3, Pg. 15-342: Comprehensive list of mitigation actions for all participating jurisdictions. Actions are connected to goals and objectives and individual hazards.		x	
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	Vol. 3, Pg. 11: Prioritization criteria  Vol.3, Pg. 15-342: Mitigation strategy includes timeline, estimated costs and priority.		x	

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b>	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	Vol.1, Pg. 73-73: Table indicating integration and implementation touchpoints with other planning and policy initiatives.		X	
<b><u>ELEMENT C: REQUIRED REVISIONS</u></b>				
<b>ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION</b> (applicable to plan updates only)				
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Vol.1, Pg. 58: Discussion of projected future development and growth.		X	
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Yes, volume 1 describes the progression of each plan iteration and the tasks the community undertook to make sure this plan reflected updated and comprehensive information.		X	
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Vol.1, Pg. 17-18: Plan states this update reflects a more comprehensive risk assessment including more hazards as well as detailed information on vulnerability that can better support benefit costs on project applications. This plan also includes a more comprehensive capability assessment.		X	
<b><u>ELEMENT D: REQUIRED REVISIONS</u></b>				
<b>ELEMENT E. PLAN ADOPTION</b>				
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))	Pending			
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	Pending			
<b><u>ELEMENT E: REQUIRED REVISIONS</u></b>				

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b>	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
<b>ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY; NOT TO BE COMPLETED BY FEMA)</b>				
F1.				
F2.				
<b><u>ELEMENT F: REQUIRED REVISIONS</u></b>				

**4.1.2. MULTI-JURISDICTIONAL SUMMARY SHEET**

**INSTRUCTIONS:** Complete the Multi-jurisdiction Summary Spreadsheet by listing each participating jurisdiction which required Elements for each jurisdiction were ‘Met’ or ‘Not Met’. Adoption resolutions may be tracked after the plan was reviewed by FEMA ‘pending local adoption’. This Summary Sheet does not imply that a mini-plan be developed for each jurisdiction; it should be used as an optional worksheet to ensure that each jurisdiction participating in the Plan has been documented and has met the requirements for those Elements (A through E).

#	Jurisdiction Name	Jurisdiction Type (county/city)	Requirements Met (Y/N)				
			A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption
1	Bloomington	City	Y	Y	Working		
2	Brooklyn Center	City	Y	Y	Y		
3	Brooklyn Park	City	Y	Y	Y		
4	Champlin	City	Y	Y	Y		
5	Chanhassen	City	NA	NA	NA		Carver County
6	Corcoran	City	Y	Y	Y		
7	Crystal	City	Y	Y	Y		
8	Dayton	City	Y	Y	Y		
9	Deephaven	City	Y	Y	Y		
10	Eden Prairie	City	Y	Y	N		
11	Edina	City	Y	Y	Y		
12	Excelsior	City	Y	Y	Y		
13	Fort Snelling	Unincorporated area	NA	NA	NA		
14	Golden Valley	City	Y	Y	N		

15	Greenfield	City	Y	Y	Y		
16	Greenwood	City	Y	Y	Y		
17	Hanover	City	NA	NA	NA		Wright County
18	Hopkins	City	Y	Y	Y		
19	Independence	City	Y	Y	Y		
20	Long Lake	City	Y	Y	Y		
21	Loretto	City	Y	Y	Y		
22	Maple Grove	City	Y	Y	Y		
23	Maple Plain	City	Y	Y	Y		
24	Medicine Lake	City	Y	Y	N		
25	Medina	City	Y	Y	Y		
26	Minneapolis	City	Y	Y	Y		
27	Minnetonka Beach	City	Y	Y	Y		
28	Minnetonka	City	Y	Y	Y		
29	Minnetrista	City	Y	Y	Y		
30	Mound	City	Y	Y	Y		
31	New Hope	City	Y	Y	Y		
32	Orono	City	Y	Y	Y		
33	Osseo	City	Y	Y	Y		
34	Plymouth	City	Y	Y	Y		
35	Richfield	City	Y	Y	Y		
36	Robbinsdale	City	Y	Y	Y		

37	Rockford	City	NA	NA	NA		Wright County
38	Rogers	City	Y	Y	Y		
39	Shorewood	City	Y	Y	Y		
40	Spring Park	City	Y	Y	Y		
41	St. Anthony	City	Y	Y	Y		
42	St. Bonifacius	City	Y	Y	Y		
43	St. Louis Park	City	Y	Y	Working		
44	Tonka Bay	City	Y	Y	Y		
45	Wayzata	City	Y	Y	Y		
46	Woodland	City	Y	Y	Y		

<b>SECTION 5</b>	<b>ACRONYMS AND ABBREVIATIONS</b>
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**5.1. Acronyms and Abbreviations**

<b>ADA</b>	American Disabilities Act
<b>ADT</b>	Animal Disease Traceability
<b>APHIS</b>	Animal and Plant Health Inspection Service
<b>CAPE</b>	Convective Available Potential Energy
<b>CDBG</b>	Community Development Block Grant
<b>CDC</b>	Centers for Disease Control
<b>CDFA</b>	California Drug and Food Administration
<b>CERT</b>	Community Emergency Response Team
<b>CFI</b>	Critical Facilities Index
<b>CFR</b>	Code of Federal Regulation
<b>COOP</b>	Cooperative Observer Program
<b>CPR</b>	Cardio Pulmonary Resuscitation
<b>CRS</b>	Community Rating Scheme
<b>DMA</b>	Disaster Mitigation Act of 2000
<b>DPH</b>	Department of Health
<b>DNR</b>	Department of Natural Resources
<b>EDI</b>	Emerging Disease Investigations
<b>EF</b>	Enhanced Fujita Scale
<b>EID</b>	Emerging Infectious Disease
<b>EM</b>	Emergency Manager
<b>EML</b>	Elevated Mixed Layer
<b>EMRS</b>	Emergency Management Response System
<b>EOC</b>	Emergency Operations Center
<b>EPA</b>	Environmental Protection Agency
<b>FAD</b>	Foreign Animal Disease
<b>FBP</b>	Forest Behavior Prediction
<b>FEMA</b>	Federal Emergency Management Administration
<b>FMA</b>	Flood Mitigation Assistance Program
<b>FPI</b>	Fire Potential Index
<b>FWI</b>	Fire Weather Index
<b>GEOREF</b>	Geographical Reference
<b>GIS</b>	Geographic Information System
<b>GLS</b>	Gray Leaf Spot
<b>HACCP</b>	Hazard Analysis Critical Control Point
<b>HAZMAT</b>	Hazardous Materials
<b>HAZUS</b>	Hazards United States
<b>HAZUS-MH</b>	Hazards United States- Multi Hazard
<b>HCEM</b>	Hennepin County Emergency Management
<b>HEPA</b>	High Efficiency Particulate Air
<b>HMGP</b>	Hazard Mitigation Grant Program
<b>HSEM</b>	Homeland Security Emergency Management- Minnesota

<b>HWO</b>	Hazardous Weather Outlook
<b>ICS</b>	Incident Command System
<b>IFR</b>	Interim Final Rule
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>LAT-LONG</b>	Latitude and Longitude
<b>MAP</b>	Mitigation Action Plan
<b>MD</b>	Mesoscale Discussion
<b>MEDSS</b>	Minnesota Electronic Disease Surveillance System
<b>MGRS</b>	Military Grid Reference System
<b>MJHMP</b>	Multi-Jurisdictional Hazard Mitigation Plan
<b>MNICS</b>	Minnesota Incident Command System
<b>MPRB</b>	Minneapolis Parks and Recreation Board
<b>MSP</b>	Minneapolis/St. Paul
<b>NAHERC</b>	National Animal Health Emergency Response Corp
<b>NAHSS</b>	National Animal Health Surveillance System
<b>NASA</b>	National Aeronautics Space Administration
<b>NDRF</b>	National Disaster Recovery Framework
<b>NFDRS</b>	National Fire Danger Rating System
<b>NFIP</b>	National Flood Insurance Program
<b>NHL</b>	National Historic Landmarks
<b>NIDIS</b>	National Integrated Drought Information System
<b>NIFC</b>	National Interagency Fire Center
<b>NPIC</b>	National Preparedness and Incident Coordination Center
<b>NVAP</b>	National Veterinary Accreditation Program
<b>NWS</b>	National Weather Service
<b>PDM</b>	Pre-Disaster Mitigation Program
<b>PIC</b>	Preparedness and Incident Coordination
<b>POD</b>	Point of Dispensing
<b>PRI</b>	Priority Risk Index
<b>REMPRC</b>	Regional Emergency Management Planning Reference Collection
<b>RF</b>	Radio Frequency
<b>RH</b>	Relative Humidity
<b>SBA</b>	Small Business Administration
<b>SMS</b>	Situation Monitoring Station
<b>SOP</b>	Standard Operating Procedure
<b>SPC</b>	Storm Prediction Center
<b>SPRS</b>	Surveillance, Preparedness and Response Services
<b>UC-ANR</b>	University of California Agriculture and Natural Resources
<b>USDA</b>	US Dept. of Agriculture
<b>USFA</b>	United States Fire Administration
<b>USNG</b>	United States National Grid
<b>UTC</b>	Coordinated Universal Time
<b>UTM</b>	Universal Transverse Mercator
<b>VS</b>	Veterinary Services
<b>VSMS</b>	Vital Situation Monitoring Station

<b>WBG</b>	Wet Bulb Globe Temperature
<b>WEA</b>	Wireless Emergency Alerts
<b>WFAS</b>	Wildland Fire Assessment System
<b>WFO</b>	Weather Forecast Office

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## SECTION 6

## GLOSSARY

**6.1. Terms**

**Multi-Jurisdictional Hazard Mitigation Plan-** a countywide plan that identifies risks and ways to minimize damage by natural and manmade disasters. The plan is a comprehensive resource document that serves many purposes such as enhancing public awareness, creating a decision tool for management, promoting compliance with State and Federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination.

**Area Planning Group-** One of four groups in Hennepin County divided by region that meet routinely to gather information, discuss issues, develop goals, prioritize goals, create approaches, prioritize approaches, and develop plans. Each step is necessary to the overall development and creation of the regional or jurisdictional plan.

**Disaster Mitigation Act (DMA 2000)-** is Public Law 106-390, also called DMA2K, is U.S. federal legislation passed in 2000 that amended provisions of the United States Code related to disaster relief. The amended provisions are named after Robert Stafford, who led the passage of the Stafford Disaster Relief and Emergency Assistance Act of 1988.

**Hazard Mitigation Program Grant -** to help communities implement hazard mitigation measures following a Presidential major disaster declaration. Hazard mitigation is any action taken to reduce or eliminate long term risk to people and property from natural hazards. The HMPG is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

**Incident Action Plan-** a written plan that defines the incident objectives and reflects the tactics necessary to manage an incident during an operational period.

**Operational Period-** An operational period is the period of time scheduled for executing a given set of operational actions. The length of the operational period is typically 12 to 24 hours.

**Planning Team-** A team whose members usually belong to different groups, functions and are assigned to activities for the same project.

**Public Law 106-390-** to establish a national disaster hazard mitigation program— (1) to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters; and (2) to provide a source of pre-disaster hazard mitigation funding that will assist States and local governments (including Indian tribes) in implementing effective hazard mitigation measures that are designed to ensure the continued functionality of critical services and facilities after a natural disaster.

**Risk Assessment-** is the determination of quantitative or qualitative estimate of risk related to a well-defined situation and a recognized threat (also called hazard assessment).

**Social Media-** are computer-mediated tools that allow people or companies to create, share, or exchange information, career interests, ideas, and pictures/videos in virtual communities and networks.

**Steering Committee-** a committee that provides guidance, direction and control to a project within an organization.

**Vulnerability Assessment-** the process of identifying, quantifying, and prioritizing (or ranking) the vulnerabilities in a system.

**Whole Community-** an approach to emergency management that reinforces the fact that FEMA is only one part of our nation's emergency management team; that we must leverage all of the resources of our collective team in preparing for, protecting against, responding to, recovering from and mitigating against all hazards; and that collectively we must meet the needs of the entire community in each of these areas.

**Working Group-** is an *ad hoc* group of subject-matter experts working together to achieve specified goals.

**Title 44 CFR Part 201-** Identification name for Emergency Management and Assistance- specifically Mitigation Planning within the Code of Federal Regulation. (1)-The purpose of this part is to provide information on the policies and procedures for mitigation planning as required by the provisions of section 322 of the Stafford Act, 42 U.S.C. 5165. (2)-The purpose of mitigation planning is for State, local, and Indian tribal governments to identify the natural hazards that impact them, to identify actions and activities to reduce any losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resources.

**SECTION 7****ANNEX'S****Annex A:****Applicable Federal and State Regulations**

- A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended by the Disaster Mitigation Act of 2000, provides the legal basis for state, tribal, and local governments to undertake risk-based approaches to reducing natural hazard risks through mitigation planning. Specifically, the Stafford Act requires state, tribal, and local governments to develop and adopt FEMA-approved hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance.
- B. Another law relevant to hazard mitigation planning is the National Flood Insurance Act of 1968, as amended (42 U.S.C. § 4104c), which authorizes the Flood Mitigation Assistance (FMA) grant program with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP). FMA provides funding to states, territories, federally-recognized tribes, and local communities for flood hazard mitigation projects, plan development, and management costs.
- C. Title 44, Chapter 1, Part 201 (44 CFR Part 201) of the Code of Federal Regulations (CFR) contains requirements and procedures to implement the hazard mitigation planning provisions of the Stafford Act.
- D. FEMA policies are external, authoritative statements that articulate the Agency's intent and direction to guide decision-making and achieve rational outcomes for Agency activities. The following mitigation planning guidance documents constitute FEMA's official policy on and interpretation of the hazard mitigation planning requirements in 44 CFR Part 201.
- State Mitigation Plan Review Guide (March 2015)
  - Local Mitigation Plan Review Guide (English) (October 2011)
  - Local Mitigation Plan Review Guide (Spanish) (October 2011)
  - Tribal Multi-Hazard Mitigation Planning Guidance (March 2010)

Additional mitigation planning policies include:

- State Mitigation Plan Review Guide Policy (FP 302-094-2, March 6, 2015)
- Mitigation Planning (MT-PL) Memorandum #15: Local Mitigation Plan Review Guide (September 30, 2011)
- Mitigation Planning Memorandum (MT-PL) #1A: Implementation Procedures for States, Territories and Indian Tribal Governments Without an Approved State Mitigation Plan - Follow-up Guidance (Attachment) (May 2, 2005)
- Mitigation Planning Memorandum (MT-PL) #1: Disaster Declaration Procedures After May 1, 2005 for States Without an Approved State Mitigation Plan (April 13, 2005)

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# HENNEPIN COUNTY

## MINNESOTA

Board Action Request  
18-0246

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**Item Description:**

Adopt Hennepin County All-Hazard Mitigation Plan

WHEREAS, Hennepin County has participated in the hazard mitigation planning process as established under the federal Disaster Mitigation Act of 2000; and

WHEREAS, the Act establishes a framework for the development of a County Hazard Mitigation Plan; and

WHEREAS, the Act as requires public involvement and local coordination among neighboring local units of government and businesses in the assessment and planning process; and

WHEREAS, the Hennepin County Plan includes a risk assessment including county disaster history, an inventory of hazards that threaten the County, an estimate of infrastructure at risk, a general description of population, land use and development trends; and

WHEREAS, the Hennepin County Plan includes a mitigation strategy including goals and objectives and an action plan identifying specific mitigation projects and costs that will reduce disaster impacts; and

WHEREAS, the Hennepin County Plan includes a maintenance or implementation process including plan updates, integration of the plan into other planning documents and how Hennepin County will maintain public participation and coordination; and

WHEREAS, the Plan has been shared with the Minnesota Division of Homeland Security and Emergency Management and the Federal Emergency Management Agency for review and comment; and

WHEREAS, this Hennepin County All-Hazard Mitigation Plan is multi-jurisdictional in scope and that cities that participated in the planning process may choose to adopt the County Plan and be included in eligibility to apply for federal mitigation grants.

**Resolution:**

BE IT RESOLVED, that the Hennepin County Board of Commissioners adopts the 2018 Hennepin County All-Hazard Mitigation Plan.

**Background:**

The primary aim of mitigation is to protect lives by increasing the survivability of disaster situations. Mitigation also makes good economic sense. According to the Federal Emergency Management Agency (FEMA), for every federal dollar spent on pre-disaster mitigation, six dollars are saved in disaster response and recovery costs.

The 2018 Hennepin County All-Hazard Mitigation Plan is significantly improved from previous plans. Extensive research has been focused on detailed assessments of the natural hazards effecting the county. New knowledge has been employed to better focus mitigation efforts locally. This work will continue so that future mitigation projects can be directed to the places most in need of them.

**Current request:** The Federal Emergency Management Agency requires a format adoption document to complete the approval process for the county's Plan. This request seeks adoption of the 2018 Hennepin County All Hazards Mitigation Plan.

**Recommendation from County Administrator:** Recommend Approval

**ATTACHMENTS:**

Description	Upload Date	Type
FEMA Letter	6/11/2018	Letter
HC Plan	6/11/2018	Back-Up material

Hennepin County, Board of Commissioners

**RESOLUTION 18-0246**

2018

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The following resolution was moved by Commissioner Mike Opat and seconded by Commissioner Debbie Goettel:

WHEREAS, Hennepin County has participated in the hazard mitigation planning process as established under the federal Disaster Mitigation Act of 2000; and

WHEREAS, the Act establishes a framework for the development of a County Hazard Mitigation Plan; and

WHEREAS, the Act as requires public involvement and local coordination among neighboring local units of government and businesses in the assessment and planning process; and

WHEREAS, the Hennepin County Plan includes a risk assessment including county disaster history, an inventory of hazards that threaten the County, an estimate of infrastructure at risk, a general description of population, land use and development trends; and

WHEREAS, the Hennepin County Plan includes a mitigation strategy including goals and objectives and an action plan identifying specific mitigation projects and costs that will reduce disaster impacts; and

WHEREAS, the Hennepin County Plan includes a maintenance or implementation process including plan updates, integration of the plan into other planning documents and how Hennepin County will maintain public participation and coordination; and

WHEREAS, the Plan has been shared with the Minnesota Division of Homeland Security and Emergency Management and the Federal Emergency Management Agency for review and comment; and

WHEREAS, this Hennepin County All-Hazard Mitigation Plan is multi-jurisdictional in scope and that cities that participated in the planning process may choose to adopt the County Plan and be included in eligibility to apply for federal mitigation grants.

BE IT RESOLVED, that the Hennepin County Board of Commissioners adopts the 2018 Hennepin County All-Hazard Mitigation Plan.

The question was on the adoption of the resolution and there were 7 YEAS and 0 NAYS, as follows:

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**County of Hennepin  
Board of County Commissioners**

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<b>YEAS</b>	<b>NAYS</b>	<b>ABSTAIN</b>	<b>ABSENT</b>
Mike Opat			
Linda Higgins			
Marion Greene			
Peter McLaughlin			
Debbie Goettel			
Jan Callison			
Jeff Johnson			

**RESOLUTION ADOPTED ON 6/26/2018**

**ATTEST:** M. Roge

**Deputy/Clerk to the County Board**

MAY 10 2018



U.S. Department of Homeland Security  
Region V  
536 S. Clark St., 6th Floor  
Chicago, IL 60605-1509

**FEMA**

Ms. Jennifer Nelson  
Homeland Security and Emergency Management  
Minnesota Department of Public Safety  
444 Cedar Street, Suite 223  
Saint Paul, MN 55101

Dear Ms. Nelson:

Thank you for submitting the Hennepin County All Hazards Mitigation Plan update for our review. The plan was reviewed based on the local plan criteria contained in 44 CFR Part 201, as authorized by the Disaster Mitigation Act of 2000. Hennepin County met the required criteria for a multi-jurisdictional local hazard mitigation plan. Formal approval of this plan is contingent upon the adoptions by the participating jurisdictions. Once FEMA Region V receives documentation of adoption from the county and other jurisdictions, we will send a letter of official approval to your office.

We look forward to receiving the adoption documentation and completing the approval process for Hennepin County.

If you or the community representatives have any questions, please contact Christine Meissner at (312) 408-4460 or at [christine.meissner@fema.dhs.gov](mailto:christine.meissner@fema.dhs.gov).

Sincerely,

*for* Melissa A. Janssen  
Chief, Risk Analysis Branch  
Mitigation Division

Attachments: Local Plan Review Sheets

