Winnebago County, Illinois Multi-Hazard Mitigation Plan

2024



Winnebago County, Illinois
404 Elm St. Rockford, Illinois 61103
815-319-4444

Region 1 Planning Council
127 N. Wyman St. Suite 100
Rockford Illinois, 61101
815-319-4180 | info@r1planning.org

Winnebago County, Illinois
Multi-Hazard Mitigation Plan 2024

Acknowledgments

The 2024 Winnebago County Multi-Hazard Mitigation Plan was prepared by the Region 1 Planning Council (henceforth referred to as R1) in coordination with its member agencies, partner organizations, Winnebago County organizations, Winnebago County service and utility providers, and their relevant staff. This plan would not have been possible without the valuable feedback, input, and expertise provided by everyone involved. R1 would like to give explicit thank you to all those who took part in making this plan possible.

Multi-Hazard Mitigation Project Team

Organization	Name
Winnebago County Engineer	Carlos Molina
Winnebago County Assistant County Engineer	Sean Von Bergen
Winnebago County Emergency Management Coordinator	Slade Beery

Multi-Hazard Mitigation Partner Organizations

Organization	Type	Title
Winnebago County- Building Division	County	Office Manager
Winnebago County- Health Department	County	Director of Public Health Preparedness
Winnebago County- Highway Department	County	County Engineer
Winnebago County- Planning & Zoning Division	County	Planning & Zoning Officer
Winnebago County- Purchasing	County	Director
Winnebago County- Regional Planning & Economic Development	County	Chief Operations Officer
Winnebago County- Emergency Operations (Sheriff's Department)	County	Emergency Management Coordinator
Winnebago County Fire Official- Blackhawk Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official-Durand Fire Protection District	Winnebago County Fire Protection Districts	Chief
City of Loves Park Fire Department	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Cherry Valley Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- German Valley Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Harlem-Roscoe Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- New Milford- Fire Protection District	Winnebago County Fire Protection Districts	Deputy Fire Chief

Multi-Hazard Mitigation Partner Organizations Continued

Organization	Type	Title
Winnebago County Fire Official- North Park Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Northwest Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Pecatonica Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Rockton Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Shirland Fire Department	Winnebago County Fire Protection Districts	Chief
City of Rockford Fire Department	Winnebago County Fire Protection Districts	Chief of Operations/EMA Director
Winnebago County Fire Official- Stillman Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Win-Bur-Sew Fire Protection District	Winnebago County Fire Protection Districts	Chief
Federal Emergency Management Agency (FEMA)	Federal Government Agency	FEMA Mitgation Planning
Illinois Emergency Management Agency (IEMA)	State Government Agency	Hazard Mitigation Section Manager
Region 1 Planning Council	Special Government	Project Coordinator, Executive Director
City of Loves Park (*Municipal Fire Departments)	County Municipality	Economic Development and Planning Manager, Director of Community Development, Public Works
City of Rockford (*Municipal Fire Departments)	County Municipality	City Administrator, Public Works, City Engineer
City of South Beloit	County Municipality	City Administrator, Mayor, Public Works- Streets
Village of Cherry Valley	County Municipality	Public Works Director, Village Administrator
Village of Durand	County Municipality	Mayor, Village Zoning Administrator
Village of Machesney Park	County Municipality	Community Development & Building Coordinator, Village Administrator, Public Works
Village of New Milford	County Municipality	Village President
Village of Pecatonica	County Municipality	Village President
Village of Rockton	County Municipality	Mayor, Public Works, Chief of Police
Village of Roscoe	County Municipality	Village Administrator
Village of Winnebago	County Municipality	Public Works Director, Village President, Village Administrator, Chief of Police
Boone-Winnebago County School Districts	School District	Superintendent, Business Administrator, Business Manager
Rock Valley College	Educational Institution	Emergency Manager
Rockford Park District (*New participant)	Special District	Operations Director
Chicago-Rockford International Airport	Service Provider	Executive Director, Emergency Manager
Commonwealth Edison (ComEd) (Power)	Service Provider	External Affairs Manager
Nicor (Gas)	Service Provider	Community Affairs

Multi-Hazard Mitigation Partner Organizations Continued

Organization	Type	Title
Burritt Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Cherry Valley Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Durand Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Harlem Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Harrison Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Laona Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Owen Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Pecatonica Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Rockford Township	Winnebago County Township	Township Supervisor, Highway Commissioner, Assistant Highway Commissioner
Rockton Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Roscoe Township	Winnebago County Township	Township Supervisor, Highway Commissioner, Assistant Highway Commissioner
Seward Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Shirland Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Winnebago Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Swedish American Hospital Group	Hospital	Emergency Management Coordinator
OSF Healthcare	Hospital	Emergency Management Coordinator
North Park Public Water District	Utility Provider	Director of Government Affairs
Four Rivers Sanitation Authority	Utility Provider	Executive Director, Director of Engineering

Disclosures

The contents, views, and recommendations provided in this plan are not necessarily representative of those of the partner organizations who coordinated in the production of this plan.

If you have any questions or comments related to this plan or the contents therein, please call or email Slade Berry, Emergency Management Coordinator at 815-319-6217 or BerryS@WCSO-IL.us.

Winnebago County, Illinois
404 Elm St.
Rockford, Illinois 61103
815-319-4444

Region 1 Planning Council
127 N Wyman St. Suite 100
Rockford, Illinois 61101
815-319-4180 | info@r1planning.org

Table of Contents

Winnebago County, Illinois Multi-Hazard Mitigation Plan 2024 ii
Acknowledgments ii

Winnebago County, Illinois Community Profile 1

Section 1: Introduction 2
Overview 2
What is Hazard Mitigation and the Multi-Hazard Mitigation Plan? 2
FEMA Hazard Mitigation Planning and Hazard Mitigation Grant Program – 44 CFR Parts 201 and 206 2
Why Planning? 3

Section 2: Winnebago County Overview 4
Winnebago County History 4
Winnebago County & Municipalities 4
Climate and Weather 6
Topography & Major Waters 6
Land Cover & Development 10

Section 3: Winnebago County Demographics 12
Population Distribution 12
Economic Distribution 14
Housing 15

Section 4: Winnebago County Critical Facilities 17
Winnebago County Essential Facilities in a Floodplain 19
Winnebago County Schools & School Districts 20

Section 5: Planning Process 25
Partner Organizations 26
Timeline 27
Public Involvement 28
Organizational Involvement 28
Review of the Existing Plans 28
Data Updated 28

Winnebago County, Illinois Natural Hazards Assessment 29

Section 6: Risk Analysis 30
Hazard Identification 30
State Weather Records 30
Federal Emergency Management 31
Risk Priority Number Index 31
Vulnerability Assessment 34
Regional Economic Modeling Inc. (REMI) 37

Section 7: Hazard Profiles 39
Thunderstorm 39
Winter Storm 42
Tornado 44
Flooding 48
Drought & Extreme Heat 53
Hazardous Material Storage and Transportation 55
Dam & Levee Failure 63
Groundwater Shortage 66
Earthquake 72
COVID-19 77

Section 8: Mitigation Strategies 79
Winnebago County Successful Mitigation Projects and Related Projects 79
Capability Analysis 82
Mitigation Goals 84

Section 9: Plan Maintenance 180
Adoption by Local Government 180

Appendix A: Definitions 182

Appendix B: Acronyms 184

Appendix C: Checklist 187

Appendix D: Meeting Information 194

Appendix E: Public Comment 212

Appendix F: Existing Plans 217

Appendix G: Mitigation Strategies Matrix 219

Endnotes 309

Extended Descriptions 311

List of Exhibits

Figures

Figure 2-1: Municipalities in Winnebago County, Illinois 5
Figure 2-2: Physiographic Sections Map 7
Figure 2-3: Major Waters of Winnebago County, Illinois 9
Figure 2-4: Future Land Use In Winnebago County, Illinois 11

Figure 3-1: Racial Distribution of Winnebago County, Illinois 12
Figure 3-2: Educational Attainment in Winnebago County, Illinois 13
Figure 3-3: Educational Attainment by Race in Winnebago County, Illinois 13
Figure 3-4: Occupied vs. Vacant Housing Units in Winnebago County, Illinois 15
Figure 3-5: Owner vs. Renter Occupied Housing Units in Winnebago County, Illinois 15
Figure 3-6: Residential Flood Zone 16

Figure 4-1: Winnebago County Critical Facilities 18
Figure 4-2: Critical Facilities in Flood Zones in Winnebago County 19
Figure 4-3: School Districts in Winnebago County 20

Figure 6-1: Hazard Identification 30
Figure 6-2: Winnebago County Flooding Events 35
Figure 6-3: Annual Total Precipitation 36
Figure 6-4: Annual Dry Days (<0.01 inches) 36

Figure 7-1: Modeled Tornado Zones 45
Figure 7-2: Modeled Tornado Path 46
Figure 7-3: Winnebago County Critical Facilities in a Floodplain 51
Figure 7-4: Truck Routes in Winnebago County 56
Figure 7-5: Plume Origin Map 58
Figure 7-6: ALOHA Analysis Parameters for Ammonia Release 58
Figure 7-7: ALOHA Analysis Generated Plume from Ammonia Scenario 59
Figure 7-8: ALOHA Analysis Parameters for Chlorine Release 59
Figure 7-9: ALOHA Analysis Generated Plume from Chlorine Scenario 60
Figure 7-10: Plume Footprint and Parcel Exposure to Ammonia Release 61
Figure 7-11: Plume Footprint and Parcel Exposure to Chlorine Release 62

Figure 7-12: Groundwater Depletion Rate, United States, USGS 67
Figure 7-13: St. Peter Sandstone Aquifer Risk Area for Northern Illinois, Illinois State Water Survey 69
Figure 7-14: St. Peter Sandstone Aquifer Risk Area for Winnebago County, Illinois State Water Survey 70
Figure 7-15: Comparison of Earthquake Magnitude and Intensity 73
Figure 7-16: Earthquake Hazard Zones, United States 74
Figure 7-17: Damaging Earthquake Shaking, United States 75
Figure 7-18: Soil Liquefaction Map, Illinois 76

Figure D-1: Document Kick-off Meeting Agenda 194
Figure D-2: Community Input Coordination Meeting Update 195
Figure D-3: Community Input Meeting Agenda 196
Figure D-4: Community Input Meeting Sign-In Sheet 197
Figure D-5: Pecatonica Township Meeting Sign-In sheet 199
Figure D-6: Public Works Committee Agenda 200
Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation 202
Figure D-8: Public Meeting Sign-in Sheet 211

Figure E-1: Winnebago County Health Department Comments 212
Figure E-2: Public Comment Social Media Post 213
Figure E-3: Public Comment Notes 214
Figure E-4: Suggestion for Hazard Mitigation Plan 215

Tables

Table 2-1: Land Cover Change in Winnebago County, 2019-2023 10

Table 3-1: Population by Municipality in Winnebago County, Illinois 12
Table 3-2: Industry Sector Percentage in Winnebago County, Illinois 14
Table 3-3: Employer by Size in Winnebago County, Illinois 14
Table 3-4: Percent of Population in Poverty by Group in Winnebago County, Illinois 15

Table 4-1: Winnebago County Public Facilities 17
Table 4-2: Winnebago County Utility Providers 17
Table 4-3: Winnebago County Critical Facilities in Floodplains 19
Table 4-4: Winnebago County School Districts 21

Table 5-1: Partner Organizations 26

Table 6-1: Disaster by Event Type, with Property Damage Estimate in Winnebago County, Illinois 30
Table 6-2: FEMA disaster declaration by specific type in Winnebago County, Illinois 31
Table 6-3: Risk Priority Index Number Matrices: Weighted Breakdown for Calculation 31
Table 6-4: Risk Priority Index Number Matrices: Severity, Probability, Detection and Affected Area 32
Table 6-5: Risk Priority Index Number Ranking 33
Table 6-6: Risk Priority Index Number Ranking by Jurisdiction 33
Table 6-7: Perceived Geographic Impact by Hazard Type 33
Table 6-8: Components of Vulnerability 34
Table 6-9: Extreme Heat Projections 35
Table 6-10: Long-term Projected Employment and Population Growth, 2015-2023 37

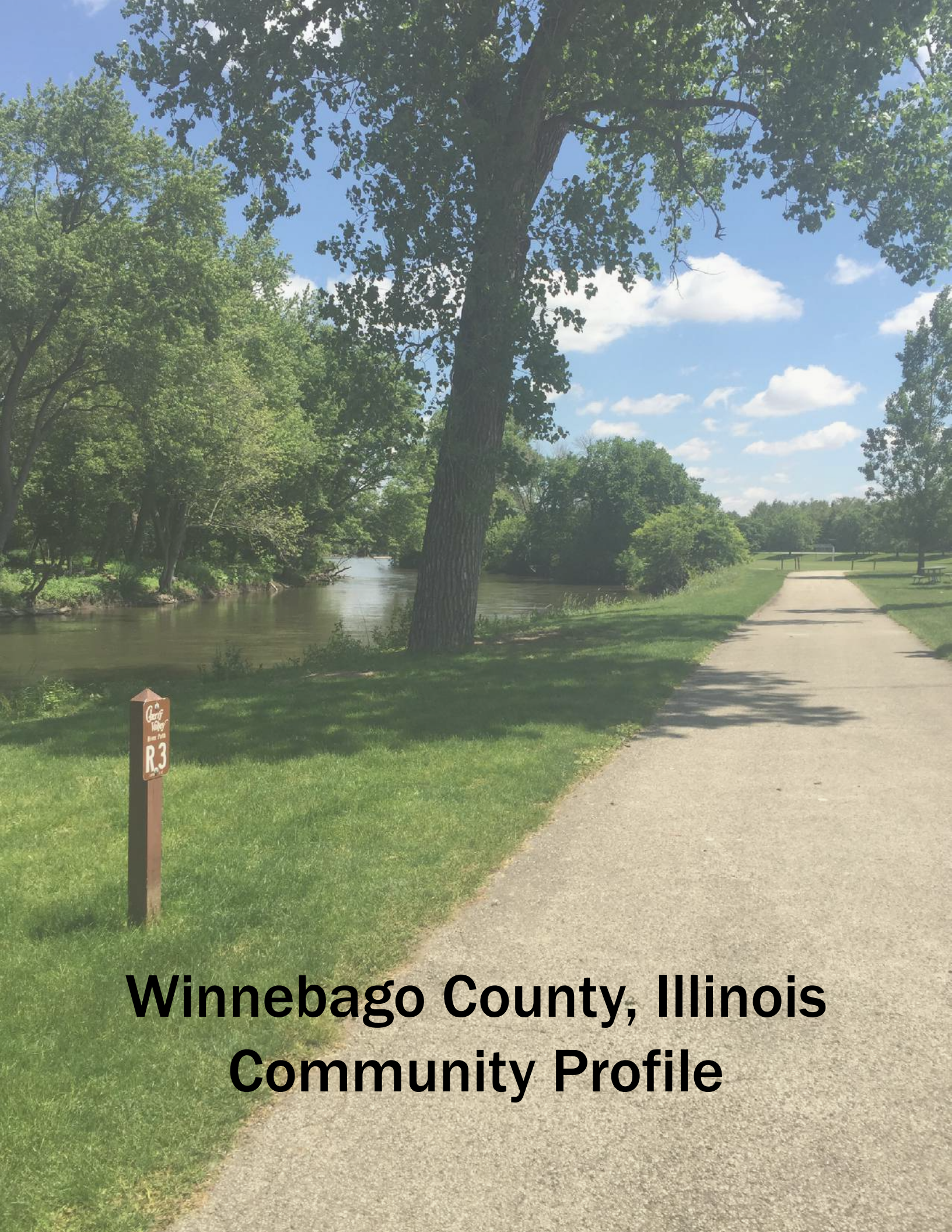
Table 7-1: Hail Sizes 39
Table 7-2: NCEI-Recorded Lightning that Caused Damage, Death, or Injury in Winnebago County 40
Table 7-3: NCEI High Wind Events 40
Table 7-4: Risk Identification for Thunderstorm Hazard 41
Table 7-5: Risk Identification for Winter Storm Hazard 43
Table 7-6: Enhanced Fujita (EF) Tornado Rating Scale 44
Table 7-7: NCEI-Recorded Tornadoes That Caused Damage, Death, or Injury in Winnebago County 44
Table 7-8: Risk Identification for Tornadoes 45
Table 7-9: Tornado Assessed Value Loss, Parcel Based Winnebago County and Rockford 46
Table 7-10: Tornado Assessed Value Loss, Parcel Based Winnebago County and Cherry Valley 47
Table 7-11: NCEI- recorded Flooding Events that caused Death, Damage or Injury in Winnebago County 49
Table 7-12: Repetitive Loss Structures by Jurisdiction in Winnebago County 49
Table 7-13: Winnebago County Critical Facilities in a Flood Plains 49
Table 7-14: Risk Identification for Flooding 50

Table 7-15: Essential Facilities within the 100- year Floodplain....50
Table 7-16: Critical Facilities in a Flood Zone In Winnebago County....52
Table 7-17: Risk Identification for Drought/Heat Storm....54
Table 7-18: Risk Identification for Hazardous Materials Storage and Transportation Hazard....57
Table 7-19: Estimated Fair Market Value as a Result of Ammonia Release....61
Table 7-20: Estimated Fair Market Value as a Result of Chlorine Release....62
Table 7-21: Dams in Winnebago County....64
Table 7-22: Levees in Winnebago County....65
Table 7-23: Risk Identification for Dam/Levee Failure....65
Table 7-24: Risk Identification for Groundwater Shortage Hazard....71
Table 7-25: Risk Identification for Earthquake Hazard....77

Table 8-1: Community NFIP Participation, FIRM Data, and Floodplain Ordinance Date....81
Table 8-2: Related Municipal Zoning Ordinances....81
Table 8-3: Fire Insurance Ratings by District....82
Table 8-4: Capability Summary Table by Jurisdiction....83
Table 8-5: STAPLE+E Criteria from FEMA....86
Table 8-6: Blackhawk Fire Protection District (2024)....90
Table 8-7: Boone-Winnebago Regional School District (2024)....92
Table 8-8: Burritt Township (2024)....93
Table 8-9: Village of Cherry Valley (2024)....96
Table 8-10: Cherry Valley Township (2024)....100
Table 8-11: Chicago-Rockford Airport (2024)....101
Table 8-12: Village of Durand (2024)....102
Table 8-13: Durand Fire Protection District (2024)....105
Table 8-14: Durand Township (2024)....106
Table 8-15: Four Rivers Sanitation Authority (2024)....107
Table 8-16: German Valley Fire Protection District (2024)....108
Table 8-17: Harlem Township (2024)....109
Table 8-18: Harlem Roscoe Fire Protection District (2024)....110
Table 8-19: Harrison Township (2024)....111
Table 8-20: Laona Township (2024)....112
Table 8-21: City of Loves Park (2024)....113
Table 8-22: Village of Machesney Park (2024)....116
Table 8-23: Village of New Milford (2024)....120
Table 8-24: New Milford Fire Protection District (2024)....122
Table 8-25: North Park Fire Protection District (2024)....124
Table 8-26: North Park Water District (2024)....126
Table 8-27: Northwest Fire Protection District (2024)....128
Table 8-28: Village of Pecatonica (2024)....130
Table 8-29: Pecatonica Fire Protection District (2024)....133
Table 8-30: Pecatonica Township (2024)....135
Table 8-31: City of Rockford (2024)....138
Table 8-32: Rock Valley College (2024)....145
Table 8-33: Rockford Park District (2024)....147
Table 8-34: Rockford Township (2024)....149
Table 8-35: Village of Rockton (2024)....150
Table 8-36: Rockton Fire Protection District (2024)....153
Table 8-37: Rockton Township (2024)....154
Table 8-38: Village of Roscoe (2024)....155
Table 8-39: Roscoe Township (2024)....158
Table 8-40: Seward Township (2024)....159
Table 8-41: Shirland Township (2024)....160
Table 8-42: City of South Beloit (2024)....162
Table 8-43: Stillman Fire Protection District (2024)....166
Table 8-44: Win-Bur-Sew Fire Protection District (2024)....168
Table 8-45: Village of Winnebago (2024)....170
Table 8-46: Winnebago County (2024)....172
Table 8-47: Winnebago Township (2024)....178

Table F-1: List of Existing Plans....217

Table G-1: Blackhawk Fire Protection District (2024)....219
Table G-2: Boone-Winnebago Regional School District (2024)....221
Table G-3: Burritt Township (2024)....222
Table G-4: Village of Cherry Valley (2024)....225
Table G-5: Cherry Valley Township (2024)....229
Table G-6: Chicago-Rockford Airport (2024)....230
Table G-7: Village of Durand (2024)....231
Table G-8: Durand Fire Protection District (2024)....234
Table G-9: Durand Township (2024)....235
Table G-10: Four Rivers Sanitation Authority (2024)....236
Table G-11: German Valley Fire Protection District (2024)....237
Table G-12: Harlem Township (2024)....238
Table G-13: Harlem Roscoe Fire Protection District (2024)....239
Table G-14: Harrison Township (2024)....240
Table G-15: Laona Township (2024)....241
Table G-16: City of Loves Park (2024)....242
Table G-17: Village of Machesney Park (2024)....245
Table G-18: Village of New Milford (2024)....249
Table G-19: New Milford Fire Protection District (2024)....251
Table G-20: North Park Fire Protection District (2024)....253
Table G-21: North Park Water District (2024)....255
Table G-22: Northwest Fire Protection District (2024)....257
Table G-23: Village of Pecatonica (2024)....259
Table G-24: Pecatonica Fire Protection District (2024)....262
Table G-25: Pecatonica Township (2024)....264
Table G-26: City of Rockford (2024)....267
Table G-27: Rock Valley College (2024)....274
Table G-28: Rockford Park District (2024)....276
Table G-29: Rockford Township (2024)....278
Table G-30: Village of Rockton (2024)....279
Table G-31: Rockton Fire Protection District (2024)....282
Table G-32: Rockton Township (2024)....283
Table G-33: Village of Roscoe (2024)....284
Table G-34: Roscoe Township (2024)....287
Table G-35: Seward Township (2024)....288
Table G-36: Shirland Township (2024)....289
Table G-37: City of South Beloit (2024)....291
Table G-38: Stillman Fire Protection District (2024)....295
Table G-39: Win-Bur-Sew Fire Protection District (2024)....297
Table G-40: Village of Winnebago (2024)....299
Table G-41: Winnebago County (2024)....301
Table G-42: Winnebago Township (2024)....307



Winnebago County, Illinois
Community Profile

Section 1: Introduction

Overview

Hazard Mitigation is an integral part of long-term, comprehensive planning. It minimizes the initial and long-term impacts major disasters have on municipalities and residents. Major natural disasters often have devastating effects over large areas and the impacts from these storms can last for extended periods of time. The Federal Emergency Management Agency (FEMA) prioritizes mitigation as a tier principle in its organizational operation. Through the Disaster Management Act of 2000 (DMA) FEMA began federally requiring a Multi-Hazard Mitigation Plan (MHMP) as a pre-requisite for pre- and post-disaster funding.

What is Hazard Mitigation and the Multi-Hazard Mitigation Plan?

According to FEMA, hazard mitigation is "any effort to reduce the loss of life and property by lessening the impact of disasters, both natural and man-made."[i] This involves the identification of vulnerable assets, individuals, and areas; the assessment of risks by impact level and by disaster type; and finally the drafting, identification, and implementation of strategies to mitigate loss of life and devastation on impacted areas. FEMA defines hazard mitigation as "the key to breaking the cycle of disaster damage, reconstruction, and repeated damage."[ii] MHMPs represent the coalescence of these tools into a single document which often combines them with a profile of the community. This community profile is provided in the form of socio-demographic data; climate, topographical, and land-cover data; and finally a community risk analysis which indexes (or ranks) the perceived threat from disasters by organization or municipality.

FEMA Hazard Mitigation Planning and Hazard Mitigation Grant Program – 44 CFR Parts 201 and 206

In 2002, the Robert T. Stafford Act, enacted under the Disaster Mitigation Act of 2000, was amended to mandate (as a final rule) that a portion of the Hazard Mitigation Grant Program funds (up to 20 percent) could be used to develop a "comprehensive, enhanced mitigation plan." This amendment also added to the existing requirement, which mandated that states have a mitigation plan adopted as a condition of federal pre-and-post-disaster funding, that local entities also have a mitigation plan adopted as a condition of federal pre-and-post-disaster funding. Below is an excerpt from the federal register of February 2002.

> "This section: (1) Continues the requirement for a Standard State Mitigation plan as a condition of disaster assistance; (2) provides for States to receive an increased percentage of HMGP funds (from 15 to 20 percent of the total estimated eligible Federal assistance) if, at the time of the declaration of a major disaster, they have in effect a FEMA-approved Enhanced State Mitigation Plan that meets the factors listed in this rule; (3) establishes a new requirement for local mitigation plans; and (4) authorizes up to 7 percent of the HMGP funds available to a State to be used for development of State, tribal, and local mitigation plans. We will give Indian tribal governments the opportunity to fulfill the requirements of § 322 either as a grantee or a sub-grantee. An Indian tribal government may choose to apply for HMGP funding directly to us and would then serve as a grantee, meeting the State level responsibilities, or it may apply through the State, meeting the local government or sub-grantee responsibilities.

Why Planning?

Planning represents the unification of multiple partner organizations working together with their respective communities towards a common goal: often this comes in the form of comprehensive planning documents, collaborative policies and procedures, and regional goals. Challenges that affect the region—whether it is social inequity, environmental degradation, structurally deficient infrastructure, or natural disasters—require the expertise from these partner organizations to be integrated with public comment into unified outputs that represent the interests of all. Often this results in policies that represent a broader group of individuals and the municipalities they make up.

Winnebago County completed its first MHMP in 2007. This document represents the third update to the MHMP. Region 1 Planning Council (R1) was contracted by Winnebago County to manage the 2024 MHMP update. R1 guided the planning process, performed the risk assessment, and assisted in identifying unifying mitigation recommendations. This plan follows a similar format from the 2019 update. All sections were reviewed and updated with the most recently available data. This document hereby serves as Winnebago County's Multi-Hazard Mitigation Plan 2024 update.

Section 2: Winnebago County Overview

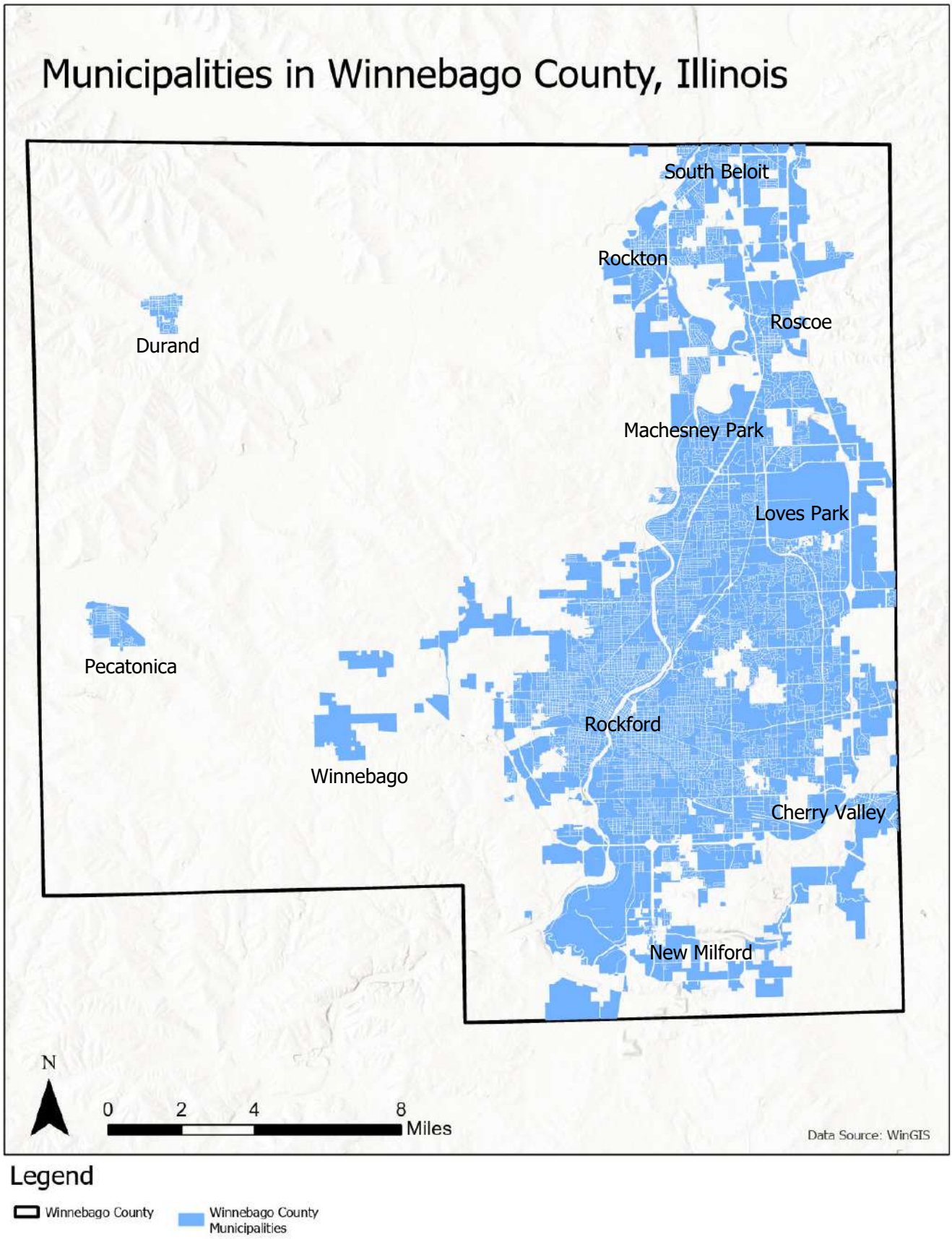
Winnebago County History

Winnebago County was established in January 1836. The County was named after the Winnebago Tribe, a Siouan-speaking tribe of Native Americans that once occupied large parts of what is now Illinois, Wisconsin, and Iowa. After the Black Hawk War of 1832, the area was settled on the banks of the Rock River in what is now the City of Rockford. Located halfway between Chicago and Galena, this early settlement was known as “Midway Village” but was soon changed to Rockford, after the ford that existed across the Rock River. The Rock River played a major role in the development of the region, serving as the major source of power while while rich soils helped the area grow rapidly. Rapid industrialization during the mid-twentieth century saw the City of Rockford become a regional powerhouse in the industrial world. Winnebago County continues to represent a dynamic balance between urban amenities and tranquil rurality.

Winnebago County & Municipalities

Figure 2-1 displays Winnebago County and its incorporated municipalities. Winnebago County covers 519 square miles and is located in north-central Illinois, ninety miles northwest of Chicago and sixty miles south of Madison, Wisconsin. It is bordered by Wisconsin on the north, Boone County on the east, Ogle County on the south, and Stephenson County on the west. The City of Rockford is the County Seat, and other cities in Winnebago County include Loves Park and South Beloit. There are eight villages in Winnebago County: Cherry Valley, Durand, Machesney Park, New Milford, Pecatonica, Roscoe, Rockton, and Winnebago. There are fourteen townships: Burritt, Cherry Valley, Durand, Harlem, Harrison, Laona, Owen, Pecatonica, Rockford, Rockton, Roscoe, Seward, Shirland, and Winnebago. Representatives from each city, village, and township were provided multiple opportunities to participate in the 2024 MHMP.

Figure 2-1: Municipalities in Winnebago County, Illinois



Climate and Weather

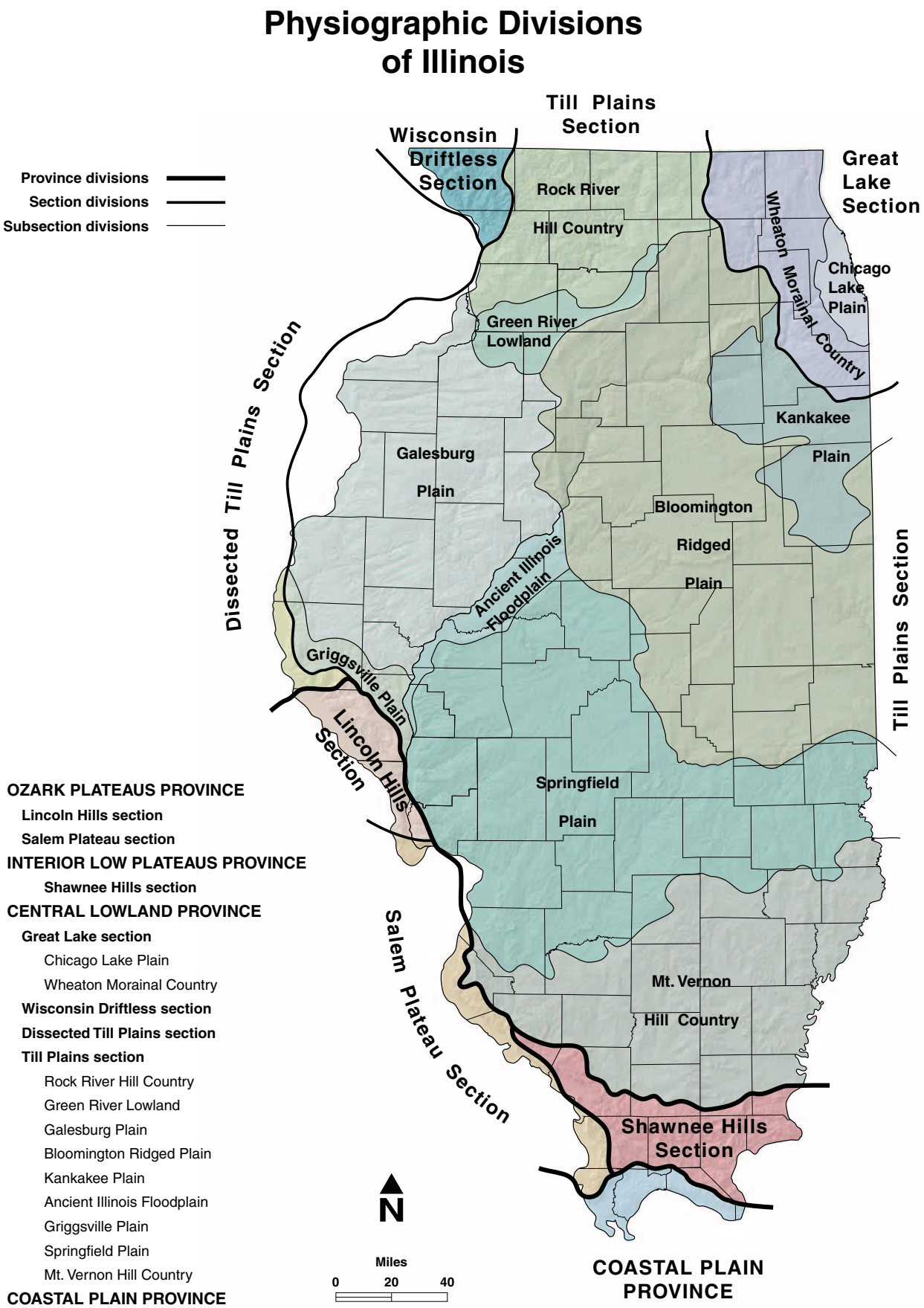
Winnebago County climate is a Humid-Continental climate according to the National Weather Service (NWS), which is based on the "Köppen-Geiger climate classification system." According to the National Oceanic and Atmospheric Administration (NOAA) this climate is defined by humid hot summers, with convective thunderstorms dominating these months, to extremely snowy winter months, where the temperature often drops below freezing and remains for multiple days. Wild temperature variations between winter and summer are standard in this mid-latitude climate zone. Winnebago County's average low temperature for the month of January from 1981-2010 was 13.5 degrees Fahrenheit; during that same period, the average high temperature for the month of July, the hottest month of the year, was 84.5 degrees Fahrenheit. The highest temperature on record for Winnebago County is 112 degrees Fahrenheit and the lowest temperature on record is-31 degrees Fahrenheit. Winnebago County receives some measurable precipitation for at least 119 days per year. This comes from powerful summer thunderstorms dropping on average 36.2" of rain per year and fierce winter storms which bring on average 36.7" of snow per year.[iii] [iv] [1]

Topography & Major Waters

Winnebago County is situated within the Central Lowlands Province, Rock River Hill County Subsection of the Till Plains Section physiographic division of Illinois (Figure 2-2). The topography is gently rolling ground moraine, with occasional eskers, kames, marginal moraines, and outwash. Elevations in the county range from 980 feet above mean sea level to 680 feet above mean sea level.

1 This section includes recently available climate data.

Figure 2-2: Physiographic Sections Map



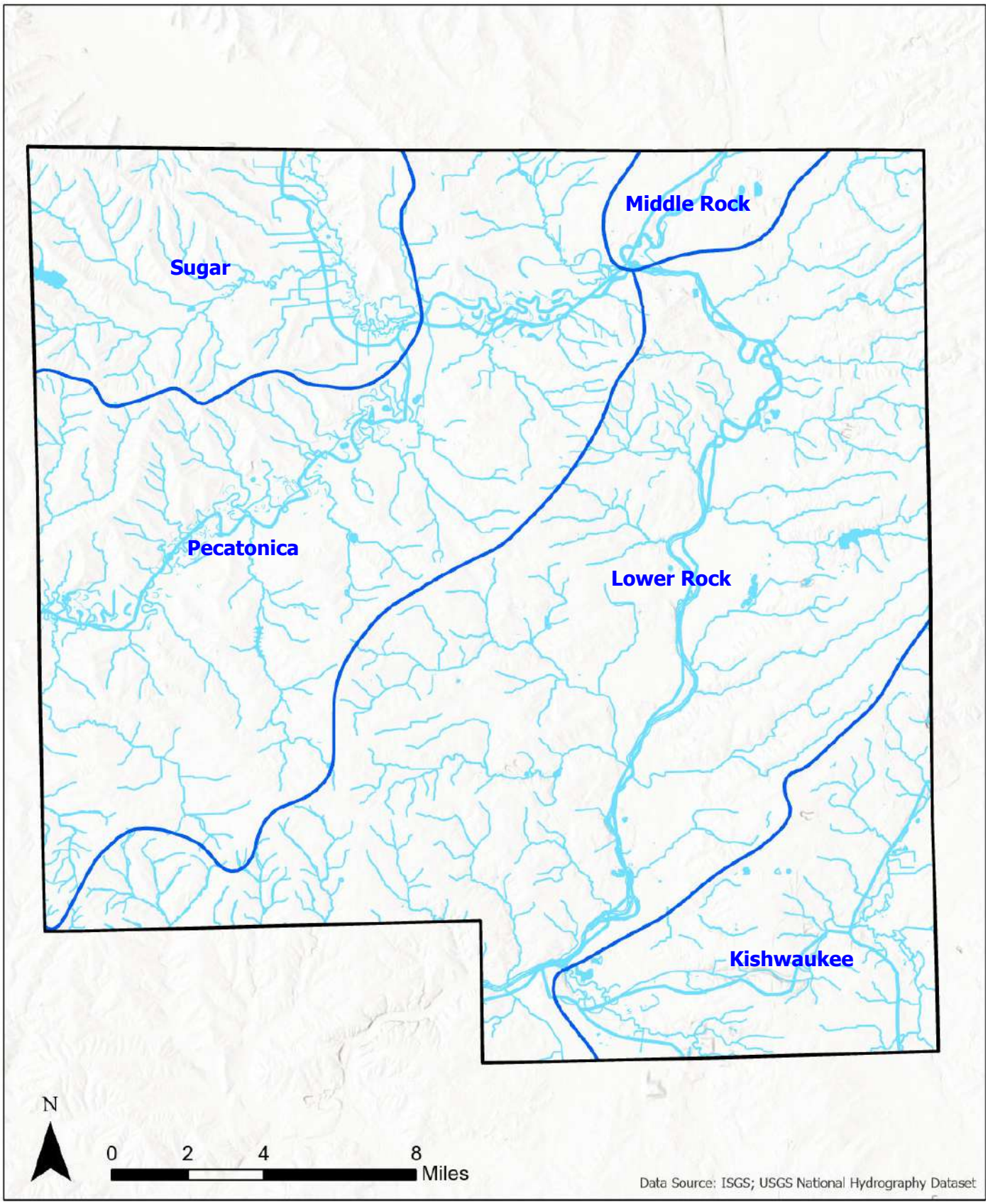
Major Waters

Winnebago County has several water bodies, with the Rock River being the most significant. According to the USGS, Winnebago County consists of five drainage basins: Kishwaukee, Lower Rock, Middle Rock, Pecatonica, and Sugar. Figure 2-3 depicts the hydrologic units within Winnebago County.

The Rock River flows south through the county for a distance of 33.2 stream miles. Headwaters of the Rock River begin in the lake region of Fond du Lac County, Wisconsin. Within Winnebago County the Rock River flows through the communities of South Beloit, Rockton, Roscoe, Machesney Park, Loves Park, and Rockford. There are numerous tributaries that feed into the Rock River. The southeast tributaries of the Rock River include: Killbuck Creek, Kishwaukee River, South Branch Kishwaukee River, Madigan Creek, Keith Creek, Spring Creek, Buckbee Creek, South Ditch, Main Drainage Ditch, Ditch No. 3 and Manning Creek. The northeast tributaries of the Rock River include: Will Creek, McDonald Creek, South Kinnikinnick Creek, North Kinnikinnick Creek, Dry Creek, South Branch Dry Creek, and Turtle Creek. The central west tributaries of the Rock River include: North Kent Creek, South Kent Creek, Kilburn Creek, Mud Creek, and an unnamed Tributary to South Kent Creek.

The Pecatonica River System differs markedly from others in Winnebago County. The main stem has a flat slope and the river valley is very wide, being cut through alluvium. The Pecatonica River System includes: Pecatonica River, Unnamed Tributary to Pecatonica River, Sugar River, Otter Creek, North Branch Otter Creek, Raccoon Creek, Randall Creek, and South Branch Otter Creek.

Figure 2-3: Major Waters of Winnebago County, Illinois



Land Cover & Development

Landcover by Type

Winnebago County's predominant land covers include cultivated crop, developed space, deciduous forest, and hay/pasture (National Land Cover Database 2021). Agricultural lands are found almost everywhere in Winnebago. Deciduous forest cover is primarily found along the Rock River, Pecatonica River, Sugar River, and Kishwaukee River. Significant urban development is concentrated along the eastern boundary of the county and includes the municipalities of Rockford, Roscoe, Rockton, Loves Park and Machesney Park, with rural development to the west. Net developed area in Winnebago County increased by 1.13 percent, or 1.66 square miles, between 2019 and 2023, as shown in Table 2-1.

Table 2-1: Land Cover Change in Winnebago County, 2019-2023

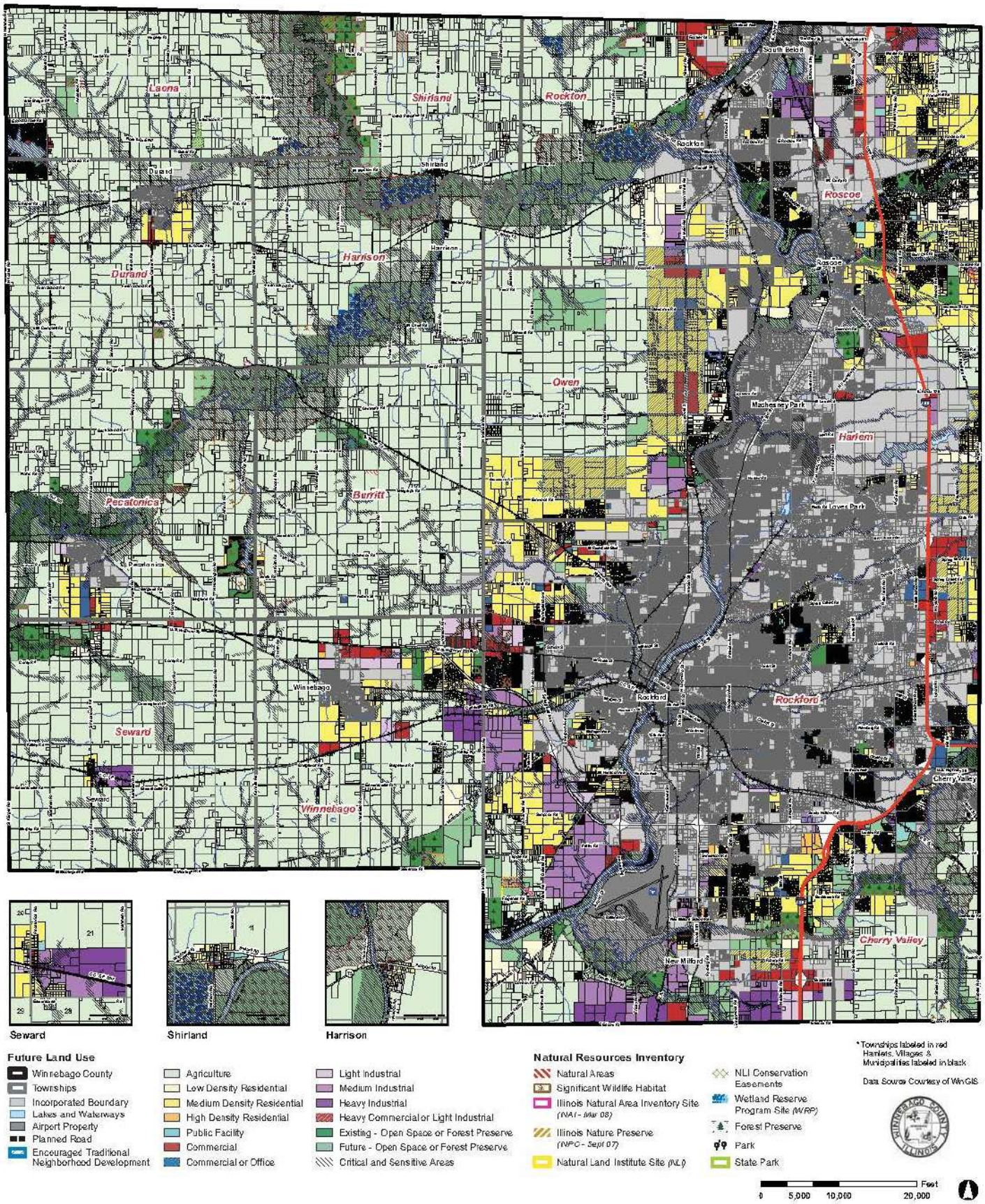
Land Cover Categories	Area 2019 (sq.mi)	Area 2023 (sq. mi)	Net Change (sq. mi)	Percent Change
Developed, High Intensity	9.17	9.33	0.16	1.74%
Developed, Medium Intensity	29.75	30.01	0.26	0.87%
Developed, Low Intensity	61.45	61.92	0.47	0.76%
Developed, Open Space	46.29	47.08	0.79	1.71%
Cultivated Crops	257.23	253.96	-3.27	-1.27%
Hay/Pasture	44.19	45.58	1.39	3.15%
Grassland	1.32	1.42	0.10	7.58%
Deciduous Forest	36.56	36.71	0.15	0.41%
Evergreen Forest	1.04	1.03	-0.01	-0.96%
Mixed Forest	1.15	1.17	0.02	1.74%
Scrub/Shrub	0.02	0.03	0.01	50.00%
Woody Wetland	14.65	14.58	-0.07	-0.48%
Emergent Herbaceous Wetland	6.39	6.76	0.37	5.79%
Barren Land	2.78	2.94	0.16	5.76%
Open Water	7.16	6.66	-0.50	-6.98%
Perennial Snow/Ice	0	0	0	0.00%

Future Land Use in Winnebago County

As the county's population grows, the residential and urban areas will extend further into the county, placing more pressure on existing transportation and utility infrastructure while increasing the rate of farmland conversion. Winnebago County will address specific mitigation strategies in Section 8 to alleviate such issues.

Winnebago County is vulnerable to a variety of natural hazards, therefore the county government—in partnership with state and local government—must make a commitment to hazard mitigation. Winnebago County is committed to ensuring that county elected and appointed officials become informed leaders regarding community hazards so that they are better prepared to set and direct policies for emergency management in mitigation, preparedness, response, and recovery. Winnebago County has adopted a 2030 Land Resource Management Plan to implement its vision for the future of the County. The land use decisions and growth management strategies found in the plan aim to preserve Winnebago County's unique quality of life, which results from its ability to balance the rural and urban characteristics that make up the county.

Figure 2-4: Future Land Use In Winnebago County, Illinois



Section 3: Winnebago County Demographics

Population Distribution

Population (County, Density, and by Municipality)

Winnebago County has a population of 282,188 (U.S. Census Bureau, 2022 Census). This is down slightly (1.5%) from the 2020 Census when the population was 285,337 (U.S. Census Bureau, 2020 Census). Winnebago County has a population density of 556.2 people per square mile. The population is spread throughout the 14 townships: Burritt, Cherry Valley, Durand, Harlem, Harrison, Laona, Owen, Pecatonica, Rockford, Rockton, Roscoe, Seward, Shirland, and Winnebago. Dispersed through those 14 townships are 11 incorporated municipalities: Cherry Valley, Davis Junction, Durand, Loves Park, Machesney Park, New Milford, Pecatonica, Rockford, Rockton, South Beloit, and Winnebago. The largest incorporated jurisdiction in Winnebago County is Rockford, which has a population of approximately 146,713 (U.S. Census Bureau, 2022) (Table 3-1). Rockford also serves as the Winnebago County Seat.[1]

Racial Distribution

Winnebago County is comprised of 64.4% White alone, not Hispanic or Latino, 16.1% Hispanic or Latino, 14.4% Black or African American, 0.7% American Indian and Alaska Native, 3% Asian alone, 0.1% Native Hawaiian or Other Pacific Islander, and 3.4% two or more races (Figure 3-1). Minority populations in Winnebago County represent a substantial portion of the population. Historically, the U.S. Census Bureau defined minorities as anything other than White. However, faced with a rapidly growing "minority" population [in some states "Non-White" minorities now make up a larger percentage of the population than White people], the U.S. Census Bureau is changing its definitions to reflect more accurate representations. In many parts of the U.S., the term minority is no longer appropriate.

Figure 3-1: Racial Distribution of Winnebago County, Illinois

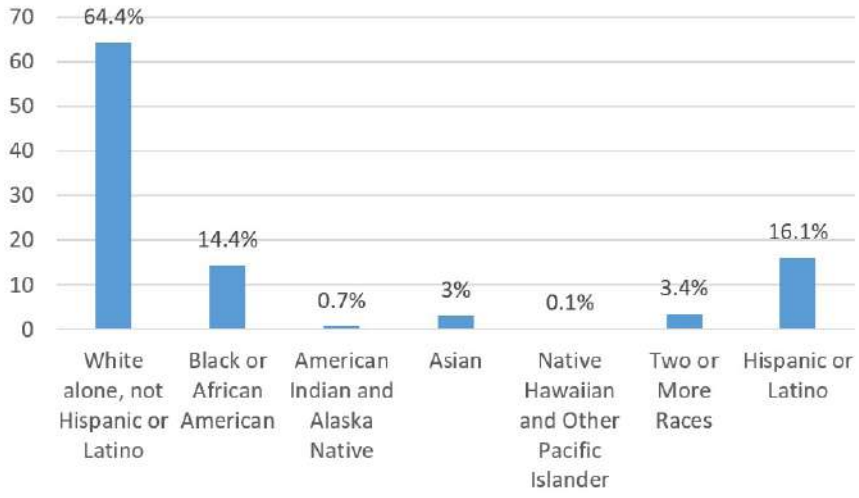


Table 3-1: Population by Municipality in Winnebago County, Illinois

Municipality	Population
Other (Population in unincorporated areas)	6,649
Argyle	576
Harlem	38,931
Lake Summerset	2,115
Loves Park	23,365
Rockford	146,713
Seward	883
South Beloit	7,908
Westlake Village	1,446
Winnebago	5,098
Cherry Valley	2,870
Durand	1,375
Machesney Park	22,752
New Milford	791
Pecatonica	2,053
Rockton	7,789
Roscoe	10,874
Total	**282,188**

1 This section includes recently available demographic data.

Educational Attainment

Educational attainment in Winnebago County is uneven, with the majority of residents in Winnebago County having little to no college education (Figures 3-2, 3-3). Only 24.1 percent of residents in Winnebago County over 25 have a college degree. Where 22.2 percent have at least a high school diploma with some college. According to a report by the Substance Abuse and Mental Health Services Administration (SAMHSA) titled "Disaster Technical Assistance Center- Supplemental Research Bulletin- Greater Impact: How Disasters Affect People of Low Socioeconomic Status"; groups of lower socio-economic status (SES), those who are generally lower-income and low-educated are less likely to be prepared for a disaster, more vulnerable to certain disasters, and less likely to fully recover post-disaster. Impacts of disasters also often have longer felt impacts on those of lower SES. The section titled "After the Disaster" details the long term impacts disasters have on lower SES. Often they have trouble accessing aid, finding stable housing, and managing post-disaster mental impacts.[v]

Figure 3-2: Educational Attainment in Winnebago County, Illinois

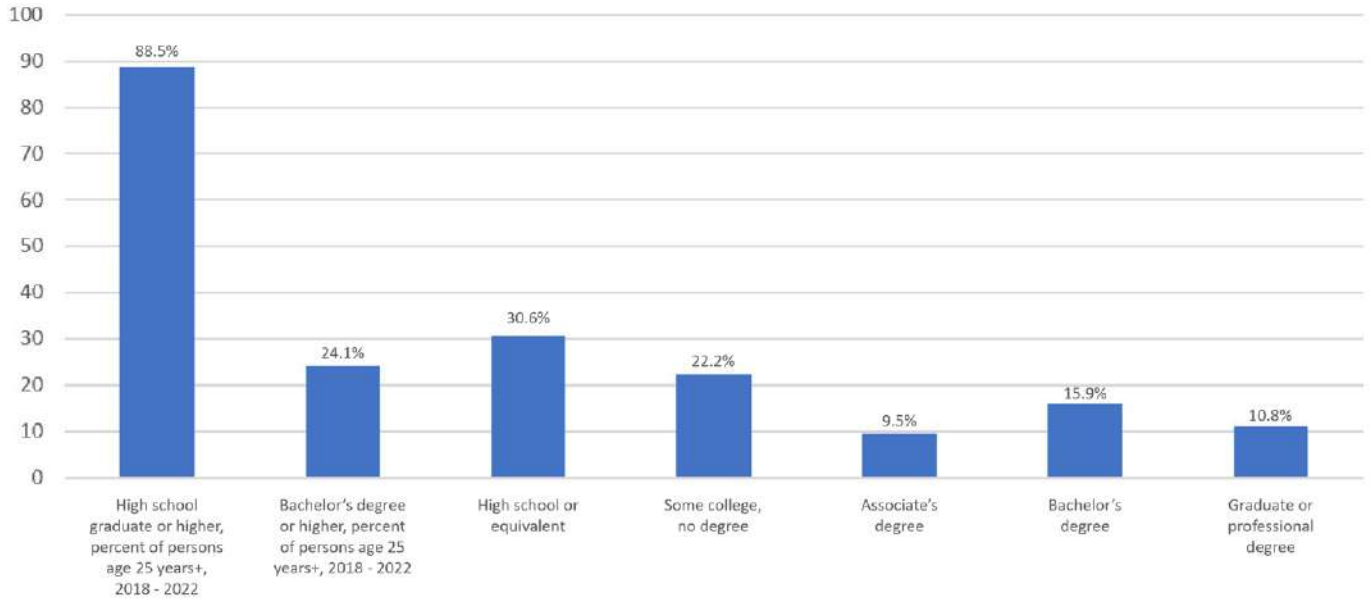
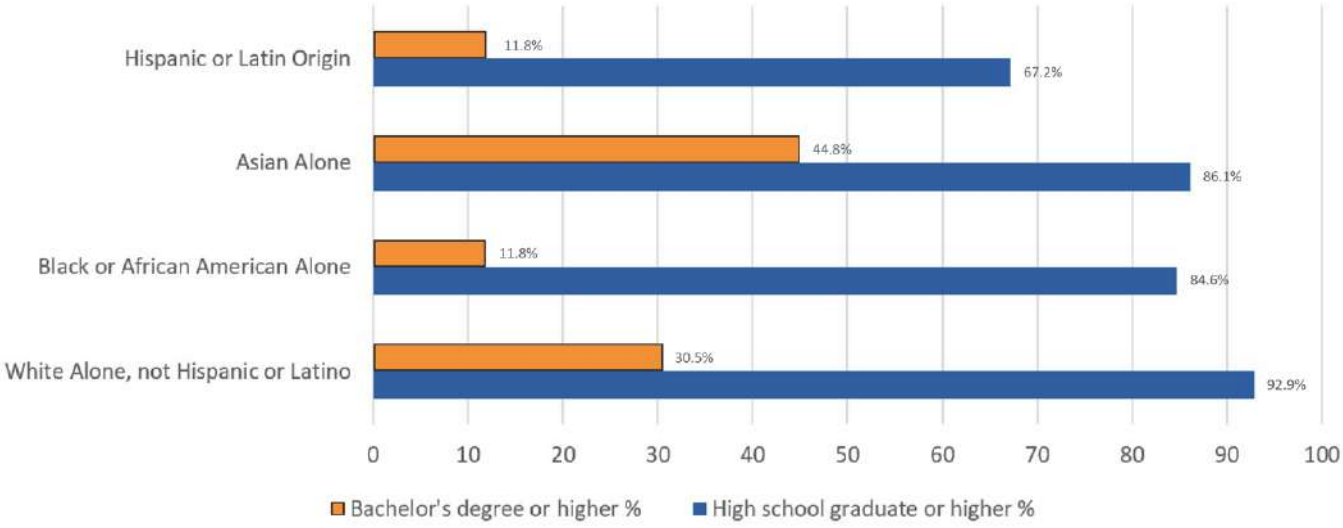


Figure 3-3: Educational Attainment by Race in Winnebago County, Illinois



Economic Distribution

Industry Sectors

Winnebago County's largest employment sectors are comprised of manufacturing, education and healthcare, and administrative and management. The classifications below were sourced from the U.S. Census Bureau's 2022 American Community Survey data (Table 3-2). According to the Illinois Department of Employment Security (IDES), some of Winnebago County's largest employers include Mercyhealth Systems, Rockford Public Schools, OSF Healthcare, and UW Health (Table 3-3).[vi] [vii]

Table 3-2: Industry Sector Percentage in Winnebago County, Illinois

Industry Sector	Percent %
Agriculture, forestry, fishing and hunting, and mining	0.5%
Construction	5.6%
Manufacturing	15.8%
Wholesale trade	2.5%
Retail trade	13.1%
Transportation and warehousing, and utilities	7.4%
Information	1.2%
Finance and insurance, and real estate and rental and leasing	5.1%
Professional, scientific, and management, and administrative and waste management services	8%
Educational services, and healthcare and social assistance	24.1%
Arts, entertainment, and recreation, and accommodation and food services	7.9%
Other services, except public administration	4.8%
Public administration	3.9%

Table 3-3: Employer by Size in Winnebago County, Illinois

Employer Name	Employee Size
Rockford Public Schools	4,075
UW Health	3,780
Mercyhealth Systems	3,000
OSF Healthcare	2,200
Collins Aerospace	2,000
Woodward	2,000
United Parcel Service	2,000
Amazon	1,535
Walmart	1,470
Stellantis	1,459

Poverty

Winnebago County has a median household income of $61,738, compared to the U.S. median household income of $74,580. Approximately 15.4 percent of households in Winnebago County live at or below the federal poverty line. As mentioned above, those of lower SES often have difficulties returning to normalcy post-disaster. Additionally, poverty is not uniform across different demographic sectors.[viii]

Housing

Housing Units (Occupied vs. Vacant)

Winnebago County has a total of 124,983 housing units. Of those housing units, 92.38 percent or 115,459 are occupied and 7.62 percent or 9,524 are vacant (U.S. Census Bureau 2020 DEC Redistricting Data PL 94-171).[ix]

Housing Units (Renter vs. Owner Occupied)

Of the total housing units in Winnebago County, 37,724 or 32.8 percent of those are renter occupied. Of the total housing units, 77,337 or 67.2 percent are owner-occupied.[x]

Table 3-4: Percent of Population in Poverty by Group in Winnebago County, Illinois

Population Group	Percent % of Population
18-34 years	16.1
35-64 years	13.9
65 years and over	11.2
Male	14.7
Female	16.6
White alone	9.4
Black or African American alone	37.8
Asian alone	26.4
Hispanic or Latino	18.2
Employed	7.1
Unemployed	44.1

Figure 3-4: Occupied vs. Vacant Housing Units in Winnebago County, Illinois

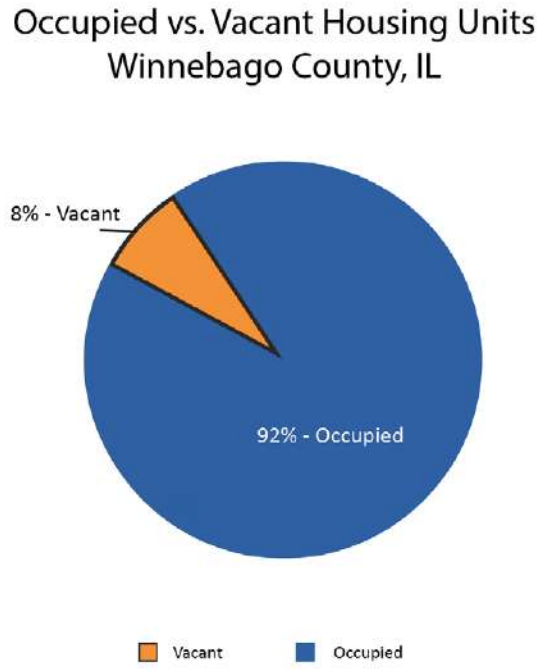
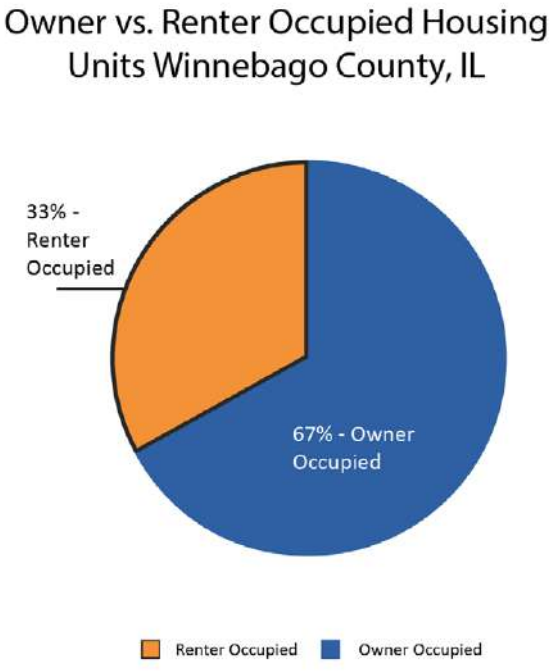


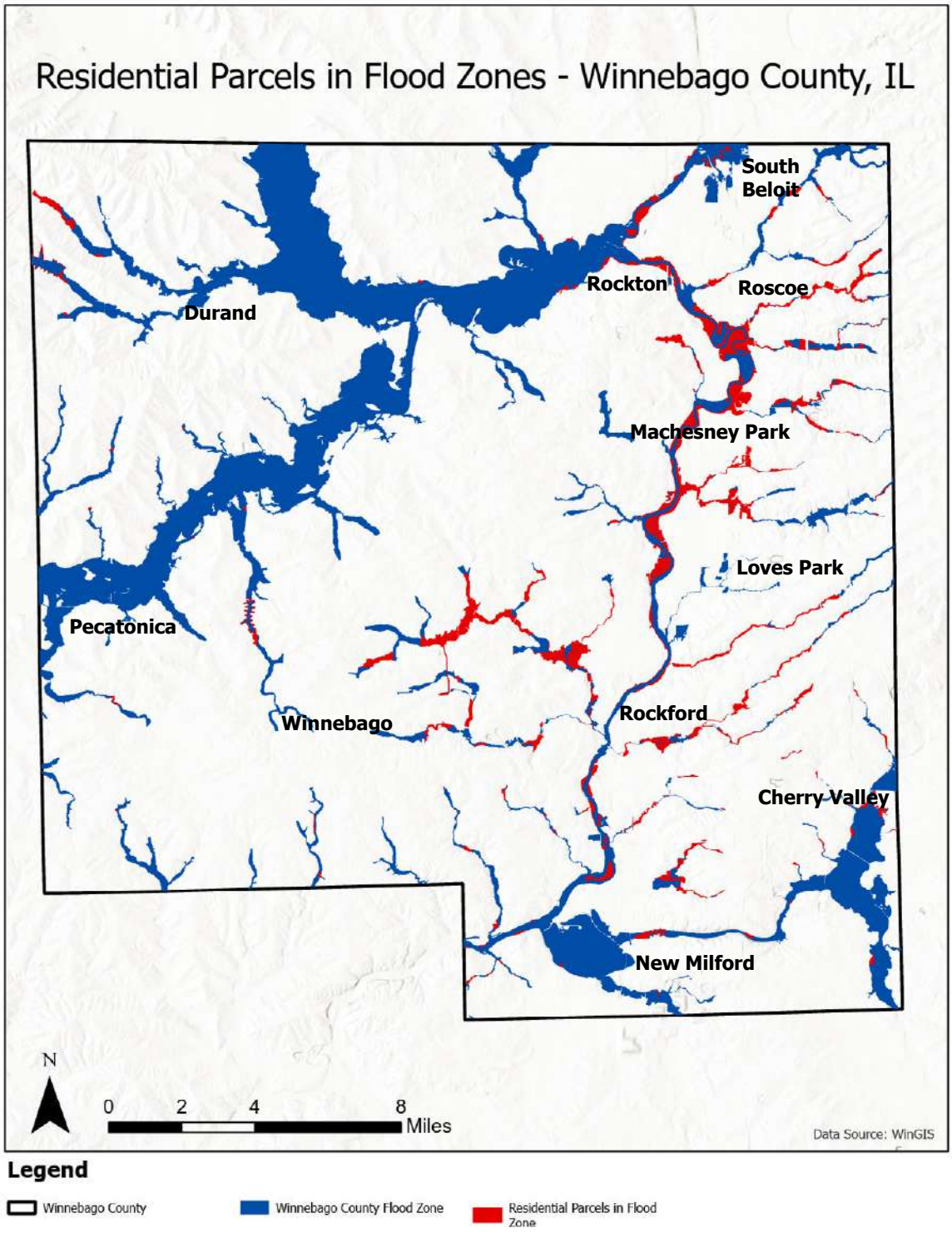
Figure 3-5: Owner vs. Renter Occupied Housing Units in Winnebago County, Illinois



Housing Units (Flood Parcels)

Riverine and stream flooding occurs naturally onto adjacent lands. Issues begin to arise when mass development occurs on both sides of a riverbank and stormwater management is an afterthought. Even with stormwater management as part of the development, riverine flooding is exacerbated by development because the water has less places to naturally dissipate into. Flooding has been a reoccurring problem for Winnebago County as recently as 2022 (flash flood). Winnebago County has a total of 128,438 parcels. Of the total, 78.78 percent of those are residentially zoned parcels. Of the residential parcels, 9,750 or 9.63 percent are within a floodplain. The majority of these parcels are municipalities in the eastern part of the county (Rockford, Machesney Park, Rockton, etc.).[xi]

Figure 3-6: Residential Flood Zone



Section 4: Winnebago County Critical Facilities

Winnebago County Geographic Information Systems (WinGIS) maintains a critical facilities list for those identified within Winnebago County. Critical facilities are defined as those which are vital to the operation of the county. Table 4- 1 identifies the number of public facilities by type, Table 4-2 identifies the utility facilities by type, and provider, for each sector within Winnebago County. Figure 4-1 displays a map of Winnebago County police, fire, and hospitals—a subset of the critical facilities list.

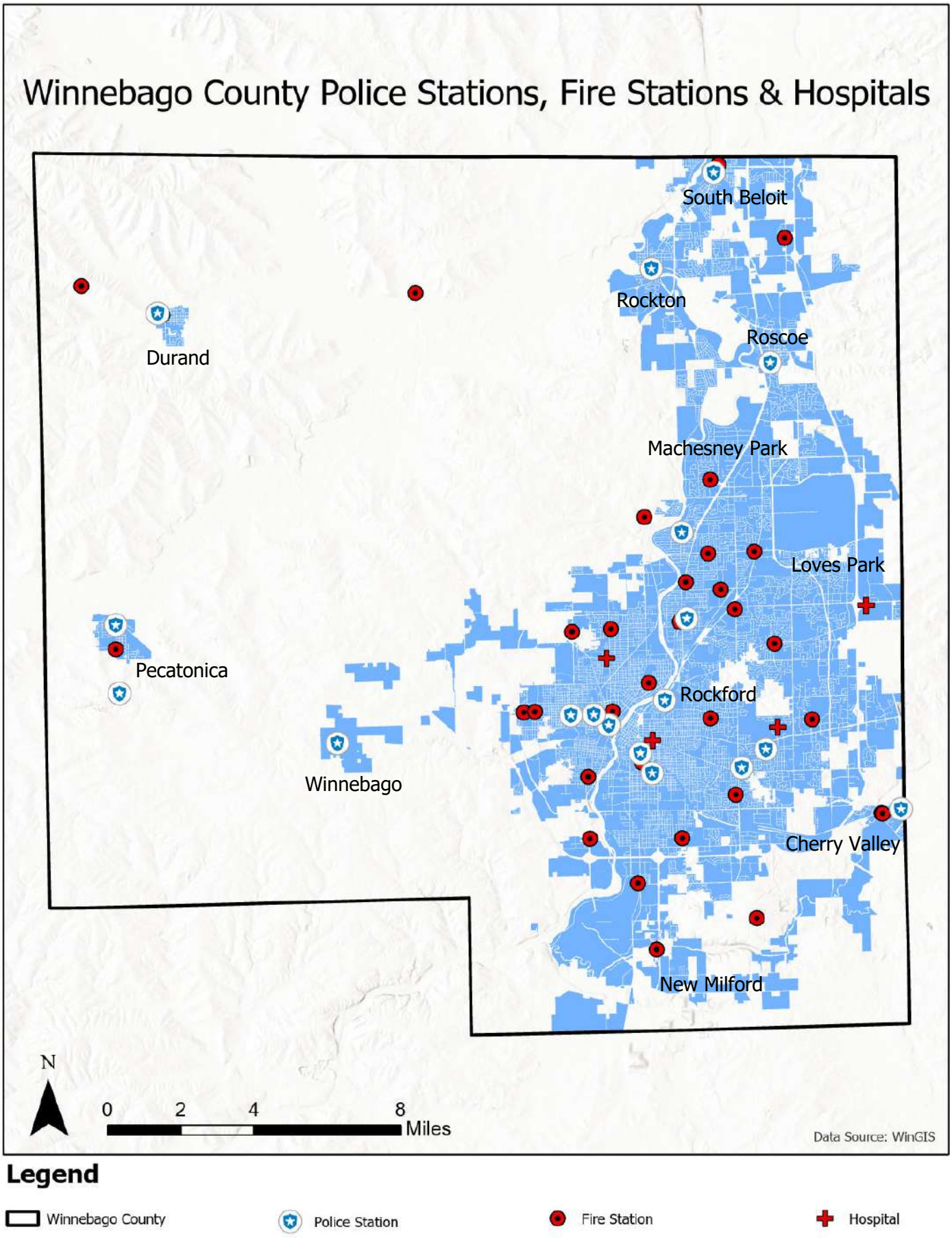
Table 4-1: Winnebago County Public Facilities

Public Facility	Number of Facilities
Government Building	110
Park District Facilities	191
Community College / College / University	25
School or Educational	226
Hospital or Medical	410
Police, Fire, or Military	80

Table 4-2: Winnebago County Utility Providers

Utility Type	Company Name
Electricity	Commonwealth Edison
Gas	Nicor Gas
Internet	HughesNet
Internet	AT&T
Internet	Viasat
Internet	T-Mobile
Internet	UScellular
Internet	Starlink
Internet	Rise Broadband
Internet	Verizon
Internet	Xfinity
Water and Sewer	City of Rockford
Water and Sewer	Four Rivers Sanitation Authority
Water and Sewer	City of Belvidere
Water and Sewer	North Park Water District

Figure 4-1: Winnebago County Critical Facilities



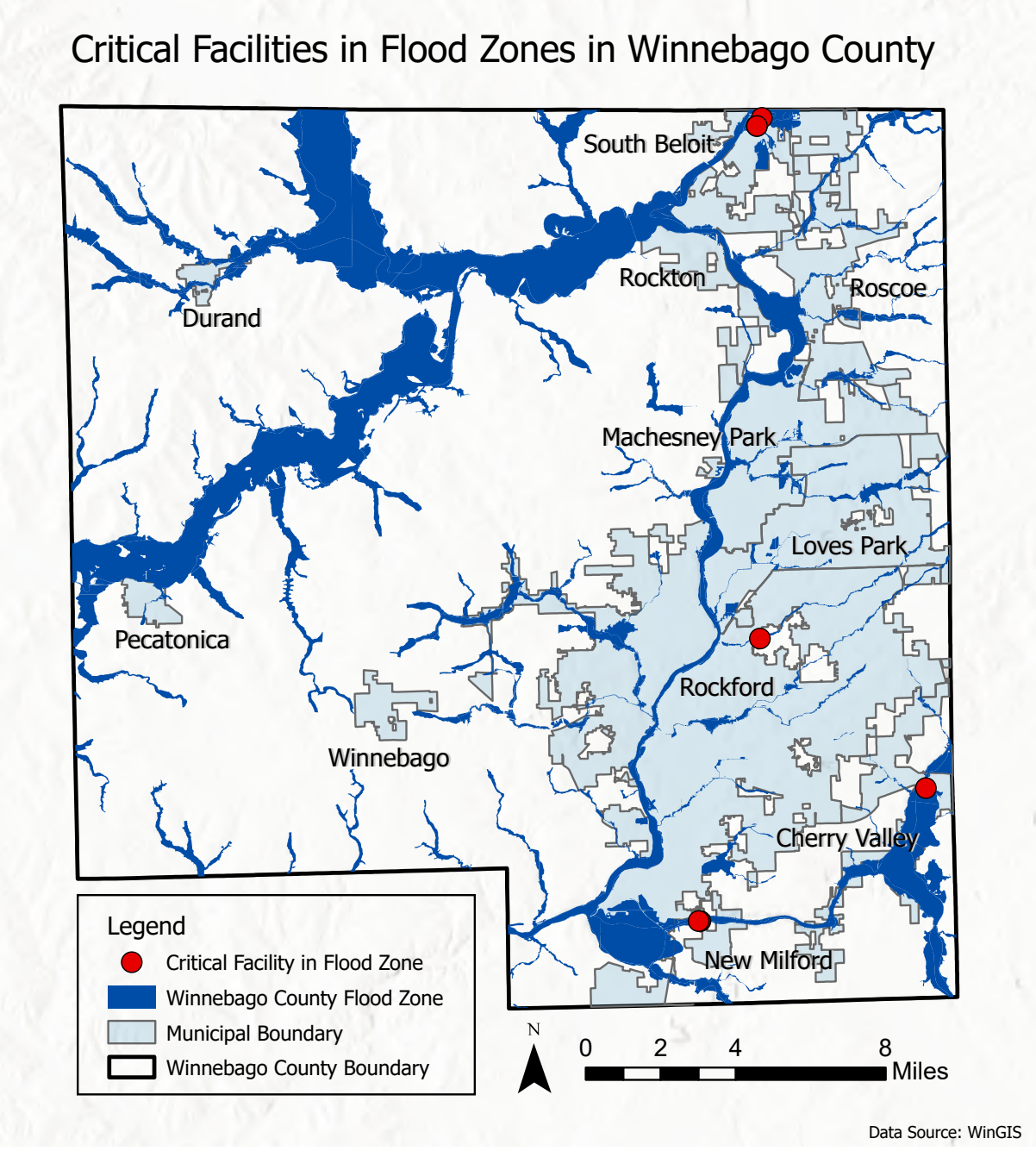
Winnebago County Essential Facilities in a Floodplain

Of the essential facilities located in Winnebago County, a number of them are located within a floodplain. Those located within a floodplain are especially susceptible to damage during storm events. Table 4-3 highlights the facilities by type that are located in floodplains and Figure 4-2 maps these within Winnebago County.

Table 4-3: Winnebago County Critical Facilities in Floodplains

Facility Type	Number of Facilities
Municipal (Police, Fire, Government Buildings)	14
Utilities	6

Figure 4-2: Critical Facilities in Flood Zones in Winnebago County



Winnebago County Schools & School Districts

Winnebago County has seven school districts. For the 2023-2024 school year, Winnebago County's 85 schools served 44,184 students. The minority enrollment rate was 51 percent. Figure 4-3 provides the county's incorporated school districts.

Figure 4-3: School Districts in Winnebago County

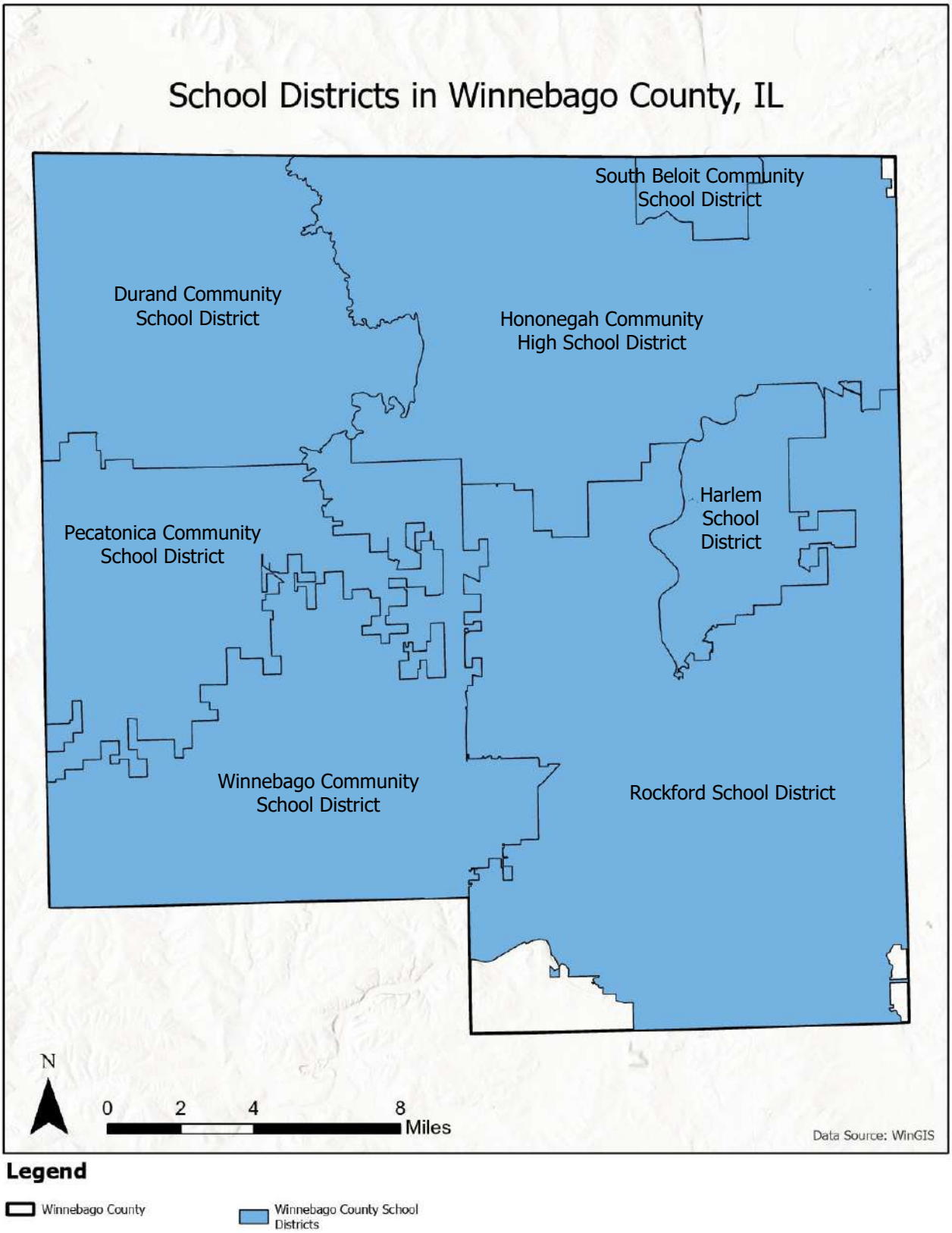


Table 4-4: Winnebago County School Districts

Boone/Winnebago ROE

School Name	Type	Grade Levels	Enrollment
Reg'l Learning Academy Star Winn	Public, Alternative	6 to 11	99
Reg'l Learning Center Star Winn	Public	9 to 12	4
Regional Alternative School	Public	9 to 12	101

County of Winnebago School District 320

School Name	Type	Grade Levels	Enrollment
Blackhawk Elementary School	Public	5 to 6	119
Clark Elementary School	Public	PK, K to 1	214
Riverview Elementary School	Public	2 to 4	207
South Beloit Junior High School	Public	7 to 8	165
South Beloit Senior High School	Public	9 to 12	246

Durand CUSD 322

School Name	Type	Grade Levels	Enrollment
Dolan Center Maryville Farm Campus	Public, Alternative	1 to 12	34
Durand Elementary School	Public	PK, K to 6	261
Durand High School	Public	9 to 12	164
Durand Junior High School	Public	7 to 8	87

Harlem UD 122

School Name	Type	Grade Levels	Enrollment
Donald C Parker Early Education Center	Public	PK-K	620
Harlem High School	Public	9 to 12	1875
Harlem High School- 9th Grade Campus	Public, Alternative	9	-
Harem Middle School	Public	7 to 8	973
Loves Park Elementary School	Public	1 to 6	343
Machesney Elementary School	Public	4 to 6	369
Maple Elementary School	Public	1 to 6	372
Marquette Elementary School	Public	1 to 3	264
Olson Park Elementary School	Public	1 to 6	339
Ralston Elementary School	Public	1 to 6	285
Rock Cut Elementary School	Public	1 to 6	413
Windsor Elementary School	Public	1 to 6	341

Table 4-4: Winnebago County School Districts - Continued

Hononegah CHD 207

School Name	Type	Grade Levels	Enrollment
Hononegah High School	Public	9 to 12	1891

Kinnikinnick CCSD 131

School Name	Type	Grade Levels	Enrollment
Kinnikinnick School	Public	4 to 5	382
Ledgewood Elementary School	Public	PK, KG to 1	403
Roscoe Middle School	Public	6 to 8	572
Stone Creek School	Public	2 to 3	371

Pecatonica CUSD 321

School Name	Type	Grade Levels	Enrollment
Pecatonica Community Middle School	Public	5 to 8	287
Pecatonica Elementary School	Public	K to 4	326
Pecatonica High School	Public	9 to 12	290

Prairie Hill CCSD 133

School Name	Type	Grade Levels	Enrollment
Prairie Hill Elementary School	Public	PK, K to 4	448
Willowbrook Middle School	Public	5 to 8	303

Rockford School District 205

School Name	Type	Grade Levels	Enrollment
A C Thompson Elementary School	Public	K to 5	280
Abraham Lincoln Middle School	Public	6 to 8	683
Arthur Froberg Elementary School	Public	K to 5	404
Auburn High School	Public	9 to 12	1936
Barbour Two-Way Lang Immersion	Public	K to 8	686
Bernard W Flinn Middle School	Public	6 to 8	900
Beyer Elementary School	Public	1 to 5	335
Brookview Elementary School	Public	K to 5	490
C Henry Bloom Elementary School	Public	K to 5	375
Cherry Valley Elementary School	Public	K to 5	631
Clifford P Carlson Elementary School	Public	K to 5	433
Conklin Elementary School	Public	K to 5	393
Dennis Early Childhood Center	Public	PK	317
Eisenhower Middle School	Public	6 to 8	938
Ellis Elementary School	Public	K to 5	378

Table 4-4: Winnebago County School Districts - Continued

Rockford School District 205 - Continued

School Name	Type	Grade Levels	Enrollment
Fairview Early Childhood Center	Public	PK	460
Galapagos Rockford Charter School	Public, Charter	K to 8	359
Gregory Elementary School	Public	K to 5	459
Guilford High School	Public	9 to 12	2071
Haskell Elementary School	Public	K to 5	252
Jackson Charter School	Public, Charter	K to 8	215
Jefferson High School	Public	9 to 12	2114
Julia Lathrop Elementary School	Public	K to 5	331
Kennedy Middle School	Public	6 to 8	463
Legacy Academy of Excellence Center	Public, Charter, Alternate	K to 12	209
Lewis Lemon Elementary	Public	K to 5	342
Maud E Johnson Elementary School	Public	K to 5	384
McIntosh Elementary	Public	K to 5	344
Montessori Elementary School	Public	PK, K to 8	601
R K Welsh Elementary School	Public	K to 5	443
Riverdahl Elementary School	Public	K to 5	555
Rockford East High School	Public	9 to 12	1718
Rockford Environmental Science Academy	Public	6 to 8	1106
Rolling Green	Public	PK, K to 5	531
Spring Creek Elementary School	Public	K to 5	496
Summerdale Early Childhood Center	Public	PK	413
Swan Hillman Elementary School	Public	K to 5	588
Thurgood Marshall Elementary	Public	1 to 4	363
Thurgood Marshall School	Public	5 to 8	471
Washington Elementary School	Public	K to 5	494
West Middle School	Public	6 to 8	952
West View Elementary School	Public	K to 5	444
White Swan Elementary School	Public	K to 2	585
Whitehead Elementary School	Public	K to 5	614
Wilson ASPIRE	Public	7	28
Wm Hashold Early Childhood Center	Public	PK	530

Rockton School District 140

School Name	Type	Grade Levels	Enrollment
Rockton Elementary School	Public	PK, K to 2	270
Stephen Mack Middle School	Public	6 to 8	483
Whitman Post Elementary School	Public	3 to 5	526

Table 4-4: Winnebago County School Districts - Continued

Shirland CCSD 134

School Name	Type	Grade Levels	Enrollment
Shirland C C School	Public	K to 8	101

Winnebago CUSD 323

School Name	Type	Grade Levels	Enrollment
Dorothy Simon Elementary School	Public	PK, K to 2	270
Jean McNair Elementary School	Public	3 to 5	274
Winnebago High School	Public	9 to 12	412
Winnebago Middle School	Public	6 to 8	304

School Name	Type	Grade Levels	Enrollment
n/a	n/a	n/a	Total: 44,184

Section 5: Planning Process

The Multi-Hazard Mitigation Plan (MHMP) update process was broken into a multi-phase process. The process was managed by Region 1 Planning Council (R1) in coordination with Winnebago County Emergency Management and the Winnebago County Highway Department. The process included identifying an extensive list of stakeholders throughout Winnebago County. One meeting was hosted at Veteran's Memorial Hall to inform stakeholders of the update process. During this meeting, several stakeholders indicated they had not participated in previous updates. R1 staff, with the assistance of Winnebago County Assistant Engineer Sean Von Bergen, and Emergency Management Coordinator Trent Brass, summarized the update process, in addition to allowing for a period of public comment and stakeholder comment. The final draft of the document was sent to the Illinois Emergency Management Agency (IEMA) and the Federal Emergency Management Agency (FEMA) for review, comments, and approval.

Phase 1: Review of the 2019 Multi-Hazard Mitigation Plan. The 2019 version of the Winnebago County MHMP was extensively reviewed by the R1 staff to identify what data was necessary to update and what could remain in this version. In addition, the stakeholder list was reviewed and expanded. The 2019 version was continually referenced throughout this document and certain sections were drafted into this version with additional editing.

Phase 2: Updating data from the 2019 Multi-Hazard Mitigation Plan. A new outline was drafted for the 2024 MHMP Update which mirrored the previous version. An updated visual standard was developed to align with R1 brand standards. The updated outline added certain sections to address recent hazard responses including the COVID pandemic, the Chemtool fire and incident response, and developing concerns regarding per-and polyfluoroalkyl substances (PFAS). A data collection outline was drafted to determine what data was necessary to update and where to collect it. The predetermined data was updated where available and appropriate. This included socio-demographic data, land-use, and mitigation implementations and Regional Economic Modeling Initiative (REMI). During this phase the Risk Priority Index ranking (RPI) was also completed. The RPI represents the individual stakeholder's perceptions of the severity, probability, and detection ability of Winnebago County.

Phase 3: Drafting of the 2024 Multi-Hazard Mitigation Plan. The main drafting phase of the updates to the document. This phase included editing, revisions, and opportunity for comment. Following an internal review of the final draft, a copy was sent to the partner and stakeholder group for final comments, and those were included where appropriate. Unless specifically indicated, participants in the plan update had no additional changes in community priorities.

During the plan update a number of jurisdictions integrated the hazard mitigation plan into other planning mechanisms. This update included Emergency Medical Service agencies (Fire Districts) into the planning process. The City of Rockford and City of Loves Park both have their own municipal fire departments. Winnebago County sought to address aging tornado sirens as part of the update process. Threat and Hazard Identification and Risk Assessment (THIRA) and Injury and Illness Prevention Programs (IPP) were reviewed and considered by the County and other jurisdictions as part of the update process. Additionally, Winnebago County recently completed an update of its Surface Water Management Ordinance, which specifically addresses flood plain permitting in the unincorporated areas. The County and the City of Rockford recently updated Emergency Operations Plans.

Region 1 Planning Council recently adopted the regions first Climate Action Plan to address many of these same hazards. Additionally, R1 is working to draft a Resilence Improvement Plan with a more specific focus on regional infrastructure improvements across many of the same identified hazards.

Phase 4: Review and Approval of the 2024 Multi-Hazard Mitigation Plan. The partner organizations and the public reviewed the draft plan and proposed revisions. Winnebago County and the partner organizations accepted the plan after R1 incorporated the necessary changes from stakeholder comments. Following this, R1 forwarded the plan to the mitigation staff at the Illinois Emergency Management Agency (IEMA) and the Federal Emergency Management Agency (FEMA) for review and comments before final approval by FEMA. Following review and comment by FEMA staff, additional revisions were included for final approval.

The DMA 2000 planning regulations require that planning team members from each jurisdiction actively participate in the MHMP process. The planning team and stakeholders were actively involved on the following components:

- Attending the MHMP kick off meeting.
- Providing available assessment and parcel and historical hazard information.
- Reviewing and providing comments on the draft plans.
- Coordinating and participating in the public input process.
- Coordinating the formal adoption of the plan by the county and other jurisdictions.

Partner Organizations

The R1 staff, with assistance from Winnebago County, would like to give an explicit thank you to the following organizations.

Table 5-1: Partner Organizations

Organization	Type	Title
Winnebago County- Building Division	County	Office Manager
Winnebago County- Health Department	County	Director of Public Health Preparedness
Winnebago County- Highway Department	County	County Engineer
Winnebago County- Planning & Zoning Division	County	Planning & Zoning Officer
Winnebago County- Purchasing	County	Director
Winnebago County- Regional Planning & Economic Development	County	Chief Operations Officer
Winnebago County- Emergency Operations (Sheriff's Department)	County	Emergency Management Coordinator
Winnebago County Fire Official- Blackhawk Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official-Durand Fire Protection District	Winnebago County Fire Protection Districts	Chief
City of Loves Park Fire Department	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Cherry Valley Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- German Valley Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Harlem-Roscoe Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- New Milford- Fire Protection District	Winnebago County Fire Protection Districts	Deputy Fire Chief
Winnebago County Fire Official- North Park Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Northwest Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Pecatonica Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Rockton Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Shirland Fire Department	Winnebago County Fire Protection Districts	Chief
City of Rockford Fire Department	Winnebago County Fire Protection Districts	Chief of Operations/EMA Director
Winnebago County Fire Official- Stillman Fire Protection District	Winnebago County Fire Protection Districts	Chief
Winnebago County Fire Official- Win-Bur-Sew Fire Protection District	Winnebago County Fire Protection Districts	Chief
Federal Emergency Management Agency (FEMA)	Federal Government Agency	FEMA Mitgation Planning
Illinois Emergency Management Agency (IEMA)	State Government Agency	Hazard Mitigation Section Manager
Region 1 Planning Council	Special Government	Project Coordinator, Executive Director
City of Loves Park (*Municipal Fire Departments)	County Municipality	Economic Development and Planning Manager, Director of Community Development, Public Works
City of Rockford (*Municipal Fire Departments)	County Municipality	City Administrator, Public Works, City Engineer
City of South Beloit	County Municipality	City Administrator, Mayor, Public Works- Streets
Village of Cherry Valley	County Municipality	Public Works Director, Village Administrator
Village of Durand	County Municipality	Mayor, Village Zoning Administrator
Village of Machesney Park	County Municipality	Community Development & Building Coordinator, Village Administrator, Public Works
Village of New Milford	County Municipality	Village President
Village of Pecatonica	County Municipality	Village President

Table 5-1: Partner Organizations Continued

Organization	Type	Title
Village of Rockton	County Municipality	Mayor, Public Works, Chief of Police
Village of Roscoe	County Municipality	Village Administrator
Village of Winnebago	County Municipality	Public Works Director, Village President, Village Administrator, Chief of Police
Boone-Winnebago County School Districts	School District	Superintendent, Business Administrator, Business Manager
Rock Valley College	Educational Institution	Emergency Manager
Rockford Park District (*New participant)	Special District	Operations Director
Chicago-Rockford International Airport	Service Provider	Executive Director, Emergency Manager
Commonwealth Edison (ComEd) (Power)	Service Provider	External Affairs Manager
Nicor (Gas)	Service Provider	Community Affairs
Burritt Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Cherry Valley Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Durand Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Harlem Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Harrison Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Laona Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Owen Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Pecatonica Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Rockford Township	Winnebago County Township	Township Supervisor, Highway Commissioner, Assistant Highway Commissioner
Rockton Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Roscoe Township	Winnebago County Township	Township Supervisor, Highway Commissioner, Assistant Highway Commissioner
Seward Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Shirland Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Winnebago Township	Winnebago County Township	Township Supervisor, Highway Commissioner
Swedish American Hospital Group	Hospital	Emergency Management Coordinator
OSF Healthcare	Hospital	Emergency Management Coordinator
North Park Public Water District	Utility Provider	Director of Government Affairs
Four Rivers Sanitation Authority	Utility Provider	Executive Director, Director of Engineering

Timeline

May-September: Data. Beginning in May 2024, and at the direction of Winnebago County, R1 began reviewing the 2019 Winnebago County MHMP. Following a thorough review of the 2019 document, work began on updating the data included within this plan. The 2019 version is continually referenced throughout the current update process. The comprehensive data update for the MHMP included population, land use, economic factors, and socio-demographic data. All maps were updated. During this data collection phase, Risk Analysis worksheets were distributed to stakeholders. Additionally, stakeholder partners received Mitigation Strategy worksheets to review and update for incorporation into the Mitigation Strategy Matrix included in Appendix G.

June-October: Draft. At a kick-off meeting in May, Winnebago County staff reviewed the draft outline proposed by R1 to serve as the basis for the 2024 version of the Winnebago County MHMP. The drafting process took multiple months and included several reviews and revisions, including comments from stakeholders and the public. There is some carry-over with certain sections from the 2019 version where appropriate, as noted.

November: Public/Stakeholder Comment. In November, R1 and Winnebago County made the plan draft available to the public for comment. Public versions of the draft MHMP document were posted on the R1 website, with a link available from the Winnebago County website as well. Additionally, a draft version was sent to stakeholders directly. Everyone reviewing the document was asked to provide comments on the draft in writing via email, for their inclusion in the final document.

December: Following the public review period, any comments submitted were reviewed and incorporated into the final draft. R1 and Winnebago County staff then conducted a self-review and internal review. A Public Information Meeting was held at the Winnebago County Administration building on December 3.

December-January: Approval. Submission to IEMA/FEMA for review. Following the receipt of comments and suggestions from IEMA and FEMA, revisions were made based on any comments received. R1 and Winnebago County submitted the final edited draft to IEMA and FEMA representatives for review and comments. The final version was adopted by Winnebago County and individual stakeholder jurisdictions over the following weeks.

Public Involvement

The project team (R1 and Winnebago County staff) solicited stakeholder input during the planning process with varying levels of involvement and commitment. When the draft was finalized it was submitted to both stakeholders (including municipal jurisdictions and special districts) and the public through the R1 and Winnebago County websites. A public comment period will run from November 5 to November 20. The plan was also distributed to emergency management contact in the neighboring counties of Boone, Stephenson, and Ogle for review and comment. Appendix E contains comments received by both the public and stakeholders throughout the plan process.

Organizational Involvement

The 2024 Winnebago County MHMP would not have been possible without the invaluable feedback and review from the partner organizations. A thorough stakeholder list was compiled that included a number of public and private organizations who also participated in the 2024 update to the MHMP. These organizations can be found on page 26. New partner organizations are highlighted with an (*). Each organization offered feedback on the plan at some point during the process. Organizations were typically contacted by email throughout the update process. Phone calls and in person meetings were conducted as necessary to assist partner organizations in completing the Risk Priority Index rankings or Mitigation Strategy worksheets.

Review of the Existing Plans

The R1 team reviewed publicly available plans related to resource management, and disaster response. These included plans from Winnebago County, municipalities, FEMA, and IEMA. The project team also received feedback from emergency response coordinators at the county and private sector levels (including multiple health care providers). The 2019 Winnebago County MHMP was a continual source for the current update throughout the process. The existing plans reviewed during this update, in addition to how they were utilized, can be found in Appendix F.

Data Updated

During the 2024 update, the majority of the data updated included sociodemographic data including population, race, educational attainment, economic indicators, poverty, and housing data. This data was updated to better demonstrate an accurate county profile as most of the current data available, aided by the 2020 Census (data updates are also required by FEMA). Land use data was examined carefully as well to ensure an accurate representation of existing and potential hazard risks throughout the county. A more in-depth analysis by Regional Economic Modeling, Inc. (REMI) is included. For the 2024 update, REMI projected property damage costs by natural disaster type are shown on page 37.

Additional narrative is included to address additional hazards related to the COVID-19 pandemic, the Chemtool fire, and of per-and poly-fluoroalkyl substances (PFAS).



Winnebago County, Illinois
Natural Hazards Assessment

Section 6: Risk Analysis

The goal of mitigation is to reduce future hazard impacts including loss of life, property damage, disruption to local and regional economies, and the expenditure of public and private funds for recovery. Sound mitigation requires rigorous risk assessment. A risk assessment involves quantifying the potential loss resulting from a disaster by assessing the vulnerability of buildings, infrastructure, and people. This assessment identifies the characteristics and potential consequences of a disaster, how much the disaster could affect the community, and the impact on community assets. A risk assessment consists of these components—hazard identification, risk assessment, hazard profiling, county-wide risk analysis, and recommendations.

Hazard Identification

The hazards profiled in Section 7 were those that were identified by FEMA, IEMA, the 2023 Illinois Natural Hazard Mitigation plan, and those highlighted in the 2019 version. The selection of hazards included the review of existing threats to Winnebago County, review of historic national weather records, and review of FEMA's disaster declarations by type. Figure 6-1 shows the hazards for the Risk Analysis.

State Weather Records

R1 reviewed historic national weather records to create a profile of weather events that have traditionally impacted Winnebago County. This aided in choosing hazards to profile in this plan. The data was collected from the National Centers for Environmental Information (NCEI; previously the National Climatic Data Center (NCDC)), National Weather Service (NWS), National Oceanic and Atmospheric Administration (NOAA), and data from the Illinois State Climatologist Office (ISCO) through the Illinois State Water Survey (ISWS).

The NCEI records provide estimates of damage reported to the NWS from various local, state, and federal sources. These estimates are often preliminary in nature and may not match final estimates. Historic averages for climate and weather were collected through the NWS and ISCO. Finally, data collected from NOAA provided classifications for weather.

The NCEI reported 450 events in Winnebago County from 1950 to 2023 (these are strictly weather events reported by the area, and may not include all events depending on their size and intensity). The following hazard-profile sections each include a summary table of events related to each hazard type. Table 6-1 summarizes meteorological hazards reported by NCEI for Winnebago County. Full details of individual hazard events are on the NCEI website.

Figure 6-1: Hazard Identification

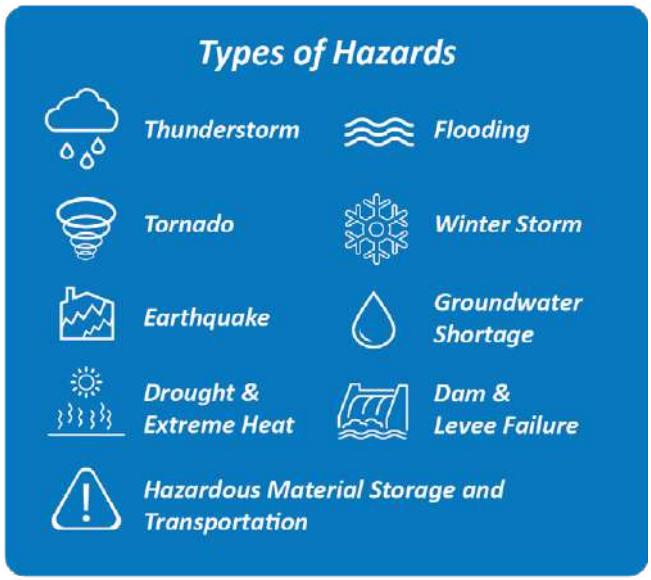


Table 6-1: Disaster by Event Type, with Property Damage Estimate in Winnebago County, Illinois

Event Type	NCEI Property Damage Estimate	NCEI Property Damage Estimate
Winter Storm/ Blizzard	37	-
Drought/ Excessive Heat	27	-
Flash Flood/ Flood	74	$30,932,000.00
Thunderstorm	291	$5,561,500.00
Tornado	21	$5,440,000.00
Total:	**450**	**$41,933,500.00**

Federal Emergency Management

Since 1957, FEMA[xii] has declared 58 major disasters and 9 emergencies for the State of Illinois. Emergency declarations allow states to access FEMA funds for Public Assistance (PA); disaster declarations allow for even more PA funding, including Individual Assistance (IA) and the Hazard Mitigation Grant Program (HMGP). Winnebago County has received federal aid for eighteen declared disasters and emergencies since 1965. Table 6-2 lists specific information for each disaster declaration in Winnebago County. Illinois, and Winnebago County, are part of declaration DR-4489-IL, the Illinois Covid-19 Pandemic, declared on March 26, 2020 and lasting through May 11, 2023. The most recent disaster declaration affecting Winnebago County since the 2019 update was made on September 20, 2024, as a result of the sever storms, tornadoes, straightline winds, and flooding in the State of Illinois during the period of July 13-16, 2024.

Risk Priority Number Index

The Risk Priority Index Number (RPN) quantifies risk as a ranked number representative of the product of hazard severity (S) X probability (P) X detection (D). This tool is used to provide partner organizations with a ranking to prioritize mitigation strategies for high-risk-priority hazards. The R1 project team used historical hazard data to determine probability and knowledge of local conditions to determine the possible severity of a hazard; the hazards that were included in the RPN analysis are profiled in Section 7. For the 2024 version, the analysis metrics included: severity (S), probability (P), and detection (D)— affected area was also included but is not factored into the analysis[1]. The RPN represents a comprehensive risk assessment including organizations from the private, public, and non-profit sectors. The three components are weighted independently initially; however, the final RPN (Table 6-3) is a weighted normalization ranking to offer the RPN as an evaluative measure.

1 Affected area was included to understand jurisdictional perception of geographic impact.

Table 6-2: FEMA disaster declaration by specific type in Winnebago County, Illinois

Declaration Number	Date of Declaration	Descriptions
227	4/25/1967	Tornadoes
373	4/26/1973	Severe Storms and Flooding
438	6/10/1974	Severe Storms and Flooding
3068	1/16/1979	Blizzards and Snowstorms
997	7/9/1993	Severe Storms and Flooding
1129	7/25/1996	Severe Storms and Flooding
3134	1/8/1999	Winter Storms
3161	1/17/2001	Winter Storms
3230	9/7/2005	Hurricane Katrina Evacuation
3269	12/29/2006	Snow
1722	8/30/2007	Severe Storms and Flooding
3283	3/13/2008	Record Snow and Near Record Snow
1771	6/24/2008	Severe Storms and Flooding
1935	8/19/2010	Severe Storms and Flooding
1960	3/17/2011	Severe Winter Storm and Snowstorm
4116	5/10/2013	Severe Storms, Straight-Line Winds, and Flooding
3435	3/13/2020	COVID-19 Pandemic
4489	3/26/2020	COVID-19 Pandemic
4819	9/20/2024	Severe Storms, Tornadoes, Straight-Line Winds, and Flooding

Table 6-3: Risk Priority Index Number Matrices: Weighted Breakdown for Calculation

Risk Priority Index Number (RPN) Metrics	Weighted (If Applicable)
Unadjusted RPN	Severity (33.33) x Probability (33.33) x Detection (33.33)
Adjusted (S)	Severity (60.00) x Probability (20.00) x Detection (20.00)
Adjusted (P)	Severity (20.00) x Probability (60.00) x Detection (20.00)
Final RPN	Adjusted (S) x Adjusted (P) x Detection (D)

The independent organizations are also weighted evenly (i.e., one organization's ranking is not heavier or lesser than another). Table 6-3 displays the basic formulas used to calculate the final RPN—including the varied weights to determine the final RPN. Table 6-4 displays the metrics the project team used to quantify hazard probability and magnitude and the affect area descriptions.

Table 6-4: Risk Priority Index Number Matrices: Severity, Probability, Detection and Affected Area

		Severity (S)
1	Minor	Injuries treatable with on-site first aid; Minor impact to quality of life lost; Shutdown of critical facilities for twenty-four hours or less; Little to no property damage in disaster area.
2	Moderate	Injuries may require hospital visit; Shutdown of critical facilities for more than five days; Multiple properties in disaster area damaged.
3	Critical	Injuries require hospital stay; Shutdown of critical facilities for more than ten days; Property damage to more than 50% of disaster area.
4	Extreme	Severe injuries and multiple deaths; Severe impact to quality of life; Shutdown of critical facilities for more than fifteen days; Property damage to more than 75% of disaster area.

		Probability (P)
1	Unlikely	Event is not likely to occur within the next ten years; History of event shows event has not occurred in the last ten years.
2	Somewhat likely	Event could occur in the next five years; History of event shows at least one occurrence in the last ten years.
3	Likely	Event could occur in the next three years; History of event shows at least one occurrence in the last five years.
4	Highly Likely	Event will likely occur in the next year; History of event shows at least one occurrence in the last five years.

		Detection (D)
1	Poor	No controls in place to detect future occurrences; Minimal ability to forecast future event occurrence.
2	Moderate	Controls in place will likely not forecast future occurrences; small advanced warning of less than ten minutes offered to citizens in affected area resulting in greater injuries/deaths.
3	Good	Controls in place will likely forecast future occurrences; greater advance warning of at least two hours or more warning offered to citizens in affected area is enough to minimize injuries/deaths.
4	Excellent	Controls in place have proven ability to forecast future occurrences with multiple day warning; injuries/deaths unlikely.

		Affected Area
	Specific Area	During high-level hazard event that may impact the county, this would be restricted a more defined area or would be localized (i.e. neighborhood, a street).
	Multi-County	During a high-level hazard event that may impact the county, this would impact a much larger area, often stretching across county borders.

The product of hazard severity (S), probability (P), and detection (D) is the RPN. The partner organizations ranked hazards based on the RPN matrix (Table 6-5), with smaller numbers corresponding to greater risk (i.e., Rank 1 being the highest priority hazard). The municipality jurisdictional ratings are included below because hazard susceptibility may differ by municipality and these organizations manage the largest concentrations of county residents (Table 6-6). Table 6-6 identifies the major municipalities in Winnebago county and their corresponding rankings; Table 6-7 provides the perceived geographic impact by hazard type.

Table 6-5: Risk Priority Index Number Ranking

RPN Ranking - Hazard
(1) Thunderstorm
(1) Winter Storm
(3) Tornado
(4) Flooding
(5) Drought and Excessive Heat
(6) Hazardous Material Storage and Transportation
(7) Dam and Levee Failure
(7) Groundwater Shortage
(9) Earthquake

Table 6-6: Risk Priority Index Number Ranking by Jurisdiction

Jurisdiction	F	ST	T	HZ	WS	DH	DL	EQ	GS
Boone Winnebago Regional Office of Education	6	2	3	5	1	3	6	6	6
City or Rockford	2	1	6	8	2	4	7	9	5
City of South Beloit	4	1	3	7	2	5	8	9	5
City of Loves Park	1	5	5	4	2	2	7	7	7
Village of Machesney Park	1	2	3	7	4	5	8	9	6
Village of Rockton	5	1	1	7	4	3	8	8	6
Village of Roscoe	6	1	3	8	1	4	7	9	4
Village of Winnebago	7	3	2	8	1	4	9	6	4
Winnebago County Health Department	4	2	1	3	4	7	7	9	6
Winnebago County- EMA	2	1	3	7	4	4	9	8	4

Key: F- Flooding, **ST**- Thunderstorm, **T**- Tornado, **HZ** - Hazardous Materials Storage and Transportation, **WS**- Winter Storm, **DH** - Drought/Heat, **DL** - Dam/Levee Failure, **EQ** - Earthquake, **GS** - Groundwater Shortage

Table 6-7: Perceived Geographic Impact by Hazard Type

Hazard	Geographic Impact
Flood	Specific-Area
Severe Thunderstorm	Multi-County
Tornado	Multi-County
HAZMAT	Specific-Area
Winter Storms	Multi-County
Drought/Heat	Multi-County
Dam/Levee Failure	Specific-Area
Earthquake	Multi-County
Groundwater Shortage	Specific-Area

Vulnerability Assessment

As part of the creation of the region's first Climate Action Plan (CAP), Region 1 Planning Council (R1) conducted a vulnerability assessment to identify areas within Winnebago County that are highly susceptible to the impacts of climate change. This assessment takes a data-driven approach, collecting health, socioeconomic, and climate data to adequately assess vulnerability. By analyzing the relative vulnerability of communities to these climate impacts, elected officials and other entities can prioritize and direct resources to at risk areas.

What is a Vulnerability Assessment?

A vulnerability assessment is a synthesis of existing scientific research that identifies the greatest risks of climate change to a geographic area. These risks are composed of three components: exposure, sensitivity, and adaptive capacity, as defined in Table 6-8. Establishing a vulnerability assessment for a geographic area provides a resource for local agencies and the public to appropriately plan for and respond to these risks.

Table 6-8: Components of Vulnerability

Total	Component	Definition
Vulnerability	Exposure	The degree by which a person, community, or location can be affected by a climate impact. Examples of exposure include living within a flood zone or living in an area where temperatures are regularly above 95 degrees Fahrenheit.
	Sensitivity	The degree by which a person or community can be harmed when exposed to a climate impact. Examples of factors used to define sensitivity are a person's age, if they have a chronic condition, or mental health issues.
	Adaptive Capacity	The ability of a system or individual to adapt to a climate impact. Socioeconomic factors such as access to healthcare, unemployment rate, and education level are commonly used data in this analysis.

Vulnerability by Climate Impact

Two climate impacts, extreme heat and flooding, were analyzed as a means of identifying the risks they pose to Winnebago County. These impacts were identified in the Nature Conservancy's Illinois Climate Assessment and chosen for their historic and future relevance to the county.[xiii]

Extreme Heat

Extreme heat refers to the annual number of days in which temperatures exceed 95 degrees Fahrenheit.[xiv] When exposed to these temperatures over long periods of time, a person can face increased stress in regulating one's internal temperature, potentially triggering heat-related illnesses such as heat exhaustion or heat stroke. Individuals who experience chronic conditions that reduce their ability to adjust to heat (e.g., fluid intake, sweating, etc.) are at greater risk from these temperature extremes.[xv]

Between 1985 to 2024 , the observed record for extreme heat in Winnebago County has remained relatively stable, averaging a total of 1.5 days each year with temperatures over 95 degrees. However, future projections show exposure to extreme heat will increase over time. According to Table 6-9, projections for the years 2025 to 2054 indicate an average rise in the number of days exceeding 95 degrees Fahrenheit, with an increase ranging from 6.8 days under a low emissions scenario to 10.63 days under a high emissions scenario.

Low emissions scenario

A low emissions scenario assumes a rapid movement away from fossil fuels over the coming decades; a high emissions scenario corresponds to a future still dependent on fossil fuels where carbon and methane emissions continue to rise throughout the century, while still accounting for projected declines in emissions growth rates.

Source: 2021: An Assessment of the Impacts of Climate Change in Illinois

Table 6-9: Extreme Heat Projections

Data Indicator	Average Observed Climatology	SSP Scenario	2020 Projection	2025 Projection
Annual Days with Maximum Temperature ≥ 95°F	3 days	4.5 (Low Emissions)	10- 23 days	17- 34 days
		7 (High Emissions)	9- 22 days	14- 31 days

Flooding

Flooding, typically caused by excessive rainfall, causes a river, stream, or other bodies of water to overflow. Flooding can carry a variety of risks to the public, such as the immediate risk of injury, drowning, exposure to pollutants, as well as a loss of power or clean water. Flooded waters also have a greater risk of being polluted by sewage and chemicals and may carry a variety of infectious diseases. However, the most notable effects of flooding are the consequences after an area has been impacted. Flooding may cause disruptions in accessing health services and treatment for vulnerable populations, particularly those with chronic conditions. Consequently, individuals with chronic conditions may face a heavier physical burden when cleaning up and repairing their homes or dealing with the financial aftermath.[xvi]

Since 1996 to 2019, the Federal Emergency Management Agency (FEMA) has recorded 68 flooding events in Winnebago County.[xvii] Figure 6-2 illustrates the increasing frequency of flooding events, rising from an average of 2.1 events annually between 1996 and 2007 to 3.6 events annually from 2008 to 2019[xviii]. This upward trend is expected to persist due to projected rises in annual precipitation, which is estimated to surge from an average of 37 inches per year to between 38 and 44 inches per year by 2050. Additionally, the minimal changes in the number of dry days annually suggest that there will be more intense periods of rainfall in the future. These shifts are visually represented in Figure 6-3 and Figure 6-4.

Figure 6-2: Winnebago County Flooding Events

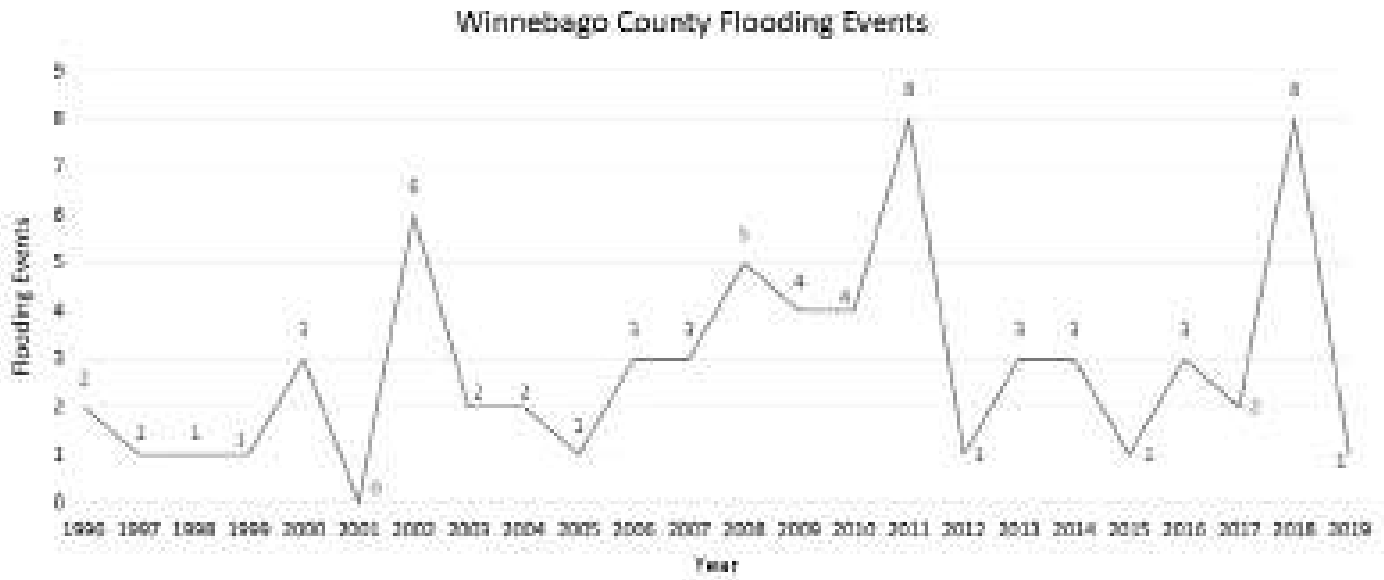


Figure 6-3: Annual Total Precipitation

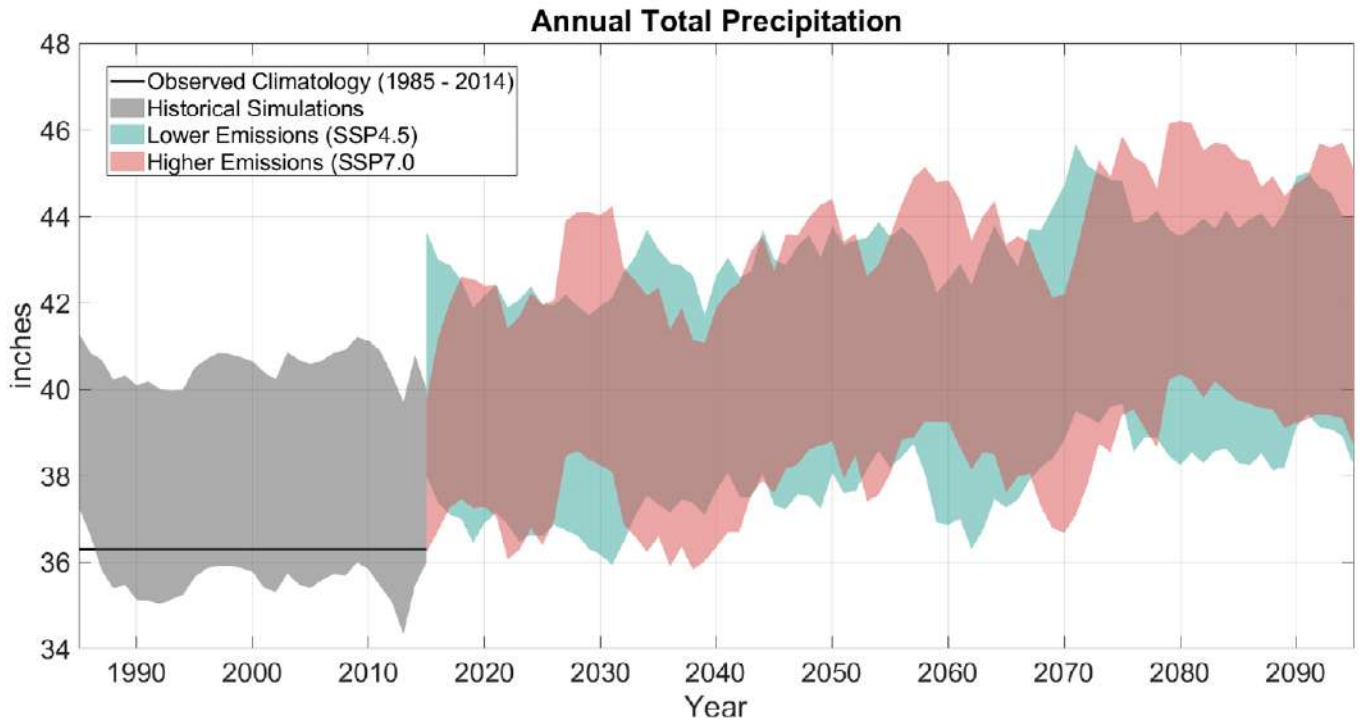
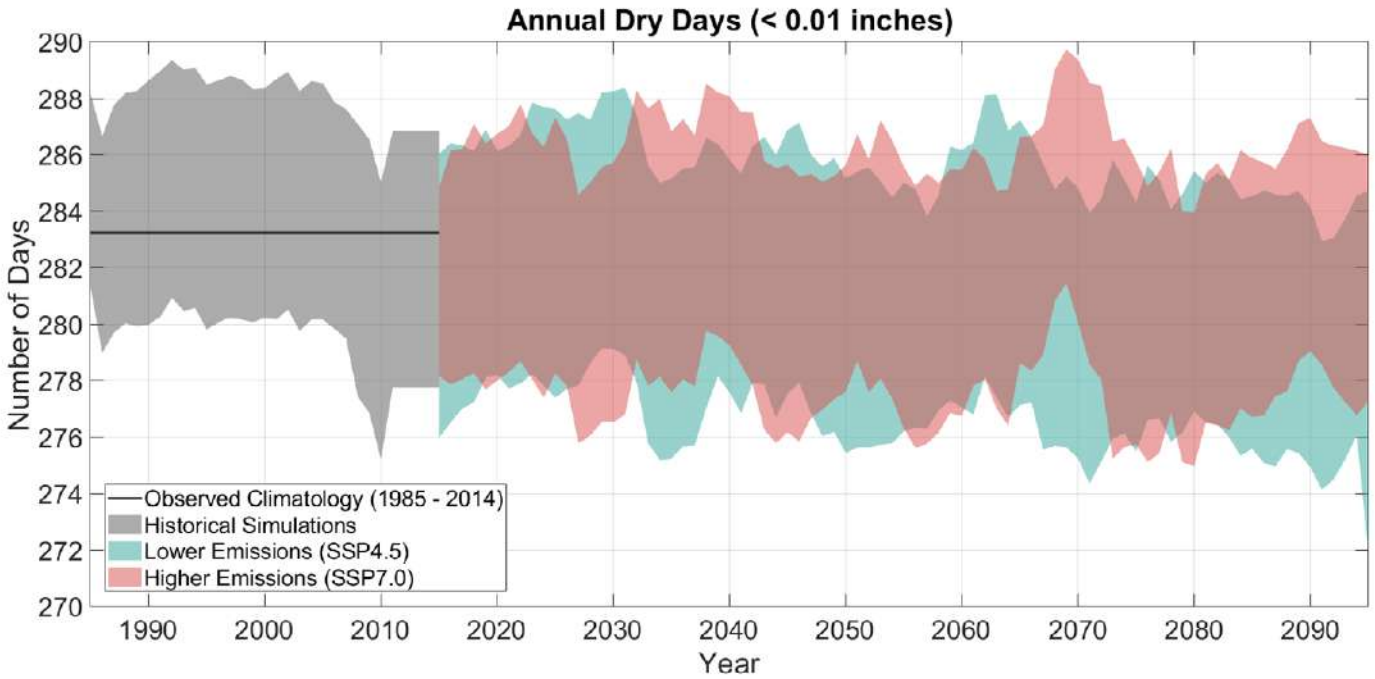


Figure 6-4: Annual Dry Days (<0.01 inches)



Regional Economic Modeling Inc. (REMI)

The REMI model was utilized for population projections and economic forecasts at the regional level for the 2024 Winnebago County MHMP. The REMI model for the R1 Region consists of Boone, Winnebago, and Ogle counties – therefore, the data below represents the region, not just Winnebago County. Projection data for 2015 to 2030 is included in Table 6-10.

Utilizing REMI modeling projections (Table 6-10) the R1 project team is able to assess long-term projected employment and population growth. Table 6-10 shows a total population growth in the region to 279,410 in 2030. This growth is a net loss in population of nearly 10,000 residents from the 2015 baseline; however, there is a projected increase of more than 2,000 in total employment over the same period. This assumes a trend-level development pattern and does not account for the fluctuations seen in population patterns and development trends based on the economy and other situational factors. However, the REMI modeling projections provide a safe approximation of the employment and population estimates for the region.

These employment and population projections can help local and state governments to determine the necessary measures to take to provide for the resources, the security, and the space for the populations of people as the region continues to grow.

Table 6-10: Long-term Projected Employment and Population Growth, 2015-2023

Year	Total Employment	Population	Gross Domestic Product (Billions of Fixed 2009 Dollars)
2015 (Base)	164,377	289,149	14.546
	162,936	288,439	14.499
	161,271	287,275	14.712
	162,345	286,556	14.826
	161,186	285,778	14.94
	151,080	284,928	13.676
	156,358	283,559	14.117
	165,290	281,188	14.685
	166,170	281,313	14.844
	165,804	281,757	15.082
	165,456	281,807	15.244
	166,210	281,476	15.502
	166,578	280,815	15.774
	166,737	280,274	16.052
	166,895	279,809	16.33
2030 (Projected)	167,023	279,410	16.603

The FEMA National Risk Index (NRI)[xix] data for Winnebago County, IL, reveals that the county has a population of 285,162 and covers an area of approximately 524.42 square miles. The total building value is over $60 billion, with an additional $122 million in agricultural value. The county's National Risk Index score is 90.45, placing it in the 94th percentile for risk within the state, which indicates a relatively moderate risk level compared to other regions.

Winnebago County's Expected Annual Loss (EAL) score is 90.56, with a total projected annual loss of approximately $41.7 million. This includes $22 million in building loss, $18.8 million in population-equivalent loss, and $825,957 in agricultural loss. The county's annual loss rate is moderate, with a national percentile ranking of 31.69.

Social vulnerability in Winnebago County is relatively high, with a score of 76.29, placing the county in the 97th percentile statewide. Despite this, the county demonstrates considerable community resilience, with a score of 75.94, ranking it in the 43rd percentile for resilience across the state. Lastly, the county's community risk factor is 1.13, suggesting a moderately elevated risk in terms of overall disaster preparedness and vulnerability.

The FEMA hazard data for Winnebago County, indicates varying degrees of risks and annualized losses for different natural hazards. The summary for several key hazards is as follows:

- **Drought:** With an annual frequency of 11, drought causes approximately $291,415 in expected annual losses, primarily affecting agriculture. The risk score is relatively low at 78.52.
- **Hail:** Occurring five times annually, hail results in about $8.76 million in total expected annual losses, with the majority impacting building value. The risk score is high at 99.11.
- **Heat Wave:** Heat waves occur once a year and cause $1.2 million in expected annual losses, mostly affecting population equivalence. The risk is moderate, with a score of 91.92.
- **Ice Storm:** With an annual frequency of 1, ice storms generate $1.66 million in expected annual losses, primarily impacting buildings. The risk score is very high at 96.90.
- **Riverine Flooding:** Occurring twice annually, riverine flooding causes about $4.05 million in expected annual losses, with significant impacts on buildings and population equivalence. The risk score is moderate at 91.41.
- **Strong Wind:** With an annual frequency of 6, strong winds result in $2.09 million in expected annual losses, primarily affecting building value. The risk score is relatively high at 93.25.
- **Tornado:** Tornadoes, despite having a frequency of zero, still pose a substantial risk, with potential losses estimated at $16.88 million, primarily impacting population equivalence and building value. The risk score is high at 97.04.

These figures highlight the diverse hazard profile of Winnebago County, with varying degrees of risk and financial impacts across different types of natural disasters.

Section 7: Hazard Profiles

Thunderstorm

Hazard Definition - Thunderstorm

Severe thunderstorms are weather events with one or more of the following characteristics: strong winds, large and damaging hail, and frequent lightning. Severe thunderstorms most frequently occur in Illinois during the spring and summer months, but can occur at any time. A severe thunderstorm's impacts can be localized or can be widespread in nature. A thunderstorm is classified as severe when it meets one or more of the following criteria:

- Hail 0.75 inches or greater in diameter
- Frequent and dangerous lighting
- Wind speeds greater than or equal to 58 miles per hour

Hail

Hail is a possible product of a strong thunderstorm. Hail usually falls near the center of a storm, but strong winds occurring at high altitudes in the thunderstorm can blow the hailstones away from the storm center, resulting in damage in other areas near the storm. Hailstones range from pea-sized to baseball-sized, and some reports note hailstones larger than softballs.

Lighting

Lightning is a release of electricity from a thunderstorm. Lightning is often perceived as a minor hazard, but lightning damages many structures and kills or severely injures numerous people in the United States each year.

Severe Winds (Straight-Line Winds)

Straight-line winds from thunderstorms are fairly common in Illinois. Straight-line winds can cause damage to homes, businesses, power lines, and agricultural areas, and may require temporary sheltering of individuals who are without power for extended periods of time.

Table 7-1: Hail Sizes

Reference Object	Size
Pea	1/4-inch diameter
Mothball	1/2-inch diameter
Penny	3/4-inch diameter
Nickel	7/8-inch diameter
Quarter	1-inch diameter- hail quarter size or larger is considered severe
Ping-Pong Ball	1 1/2-inch diameter
Golf Ball	1 3/4-inch diameter
Tennis Ball	2 1/2-inch diameter
Baseball	2 3/4-inch diameter
Teacup	3-inch diameter
Softball	4-inch diameter
Grapefruit	4 1/2-inch diameter

Source: 2023 Illinois Natural Hazard Mitigation Plan

Previous Occurrences of Thunderstorm Hazards

The NCEI database reported 291 thunderstorm events in Winnebago County since 1950. The most recent reported occurrence was in August of 2021, when a line of severe thunderstorms moved across northern Illinois producing damaging winds; wind gusted near severe limits for as much as 20 minutes. Tree damage led to the rescue of multiple occupants of a mobile home in The Riverview Mobile Home Park; one died from injuries. Hailstorms occur nearly every year in the late spring and early summer months. The NCEI database reported no occurrences of significant hail storms (such as those that cause death damage or injury) in Winnebago County.

Previous Occurrences of Lighting Events

The NCEI database reported ten lightning events in Winnebago County since 1950. The most recent reported event was in July 2023, when a line of strong storms moved across northern Illinois during the morning of July 26th producing several instances of tree and power line damage. There was one report of a man injured when struck by lightning. Table 7-2 identifies NCEI-recorded lightning that caused damage, death, or injury in Winnebago County. Additional details of individual hazard events are on the NCEI website.

Table 7-2: NCEI-Recorded Lightning that Caused Damage, Death, or Injury in Winnebago County

Location	Date	Deaths	Injuries	Property Damage
Harlem	5/25/2011	0	0	$400,000
Seward	5/22/2011	0	0	$10,000
Loves Park	11/22/2010	0	0	$20,000
Roscoe	7/24/2010	0	0	$50,000
Pecatonica	6/8/2009	0	0	$10,000
East Rockford	4/25/2008	0	0	$1,000
Winnebago	9/4/2006	0	0	$50,000
	Total:	0	0	$541,000

NCEI records are estimates of damages compiled by the National Weather Service from various local, state, and federal sources. However, these estimates are often preliminary in nature and may not match the final assessment of economic and property losses related to a given weather event.

Previous Occurrences of High Wind Events

The NCEI database reported 26 high wind events in Winnebago County since 1950. The most recent reported event was in February of 2023, when isolated thunderstorms moved across portions of northern Illinois during the evening of February 14th and continued into the early morning the next day, producing isolated severe wind gusts. A wind gust to 59 mph was recorded at the Rockford Airport. Table 7-3 identifies selected NCEI-recorded wind storms that caused major damage, death, or injury in Winnebago County. Additional details of individual hazard events are on the NCEI website.

Table 7-3: NCEI High Wind Events

Location	Date	Deaths	Injuries	Property Damage
Winnebago (Zone)	3/8/2017	0	0	$25,000
Winnebago (Zone)	3/16/2016	0	0	$1,000
Winnebago (Zone)	10/27/2010	0	0	$10,000
Winnebago (Zone)	10/26/2010	0	0	$100,000
Winnebago (Zone)	5/30/2008	0	0	$10,000
	Total:	0	0	$146,000

Geographic Location of Thunderstorm Hazard

The entire county has the same risk for occurrence of thunderstorms. They can occur at any location within the county. High winds can negatively impact more densely populated urban areas of the County between Roscoe (north) and Rockford airport (south). High winds and lighting can also impact rural areas, which encompass most of the western half of the County. Downed trees and power lines may significantly impact emergency response times and truck routes.

Hazard Extent for Thunderstorm Hazard

The extent of the historical thunderstorms depends upon the extent of the storm, the wind speed, and the size of hail stones. Thunderstorms can occur at any location within the county. Thunderstorms are often forecasted in advance by the NWS; however, weather can still be unpredictable and weather events can occur without warning. Based on historical information, the occurrence of future high winds, hail, and lightning is probable. There were over 200 events since 1950 and that only counts events that were reported as ***severe***. The county should expect high winds, hail, and lightning of widely varying magnitudes in the future.

Based on historical information, future occurrence of some variation of a thunderstorm event in Winnebago County is likely. According to the RPI and the County, severe thunderstorms ranked as the number one hazard along with winter storms.

Table 7-4: Risk Identification for Thunderstorm Hazard

Probability	x	Magnitude/Severity	=	RPI
4	x	2	=	8

Vulnerability Analysis for Thunderstorm Hazard

The entire county's population and all buildings are vulnerable to a severe thunderstorm and can expect the same impacts within the affected area. This plan will therefore consider all buildings located within the county as vulnerable.

Critical Facilities

All critical facilities are vulnerable to severe thunderstorms. A critical facility will encounter many of the same impacts as any other building within the jurisdiction. These impacts include structural failure, damaging debris (trees or limbs), roofs blown off or windows broken by hail or high winds, fires caused by lightning, and loss of building functionality (e.g., a damaged police station cannot serve the community). On page 17, Table 4-1 includes a list of the essential facilities in Winnebago County and page 18, Figure 4-1 displays a large format map of the locations of all critical facilities within the county.

Building Inventory

The buildings within the county can expect impacts similar to those discussed for critical facilities. The potential impacts encompass structural failure, damaging debris (trees or limbs), roofs blown off or windows broken by hail or high winds, fires caused by lightning, and loss of building functionality (e.g., a person cannot inhabit a damaged home, causing residents to seek shelter).

Infrastructure

A severe thunderstorm could impact roadways, utility lines/pipes, railroads, and bridges. Since the county's entire infrastructure is vulnerable, it is important to emphasize that a severe thunderstorm could damage any number of these structures. The impacts to these structures include broken, failed, or impassable roadways; broken or failed utility lines (e.g., loss of power or gas to the community); or impassable railways. Bridges could become impassable causing risk to motorists.

Potential Dollar Losses for Thunderstorm Hazard

R1 determined that Winnebago County has incurred an estimated $5,561,500 in damages relating to thunderstorms, including hail, lightning, and high winds since 1995. NCEI records are estimates of damage compiled by the National Weather Service from various local, state, and federal sources. However, these estimates are often preliminary in nature and may not match the final assessment of economic and property losses related to a given weather event. As a result, R1 cannot reliably constrain potential dollar losses for a future event; however, based on average property damage in the past decade, R1 estimates that Winnebago County incurs property damages of approximately $198,000 per year related to severe thunderstorms.

Vulnerability to Future Assets/Infrastructure for Thunderstorm Hazard

All future development within the county and all communities will remain vulnerable to these events.

Suggestion for Community Development Trends

Local officials will enhance severe storm preparedness if they sponsor a wide range of programs and initiatives to address the overall safety of county residents. The county needs to build new structures with more sturdy construction, and harden existing structures to lessen the potential impacts of severe weather. Updating or replacing existing warning sirens, and closing coverage gaps with new sirens, will continue the practice of advanced notice to warn the community of approaching storms to ensure the safety of Winnebago County residents.

Winter Storm

Severe winter weather consists of various forms of precipitation and weather conditions. This may include one or more of the following: freezing rain, sleet, heavy snow, blizzards, icy roadways, extreme low temperatures, and strong winds. These conditions can cause human health risks such as frostbite, hypothermia, or death and cause property damage and disrupt economic activity.

Ice (Glazing) and Sleet Storms

Ice or sleet, even in small quantities, can result in hazardous driving conditions and can cause property damage. Sleet involves raindrops that freeze completely before reaching the ground. Sleet does not stick to trees and wires. Ice storms, on the other hand, involve liquid rain that falls through subfreezing air and/or onto sub-freezing surfaces, freezing on contact with those surfaces. The ice coats trees, buildings, overhead wires, and roadways, sometimes causing extensive damage.

Ice storms are some of the most damaging winter storms in Illinois. Ice storms occur when moisture-laden Gulf air converges with the northern jet stream causing freezing rain that coats power and communication lines and trees with heavy ice. Strong winds can cause the overburdened limbs and cables to snap, leaving large sectors of the population without power, heat, or communication.

Snow Storms

Rapid accumulation of snow, often accompanied by high winds, cold temperatures, and low visibility, characterize significant snowstorms. A blizzard is categorized as a snow storm with winds of 35 miles per hour or greater and/or visibility of less than one-quarter mile for three or more hours. Strong winds during a blizzard blow falling and fallen snow, creating poor visibility and impassable roadways. Blizzards potentially result in property damage.

Blizzards repeatedly affect Illinois. Blizzard conditions cause power outages, loss of communication, and transportation difficulties. The resulting disorientation due to reduced visibility caused by blizzard events makes even travel by foot dangerous if not deadly.

Severe Cold

Severe cold involves ambient air temperatures that drop to zero degrees Farhenheit or below. These extreme temperatures can increase the likelihood of frostbite and hypothermia. High winds during severe cold events can enhance the air temperature's effects. Fast winds during cold weather events can lower the wind chill factor (how cold the air feels on your skin). As a result, the time it takes for frostbite and hypothermia to affect a person's body will decrease.

Previous Occurrence of Winter Storm Hazard

The NCEI database identified 37 blizzard or winter storm events for Winnebago County since 1950. Of the events listed on the NCEI database, no property damage, deaths, or injuries were reported. Additional details of individual hazard events are on the NCEI website. The most recent reported event occurred in March of 2023; rain transitioned to heavy snow on the backside of a passing storm system and dropped between six and ten inches of snow across extreme northern Illinois throughout the morning of March 25.

Geographic Location of Winter Storm Hazard

Severe winter storms are regional in nature. Most of the NCEI data are calculated regionally or in some cases statewide. More dense populations in the eastern half of the County from Roscoe (north) to Rockford (south) may be impacted by the timing of winter storms, which can impact the quality and safety of roadways during the morning or afternoon commute. Rural areas in the western half of the County may encounter additional difficulties including poor visibility or impassable lengths of roadway.

Hazard Extent of Winter Storm Hazard

The extent of the historical winter storms varies in terms of storm location, temperature, and ice or snowfall. A severe winter storm can occur anywhere in the county and should expect such storms to be of varying magnitudes.

Based on historical information, future occurrence of varying level intensity winter storm events is very likely. According to the RPI and County input, winter storms ranked as the number one hazard along with thunderstorms.

Table 7-5: Risk Identification for Winter Storm Hazard

Probability	x	Magnitude/Severity	=	RPI
4	x	2	=	8

Vulnerability Analysis of Winter Storm Hazard

Winter storm impacts are equally likely across the entire county; therefore, the entire county is vulnerable to a winter storm and can expect impacts within the affected area.

Critical Facilities

All critical facilities are vulnerable to a winter storm. A critical facility will encounter many of the same impacts as other buildings within the county. These impacts include loss of gas or electricity from broken or damaged utility lines, damaged or impassable roads and railways, broken water pipes, and roof collapse from heavy snow.

Building Inventory

The impacts to the general buildings within the county are similar to the damages expected to the critical facilities. These include loss of gas or electricity from broken or damaged utility lines, damaged or impassable roads and railways, broken water pipes, and roof collapse from heavy snow.

Infrastructure

During a winter storm, the types of potentially impacted infrastructure include roadways, utility lines/pipes, railroads, and bridges. Since the county's entire infrastructure is vulnerable, it is important to emphasize that a winter storm could impact any structure. Potential impacts include broken gas and/or electricity lines or damaged utility lines, damaged or impassable roads and railways, and broken water pipes.

Potential Dollar Losses for Winter Storm Hazard

It was determined that property damage can occur due to severe blizzards and winter storms (including downed trees, downed power lines, collapsed roofs, etc.). Winnebago County has no documented property damage for blizzards or winter storms since 1950 reported to the NCEI.

Vulnerability to Future Assets/Infrastructure for Winter Storm Hazard

Any new development within the county will remain vulnerable to these events.

Suggestions for Community Development Trends

Given the regional nature of winter storms and their impact on community development, some considerations to help prepare the community include developing resilient infrastructure, improvement in urban planning, and community preparedness. This includes improved roadways, emergency shelters, back-up generators, and home weatherization programs. These strategies can help minimize the economic, social, and physical impacts of severe winter weather and protect residents more effectively.

Tornado

Tornadoes are violently rotating columns of air that extend from thunderstorms to the ground. Funnel clouds, on the other hand, are rotating columns of air that do not touch the ground; however, the violently rotating column of air can reach the ground quickly and become a tornado. If a funnel cloud picks up and disperses debris, it indicates it has made contact with the ground and has developed into a tornado.

Tornadoes are a significant risk to Illinois and its citizens. Tornadoes can occur at any time on any day. The unpredictability of tornadoes makes them one of Illinois' most dangerous hazards. Tornado winds are violently destructive in developed and populated areas. Current estimates place maximum wind velocity at about 200 miles per hour, but higher values can occur. A wind velocity of 300 miles per hour results in a pressure of 102.4 pounds per square foot—a load that exceeds the tolerance limits of most buildings. Thus, it is easy to understand why tornadoes can devastate the communities they hit.

Tornadoes are classified according to the Enhanced Fujita (FE) tornado intensity scale. The Enhanced Fujita scale ranges from intensity EF0, with effective wind speeds of 65 to 85 miles per hour, to EF5 tornadoes, with effective wind speeds of over 200 miles per hour. Table 7-6 outlines the Enhanced Fujita intensity scale.

Table 7-6: Enhanced Fujita (EF) Tornado Rating Scale

EF Rating	3 Second Gust (mph)
0	65- 85
1	86- 110
2	111- 135
3	136- 165
4	166- 200
5	Over 200

Previous Occurrences of Tornadoes

The NCEI database reported 21 tornadoes in Winnebago County since 1950. The most recent recorded event occurred in March of 2023, when an EF-1 tornado touched down southwest of the intersection of Elmwood Road and Rockton Avenue on the north side of Rockford, and tracked northeast for almost nine miles. Wind speed peaked between 90-100 mph. The tornado damaged trees, outbuildings, and roofs on multiple homes.

Table 7-7 identifies NCEI-recorded tornadoes that caused damage, death, or injury in Winnebago County. Additional details of individual hazard events are on the NCEI website.

Table 7-7: NCEI-Recorded Tornadoes That Caused Damage, Death, or Injury in Winnebago County

Location	Date	Fujita Scale	Deaths	Injuries	Property Damage
Harlem	11/22/2010	EF2	0	6	$5,000,000
Winnebago County	8/30/1958	F2	0	0	$25,000
Winnebago County	6/11/1967	-	0	0	$25,000
Winnebago County	8/17/1979	F2	0	0	$250,000
Winnebago County	8/28/1990	F1	0	0	$25,000
Seward	5/22/2011	EF1	0	0	$100,000
South Beloit	5/22/2011	EF1	0	0	$15,000
		Total:	0	6	$5,440,000

NCEI records are estimates of damage compiled by the National Weather Service from various local, state, and federal sources. However, these estimates are often preliminary in nature and may not match the final assessment of economic and property losses related to a given weather event.

Geographic Location for Tornado Hazard

The entire county has the same risk of tornado occurrence. Tornadoes can occur at any location within the county. The western half of the county is rural in nature, with the largest concentration of population and structures within Pecatonica and Winnebago. The eastern half of the county is more dense and urban in nature. Significantly more structures, and people, can be impacted by a tornado event in this portion of the county.

Hazard Extent for Tornado Hazard

Historical tornadoes generally moved from southwest to northeast across the county. The extent of the hazard varies in terms of the size of the tornado, its path, and its wind speed.

Table 7-8: Risk Identification for Tornadoes

Probability	x	Magnitude/Severity	=	RPI
2	x	3	=	6

Based on historical information, the probability of future tornadoes in Winnebago County is probable. According to the Risk Priority Index Number (RPN) and County input, tornado is ranked as the number three hazard.

GIS-based Tornado Analysis

R1 conducted two tornado scenarios for Winnebago County based on reports from a tornado event that occurred in July, 2024: (1) Winnebago County and City of Rockford and (2) Winnebago County and Village of Cherry Valley. The following analysis quantifies the anticipated impacts of tornadoes in the county in terms of number of parcels affected. R1 used GIS-overlay modeling (Buffered Zonal Analysis) to determine the potential Fair Market Value of these tornado events. The analysis used a hypothetical path based upon the reported tornado event in July, 2024.

Degrees of damage depend on proximity to the path centerline within a given tornado path. The most intense damage occurs within the center of the damage path, with decreasing amounts of damage away from the center. Figure 7-1 illustrates the zone analysis. Figure 7-2 depicts the selected hypothetical tornado paths.

Figure 7-1: Modeled Tornado Zones

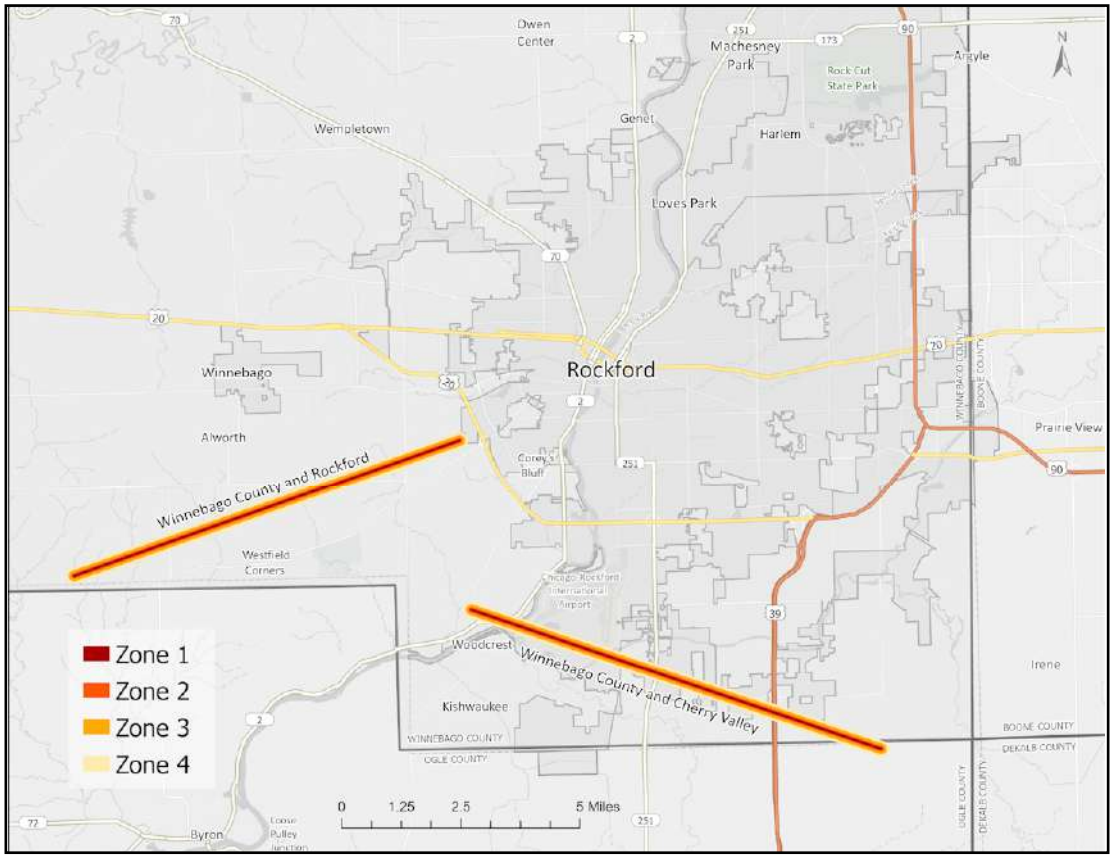
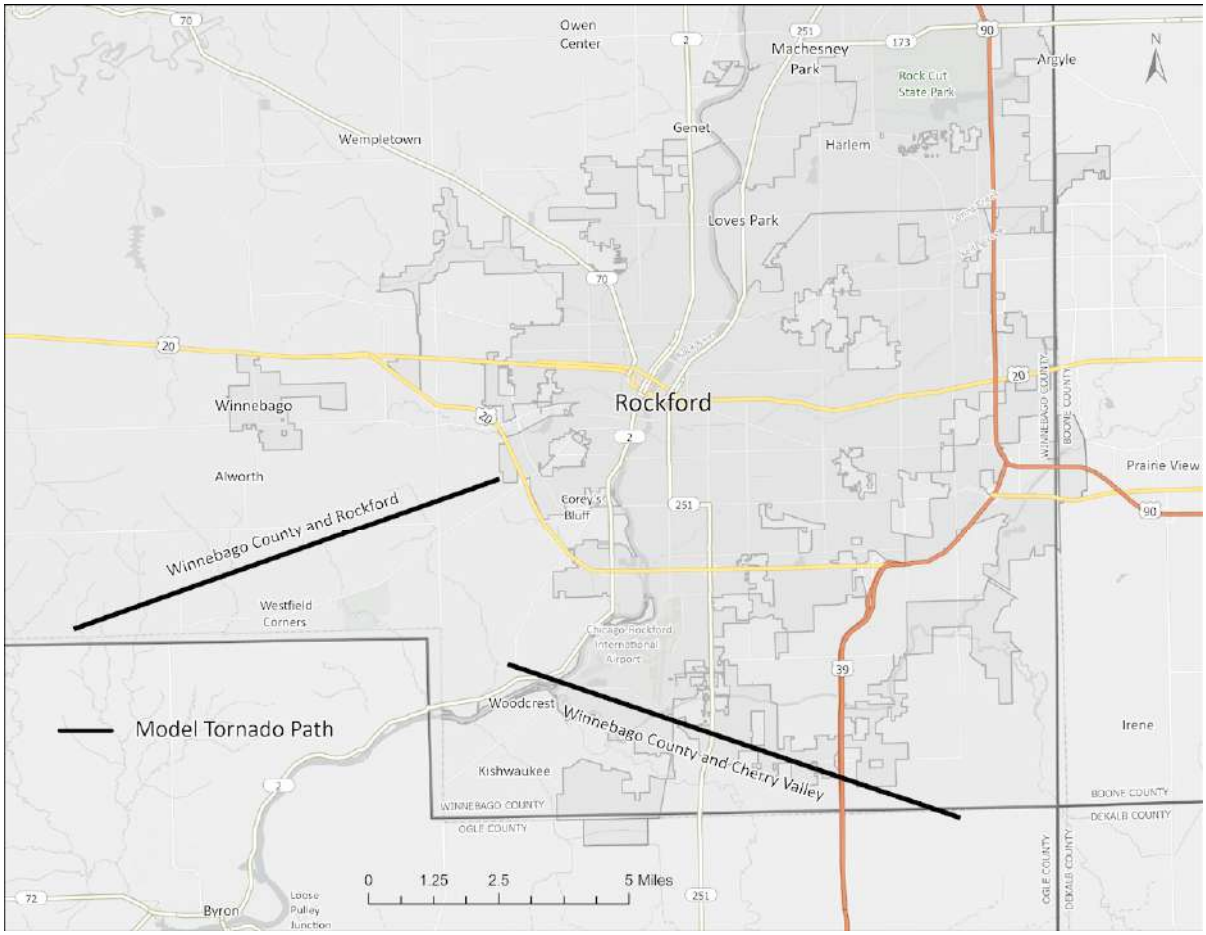


Figure 7-2: Modeled Tornado Path



Modeled Impacts of Recent Tornado Events near Rockford

Table 7-9 depicts estimated Fair Market Value of parcels within the tornado zones utilized for the modeled scenario in Winnebago County and Rockford. The GIS analysis estimates that the modeled tornado would affect 321 parcels. The estimated Fair Market Value is $19,786,480.

Table 7-9: Tornado Assessed Value Loss, Parcel Based Winnebago County and Rockford

Occupancy	Zone 1	Parcels Zone 1	Zone 2	Parcels Zone 2	Zone 3	Parcels Zone 3	Zone 4	Parcels Zone 4
Residential	$262,960	4	$89,380	9	$1,441,650	13	$5,973,200	41
Commercial	$0	0	$0	0	$0	0	$0	0
Industrial	$0	0	$0	0	$0	0	$0	0
Agricultural	$2,561,780	42	$2,561,780	51	$5,034,040	65	$9,628,880	96
		Total: 46		Total: 60		Total: 78		Total: 137
Total Fair Market Value: $19,786,480								

Table 7-10 depicts estimated Fair Market Value of parcels within the tornado zones utilized for the modeled scenario in Winnebago County and Cherry Valley. The GIS analysis estimates that the modeled tornado would affect 699 parcels. The estimated Fair Market Value is $33,843,090.

Table 7-10: Tornado Assessed Value Loss, Parcel Based Winnebago County and Cherry Valley

Occupancy	Zone 1	Parcels Zone 1	Zone 2	Parcels Zone 2	Zone 3	Parcels Zone 3	Zone 4	Parcels Zone 4
Residential	$3,300,760	22	$5,736,290	41	$10,423,880	74	$13,784,760	167
Commercial	$0	0	$0	0	$229,760	3	$125,870	1
Industrial	$2,810,890	21	$3,112,540	25	$2,091,420	24	$3,422,230	31
Agricultural	$4,871,400	46	$6,442,580	56	$9,557,350	82	$12,971,760	106
		Total: 89		Total: 122		Total: 183		Total: 305
Total Fair Market Value: $33,843,090								

Vulnerability Analysis for Tornado Hazard

Tornadoes can occur within any area in the county; therefore, the entire county population and all buildings are vulnerable to tornadoes. To accommodate this risk, this plan considers all parcels and buildings located within the county as vulnerable.

Critical Facilities

All critical facilities are vulnerable to tornadoes. A critical facility is susceptible to many of the same impacts as any other building within the jurisdiction. These impacts vary based on the magnitude of the tornado but can include structural failure, damaging debris (trees or limbs), roofs blown off or windows broken by hail or high winds, and loss of facility functionality (e.g., a damaged police station will no longer be able to serve the community).

Building Inventory

The buildings within the county can all expect the same impacts, similar to those discussed for critical facilities. These impacts include structural failure, damaging debris (trees or limbs), roofs blown off or windows broken by hail or high winds, and loss of building function (e.g., damaged home will no longer be habitable, causing residents to seek shelter).

Infrastructure

The types of infrastructure that could be impacted during a tornado include roadways, utility lines/pipes, railroads, and bridges. Since the county's entire infrastructure is vulnerable, it is important to emphasize that any number of these structures could become damaged during a tornado. The impacts to these structures include broken, failed, or impassable roadways, broken or failed utility lines (e.g., loss of power or gas to the community), and railway failure from broken or impassable rail lines. Bridges could fail or become impassable, causing risk to motorists.

Vulnerability to Future Assets/Infrastructure for Tornado Hazard

The entire population and all buildings are at risk because tornadoes can occur anywhere within the state, at any time. Furthermore, any future development in terms of new construction within the county is at risk.

Suggestions for Community Development Trends

Local officials can improve severe storm preparedness by supporting a variety of programs and initiatives aimed at ensuring the safety of county residents. Investment should prioritize the upgrade, or replacement of advanced warning systems for tornadoes. This will provide the community with sufficient warning time to ensure the safety of Winnebago County residents. The construction of new, sturdier structures, as well as the reinforcement of existing ones, will ensure the resilience of buildings, including critical facilities, throughout the county. The investment and initiative will minimize the potential impact of severe weather.

Flooding

Flooding is a significant natural hazard throughout the United States. As of the date of this plan, FEMA has paid over 76.8 billion dollars[xx] in Flood Insurance claims in Illinois since 1978, to more than 2.5 million flood loss claims. The type, magnitude, and severity of flooding are functions of the magnitude and distribution of precipitation over a given area, the rate at which precipitation infiltrates the ground, the geometry and hydrology of the catchment, and flow dynamics and conditions in and along the river channel. Below are definitions of the two common types of flooding in Illinois: Upstream and Downstream floods.

Upstream floods, also called flash floods, occur in the upper parts of drainage basins and are generally characterized by periods of intense rainfall over a short duration. These floods arise with very little warning and often result in locally intense damage, and sometimes loss of life, due to the high energy of the flowing water. Flood waters can snap trees, topple buildings, and easily move large boulders or other structures. Six inches of rushing water can upend a person; another 18 inches might carry off a car. Generally, upstream floods cause severe damage over relatively localized areas. Urban flooding is a type of upstream flood. Urban flooding involves the overflow of storm drain systems and can result from inadequate drainage combined with heavy rainfall or rapid snowmelt. Upstream or flash floods can occur at any time of the year in Illinois, but they are most common in the spring and summer months.

Downstream floods, sometimes called riverine floods, refer to floods on large rivers at locations with large upstream catchments. Downstream floods are typically associated with precipitation events that are of relatively long duration and occur over large areas. Flooding on small tributary streams may be limited, but the contribution of increased runoff may result in a large flood downstream. The lag time between precipitation and time of the flood peak is much longer for downstream floods than for upstream floods, generally providing ample warning for people to move to safe locations and, to some extent, secure some property against damage. Riverine flooding on the large rivers of Illinois generally occurs during the spring or summer.

Previous Occurrences of Flooding

The NCEI database[xxi] reported 74 flooding (including flash flood) events in Winnebago County since 1950. The latest reported flash flood event was in August 2022[xxii], while the most notable flood occurrence dates back to 2006. On September 4, 2006 thunderstorms developed over southeast Winnebago County. Some areas of eastern Rockford received heavy rain for two to three hours. As a result, massive and severe flooding occurred. Most of the flooding occurred in and around the Keith Creek Watershed. Some of the damage included a large section of a concrete drainage ditch that was washed out on Harrison Avenue near 20th Street. Hundreds of basements were flooded, fifteen of which suffered structural damage and were deemed uninhabitable. Numerous streets and parking lots were flooded as much as four to six feet, with cars floating or submerged in the flood waters. Flood waters as deep as nine feet were reported on Alpine Park in downtown Rockford. Dozens of people were rescued from the flood waters and hundreds were evacuated from their homes as flood waters rose. Flood waters rapidly rose in some areas that motorists were trapped in their cars until help arrived. At least 70 businesses sustained some level of flood damage. The highest rainfall total reported was 7.50 inches near Cherry Valley and 4.30 inches was reported on the east side of Rockford. Table 7-11 identified NCEI-recorded flooding events that caused damage, death or injury in Winnebago County. Additional details of individual hazard events are on the NCEI website.

Table 7-11: NCEI- recorded Flooding Events that caused Death, Damage or Injury in Winnebago County

Location	Date	Deaths	Injuries	Property Damage
Winnebago County	2/20/1997	1	0	$0
Rockford	9/4/2006	0	0	$20,000,000
Rockford	8/7/2007	0	0	$1,000,000
Winnebago	8/7/2007	0	0	$2,000,000
Roscoe	6/10/2008	0	0	$6,000,000
South Beloit	7/24/2010	0	0	$632,000
Camp Grant	8/18/2015	0	0	$300,000
Seward	6/28/2017	0	0	$500,000
Wempleton	6/18/2018	0	0	$500,000
	Total:	1	0	$30,932,000

NCEI records are estimates of damage compiled by the National Weather Service from various local, state, and federal sources. However, these estimates are often preliminary in nature and may not match the final assessment of economic and property losses related to a given weather event.

Repetitive Loss Properties

FEMA defines a repetitive loss structure as a structure covered by a contract of flood insurance issued under the NFIP that has suffered flood loss damage on two or more occasions during a 10-year period that ends on the date of the second loss, in which the cost to repair the flood damage is greater than, or equal to 25 percent of the market value of the structure at the time of each flood loss.

FEMA NFIP Multiple Loss Properties data (new citation here) was referenced to determine the location of repetitive loss structures in Winnebago County. Records indicate that there are 238 of these properties within the county as of December 2024. According to the 2023 IEMA State Hazard Mitigation Plan[xxiii] the total amount paid in insurance claims in the county for related damage and deconstruction of these repetitive loss structures as of April 2023 was $13,493,398.22. Table 7-12 describes the repetitive loss structures for each jurisdiction as of December 2024.

Table 7-12: Repetitive Loss Structures by Jurisdiction in Winnebago County

Jurisdiction	Number of Properties	Total Paid
Loves Park	Residential	4
Loves Park	Commercial	1
Loves Park	Industrial	0
Machesney Park	Residential	60
Machesney Park	Commercial	0
Machesney Park	Industrial	0
Rockford	Residential	118
Rockford	Commercial	1
Rockford	Industrial	13
Roscoe	Residential	4
Roscoe	Commercial	0
Roscoe	Industrial	0
South Beloit	Residential	2
South Beloit	Commercial	0
South Beloit	Industrial	0
Winnebago County (unincorporated)	Residential	34
Winnebago County (unincorporated)	Commercial	0
Winnebago County (unincorporated)	Industrial	1

Geographic Location of Flooding

Flood damage in Winnebago County results from three types of floods. Floods on the Rock River generally are associated with spring snowmelt combined with ice jams and rain storms. Floods on the Pecatonica River system generally are caused by spring snowmelt combined with rainfall. Floods on the much smaller tributes of the Rock River in Winnebago County are usually caused by intense thunderstorms which occur in the late summer, or early fall.

Table 7-13: Winnebago County Critical Facilities in a Flood Plains

Facility Type	Number of Facilities
Municipal (Police, Fire, Government Buildings)	14
Utilities	6

The majority of flood hazards in Winnebago County occur in the areas near the Cities of Rockford, Loves Park, and Machesney Park. Flood peaks have been increased by recent urbanization of uplands. Urbanization often is accompanied by floodplain filling or encroachment which reduces the channel conveyance capacity and increases the rainfall runoff. Increased flooding on the main channels can produce backwater effects up tributaries thus increasing the flood hazard. Additional flood runoff is unable to flow through restricted culverts and bridges which often are clogged with sediment and debris from new construction.

Hazard Extent for Flooding

All floodplains are susceptible to flooding in Winnebago County. The floodplain of concern is for the 100-year flood event which is defined as areas that have a one percent chance of flooding in any given year. However, flooding is dependent on various local factors including, but not limited to, impervious surfaces, amount of precipitation, river-training structures, etc.

The urban nature of the eastern portion of Winnebago County, between Machesney Park and Rockford, leads to road closures due to standing water. Additionally, streambank erosion causes additional sediment to accumulate and potentially clog culverts, requiring additional maintenance. Structural damage is also possible, to roads, bridges, and buildings.

Table 7-14: Risk Identification for Flooding

Probability	x	Magnitude/Severity	=	RPI
3	x	2	=	6

Based on historical information, future occurrence of flooding in Winnebago County is probable. According to the Risk Priority Index (RPI) and County input, flooding is ranked as the number four hazard.

Critical Facilities

All critical facilities within the floodplain are vulnerable to floods. An essential facility will encounter many of the same impacts as other buildings within the flood boundary. These impacts can include structural failure, extensive water damage to the facility, and loss of facility functionality (e.g., a damaged police station cannot serve the community).

Infrastructure

The types of infrastructure potentially impacted by a flood include roadways, utility lines/pipes, railroads, and bridges. Since an extensive inventory of the infrastructure is not available for this plan, it is important to emphasize that a flood could damage any number of these items. The impacts to these items include: broken, failed, or impassable roadways; broken or failed utility lines (e.g., loss of power or gas to the community); or railway failure from broken or impassable railways. Bridges could also fail or become impassable, causing risk to motorists.

Essential Facilities Damage

Of the essential facilities located in Winnebago County, a number of them are located within a floodplain. Those located within a floodplain are especially susceptible to damage during storm events. Table 7-15 highlights the facilities by type that are located in floodplains and Figure 7-3 maps these within Winnebago County.

Table 7-15: Essential Facilities within the 100- year Floodplain

Facility Type	Number of Facilities
Municipal (Police, Fire, Government Buildings)	14
Utilities	6

Figure 7-3: Winnebago County Critical Facilities in a Floodplain

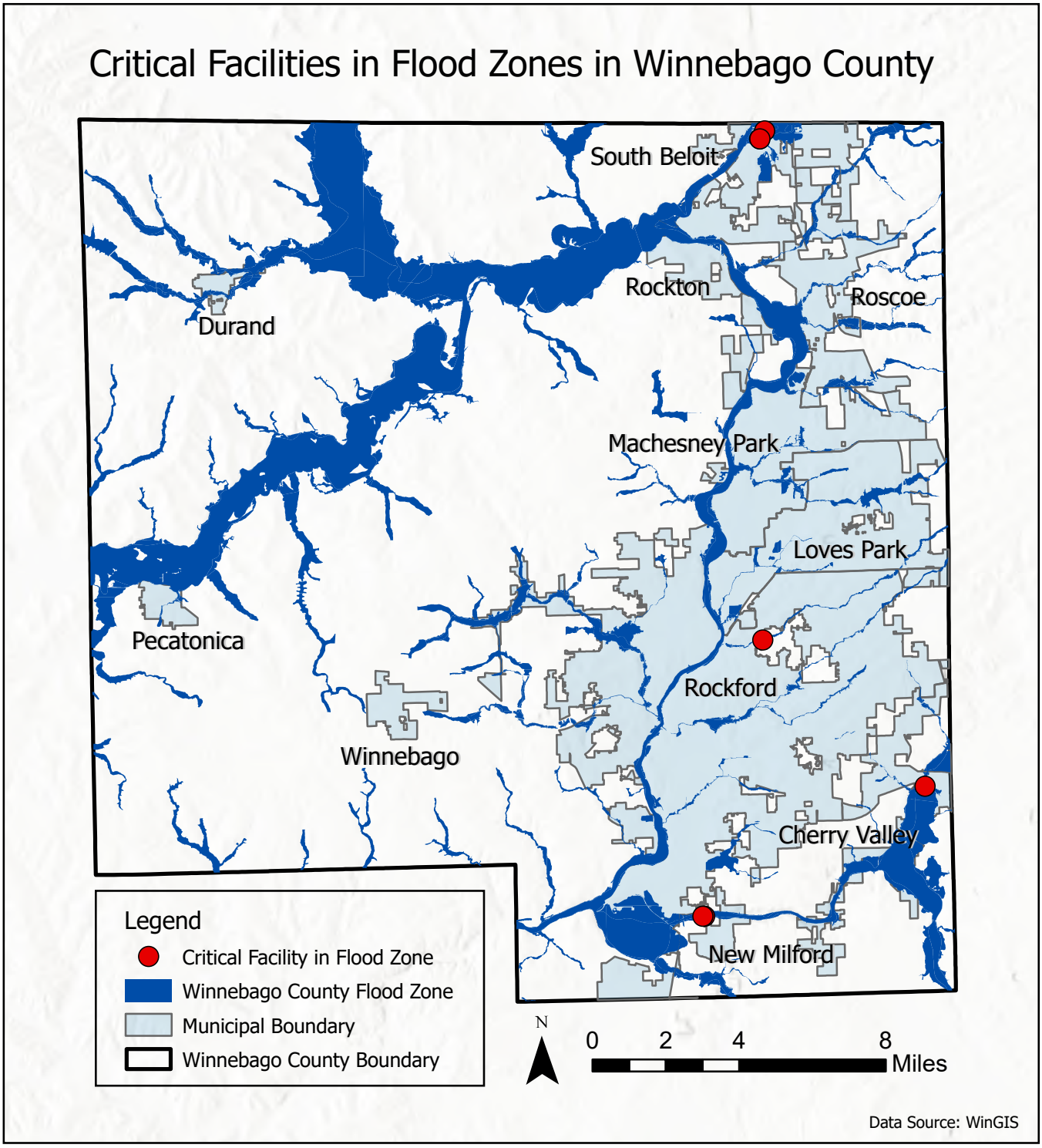


Table 7-16: Critical Facilities in a Flood Zone In Winnebago County

Facility Type	Facility Name	City
Fire Station	New Milford Fire Protection District	New Milford
Fire Station	South Beloit Fire Station	South Beloit
Municipal Building	Cherry Valley Public Works Department	Cherry Valley
Municipal Building	New Milford Village Hall	New Milford
Municipal Building	South Beloit City Hall	South Beloit
Police Station	South Beloit Police	South Beloit
School	Eisenhower Middle School	Rockford

Vulnerability Analysis for Flash Flooding

Flash flooding could affect any low-lying location or areas of poor drainage within the county; therefore, a significant portion of the county's population and buildings are vulnerable to a flash flood. These structures can expect the same impacts as discussed in a riverine flood.

Suggestions for Community Development Trends

Reducing floodplain development is crucial to reducing flood-related damages. Areas with recent development may be more vulnerable to drainage issues. Storm drains and sewer systems are usually most susceptible to drainage issues. Damage to these can cause back-up of water, sewage, and debris into homes and basements, causing structural and mechanical damage as well as creating public health hazards and unsanitary conditions. Stabilizing eroded streambanks can help protect nearby structures.

Drought & Extreme Heat

Drought is a climatic phenomenon. The meteorological condition that creates a drought is below-normal rainfall. However, excessive heat can lead to increased evaporation, which enhances drought conditions. Droughts can occur in any month. Drought differs from normal arid conditions found in low-rainfall areas. Drought is the consequence of a reduction in the amount of precipitation over an undetermined length of time (usually a growing season or longer). The severity of a drought depends on location, duration, and geographical extent. Additionally, drought severity depends on the water supply, usage demands by human activities, vegetation, and agricultural operations. Drought will affect the quality and quantity of crops, livestock, and other agricultural assets. Drought can adversely impact forested areas leading to an increased potential for extremely destructive forest and woodland fires that could threaten residential, commercial, and recreational structures.

Hazards Definition for Extreme Heat Hazard

Drought conditions are often accompanied by extreme heat, which is defined as temperatures that exceed the average high for the area by ten degrees Fahrenheit or more, or last for several weeks.

Common Terms Associated with Extreme Heat

Heat Wave: Prolonged period of excessive heat often combined with excessive humidity.

Heat Index: A number, in degrees Fahrenheit, which estimates how hot it feels when relative humidity is added to air temperature. Exposure to full sunshine can increase the heat index by 15 degrees Fahrenheit

Heat Cramps: Muscular pains and spasms due to heavy exertion. Although heat cramps are the least severe, they are often the first signal that the body is having trouble with heat.

Heat Exhaustion: Typically occurs when people exercise heavily or work in a hot, humid place where body fluids are lost through heavy sweating. Blood flow to the skin increases, causing blood flow to decrease to the vital organs, resulting in a form of mild shock. If left untreated, the victim's condition will worsen. Body temperature will continue to rise, and the victim may suffer heat stroke.

Heat and Sun Stroke: A life-threatening condition. The victim's temperature control system, which produces sweat to cool the body, stops working. The body's temperature can rise so high that brain damage and death may result if the body is not cooled quickly.

Previous Occurrences for Drought and Extreme Heat

The National Climatic Data Center (NCDC) database reported 27 drought/extreme heat events in Winnebago County since 1950. The most recent recorded event occurred during October 2023 when an abnormally dry August and September led severe drought conditions to persist into October for portions of far north central Illinois. There have been no NCEI-recorded drought/heat wave events that caused damage, death, or injury in Winnebago County during that time. Additional details of individual hazard events are on the NCEI website.

Geographic Location for Drought and Extreme Heat

Droughts are regional in nature, most areas of the United States are vulnerable to the risk of drought and extreme heat.

Hazard Extent for Drought and Extreme Heat

The extent of droughts or extreme heat varies both depending on the magnitude and duration of the heat and the range of precipitation. The more densely populated eastern half of the county from Rocoe (north) to Rockford (south) may be subject to higher temperature extremes in the warmer summer months. While the rural areas in the western half of the county may not retain heat due to significantly fewer structures, the longer distances required for emergency response may increase risks posed by higher temperatures.

Based on historical information, future occurrence of some kind of drought and/or extreme heat event in Winnebago County is likely. According to the Risk Priority Index Number (RPN) and County input, drought and extreme heat ranked as the number five hazard.

Table 7-17: Risk Identification for Drought/Heat Storm

Probability	x	Magnitude/Severity	=	RPI
2	x	1	=	2

Vulnerability Analysis for Drought and Extreme Heat

Drought and extreme heat are a potential threat across the entire county; therefore, the county is vulnerable to this hazard and can expect impacts within the affected area. Extreme heat is responsible for the highest number of annual deaths among all weather-related hazards[xxiv]. Young children, elderly, and hospitalized populations have the greatest risk. The entire population and all buildings are at risk.

Critical Facilities

All critical facilities are vulnerable to drought. A critical facility will encounter many of the same impacts as any other building within the jurisdiction, which should involve little or no damage. Potential impacts include water shortages, fires as a result of drought conditions, and residents in need of medical care from the heat and dry weather.

Building Inventory

The buildings within the county can all expect impacts similar to those discussed for critical facilities. These impacts include water shortages, fires as a result of drought conditions, and residents in need of medical care from the heat and dry weather.

Infrastructure

During a drought, the types of potentially impacted infrastructure include roadways, utility lines/pipes, railroads, and bridges. The risk to these structures is primarily associated with fire, which could result from hot, dry conditions. Since the county's entire infrastructure is vulnerable, damage to any infrastructure is possible. The impacts to these items include: impassable roadways; broken or failed utility lines (e.g., loss of power or gas to the community); or impassable railways. Bridges could become impassable, causing risk to motorists.

Vulnerability to Future Assets/Infrastructure from Drought/Extreme Heat Hazard

Future development will remain vulnerable to droughts. Typically, some urban and rural areas are more susceptible than others. For example, urban areas are subject to water shortages during periods of drought. Excessive demands of densely populated areas put a limit on water resources. In rural areas, crops and livestock may suffer from extended periods of heat and drought. Dry conditions can lead to the ignition of wildfires that could threaten residential, commercial, and recreational areas.

Suggestion of Community Development Trends

Because droughts and extreme heat are regional in nature, future development is susceptible to drought. Although urban and rural areas are equally vulnerable to this hazard, those living in urban areas may have a greater risk from the effects of a prolonged heat wave. The atmospheric conditions that create extreme heat tend to trap pollutants in urban areas, adding contaminated air to the excessively hot temperatures and creating increased health problems. Furthermore, asphalt and concrete store heat longer, gradually releasing it at night and producing high nighttime temperatures. This phenomenon is known as the "urban heat island effect."

Local officials should address drought and extreme heat hazards by educating the public on steps to take before and during the event—for example, temporary window reflectors to direct heat back outside, staying indoors as much as possible, and avoiding strenuous work during the warmest part of the day. Prioritizing installation or replacement of backup generators can ensure resilience of critical facilities in the event of extreme heat.

Hazardous Material Storage and Transportation

Illinois has numerous active transportation lines that run through many of its counties. Active railways transport harmful and volatile substances across county and state lines every day. Transporting chemicals and substances along interstate routes is common in Illinois. The rural areas of Illinois have considerable agricultural commerce, meaning transportation of fertilizers, herbicides, and pesticides is common on rural roads. These factors increase the chance of hazardous material releases and spills throughout the state of Illinois.

The release or spill of certain substances can cause an explosion. Explosions result from the ignition of volatile products such as petroleum products, natural and other flammable gases, hazardous materials/chemicals, dust, and bombs. An explosion can potentially cause death, injury, and property damage. In addition, a fire routinely follows an explosion, which may cause further damage and inhibit emergency response. Emergency response may require fire, safety/law enforcement, search and rescue, and hazardous materials units.

Previous Occurrences of Hazardous Materials Storage and Transportation Hazard

The most recent hazardous materials incident occurred on June 14, 2021, when the Chemtool plant, 1165 Prairie Hill Road in Rockton, caught fire. The plant opened in 2008, manufacturing grease, lubricating oils and other industrial fluids. The fire caused several explosions and continued burning for days. All residents within a mile of the plant were forced to evacuate their home for four days, while the incident was brought under control. As of May 2024, a class action lawsuit, which included any owner or tenant of properties within a three-mile radius of the plant, has resulted in a preliminary agreement on a $94.5 million settlement for property related damages. There were no deaths or serious injuries resulting from the fire.

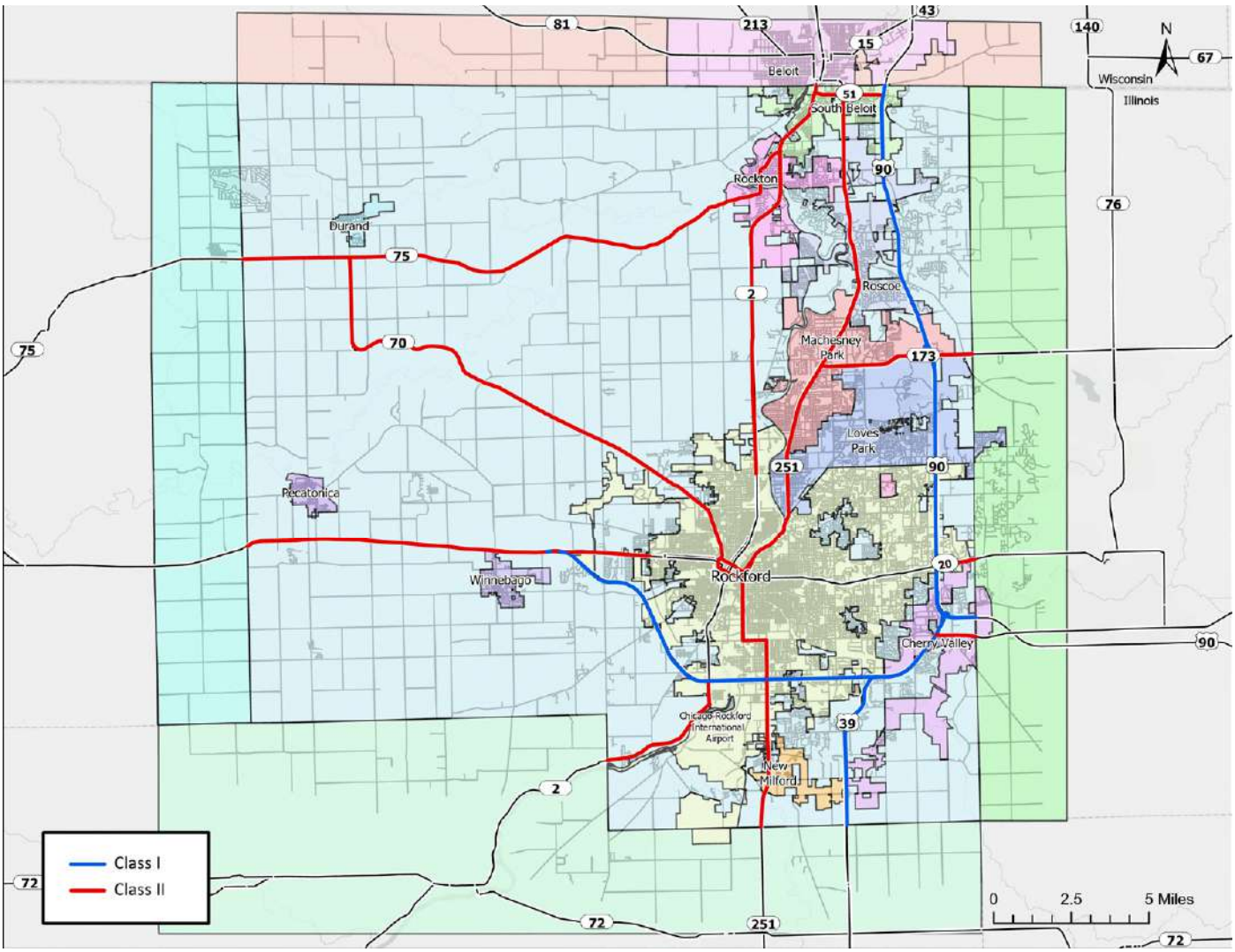
Minor releases have put local firefighters, hazardous materials teams, emergency management, and local law enforcement into action to try to stabilize these incidents and prevent or lessen harm to Winnebago County residents.

Geographic Location of Hazardous Materials Storage and Transportation Hazard

Hazardous material hazards are countywide and are primarily associated with the transport of materials via highway, railroad, and/or river barge. Major truck routes travel through multiple areas of the County. As shown on the map in Figure 7-4, the Class 1 truck route includes I-90 on the far east side of the county and the US Highway 20 bypass on the south side of Rockford. Multiple Class II truck routes extend through the denser urban area of eastern Winnebago County, including into downtown Rockford, while continuing into the western, rural areas of the County. Chemical incidents are more likely to be concentrated in the urban areas to the east (chlorine), while the western rural areas are more likely to experience incidents related to anhydrous ammonia.

The potential impacts are a risk for all jurisdictions within the County due to the extent of the truck route network.

Figure 7-4: Truck Routes in Winnebago County



Winnebago County Landfill

Originally founded as Pagel's Landfill in 1972, the Winnebago County Landfill and Recycling Facility[xxv] (Winnebago County LRF) now operates as the main waste collection site for the County and its respective municipalities.[xxvi] The landfill was originally founded out of a crisis. In the early 1970's the City of Rockford saw the reality of explosive growth—their municipal landfill was running out of space and they were in need of a new site. The Pagel Landfill was founded and operated until the late 1980's when it also began to fill up. In 1990, the IEPA granted a site expansion to the landfill in accordance with their regulations and the site received the State's first Subtitle D landfill classification expansion.

In 2005, the landfill was renamed the Winnebago County LRF and was billed to serve the county and its municipalities in whole.

As of this plan, the Winnebago County LRF is in full compliance with IEPA regulations and standards and the state statutes that govern its existence. Per the Winnebago County LRF's website, they maintain two landfills, two transfer stations, and a composting facility. They allow general household trash and demolition debris; they do not allow yard waste, tires, liquids (including paints, oils, and hazardous materials) or appliances. Liquids that are collected through the municipal drainage systems are treated by the LRF at their wastewater treatment facility in Rockford, Illinois. The Winnebago County LRF works to maintain full compliance with the State of Illinois' statutes and regulations. The Winnebago County LRF should work to maintain their compliant status with the IEPA and reduce violations – especially violations that concern the storage, treatment, or disposal of hazardous materials (including both those that are regulated by the IEPA and the PCB and those that are not).

Hazard Extent of Hazardous Materials Storage and Transportation Hazard

The extent of the hazardous material hazard varies both in terms of the quantity of material being transported as well as the specific content of the container.

Based on input from the planning team, the occurrence of a hazardous materials accident is unlikely. According to the RPI and County input, "hazardous materials storage and transport" ranked as the number six hazard in Winnebago County.

Table 7-18: Risk Identification for Hazardous Materials Storage and Transportation Hazard

Probability	x	Magnitude/Severity	=	RPI
2	x	2	=	4

ALOHA Hazardous Chemical Release Analysis

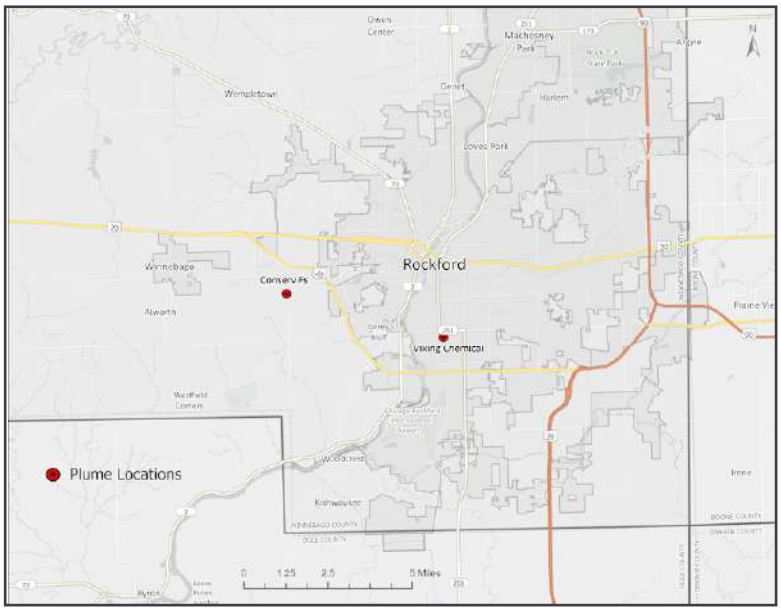
Winnebago County and the R1 GIS staff used the U.S. Environmental Protection Agency's Areal Locations of Hazardous Atmospheres (ALOHA) model to assess the impacted area for: (1) ammonia release at Conserv FS and (2) Chlorine release at the Viking Chemical Plant in Rockford. The Winnebago County project team selected the ammonia location because of the potentially high volume of ammonia available at that location directly west of the City of Rockford. The Chlorine scenario was selected because bulk chemicals are present in at the Viking Chemical Plant in Rockford. ALOHA is a computer program designed for response to chemical accidents, as well as emergency planning and training. Ammonia and chlorine are common chemicals used in industrial operations and are found in either liquid or gas form. Rail and truck tankers haul ammonia and chlorine to and from facilities. Ammonia tanks are hauled by truck to farms in the County.

Ammonia is a clear colorless gas with a strong odor. Ammonia is shipped as a liquid under its own vapor pressure. The density of liquid ammonia is six pounds per gallon. Contact with the unconfined liquid can cause frostbite. Gas is generally regarded as nonflammable but does burn within certain vapor concentration limits and with strong ignition. Fire hazard increases in the presence of oil or other combustible materials. Although gas is lighter than air, vapors from a leak initially hug the ground. Prolonged exposure of containers to fire or heat may cause violent rupturing and rocketing. Long-term inhalation of low concentrations of the vapors or short-term inhalation of high concentrations have adverse health effects. It is used as a fertilizer, as a refrigerant, and in the manufacture of other chemicals (NOAA Reactivity, 2007)[xxvii].

Chlorine is a greenish yellow gas with a pungent to suffocating odor. The gas liquefies above-35 degrees Celsius at ambient pressure and will liquefy from pressure applied at room temperature. Contact with unconfined liquid chlorine can cause frostbite from evaporative cooling. Chlorine does not burn but, like oxygen, supports combustion. The toxic gas can have adverse health effects from either long-term inhalation of low concentrations of vapors or short-term inhalation of high concentrations. Chlorine vapors are much heavier than air and tend to settle in low areas. Chlorine is commonly used to purify water, bleach wood pulp, and make other chemicals (NOAA Reactivity 2007)[xxviii].

For the ammonia scenario, R1 used average atmospheric and climatic conditions for the summer season with a breeze from the west. For the chlorine scenario, R1 assumed average atmospheric and climatic conditions for the summer season with a breeze from the south-southeast. Figure 7-5 depicts the plume origins of the two modeled hazardous chemical releases in Winnebago County.

Figure 7-5: Plume Origin Map



Analysis Parameters for Ammonia Release

The ALOHA atmospheric modeling parameters for the ammonia release, depicted in Figure 7-6, were based upon a west wind speed of 10 miles per hour. The temperature was 80 degrees Fahrenheit with 75 percent humidity and a cloud cover of five-tenths skies.

The source of the chemical spill is a horizontal, cylindrical-shaped tank. The diameter of the tank was set to 8 feet and the length set to 33 feet (12,408 gallons). At the time of its release, it was estimated that the tank was 78 percent full. The ammonia in this tank is in its liquid state. This release was based on a leak from a 2.5-inch-diameter hole, 12 inches above the

Figure 7-6: ALOHA Analysis Parameters for Ammonia Release

```
SITE DATA:
  Location: CONSERV FS AT MERIDIAN AND C, ILLINOIS
  Building Air Exchanges Per Hour: 1.14 (unsheltered single storied)
  Time: September 13, 2024  1448 hours CDT (user specified)

CHEMICAL DATA:
  Chemical Name: AMMONIA
  CAS Number: 7664-41-7                  Molecular Weight: 17.03 g/mol
  AEGL-1 (60 min): 30 ppm   AEGL-2 (60 min): 160 ppm   AEGL-3 (60 min): 1100 ppm
  IDLH: 300 ppm      LEL: 150000 ppm     UEL: 280000 ppm
  Ambient Boiling Point: -29.2° F
  Vapor Pressure at Ambient Temperature: greater than 1 atm
  Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

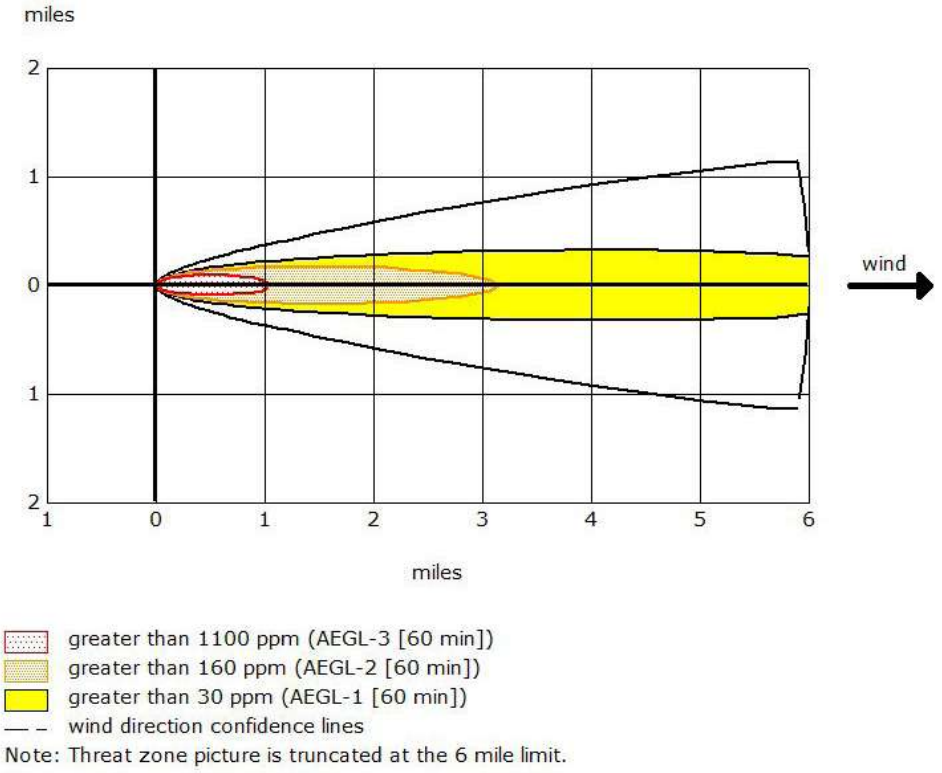
ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)
  Wind: 15 miles/hour from W at 10 meters
  Ground Roughness: open country         Cloud Cover: 5 tenths
  Air Temperature: 80° F                 Stability Class: D
  No Inversion Height                    Relative Humidity: 75%

SOURCE STRENGTH:
  Leak from hole in horizontal cylindrical tank
  Flammable chemical escaping from tank (not burning)
  Tank Diameter: 8 feet                  Tank Length: 33 feet
  Tank Volume: 12,408 gallons
  Tank contains liquid                   Internal Temperature: 80° F
  Chemical Mass in Tank: 24.3 tons       Tank is 78% full
  Circular Opening Diameter: 2.5 inches
  Opening is 12 inches from tank bottom
  Release Duration: 9 minutes
  Max Average Sustained Release Rate: 8,600 pounds/min
     (averaged over a minute or more)
  Total Amount Released: 45,360 pounds
  Note: The chemical escaped as a mixture of gas and aerosol (two phase flow).

THREAT ZONE:
  Model Run: Heavy Gas
  Red   : 1.0 miles --- (1100 ppm = AEGL-3 [60 min])
  Orange: 3.2 miles --- (160 ppm = AEGL-2 [60 min])
  Yellow: greater than 6 miles --- (30 ppm = AEGL-1 [60 min])
```

bottom of the tank. According to these ALOHA parameters, this scenario would release approximately 8,600 pounds of material per minute. Figure 7-7 depicts the plume footprint generated by ALOHA.

Figure 7-7: ALOHA Analysis Generated Plume from Ammonia Scenario



Analysis Parameters for Chlorine Release

The ALOHA atmospheric modeling parameters for the chlorine release, depicted in Figure 7-8, were based upon a south-southeast wind speed of 15 miles per hour. The temperature was 80 degrees Fahrenheit with 75 percent humidity and a cloud cover of zero-tenths skies.

The source of the chemical spill is a horizontal, cylindrical-shaped tank. The diameter of the tank was set to 8 feet and the length set to 33 feet (12,408 gallons). At the time of its release, it was estimated that the tank was 78 percent full. The chlorine in this tank is in its liquid state. This release was based on a leak from a 2.5-inch-diameter hole, 12 inches above the bottom of the tank.

Figure 7-8: ALOHA Analysis Parameters for Chlorine Release

```
SITE DATA:
  Location: VIKING CHEMICAL, ILLINOIS
  Building Air Exchanges Per Hour: 1.41 (unsheltered single storied)
  Time: September 12, 2024  1349 hours CDT (using computer's clock)

CHEMICAL DATA:
  Chemical Name: CHLORINE
  CAS Number: 7782-50-5                  Molecular Weight: 70.91 g/mol
  AEGL-1 (60 min): 0.5 ppm   AEGL-2 (60 min): 2 ppm   AEGL-3 (60 min): 20 ppm
  IDLH: 10 ppm
  Ambient Boiling Point: -30.2° F
  Vapor Pressure at Ambient Temperature: greater than 1 atm
  Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

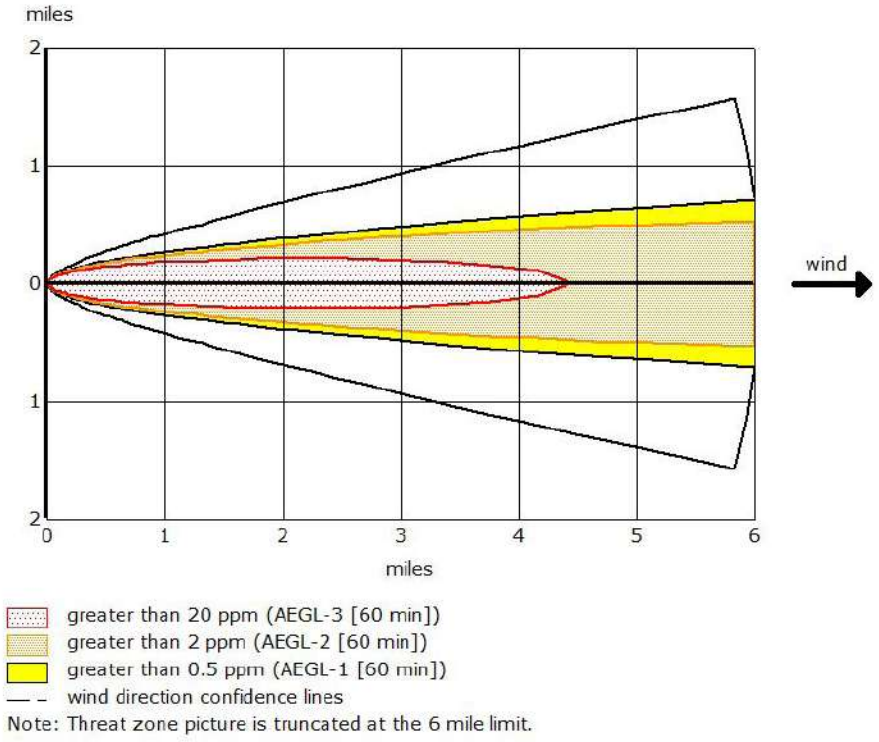
ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)
  Wind: 15 miles/hour from SSE at 10 feet
  Ground Roughness: open country         Cloud Cover: 0 tenths
  Air Temperature: 80° F                 Stability Class: D
  No Inversion Height                    Relative Humidity: 75%

SOURCE STRENGTH:
  Leak from hole in horizontal cylindrical tank
  Non-flammable chemical is escaping from tank
  Tank Diameter: 8 feet                  Tank Length: 33 feet
  Tank Volume: 12,408 gallons
  Tank contains liquid                   Internal Temperature: 80° F
  Chemical Mass in Tank: 56.4 tons       Tank is 78% full
  Circular Opening Diameter: 2.5 inches
  Opening is 12 inches from tank bottom
  Release Duration: 14 minutes
  Max Average Sustained Release Rate: 11,400 pounds/min
     (averaged over a minute or more)
  Total Amount Released: 104,528 pounds
  Note: The chemical escaped as a mixture of gas and aerosol (two phase flow).

THREAT ZONE:
  Model Run: Heavy Gas
  Red   : 4.4 miles --- (20 ppm = AEGL-3 [60 min])
  Orange: greater than 6 miles --- (2 ppm = AEGL-2 [60 min])
  Yellow: greater than 6 miles --- (0.5 ppm = AEGL-1 [60 min])
```

According to these ALOHA parameters, this scenario would release approximately 11,400 pounds of material per minute. Figure 7-9 depicts the plume footprint generated by ALOHA.

Figure 7-9: ALOHA Analysis Generated Plume from Chlorine Scenario



Description of Acute Exposure Guideline Levels

Acute Exposure Guideline Levels (AGELs) are intended to describe the risk to humans resulting from once-in-a-lifetime, or rare exposure to airborne chemical (U.S. EPA AEGL Program). The National Advisory Committee for the Development of Acute Exposure Guideline Levels for Hazardous Substances (AEGL Committee) is involved in developing these guidelines to help both national and local authorities, as well as private companies, deal with emergencies involving spills, or other catastrophic exposures. AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposure periods ranging from ten minutes to eight hours. The EPA has defined the three AEGLs, as follows:

- **AEGL-1:** The airborne concentration, expressed as parts per million or milligrams per cubic meter (ppm or mg/m3) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic non-sensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.
- **AEGL-2:** The airborne concentration (expressed as ppm or mg/m3) of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.
- **AEGL-3:** The airborne concentration (expressed as ppm or mg/m3) of a substance above which it is predicted that the general population, including susceptible individuals, could experience life- threatening health effects or death.

Airborne concentrations below the AEGL-1 represent exposure levels that can produce mild and progressively increasing but transient and non-disabling odor, taste, and sensory irritation or certain asymptomatic, non-sensory effects. With increasing airborne concentrations above each AEGL, there is a progressive increase in the likelihood of

occurrence and the severity of effects described for each corresponding AEGL. Although the AEGL values represent threshold levels for the general public, including susceptible subpopulations, such as infants, children, the elderly, persons with asthma, and those with other illnesses, it is recognized that individuals, subject to unique or idiosyncratic responses, could experience the effects described at concentrations below the corresponding AEGL.

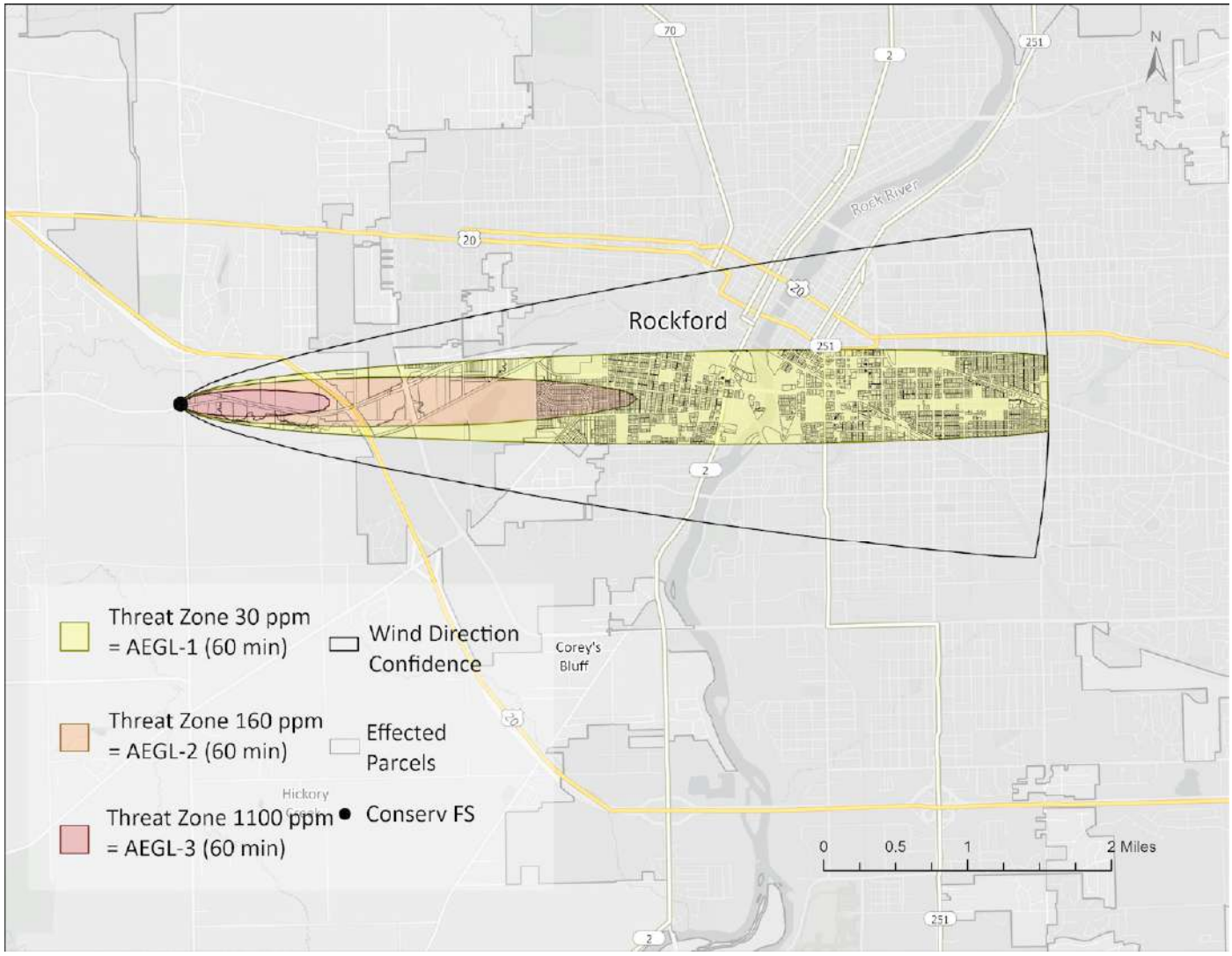
Results for Ammonia Release

R1 calculated an estimate of property based on fair market value, exposed to the ammonia spill by using assessed value and intersecting these data with each of the AEGL levels (AEGL 3: ≥ 20.0 ppm, AEGL 2: ≥ 2.0 ppm and AEGL 1: ≥ 0.5 ppm). There are 3,966 parcels within the ammonia plume. Table 7-19 lists Fair Market Value exposure by AEGL zone. Figure 7-10 depicts the ammonia spill footprint and location of the parcels exposed. This GIS overlay analysis estimates that the Fair Market Value of the parcels exposed to the ammonia plume is $266,689,870.

Table 7-19: Estimated Fair Market Value as a Result of Ammonia Release

	AEGL 1	AEGL 2	AEGL 3
Parcels	3474	466	26
Fair Market Value	$235,488,370	$26,844,680	$4,356,820

Figure 7-10: Plume Footprint and Parcel Exposure to Ammonia Release



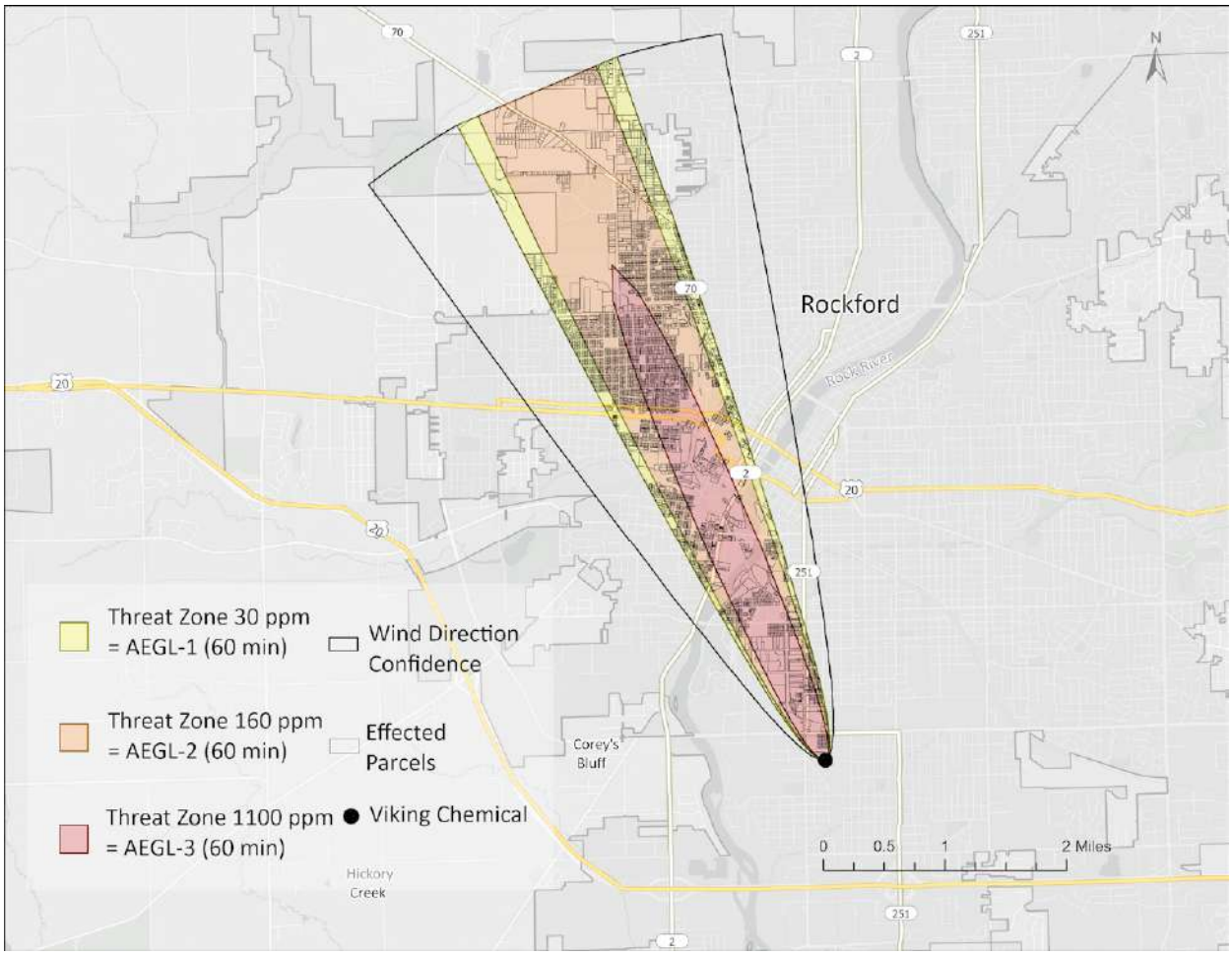
Results for Chlorine Release

R1 calculated an estimate of property based on fair market value, exposed to the chlorine spill by using assessed value and intersecting these data with each of the AEGL levels (AEGL 3: ≥ 20.0 ppm, AEGL 2: ≥ 2.0 ppm and AEGL 1:≥ 0.5 ppm). There are 5,762 parcels within the chlorine plume. Table 7-20 lists Fair Market Value exposure by AEGL zone. Figure 7-11 depicts the ammonia spill footprint and location of the parcels exposed. This GIS overlay analysis estimates that the Fair Market Value of the parcels exposed to the ammonia plume is $420,671,460.

Table 7-20: Estimated Fair Market Value as a Result of Chlorine Release

	AEGL 1	AEGL 2	AEGL 3
Parcels	1479	2689	1594
Fair Market Value	$131,506,110	$191,703,770	$97,461,580

Figure 7-11: Plume Footprint and Parcel Exposure to Chlorine Release



Vulnerability Analysis for Hazardous Materials Storage and Transportation Hazard

The entire county is vulnerable to a hazardous material release and can expect impacts within the affected area. The main concern during a release or spill is the affected population. This plan will therefore consider all buildings located within the county as vulnerable.

Critical Facilities

All critical facilities and communities within the county are at risk. A critical facility will encounter many of the same impacts as any other building within the jurisdiction. These impacts include structural failure due to fire or explosion and loss of function of the facility (e.g., a damaged police station can no longer serve the community).

Building Inventory

Buildings within the county can expect impacts similar to those discussed for critical facilities. These impacts include structural failure due to fire or explosion or debris, and loss of function of the building (e.g., a person cannot inhabit a damaged home, causing residents to seek shelter).

Infrastructure

During a hazardous material release, the types of potentially impacted infrastructure include roadways, utility lines/pipes, railroads, and bridges. Since an extensive inventory of the infrastructure is not available to this plan, it is important to emphasize that a hazardous materials release could damage any number of these items. The impacts to these items include: broken, failed, or impassable roadways; broken or failed utility lines (e.g., loss of power or gas to the community); and railway failure from broken or impassable railways. Bridges could become impassable causing risk to motorists.

Building Inventory Damage

Buildings within the county can all expect impacts similar to those discussed for critical facilities. These impacts include structural failure due to fire or explosion or debris and loss of function of the building (e.g., a person cannot inhabit a damaged home, causing residents to seek shelter).

Vulnerability to Future Assets/Infrastructure for Hazardous Materials Storage and Transportation Hazard

Any new development within the county will be vulnerable to these events, especially development along major roadways.

Suggestion for Community Development Trends

Because the hazardous material hazard events may occur anywhere within the county, future development is impacted. The major transportation routes and the industries located in Winnebago County pose a threat of dangerous chemicals and hazardous materials release. Ensuring that mutual aid agreements are in place across jurisdictions will provide resilience in the event of a hazardous materials event.

Dam & Levee Failure

Dams are structures that retain or detain water behind a large barrier. When full or partially full, the difference in elevation between the water above the dam and the drop in elevation below has the potential to create large amounts of energy, but also creating the potential for structural failure. The same potential exists for levees when they serve their purpose, which is to confine flood waters within the channel area of a river and exclude that water from land or communities land-ward of the levee. Dams and levees can fail due to either: 1) water heights or flows above the capacity for which the structure was designed; or 2) deficiencies in the structure such that it cannot hold back the potential energy of the water. If a dam or levee fails, issues of primary concern include loss of human life/injury, downstream property damage, lifeline disruption (of concern would be transportation routes and utility lines required to maintain or protect life), and environmental damage.

Many communities consider both dams and levees as permanent and infinitely safe structures. This sense of security can lead to significantly increased risks. Over time, the construction of new infrastructure and the growth of

population downstream of dams and in floodplains protected by levees can increase the potential for damage. Levees are designed to hold back flood waters only up to a maximum level, often the 100-year (1 percent annual probability) flood event. When the set maximum level is exceeded by more than the design safety margin, the levee will be overtopped or otherwise fail, inundating communities in the land previously protected by that levee. Factors such as climate change, changes in land use, and river engineering practices may be contributing to the increased risk of large floods and the potential for levee failures.

In addition to failure that results from extreme floods above the design capacity, levees and dams can fail due to structural deficiencies. Both dams and levees require constant monitoring and regular maintenance to assure their integrity. Many structures across the U.S. have been under-funded or otherwise neglected, leading to deem the structure unsafe or an actual failure. The threat of dam or levee failure may require substantial commitment of time, personnel, and resources. Since dams and levees deteriorate with age, minor issues become larger compounding problems, and the risk of failure increases.

Previous Occurrences of Dam and Levee Failure

According to the Winnebago County Emergency Management, there are no records or local knowledge of any dam or levee failure in the county.

Geographic Location of Dams and Levees in Winnebago County

Table 7-21 list of the dams located in Winnebago County and their respective classification level. According to Winnebago County records, six dams in Winnebago County are classified as high hazard and three dams have Emergency Action Plans (EAP). An EAP is not required by the State of Illinois but is strongly recommended by the Illinois Department of Natural Resources.

Table 7-21: Dams in Winnebago County

Dams in Winnebago County	Classification
Rockton	Low
Page Park Dam	High
Olson Lake Dam	Low
Elliot Golf Course Dam	Significant
Cherry Valley Lower Dam	Low
Levings Lake Dam	High
Pierce Lake Dam	High
Lakewood Hills Lake Dam	Significant
Pebble Creek Dam	High
Alpine Dam	High
Harrison Park West Detention Dam	Significant
Fordam Station Dam	Low
Four Rivers Sanitation Authority Excess Flow Basin Dam	High
Harrison Park East Detention Pond Dam	Significant
Spring Lake Dam	Significant
Lake Summerset Dam	High
Coolidge Creek Dam	Low
Kiowa Crossing Dam	Significant

The State of Illinois Hazard Mitigation Plan indicated three levees within Winnebago County, as shown in Table 7-22.

Table 7-22: Levees in Winnebago County

Levees in Winnebago County
Rockford, IL- Alpine Dam
Rockford, IL- Kent Creek- Leving's Lake Dam
Rockford, IL- Kent Creek North Branch- Page Park Dam

Hazard Extent for Dam and Levee Failure

Dams are assigned a low hazard potential classification meaning that failure or incorrect operation of the dam will result in no human life losses and no economic or environmental losses. Losses are principally limited to the owner's property. A significant hazard classification means that failure or incorrect operation results in no probable loss of human life; however, dam or levee failure can cause economic loss, environmental damage, and disruption of lifeline facilities. Significant hazard potential dams are often located in predominantly rural or agricultural areas, but could be located in populated areas with a substantial amount of infrastructure. A high hazard potential classification means that failure or incorrect operation has the highest risk of causing loss of human life and to significantly damage buildings and infrastructure. According to Winnebago County, six dams are classified as high hazard dams; three of which have an Emergency Action Plan (EAP). An EAP is not required by the State of Illinois but is recommended in the 2003 Illinois Dam Safety & Inspection Manual. Accurate mapping of the risks of flooding behind levees depends on knowing the condition and level of protection the levees actually provide. FEMA and the U.S. Army Corps of Engineers are working together to make sure that flood hazard maps better reflect the flood protection capabilities of levees and that the maps accurately represent the flood risks posed to areas situated behind them. Levee owners—usually states, communities, or private individuals or organizations such as local levee districts—are responsible for ensuring that the levees they own are maintained to their original design level and condition. In order to be considered creditable flood protection structures on FEMA's flood maps, levee owners must provide documentation to prove that the levee meets design, operation, and maintenance standards for protection against the 1 percent annual probability (100-year) flood.

Based on operation and maintenance requirements and local knowledge of the dams and levees in Winnebago County, the probability of failure is low. However, if a high-hazard dam failed, the magnitude and severity of the damage could be great. The warning time and duration of the dam failure event would be very short. Based on historical information, future occurrences of some kind of dam or levee failure event in Winnebago County is unlikely; however, measures should still be taken to ensure the continued use of existing and future dams/levees. According to the RPN and County input, dam or levee failure ranked as the number seven hazard, along with groundwater shortage.

Table 7-23: Risk Identification for Dam/Levee Failure

Probability	x	Magnitude/Severity	=	RPI
1	x	1	=	1

Critical Facilities

All critical facilities within the floodplain are vulnerable to dam and levee failure. An essential facility will encounter many of the same impacts as other buildings within the flood boundary. These impacts can include structural failure, extensive water damage to the facility, and loss of facility functionality (e.g., a damaged police station cannot serve the community).

Infrastructure

The types of infrastructure potentially impacted by a flood caused by a dam or levee failure include roadways, utility lines/pipes, railroads, and bridges. Since an extensive inventory of the infrastructure is not available for this plan, it is important to emphasize that a flood caused by a dam or levee failure could damage any number of these items. The impacts to these items include: broken, failed, or impassable roadways; broken or failed utility lines (e.g., loss of power or gas to the community); or railway failure from broken or impassable railways. Bridges could also fail or become impassable, causing risk to motorists.

Vulnerability Analysis for Dam and Levee Failure

An Emergency Action Plan (EAP) is required to assess the effect of dam failure on these communities. In order to be considered creditable flood protection structures on FEMA's flood maps, levee owners must provide documentation to prove the levee meets design, operation, and maintenance standards for protection against the 1 percent annual probability flood.

Vulnerability to Future Assets/Infrastructure for Dam and Levee Failure

The City of Rockford, and Winnebago County, Zoning Board of Appeals review new development for compliance with local zoning ordinances.

Suggestions for Community Development Trends

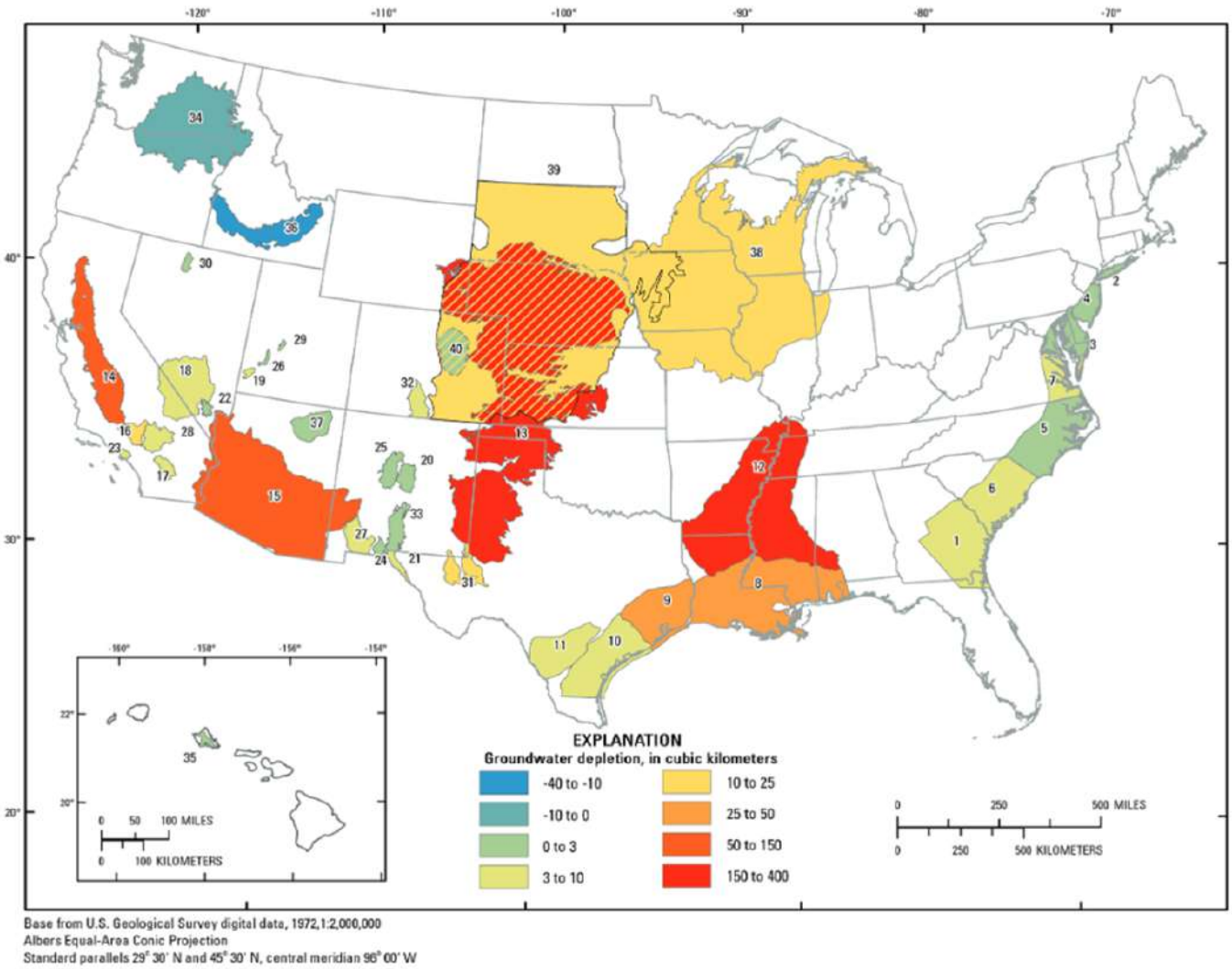
Areas with recent development within the county may be more vulnerable to drainage issues. Storm drains and sewer systems are usually most susceptible, which can cause the back-up of water, sewage, and debris into homes and basements, causing structural and mechanical damage as well as creating public health hazards and unsanitary conditions. Controlling floodplain development is the key to reducing flood-related damages. Regular review of related ordinances and Emergency Action Plans should be conducted to ensure that development will not adversely affect dam and levee operation and maintenance within Winnebago County.

Groundwater Shortage

According to the United States Geological Survey (USGS), groundwater "decline and depletion" is occurring over large areas in the United States. As the United States' population continues to grow, surface sources of freshwater for drinking, energy, and production dwindle. Per the USGS, groundwater provides drinking water to nearly half of the total population of the United States and nearly all of the rural population. Additionally, it provides over 50 billion gallons per day for agricultural needs – feeding millions of American consumers.

Groundwater depletion or "over-pumping" can have dire effects on the environment. The repletion rates fall far below the depletion rates leading to shortages in multiple regions throughout the United States. Figure 7-12 shows the depletion rates in critical areas throughout the United States. Shortages of groundwater can affect the water table, the water found in streams and lakes, the land, the water quality, and the cost on the user. These affects are explained briefly below.

Figure 7-12: Groundwater Depletion Rate, United States, USGS



Source: United States Geological Survey

Effects of Groundwater Depletion on the Environment, Supply, and User[xxix]

- *Lowering of the Water Table*: The most severe consequence of the over-pumping of the groundwater is the lowering of the water table. The water table is the level that the water rests at directly underground. For users to reach the groundwater they dig wells. If the water table drops, the wells may have to be dug deeper or re-dug altogether. Additionally, as the water table drops, the yield from a well may decrease significantly.
- *Reduction of Water in Streams and Lakes:* Due to ongoing hydrological forces, groundwater and surface water are constantly interacting. A portion, sometimes large, of the water located in streams and lakes comes from groundwater seepage. Groundwater pumping can alter the rates at which this occurs or remove it altogether depending on the severity.
- *Land Subsidence:* This geologic phenomenon occurs when the support below the ground disappears or slowly erodes. This change can either happen slowly or rapidly depending on the geology of the area; however, in both instances it causes the land (which supports the structures above) to collapse into the empty space.
- *Increased Costs for the User:* As the depth required to access groundwater increases, production and transportation costs increase which are inevitably directly routed to the users of the service.

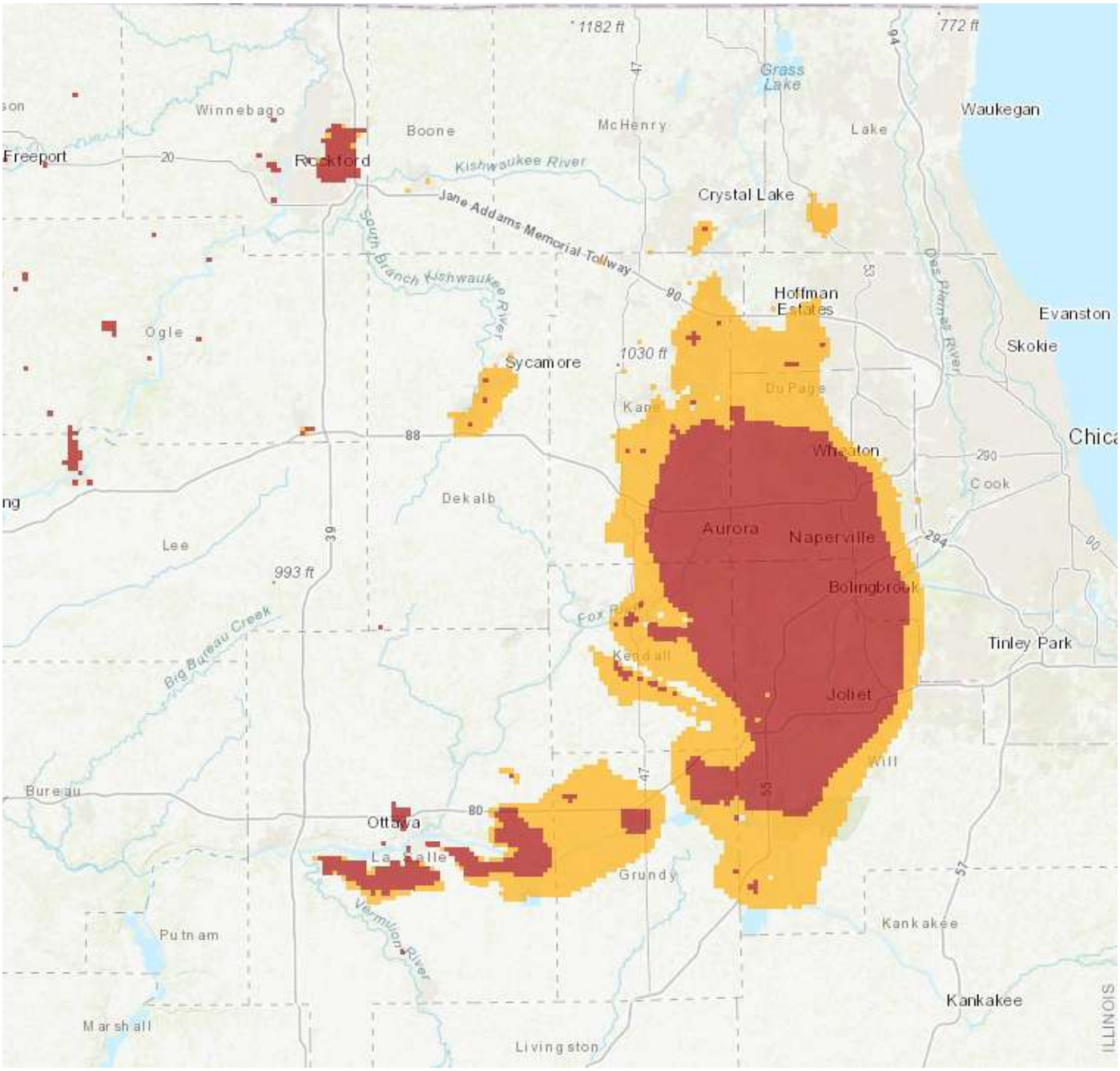
- *Deterioration of the Water Quality:* A major water quality threat to groundwater is contamination from saltwater intrusion. All of the groundwater in the earth is not freshwater; some of the deepest wells of groundwater are saline. Natural conditions maintain the barrier between salt and freshwater; however, drilling and welling can cause major disturbances which can upend and cause saltwater to surge into groundwater supply.

Previous Occurrences for Groundwater Shortage

Groundwater shortages are a significant issue affecting various regions across the United States. California faces significant groundwater shortage issues, exacerbated by prolonged drought conditions and increasing demand from agricultural and urban areas. About 40 percent of the state's water supply comes from groundwater; 60 percent or more during dry years, can lead to many aquifers being depleted faster than they can recharge.[xxx] For instance, the Central Valley has experienced groundwater levels dropping by over 100 feet in some areas due to over-extraction.[xxxi] This reliance on groundwater for irrigation and drinking water has led to depleted aquifers, land subsidence, and degraded water quality. The situation is further complicated by climate change, which affects precipitation patterns and intensifies water scarcity. Efforts to manage and replenish groundwater resources, such as implementing sustainable groundwater management practices and promoting conservation, are crucial to addressing this pressing issue and ensuring long-term water security for the state.

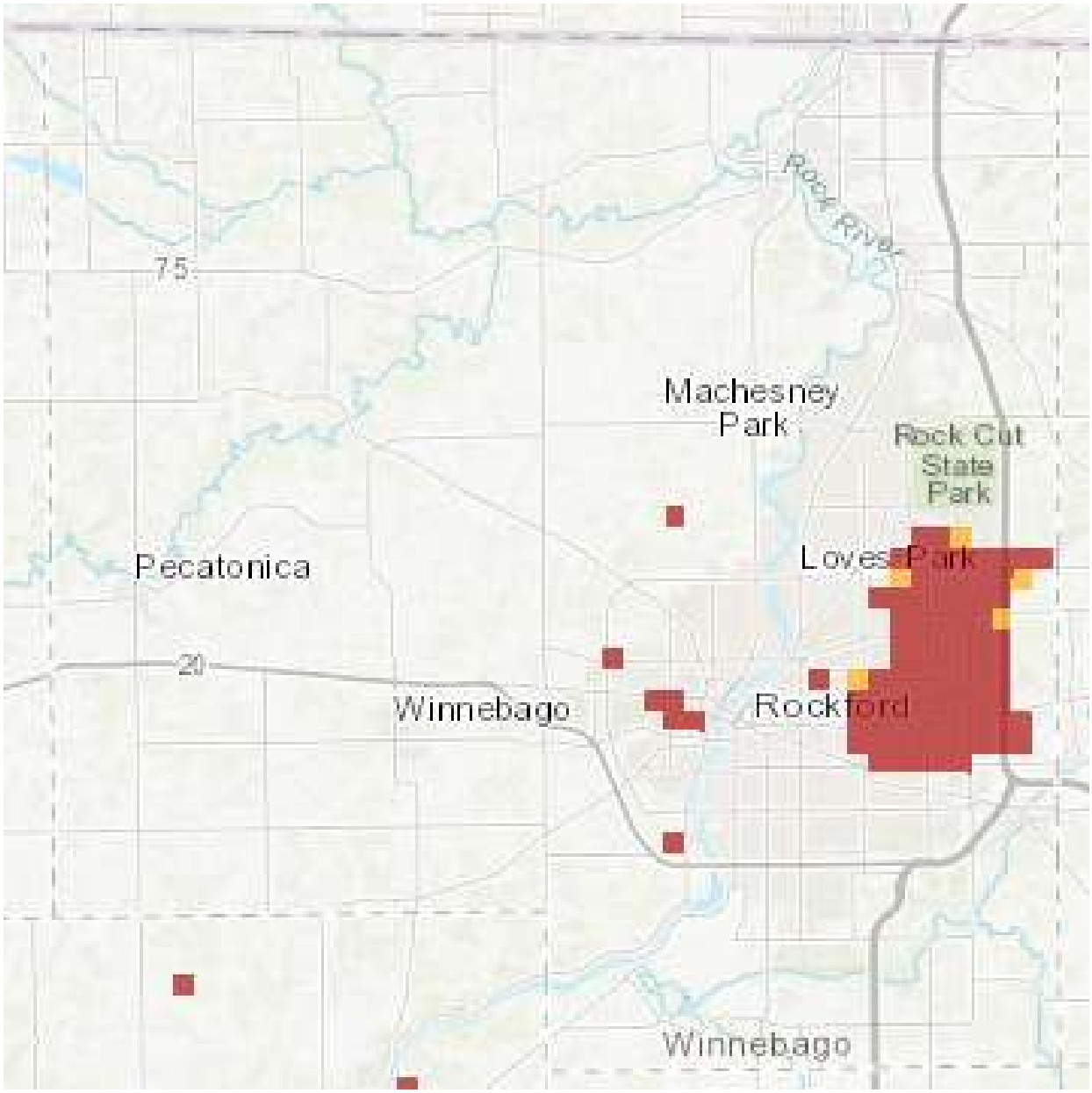
For the Midwest, specifically, the problem stretches from Northern Michigan to Southern Louisiana. In Illinois, aquifers have provided sources of water for the Chicagoland area since the mid-1800s, contributing to its explosive population growth. However, in 2017 it was shown that Chicago's Southwestern Suburbs are on a collision course with a water shortage. Low repletion rates (due to geologic features) and high depletion rates (due to population growth and increases in demand) have exacerbated the water shortage problem locally as Chicago's more affluent Eastern and Northern Suburbs tap Lake Michigan's infinite supply. One of Chicago's largest collar cities, Joliet, is predicted to run out water in less than ten years (2032). The City of Joliet is currently forming a plan for how to deal with the impending water shortage[xxxii]. Figure 7-13 shows the groundwater shortage risk area for the St. Peter Sandstone Aquifer for Northern Illinois. Figure 7-14 shows the groundwater shortage risk area for the St. Peter Sandstone Aquifer for Winnebago County.

Figure 7-13: St. Peter Sandstone Aquifer Risk Area for Northern Illinois, Illinois State Water Survey



Source: University of Illinois

Figure 7-14: St. Peter Sandstone Aquifer Risk Area for Winnebago County, Illinois State Water Survey



Source: University of Illinois

PFAS

Winnebago County and its residents rely on groundwater as a primary drinking water source. Groundwater shortage is exacerbated by the presence of per-and poly-fluoroalkyl substances (PFAS), a group of synthetic chemicals commonly used in industry and consumer products for their water and oil-resistant properties. Often referred to as "forever chemicals", PFAS have bio-accumulative properties, meaning they are likely to build up in the body, along with soil and water. Exposure to PFAS[xxxiii] is linked to adverse health impacts including increased cholesterol levels, and an increased risk of cancer.

In April 2024, the US Environmental Protection Agency, finalized primary drinking water regulations[xxxiv] for six PFAS: PFOA, PFOS, PFHxS, PFNA, and HFPO-DA. The final rule requires public water systems must monitor for these PFAS, provide the public with information on the levels of these PFAS in drinking water, implement solutions to reduce these PFAS if drinking water levels exceed Maximum Contaminant Levels (MCLs), and beginning in 2029, must take action to reduce any of these PFAS that violate the MCLs.

Geographic Location of Groundwater Shortage

Groundwater shortage impacts would be felt at the regional level. Figures 7-12, and 7-13, highlight the high risk areas at the region and local level, respectively, that are vulnerable to the risk of groundwater shortage. The immediate area of concern in the county is between Rockford and Loves Park where groundwater depletion is most concentrated.

Hazard Extent for Groundwater Shortage

Similar to drought, the extent of groundwater shortage hazard varies both depending on the severity and duration of the shortage and the range of depletion and repletion rates. While studies on the groundwater shortage impacts on Northern Illinois are ongoing, potential solutions should be addressed now, rather than later when it becomes a serious problem.

Table 7-24: Risk Identification for Groundwater Shortage Hazard

Probability	x	Magnitude/Severity	=	RPI
1	x	1	=	1

Based on historical information and ongoing water studies in the region, future occurrences of groundwater shortage events in Winnebago County are likely. According to the Risk Priority Index Number (RPN) and County input, groundwater shortages ranked as the number seven hazard, along with dam or levee failure.

Critical Facilities

All critical facilities are impacted by groundwater shortages. A critical facility would encounter many of the same impacts as any other building within the county. These impacts include inability to serve the community or a lack of access to clean drinking water.

Infrastructure

Infrastructure such as power plants and most factories would not be able to operate without the availability of ample water. Fire protection services would not be active due to a lack of water. A groundwater shortage would be felt by residents on many levels.

Vulnerability Analysis for Groundwater Shortage

Groundwater shortages could impact the entire county equally; therefore, the entire county's population and all buildings are vulnerable to a groundwater shortage. To accommodate this risk, this plan considers all buildings located within the county as vulnerable.

Vulnerability to Future Assets Groundwater Shortage/Suggestions for Community Development

New development in the county would be equally impacted by groundwater shortages as existing infrastructure. A lack of access to clean, safe drinking water would be of detriment to the entire community. New developments should be built and planned with groundwater use reduction design standards.

Suggestions for Community Development Trends

Much like droughts and extreme heat, groundwater shortages will be a regional problem. While the initial shortage may affect only one or two municipalities in the beginning, the external effects from that will affect the region. As such, future development is susceptible to groundwater shortage. Because urban and rural areas are equally vulnerable to this hazard, both should take measures to ensure the continuity of our water supply.

An urban water shortage would spell catastrophe for civil, urban life. On the other hand, rural Winnebago County, much of which is agricultural, would see extreme hardships if a water supply issue were to present itself. Local officials should address groundwater shortage hazards by educating the public on steps to take before and during the event. Further, proactive measures towards the problem will do much more to help the County than reactive measures.

Earthquake

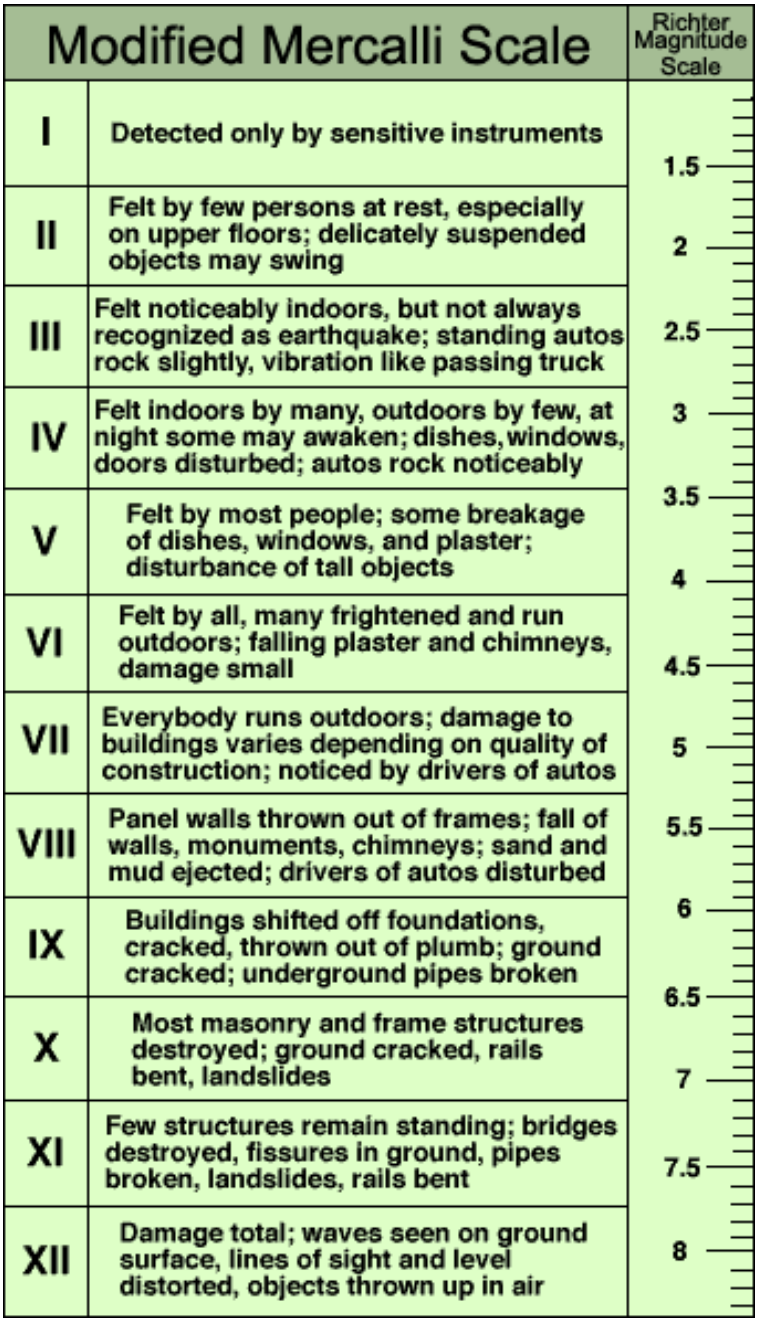
An earthquake is a shaking of the earth caused by the energy released when large blocks of rock slip past each other in the earth's crust. This movement can be demonstrated by trying to slide two sandpaper blocks past each other – at first, they don't move, but as you apply more force, they quickly slip past each other. Similarly, the earth's tectonic plates slowly try to slide past each other and when they build up enough energy, they quickly slip past each other, generating an earthquake.

Most earthquakes occur at tectonic plate boundaries; however, some earthquakes occur in the middle of plates, for example the New Madrid Seismic Zone or the Wabash Valley Fault System. Both of these seismic areas have a geologic history of strong quakes, and an earthquake from either seismic area could possibly affect Illinois counties. There may be other, currently unidentified faults in the Midwest also capable of producing strong earthquakes.

Strong earthquakes can collapse buildings and infrastructure, disrupt utilities, and trigger landslides, avalanches, flash floods, fires, and tsunamis. When an earthquake occurs in a populated area, it may cause death, injury, and extensive property damage. An earthquake might damage essential facilities, such as fire departments, police departments, and hospitals, disrupting emergency response services in the affected area. Strong earthquakes may also require mass relocation; however, relocation may be impossible in the short-term aftermath of a significant event due to damaged transportation infrastructure and public communication systems.

Earthquakes are usually measured by two criteria: intensity and magnitude (M). Earthquake intensity qualitatively measures the strength of shaking produced by an earthquake at a certain location and is determined from effects on people, structures, and the natural environment. Earthquake magnitude quantitatively measures the energy released at the earthquake's subsurface source in the crust, or epicenter. Figure 7-15 provides a comparison of magnitude and intensity, with qualitative descriptions of intensity, for a sense of what a given magnitude might feel like.

Figure 7-15: Comparison of Earthquake Magnitude and Intensity



Source: Missouri Department of Natural Resources

Previous Occurrences for Earthquakes

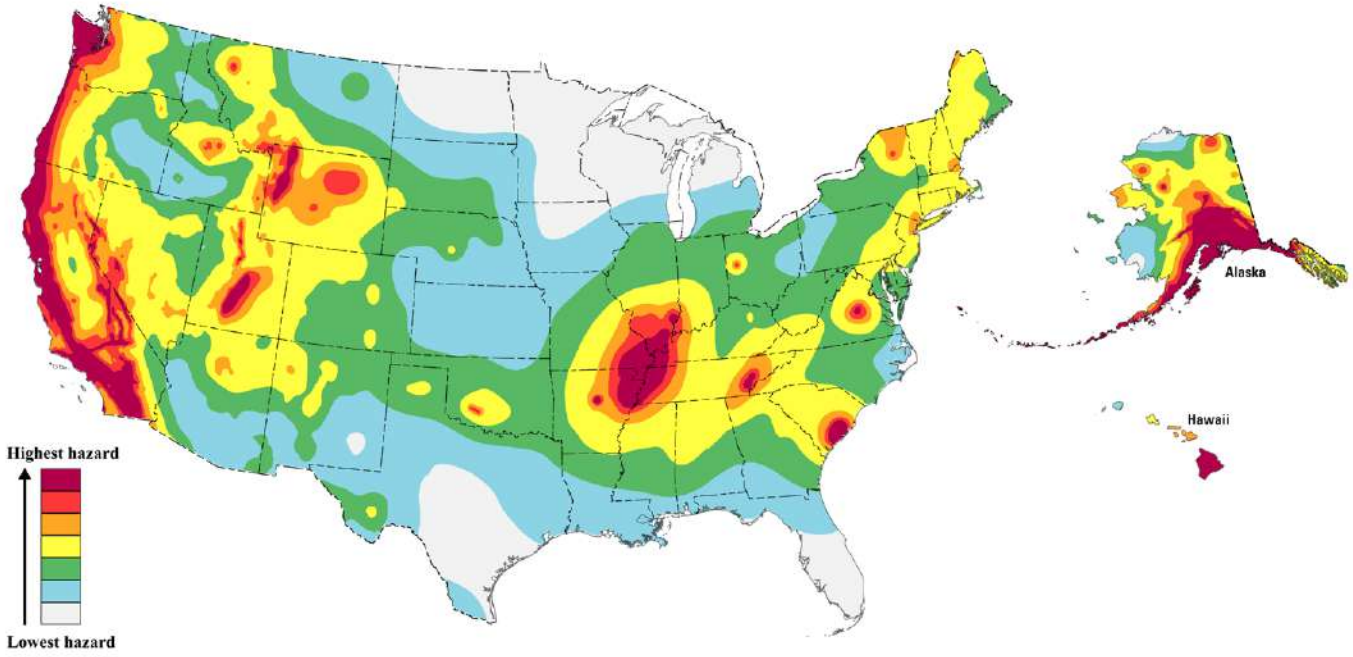
Historically, the most significant seismic activity in Illinois is associated with New Madrid Seismic Zone. The New Madrid Seismic Zone produced three large earthquakes in the central U.S. with magnitudes estimated between 7.0 and 7.7 on December 16, 1811, January 23, 1812, and February 7, 1812. These earthquakes caused violent ground cracking and volcano-like eruptions of sediment (sand blows) over an area greater than 10,500 square kilometers, and uplifted a 50 by 23 kilometer zone (the Lake County uplift). The shaking was felt over a total area of over 10 million square kilometers (the largest felt area of any historic earthquake). The United States Geological Survey (USGS) and the Center for Earthquake Research and Information (CERI) at the University of Memphis estimate the probability of a repeat of the 1811-1812 type earthquakes (M7.5-8.0) is 7-10 percent over the next 50 years (USGS Fact Sheet 2006-3125).

Earthquakes measured in Illinois typically vary in magnitude from very low microseismic events of M1-3 to larger events up to M5.4. The most recent earthquake in Illinois —as of the date of this report—was a M2.4 event in August of 2024 approximately 2.5 miles west southwest of Enfield, Illinois. In Northern Illinois , the most recent earthquake was a M3.1 event in July of 2024, approximately 1.2 miles west northwest of Somonauk, Illinois. The last earthquake in Illinois to cause minor damage occurred on April 18, 2008 near Mt. Carmel, Illinois and measured 5.2 in magnitude. Earthquakes resulting in more serious damage have occurred about every 70 to 90 years and are historically concentrated in southern Illinois.

Geographic Location for Earthquake Hazard

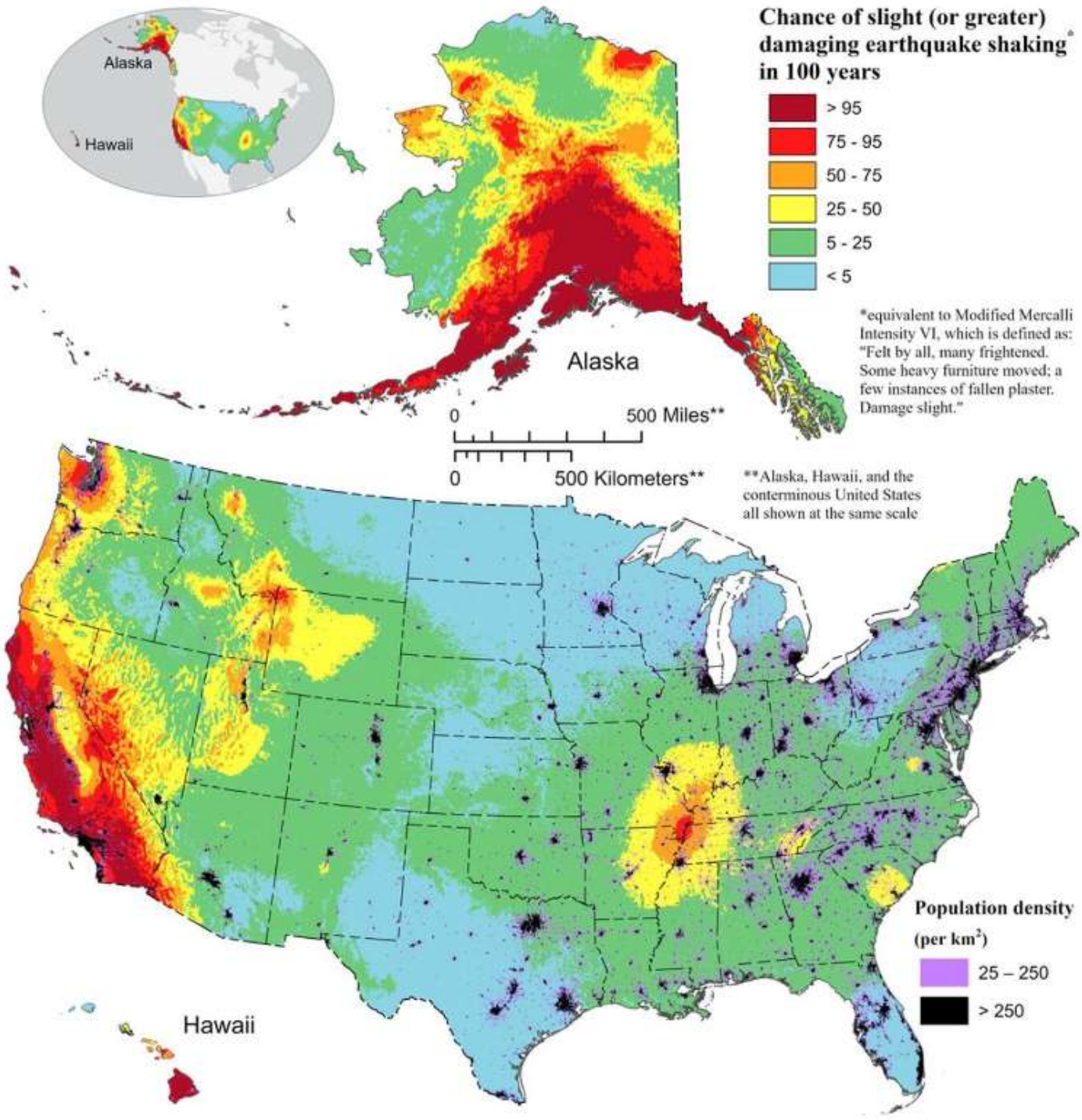
The two most significant zones of seismic activity in Illinois are the New Madrid Seismic Zone and the Wabash Valley Fault System. There are no earthquake epicenters recorded in Winnebago County. While large earthquakes (greater than M7.0) experienced during the New Madrid Events of 1811 and 1812 are unlikely in Winnebago County, moderate earthquakes (less than or equal to 6.0M) in or in the vicinity of Winnebago County are possible. The USGS estimates a damaging earthquake shaking occurring in Winnebago County within the next 100-years at approximately five percent (USGS 2023).

Figure 7-16: Earthquake Hazard Zones, United States



Source: United State Geological Survey

Figure 7-17: Damaging Earthquake Shaking, United States

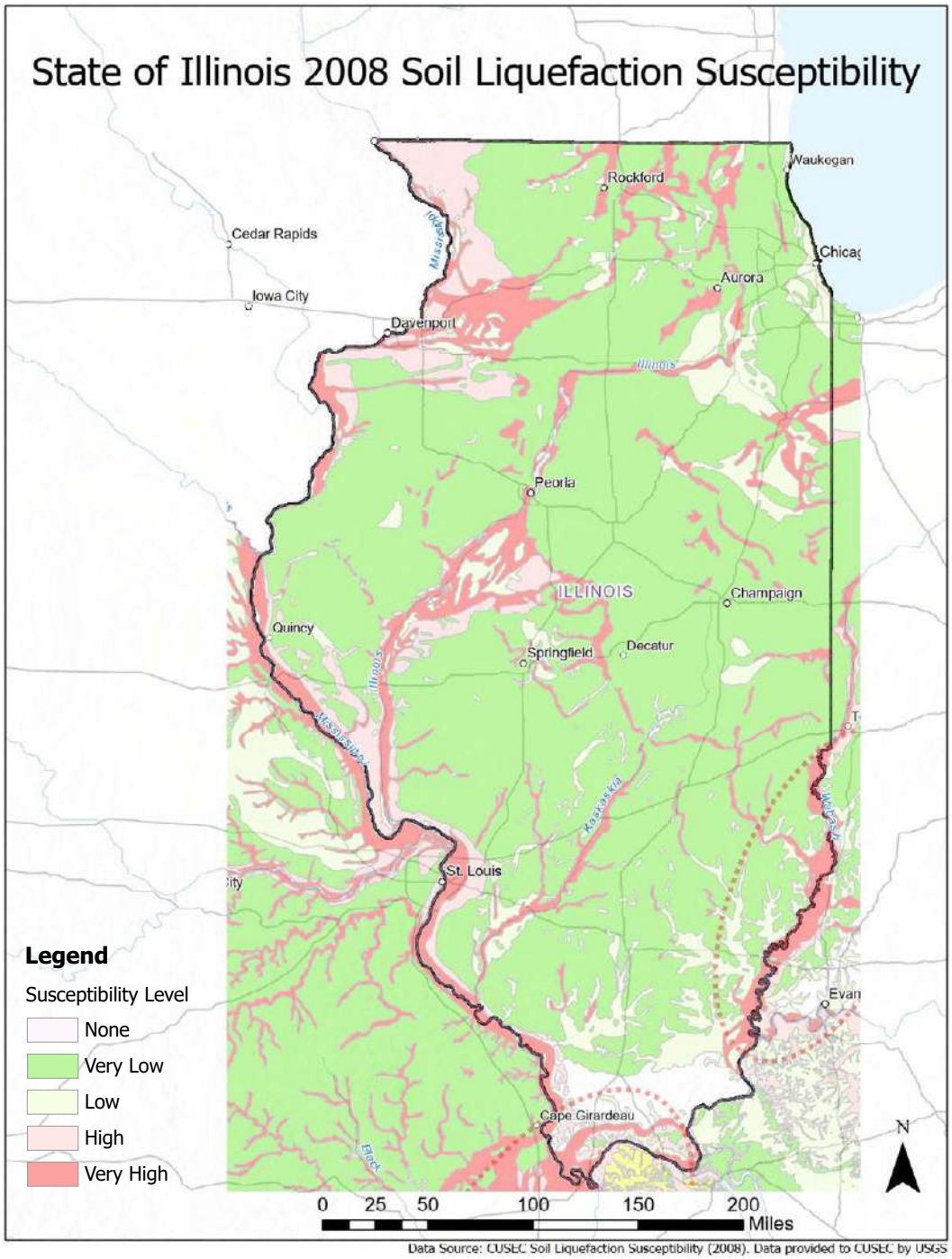


Source: United States Geological Survey

Hazard Extent for Earthquake Hazard

Earthquake effects are possible anywhere in Winnebago County. One of the most critical sources of information that is required for accurate assessment of earthquake risk is soils data. The project team used GIS data from the Central United States Earthquake Consortium (CUSEC) to identify soils that were most susceptible to liquefaction. According to the USGS, liquefaction takes place when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking. Liquefaction occurring beneath buildings and other structures can cause major damage during earthquakes. Figure 7-18 identifies the soils in Illinois most susceptible to failure. Based on historical information and current USGS research and studies, future earthquakes in Winnebago County are possible, but large (greater thanM7.0) earthquakes that can cause catastrophic damage are unlikely.

Figure 7-18: Soil Liquefaction Map, Illinois



Based on historical information, future occurrences of varying level intensity earthquake events in Winnebago County is unlikely. According to the Risk Priority Index Number (RPN) and County input, earthquakes ranked as the number nine hazard.

Table 7-25: Risk Identification for Earthquake Hazard

Probability	x	Magnitude/Severity	=	RPI
1	x	1	=	1

Vulnerability Analysis for Earthquake Hazard

Earthquakes could impact the entire county equally; therefore, the entire county's population and all buildings are vulnerable to an earthquake. To accommodate this risk, this plan considers all buildings located within the county as vulnerable.

Critical Facilities

All critical facilities are vulnerable to earthquakes. A critical facility would encounter many of the same impacts as any other building within the county. These impacts include structural failure and loss of facility functionality (e.g., a damaged police station cannot serve the community).

Building Inventory

The buildings within the county can expect similar impacts to those discussed for critical facilities. These impacts include structural failure and loss of building function which could result in indirect impacts (e.g., damaged homes will no longer be habitable causing residents to seek shelter).

Infrastructure

During an earthquake, the types of infrastructure that shaking could impact include roadways, utility lines/pipes, railroads, and bridges. Since an extensive inventory of the infrastructure is not available to the public, it is important to emphasize that any number of these items could become damaged in the event of an earthquake. The impacts to these items include broken, failed, or impassable roadways, broken or failed utility lines (e.g., loss of power or gas to the community), and railway failure from broken or impassable railways. Bridges could also fail or become impassable, causing risk to motorists.

Vulnerability to Future Assets/Infrastructure for Earthquake Hazard

New construction, especially critical facilities, should accommodate earthquake mitigation design standards.

Suggestions for Community Development Trends

Community development should occur outside of the low-lying areas in floodplains with a water table within five feet of grade that is susceptible to liquefaction.

COVID-19

The COVID-19 pandemic significantly impacted Winnebago County, affecting health, the economy, and community dynamics. Infection rates fluctuated throughout the pandemic, leading to increased hospitalizations that strained local healthcare systems. In response, extensive vaccination campaigns were launched, improving immunity in the community and reducing severe cases. However, the mental health toll was notable nationally, with many residents experiencing heightened anxiety and depression due to isolation and economic instability.[xxxv] Local businesses faced disruptions, resulting in closures and job losses, which contributed to higher unemployment rates and prompted government assistance initiatives. Education was also affected, as schools shifted to remote learning, raising concerns about learning loss and equity.

Ongoing public health concerns, such as long COVID and disparities in healthcare access, have led to discussions on improving resources for affected populations. As the situation evolves, Winnebago County continues to monitor COVID-19 cases while promoting vaccinations and working to rebuild the community's health and economy.

COVID-19 can lead to a wide range of health effects that vary in severity among individuals. Common symptoms include respiratory issues such as cough and shortness of breath, along with fatigue that can last for weeks or months.[xxxvi] Many people experience a loss of taste or smell, muscle and joint pain, and mental health impacts like anxiety, depression, and cognitive difficulties often referred to as "brain fog." Additionally, some individuals may develop long COVID, which presents prolonged symptoms affecting multiple bodily systems. Cardiovascular complications, such as myocarditis, and gastrointestinal issues like nausea and diarrhea have also been reported, highlighting the diverse and sometimes serious health consequences of the virus.[xxxvii]

Section 8: Mitigation Strategies

The goal of mitigation is to reduce the future impacts of a hazard, including property damage, disruption to local and regional economies, and the amount of public and private funds spent to assist with recovery. Overall, mitigation strategies attempt to build disaster-resistant communities. Mitigation actions and projects are necessarily based on a well-constructed risk assessment (Section 6). Mitigation is an ongoing process that adapts over time to accommodate a community's needs.

Winnebago County Successful Mitigation Projects and Related Projects

To be successful, mitigation must be a recurrent process that is continually striving to lessen the impact of natural hazards within the county. The following are projects that have been successfully completed after Winnebago County's 2007 Multi-Hazard Mitigation Plan was formally adopted.

Federal Emergency Management Agency (FEMA) / Illinois State Water Survey (ISWS):

- *Kishwaukee Watershed Discovery:*
  - Through FEMA's Flood Risk Mapping (FRM) program, FEMA worked with ISWS to develop more comprehensive maps of the Kishwaukee Watershed's flood risk areas. While much of this was located in Boone County, some of the flood risk mapping impacted areas in Winnebago County.

State of Illinois: Department of Natural Resources (IDNR):

- *Water Demand in the Rock River Water Supply Planning Region, 2010-2060:*
  - Through the IDNR in partnership with the ISWS, a comprehensive water demand study was completed for the Rock River Region (IDNR's northwestern water study geographic region). The study focused on five areas of major water demand: public supply, self-supplied domestic, self- supplied thermoelectric power generation, self-supplied industrial and commercial, and self- supplied irrigation. The study also factored in climate change scenarios and their impact on water availability.

Winnebago County:

- *Acquisition of 12 Flood Prone Structures:*
  - FEMA has released $1,667,191 in Hazard Mitigation Grant Program (HMGP) funds to Winnebago County, Ill., for the acquisition and removal of 12 homes in Edgemere Terrace that have been repeatedly damaged by flooding.
- *Acquisition of 29 Flood Prone Structures and 61 Adjacent Vacant Lots:*
  - The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) has released $1,446,034 in Hazard Mitigation Grant Program (HMGP) funds to Winnebago County, Ill., for the acquisition and removal of 29 structures & 61 adjacent vacant lots on Blackhawk Island that have been repeatedly damaged by flooding.
- *Update Flood Maps:*
  - FEMA has provided funding to the Illinois State Water Survey and the USACE Rock Island District to update flood studies and flood hazard mapping in Winnebago County. A new engineering study of the hydrology and hydraulics of the Rock River took place. In addition, funding has been provided to update flood studies and mapping for a limited number of tributaries to the Rock River in Winnebago county. The Illinois State Water Survey, on behalf of the Federal Emergency Management Agency, held a Winnebago County Flood Risk Review Meeting on May 1, 2013 in Rockford, Illinois.

- From 2015 to 2017 the Village of Roscoe has acquired 6 flood prone structures. Funding sources have been HMGP funds totaling over $1,000,000.

City of Rockford

- *Community Rating System:*
  - The City of Rockford was approved for enrollment in the CRS in 2022. Approval includes providing flooding education to residents.
- *Alpine Dam:*
  - The City of Rockford secured funding to complete rehabilitation of the Alpine dam.
- *Acquisition of 38 Flood Prone Structures:*
  - The City of Rockford has acquired and demolished 112 flood prone structures in the Keith Creek floodplain. Funding sources have been HMGP funds totaling $5,240,765, DCEO CDAP funds totaling $2,918,186 and DCEO IKE Buyout Program funds totaling $4,832,727

Machesney Park

- *Acquisition of 116 Flood Prone Structures:*
  - Machesney Park has acquired 143 parcels and demolished 116 flood-prone structures in the Shore Drive and floodplain areas within the Village. Funding sources have been HMGP funds totaling $6,465,476, DCEO funds totaling $6,022,382, FMA funds totaling $260,752, and IDNR funds totaling $227,612.

North Park Water District

- *Back-up Generators for Critical Facilities:*
  - The District installed back-up generators at Pump Station 7, Well 4 and the Administration Office to provide firm resilience during power interruptions.
  - The District updated the Source Water Protection Plan in 2023, and shared with municipal partners to avoid potential hazardous developments in set-back zones.

Four Rivers Sanitation Authority

- *Minimize the amount of infrastructure exposed to hazards:*
  - The district completed a Flow Basin Project ensuring quality wastewater treatment can continue in high-flow rain events. Additionally, the District completed sanitary sewer stream crossing encasements, stream bank stabilization, generator replacement, and replaced failing pipes.

National Flood Insurance Program (NFIP)

As of the date of this plan, FEMA has paid over 76.8 billion dollars in Flood Insurance claims in Illinois since 1978, to more than 2.5 million flood loss claims. Table 8-1 includes a summary of additional information for Winnebago County including information on the NFIP participation and date, Flood Insurance Rate Map (FIRM) participation and data, and floodplain ordinances. FEMA manages a program known as the Community Rating System (CRS). In 2022, the City of Rockford became approved for enrollment in the CRS, and as of this report is the only municipality in Winnebago County participating in this program. Cherry Valley, Durand, Loves Park, Machesney Park, New Milford, Pecatonica, Rockford, Roscoe, South Beloit, and the unincorporated areas of Winnebago County participate in the NFIP. As of October 15, 1981, the Village of Rockton has been suspended from the NFIP. Winnebago County will continue to provide information to these municipalities regarding the benefits of the program.

Since the last update of the Hazard Mitigation Plan in 2019, the Village of Rockton has had internal discussion regarding NFIP participation, but no significant action was taken. The Village is open to participating in the NFIP in the future. It would be helpful if officials could be educated on the benefits of participation, given the uncertainty of the number of eligible homes or properties within identified floodplain boundaries within the Village.

Table 8-1: Community NFIP Participation, FIRM Data, and Floodplain Ordinance Date

Community	Flood Administrator	Participation Date	FIRM Date	Floodplain Ordinance
Cherry Valley	Public Works Director	3/16/1981	2/17/2016	March 2004
Durand	Zoning Administrator	9/2/1981	9/6/2006	Aug 2006
Loves Park	Director of Public Works	10/17/1978	2/17/2016	Feb 2011
Machesney Park	Planning and Zoning Manager	9/30/1981	2/17/2016	Jan 2016
New Milford	Village President	9/6/2006	2/17/2016	June 2006
Pecatonica	Village Clerk	12/1/1981	2/17/2016	Sept 2006
Rockford	Stormwater Manager	12/4/1979	2/17/2016	Sept 2011
Rockton	Village Engineer	Suspended	2/17/2016	Sept 2016
Roscoe	Village Engineer	3/1/1982	2/17/2016	March 1993
South Beloit	City Administrator	1/2/1980	2/17/2016	Aug 1976
Winnebago County	Civil Engineer	11/19/1980	2/17/2016	Aug 2006

Zoning and Building Codes

Ordinances that directly pertain, or can pertain, to disaster mitigation are listed in Table 8-2. These are discussed in more detail, if information was provided, in this section. Data in this table was collected from Municode and the individual municipalities.

Table 8-2: Related Municipal Zoning Ordinances

Municipality Name	Zoning	Building Codes	Land Use Plan	Stormwater Management Plan	Stormwater Management Ordinance	Flooding Controls	Subdivision Ordinance	Burning Ordinance	Seismic Standards	Erosion Management
Cherry Valley	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
Durand	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No
Loves Park	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
Machesney Park	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
New Milford	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
Pecatonica	Yes	Yes	No	No	Yes	-	-	Yes	-	Yes
Rockford	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Rockton	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
Roscoe	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
South Beloit	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Winnebago	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Winnebago County	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes

Fire Insurance Ratings

Fire Insurance Ratings (FIR) are provided to your community's fire department by a company called Insurance Service Offices (ISO). The ratings are generally not made available to the public. These ratings directly impact your home insurance rates. ISO rates how effective your fire department is at protecting your community from hazards. The ISO rating is also known as a Public Protection Classification (PPC) and is a score from one to ten and often is used as an indicator for how well-equipped your fire department(s) are to protect the community. One is the best possible rating with ten meaning the fire department does not meet the ISO minimum standards. The Greater Rockford Airport fire is not evaluated by the ISO rating system as they only handle airport-related fires. Table 8-3 provides the municipal fire insurance ratings.

Table 8-3: Fire Insurance Ratings by District

Facility Name	Fire Insurance Rating	Number of Employees
Blackhawk Fire	4	22
Cherry Valley Fire Protection District	3	50
Durand Fire Protection District	5/8	25
Greater Rockford Airport Fire	n/a	7
Harlen Roscoe Fire Protection District	3	56
Loves Park Fire Department	4	38
New Milford Fire Protection District	4	22
North Park Fire Protection District	4	52
Northwest Fire Protection District	5/7	23
Pecatonica Fire Protection District	4/8	26
Rockford Fire Department	2	280
Rockton Fire Protection District	3/6	45
Shirland Fire Protection District	5/8	20
South Beloit Fire Department	4	18
Stillman Fire Protection District	4/8	41
West Suburban Fire Protection District	7/9	23
Win-Bur-Sew Fire Protection District	4/7	24

Capability Analysis

Table 8-4 summaries the capabilities for the jurisdictions within Winnebago County. The Fire Districts and Townships are combined. Service organizations can act within any jurisdiction of the County.

Individual jurisdictions may be limited by staff or resources, and any changes in capability may not be immediately reflected.

Table 8-4: Capability Summary Table by Jurisdiction

Capability	Winnebago County	Townships	Cherry Valley	Durand	Loves Park	Machesney Park	New Milford	Pecatonica	Rockford	Rockton	Roscoe	Winnebago	Fire Districts	Park District
Plans														
Economic Development*	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	n/a	n/a
Emergency Operations	Winnebago County EOP, 2001								City of Rockford EOP, 2001					
Policies, Codes, Ordinances														
Surface Water, Storm, Flood	Surface Water, 2024	Surface Water, 2024	Stormwater Management Plan, 2001			Stormwater Management Plan			Storm Water Master Plan, 2024 update		Stormwater Management Program, 2012		n/a	n/a
Mutual Aid Agreements	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a
Administrative														
Planner	Staff	n/a	None	None	Staff	Staff	None	None	Staff	Staff	None	None	n/a	Staff
Finance/Grants Administration	Staff		None	None	Staff	None	None	None	Staff	None	None	None	None	
Public Information Officer	Staff		None	None	Staff	None	None	None	Staff	None	None	None	Yes	
Grant Writing	Staff		None	None	None	None	None	None	Staff	None	None	None	None	
Technical														
Emergency Manager	Staff	County	County	County	Fire	County	County	County	Staff	County	County	County	Staff	Staff
Floodplain Admin	Staff	County				Staff			Staff				n/a	
Civil Engineer	Staff	County	Consultant	Consultant	Consultant	Consultant	Consultant	Consultant	Staff	Consultant	Consultant	Consultant	n/a	Consultant
Legal Counsel	Staff	Consultant	Consultant	Consultant	Consultant	Consultant	Consultant	Consultant	Staff	Consultant	Consultant	Consultant	Consultant	Consultant
GIS	Staff	County	None	None	None	None	None	None	Staff	None	None	None	n/a	
Financial														
Capital Improvement	As needed	As needed							Annual				As needed	Annual
Utility Fees	none	n/a	Water	Water, Sewer	Water, Sewer	Non Village	None	Water, Sewer	Water, Sewer	Water, Sewer	Non village	Water, Sewer	n/a	n/a
State funding	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT		IDNR, IEPA
Federal funding (non-FEMA)	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA		EDA
FEMA funding assistance	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC
Education/Outreach														
Newspaper	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current
Local news stations	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF
Organizations that interact with underserved/ vulnerable	Community Services Division/ Human Services Department, Salvation Army, Red Cross, Rock River Valley Pantry, Rockford Rescue Mission, NIL Foodbank								Salvation Army, Red Cross, Shelter Care Ministries, YWCA, Prairie State Legal Services					
Social media	Multiple								Multiple					Multiple

*See larger version at the end of the document

Mitigation Goals

In Section 6 of this plan, the risk assessment identified Winnebago County as prone to several hazards. The Multi-Hazard Mitigation project team members understand that although they cannot eliminate hazards altogether, Winnebago County can work towards building disaster-resistant communities. Below is a generalized list of goals, objectives, and actions. The goals represent long-term, broad visions of the overall vision the county would like to achieve for mitigation. The objectives are strategies and steps that will assist the communities in attaining the listed goals. The County and R1 project teams added an additional goal to address mitigation to hazards throughout the County by identifying specific projects for inclusion in a Resilience Improvement Plan.

Goal 1: Lessen the impacts of hazards to new and existing infrastructure

- *Objective:* Retrofit critical facilities and structures with structural design practices and equipment that will withstand natural disasters and offer weather-proofing.
- *Objective:* Equip public facilities and communities to guard against damage caused by secondary effects of hazards.
- *Objective:* Minimize the amount of infrastructure exposed to hazards.
- *Objective:* Evaluate and strengthen the communication and transportation abilities of emergency services throughout the county.
- *Objective:* Improve emergency sheltering in Winnebago County.

Goal 2: Create new, revise, and support existing plans/maps for Winnebago County

- *Objective:* Support compliance with the NFIP for each municipality in Winnebago County.
- *Objective:* Review and update existing, or create new, community plans and ordinances to support hazard mitigation.
- *Objective:* Conduct new studies/research to profile hazards and follow up with mitigation strategies.
- *Objective:* Identify developing hazards as the world around us changes and prepare for them.

Goal 3: Develop long-term strategies to educate Winnebago County residents on the hazards affecting their county

- *Objective:* Raise public awareness on hazard mitigation.
- *Objective:* Improve education and training of emergency personnel and public officials.

Goal 4: Identify and seek funding for critical facility and infrastructure projects for mitigation

- *Objective:* Identify projects for Hazard Mitigation funding opportunities
- *Objective:* Identify projects for inclusion in Resilience Improvement Plan

Mitigation Action Plans and Strategies

Upon completion of the risk assessment and development of the goals and objectives, the County and R1 reviewed a list of the six mitigation measure categories from the FEMA State and Local Mitigation Planning How-to Guides. The measures are listed as follows:

- **Prevention:** Government, administrative, or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection:** Actions that involve the modification of existing buildings or structures to protect them from a hazard or removal from the hazard area. Examples include acquisition, elevation, structural retrofits, storm shutters, and shatter-resistant glass.

- **Public Education and Awareness:** Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.
- **Natural Resource Protection:** Actions that, in addition to minimizing hazard losses, preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream-corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Emergency Services:** Actions that protect people and property during and immediately after a disaster or hazard event. Services include warning systems, emergency response services, and protection of critical facilities.
- **Structural Projects:** Actions that involve the construction of structures to reduce the impacts of a hazard. Such structures include dams, levees, floodwalls, seawalls, retaining walls, and safe rooms.

As part of the evaluative measures set forth by FEMA, the project team was tasked with listing potential mitigation activities using the FEMA evaluation criteria. FEMA uses their evaluation criteria STAPLE+E (stands for social, technical, administrative, political, legal, economic and environmental) to assess the developed mitigation strategies.

- **Social:**
  - Will the proposed action adversely affect one segment of the population?
  - Will the action disrupt established neighborhoods, break up voting districts, or cause the relocation of lower income people?
- **Technical:**
  - How effective is the action in avoiding or reducing future losses?
  - Will it create more problems than it solves?
  - Does it solve the problem or only a symptom?
  - Does the mitigation strategy address continued compliance with the NFIP?
- **Administrative:**
  - Does the municipality have the capability (staff, technical experts, and/or funding) to implement the action, or can it be readily obtained?
  - Can the community provide the necessary maintenance?
  - Can it be accomplished in a timely manner?
- **Political:**
  - Is there political support to implement and maintain this action?
  - Is there a local champion willing to help see the action to completion?
  - Is there enough public support to ensure the success of the action?
  - How can the mitigation objectives be accomplished at the lowest cost to the public?
- **Legal:**
  - Does the community have the authority to implement the proposed action?
  - Are the proper laws, ordinances, and resolutions in place to implement the action?
  - Are there any potential legal consequences?
  - Is there any potential community liability?
  - Is the action likely to be challenged by those who may be negatively affected?
  - Does the mitigation strategy address continued compliance with the NFIP?

- **Economic:**
  - Are there currently sources of funds that can be used to implement the action?
  - What benefits will the action provide?
  - Does the cost seem reasonable for the size of the problem and likely benefits?
  - What burden will be placed on the tax base or local economy to implement this action?
  - Does the action contribute to other community economic goals such as capital improvements or economic development?
  - What proposed actions should be considered but be "tabled" for implementation until outside sources of funding are available?
- **Environmental:**
  - How will this action affect the environment (land, water, endangered species)?
  - Will this action comply with local, state, and federal environmental laws and regulations?
  - Is the action consistent with community environmental goals?

Implementation and Analysis of Mitigation Projects

Implementation of the mitigation plan is critical to the overall success of the mitigation planning process. The first step is to decide, based upon many factors, which action will be undertaken first. In order to pursue the top priority first, an analysis and prioritization of the actions is important. Some actions may occur before the top priority due to financial, engineering, environmental, permitting, and site control issues. Public awareness and input of these mitigation actions can increase knowledge to capitalize on funding opportunities and monitoring the progress of an action.

As part of the 2024 version, Winnebago County, individual municipalities, and the organizations that operate in the County were asked to review the 2019 strategies they developed during the 2019 plan and offer and comments or additions where appropriate. The matrices included under Mitigation Strategies 2024 includes completed and ongoing mitigation strategies. Once the review was complete, the prioritization was updated where appropriate. Table 8-5 summarizes the STAPLE+E criteria used by FEMA to prioritize strategies. For each incorporated municipality, a rating of high, medium, or low was assessed for each mitigation item.

Table 8-5: STAPLE+E Criteria from FEMA

Criteria	Definition
S- Social	Mitigation actions are acceptable to the community if they do not adversely affect a particular segment of the population, do not cause relocation of lower income people, and if they are compatible with the community's social and cultural values.
T- Technical	Mitigation actions are technically most effective if they provide a long-term reduction of losses and have minimal secondary adverse impacts.
A- Administrative	Mitigation actions are easier to implement if the jurisdiction has the necessary staffing and funding.
P- Political	Mitigation actions can truly be successful if all stakeholders have been offered an opportunity to participate in the planning process and if there is public support for the action.
L- Legal	It is critical that the jurisdiction or implementing agency have the legal authority to implement and enforce a mitigation action.
E- Economic	Budget constraints can significantly deter the implementation of mitigation actions. Hence, it is important to evaluate whether an action is cost-effective, as determined by a cost benefit review, and possible to fund.
E- Environmental	Sustainable mitigation actions that do not have an adverse effect on the environment, comply with federal, state, and local environmental regulations, and are consistent with the community's environmental goals, have mitigation benefits while being environmentally sound

For each mitigation action related to infrastructure, new and existing infrastructure was considered. Additionally, the mitigation strategies address continued compliance with the NFIP. While an official cost-benefit review was not conducted for any of the mitigation actions – potential funding sources are included in the following section. The overall benefits were considered when prioritizing mitigation items from high to low. An official cost-benefit review would be conducted prior to the implementation of any mitigation actions; however, as part of the scope of this project – an official review was not completed for each mitigation item. Appendix G presents mitigation projects for each incorporated municipality and organization developed and updated for 2024. This plan identifies potential funding sources for each mitigation item as well as responsible positions, departments, or municipalities for the mitigation strategies included below. The objective of this updated plan is to generate proactive mitigation strategies with clear goals and objectives. The Winnebago County Highway Department will transfer the lead of local planning efforts to the Winnebago County Emergency Management offices. The Winnebago County Board, the cities, and the villages continue to be an integral part of the implementation process. Federal and state assistance will be necessary for a number of the identified actions included below and this is noted under the potential funding sources. R1 and Winnebago County staff contacted all jurisdiction included in the Multi-Hazard Mitigation Partner Organizations table (pages ii through iv). Each participant received an opportunity to add or identify new mitigation actions, but in a number of instances, none were amended. The Rockford Park District is included as a new participant in the plan for this update.

Potential Mitigation Item Funding Sources

The biggest challenge in implementing many mitigation items is a lack of funding across local, state, and federal governments. The costs of these projects run into the hundreds of thousands of dollars – sometimes even the millions. It can be difficult for governments, especially at the local and state levels, to amass the necessary capital to implement them. However, the cost of doing nothing – especially in an era of weather extremes – is far greater. Included below are descriptions for identified FEMA funding sources. Additionally, under the Review of Mitigation Strategies section, each mitigation strategy has a potential funding source[1] if applicable (i.e. if a mitigation item is complete – it will have no funding source).

Per the NCEI[xxxviii], from 1980 to 2018 the annual average cost year-to-year for overall damage on the U.S. government was $42.8 billion (including billion-dollar weather disasters only). From 2014 to 2018 the annual average cost year-to-year for overall damage on the U.S. government was $99.1 billion – nearly $100 billion year-to-year (including billion-dollar weather disasters only). The trend in billion dollar disasters for the U.S. is upward in both intensity and probability, therefore, resiliency during an era of weather extremes is more important than ever. Flash floods and floods represent the second most common NCEI storm events that impact the Winnebago County area. Since 2000, the Winnebago County area has suffered from nearly $31 million in damage from flash floods and floods (42 storm events reported from 2000-2019). Included below are potential funding sources with brief descriptions for each for the mitigation items profiled above (all of the FEMA grant included below are available to local government through the Hazard Mitigation Assistance grant program); these funding source options were identified through FEMA materials.

Federal Emergency Management Agency (FEMA):

- *Hazard Mitigation Grant Program (HMGP):*
  - The HMGP is designed to provide local and state governments access to a larger pool of funding following a Presidential Major Disaster Declaration[xxxix]. The funds are eligible to be used for projects that reduce long-term effects of future disaster events. The prioritization of projects is administered through state and local governments. Private individuals may not apply for this funding; however, they may be sponsored by a local government as an applicant. Benefits of the HMGP funded projects are risk- reduction activities, improved resiliency, and the provision of a solution to a long-term problem.

1 These funding sources are potential funding sources only. They are intended to express no formal commitment and are solely included to demonstrate potential funding sources.

- *Building Resilience in Communities (BRIC):*
  - Building Resilience in Communities, or similar pre-disaster mitigation funding yet to be determined, will be targeted to address any applicable mitigation strategies identified by the participating jurisdictions.
- *Flood Mitigation Assistance Grant Program (FMA):*
  - The FMA grant is offered to state and local governments under the National Flood Insurance Act of 1968 (NFIA). It is intended to reduce or eliminate claims made under the NFIP. The FMA provides funding for the reduction or elimination of structures that are at risk of flooding and are insured by the NFIP. The funding is also available for management costs. Private individuals may not apply for this funding; however, they may be sponsored by a local government as an applicant. Benefits of the FMA funded projects are improved resiliency and a reduction in reliance on the federal government for future disaster assistance.

Provided by the local or state government:

- *Taxes; Fees; Financial Reserves (I.e. General Funds)* (provided by the local or state government)
  - Taxes are an often underutilized source of funding for hazard mitigation activities. Whether it is because of their unpopularity or mistrust in government use of tax money – taxes represent an excellent source of funding at the local and state level to fund mitigation projects and activities. Further, it is not necessarily the levying of a tax – local and state governments can offer tax incentives (often referred to as breaks) to developers and builders that build with future disaster resiliency in mind. If a tax was levied against a local or state community, it should be placed into a fund to grow cumulatively – and offered as a grant for future mitigation projects or activities.
- *Impact Fees* (provided by the local or state government)
  - Impact fees are traditionally used to offset the costs of new infrastructure and public capital facilities when new developments are constructed (more information is found at the American Planning Association; and information from the Institute for Legal Government: League of California Cities). However, funding from impact fees can be utilized to offset the mitigation of future damages from natural hazards. For example, one option of funding would be to deposit impact fees on developments in one municipality into a general fund for multiple municipalities that can fund mitigation strategies at a higher level – the logic behind this being, multiple funding sources can make project funding easier. While mitigation projects and actions are often specific in nature, funding projects done collaboratively as a region can ease cost burdens. Impact can be formatted as taxes (which may provide a longer-term solution to funding local and state mitigation projects); however, this is a relatively new concept. Impact fees are more common and easily defined. In either case – a solution should be funneled into a kind of financial reserve for the municipality to fund mitigation projects and actions only. To ensure the funding stays relatively stable the funding should come from multiple sources (municipalities).

Provided by local, state, and national financials institutions:

- *Lending from Private Financial Institutions* (provided by local, state and national financial institutions)
  - Another funding source for local and state government is local, state, and national financial institutions. These funds are readily available through the financial system. However, these funds are often in the form of loans which often carry interest rates. Some larger foundations and corporations may provide funding through the form of grants to non-profits or local government. However, these grants can carry strict requirements for how the funding is spent – additionally, the funding is also often limited in the way that it is spent (for example: a restriction on capital expenditures).

Organizational Mitigation Strategies Matrix

As a part of the multi-hazard mitigation planning requirements, at least two identifiable mitigation action items have been addressed for each hazard listed in the risk assessment and for each municipality covered under this plan. As part of the 2024 version of the MHMP, each municipality and organization was asked to complete a review of their 2019 mitigation strategies and provide an update on its status as of 2024. These are provided below in addition to potential funding sources, timelines, and a responsible position(s), departments, or municipalities for the mitigation strategies included below[2]. Also included below are individual action items by municipality if one was provided – these action items are included following the mitigation strategy table.

During the drafting of the 2024 version all of incorporated municipalities within and including Winnebago County were asked to participate in a review in which goals, objectives, and strategies were discussed and prioritized. In addition, organizations that operate in Winnebago County, such as service providers and utility providers were encouraged to participate. Each participant was offered the 2019 strategies as well as the Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards (2013) authored by FEMA. This guidebook includes possible mitigation goals and strategies provided by FEMA. All potential strategies and goals that arose through this process are included in this plan. The Winnebago County project team used FEMA's evaluation criteria to gauge the priority of all items.

Mitigation Strategies 2024

Winnebago County, individual municipalities, and the organizations that operate in the County continue to work with IEMA and FEMA on mitigation projects like those outlined below. Winnebago County and its municipalities will continue to develop new strategies, plans, maps, and procedures for mitigating the impacts of natural hazards. Included below are reviews by the individual municipalities on their mitigation strategies since the 2019 version with comments for status updates as of 2024 as well as timelines for projects and responsible parties. All comments were reviewed and may be edited slightly for content and clarity (unedited versions are available upon request). The 2024 Mitigation Strategies Matrices can also be found in Appendix G.

2 The responsible positions, departments, or municipalities identified are subject to change due to internal changes, departmental reorganizations, and other external factors. These are meant to be illustrative of current conditions and are non-binding.

Table 8-6: Blackhawk Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: To update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Finding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreement	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table 8-6: Blackhawk Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazards Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding: private lending; or grant funding				
Responsible: Chief/Administration				

Table 8-7: Boone-Winnebago Regional School District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Emergency and Crisis Response Plan with Enhanced Security Measures	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	All Hazards	High	All school districts are required to meet with local first responders and their representative crisis teams annually, before October 1, to review all emergency plans. Minutes from these meetings are submitted to the Regional Office of Education each school year and are available at our office.	We are working to develop a regional safe school plan that all schools in the county will follow. Several planning meetings are scheduled and will take place throughout the year. One agenda item is to apply for a grant for an outside company to develop maps of the schools.
Timeline: Ongoing; by October 1					
Funding: Respective School districts general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Currently, school districts lack funding for items such as these; however, they may exist at certain schools' facilities. The Boone-Winnebago ROE is not familiar with to what extent these varying districts and schools may have these in place.	We are working to develop a regional safe school plan that all schools in the county will follow. Several planning meetings are scheduled and will take place throughout the year. One agenda item is to apply for a grant for an outside company to develop maps of the schools.
Timeline: 2- 4 year implementation when funding is identified (pending individual school board approval)					
Funding: Respective school districts general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Family Disaster Plans & IEMA Kits	Goal: Lessen the impacts of hazards to County residents. Objective: Strengthen communication between County residents and emergency services.	All Hazards	Medium	No Comment	As part of the 2 year grant we received we will work with the partnering districts to develop better internal and external communication plans and systems for crisis.
Timeline: Ongoing					
Funding: Respective school districts general funds					
Develop Emergency Management Team	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	All Hazards	High	Some school districts have a School Emergency Management Team and are integrated into the Unified Command Structure.	We are working to develop a regional safe school plan that all schools in the county will follow. Several planning meetings are scheduled and will take place throughout the year. Within the next two years we will have unified response plans for every participating district. Our goal is every district.
Timeline: Ongoing (EMT teams meet yearly with local officials and individual schools prior to October 1)					
Funding: None					
Responsible: Boone-Winnebago Regional Offices of Education administrative offices; respective school district offices of administration					

Table 8-8: Burritt Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Developing Informational Only Website. Further Objective: Winnebago County website for easier constituent access.
Timeline: The Township will evaluates the website information annually				
Funding: Township general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Burritt Township lacks funding to purchase additional equipment for dealing with flooding, erosion and hazards i.e. Backhoe, skid loader, trailer, replace failing tandum, new mowing tractor and mower, and chipper.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Floodplain and Stormwater Management Ordinances	Goal: Develop long-term strategies to reduce/ eliminate flooding impact in Township.	All Hazards	High	Critical Flooding Failure areas in Township are Harrison Road, Cemetery Road, and Eddie Road. Funding needed.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Erosion Control	Goal: Develop long-term strategies to reduce/ eliminate erosion impact in Township.	All Hazards	High	Critical Erosion Failure along and near all drainage ways do due irresponsible farming practices through the entire Township. To resolve this issue would require farmers to not plant crops in drainage ways and plant grass ways in the drainage areas.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Burritt Township has a high elderly population including homebound. Critical as many lack computers or cell phones and transportation, and rely on landline and tv or radio. Except for family members of this population, use of website would be to no avail to them. Township lacks transport methods other than Fire Dept or police Emergency Services. Winnebago County is in discussions on transportation.
Timeline: Ongoing				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				

Table 8-8: Burritt Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Provided and Publicize Location of Safe Rooms and / or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	Township has no storm shelters. Critical would be funding to extend Road District building to serve as a storm shelter for residents and Officers/employees.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Coordinate with County, Fire Department, County Police Department, and other public bodies.
Timeline: Ongoing				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Critical for to Infrastructure. Burritt Township does not have alternative power source and has non backup generators for either Township Hall or Road District building or equipment and funding is limited.
Timeline: 2 years once funding is available				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Winnebago County has Tornado Siren system with practice alert every Tuesday morning. Township seeking to add on to the system through communication, awareness through email, and text blasts.
Timeline: 2 years once funding is available				
Funding: Township general funds; Pre-Disaster Mitigation Funding; or grant funding				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with County to develop updated maps for Township.
Timeline: Ongoing				
Funding: Township general funds				
Bridges/Waterflow Structures	Goal: to update and repair to guard against damage by flooding, erosion and excessive ground water.	All Hazards	High	Critical Failure of at least one box culvert currently identified by IDOT/Winnebago County is Cemetery Road over Tunnison Creek in Burritt Township. Funding is extremely limited beyond any County assistance for bridge projects.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; Private lending; or grant funding				

Table 8-8: Burritt Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	To implement an Ordinance adopting Winnebago County Burn Ordinance.
Timeline: Ongoing				
Funding: Township general funds				
Develop Alternate Traffic Routes	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and updated existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County for developing of alternative routes and awareness for flooding of roads and alternative routes for other road closure purposes, such as signage for detours, etc.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Critical in Township for safety and access to roadways. No funding for purchasing snow fence or natural snow fence barriers.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table 8-9: Village of Cherry Valley (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Devote Section of Website to Hazard Mitigation Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Ongoing efforts to post to Village's website.	The Village has recently updated their website and will include a section to provide residents with information regarding any know hazards and their mitigation for those hazards.
Timeline: Reviewed annually					
Funding: Village general funds					
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Ongoing within Cherry Valley. The Village wishes to provide additional training and education for Management team, as well as Public Works Crews through NIMS training.	Village Public Works staff routinely take classes to stay informed and up to date on several topics that cover first response assistance. Including but not limited to defibrillator, OHSA, traffic control, and flagging training.
Timeline: Within one year of funding being made available					
Funding: Pre-Disaster Mitigation funding, or grant funding					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Backup generator was added in 2018.	The Village has been proactive and has already provided backup generators for their Village Hall, public works facility, and all Well Houses in operation. The Village is considering providing generators for their water towers as well.
Timeline: Completed; under review					
Funding: Village general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	All Hazards	High	Cherry Valley has began removing EAB affected trees within the Village. We will continue to remove hazardous trees.	Trees identified to be a risk to public infrastructure are routinely added to Village projects to remove the trees. When possible, Public Works crews also take down trees that have or have a strong possibility of causing damage.
Timeline: Within Five years					
Funding: Village general funds					

Table 8-9: Village of Cherry Valley (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of the emergency services.	All Hazards	Low	Still evaluating means of communication and transportation abilities of the emergency services	The Village continues to identify and replace sections of sidewalk and crosswalks that are in need of replacing to adhere to the latest ADA and PROWAG standards.
Timeline: Within three years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Medium	Continued communication efforts by sending out Village newsletter quarterly, additionally a portable message board has been purchased to identify local and specific issues.	The Village has updated their website and provides many different notices and brochures to residents to make them aware of the latest Village ordinances and recommendations. They also publish a newsletter 3 times a year..
Timeline: Reviewed annually					
Funding: Village general funds					
Develop Safety Procedures for Earthquakes	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Earthquakes	High	Village to work with appropriate response agency to develop a plan.	The Public Works team is organizing a meeting between local police and fire departments to propose a response plan in the event of an earthquake.
Timeline: Within five years					
Funding: Village general funds					
Burn Ordinances	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat	High	Ordinance was passed allowing burning the last (2) weekends in October and first (2) weekends in November.	The Village continues to publish information regarding the burn ordinances in their fall newsletter for all residents, which can also be found online.
Timeline: Reviewed annually					
Funding: Village general funds					
Floodplain Ordinances	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	High	Cherry Valley will continue to improve the village's floodplain ordinances to restrict development with the floodplain.	The existing ordinance continues to be enforced during plan review for Village development. The Village works closely with the County to make sure Cherry Valley's ordinance complies with the County's.
Timeline: Reviewed every two years					
Funding: Village general funds					

Table 8-9: Village of Cherry Valley (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Stormwater Management Ordinances	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	Medium	Cherry Valley wishes to plan for new flow and direct it to access of outflow.	The Village is pursuing a GIGO Grant for the restoration of Madigan Creek as the Creek has causing significant erosion to the local resident's yards and even threatens one of the homes near the outlet of the creek.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Cherry Valley plans to develop an emergency plan in the event of a HAZMAT release. The village has identified the importance of reinforced situational awareness, identification of potential hazards, and the need to communicate with other disciplines.	The Public Works team is organizing a meeting between local police and fire departments to proposed an emergency plan in the event of a HAZMAT release.
Timeline: Five years					
Funding: Village general funds					
HAZMAT Spill, Removal, and Disposal Procedure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Cherry Valley plans to work with local Fire and Police on this.	The Public Works team is organizing a meeting between local police and fire departments to proposed an emergency plan in the event of a HAZMAT spill. The Village has previously mapped the majority of storm drains and outfalls to easily identify locations where a contaminated spill could make its way to the local river and cut it off ahead of time.
Timeline: Five years					
Funding: Village general funds					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	Still in consideration.	In 2023 the Village coordinated with ComEd to bury the majority of power lines in a section of the downtown commercial district. The Village continues to seek funding to bury more power lines for the rest of the commercial district.
Timeline: Within ten years after funding is made available					
Funding: Pre-Disaster Mitigation Funding: private lending; or grant funding/donations					

Table 8-9: Village of Cherry Valley (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Ordinance for Higher Construction Standards	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Severe Storms/ Tornadoes	Medium	Cherry Valley will continue to improve the village's construction ordinances to develop construction standards specific to weather/climate stressors.	The Village has made amendments to ordinance section 82-10, which covers accessory buildings to strengthen the design standards required for non-residential buildings. The Village also continues to review their construction ordinances based on resident and developer feedback.
Timeline: Reviewed every two years					
Funding: Village general funds					
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No plans to install snow fencing for maintenance reasons. Not much drifting issues within the Village.	No plans to install snow fencing for maintenance reasons. The Village has not previously and continues to not have any issues with drifting snow. Public Works crews have snow removal plans and procedures to ensure roads are cleared in a timely manor for residents and emergency responders.
Timeline: Complete					
Funding: Village general funds					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	Looking at additional locations to utilize.	Village Hall has recently been identified as a Heating and Cooling Center as required and in close coordination with the County.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding: private lending; or grant funding/donations					
Responsible: Administrator, Village Board					

Table 8-10: Cherry Valley Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Ongoing within the Cherry Valley Township.
Timeline: Ongoing				
Funding: Road and Bridge				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Cherry Township participates in the IPWMAN that would provide resources and assistance during events.
Timeline: Ongoing				
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guards against damage cause by secondary effects on hazards.	All Hazards	High	This mitigation item has been identified as a need, securing costs and budgeting future installation at the Township offices and maintenance building.
Timeline: 2 years once funding is available				
Funding: Grant Funding when available				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	This mitigation item is ongoing.
Timeline:Ongoing				
Funding: Road and Bridge				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	This item is ongoing and regular practice at the Cherry Valley Township.
Timeline: Ongoing				
Funding: Grant Funding; Road and Bridge; General Fund				
Responsible: Cherry Valley Township Highway				

Table 8-11: Chicago-Rockford Airport (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	The Chicago-Rockford Airport would like to add a back up generator to the admin building (which servces as EOC and Family Assistance Center). Also a whole building UPS to bridge the gap between power failure and generator activation for the main terminal.
Timeline: 2 years once funding is available				
Funding: Grant Funding				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	Flooding	High	Pump House for Glycol Deicing Containment and Treatment pond pump house for working mechanisms is not on generator back up. Identified as need as result of July 2024 storms.
Timeline: 2 years once funding is available				
Funding: Grant Funding				
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding	High	The backup generator for operational approach runway lighting is currently located within the Floodplain.
Timeline: 2 years once funding is available				
Funding: Grant Funding				
Roadway Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding	High	Cessna Road is a main access road to major suppliers of goods and services, and the roadway is surrounding by floodplain on all sides. The could affect access to the south end of the Airport if inundated with water during a flood event.
Timeline: 2 years once funding is available				
Funding: Grant Funding				
Responsible: Emergency Manager				

Table 8-12: Village of Durand (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of the emergency services.	All Hazards	High	Still need more sr. living and special needs help and contact information to help the village of Durand.	Still need more sr. living and special needs help and contact information to help the village of Durand.
Timeline: Ongoing					
Funding: Village general funds					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Okay.	Currently, the Durand Fire Department has mutual aid agreements with other local departments. Durand Police Department is also involved with mutual aid agreements.
Timeline: Ongoing					
Funding: Village general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Okay.	The Village currently has one large generator to assure their ability to operate pumps in the event of a prolonged power outage. The village also has several smaller portable generators to insure power for radio communication.
Timeline: 2 years once funding is available					
Funding: Village general; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Okay.	Durand wishes to improve first responder training in the city. This will be handled by the Durand Fire and EMS.
Timeline: Ongoing					
Funding: Village general funds					
Devote Section of Website to Hazard Mitigation Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Low	New website is online and still adding more information.	Website is online and still being regularly updated.
Timeline: Ongoing					
Funding: Village general funds					

Table 8-12: Village of Durand (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Enhance/Create Alternate Emergency Operations Center	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve EOC emergency sheltering.	All Hazards	Medium	Okay.	Durand's primary EOC is the Durand Fire Department. The secondary EOC is the Village Hall and/or Durand School.
Timeline: Complete					
Funding: Village general funds					
Back-up Water Supply	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium/High	Done.	The Village's portable generator is capable of providing power to the well in order to keep the elevated water tower filled.
Timeline: Complete					
Funding: Village general funds					
Burn/Water Ban Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	Okay.	The Village currently has existing burning ordinances as well as a water ban ordinance that can be implemented when needed.
Timeline: Ongoing					
Funding: Village general funds					
Floodplain Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	High	Okay.	Durand will continue to maintain update floodplain ordinances.
Timeline: Ongoing					
Funding: Village general funds					
Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	Low	Still on list as money is short.	Done.
Timeline: Complete					
Funding: Village general funds					

Table 8-12: Village of Durand (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Culvert Replacement	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/Dam and Levee Failure	Medium	Okay.	Durand currently monitors high flow areas. The Village will seek funding to replace culverts on an as needed basis.
Timeline: 2 years once funding is made available					
Funding: Village general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Okay.	Durand Fire Department will continue to work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: Ongoing					
Funding: Village general funds					
HAZMAT Spill, Removal, and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Okay.	Durand Fire Department will continue to work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: Ongoing					
Funding: Village general funds					
Anchoring of Manufactured Homes and Exterior Attachments	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Medium	Okay.	Current building codes address the issue including anchoring of utility sheds.
Timeline: Complete					
Funding: Village general funds					
Responsible: Village staff; Police Department; Public Works Department					

Table 8-13: Durand Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	What we lack in personnel, training, or appropriate equipment to deal with a variety of emergencies can be addressed utilizing resources within our mutual aid area.	High	We have been a member of MABAS IL since its inception. We have Mutual/Auto Aid agreements with neighboring fire districts and EMS services. We are in the process of updating our MABAS cards.
Timeline: Ongoing				
Funding: District general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	Long periods of power disruptions could cause serious risks to our community, especially during times of extreme heat and/or cold. It is important to have a source of power for long-term outages to address the needs of public health and shelter.	High	We have a backup generator at our main fire station in Durand. Medina Nursing Home is an extended care facility in our community and they have a backup generator as well. Alternate/back-up power sources for a larger facility like the school should be looked at as a longer term location for sheltering a larger segment of our community.
Timeline: Ongoing				
Funding: District general funds				
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Within our community the water supply is probably the most vulnerable infrastructure. Communications is another area of concern. Our community relies strongly on telephone, cable, and cellular networks for a majority of day to day and emergency communications.	Medium	The water system falls under the jurisdiction of the Village, so this would be an issue better addressed by them. Our fire district has the ability to pump and haul large amounts of water if needed from many other locations. Backups to the 911 System and Public Safety Communications are in place so emergency calls can be answered locally. Redundant communications links with our dispatch center are in place to handle a failure within the primary system.
Timeline: Ongoing				
Funding: District general funds				
Responsible: Chief/Administration				

Table 8-14: Durand Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Our township should collaborate with other municipalities to provide education to the residents on hazards that affect our community. This would be better administered at the County level with input and involvement from the municipalities who could address the hazards specific to their jurisdictions.
Timeline: The Township will evaluate this information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	We do not have formal mutual aid agreements in place, however, we do assist other jurisdictions as needed with informal requests. Establishing a formal mutual aid system like exists within the fire service through MABAS within the various township, county, and state highway departments would be a good way to share resources (equipment and personnel) during an emergency.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	The Durand Fire Department has a backup generator at the main fire station in Durand. Medina Nursing Home is an extended care facility in our community and they have a backup generator as well. Alternate/back-up power sources for a larger facility like the school should be looked at as a longer term location for sheltering a larger segment of our community.
Timeline: Ongoing				
Funding: Township general funds				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	We do not have formal alternate traffic routes but in times of emergency traffic can be re-routed. Alternate traffic routes would be a higher priority for State and County roads that see higher traffic than our township roads.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Snow fencing can be effective during winter storms. We have a grader and snow blower to help clear snow when a winter storm causes major drifting. Locations that are prone to significant drifting could be targeted for snow fencing.
Timeline: Within 3 years funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table 8-15: Four Rivers Sanitation Authority (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	Medium	Formalized one Mutual Aid Agreement. 2024 correction: FRSA does not have record of a current Mutual Aid Agreement.	FRSA is open to negotiating/ implementing Mutual Aid Agreements if approached by other entities.
Timeline: Ongoing; as appropriate					
Funding: District general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	All critical lift stations and WWTPs have back-up generators.	FRSA continues to maintain and replace back-up generators as required.
Timeline: Completed					
Funding: None					
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	2024 clarification: Excess Flow Basin Project has been completed ensuring quality wastewater treatment can continue in high-flow rain events.	FRSA continues to harden infrastructure throughout the treatment plant and collection system facilities. Example projects include sanitary sewer stream crossing encasements, stream bank stabilization, generator replacement, replacement of failing pipes, and inflow/infiltration mitigation.
Timeline: Completed					
Funding: None					
Responsible: Executive Director, Chief Engineer					

Table 8-16: German Valley Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/ maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Consistently looking at ways to better our response and reviewing box cards.
Timeline: Ongoing				
Funding: District general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	Both fire stations have standby generators installed.
Timeline: Completed				
Funding: District general funds				
Responsible: Chief/Administration				

Table 8-17: Harlem Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Keeping out Township website up to date with information.
Timeline: The Township will evaluate this information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	No formal aid agreements but we keep good relations with other local government.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Our department does have a back-up generator on site.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with our County Emergency Services providers and cities to develop plans for alternate road closures.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Our roads are mostly residential snow fence works on rural roads not residential.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table 8-18: Harlem Roscoe Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/ maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Harlem-Roscoe continues to work with the Fire Departments in the county to have a specified plan for assistance when needed.
Timeline: Ongoing				
Funding: District general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Harlem-Roscoe has equipped all our Fire Stations with a back up generators in case of power failure.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table 8-19: Harrison Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Harrison Township is unincorporated and passes information made available from Winnebago County.
Timeline: Ongoing				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Harrison Township is unincorporated and any emergency services are provided through Winnebago County.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Harrison Township is unincorporated and existing infrastructure consists of small town hall.
Timeline: With 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Harrison Township is unincorporated and its thoroughfares are county maintained.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No Comment
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table 8-20: Laona Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Our township should collaborate with other municipalities to provide education to the residents on hazards that affect our community. This would be better administered at the County level with input and involvement from the municipalities who could address the hazards specific to their jurisdictions.
Timeline: The Township will evaluate this information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	We do not have formal mutual aid agreements in place, however, we do assist other jurisdictions as needed with informal requests. Establishing a formal mutual aid system like exists within the fire service through MABAS within the various township, county, and state highway departments would be a good way to share resources (equipment and personnel) during an emergency.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	The Durand Fire Department has a backup generator at the main fire station in Durand. Medina Nursing Home is an extended care facility in our community and they have a backup generator as well. Alternate/ back-up power sources for a larger facility like the school should be looked at as a longer term location for sheltering a larger segment of our community.
Timeline: Ongoing				
Funding: Township general funds				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	We do not have formal alternate traffic routes but in times of emergency traffic can be re-routed. Alternate traffic routes would be a higher priority for State and County roads that see higher traffic than our township roads.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Snow fencing can be effective during winter storms. We have a grader and snow blower to help clear snow when a winter storm causes major drifting. Locations that are prone to significant drifting could be targeted for snow fencing.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table 8-21: City of Loves Park (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Ongoing/ High	Loves Park will continue to work with Winnebago County to improve Public Education and Awareness.	Fire Department Inspection Beaureu is actively involved with pre-plans, inspections, and Public Safety Awareness Programs, activities, etc.
TImeline: Ongoing					
Funding: City of Loves Park general funds					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Continue these efforts with the Winnebago County Local Emergency Planning Committee (LEPC?).	Loves Park Fire has updated the M.A.B.A.S. Box Alarm Cards which were approved by the committee and implemented, along with updated Auto-Aid Agreements in place.
Timeline: Ongoing					
Funding: City of Loves Park general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Continue to seek funding for back-up generators for critical facilities within the City.	Loves Park Fire is currently working with Helm on projected on-site generator quotes for the two staffed Stations and Headquarters.
Timeline: 1 to 3 years as funds are available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Loves Park wishes to improve first responder training in the City and will work with Winnebago County on this mitigation item.	The City has hired a Marketing and Communications Specialists who submits monthly correspondence safety tips on varying media outlets. Fire Department personnel have increased annual training.
Timeline: Ongoing; annually					
Funding: City of Loves Park general funds					
Develop Safety Procedures for Earthquakes	Goal: Improve emergency sheltering and procedures in the event of an earthquake. Objective: Review and update existing, or create new community earthquake plans.	Earthquakes	Low	The City of Loves Park will work with Winnebago County will work to develop mutual aid agreements in event of an earthquake.	The City of Loves Park will work with Winnebago County if there is a need for mutual aid in the event of an earthquake.
TImeline: 7 to 10 years					
Funding: City of Loves Park general funds					

Table 8-21: City of Loves Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Low	Continue enforcing burn ordinance and maintain updates.	Continue enforcing burn ordinance and maintain updates.
Timeline: Completed, ongoing enforcement and updates					
Funding: None					
Develop educational materials, both web-based and in paper form, on the benefits of the NFIP	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of flooding and flood insurance.	Flooding/ Dam and Levee Failure	High	Continue efforts educating residents on the benefits of the NFIP.	No Comment
Timeline: Ongoing					
Funding: City of Loves Park general funds					
Culvert Replacement	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	Loves Park wishes to seek funding to replace culverts in the city.	Loves Park will continue to maintain or replace bad culverts as needed within the City.
Timeline: 1 to 3 years as funds are available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or gran funding/donations					
Install Sump Pumps	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize potential damage to foundations and household/critical facility utilities.	Flooding/ Dam and Levee Failure	High	This mitigation item is ongoing.	We currently only utilize one sump pump that we monitor and maintain as needed.
Timeline: Ongoing; 5-7 years; completed as necessary					
Funding: City of Loves Park general funds					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: 1- 3 years					
Funding: City of Loves Park general funds					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: 1- 3 years					
Funding: City of Loves Park general Funds					

Table 8-21: City of Loves Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: 4- 6 years					
Ongoing: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	The City will continue these efforts. However, the cost of burying existing power lines makes this a very difficult reality.	The City would encourage the Power company to bury existing power lines. The cost to the City if we decide is very substantial and can greatly affect the overall cost of a project.
Timeline: 4- 6 years once funding is available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Medium	The City of Loves Park wishes to seek funding to harden existing infrastructure in the event of severe storms and tornadoes.	The City of Loves Park wishes to seek funding to harden existing infrastructure in the event of severe storms and tornadoes.
Timeline: 4-6 years once funding is available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	Medium	This mitigation item is ongoing in the County the Highway Department. The City of Loves Park will work with the County to improve this mitigation item.	The City of Loves Park does not use snow fence. We have made improvements to our equipment and deicing chemicals to help limit the impacts of drifting.
Timeline: 4- 6 years once funding is available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	The City of Loves Park wishes to seek funding to increase the number of heating and cooling shelters for its residents.	The City of Loves Park will contine to work within Winnebago County to provide Heating and Cooling Shelters.
Timeline: 4- 6 years once funding is available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Responsible: Village staff, Fire Chief, Public Works, Community Development					

Table 8-22: Village of Machesney Park (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Machesney Park plans to work with Winnebago County to distribute materials to residents at strategic times to raise awareness of potential hazard.	The Village has adopted a local incident response plan which accounts for public outreach during weather-related incidents.
Timeline: Quarterly and annual updates to the villages through newsletters and mailings (Ongoing; as needed)					
Funding: Village of Machesney Park general funds					
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Machesney Park will work with the Winnebago County Local Emergency Planning Committee (LEPC) and other Agencies in the County to develop and improve mutual aid agreements within the county.	Machesney Park will work with the County and other Agencies in the County to develop and improve mutual aid agreements within the county.
Timeline: 5- 10 years; pending Winnebago County Sheriff's Department approval					
Funding: Village of Machesney Park general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Machesney Park wishes to seek funding to obtain back-up generators for critical facilities.	Machesney Park wishes to seek funding to obtain back-up generators for critical facilities.
Timeline: 2 years after funding identified					
Funding: Village of Machesney Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Machesney park will continue to assist WinGIS in maintaining its list of critical and essential facilities in the county.	Machesney park will continue to assist WinGIS in maintaining its list of critical and essential facilities in the county.
Timeline: Ongoing; annually (reviewed every 1- year)					
Funding: Village of Machesney Park general funds					
Establish Local Emergency Planning Committee	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to residents.	All Hazards	Low	Machesney Park will work with the Winnebago County Local Emergency Planning Committee (LEPC).	Machesney Park will work with the Winnebago County Local Emergency Planning Committee (LEPC).
Timeline: 5 years					
Funding: Village of Machesney Park general funds					

Table 8-22: Village of Machesney Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Family Disaster Plans and Kits	Goal: Lessen the impacts of hazards to residents. Objective: Strengthen communication between residents and emergency services.	All Hazards	Medium	Machesney Park will work with Winnebago County to distribute Family Disaster Plans and Kits to residents.	Machesney Park will work with Winnebago County and State of Illinois to distribute Family Disaster Plans and Kits to residents.
Timeline: As needed; trigged when disaster occurs					
Funding: Village of Machesney Park general funds					
Special Needs population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Medium	Machesney Park will work to develop and maintain a special needs population list to strengthen the emergency services.	Machesney Park will coordinate and research a special needs population list to strengthen the emergency services with other governmental agencies.
Timeline: 5- 10 years					
Funding: Village of Machesney Park general funds					
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	Medium	Machesney Park will work to develop, maintain, and distribute a list of the safe rooms and shelters to its residents.	Machesney Park will work to develop, maintain, and distribute a list of the safe rooms and shelters to its residents.
Timeline: 5 years					
Funding: Village of Machesney Park general funds					
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	Machesney Park plans to improve the emergency communication system currently in place.	Machesney Park has and plans to improve the emergency communication system currently in place.
Timeline: 5- 10 years					
Funding: Village of Machesney Park general funds					
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Medium	Machesney Park will continue to maintain updated burn ordinances.	Machesney Park will continue to maintain update burn ordinances.
Timeline: 5- year review schedule					
Funding: Village of Machesney Park general funds					

Table 8-22: Village of Machesney Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Participate in the Community Rating System	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Machesney Park will investigate the feasibility of joining the CRS.	Machesney Park will work with Winnebago County will investigate the feasibility of joining the CRS.
Timeline: 1- 2 years					
Funding: Village of Machesney Park general funds					
Participate in the NFIP	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Machesney Park participates in the NFIP and will continue to maintain compliance with the NFIP by evaluating and improving existing ordinances.	Machesney Park participates in the NFIP and will continue to maintain compliance with the NFIP by evaluating and improving existing ordinances.
Develop educational materials, both web-based and in paper form, on the benefits of the NFIP	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of flooding and flood insurance.	Flooding/ Dam and Levee Failure	High	Machesney Park participates in the NFIP and will continue to educate its residents on the benefits of the NFIP.	Machesney Park participates in the NFIP and will continue to education its residents on the benefits of the NFIP.
Timeline: 2 years					
Funding: Village of Machesney Park general funds					
Property Acquisition (Buyouts) & Property Relocation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	Machesney Park currently works and will continue to identify areas where buyouts and property relocations make the most sense. Several projects have already been completed with Federal assistance. Machesney Park will continue to seek federal funding for future property acquisitions.	Machesney Park currently works and will continue to identify areas where buyouts and property relocations make the most sense. Several projects have already been completed with Federal assistance. Machesney Park will continue to seek federal funding for future property acquisitions.
Timeline: 1 year and immediately following funding identification and award					
Funding: Village of Machesney Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Floodplain and Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	Machesney Park has building code restrictions and flood protection requirements in place. The Village will continue to maintain and update these ordinances.	Machesney Park has building code restrictions and flood protection requirements in place. The village will continue to maintain and update these ordinances.
Timeline: 2 year review					
Funding: Village of Machesney Park general funds					
Open Space Preservation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Keep the floodplain and other hazardous areas open and free from development.	Flooding/ Dam and Levee Failure	High	Machesney Park wishes to seek funding to improve open space preservation and decrease the amount of infrastructure exposed to flooding.	Machesney Park wishes to seek funding to improve open space preservation and decrease the amount of infrastructure exposed to flooding.
Timeline: 2 year review after funding identified and awarded					
Funding: Village of Machesney Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					

Table 8-22: Village of Machesney Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Dam Failure Emergency Response Plan	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	Low	Machesney Park will work with Winnebago County Emergency Services to participate in response planning for such events.	Machesney Park will work with Winnebago County Emergency Services to participate in response planning for such events.
Emergency Plan / Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Machesney Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	Machesney Park will consider working with the Winnebago County LEPC to improve the County's HAZMAT response plans upon request.
Timeline: 5- 10 years					
Funding: Village of Machesney Park general funds					
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Machesney Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	Machesney Park will consider working with the Winnebago County LEPC to improve the County's HAZMAT response plans upon request.
Timeline: 5- 10 years					
Funding: Village of Machesney Park general funds					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms / Tornadoes	Medium	Machesney Park wishes to seek funding to convert existing power lines. This will minimize loss of energy at critical times of need.	Machesney Park wishes to seek funding to convert existing power lines. This will minimize loss of energy at critical times of need.
Timeline: 10 years after funding identified and received					
Funding: Village of Machesney Park general funds; Pre-Disater Mitigation Funding; private lending; or grant funding					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	Machesney Park wishes to seek funding to increase the number of heating and cooling shelters for its residents. The Village Hall is designated as a cooling center.	Machesney Park shares the locations of area heating and cooling shelters with its residents via social media. Village Hall is no longer a designated heating or cooling shelter location.
Responsible: Village staff, Administration, Public Works, Community Development					

Table 8-23: Village of New Milford (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Websites updates ongoing. Village looking into text notification of residents for emergencies.	The Village of New Milford has started a new website, a Facebook page, and has implemented a new notice board by Village Hall that will be used to notify residents about Emergency Procedures or updates as the Village becomes aware of them. Information provided by these sources is updated biweekly.
Timeline: Reviewed annually					
Funding: Village general funds					
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	Ongoing. Village evaluating and pursuing grant options to provide shelter since New Milford School Structure has been demolished.	Ongoing. Village is still evaluating and continues to pursue grant opportunities to provide shelter since New Milford School Structure has been demolished.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Ongoing. Village evaluating funding sources available.	Ongoing. Generator to be purchased and installed within five years once funding is awarded to the Village.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaaster Mitigation Funding; private lending; or grant funding/donations					
Floodplain and Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	Medium	Ongoing. Village continuing to review and update applicable ordinances.	New Milford has ordinances and procedures in place and continues to consult with the County to remain in line with Winnebago County's ordinances. The village will continue to maintain and update these ordinances.
Timeline: Reviewed annually					
Funding: Village general funds					

Table 8-23: Village of New Milford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Ongoing. Village is continuing to collaborate with the appropriate agencies and departments at the County.	New Milford continues to consult with the local Fire Department and Police Department regarding the latest information and recommendations for Emergency plans and HAZMAT response plans.
Timeline: Ongoing					
Funding:Village general funds					
Install Tornado Safe Room	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Severe Storms/ Tornadoes	High	Ongoing. Village evaluating and pursuing grant options to provide shelter since New Milford School Structure has been demolished.	The Village continues to monitor for grant opportunities to assist with the construction of tornado safe rooms. Shelter to be constructed within five years once funding is awarded to the Village.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Anchoring of Manufactured Homes and Exterior Attachments	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Medium	Village has updated applicable ordinances and is working with homeowners to comply.	In 2024 New Milford has reviewed and amended their mobile home ordinance to comply with the latest standards for home installation and anchoring in coordination with the Department of Housing and Urban Development (HUD).
Timeline: Ongoing					
Funding: Village general funds					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	Winter Storms/ Drought and Extreme Heat	High	Ongoing. Village evaluating funding sources available.	The Village would like to use the Village Hall as a heating/ cooling shelter, but the required backup generator would need to be funded by a grant or similar funding source. The Village continues to monitor for opportunities for funding this purchase.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Responsible: Village Staff, Village Board					

Table 8-24: New Milford Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Finding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table 8-24: New Milford Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table 8-25: North Park Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Finding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table 8-25: North Park Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table 8-26: North Park Water District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Medium	Implemented robo-calls, which allows us to target susceptible customers for advanced notification. Increased social media awareness as an additional communication method.	Continued to implement robo-calls, which allows us to target susceptible customers for advanced notification. Increased social media awareness as an additional communication method.
Timeline: Completed					
Funding: None					
Family Disaster Plans & Kits	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Medium	NPPWD would like obtain funding for family disaster plans & kits to stress the importance of safe drinking water.	Implemented social media as it relates to source water protection, disaster preparedness ("Know Where Your Master Valve is")
Timeline: Within 2 years after the funding is awarded					
Funding: North Park Water District general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Generators at critical sites are included in the 5 year capital plan.	Back-up generators have been installed at Pump Station 7, Well 4 and the Administration Office. These generators provide firm resilience during power interruptions.
Timeline: Within 3 years after the funding is awarded					
Funding: North Park Water District general funds					
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	Low	Susceptible facilities have been raised above flood plain.	Susceptible facilities have been raised above flood plain.
Timeline: Completed					
Funding: None					
Install Sump Pumps	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize potential damage to foundations and household/critical facility utilities.	Flooding/ Dam and Levee Failure	Medium	Backflow devices are required in all commercial buildings and residential buildings with hazards as defined by IEPA.	Backflow devices are required in all commercial buildings and residential buildings with hazards as defined by IEPA. Device inspection and testing is also performed annually as required.
Timeline: Completed					
Funding: None					

Table 8-26: North Park Water District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Medium	No Comment	Implemented Cybersecurity improvements (multi-factor authentication, education for employees, server monitoring by third-party agency).
Timeline: Within 5 years after the funding is awarded					
Funding: North Park Water District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Low	Have begun converting critical sites to underground power.	Moved Well 4 and Tower 2 power services underground along with NPPWD Administration Building.
Timeline: Within 5 years after the funding is awarded					
Funding: North Park Water District general funds					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Groundwater protection setback zones have been established and communicated with local emergency response agencies.	Updated Source Water Protection Plan in 2023, shared with municipal partners and work to avoid potential hazardous developments in set-back zones.
Timeline: Completed					
Funding: None					
Heating and Colling Shelter	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	Will continue to cooperate with local municipalities in all aspects of severe weather emergencies.	Will continue to cooperate with local municipalities in all aspects of severe weather emergencies.
Timeline:Annually (1 year)					
Funding: North Park Water district general funds					
Develop Safety Procedures for Earthquakes	Goal: Improve emergency sheltering and procedures in the event of an earthquake. Objective: Review and update existing, or create new community earthquake plans.	Earthquakes	Low	Will continue to cooperate with local municipalities in all aspects of emergencies.	Will continue to cooperate with local municipalities in all aspects of emergencies.
Timeline: Annually (1 year)					
Funding: North Park Water District general funds					
Responsible: Director of Government Affairs					

Table 8-27: Northwest Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and /or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table 8-27: Northwest Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table 8-28: Village of Pecatonica (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	This will continue to be overseen by the Village Board in addition to press releases,website we are now able to contact every household with our callout system.	This will continue to be overseen by the Village Employees, we will continue to use our website, newsletter and call out system to inform the public.
Timeline: Ongoing					
Funding: Village general funds					
Develop a Disaster Plan	Goal: Develop Disaster plan. Objective: To inform Citizens of who to call and where to go in case of a disaster.	All Hazards	High	This plan will be developed by the Village Board with input from Police and Fire Departments and Social Service agencies.	Plan will be developed between the Police Department, Fire Department as well as Winnebago County Emergency management.
Timeline: 5 years					
Funding: Village general funds					
Emergency Planning Committee	Goal: Develop an Emergency Planning Committee. Objective: To review and update existing, or create new community plans.	All Hazards	High	This still needs to be setup. In 2014 there was a different Administration in place.	Members of the Police Department will work with the Fire department to create a committee.
Timeline: 5 years					
Funding: Village general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	The Village currently has one and options are being reviewed to increase.	Both water and sewer facilities are covered by back up generators owned by the village.
Timeline: 2 years once funding is available					
Funding: Village general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Develop Procedures Specific to Earthquakes and Educate Public	Goal: Develop Procedures specific to Earthquakes. Objective: Establish guidelines and procedures in case of an earthquake.	Earthquakes	Low/ Medium	This will be assigned to the emergency committee once established.	We will rely on the Winnebago county emergency disaster plans.
Timeline: 5 years					
Funding: Village general funds					

Table 8-28: Village of Pecatonica (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Burn/Water Ban Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat / Drought	Medium	Currently the Village does not allow burning. A water ban ordinance can be implemented if needed.	Currently the Village does not allow burning. A water ban ordinance can be implemented if needed.
Timeline: Ongoing					
Funding: Village general funds					
Culvert/Storm Drain Repair	Goal: Culvert/Storm drain Repair. Objective: Ensure all culverts and storm drains are working properly and evaluate if others are needed.	Flooding/ Dam and Levee Failure	Low	Public Works inspects these areas on a regular basis and if there are heavy rains a close eye is kept on these areas.	They are inspected and repaired as needed, by the Public Works Department.
Timeline: Ongoing					
Funding: Village general funds					
Floodplain Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	Medium	This still needs to be setup.	Flood plain will follow the EPA requirements.
Timeline: 2 years once funding is available					
Funding: Village general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Identification of Structures in Floodplains	Goal: Identification of Structures in floodplains. Objective: To create a list of all Structures located in Floodplains.	Flooding/ Dam and Levee Failure	Medium	We currently have a map that identifies the floodplain area however, it still needs more work done by the committee once established.	We currently have a map that identifies the floodplain area.
Timeline: Completed					
Funding: Village general funds					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	These plans are still in effect.	Plans are reviewed annually and are still in place.
Timeline: Ongoing					
Funding: Village general funds					
HAZMAT Spill, Removal, and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	This plan is still in place with the Public Works and Police Department.	This plan is review and updated when needed. The Police Department and Public Works department work together.
Timeline: Ongoing					
Funding: Village general funds					

Table 8-28: Village of Pecatonica (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	Severe Storms/ Tornadoes	Low	This will continue to be handled by the Public Works Department.	The Public Works Department address Trees annually or as needed.
Timeline: Ongoing					
Funding: Village general funds					
Provide and Publicize Shelters/Safe Rooms	Goal: Provide and Publicize Shelters/Safe Rooms. Objective: To Inform the Public of where they can go in case of a severe storm.	Severe Storms/ Tornadoes	Medium	This will be assigned to the emergency committee once established.	The Village has identified and published the local shelter.
Timeline: Ongoing					
Funding: Village general funds					
Winter Storms-Dissemination of Information	Goal: Provide contacts for residents if snowed in. Objective: To inform Residents of whom to call if they are stranded at home or in town.	Winter Storms	High	This will be assigned to the emergency committee once established.	The Village has identified and published the local shelter.
Timeline: Ongoing					
Funding: Village general funds					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Low	The Village currently has one building assigned for this more work needs to be done to add other sites.	The Village has identified and published the local shelter.
Timeline: Ongoing					
Funding: Village general funds					
Responsible: Village Administration, Police, and Public Works staff, with cooperation by Fire District					

Table 8-29: Pecatonica Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: To update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding: private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table 8-29: Pecatonica Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regrading burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table 8-30: Pecatonica Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Developing Informational Only Website to provide information. Further Objective: To link with Village of Pecatonica/ Westlake Village Assn websites and a link to Winnebago County website for easier constituent access.
Timeline: The Township will evaluates the website information annually				
Funding: Township general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Pecatonica Township lacks funding to purchase additional needed equipment for dealing with flooding, erosion and hazards i.e. Chipper needed, updated backhoe (current one is from 1990;s), skid loader, trailer, secondary newer tandum. (funding used to purchase tandum (which we are still awaiting) replacing a 1988, but our secondary truck is a 1998). new mowing tractor and mower.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Floodplain and Stormwater Management Ordinances	Goal: Develop long-term strategies to reduce/eliminate flooding impact in Township.	All Hazards	High	Critical Flooding Failure areas in Township are Blair Road and Anderson Road. Funding needed.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Erosion Control	Goal: Develop long-term strategies to reduce/ eliminate erosion impact in Township.	All Hazards	High	Critical Erosion Failure Westlake Village's whole subdivision has critical issues with storm/sewer drains and sitting water in roadways due to elevation of homeowner's properties. To resolve this issue would to rework all storm drains and waterflow.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Pecatonica Township has a high elderly population including homebound. Critical as many lack computers or cell phones and transportation, and rely on landline and tv or radio. Except for family members of this population, use of website would be to no avail to them. Township lacks transport methods other than Fire Dept or police Emergency Services. Winnebago County is in discussions on transportation.
Timeline: Ongoing				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				

Table 8-30: Pecatonica Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Provided and Publicize Location of Safe Rooms and / or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	Township has no storm shelters. Critical would be funding to extend Road District building to serve as a storm shelter for residents and Officers/employees.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Coordinate with County, Village, Westlake Assn, Fire Department, Village Police Department, and other public bodies.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	CRITICAL FOR TO INFRASTRUCTURE. Pecatonica Township does not have alternative power source and has no backup generators for either Township Admin bldg or Road District bldg or equipment and funding is limited.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Winnebago County has Tornado Siren system with practice alert every Tuesday morning. Township seeking to add on to the system through communication/awareness through email /text blasts.
Timeline: 2 years once funding is available				
Funding: Township general funds; Pre-Disaster Mitigation Funding; or grant funding				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with County to develop updated maps for Township including Village of Pecatonica and Westlake Village.
Timeline: Ongoing				
Funding: Township general funds				
Bridges/Waterflow Structures	Goal: to update and repair to guard against damage by flooding, erosion and excessive ground water.	All Hazards	High	CRITICAL FAILURE of at least one bridge currently identified by IDOT/Winnebago County is GOEKE bridge over PINK CREEK in Pecatonica Township. Also County identified a box culvert on BEST ROAD over PINK CREEK. Funding extremely limited beyond any County assistance for bridge projects.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				

Table 8-30: Pecatonica Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Burn Ordinance	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	To implement an Ordinance adopting Winnebago County Burn Ordinance.
Timeline: Ongoing				
Funding: Township general funds				
Dam Failure Emergency Response Plan	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding / Dam and Levee Failure	High	Critical Faiure if Dam/Levee breaks in Westlake Village. Work with County for disaster planning.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County for developing of alternative routes and awareness for flooding of roads and alternative routes for other road closure purposes, such as signage for detours, etc.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Critical in Township for safety and access to roadways. No funding for purchasing snow fence or natural snow fence barriers.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table 8-31: City of Rockford (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Create Evacuation Notification Strategies	Goal: Improve Emergency Response procedures. Objective: Create Evacuation Notification Strategies.	All Hazards	High	Completed in 2015 and updated in 2016 and 2018 by ESDA Coordinator.	Complete Emergency Operations Plan re-write due to IEMA 3/2025.
Timeline: Completed					
Funding: None					
Create a Public Works Recovery Plan	Goal: Improve Emergency Response procedures. Objective: Create a Public Works Recovery Plan.	All Hazards	High	Completed in 2015 updated in 2018 PW Emergency Manager oversee this mitigation item.	Update in process through APWA Accreditation process by PW Emergency manager.
Timeline: Completed					
Funding: None					
Create and Update Mutual Aid Agreements with Outside Agencies and Contractors	Goal: Improve Emergency Response procedures. Objective: Create and Update Mutual Aid Agreements with Outside Agencies and Contractors.	All Hazards	High	Completed in 2015 updated in 2018 for PW.	Updated in 2024 with PW Emergency Manager, ESDA Coordinator, and Police Dept.
Timeline: Completed					
Funding: None					
Follow In Place Plans/ Procedures/ Strategies for Hazard Situations	Goal: Improve Emergency Response procedures. Objective: Follow In Place Plans/Procedures/Strategies for Hazard Situations.	All Hazards	High	This mitigation item is ongoing. Funding source from City of Rockford general funds. All City of Rockford Departments oversee this mitigation item.	This mitigation item is ongoing. Funding source from City of Rockford general funds. All City of Rockford Departments oversee this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Run Public Service Announcements and Educational Material for Each Hazard	Goal: Improve safety for our citizens during disasters. Objective: Run Public Service Announcements and Educational Material for Each Hazard.	All Hazards	High	Ongoing mitigation item. Funding source from City of Rockford general funds. Strategic Communications Manager, PW Emergency Manager, ESDA Coordinator, Fire and Police Departments oversee this mitigation item.	Ongoing mitigation item. Funding source from City of Rockford general funds. Strategic Communications Manager, PW Emergency Manager, ESDA Coordinator, Fire and Police Departments oversee this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					

Table 8-31: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Follow Load Restrictions on Building Design, Fire Suppression and Electrical/ Plumbing Requirements	Goal: Improve safety for our citizens during disasters. Objective: Follow Load Restrictions on Building Design, Fire Suppression and Electrical/Plumbing Requirements.	All Hazards	High	Ongoing mitigation item. Funding source from City of Rockford general funds. The Building Code Official oversees this mitigation item.	Ongoing mitigation item. Funding source from City of Rockford general funds. The Building Code Official oversees this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Train Additional Staff in Emergency Management	Goal: Improve Emergency Response procedures. Objective: Train Additional Staff in Emergency Management.	All Hazards	Medium	Ongoing mitigation item with funding source from City of Rockford general funds. PW Emergency Manager, ESDA Coordinator, Fire and Police Departments oversee this mitigation item.	Ongoing mitigation item with funding source from City of Rockford general funds. Numerous City Employees are Certified Illinois Professional Emergency Managers through IEMA.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Map City Wells and Cone of Influence	Goal: Monitor Water Supply. Objective: Map city wells and cone of influence.	Extreme Heat and Drought	High	Completed and updated as needed.	Completed and updated as needed.
Timeline: Completed					
Funding: None					
Map Groundwater Ordinances and Plume of Contamination	Goal: Monitor Water Supply. Objective: Map groundwater ordinances & plume of contamination.	Extreme Heat and Drought	High	No Change. Updated as needed will continue to research ordinances prior to 2006.	No Change. Updated as needed will continue to research ordinances prior to 2006.
Timeline: 2 years					
Funding: City of Rockford general funds					
Regularly Check for Leaks to Minimize Water Supply Losses	Goal: Monitor Water Supply. Objective: Regularly Check for Leaks to Minimize Water Supply Losses.	Extreme Heat and Drought	Low	This item is ongoing with no completion date; the City is divided into quadrants and an annual inspection is completed on one quandrant per year . Funding source from City of Rockford Water Funds. Water Superintendent oversees this mitigation Item.	This item is ongoing with no completion date; the City is divided into quadrants and an annual inspection is completed on one quandrant per year . Funding source from City of Rockford Water Funds. Water Superintendent oversees this mitigation Item.
Timeline: Ongoing					
Funding:City of Rockford general funds					
Begin Integrated Planning For Water Quality Improvements	Goal: Monitor Water Supply. Objective: Begin Integrated Planning For Water Quality Improvements.	Extreme Heat and Drought	Medium	The City withdrew from agreement and completed independently through Water Department.	The City of Rockford is a member of the Rock River Watershed Group through FRSA regarding water quality improvements.

Table 8-31: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Install Rain Gauges Throughout City to Better Understand Rainfall Trends	Goal: Monitor Water Supply. Objective: Install rain gauges throughout city to better understand rainfall trends.	Extreme Heat and Drought	Medium	Weather Station was designed for a portion of the Alpine Dam Improvements ; Program will be re-evaluated for year 2020; Funding sources from the City of Rockford Water and CIP Funds.	Weather Station is installed at Alpine Dam and Page Park Dam; Program will be re-evaluated as needed; Funding sources from the City of Rockford CIP Funds.
Timeline: 1 to 5 years					
Funding: City of Rockford general funds					
Restrict Water Usage During Drought Events	Goal: Require water conservation during drought conditions. Objective: Restrict Water Usage During Drought Events.	Extreme Heat and Drought	Medium	This mitigation item is ongoing when required. SCADA system has been implemented and assists in this. Funding source from City of Rockford Water funds. The Water Superintendent oversees this mitigation item.	This mitigation item is ongoing when required. SCADA system has been implemented and assists in this. Funding source from City of Rockford Water funds. The Water Superintendent oversees this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Rewrite City's Stormwater Ordinance and Stormwater Technical Manual	Goal: Adopt and enforce building codes and development standards. Objective: Rewrite City's Stormwater Ordinance and Stormwater Technical Manual.	Flooding/ Dam and Levee Failure	High	Both items completed in 2015 with regular updates as needed. The Stormwater Manager oversees this mitigation item.	In process of updating the Stormwater Master Plan and Stormwater Ordinance. Completion scheduled for 2024.
Timeline: In process					
Enforce Flood Mitigation, Flood Control, Stormwater Management	Goal: Adopt and enforce building codes and development standards. Objective: Enforce Flood Mitigation, Flood Control, Stormwater Management.	Flooding/ Dam and Levee Failure	High	SOPs have been created providing guidance on inspection, maintenance and enforcement measures. Ordinance revisions are underway for enforcement and code hearing process for all ordinance violations. Funding source from City of Rockford general funds. The Stormwater Administrator oversees this mitigation item.	SOPs have been created providing guidance on inspection, maintenance and enforcement measures. Ordinance revisions are underway for enforcement and code hearing process for all ordinance violations. Funding source from City of Rockford general funds. The Stormwater Administrator oversees this mitigation item.
Timeline: Completed					
Funding: None					
Enforce Post Construction Management Requirements	Goal: Adopt and enforce building codes and development standards. Objective: Enforce Post Construction Management Requirements.	Flooding/ Dam and Levee Failure	High	This item was completed in 2015 with on-going inspections and updates as needed including code hearing processes. The Stormwater Manager oversees this mitigation item.	This item was completed in 2015 with on-going inspections and updates as needed including code hearing processes. The Stormwater Manager oversees this mitigation item.
Timeline: Completed					
Funding: None					

Table 8-31: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Continue To Map Priority Acquisition And Unsuitable For Development Areas	Goal: Limit or restrict development in floodplain areas. Objective: Continue To Map Priority Acquisition And Unsuitable For Development Areas.	Flooding/ Dam and Levee Failure	High	This item is ongoing. The City follows Floodplain regulations The Stormwater Manager and GIS oversee this mitigation item.	This item is ongoing . The City follows Floodplain regulations and is a part of the Community Rating System, which provides flood insurance discounts to residents; On-going buy outs in Churchill Park with plans for future flood mitigation projects.
Timeline: 5 years					
Funding: City of Rockford general funds					
Enforce Landscaping And Buffer Requirements, Open Space Requirements, Impervious Ratio Requirements	Goal: Limit or restrict development in floodplain areas. Objective: Enforce landscaping and buffer requirements, open space requirements, impervious ratio requirements.	Flooding/ Dam and Levee Failure	High	CED	The City of Rockford is revising it's Stormwater Ordinance, which includes a more defined floodplain development requirements.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Map Structures Located Within Floodplains and Map Repetitive Loss and Substantially Damaged Properties	Goal: Improve Flood Risk Assessment. Objective: Map structures located within floodplains and map repetitive loss and substantially damaged properties.	Flooding/ Dam and Levee Failure	High	This item was completed in 2017. The Stormwater Manager oversees this mitigation item.	Updated as needed. The Stormwater Manager oversees this mitigation item.
Timeline: Completed					
Funding: None					
Develop Flood Risk Map Educational Materials for New FEMA Maps	Goal: Improve Flood Risk Assessment. Objective: Develop flood risk map educational materials for new FEMA Maps.	Flooding/ Dam and Levee Failure	High	This item was completed and went into effect in February 2016 with the issuance of new FEMA maps. The Stormwater Manager oversees this mitigation item.	The City of Rockford was approved for enrollment in the Community Rating System in 2022, which includes providing flooding education to residents.
Timeline: Completed					
Funding: None					
Replace Water Level Gauges at Page Park And Levings Lake Dam; Install Water Level Gauge at Alpine Dam	Goal: Improve Flood Risk Assessment. Objective: Replace water level gauges at Page Park and Levings Lake Dam; Install water level gauge at Alpine Dam.	Flooding/ Dam and Levee Failure	High	This mitigation item was completed in 2017 for Page Park and Levings Lake Dam; Alpine Dam Improvements to be completed in 2020 which will include this item. The funding source is CIP general funds. The Stormwater manager oversees this mitigation item.	This mitigation item was completed in 2023 for Alpine Dam and Page Park Dam.
Timeline: Completed					
Funding: City of Rockford general funds					

Table 8-31: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Participate in the Community Rating System	Goal: Manage the floodplain beyond minimum requirements. Objective: Participate in the Community Rating System.	Flooding/ Dam and Levee Failure	High	This mitigation item is on-going; The City continues to participate in the Community Rating System. The Stormwater Manager oversees this mitigation item.	The City of Rockford was approved for enrollment in the Community Rating System in 2022, which includes providing flooding education to residents.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Improve Compliance with the NFIP	Goal: Manage the floodplain beyond minimum requirements. Objective: Improve compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	This item is on-going. The flood plain ordinance went into effect in 2015 and the City of Rockford standard is above minimum compliance standards with the NFIP. The Stormwater Manager oversees this item.	This item is on-going. The flood plain ordinance went into effect in 2015 and the City of Rockford standard is above minimum compliance standards with the NFIP. The Stormwater Manager oversees this item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Flood-Proof, Relocate, Elevate and Demolish At-Risk Properties	Goal: Manage the floodplain beyond minimum requirements. Objectives: Flood-proof, relocate, elevate and demolish at risk properties.	Flooding/ Dam and Levee Failure	High	This mitigation item is on-going. Due to limited funds, it is reviewed on a case by case basis and updated as needed. The Stormwater Manager oversees this item along with the Building Code Official.	This mitigation item is on-going. Due to limited funds, it is reviewed on a case by case basis and updated as needed. The Stormwater Manager oversees this item along with the Building Code Official.
Timeline: 3- 4 years					
Funding: City of Rockford general funds					
Complete Alpine Dam Rehabilitation	Goal: Conduct regular maintenance for drainage systems and flood control structures. Objectives: Complete Alpine Dam rehabilitation.	Flooding/ Dam and Levee Failure	High	Funding is now secure for this mitigation items. Design Phase is near completion with implementation set for 2020. The Stormwater Manager and City Engineer oversee this mitigation item.	This mitigation item was completed in 2024 for Alpine Dam.
Timeline: Completed					
Funding: City of Rockford general funds					
Continue Watershed Assessment and Planning	Goal: Form Partnerships to support floodplain management. Objective: Continue Watershed Assessment and Planning.	Flooding/ Dam and Levee Failure	Low	Several watersheds have been completed. Airport East watershed study is in currently in review; Funding is an issue for continued studies, current funding source is CIP. The Stormwater Manager oversees this mitigation item.	Several watersheds have been completed. Airport East watershed study is in currently in review; During revision of the Stormwater Master Plan, the consultant completed a City-wide flood risk analysis; Funding is an issue for continued studies, current funding source is CIP. The Stormwater Manager oversees this mitigation item.
Timeline: 5 years					
Funding: City of Rockford general funds					

Table 8-31: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Review and Update Emergency Plan and Protocol for HAZMAT Releases	Goal: Review and update emergency procedures for hazard materials. Objective: Review and update emergency plan and protocol for HAZMAT releases.	HAZMAT	Medium	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Fire Department oversees this mitigation item.	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Fire Department oversees this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Review and Update HAZMAT Spill, Removal and Disposal Procedures	Goal: Review and update emergency procedures for hazard materials. Objective: Review and Update HAZMAT Spill, Removal and Disposal Procedures.	HAZMAT	Medium	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Fire Department oversees this mitigation item.	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Fire Department oversees this mitigation item
Timeline: Ongoing					
Funding: City of Rockford general funds					
Enforce Tree and Brush Trimming/ Pruning Requirements/ Planting and Removal Requirements	Goal: Reduce Impacts to Infrastructure. Objective: Enforce Tree and Brush Trimming/Pruning Requirements/Planting and Removal Requirements.	Severe Storms/ Tornadoes	High	This mitigation item is on-going. Ordinance revisions were complete in 2018 for enforcement and code hearing process for all ordinance violations. The Street Superintendent and Neighborhood Standards oversee this mitigation item.	The City is modifying our Forestry Ordinance and will implement the Urban Forestry Management Plan to address this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Provide and Publicize Heating and Cooling Shelters	Goal: Educate citizens and property owners on severe weather conditions. Objective: Provide and publicize heating and cooling shelters.	Severe Storms/ Tornadoes	Medium	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Strategic Communications Manager, ESDA Coordinator, and Health & Human Services Department oversee this mitigation item.	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Strategic Communications Manager, ESDA Coordinator, and Health & Human Services Department oversee this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Follow Parking Restrictions for Emergency Events, Follow Salting and Plowing Policies	Goal: Reduce Impacts to Roadways. Objective: Follow parking restrictions for emergency events, follow salting and plowing policies.	Severe Storms/ Winter Storms	Medium	This item is ongoing when required. Funding source from the City of Rockford parking and general funds. The Parking contractor, Street Superintendent, and police oversee this mitigation item.	This item is ongoing when required. Funding source from the City of Rockford parking and general funds. The Parking contractor, Street Superintendent, and police oversee this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					

Table 8-31: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Educate Property Owners About Freezing Pipes	Goal: Educate citizens and property owners on severe weather conditions. Objective: Educate property owners about freezing pipes.	Winter Storms	Medium	This mitigation item is ongoing as weather relates. The funding source is City of Rockford Water Department. The Water Superintendent oversees this item.	This mitigation item is ongoing as weather relates. The City's PIO posts information as needed. The funding source is City of Rockford Water Department. The Water Superintendent oversees this item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	This mitigation item is ongoing. Funding source from City General Fund. As critical buildings are updated, the need for a generator is evaluated. The Water Superintendent, Street Superintendent and City Engineer oversee this mitigation item.	This mitigation item is ongoing. Funding source from City General Fund. As critical buildings are updated, the need for a generator is evaluated. Several critical City owned sites have been updated with generator services, including 7 water well houses, 11 Fire Stations, 3 Police District Buildings and Public Works Administration Building. The Water Superintendent, Street Superintendent and City Engineer oversee this mitigation item.
Timeline: Ongoing					
Funding City of Rockford general funds					
Responsible: Noted, where appropriate in 2024 comments column					

Table 8-32: Rock Valley College (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Roack Valley College has an All Hazards Plan in place. This is a living document and updated annually.
Timeline: Annual				
Funding: General Funds or Grant Funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Mutual air agreements are in place with other police departments, sheriff department and state agencies.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Rock Valley College has generators at the following buildings: JCSM, SSB, HSC and will have a generator at the new downtown facility when it opens. Other buildings on main campus will be powered by a CoGen.
Timeline: 2 years once funding becomes available				
Funding: General Funds or Grant Funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Currently reviewing plans to update south end of campus parking lots as well as ingress and egress with the City of Rockford.
Timeline: Within 5 years				
Funding: General Funds or Grant Funding				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Snow fences are put up in the winter months at Mulford and Rock Valley Circle to minimize hazards.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				

Table 8-32: Rock Valley College (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Structure Elevation	Goal: Decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Rock Valley College has no history of flooding.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Storm drains	Goal: Decrease flooding. Objective: Minimize hazards to public and private infrastructure.	Flooding	High	Rebuilt several storm drain inlets on campus as well as removed sediment from Spring Creek.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Pretreatment of roads	Goal: Decrease the hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Weather	High	Each winter season RVC Facilities and Maintenance personnel preteat the roads to lessen the impact of hazards when needed.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Active Tree Management	Goal: Lesson the impact of hazards to new and existing infrastructure. Objective: Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing- continuous evaluation of any hazardous situations where trees can damage building, roadways or sidewalks.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Responsible: Emergency Manager				

Table 8-33: Rockford Park District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Create Evacuation Notification Strategies	Goal: Improve Emergency Response procedures. Objective: Create Evacuation Notification Strategies.	All Hazards	High	Ongoing efforts to evaluate methods on improving patron awareness and notification of severe weather. Severe weather policy was updated in 2024 to provide clearer guidance for District programs and facilities, however we will continue to explore infrastructure such as lightning detection systems to enhance awareness and response. This is for both indoor and outdoor facilities that could be impacted by severe weather, and /or sites that have large gathering space for events such as Sports Facilities, Concert Venues, and Golf Courses. Risk Management department oversees this initiative.
Timeline: Ongoing; within 2 years after funding is made available for the project				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Train Additional Staff in Emergency Management	Goal: Improve Emergency Response procedures. Objective: Train Additional Staff in Emergency Management.	All Hazards	Medium	Ongoing mitigation item with funding source from Rockford Park District. Risk Management department oversees this mitigation item.
Timeline: Ongoing				
Funding: District general funds				
Bank stabilization and erosion control	Goal: Address areas impacted by erosion along waterways.	Flooding	Medium	Currently stabilizing portions of the bank along the Rock River within Sinnissippi Park and Shorewood Park as well as Alpine Hills Adventure Park. Ongoing efforts to evaluate other areas impacted by flooding including Blackhawk Park, MercyHealth Sportscore 1, Martin Park, Rock River Recreation Path, Twin Sisters, Dahlquist Park and Atwood Park. The Capital Planning and Asset Management department oversees this mitigation item.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Flood-Proof, Relocate, Elevate and Demolish At-Risk Properties	Goal: Manage the floodplain beyond minimum requirements. Objectives: Flood-proof, relocate, elevate and demolish at risk properties.	Flooding/ Dam and Levee Failure	High	This mitigation item is on-going. Due to limited funds, it is reviewed on a case by case basis and updated as needed. The Capital Planning and Asset Management department oversees this item.
Timeline: Ongoing				
Funding: District general funds				

Table 8-33: Rockford Park District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Review and Update Emergency Plan and Protocol for HAZMAT Releases	Goal: Review and update emergency procedures for hazard materials. Objective: Review and update emergency plan and protocol for HAZMAT releases.	HAZMAT	Medium	This mitigation item is ongoing. Funding source from the Rockford Park District general funds. The Risk Management department oversees this mitigation item.
Timeline: Ongoing				
Funding: District general funds				
Review and Update HAZMAT Spill, Removal and Disposal Procedures	Goal: Review and update emergency procedures for hazard materials. Objective: Review and Update HAZMAT Spill, Removal and Disposal Procedures.	HAZMAT	Medium	This mitigation item is ongoing. Funding source from the Rockford Park District general funds. The Risk Management department oversees this mitigation item.
Timeline: Ongoing				
Funding: District general funds				
Review and update infrastructure and technology for monitoring mechanical systems with Ammonia or Chlorine.	Goal: Update mechanical systems and technology to improve monitoring and oversight of mechanical systems connected to hazardous materials such as ammonia or chlorine.	HAZMAT	High	This mitigation item is on-going. Due to limited funds, it is reviewed on a case by case basis and updated as needed. The Capital Planning and Asset Management department oversees this item.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation funding, private lending; or grant funding				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	This mitigation item is ongoing. Funding source from Rockford Park District capital funding. As critical buildings are updated, the need for a generator is evaluated. The Capital Planning and Asset Management department oversees this mitigation item.
Responsible: Operations Director				

Table 8-34: Rockford Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Continue putting information on Township website and providing availability for speaking to the public on all hazards.
Funding: Road and Bridge or Grant Funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Continue relationship with all local governmental bodies and IPMAN.
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	No current back-up generators for any of the township facilities.
Funding: Road and Bridge; Grant Funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County, Emergency Service Providers, and cities to develop plans for alternate routes for all road closure situations.
Funding: Road and Bridge				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No current snow fence installed by the Township. Beneficial in rural areas of the township.
Funding: Road and Bridge				
Structure Elevation	Goal: decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Specific section of Rote Road needs addressing. Grant funding need.
Funding: Grant Funding; Road and Bridge; General Fund				
Storm drains	Goal: Decrease flooding. Objective: Minimize hazards to public and private infrastructure.	Flooding	High	Carbaugh/Bond are areas of flooding that grant is currently being pursued.
Funding: Grant Funding; Road and Bridge; General Fund				
Phase I & Phase II Madigan Creek	Goal: Decrease the impact of hazards. Objective: Reduce or eliminate ditch erosion and runoff.	Severe Weather	High	In cooperation with Winnebago County and City of Rockford, grant funding is being applied for.
Funding: Grant Funding; Road and Bridge; General Fund				
Pretreatment of roads	Goal: decrease the hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Weather	High	Ongoing winter practice that Rockford Township Highway Department performs.
Funding: Road and Bridge				
Active Tree Management	Goal: Lesson the impact of hazards to new and existing infrastructure. Objective: Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing year round practice that Rockford Township Highway perform. Additional funding for equipment needed.
Funding: Road and Bridge				
Responsible: Township Highway, Township Supervisor				

Table 8-35: Village of Rockton (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Rockton is periodically updating website and posting information on Facebook with emergency information.	Same comment as 2019.
Timeline: The Village evaluates the website information at least quarterly each year					
Funding: Village of Rockton general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Rockton continues to pursue additional funding for Generators.	Same comment as 2019. We are hoping to purchase within 12 months.
Timeline: Within 3 years after funding is made available for the project					
Funding: Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	Same	Rockton has replaced and improved some systems. Currently planning and strategizing remaining needs and implementation.
Timeline: Within 5 years upon receipt of funding for this project					
Funding: Village of Rockton general funds					
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	All Hazards	Medium	Rockton has developed a yearly tree trimming program and is working with Rock Energy to remove tree hazards by power lines.	Rockton has developed a yearly tree trimming program and is working with Rock Energy to remove tree hazards by power lines.
Timeline: Trees will be removed annually with available funds allocated for such work					
Funding: Village of Rockton general funds					
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Create new or revise existing plans/maps.	All Hazards	Medium/ High	Rockton continues to pursue and obtain Mutual Aid agreements with fellow communities.	Rockton continues to update Mutual Aid agreements as needed.
Timeline: Ongoing					
Funding: Village of Rockton general funds					
Establish Local Emergency Planning Committee	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	Medium/ High	The Village of Rockton in conjunction with the Fire District and the State Of Illinois has formed a committee.	The Village of Rockton in conjunction with the Fire District and the State Of Illinois has formed a committee.
Timeline: Completed					
Funding: None					

Table 8-35: Village of Rockton (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Identification of Floodplain Structures	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Examine flood loss areas and generate a comprehensive list of structures located in floodplains.	Flooding/ Dam and Levee Failure	High	Rockton continues to work on and maintain a list of Structures.	Rockton continues to work on and maintain a list of Structures.
Timeline: Structures will be identified annually with available funds that are allocated for this project					
Funding: Village of Rockton general funds					
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	Rockton is working with the Winnebago County Building department to evaluate all structures.	Rockton has not permitted any structure construction in the floodplain since 2019 (nor has permission been sought by any property owner).
Timeline: Within 3 years after the Village is awarded funding					
Funding: Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Floodplain and Stormwater Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	Same	Rockton Village adopted a Floodplain Development Ordinance in 2016 and updates as necessary to comply with County and State requirements.
Timeline: Every 2 year					
Funding: Village of Rockton general funds					
Open Space Preservation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Keep the floodplain and other hazardous areas open and free from development.	Flooding/ Dam and Levee Failure	High	Same	The Village is proactive in its ordinances on open space maintenance polices to ensure land is used for this purpose throughout the village.
Timeline: Ongoing					
Funding: Village of Rockton general funds; as needed					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Same	Rockton will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: Within 3 years after the Village is awarded funding					
Funding: Village of Rockton general funds					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	Severe Storms/ Tornadoes	High	Same	Rockton Village coordinates with Rock Energy to bury all new and relocated facilities as part of short- and long-term project planning.
Timeline: Within 10 years after the Village is awarded funding					
Funding: Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					

Table 8-35: Village of Rockton (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	Low	Rockton Continues to work with the County and has purchased and installs snow fencing.	Rockton Village continues to coordinate with County to implement snow fencing as needed.
Timeline: Completed					
Funding: Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	Same	Rockton Village has identified need and need of funds to assess community need for heating and cooling shelters and implementation funds.
Timeline: Within 5 years after the Village is awarded funding					
Funding:Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Responsible: Village Public Works Director and Village of Rockton					

Table 8-36: Rockton Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazard Preparedness: Fire Suppression, Hazardous Materials, Technical Rescue, Dive & Water Rescue.	High	Rockton Fire is part of MABAS Division 8 and has mutual aid and auto aid agreements with fire districts in Winnebago, Rock, and Walworth Counties.
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazard Preparedness: Fire Suppression, Hazardous Materials, Technical Rescue, Dive & Water Rescue.	High	The Village of Rockton may look at avenues to seek back up generators for critical facilities.
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	A ll Hazard Preparedness: Fire Suppression, Hazardous Materials, Technical Rescue, Dive & Water Rescue.	High	The Village of Rockton may work with Winnebago County and assess current infrastructure reducing exposure to hazard.
Responsible: Chief/Administration				

Table 8-37: Rockton Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	This mitigation is ongoing and we would follow and work with Winnebago County.
Timeline: The Township will evaluates the website information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	We would work with Rockton Fire Department along with the Rockton Village to assist anyway possible.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	This mitigation item is on going- we do not have a back up generator at this time and would be working with the Rockton Village.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	This mitigation item is ongoing and we would follow Winnebago County Health Department if needed.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	This mitigation item is ongoing and is regular practice of the Highway Department.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table 8-38: Village of Roscoe (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	The Village has constructed a new Police Department building since 2014. The structure is 100% backed up by a generator, with UPS systems to ensure zero down time. Critical systems, including IT and access control in Village Hall are linked to the generator as well. Additionally, Com Ed has installed a 'Smart Grid' network throughout the Village that involves distribution automation to immediately re-route power to effected areas.	The Village has constructed a new Police Department building since 2014. The structure is 100% backed up by a generator, with UPS systems to ensure zero down time. Critical systems, including IT and access control in Village Hall are linked to the generator as well. Additionally, Com Ed has installed a 'Smart Grid' network throughout the Village that involves distribution automation to immediately re-route power to effected areas.
Timeline: Completed					
Funding: None					
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	The Village now communicates with multiple agencies utilizing the StarCom radio system.	The Village now communicates with multiple agencies utilizing the StarCom radio system.
Timeline: Completed					
Funding: None					
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	All Hazards	Medium	The Village now contracts with private tree trimming vendors on an annual basis to minimize risk to power lines and other infrastructure.	The Village now contracts with private tree trimming vendors on an annual basis to minimize risk to power lines and other infrastructure.
Timeline: Ongoing					
Funding: Village of Roscoe general funds					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	Medium/ High	The Village has increased communication and inter-governmental cooperation with surrounding communities, including in the areas of mutual aid.	The Village has increased communication and inter-governmental cooperation with surrounding communities, including in the areas of mutual aid.
Timeline: Ongoing					
Funding: Village of Roscoe general funds					

Table 8-38: Village of Roscoe (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Establish Local Emergency Planning Committee	Goal: Create new or revise existing plans/maps. Objective: Improve emergency sheltering and procedures in the event of an earthquake.	All Hazards	Medium/ High	Roscoe will develop a Local Emergency Planning Committee with the Winnebago County Local Emergency Planning Committee.	No Update
Timeline: 2 years					
Funding: Village of Roscoe general funds					
Develop Safety Procedures for Earthquakes	Goal: Improve emergency sheltering and procedures in the event of an earthquake. Objective: Review and update existing, or create new community plans and ordinances.	Earthquake	Low	Roscoe will work to develop an earthquake safety procedure for the Village.	No Update
Timeline: 5 Years					
Funding: Village of Roscoe general funds					
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Low	Ordinance updated to require that all property owners maintain a physical presence at all recreational or yard waste fires until fully extinguished.	Ordinance updated to require that all property owners maintain a physical presence at all recreational or yard waste fires until fully extinguished. Fire Dept monitors conditions and issues advisories during exceptionally dry/windy conditions.
Timeline: Ongoing					
Funding: Village of Roscoe general funds					
Participate in the Community Rating System	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam Levee Failure	Medium	No Update	No Update
Timeline: 5 years					
Funding: Village of Roscoe general funds					
Identification of Floodplain Structures	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Examine flood loss areas and generate a comprehensive list of structures located in floodplains.	Flooding/ Dam and Levee Failure	Medium	The Village has began the process of compiling a list of all structures existing in identified floodplains. Preliminary indications are that only 4 inhabitable structures exist within a floodplain.	The Village continues the process of compiling a list of all structures existing in identified floodplains. Preliminary indications are that only 4 inhabitable structures exist within a floodplain.
Timeline: 2 years					
Funding: Village of Roscoe general funds					
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps.	HAZMAT	Low	Alternate route mapping is completed.	Alternate route mapping is completed.
Timeline: Complete					
Funding: None					

Table 8-38: Village of Roscoe (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
HAZMAT Spill, Removal, and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Roscoe will continue to work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	No Update
Timeline: 5 years					
Funding: Village of Roscoe general funds					
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	Medium	The Village continues to maintain our roadway network to the highest standard during winter storm events, ensuring that streets are free of ice and snow at all times. No additional measures have been implemented since 2014.	The Village continues to maintain our roadway network to the highest standard during winter storm events, ensuring that streets are free of ice and snow at all times. Roadways prone to snow drifting are maintained by Winnebago County Highway Dept and snow fencing is typically installed in high risk areas.
Timeline: 1- 2 years once funding is made available					
Funding: Village of Roscoe general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	The Village has been working with the Harlem-Roscoe Fire Protection District to inform residents of heating/cooling centers in times of extreme events. We have recently began to employ social media as a tool to communicate such information.	The Village has been working with the Harlem-Roscoe Fire Protection District to inform residents of heating/cooling centers in times of extreme events. We have recently began to employ social media as a tool to communicate such information.
Timeline: 1- 2 years once funding is made available					
Funding: Village of Roscoe general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Responsible: Village Administrator and Village of Roscoe					

Table 8-39: Roscoe Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Roscoe Township is unincorporated and passes information made available from Winnebago County.
Timeline: The Township will evaluates the website information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Roscoe Township is unincorporated and any emergency services are provided through Winnebago County.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Roscoe Township is unincorporated and existing infrastructure consists of small town hall.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Roscoe Township is unincorporated and its thoroughfares are county maintained.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Roscoe Township is unincorporated and 95% of its roads are residential.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table 8-40: Seward Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Continue putting information on Township website and providing availability for speaking to the public on all hazards.
Timeline: Ongoing				
Funding: Road and Bridge or Grant Funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Continue relationship with all local governmental bodies and IPMAN.
Timeline: Ongoing				
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	No current back-up generators for any of the township facilities.
Timeline: 2 years once funding is made available				
Funding: Road and Bridge; Grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County, Emergency Service Providers, and adjoining townships to develop plans for alternate routes for all road closure situations.
Timeline: 5 years once funding is made available				
Funding: Road and Bridge				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No current snow fence installed by the Township. Beneficial in rural ares of the township.
Timeline: Ongoing				
Funding: Road and Bridge				
Structure Elevation	Goal: decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Numerous structures that need updating, grant funds needed.
Timeline: 5 years once funding is made available				
Funding: Grant Funding; Road and Bridge, General funds				
Active Tree Management	Goal: Lessen the impact of hazards to new and existing infrastructure Objective: Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing year round practice that Seward Township Highway perform. Additional funding for equipment needed.
Timeline: Ongoing				
Funding: Road and Bridge				
Responsible: Township Highway Department; Township Supervisor				

Table 8-41: Shirland Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Continue putting information on Township website and providing availability for speaking to the public on all hazards.
Timeline: Ongoing				
Funding: Road and Bridge or Grant Funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Continue relationship with all local governmental bodies and IPMAN.
Timeline: Ongoing				
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	No current back-up generators for any of the township facilities.
Timeline: Within 3 years after funding is made available for the project				
Funding: Road and Bridge; Pre-Disaster Mitigation Funding; private lending; or Grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County Emergency Service Providers, and adjoining townships to develop plans for alternate routes for all road closure situations.
Timeline: Ongoing				
Funding: Road and Bridge				
Pecatonica River, Sugar River, Sugar Creek	Goal: Decrease the impact of hazards. Objective: Reduce or eliminate ditch erosion and runoff.	Severe Weather	High	In cooperation with Winnebago County, grant funding needed.
Timeline: Within 5 years after funding is made available for the project				
Funding: Grant funding; Road and Bridge; General funds				
Treatment of Roads	Goal: decrease the hazards to new and existing infrastructure. Objective: Maximize efficiency of infrastructure exposed to hazards.	Winter Weather	High	Winter salt storage needed.
Timeline: Within 5 year after funding is made available for the project				
Funding: Grant funding				

Table 8-41: Shirland Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Structure and Roadway Elevation	Goal: Decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Numerous structures and roadways need updating and elevating, grant funds needed.
Timeline: Within 5 years after funding is made available for the project				
Funding: Grant funding; Road and Bridge; General fund				
Active Tree Management	Goal: Lessen the impact of hazards to new and existing infrastructure. Objective:Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing year round practice that Seward Township Highway perform. Additional funding for equipment needed.
Timeline: Ongoing				
Funding: Road and Bridge				
Responsible: Township Highway Department; Township Supervisor				

Table 8-42: City of South Beloit (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	South Beloit will increase its public education at the library, sewer billing and city websites. Press releases will also be distributed.	South Beloit will increase its public education at the library, sewer billing and city websites. Press releases will also be distributed.
Timeline: Ongoing					
Funding: City of South Beloit general funds					
Develop Education Materials on the benefits of the NFIP	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of flooding and flood insurance.	Flooding/ Dam and Levee Failure	High	Material will be available at the city hall.	Material will be available at the city hall.
Timeline: Completed					
Funding: None					
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazard	High	Nursing homes currently have mutual aid agreements in place. This agreement includes developing and maintaining a special needs population list for each nursing home.	Nursing homes currently have mutual aid agreements in place. This agreement includes developing and maintaining a special needs population list for each nursing home.
Timeline: Completed					
Funding: None					
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	Low	South Beloit currently has designated heating/cooling shelters and plans to distribute the locations of the shelters to residents in the county.	South Beloit currently has designated heating/cooling shelters and plans to distribute the locations of the shelters to residents in the county.
Timeline: Completed					
Funding: None					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	South Beloit currently has mutual aid agreements in place for the Fire Departments and Public Works.	South Beloit currently has mutual aid agreements in place for the Fire Departments and Public Works.
Timeline: Completed					
Funding: None					

Table 8-42: City of South Beloit (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	City Hall, Police and Fire Department, and the Sewer Plant have portable generators.	City Hall, Police Department, and existing Sanitary Lift Station generators require upgrades. Sewer Department and Fire Department generators do not requirer upgrades.
Timeline: Within 3 years after funding is made available for the project					
Funding: City of South Beloit general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/maps. Objective: Review and update existing GIS datasets.	All Hazards	High	WinGIS maintains a list of critical and essential facilities in the county.	WinGIS maintains a list of critical and essential facilities in the county.
Timeline: Ongoing					
Funding: None					
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Ongoing with Fire and Police.	Ongoing with Fire and Police.
Timeline: Ongoing					
Funding: None					
Participate in the NFIP	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Ongoing. The South Beloit will contribute to map revisions.	Ongoing. The South Beloit will contribute to map revisions.
Timeline: Ongoing					
Funding: City of South Beloit general funds					
Property Acquisition (Buyouts)	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	Medium	South Beloit will continue to seek funding for future property acquisitions.	South Beloit will continue to seek funding for future property acquisitions.
Timeline: 2 years once funding is made available					
Funding: City of South Beloit general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding / Dam and Levee Failure	Medium	Ordinances in the village requires all new structures to be raised above the flood level.	Ordinances in the village requires all new structures to be raised above the flood level.
Timeline: Completed					
Funding: None					

Table 8-42: City of South Beloit (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Floodplain and Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	South Beloit has building code restrictions and flood protection requirements in place. South Beloit will continue to maintain and update these ordinances.	South Beloit has building code restrictions and flood protection requirements in place. South Beloit will continue to maintain and update these ordinances.
Timeline: Ongoing					
Funding: None					
Open Space Preservation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Keep the floodplain and other hazardous areas open and free from development.	Flooding/ Dam and Levee Failure	Medium	South Beloit will continue working to preserve green space along Turtle Creek and Rock River.	South Beloit will continue working to preserve green space along Turtle Creek and Rock River.
Timeline: 5 year once funding is made available					
Funding: City of South Beloit general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Install Backflow Values and Sump Pumps	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize potential damage to foundations and household/critical facility utilities.	Flooding/ Dam and Levee Failure	High	This mitigation item is ongoing through city ordinances.	This mitigation item is ongoing through city ordinances.
Timeline: Ongoing					
Funding: City of South Beloit general funds					
Anchoring of Manufactured Homes and Exterior Attachments	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	Current building codes address this issue including anchoring.	Current building codes address this issue including anchoring.
Timeline: Ongoing					
Funding: None					
Ordinance for Higher Construction Standards / Techniques Regarding Severe Storms	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Severe Storms/ Tornadoes	High	South Beloit will continue to maintain and update this ordinance.	South Beloit will continue to maintain and update this ordinance.
Timeline: Ongoing					
Funding: City of South Beloit general funds					

Table 8-42: City of South Beloit (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	All Hazards	Medium	South Beloit will be implementing additional action plans to minimize tree damage to power lines as well as other infrastructure.	South Beloit will be implementing additional action plans to minimize tree damage to power lines as well as other infrastructure.
Timeline: 10 years					
Funding: City of South Beloit general funds					
Emergency Plan / Protocol for HAZMAT Releases	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Low	South Beloit plans to develop an emergency plan in the event of a HAZMAT release and will work with the Winnebago County LEPC.	South Beloit plans to develop an emergency plan in the event of a HAZMAT release and will work with the Winnebago County LEPC.
Timeline: 5 years					
Funding: City of South Beloit general funds					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Low	South Beloit plans to develop an emergency plan in the event of a HAZMAT release and will work with the Winnebago County LEPC.	South Beloit plans to develop an emergency plan in the event of a HAZMAT release and will work with the Winnebago County LEPC.
Timeline: 5 years					
Funding: City of South Beloit general funds					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	South Beloit wishes to seek funding to increase the number of heating and cooling shelters in the village.	South Beloit wishes to seek funding to increase the number of heating and cooling shelters in the village.
Timeline: 5 years once funding is made available					
Funding: City of South Beloit general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Responsible: City of South Beloit; City of South Beloit Public Works					

Table 8-43: Stillman Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table 8-43: Stillman Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: district general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table 8-44: Win-Bur-Sew Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: To update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table 8-44: Win-Bur-Sew Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table 8-45: Village of Winnebago (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Plans to improve public education and awareness remain a consideration; funding sources have not been identified at this time.	Plans to improve public education and awareness remain a consideration; funding sources have not been identified at this time.
Timeline: 2 years once funding is available					
Funding: Pre-Disaster Mitigation Funding; private lending;or grant funding/donations					
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	The Village of Winnebago is committed to working with Winnebago County Local Emergency Planning Committee and other agencies/entities to develop, refine, and improve agreements throughout the county.	The Village of Winnebago is committed to working with Winnebago County Local Emergency Planning Committee and other agencies/entities to develop, refine, and improve agreements throughout the county.
Timeline: Ongoing					
Funding: Village general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazard	High	The Village Board and department heads within the Village recognize the importance of this category. At this time, funding sources have not been identified.	The Village Board and department heads within the Village recognize the importance of this category. At this time, funding sources have not been identified.
Timeline: 5 years once funding is available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Participate in the NFIP	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	The Village of Winnebago will continue assessments to evaluate and improve existing ordinances.	The Village of Winnebago will continue assessments to evaluate and improve existing ordinances.
Timeline: Ongoing					
Funding: Village general funds					
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	The Village of Winnebago will work with Winnebago Co. LEPC and other entities/agencies as necessary to improve and implement HAZMAT response plans.	The Village of Winnebago will work with Winnebago Co. LEPC and other entities/agencies as necessary to improve and implement HAZMAT response plans.
Timeline: 5 years					
Funding: Village general funds					

Table 8-45: Village of Winnebago (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	The Village Board will oversee this project while working with appropriate department head(s) and try to secure funding.	The Village Board will oversee this project while working with appropriate department head(s) and try to secure funding.
Timeline: 2 years once funding is available					
Funding: Village general funds; Pre-Disaster Mitigation Funding; Private lending; or grant funding/donations					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	The Village Board oversees this project while working with appropriate department head(s), as well as outside entities and agencies.	The Village Board oversees this while working with appropriate department head(s), as well as outside entities and agencies.
Timeline: Ongoing					
Funding: Village general funds					
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	The Village Board, and the appropriate sub-committee(s) will oversee and monitor this ordinance. A revised ordinance has not been implemented at this time.	In 2024, The village Board updated its Burning ordinances to prohibit burning whenever there is an official warning by the National Weather Service or any other identified danger.
Timeline: Ongoing					
Funding: Village general funds					
Responsible: Administrator, Police Department, Public Works					

Table 8-46: Winnebago County (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Ongoing within Winnebago County.	Ongoing within Winnebago County. Explore strategies for enhancing public awareness.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Devote Section of County Website to Hazard Mitigation Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Ongoing mitigation item. Winnebago County website is utilized. Information should be updated frequently and seasonally.	Ongoing within Winnebago County utilizing the website and social media. Social media continues to be used for timely public awareness messaging.
Timeline: Updated annually					
Funding: Winnebago County general funds					
Family Disaster Plans & IEMA Kits	Goal: Lessen the impacts of hazards to County residents. Objective: Strengthen communication between County residents and emergency services.	All Hazard	High	2014 Comments as well as working with local municipalities and public works.	Engage in collaborative efforts with local municipalities and community partners to offer initiatives aimed at promoting awareness and preparedness.
Timeline: Ongoing					
Funding: Winnebago County general fund; Winnebago County Health Department general fund					
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Low	Nursing homes within Winnebago county currently have mutual aid agreements in place. This agreement includes developing and maintaining a special needs population list for each nursing home.	Conduct training in healthcare emergency preparedness to ensure mutual aid agreement plans are current and functional. Working with the health department to identify ways to identify special needs populations within the community.
Timeline: Completed					
Funding: None					
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	Winnebago County currently has designated heating/cooling shelters and distributes the locations of the shelters to residents in the county prior/ during each extreme weather event.	Winnebago County currently has designated heating/cooling shelters and distributes their locations to residents prior to/ during each extreme weather event. IEMA has a website listing heating/cooling that contains information for our county.
Timeline: Completed					
Funding: None					

Table 8-46: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Establish Local Emergency Planning Committee	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	All Hazards	High	The Winnebago County LEPC continues to hold monthly planning meetings as well as annual public meetings and conferences.	The Winnebago County LEPC continues to hold quarterly meetings along with an annual public meeting. The Winnebago County LEPC is partnering with the Region 1 NIPARC group to plan a disaster preparedness conference.
Timeline: Ongoing					
Funding: None					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Winnebago County Local Emergency Planning Committee (LEPC) oversees the various mutual aid agreements within the county.	Winnebago County Local Planning Committee (LEPC) oversees various mutual aid agreements. The fire jurisdictions use MABAS. The police jurisdictions use ILEAS.
Timeline: Ongoing					
Funding: None					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Certain critical facilities within Winnebago County have alternative power sources in the event of a hazardous event. Identify those that do not have alternate power and work with ComEd if they lose power.	Certain critical facilities within Winnebago County have alternative power sources in the event of a hazardous event. Identify those that do not have alternate power and work with ComEd if they lose power.
Timeline: 2 years once funding is available					
Funding: Winnebago County general funds; Pre-Diaster Mitigation Funding; private lending; or grant funding/donations					
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Winnebago County is in the process of implementing a new Emergency Notification System, which is I-PAWS compliant.	Winnebago County utilizes IPAWS to alert the community during non-weather imminent danger. The county is exploring enhancing fire dispatch communications during incidents. Expand the use of Wincoil subscription-based communication.
Timeline: 2 years once funding is available					
Funding: Winnebago County general funds					
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Winnebago County continues to assist the Illinois State Water Survey with FEMA-directed flood risk-map reviews and comments. WinGIS maintains a list of critical and essential facilities in the county.	Winnebago County continues to assist the Illinois State Water Survey with FEMA-directed flood risk map reviews and comments. WinGIS maintains a list of critical and essential facilities in the county, along with other public safety layers.
Timeline: Ongoing					
Funding: Winnebago County general funds					

Table 8-46: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Ongoing within Winnebago County.	Continue to enhance collaboration and form partnerships to achieve regional uniformity in procedures and processes.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Develop Safety Procedures for Earthquakes	Goal: Improve emergency sheltering and procedures in the event of an earthquake. Objective: Review and update existing, or create new community earthquake plans.	Earthquakes	High	Winnebago County will work to develop mutual aid agreements in event of an earthquake.	Winnebago County will continue to develop responses and preparedness activities for earthquake events.
Timeline: 5 years					
Funding: Winnebago County general funds					
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	This mitigation item is ongoing and is addressed by current ordinances. The County will continue to maintain update these ordinances.	This mitigation item is ongoing and is addressed by current ordinances. The county will continue to maintain and update these ordinances.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Participate in the NFIP	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Ongoing within Winnebago County. The county will continue to educate and encourage communities/jurisdictions to join the NFIP.	Ongoing within Winnebago County. The county will continue to educate and encourage communities/jurisdictions to join the NFIP.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Participate in the Community Rating System	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Winnebago County will investigate the feasibility of joining the CRS.	Winnebago County will investigate the feasibility of joining the CRS.
Timeline: 5 years					
Funding: Winnebago County general funds					
Property Acquisition (Buyouts) & Property Relocation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	Winnebago County currently works and will continue to identify areas where buyouts and property relocations make the most sense. Several projects have already been completed with Federal assistance. The County will continue to seek federal funding for future property acquisitions.	Winnebago County currently works and will continue to identify areas where buyouts and property relocations make the most sense. Several projects have already been completed with Federal assistance. The County will continue to seek federal funding for future property acquisitions.
Timeline: 5 years once funding is made available					
Funding: Winnebago County general fund; Pre-Disaster Mitigation Funding; private lending; or grant funding					

Table 8-46: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee and Failure	High	Currently, the flood protection elevation is set at Base Flood Elevation + 1 foot; flood protection overlay districts are included in the proposed Unified Development Ordinance.	Currently, the flood protection elevation is set at Base Flood Elevation + 1 foot; flood protection overlay districts are included in the proposed Unified Development Ordinance.
Timeline: Ongoing					
Funding: Winnebago County general fund; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Roadway Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	No Comment	In 2024 the Highway Department completed the elevation of Winnebago Road in west central Winnebago County above the Pecatonica River- Base Flood Elevation. The Highway Department would like to elevate Roscoe Road in north eastern Winnebago County above the Rock River- Base Flood Elevation and Telegraph Road in western Winnebago County above the Pecatonica River- Base Flood Elevation. The Highway Department will continue to apply for funding opportunities at both locations.
Timeline: 5 years once funding is made available					
Funding: Winnebago County general fund; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Floodplain and Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	Winnebago County has building code restrictions and flood protection requirements in place. The County will continue to maintain and update these ordinances.	Winnebago County has building code restrictions and flood protection requirements in place. The County updated its Surface Water Management Ordinance in 2024.
Timeline: Completed; Ongoing					
Funding: Winnebago County general funds					
Dam Failure Emergency Response Plan	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	Winnebago County Emergency Services participate in response planning for such events.	Winnebago County Emergency Services participates in response planning for such events. The Alpine Dam in Rockford, Illinois, is undergoing upgrades to bring it into compliance with modern Army Corps of Engineers regulations.
Timeline: Ongoing					
Funding: Winnebago County general fund					

Table 8-46: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Open Space Preservation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Keep the floodplain and other hazardous areas open and free from development.	Flooding/ Dam and Levee Failure	High	Flood protection overlay districts and conservation design are included in the proposed Unified Development Ordinance.	Flood protection overlay districts and conservation design are included in the proposed Unified Development Ordinance.
Timeline: Ongoing					
Funding: None					
Install Sump Pumps	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize potential damage to foundations and household/critical facility utilities.	Flooding/ Dam and Levee Failure	High	This mitigation item is ongoing within Winnebago County and is part of the building code requirement for specified sites.	This mitigation item is ongoing within Winnebago County and is part of the building code requirement for specified sites.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Winnebago County requires HAZMAT response plans for specified building sites and facilities. Through Mutual Aid, the Rockford Fire Department is the designated response team for Hazardous Materials incidents.	Winnebago County requires HAZMAT response plans for specified building sites and facilities. Tier II reports are filed with LEPC. Through Mutual Aid, the Rockford Fire Department is the designated response team for Hazardous Materials incidents.
Timeline: Completed					
Funding: None					
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	This mitigation item is ongoing.	This mitigation item is ongoing. The Federal Motor Carrier Safety Administration provides a designated National Hazardous Materials Route Registry. Designated evacuation routes are identified for Constellation Nuclear Facility incidents.
Timeline: Ongoing					
Funding: Winnebago County general funds					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	This mitigation item is ongoing and is overseen by the Winnebago County LEPC.	This mitigation item is ongoing and is overseen by the Winnebago County LEPC. Collaboration with reporting to State partners continues to oversee these types of incidents.
Timeline: Ongoing					
Funding: Winnebago County general funds					

Table 8-46: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Anchoring of Manufactured Homes and Exterior Attachments	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	This mitigation item is ongoing within Winnebago County and is part of the building code requirement for specified structures.	This mitigation item is ongoing within Winnebago County and is part of the building code requirement for specified structures.
Timeline: Ongoing					
Funding: None					
Ordinance for Higher Construction Standards/ Techniques in Regards to Severe Storms	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Severe Storms/ Tornadoes	High	This mitigation item is ongoing within Winnebago County and is part of the building code requirement. Example: Per current building code, 90 mph, 2-3 second gusts must be withstood by certain building categories.	This mitigation item is ongoing within Winnebago County and is part of the building code requirement with updates. For example, per the current building code, specific building categories must withstand 105 mph, 2-3 second gusts.
Timeline: Ongoing					
Funding: None					
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	This mitigation item is ongoing and is regular practice of the Highway Department.	This mitigation item is ongoing and is regular practice of the Highway Department.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Responsible: Winnebago County Emergency Management Agency (Winnebago County Sheriff's Department); Winnebago County; Winnebago County Highway Department					

Table 8-47: Winnebago Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Continue putting information on Township website and providing availability for speaking to the public on all hazards.
Timeline: Ongoing				
Funding: Road and Bridge or Grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Continue relationship with all local governmental bodies and IPMAN.
Timeline: Ongoing				
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	No current back-up generators for any of the township facilities.
Timeline: 2 years once funding is made available				
Funding: Road and Bridge; Grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County, Emergency Service Providers, and cities to develop plans for alternate routes for all road closure situations.
Timeline: 5 years				
Funding: Grant funding				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No current snow fence installed by the Township. Beneficial in rural areas of the township.
Timeline: Ongoing				
Funding: Road and Bridge				
Structure Elevation	Goal: Decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Numerous structures that need updating. Grant funding need.
Timeline: 5 years once funding is made available				
Funding: Grant funding; Road and Bridge; General funds				
South Fork Kent Creek or Coolige Creek	Goal: Decrease the impact of hazards. Objective: Reduce or eliminate ditch erosion and runoff.	Severe Weather	High	In cooperation with Winnebago County, grant funding needed.
Timeline: 5 years once funding is made available				
Funding: Grant funding; Road and Bridge; General funds				

Table 8-47: Winnebago Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Treatment of roads	Goal: Decrease the hazards to new and existing infrastructure. Objective: Maximize efficiency of infrastructure exposed to hazards.	Winter Weather	High	Winter salt storage needed.
Timeline: 5 years once funding is made available				
Funding: Grant funding				
Active Tree Management	Goal: Lesson the impact of hazards to new and existing infrastructure. Objective: Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing year round practice that Winnebago Township Highway perform. Additional funding for equipment needed.
Timeline: Ongoing				
Funding: Road and Bridge				
Responsible:Township Highway Department, Township Supervisor				

City of Rockford Action Items

Beverly Park Neighborhood:

- *Acquisition of Flood Prone Structures:*
  - During the update process, the R1 project team reviewed the Action Items from the 2019 plan. As of the 2016 FIRM, the Beverly Park neighborhood was identified as almost wholly in the area of the floodplain. The Beverly Park neighborhood represents about thirty city blocks between the arterial roads of Auburn St. (to the south), Kilburn Ave. (to the East), Gilbert Ave. (to the North), and North Central Ave. (and West). To the South of the Beverly Park neighborhood is the North Fork Kent Creek which includes an area of regulatory floodway. Additionally, running through the middle of the Beverly Park neighborhood is a channelized drainage basin. Both of these contribute to flooding issues in the area, as identified on the FIRM maps. The recommendation for the City of Rockford is to continue to seek funding through FEMA (primarily through Pre-Disaster Mitigation Grants (PDM)) to obtain the properties that are prone to flood – at market value – and through this process demolish and allow the land to be reclaimed by the creek for flooding and retention of water. The land can also serve to be public space, for example, a greenspace or park. The City of Rockford should also consider including the acquisition of these structures in the Resilience Improvement Plan being drafted by R1 during 2024-2025.

Section 9: Plan Maintenance

Adoption by Local Government

Following comments and feedback throughout November and December from IEMA, FEMA, and partner organizations, the R1 project team subsequently incorporated these into the plan. Following FEMA and IEMA review and approval, the R1 project team presented and recommended the plan to the Winnebago County Board for adoption. Other municipalities that adopt the plan will be included after review. The R1 project team will work with the County and the municipalities to ensure all interested parties adopt the plan. Resolutions adopting this plan from the individual municipalities will be provided after approval.

Monitoring, Evaluation, and Updating the MHMP

Throughout the five-year planning cycle, Winnebago County and other adoptees (including all municipalities that opt to adopt the plan informally or formally) will reference the plan when appropriate and offer updates to the project team where necessary. If updates are made to this plan after adoption occurs by municipal governments, notices should be sent containing the details of the related update. Additionally, a meeting will be held annually, beginning in 2025, to address the update of this plan. Members of the project team, led by Winnebago County Emergency Management, are readily available to engage in email correspondence if needed. If there is need for a special meeting, due to new developments or the occurrence of a declared disaster in the county, the Winnebago County Emergency Management Coordinator will coordinate a meeting to update mitigation strategies. Depending on grant opportunities and fiscal resources, mitigation projects may be implemented independently by individual communities or through local partnerships.

As part of the annual update meeting, the County Emergency Management Coordinator will review the county goals and objectives to determine their relevance to changing situations in the county. In addition, state and federal policies will be reviewed to ensure they are addressing current and expected conditions. Finally, the County Emergency Management Coordinator will also review the risk assessment portion of the plan to determine if this information should be updated or modified. The parties responsible for the various implementation actions will report on the status of their projects, and will include which implementation processes worked well, any difficulties encountered, how coordination efforts are proceeding, and which strategies should be revised. Evaluation of plan implementation will be the responsibility of the individual municipalities, and the county should work to ensure that the plan mitigation items are enacted in a timely manner.

The GIS data used to prepare the plan was obtained from existing county GIS data as well as data collected or reviewed as part of the planning process. As newer data becomes available with the next update process in 2029, the updated data will be integrated into future risk assessments and vulnerability analyses.

Implementation, monitoring, and evaluation of the plan will be the primary responsibility of: Winnebago County Emergency Management, 650 W State Street, Rockford, IL 61102.

Implementation through Existing Programs

The results of this plan will be incorporated into ongoing planning efforts since many of the mitigation projects identified as part of this planning process are ongoing. Winnebago County and its incorporated municipalities will update the zoning plans and ordinances listed in Table 8-2 as necessary and as part of regularly scheduled updates. Each community will be responsible for updating its own plans and ordinances.

Continued Public Involvement

Continued public involvement is critical to the successful implementation of the MHMP. Comments from the public on the MHMP will be received by Winnebago County Emergency Management Coordinator and reviewed during the annual meeting. Education efforts for hazard mitigation will be an ongoing effort of Winnebago County. The public will be notified of the annual meeting through notices in the local newspaper. Once adopted, a copy of the MHMP will be available in the Winnebago County EMA and Highway Department office; online at the Winnebago County website; online at the R1 website; and online at the individual municipalities websites (if available).

Appendix A: Definitions

#

100-year Floodplain: Areas subject to inundation by the 1-percent-annual-chance flood event.

C

Critical Facility: A structure, because of its function, size, service area, or uniqueness, that has the potential to cause serious bodily harm, extensive property damage, or disruption of vital socioeconomic activities if it is destroyed or damaged or if its functionality is impaired. This includes, but are not limited to, water and wastewater treatment facilities, municipal buildings, educations facilities, and non-emergency healthcare facilities.

Community Rating System (CRS): A voluntary program for National Flood Insurance Program (NFIP) participating communities. The goals of the CRS are to reduce flood damages to insurable property, strengthen and support the insurance aspects of the NFIP, and encourage a comprehensive approach to floodplain management.

Comprehensive Plan: A document, also known as a "general plan," covering the entire geographic area of a community and expressing community goals and objectives. The plan lays out the vision, policies, and strategies for the future of the community, including all the physical elements that will determine the community's future developments.

D

Disaster Mitigation Act of 2000 (DMA 2000): The largest legislation to improve the planning process. It was signed into law on October 30, 2000. This legislation, as amended, reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur.

E

Essential Facility: A subset of critical facilities that represent a substantial hazard to human life in the event of failure. This includes (but not limited to) hospital and fire, rescue, ambulance, emergency operations centers, and police stations.

F

Federal Emergency Management Agency (FEMA): An independent agency created in 1979 to provide a single point of accountability for all federal activities related to disaster mitigation and emergency preparedness, response, and recovery.

H

Hazard: A source of potential danger or adverse condition.

Hazard Mitigation: Any sustained action to reduce or eliminate long-term risk to human life and property from hazards.

Hazard Mitigation Grant Program (HMPG): Authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, HMGP is administered by FEMA and provides grants to states, tribes, and local governments to implement hazard mitigation actions after a major disaster declaration.

Hazus-MH: A geographic information system (GIS)-based disaster risk assessment tool.

Multi-Hazard Mitigation Planning: Identify policies and actions that can be implemented over the long term to reduce risk and future losses from various hazardous events.

I

Illinois Emergency Management Agency (IEMA): The primary responsibility of the Illinois Emergency Management Agency (IEMA) is to better prepare the State of Illinois for natural, manmade or technological disasters, hazards, or acts of terrorism. Our goal is a "better prepared state." IEMA assists local governments with multi-hazard emergency operations plans and maintains the Illinois Emergency Operations Plan.

N

National Flood Insurance Program (NFIP): Administered by the Federal Emergency Management Agency, which works closely with nearly 90 private insurance companies to offer flood insurance to property owners and renters. In order to qualify for flood insurance, a community must join the NFIP and agree to enforce sound floodplain management standards.

P

Planning Team (Interchangeably referred to as project team): A group composed of government, private sector, and individuals with a variety of skills and areas of expertise, usually appointed by a city or town manager, or chief elected official. The group finds solutions to community mitigation needs and seeks community acceptance of those solutions.

R

Risk Priority Index (RPI): Quantifies risk as the product of hazard probability and magnitude so planning team members can prioritize mitigation strategies for high-risk-priority hazards.

Risk Assessment: Quantifies the potential loss resulting from a disaster by assessing the vulnerability of buildings, infrastructure, and people.

S

Strategy: A collection of actions to achieve goals and objectives.

V

Vulnerability: Describes how exposed or susceptible to damage an asset is. Vulnerability depends on an asset's construction, contents, and the economic value of its functions.

Appendix B: Acronyms

A

AEGL: Acute Exposure Guideline levels

ALOHA: Areal Locations of Hazardous Atmospheres

B

BOL-IEPA: Bureau of Land

C

CERI: Center for Earthquake Research and Information

CFR: (United States) Code of Federal Regulations

CRS: Community Rating System

D

DCEO IKE: Illinois Department of Commerce and Economic Opportunity Illinois Disaster Recovery Program

DEM: Digital Elevation Model

DFIRM: Digital Flood Insurance Rate Map

DMA: Disaster Mitigation Act of 2000

E

EMA: Emergency Management Agency

EPA: Environmental Protection Agency

ESDA: Emergency Services and Disaster Agency (Local Agency)

F

FEMA: Federal Emergency Management Agency

FIRM: Flood Insurance Rate Map

FMA: Flood Mitigation Assistance Grant

G

GIS: Geographic Information Systems

H

HAZUS-MH: Hazards USA Multi-Hazard

HMGP: Hazard Mitigation Grant Program

HUC: Hydrologic Unit Code

I

IA: Individual Assistance

IDES: Illinois Department of Employment Security

IDNR: Illinois Department of Natural Resources

IDOT: Illinois Department of Transportation

IEMA: Illinois Emergency Management Agency

IEPACT: Illinois Environmental Protection Act

IEPA: Illinois Environmental Protection Agency

ISCO: Illinois State Climatologist Office

ISWS: Illinois State Water Survey

M

MHMP: Multi-Hazard Mitigation Plan

MPA: Metropolitan Planning Area

MPO: Metropolitan Planning Area Organization

MTP: Metropolitan Transportation Plan

N

NAICS: North American Industry Classification System

NCDC: National Climatic Data Center

NCEI: National Centers for Environmental Information (Formerly the NCDC)

NEHRP: National Earthquake Hazards Reduction Program

NEPA: National Environmental Policy Act

NFIA: National Flood Insurance Act of 1968

NFIP: National Flood Insurance Program

NLCD: National Land Cover Data

NLD: National Levee Database

NWS: National Weather Service

NOAA: National Oceanic and Atmospheric Administration

P

PA: Public Assistance

PDM: Pre-Disaster Mitigation

PDMG: Pre-Disaster Mitigation Grant

PPM: Parts Per Million

R

REMI: Regional Economic Modeling Initiative

RPN/I: Risk Priority Number/Index

S

SAMHA: Substance Abuse and Mental Health Services Administration

SES: Socioeconomic Status

SIU: Southern Illinois University (Carbondale)

SPC: Storm Prediction Center

SRL: Severe Repetitive Loss Property

U

UA: Urbanized Area

UPS: Uninterrupted Power Supply

USCB: United States Census Bureau

USDA: United States Department of Agriculture

USGA: United States Geological Survey

V

VN: Violation Notice

Appendix C: Checklist

Checklist Cover Page

The Local Mitigation Plan Review Tool (PRT) demonstrates how the local mitigation plan meets the regulation in 44 CFR § 201.6 and offers states and FEMA Mitigation Planners an opportunity to provide feedback to the local governments, including special districts.

1. The Multi-Jurisdictional Summary Sheet is a worksheet that is used to document how each jurisdiction met the requirements of the plan elements (Planning Process; Risk Assessment; Mitigation Strategy; Plan Maintenance; Plan Update; and Plan Adoption).
2. The Plan Review Checklist summarizes FEMA's evaluation of whether the plan has addressed all requirements.

For greater clarification of the elements in the Plan Review Checklist, please see Section 4 of this guide. Definitions of the terms and phrases used in the PRT can be found in Appendix E of this guide.

Plan Information	
Jurisdiction(s)	Winnebago County
Title of Plan	Winnebago County Multi-Hazard Mitigation Plan 2024
New Plan or Update	Update
Single- or Multi-Jurisdiction	Multi-Jurisdiction
Date of Plan	

Local Point of Contact	
Title	Slade Berry
Agency	Winnebago County
Address	650 W. State Street, Rockford IL 61102
Phone Number	815-319-6217
Email	BerryS@WCSO-IL.us

Additional Point of Contact	
Title	Sean Von Bergen
Agency	Winnebago County
Address	424 N. Springfield Avenue, Rockford IL 61101
Phone Number	815-319-4034
Email	SVonBergen@hwy.wincoil.gov

State Review Information	
State Reviewer(s) and Title	
State Review Date	

FEMA Review Information	
FEma Reviewer(s) and Title	
Date Received in FEMA Region	
Plan Not Approved	
Plan Approvable Pending Adoption	
Plan Approved	

Multi-Jurisdictional Summary Sheet

#	Jurisdiction Name	Requirements Met (Y/N)						
		A. Planning Process	B. Risk Assessment	C. Mitigation Strategy	D. Plan Maintenance	E. Plan Update	F. Plan Adoption	G. State Requirements
1	Winnebago County	Y	Y	Y	Y	Y	Y	Y
2	Rockford Park District	Y	Y	Y	Y	Y	Y	Y
3	Loves Park (includes Fire)	Y	Y	Y	Y	Y	Y	Y
4	Machesney Park	Y	Y	Y	Y	Y	Y	Y
5	Rockton	Y	Y	Y	Y	Y	Y	Y
6	Roscoe	Y	Y	Y	Y	Y	Y	Y
7	Rockford (includes Fire)	Y	Y	Y	Y	Y	Y	Y
8	South Beloit	Y	Y	Y	Y	Y	Y	Y
9	Winnebago	Y	Y					
10	Four Rivers	Y	Y	Y	Y	Y	Y	Y
11	Boone- Winn Roe	Y	Y	Y	Y	Y	Y	Y
12	Rock Valley College	Y	Y					
13	Rockford Airport	Y	Y					
14	North Park Water	Y	Y	Y	Y	Y	Y	Y
15	Townships: Burritt, Cherry Valley, Durand, Harrison, Pecatonica, Rockford, Rockton, Roscoe, Shirland	Y	Y	Y	Y	Y	Y	Y
16	Fire Districts: Blackhawk, Cherry Valley, Durand, German Valley, Harlem-Roscoe, Loves Park, New Milford, North Park, North West, Pecatonica, Rockton, Rockford, South Beloit, Stillman	Y	Y	Y	Y	Y	Y	Y

Plan Review Checklist

The Plan Review Checklist is completed by FEMA. States and local governments are encouraged, but not required, to use the PRT as a checklist to ensure all requirements have been met prior to submitting the plan for review and approval. 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." FEMA completes the "required revisions" summary at the bottom of each element to clearly explain the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is "not met." Sub-elements in each summary should be referenced using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each element and sub-element are described in detail in Section 4: Local Plan Requirements of this guide.

Plan updates must include information from the current planning process.

If some elements of the plan do not require an update, due to minimal or no changes between updates, the plan must document the reasons for that.

Multi-jurisdictional elements must cover information unique to all participating jurisdictions.

Element A: Planning Process

Element A Requirements	Location in Plan (section and/ or page number)	Met/Not Met
A1. Does the plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement 44 CFR § 201.6(c)(1))		
A1-a. Does the plan document how the plan was prepared, including the schedule or time frame and activities that made up the plan's development, as well as who was involved?		
A1-b. Does the plan list the jurisdiction(s) participating in the plan that seek approval, and describe how they participated in the planning process?		
A2. Does the plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development as well as businesses, academia, and other private and non-profit interests to be involved in the planning process? (Requirement 44 CFR § 201.6(b)(2))		
A2-a. Does the plan identify all stakeholders involved or given an opportunity to be involved in the planning process, and how each stakeholder was presented with this opportunity?		
A3. Does the plan document how the public was involved in the planning process during the drafting stage and prior to plan approval? (Requirement 44 CFR § 201.6(b)(1))		
A3-a. Does the plan document how the public was given the opportunity to be involved in the planning process and how their feedback was included in the plan?		
A4. Does the plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement 44 CFR § 201.6(b)(3))		
A4-a. Does the plan document what existing plans, studies, reports and technical information were reviewed for the development of the plan, as well as how they were incorporated into the document?		
Element A Required Revisions		
Required Revision:		

Element B: Risk Assessment

Element B Requirements	Location in Plan (section and/or page number)	Met/Not Met
B1. Does the plan include a description of the type, location, and extent of all natural hazards that can affect the jurisdiction? Does the plan also include information on previous occurrences of hazard events and on the probability of future hazard events? (Requirement 44 CFR § 201.6(c)(2)(i))		
B1-a. Does the plan describe all natural hazards that can affect the jurisdiction(s) in the planning area, and does it provide the rationale if omitting any natural hazards that are commonly recognized to affect the jurisdiction(s) in the planning area?		
B1-b. Does the plan include information on the location of each identified hazard?		
B1-c. Does the plan describe the extent for each identified hazard?		
B1-d. Does the plan include the history of previous hazard events for each identified hazard?		
B1-e. Does the plan include the probability of future events for each identified hazard? Does the plan describe the effects of future conditions, including climate change (e.g., long-term weather patterns, average temperature and sea levels), on the type, location and range of anticipated intensities of identified hazards?		
B1-f. For participating jurisdictions in a multi-jurisdictional plan, does the plan describe any hazards that are unique to and/or vary from those affecting the overall planning area?		
B2. Does the plan include a summary of the jurisdiction's vulnerability and the impacts on the community from the identified hazards? Does this summary also address NFIP-insured structures that have been repetitively damaged by floods? (Requirement 44 CFR § 201.6(c)(2)(ii))		
B2-a. Does the plan provide an overall summary of each jurisdiction's vulnerability to the identified hazards?		
B2-b. For each participating jurisdiction, does the plan describe the potential impacts of each of the identified hazards on each participating jurisdiction?		
B2-c. Does the plan address NFIP-insured structures within each jurisdiction that have been repetitively damaged by floods?		
Element B Required Revisions		
Required Revision:		

Element C: Mitigation Strategy

Element C Requirements	Location in Plan (section and/ or page number)	Met/Not Met
C1. Does the plan document each participant's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement 44 CFR § 201.6(c)(3))		
C1-a. Does the plan describe how the existing capabilities of each participant are available to support the mitigation strategy? Does this include a discussion of the existing building codes and land use and development ordinances or regulations?		
C1-b. Does the plan describe each participant's ability to expand and improve the identified capabilities to achieve mitigation?		
C2. Does the plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement 44 CFR § 201.6(c)(3)(ii))		
C2-a. Does the plan contain a narrative description or a table/list of their participation activities?		
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 44 CFR § 201.6(c)(3)(ii))		
C4-a. Does the plan include an analysis of a comprehensive range of actions/projects that each jurisdiction considered to reduce the impacts of hazards identified in the risk assessment?		
C4-b. Does the plan include one or more action(s) per jurisdiction for each of the hazards as identified within the plan's risk assessment?		
C5. Does the plan contain an action plan that describes how the actions identified will be prioritized (including a cost-benefit review), implemented, and administered by each jurisdiction? (Requirement 44 CFR § 201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))		
C5-a. Does the plan describe the criteria used for prioritizing actions?		
C5-b. Does the plan provide the position, office, department or agency responsible for implementing/administrating the identified mitigation actions, as well as potential funding sources and expected time frame?		
Element C Required Revisions		
Required Revision:		

Element D: Plan Maintenance

Element D Requirements	Location in Plan (section and/ or page number)	Met/Not Met
D1. Is there discussion of how each community will continue public participation in the plan maintenance process? (Requirement 44 CFR § 201.6(c)(4)(iii))		
D1-a. Does the plan describe how communities will continue to seek future public participation after the plan has been approved?		
D2. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a five-year cycle)? (Requirement 44 CFR § 201.6(c)(4)(i))		
D2-a. Does the plan describe the process that will be followed to track the progress/ status of the mitigation actions identified within the Mitigation Strategy, along with when this process will occur and who will be responsible for the process?		
D2-b. Does the plan describe the process that will be followed to evaluate the plan for effectiveness? This process must identify the criteria that will be used to evaluate the information in the plan, along with when this process will occur and who will be responsible.		
D2-c. Does the plan describe the process that will be followed to update the plan, along with when this process will occur and who will be responsible for the process?		
D3. Does the plan describe a process by which each community will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement 44 CFR § 201.6(c)(4)(ii))		
D3-a. Does the plan describe the process the community will follow to integrate the ideas, information and strategy of the mitigation plan into other planning mechanisms?		
D3-b. Does the plan identify the planning mechanisms for each plan participant into which the ideas, information and strategy from the mitigation plan may be integrated?		
D3-c. For multi-jurisdictional plans, does the plan describe each participant's individual process for integrating information from the mitigation strategy into their identified planning mechanisms?		
Element D Required Revisions		
Required Revision:		

Element E: Plan Update

Element E Requirements	Location in Plan (section and/or page number)	Met/Not Met
E1. Was the plan revised to reflect changes in development? (Requirement 44 CFR § 201.6(d)(3))		
E1-a. Does the plan describe the changes in development that have occurred in hazard-prone areas that have increased or decreased each community's vulnerability since the previous plan was approved?		
E2. Was the plan revised to reflect changes in priorities and progress in local mitigation efforts? (Requirement 44 CFR § 201.6(d)(3))		
E2-a. Does the plan describe how it was revised due to changes in community priorities?		
E2-b. Does the plan include a status update for all mitigation actions identified in the previous mitigation plan?		
E2-c. Does the plan describe how jurisdictions integrated the mitigation plan, when appropriate, into other planning mechanisms?		
Element E Required Revisions		
Required Revision:		

Element F: Plan Adoption

Element F Requirements	Location in Plan (section and/or page number)	Met/Not Met
F1. For single-jurisdictional plans, has the governing body of the jurisdiction formally adopted the plan to be eligible for certain FEMA assistance? (Requirement 44 CFR § 201.6(c)(5))		
F1-a. Does the participant include documentation of adoption?		
F2. For multi-jurisdictional plans, has the governing body of each jurisdiction officially adopted the plan to be eligible for certain FEMA assistance? (Requirement 44 CFR § 201.6(c)(5))		
F2-a. Did each participant adopt the plan and provide documentation of that adoption?		
Element F Required Revisions		
Required Revision:		

Appendix D: Meeting Information

Figure D-1: Document Kick-off Meeting Agenda

COLLABORATIVE PLANNING FOR NORTHERN ILLINOIS

Winnebago County Hazard Mitigation Plan Update

Document Kick-off Meeting
Wednesday, May 8 8:30 a.m.
Mezz North

Agenda

1. Project Scope Recap – update of 2019 Hazard Mitigation Plan for Winnebago County
   a. Schedule
      a. County-wide stakeholder/community input meeting on 5/22/24
   b. Major Content Deliverable – updated Plan document
   c. Audience(S)
      a. County, Municipalities, Townships, Community Organizations, Fire Districts, School Districts, Colleges, Utility providers Hospitals, State & Federal Mitigation officials
2. Draft Document Outline – following 2019 plan section headings
3. File Management
   a. "P:\METROPOLITAN PLANNING ORGANIZATION - MPO\+Client Projects\WC\Winnnebago County Multi-Hazard Mitigation Plan\MHMP Update_2023"
4. Data Collection and Analysis - Work Plan and monday.com
   a. Maps
   b. NOAA and NWS
   c. Update 2019 maps with any revisions through 2023/2024
   d. US Census Bureau
   e. Hazus Modelling - https://msc.fema.gov/portal/resources/hazus
5. Review and Revision Process
6. Document Layout
   a. Follow 2019 format
7. Assignments
8. Open Discussion

1

Figure D-2: Community Input Coordination Meeting Update

COLLABORATIVE PLANNING FOR NORTHERN ILLINOIS

Winnebago County Hazard Mitigation Plan Update

Community Input Meeting Coordination Update
Wednesday May 15, 2024, 3:30 p.m.
R1 Office, 127 N. Wyman

Agenda

1. Review Presentation for May 22 meeting

2. Adjust Agenda based on presentation (Suggested to add presentation details)

    a. Introduction
    b. Presentation – with subitem headings
        a. Mitigation Strategies – transportation assets and critical facilities?
    c. Additional Questions
    d. Public Comment
    e. Next Steps
    f. Adjourn

3. Document Updates
    a. Public Comment period is now added
    b. R1 completing document design?
    c. FEMA Local Mitigation Plan Review Tool/Checklist

4. Meeting Responses Update

5. Additional Questions/Comments

6. Next Steps

    a. Update presentation, if necessary
    b. Update agenda, as needed
    c. Distribute and post agenda
    d. Additional outreach – press release, social media, etc.?

7. Adjourn

1

Figure D-3: Community Input Meeting Agenda

COLLABORATIVE PLANNING FOR NORTHERN ILLINOIS

Winnebago County Hazard Mitigation Plan Update

Community Input Meeting
Wednesday, May 22, 2024 9:00 a.m.
Veteran's Memorial Hall 211 N Main Street Rockford, 61101

Agenda

1. Welcome and Introduction (Trent/Sean/Eric)
   a. Stakeholders

2. Hazard Mitigation Plan Background (Sean)

3. 2024 Plan Update Process and Timeline

   a. Community Input Meeting and feedback
   b. Risk Priority Analysis – today through early June
   c. Mitigation Strategies – June and July
   d. Document revision

4. Additional Questions/Comments

5. Public Comment

6. Next Steps

   a. Stakeholders complete Risk Priority Analysis spreadsheets
      a. Return by June 14
   b. Week of May 28 - Distribute Mitigation strategy worksheets for review and update
      a. Return worksheets by July 12
   c. June and July - Can and will meet with stakeholders to complete Mitigation Strategy worksheets

7. Adjourn

1

Winnebago County Hazard Mitigation Plan

Community Input Meeting - Rockford
Wednesday, May 22, 2024 at 9:00am

NAME	COMPANY/ORGANIZATION	EMAIL
Kelly Nokes	CoR - PW	Kelly.Nokes@Rockfordil.gov
Dody Hollins	OSF Healthcare	dody.a.hollins@osfhealthcare.org
PATRICIA DIDUCH	Village of Rockton	diduch@rocktonvillage.com
Tim Hinkens	City of Rockford	timothy.hinkens@rockfordil.gov
Jas Bilich	Winn. County Admin	jbilich@rpcd.wincoil.gov
Will Hartje	Regional Office of Education	wHartje @ ROE4.org
Carlos Molina	Winn. County Highway	Cmolina@hwy.wincoil.gov
Adam Truman	South Beloit PD	a.truman@southbeloit.org
JAMIE ROTT	COR-WATER	jamie.rott@ROCKFORDIL.GOV
Rebecca Olson	Olson Ecological Solutions	rebecca@olsonecosolutions.com
Dylan Moffitt	Village of Machesney Park	dylanm@machesneypark.org
TROY TAYLOR	VILLAGE of ROSCOE	PUBLICWORKS@VILLAGEOFROSCOE.COM
Brandon Baggs	Village of Roscoe / City of South Beloit	bbaggs@fehrgraham.com
Joe Kurlinkus	village of Roscoe	josef@village of roscoe.com

Figure D-4: Community Input Meeting Sign-In Sheet

Winnebago County Hazard Mitigation Plan

Community Input Meeting - Rockford
Wednesday, May 22, 2024 at 9:00am

NAME	COMPANY/ORGANIZATION	EMAIL
Kevin Briggs	Harlem Roscoe Fire	KBriggs@harlemroscoefire.org
Sam Hawley	Roscoe Police Dept	SHawley7894@roscoepolice.com
John Bergeron	Harlem-Roscoe Fir	JBergeron@harlemroscoef...org
Sean Madison	NIPARC	Smadison@mhemail.org
JAY ALMS	HRFD / NPFD	jalms@harlemroscoefire.org
Mike Peranich	Rockford Airport	mperanich@flyrfd.com
Ben Thompson	Mercyhealth	benthompson@mhemail.org
Sydney Turner	RI	sturner@riplanning.org
John Peterson	Village of Rockton	Peterson@RocktonVillage.org
Brad Holcomb	City of Rockford, PW-Engineering	brad.holcomb@rockfordil.gov
Barry Palm	Rockford Township Highway	Barrypalm@rockfordtownshipil.gov
SEAN Von Bergen	WCHD	Svonbergen@[illegible].winnebagoil.gov
Rebecca Lyons	Winnebago County Health Dept.	RLYONS@PUBLICHEALTH.WINNCOIL.gov
Anna McIntyre	Rockford Park Dist	amcintyre@rockfordparkdistrict.org
Jim Daniels	Rockford Park Dist	Jdaniels@rockfordparkdistrict.org
Ben Christiansen	Burritt Township	benchristiansen@hotmail.com
John Donahue	North Park Water	jdonahue@northparkwater.org

OVER →

Figure D-4: Community Input Meeting Sign-In Sheet Continued

Figure D-5: Pecatonica Township Meeting Sign-In sheet

COLLABORATIVE PLANNING FOR NORTHERN ILLINOIS

SIGN-IN SHEET

Meeting: __Hazard Mitigation Plan Pecatonica Township_ Date: _6-28-2024_____

NAME – PRINTED	SIGN
Thomas Menge Road Commission	
Elizabeth Leigh Clark Supervisor	
matt menge	Matt Menge
TRENT BRASS	

P:\ADMINISTRATION\Approved Forms & Templates\Sign Up Sheets\FORM Staff Meeting Sign In Sheet.docx

Figure D-6: Public Works Committee Agenda

The Winnebago County Public Works Committee agenda can be found on the County website.

WINNEBAGO COUNTY
ILLINOIS

Winnebago County Board
Joseph Chiarelli, Chairman
Lori Gummow, County Clerk

Date: November 27, 2024

PUBLIC NOTICE AND NOTICE TO COMMITTEE MEMBERS
NOTICE IS HEREBY GIVEN that the following Committee Meetings have been called by the Chairperson and such Meetings will be held as follows:

PUBLIC WORKS
COMMITTEE AGENDA

Called by: Chairman Tassoni

Members: Angela Fellars, Chris Scrol, Jim Webster, John Penney, John Guevara and Kevin McCarthy

DATE: **Tuesday, December 3, 2024**
TIME: 5:00 P.M.
LOCATION: Room 510
County Administration Building
404 Elm Street
Rockford, IL 61101

AGENDA:

1. Call to Order
2. Roll Call
3. Public Meeting for Winnebago County Hazard Mitigation Plan Update
   a. Presentation by Winnebago County and Region 1 Planning Council https://docs.google.com/presentation/d/153SUjgzifT5eY96fYXJjip5FkosD-wm6/edit?usp=sharing&ouid=103398449485220052594&rtpof=true&sd=true
   b. Draft Hazard Mitigation Plan https://drive.google.com/file/d/11s_DsMQCKBGVRFnnfcSHLi4e6laqtJ5Z/view?usp=sharing
4. Approval of October 17, 2024 Minutes
5. Public Comment
   This is the time we invite the public to address the Public Works Committee with issues and concerns. We ask you to limit your comments to three minutes. Personal attacks or inappropriate language of any sort will not be tolerated. A maximum of five speakers will be heard on a first come basis with sign up at the meeting. Speakers may not address zoning matters which are pending before the Zoning Committee, Zoning Board of Appeals, or the County Board. Personnel matters or pending or threatened litigation may not be addressed in open session. An individual may speak a maximum of three times per calendar year on the same topic. This prohibition shall include the repetition of the same topic in a statement on

Figure D-6: Public Works Committee Agenda Continued

what is purported to be a different topic. After acknowledgement by the chair, please stand and state your name. Thank you for your cooperation.

6. Legislation
   (24-045) Resolution Authorizing a Structural Engineering Services Agreement with IMEG Consultants Corp. for the Rehabilitation of the Roscoe Road Bridge Over the Rock River and for the Appropriation of MFT Funds (Section 18-00661-00-BR)
   Cost: $256,383 (not to exceed) C.B. District: 3

   (24-046) Resolution Authorizing the Award of Bid for the Maintenance of Traffic Signals on the County Highway System and for the Appropriation of MFT Funds
   (Section: 24-00734-00-TL)
   Cost: $488,167.50 (total for 2025 & 2026) C.B. District: County Wide

7. Other Matters
   Budget Amendment
   Change Order(s) for Information Only –

8. Reports
   a. PWC Chairman Tassoni –
   b. County Engineer Molina –

9. Adjournment

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation

The Winnebago County Multi-Hazard Mitigation Plan Update Presentation link can be found on the Public Works agenda under agenda item 3.

Winnebago County Multi-Hazard Mitigation Plan Update

WINNEBAGO COUNTY I **DECEMBER 3, 2024**

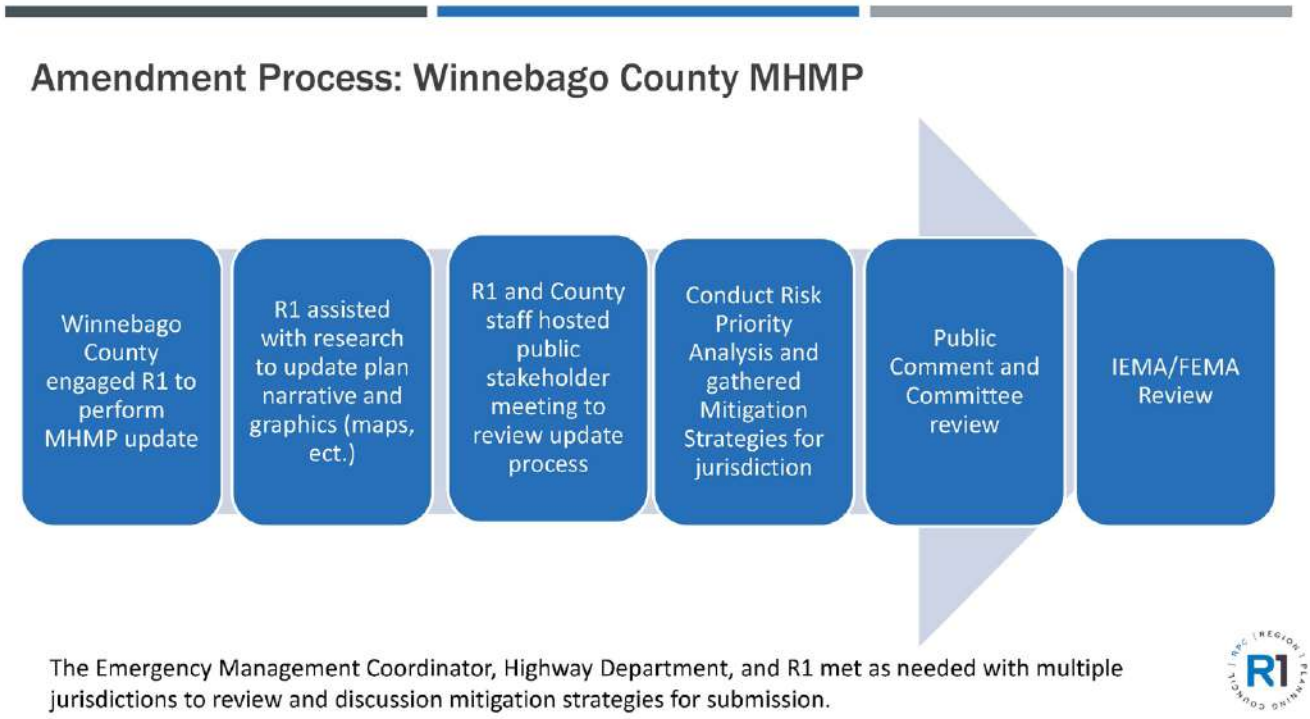


HISTORY: Winnebago County Multi-Hazard Mitigation Plan (MHMP)

- **2007**: The county completed its first MHMP
- **2019**: Most recent update approved by FEMA/IEMA
- **2023**: County applied for Federal Mitigation Assistance (FMA) grant to update 2019 plan
- **2024**: R1 assisted County staff and stakeholder partners with required update

This is the third update the County's MHMP document.

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation Continued



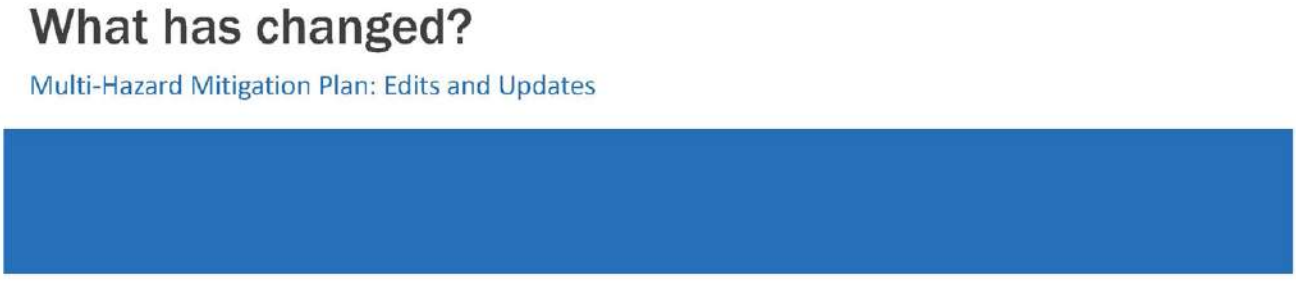


Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation Continued

MHMP Data Updates

- R1 staff updated a number of sections of the plan with recently available data:
  - Sociodemographic including population, race, education, economic, poverty, and housing
  - Land use
  - Regional Economic Modeling, Inc. (REMI)
  - Tornado Path Scenarios
- Visuals updated including county-wide maps
- Narrative updates provided:
  - Covid-19 pandemic
  - Chemtool fire
  - Per- and Poly-fluoroalkyl substances (PFAS)

MHMP Sections

The sections of this 2024 update are consistent with the prior versions.

- Introduction
- Winnebago County Overview
- Winnebago County Demographics
- Winnebago County Critical Facilities
- Planning Process
- Risk Analysis
- Hazard Profiles
- Mitigation Strategies
- Plan Maintenance

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation Continued

MHMP Sections - continued

Also included are the following Appendices:

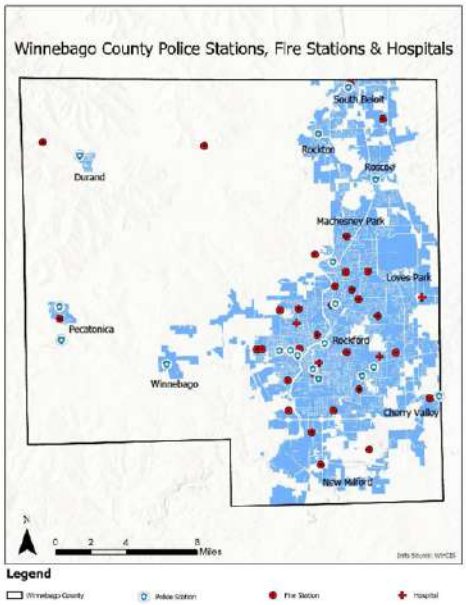
- Definitions
- Acronyms
- FEMA Checklist
- Meeting Information
- Public Comment
- Existing Plans
- Mitigation Strategies

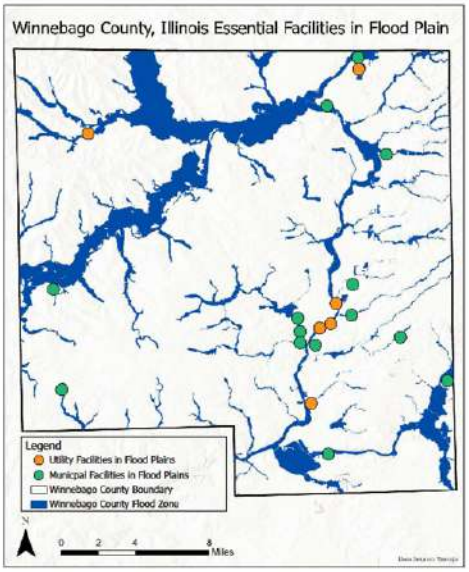
MHMP Stakeholders

- Fire Districts
- Health providers
- Municipalities including: Loves Park, Roscoe, Machesney Park, Rockton, South Beloit, Rockford
- Regional School District Office
- Rockford Park District – new participant
- Airport
- ComEd and Nicor
- Townships
- North Park Public Water
- Four Rivers
- Region 1 Planning Council
- Winnebago County

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation Continued

Critical Facilities – Section 4





Risk Analysis – Section 6

- A Risk Assessment identifies the characteristics and potential consequences of a disaster, how much the disaster could affect the community, and the impact on community assets.
- The hazards selected were identified by FEMA, IEMA, and the 2023 Illinois Natural Hazard Mitigation Plan, and also highlighted in the 2019 version.
- By Risk Priority Rank:
  - Thunderstorm (1)
  - Winter Storm (1)
  - Tornado (3)
  - Flooding (4)
  - Drought and Excessive Heat (5)
  - Hazardous Material Storage and Transportation (6)
  - Dam and Levee Failure (7)
  - Groundwater Shortage (7)
  - Earthquake (9)

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation Continued

Mitigation Strategies – Section 8

- These strategies attempt to build disaster-resistant communities and were submitted by multiple jurisdictions within the County
- Since the last plan update there are some completed mitigation efforts:
  - City of Rockford approved for enrollment in the Community Rating System, 2022
  - North Park Water District updated the Source Water Protection Plan to avoid potential hazardous developments in setback zones
- New Goal added:
  - Identify and seek funding for critical facility and infrastructure projects for mitigation
    - Worksheets can identify projects that may utilize pre-disaster funding
    - Resilience Improvement Plan enhances eligible projects for PROTECT funding

Mitigation Strategies, continued

- Worksheets received from many jurisdictions within Winnebago County:
  - Machesney Park, Loves Park, South Beloit, Rockford, Roscoe, Rockton
  - Fire Districts
  - Townships
  - Rockford Park District – new addition to this plan update
  - Boone-Winnebago Regional Office
  - North Park Water
  - Four Rivers
- Timelines, potential funding sources, and responsible parties were identified in as many locations as possible, consistent with plan update requirements

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation Continued

Plan Maintenance – Section 9

- Focus maintenance efforts through Emergency Management
- Narrative edited to require annual meetings beginning in 2025 to improve update process
  - Review goals and objects to determine relevance to changing situations throughout the county
  - Review state and federal policies to ensure response to current and expected conditions
  - Review risk assessment portion of the plan and determine if information needs to be updated or modified
  - Attending jurisdictions shall report on project status
    - Identify what worked well, any difficulties, coordination efforts, potential strategy revisions
  - Evaluate and enact mitigation items in a timely manner by jurisdiction
  - Plan for and hold special meetings related to new developments or declared disasters

Public Comment

- Public Meeting held on May 22
- Comment period open from November 6 through November 20
- Additional Public Meetings:
  - December 3 Winnebago County Public Works Committee (tonight)
  - Additional Meeting to be determined following IEMA/FEMA review

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation Continued

Public Comment – Summary of Changes

- Addition of minor typographical errors and associated corrections
  - Example: Rock River Water Reclamation to Four Rivers
- Mitigation Strategy Worksheets received from: Blackhawk Fire, New Milford Fire, North Park Fire, Northwest Fire, Stillman Fire, and WinBurSew Fire
  - Jurisdictional participation tables will also be edited to include any jurisdictions that participated in the Risk Analysis and/or returned Mitigation Strategies

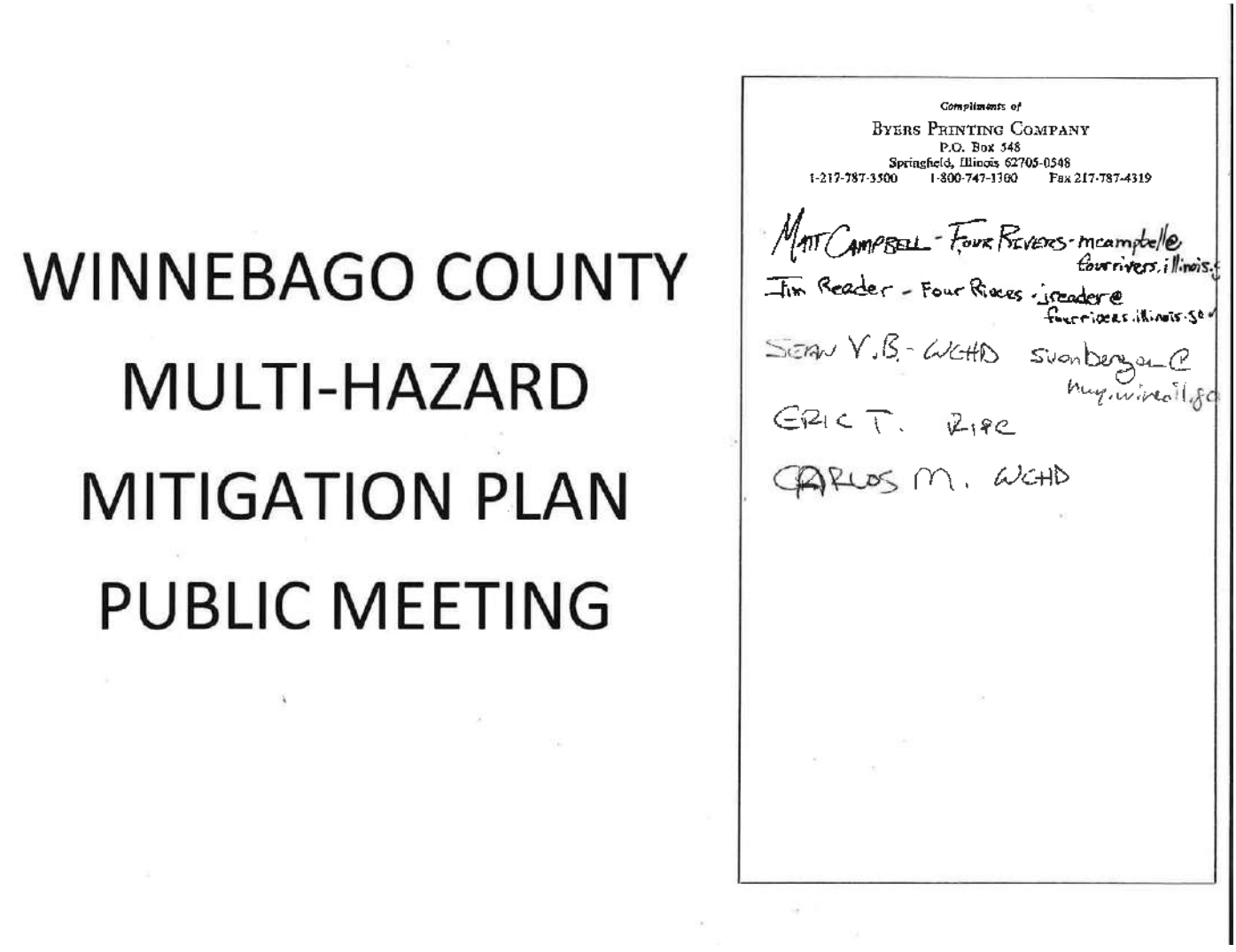
Next steps

- Submit to IEMA/FEMA for review and additional comment
- Must be adopted by County Board
  - Adoption from partner jurisdictions must be confirmed and submitted to IEMA/FEMA

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation Continued



Figure D-8: Public Meeting Sign-in Sheet



WINNEBAGO COUNTY
MULTI-HAZARD
MITIGATION PLAN
PUBLIC MEETING

Compliments of
BYERS PRINTING COMPANY
P.O. Box 548
Springfield, Illinois 62705-0548
1-217-787-3500 1-800-747-1360 Fax 217-787-4319

MATT CAMPBELL - FOUR RIVERS - mcampbell@fourrivers.illinois.g
Jim Reader - Four Rivers - jreader@fourrivers.illinois.go
SEAN V.B. - WCHD svanberg@co.winnebago.il.us
ERIC T. RIPE
CARLOS M. WCHD

Appendix E: Public Comment

Figure E-1: Winnebago County Health Department Comments

Eric Tison

From:	Rebecca Lyons [redacted]
Sent:	Monday, June 3, 2024 11:01 AM
To:	Eric Tison
Subject:	Re:: Winnebago County Hazard Mitigation Plan Update Risk Analysis--Winnebago County Health
Attachments:	Winnebago County_Health.xlsx; Community Input Meeting Presentation 05222024.pdf
Importance:	High

Hi Eric,

I had some follow up questions regarding the tool. For public health and health care we typically use the Kaiser Permanente Hazard Vulnerability Assessment Tool (HVA). I understand that the FEMA Hazard Mitigation Plan is more specifically focused on natural disasters, however I am wondering about the choice of categories and ranking. Is there a way you would like us to propose new categories be added or modified?

One I would be important to add are as follows:

- Infectious Disease Outbreak
- Air Quality Issue
- Water Contamination
- Utility Failure or Power Outage
- Extreme Cold

I would also suggest the following changes:

- Splitting drought and extreme heat into two separate categories
- Changing groundwater shortage to water disruption

Thanks,

Rebecca Lyons, MPH
Director of Public Health Emergency Preparedness
[redacted]
Winnebago County Health Department
555 N. Court St., Rockford, IL 61103
Main Line: (815) 720-4000
Website: www.publichealth.wincoil.gov

Winnebago County Health Department
A Nationally Accredited Health Department Since 2017

1

Figure E-2: Public Comment Social Media Post



Public comment social media post can be view on the R1's social media account on Linkedin.

Figure E-3: Public Comment Notes

Public Comment Notes

Need to add Pecatonica Fire to table on page iii and page 27

Public Comment to run through 11/20

Page 75 – misspelling of 'Natural'

Four Rivers, 11/13/24

- Page iv, Partner Organizations: Replace Rock River Water Reclamation District with Four Rivers Sanitation Authority.
- Page 18: Replace Rock River Water Reclamation District with Four Rivers Sanitation Authority. FRSA is a sanitary sewer utility provider only, not water.
- Page 27: Replace Rock River Water Reclamation District with Four Rivers Sanitation Authority.
- Page 60: Replace Rock River Water Reclamation District with Four Rivers Sanitation Authority.

Mitigation Strategy Worksheets to be added:

Blackhawk Fire

New Milford Fire

North Park Fire

Northwest Fire

Stillman Fire

WinBurSew Fire

Must add/confirm location in jurisdictional participation charts as well (as above, page iii and page 27)

Screenshot in folder to be added to Appendix E

This notes sheet to be added to Appendix E

Figure E-4: Suggestion for Hazard Mitigation Plan

From: [redacted]
To: Eric Tison
Cc: "Barbara Chidley"
Subject: Suggestion for Hazard Mitigation Plan 2024
Date: Friday, December 6, 2024 3:39:20 PM
Attachments: image003.png
image004.png
image005.png

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Eric,

Re Public comment on Winnebago County Hazard Mitigation Plant Update Risk Analysis – Winnebago County

Dear Eric,

Before Jack and I moved to Loves Park in 2022, I was for many years the neighborhood leader for Alpine Ridge Neighborhood Assn.

During that time, I worked with Daniel Nelson, [redacted]
(He is also the owner of Chocolat by Daniel, [redacted]

In 2020-2021 we talked about setting up a training for our neighborhood volunteers to link themselves via walky-talky type equipment
and short-wave radio to serve as communication volunteers during emergency situations in our neighborhood. Daniel is one of the area
ham operators, very knowledgeable, has taken emergency response training with a group up in S Beloit, if I remember correctly).
We believe that neighborhood volunteers could be prepared to serve responsibly during disasters.

For about 1 year we worked on setting up a relationship with the Fire Department to develop a link with RFD and our neighborhood Assn
(and possibly the Amateur shortwave radio group of people who operate in and around our area of the state). We approached the
Fire Department leadership (before the reign of the current female Chief.)
Got limited positive response. They were "busy—in the middle of the COVID epidemic – We don't have time now, but soon...")
"Soon" never happened. I wanted to push it more, but Daniel was afraid to antagonize them. So, I eventually dropped. It.
Then I moved out of the neighborhood. Daniel may have reconnected with the Fire Department – I don't know.

But...
After reviewing your summary report online, I am motivated to ask you to explore with the planning

Figure E-4: Suggestion for Hazard Mitigation Plan Continued

committees how to build upon the
Citywide neighborhood associations, and strengthen volunteer groups (especially the ham operator group) throughout the City/County,
to serve as communicators during disaster situations. With a little planning, coordination and training they could become a valuable
resource for all of us in the aftermath of a disaster.

And my perception is that they will be helping anyway – that is what they do... Why not make them more effective throughout the area?

My contact with the City was Barb Chidley [redacted] -- a terrific advocate for stronger neighborhoods.
You can contact her to discuss to viability of such an endeavor, from her perspective.
Please contact Daniel. He does not know I am sending this request to you. But I do hope you will push this concept a bit with the planners.
He is VERY KNOWLEDGEABLE, MOTIVATED AND HAS THE SKILLS OF A GOOD DISASTER MITIGATOR in that particular neighborhood.

I would be glad to provide testimony with Daniel about this concept.

Thanks, Sandy Tower, [redacted]

P.S. I have copied this message to Barb Chidley



Sandra (Sandy) Tower, GRI | Realtor®
[redacted]
Dickerson & Nieman Realtors
Office: (815) 381-1195 | Fax: (815) 986-1928
6277 E. Riverside Blvd. | Rockford IL 61114
//www.dickersonnieman.com/sandratower
Illinois License: 475.103257

Appendix F: Existing Plans

Table F-1: List of Existing Plans

Year	Organization	Title	Description	Use
2019	Federal Emergency Management Agency	Flood Insurance Rate Maps (FIRM)	A compilation and presentation of flood risk data for specific watercourses, lakes, and flood hazard areas within Winnebago County. A review of the current Flood Insurance Rate Maps (FIRM) was completed.	The FIRMs were used in conjunction with national land cover dataset and facility data available at the RPC to determine the facilities located in current floodplains. In addition, the data was used to make a direct recommendations for the City of Rockford.
2023	Illinois Emergency Management Agency	Illinois Natural Hazard Mitigation Plan (NHMP)	The State of Illinois NHMP provides an overview of the process for identifying and mitigating natural hazards in Illinois as required by the Disaster Mitigation Act of 2000.	The State of Illinois NHMP was utilized to confirm hazard selection, process, and for historical context. It was also reviewed for consistency between the two plans.
2019	Winnebago County	Multi-Hazard Mitigation Plan (MHMP)	Multi-hazard, multi-jurisdictional plan for the communities within Winnebago County.	The 2019 Winnebago County MHMP was used as a baseline for the 2024 version of the MHMP. As noted throughout this document, portions of the 2014 version were carried over from the existing document. Data and maps were updated where appropriate.
2013	Swedish American Hospital System	Emergency Operations Plan (EOP)	The emergency operations plan provides an all hazards assessment developed with the input of the multi-disciplinary emergency management committee including senior leadership and physicians. As of 2019, this plan is being updated.	The Swedish American Hospital System EOP was reviewed to ensure consistency across plans and as regional context.
2018	Winnebago County	Emergency Operations Plan (EOP)	Emergency Response Plan that identifies facilities that use or store Hazardous Material and Extremely Hazardous Substances within Winnebago County. It also identifies routes that are likely to be used in the transport of EHS.	The Winnebago County EOP was reviewed to ensure consistency across plans and as regional context.
2030	Winnebago County	Land Resource Management Plan (LRMP)	A comprehensive land use plan that offers a vision of how the unincorporated areas of Winnebago County will grow and develop over the next 20 years.	The Winnebago County LRMP was reviewed to ensure that recommendations for development and growth aligned with the recommendations included in that plan.
2012	City of Rockford	Emergency Operations Plan (EOP)	The Rockford EOP assigns responsibility to organizations or individuals for carrying out specific actions during an emergency that exceeds the capability or routine responsibility of any one agency.	The City of Rockford EOP was reviewed to ensure consistency across plans and as regional context.

Table F-1: List of Existing Plan Continued

Year	Organization	Title	Description	Use
2024-2028	City of Rockford	City of Rockford Capital Improvement Plan (CIP)	City of Rockford four year Capital Improvement Plan that identified capital projects. The plan includes project descriptions, funding sources, and estimated total project budgets.	The City of Rockford CIP was reviewed to ensure consistency across plans and as regional context. The program includes hazard mitigation (flooding) efforts on Keith Creek.
2023	Winnebago County Health Department	Health Vulnerability Assessment (HVA)	The HVA weighs different types of hazards to Winnebago County by criteria including human impact, community preparedness, and risk level.	The Winnebago County Health Department HVA was reviewed to ensure consistency across plans and as regional context.
2015	City of Rockford	Stormwater Master Plan	The City of Rockford Stormwater Master Plan identifies actions to manage stormwater quality and quantity. The Plan is in the process of being updated and approved in 2024.	The City of Rockford Stormwater Master Plan was reviewed to ensure consistency across plans and as regional context.

Appendix G: Mitigation Strategies Matrix

Table G-1: Blackhawk Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: To update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Finding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreement	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table G-1: Blackhawk Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazards Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding: private lending; or grant funding				
Responsible: Chief/Administration				

Table G-2: Boone-Winnebago Regional School District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Emergency and Crisis Response Plan with Enhanced Security Measures	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	All Hazards	High	All school districts are required to meet with local first responders and their representative crisis teams annually, before October 1, to review all emergency plans. Minutes from these meetings are submitted to the Regional Office of Education each school year and are available at our office.	We are working to develop a regional safe school plan that all schools in the county will follow. Several planning meetings are scheduled and will take place throughout the year. One agenda item is to apply for a grant for an outside company to develop maps of the schools.
Timeline: Ongoing; by October 1					
Funding: Respective School districts general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Currently, school districts lack funding for items such as these; however, they may exist at certain schools' facilities. The Boone-Winnebago ROE is not familiar with to what extent these varying districts and schools may have these in place.	We are working to develop a regional safe school plan that all schools in the county will follow. Several planning meetings are scheduled and will take place throughout the year. One agenda item is to apply for a grant for an outside company to develop maps of the schools.
Timeline: 2- 4 year implementation when funding is identified (pending individual school board approval)					
Funding: Respective school districts general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Family Disaster Plans & IEMA Kits	Goal: Lessen the impacts of hazards to County residents. Objective: Strengthen communication between County residents and emergency services.	All Hazards	Medium	No Comment	As part of the 2 year grant we received we will work with the partnering districts to develop better internal and external communication plans and systems for crisis.
Timeline: Ongoing					
Funding: Respective school districts general funds					
Develop Emergency Management Team	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	All Hazards	High	Some school districts have a School Emergency Management Team and are integrated into the Unified Command Structure.	We are working to develop a regional safe school plan that all schools in the county will follow. Several planning meetings are scheduled and will take place throughout the year. Within the next two years we will have unified response plans for every participating district. Our goal is every district.
Timeline: Ongoing (EMT teams meet yearly with local officials and individual schools prior to October 1)					
Funding: None					
Responsible: Boone-Winnebago Regional Offices of Education administrative offices; respective school district offices of administration					

Table G-3: Burritt Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Developing Informational Only Website. Further Objective: Winnebago County website for easier constituent access.
Timeline: The Township will evaluates the website information annually				
Funding: Township general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Burritt Township lacks funding to purchase additional equipment for dealing with flooding, erosion and hazards i.e. Backhoe, skid loader, trailer, replace failing tandum, new mowing tractor and mower, and chipper.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Floodplain and Stormwater Management Ordinances	Goal: Develop long-term strategies to reduce/ eliminate flooding impact in Township.	All Hazards	High	Critical Flooding Failure areas in Township are Harrison Road, Cemetery Road, and Eddie Road. Funding needed.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Erosion Control	Goal: Develop long-term strategies to reduce/ eliminate erosion impact in Township.	All Hazards	High	Critical Erosion Failure along and near all drainage ways do due irresponsible farming practices through the entire Township. To resolve this issue would require farmers to not plant crops in drainage ways and plant grass ways in the drainage areas.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Burritt Township has a high elderly population including homebound. Critical as many lack computers or cell phones and transportation, and rely on landline and tv or radio. Except for family members of this population, use of website would be to no avail to them. Township lacks transport methods other than Fire Dept or police Emergency Services. Winnebago County is in discussions on transportation.
Timeline: Ongoing				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				

Table G-3: Burritt Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Provided and Publicize Location of Safe Rooms and / or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	Township has no storm shelters. Critical would be funding to extend Road District building to serve as a storm shelter for residents and Officers/employees.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Coordinate with County, Fire Department, County Police Department, and other public bodies.
Timeline: Ongoing				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Critical for to Infrastructure. Burritt Township does not have alternative power source and has non backup generators for either Township Hall or Road District building or equipment and funding is limited.
Timeline: 2 years once funding is available				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Winnebago County has Tornado Siren system with practice alert every Tuesday morning. Township seeking to add on to the system through communication, awareness through email, and text blasts.
Timeline: 2 years once funding is available				
Funding: Township general funds; Pre-Disaster Mitigation Funding; or grant funding				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with County to develop updated maps for Township.
Timeline: Ongoing				
Funding: Township general funds				
Bridges/Waterflow Structures	Goal: to update and repair to guard against damage by flooding, erosion and excessive ground water.	All Hazards	High	Critical Failure of at least one box culvert currently identified by IDOT/Winnebago County is Cemetery Road over Tunnison Creek in Burritt Township. Funding is extremely limited beyond any County assistance for bridge projects.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; Private lending; or grant funding				

Table G-3: Burritt Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	To implement an Ordinance adopting Winnebago County Burn Ordinance.
Timeline: Ongoing				
Funding: Township general funds				
Develop Alternate Traffic Routes	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and updated existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County for developing of alternative routes and awareness for flooding of roads and alternative routes for other road closure purposes, such as signage for detours, etc.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Critical in Township for safety and access to roadways. No funding for purchasing snow fence or natural snow fence barriers.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table G-4: Village of Cherry Valley (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Devote Section of Website to Hazard Mitigation Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Ongoing efforts to post to Village's website.	The Village has recently updated their website and will include a section to provide residents with information regarding any know hazards and their mitigation for those hazards.
Timeline: Reviewed annually					
Funding: Village general funds					
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Ongoing within Cherry Valley. The Village wishes to provide additional training and education for Management team, as well as Public Works Crews through NIMS training.	Village Public Works staff routinely take classes to stay informed and up to date on several topics that cover first response assistance. Including but not limited to defibrillator, OHSA, traffic control, and flagging training.
Timeline: Within one year of funding being made available					
Funding: Pre-Disaster Mitigation funding, or grant funding					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Backup generator was added in 2018.	The Village has been proactive and has already provided backup generators for their Village Hall, public works facility, and all Well Houses in operation. The Village is considering providing generators for their water towers as well.
Timeline: Completed; under review					
Funding: Village general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	All Hazards	High	Cherry Valley has began removing EAB affected trees within the Village. We will continue to remove hazardous trees.	Trees identified to be a risk to public infrastructure are routinely added to Village projects to remove the trees. When possible, Public Works crews also take down trees that have or have a strong possibility of causing damage.
Timeline: Within Five years					
Funding: Village general funds					

Table G-4: Village of Cherry Valley (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of the emergency services.	All Hazards	Low	Still evaluating means of communication and transportation abilities of the emergency services.	The Village continues to identify and replace sections of sidewalk and crosswalks that are in need of replacing to adhere to the latest ADA and PROWAG standards.
Timeline: Within three years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Medium	Continued communication efforts by sending out Village newsletter quarterly, additionally a portable message board has been purchased to identify local and specific issues.	The Village has updated their website and provides many different notices and brochures to residents to make them aware of the latest Village ordinances and recommendations. They also publish a newsletter 3 times a year.
Timeline: Reviewed annually					
Funding: Village general funds					
Develop Safety Procedures for Earthquakes	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Earthquakes	High	Village to work with appropriate response agency to develop a plan.	The Public Works team is organizing a meeting between local police and fire departments to propose a response plan in the event of an earthquake.
Timeline: Within five years					
Funding: Village general funds					
Burn Ordinances	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat	High	Ordinance was passed allowing burning the last (2) weekends in October and first (2) weekends in November.	The Village continues to publish information regarding the burn ordinances in their fall newsletter for all residents, which can also be found online.
Timeline: Reviewed annually					
Funding: Village general funds					
Floodplain Ordinances	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	High	Cherry Valley will continue to improve the village's floodplain ordinances to restrict development with the floodplain.	The existing ordinance continues to be enforced during plan review for Village development. The Village works closely with the County to make sure Cherry Valley's ordinance complies with the County's.
Timeline: Reviewed every two years					
Funding: Village general funds					

Table G-4: Village of Cherry Valley (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Stormwater Management Ordinances	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	Medium	Cherry Valley wishes to plan for new flow and direct it to access of outflow.	The Village is pursuing a GIGO Grant for the restoration of Madigan Creek as the Creek has causing significant erosion to the local resident's yards and even threatens one of the homes near the outlet of the creek.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Cherry Valley plans to develop an emergency plan in the event of a HAZMAT release. The village has identified the importance of reinforced situational awareness, identification of potential hazards, and the need to communicate with other disciplines.	The Public Works team is organizing a meeting between local police and fire departments to proposed an emergency plan in the event of a HAZMAT release.
Timeline: Five years					
Funding: Village general funds					
HAZMAT Spill, Removal, and Disposal Procedure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Cherry Valley plans to work with local Fire and Police on this.	The Public Works team is organizing a meeting between local police and fire departments to proposed an emergency plan in the event of a HAZMAT spill. The Village has previously mapped the majority of storm drains and outfalls to easily identify locations where a contaminated spill could make its way to the local river and cut it off ahead of time.
Timeline: Five years					
Funding: Village general funds					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	Still in consideration.	In 2023 the Village coordinated with ComEd to bury the majority of power lines in a section of the downtown commercial district. The Village continues to seek funding to bury more power lines for the rest of the commercial district.
Timeline: Within ten years after funding is made available					
Funding: Pre-Disaster Mitigation Funding: private lending; or grant funding/donations					

Table G-4: Village of Cherry Valley (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Ordinance for Higher Construction Standards	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	Severe Storms/ Tornadoes	Medium	Cherry Valley will continue to improve the village's construction ordinances to develop construction standards specific to weather/climate stressors.	The Village has made amendments to ordinance section 82-10, which covers accessory buildings to strengthen the design standards required for non-residential buildings. The Village also continues to review their construction ordinances based on resident and developer feedback.
Timeline: Reviewed every two years					
Funding: Village general funds					
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No plans to install snow fencing for maintenance reasons. Not much drifting issues within the Village.	No plans to install snow fencing for maintenance reasons. The Village has not previously and continues to not have any issues with drifting snow. Public Works crews have snow removal plans and procedures to ensure roads are cleared in a timely manor for residents and emergency responders.
Timeline: Complete					
Funding: Village general funds					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	Looking at additional locations to utilize.	Village Hall has recently been identified as a Heating and Cooling Center as required and in close coordination with the County.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding: private lending; or grant funding/donations					
Responsible: Administrator, Village Board					

Table G-5: Cherry Valley Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Ongoing within the Cherry Valley Township.
Timeline: Ongoing				
Funding: Road and Bridge				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Cherry Township participates in the IPWMAN that would provide resources and assistance during events.
Timeline: Ongoing				
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guards against damage cause by secondary effects on hazards.	All Hazards	High	This mitigation item has been identified as a need, securing costs and budgeting future installation at the Township offices and maintenance building.
Timeline: 2 years once funding is available				
Funding: Grant Funding when available				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	This mitigation item is ongoing.
Timeline:Ongoing				
Funding: Road and Bridge				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	This item is ongoing and regular practice at the Cherry Valley Township.
Timeline: Ongoing				
Funding: Grant Funding; Road and Bridge; General Fund				
Responsible: Cherry Valley Township Highway				

Table G-6: Chicago-Rockford Airport (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	The Chicago-Rockford Airport would like to add a back up generator to the admin building (which servces as EOC and Family Assistance Center). Also a whole building UPS to bridge the gap between power failure and generator activation for the main terminal.
Timeline: 2 years once funding is available				
Funding: Grant Funding				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	Flooding	High	Pump House for Glycol Deicing Containment and Treatment pond pump house for working mechanisms is not on generator back up. Identified as need as result of July 2024 storms.
Timeline: 2 years once funding is available				
Funding: Grant Funding				
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding	High	The backup generator for operational approach runway lighting is currently located within the Floodplain.
Timeline: 2 years once funding is available				
Funding: Grant Funding				
Roadway Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding	High	Cessna Road is a main access road to major suppliers of goods and services, and the roadway is surrounding by floodplain on all sides. The could affect access to the south end of the Airport if inundated with water during a flood event.
Timeline: 2 years once funding is available				
Funding: Grant Funding				
Responsible: Emergency Manager				

Table G-7: Village of Durand (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of the emergency services.	All Hazards	High	Still need more sr. living and special needs help and contact information to help the village of Durand.	Still need more sr. living and special needs help and contact information to help the village of Durand.
Timeline: Ongoing					
Funding: Village general funds					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Okay.	Currently, the Durand Fire Department has mutual aid agreements with other local departments. Durand Police Department is also involved with mutual aid agreements.
Timeline: Ongoing					
Funding: Village general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Okay.	The Village currently has one large generator to assure their ability to operate pumps in the event of a prolonged power outage. The village also has several smaller portable generators to insure power for radio communication.
Timeline: 2 years once funding is available					
Funding: Village general; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Okay.	Durand wishes to improve first responder training in the city. This will be handled by the Durand Fire and EMS.
Timeline: Ongoing					
Funding: Village general funds					
Devote Section of Website to Hazard Mitigation Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Low	New website is online and still adding more information.	Website is online and still being regularly updated.
Timeline: Ongoing					
Funding: Village general funds					

Table G-7: Village of Durand (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Enhance/Create Alternate Emergency Operations Center	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve EOC emergency sheltering.	All Hazards	Medium	Okay.	Durand's primary EOC is the Durand Fire Department. The secondary EOC is the Village Hall and/or Durand School.
Timeline: Complete					
Funding: Village general funds					
Back-up Water Supply	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium/High	Done.	The Village's portable generator is capable of providing power to the well in order to keep the elevated water tower filled.
Timeline: Complete					
Funding: Village general funds					
Burn/Water Ban Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	Okay.	The Village currently has existing burning ordinances as well as a water ban ordinance that can be implemented when needed.
Timeline: Ongoing					
Funding: Village general funds					
Floodplain Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	High	Okay.	Durand will continue to maintain update floodplain ordinances.
Timeline: Ongoing					
Funding: Village general funds					
Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	Low	Still on list as money is short.	Done.
Timeline: Complete					
Funding: Village general funds					

Table G-7: Village of Durand (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Culvert Replacement	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/Dam and Levee Failure	Medium	Okay.	Durand currently monitors high flow areas. The Village will seek funding to replace culverts on an as needed basis.
Timeline: 2 years once funding is made available					
Funding: Village general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Okay.	Durand Fire Department will continue to work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: Ongoing					
Funding: Village general funds					
HAZMAT Spill, Removal, and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Okay.	Durand Fire Department will continue to work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: Ongoing					
Funding: Village general funds					
Anchoring of Manufactured Homes and Exterior Attachments	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Medium	Okay.	Current building codes address the issue including anchoring of utility sheds.
Timeline: Complete					
Funding: Village general funds					
Responsible: Village staff; Police Department; Public Works Department					

Table G-8: Durand Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	What we lack in personnel, training, or appropriate equipment to deal with a variety of emergencies can be addressed utilizing resources within our mutual aid area.	High	We have been a member of MABAS IL since its inception. We have Mutual/Auto Aid agreements with neighboring fire districts and EMS services. We are in the process of updating our MABAS cards.
Timeline: Ongoing				
Funding: District general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	Long periods of power disruptions could cause serious risks to our community, especially during times of extreme heat and/or cold. It is important to have a source of power for long-term outages to address the needs of public health and shelter.	High	We have a backup generator at our main fire station in Durand. Medina Nursing Home is an extended care facility in our community and they have a backup generator as well. Alternate/back-up power sources for a larger facility like the school should be looked at as a longer term location for sheltering a larger segment of our community.
Timeline: Ongoing				
Funding: District general funds				
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Within our community the water supply is probably the most vulnerable infrastructure. Communications is another area of concern. Our community relies strongly on telephone, cable, and cellular networks for a majority of day to day and emergency communications.	Medium	The water system falls under the jurisdiction of the Village, so this would be an issue better addressed by them. Our fire district has the ability to pump and haul large amounts of water if needed from many other locations. Backups to the 911 System and Public Safety Communications are in place so emergency calls can be answered locally. Redundant communications links with our dispatch center are in place to handle a failure within the primary system.
Timeline: Ongoing				
Funding: District general funds				
Responsible: Chief/Administration				

Table G-9: Durand Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Our township should collaborate with other municipalities to provide education to the residents on hazards that affect our community. This would be better administered at the County level with input and involvement from the municipalities who could address the hazards specific to their jurisdictions.
Timeline: The Township will evaluate this information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	We do not have formal mutual aid agreements in place, however, we do assist other jurisdictions as needed with informal requests. Establishing a formal mutual aid system like exists within the fire service through MABAS within the various township, county, and state highway departments would be a good way to share resources (equipment and personnel) during an emergency.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	The Durand Fire Department has a backup generator at the main fire station in Durand. Medina Nursing Home is an extended care facility in our community and they have a backup generator as well. Alternate/back-up power sources for a larger facility like the school should be looked at as a longer term location for sheltering a larger segment of our community.
Timeline: Ongoing				
Funding: Township general funds				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	We do not have formal alternate traffic routes but in times of emergency traffic can be re-routed. Alternate traffic routes would be a higher priority for State and County roads that see higher traffic than our township roads.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Snow fencing can be effective during winter storms. We have a grader and snow blower to help clear snow when a winter storm causes major drifting. Locations that are prone to significant drifting could be targeted for snow fencing.
Timeline: Within 3 years funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table G-10: Four Rivers Sanitation Authority (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	Medium	Formalized one Mutual Aid Agreement. 2024 correction: FRSA does not have record of a current Mutual Aid Agreement.	FRSA is open to negotiating/ implementing Mutual Aid Agreements if approached by other entities.
Timeline: Ongoing; as appropriate					
Funding: District general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	All critical lift stations and WWTPs have back-up generators.	FRSA continues to maintain and replace back-up generators as required.
Timeline: Completed					
Funding: None					
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	2024 clarification: Excess Flow Basin Project has been completed ensuring quality wastewater treatment can continue in high-flow rain events.	FRSA continues to harden infrastructure throughout the treatment plant and collection system facilities. Example projects include sanitary sewer stream crossing encasements, stream bank stabilization, generator replacement, replacement of failing pipes, and inflow/infiltration mitigation.
Timeline: Completed					
Funding: None					
Responsible: Executive Director, Chief Engineer					

Table G-11: German Valley Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/ maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Consistently looking at ways to better our response and reviewing box cards.
Timeline: Ongoing				
Funding: District general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	Both fire stations have standby generators installed.
Timeline: Completed				
Funding: District general funds				
Responsible: Chief/Administration				

Table G-12: Harlem Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Keeping out Township website up to date with information.
Timeline: The Township will evaluate this information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	No formal aid agreements but we keep good relations with other local government.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Our department does have a back-up generator on site.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with our County Emergency Services providers and cities to develop plans for alternate road closures.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Our roads are mostly residential snow fence works on rural roads not residential.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table G-13: Harlem Roscoe Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/ maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Harlem-Roscoe continues to work with the Fire Departments in the county to have a specified plan for assistance when needed.
Timeline: Ongoing				
Funding: District general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Harlem-Roscoe has equipped all our Fire Stations with a back up generators in case of power failure.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table G-14: Harrison Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Harrison Township is unincorporated and passes information made available from Winnebago County.
Timeline: Ongoing				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Harrison Township is unincorporated and any emergency services are provided through Winnebago County.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Harrison Township is unincorporated and existing infrastructure consists of small town hall.
Timeline: With 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Harrison Township is unincorporated and its thoroughfares are county maintained.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No Comment
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table G-15: Laona Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Our township should collaborate with other municipalities to provide education to the residents on hazards that affect our community. This would be better administered at the County level with input and involvement from the municipalities who could address the hazards specific to their jurisdictions.
Timeline: The Township will evaluate this information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	We do not have formal mutual aid agreements in place, however, we do assist other jurisdictions as needed with informal requests. Establishing a formal mutual aid system like exists within the fire service through MABAS within the various township, county, and state highway departments would be a good way to share resources (equipment and personnel) during an emergency.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	The Durand Fire Department has a backup generator at the main fire station in Durand. Medina Nursing Home is an extended care facility in our community and they have a backup generator as well. Alternate/ back-up power sources for a larger facility like the school should be looked at as a longer term location for sheltering a larger segment of our community.
Timeline: Ongoing				
Funding: Township general funds				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	We do not have formal alternate traffic routes but in times of emergency traffic can be re-routed. Alternate traffic routes would be a higher priority for State and County roads that see higher traffic than our township roads.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Snow fencing can be effective during winter storms. We have a grader and snow blower to help clear snow when a winter storm causes major drifting. Locations that are prone to significant drifting could be targeted for snow fencing.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table G-16: City of Loves Park (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Ongoing/ High	Loves Park will continue to work with Winnebago County to improve Public Education and Awareness.	Fire Department Inspection Beaureu is actively involved with pre-plans, inspections, and Public Safety Awareness Programs, activities, etc.
TImeline: Ongoing					
Funding: City of Loves Park general funds					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Continue these efforts with the Winnebago County Local Emergency Planning Committee (LEPC?).	Loves Park Fire has updated the M.A.B.A.S. Box Alarm Cards which were approved by the committee and implemented, along with updated Auto-Aid Agreements in place.
Timeline: Ongoing					
Funding: City of Loves Park general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Continue to seek funding for back-up generators for critical facilities within the City.	Loves Park Fire is currently working with Helm on projected on-site generator quotes for the two staffed Stations and Headquarters.
Timeline: 1 to 3 years as funds are available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Loves Park wishes to improve first responder training in the City and will work with Winnebago County on this mitigation item.	The City has hired a Marketing and Communications Specialists who submits monthly correspondence safety tips on varying media outlets. Fire Department personnel have increased annual training.
Timeline: Ongoing; annually					
Funding: City of Loves Park general funds					
Develop Safety Procedures for Earthquakes	Goal: Improve emergency sheltering and procedures in the event of an earthquake. Objective: Review and update existing, or create new community earthquake plans.	Earthquakes	Low	The City of Loves Park will work with Winnebago County will work to develop mutual aid agreements in event of an earthquake.	The City of Loves Park will work with Winnebago County if there is a need for mutual aid in the event of an earthquake.
TImeline: 7 to 10 years					
Funding: City of Loves Park general funds					

Table G-16: City of Loves Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Low	Continue enforcing burn ordinance and maintain updates.	Continue enforcing burn ordinance and maintain updates.
Timeline: Completed, ongoing enforcement and updates					
Funding: None					
Develop educational materials, both web-based and in paper form, on the benefits of the NFIP	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of flooding and flood insurance.	Flooding/ Dam and Levee Failure	High	Continue efforts educating residents on the benefits of the NFIP.	No Comment
Timeline: Ongoing					
Funding: City of Loves Park general funds					
Culvert Replacement	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	Loves Park wishes to seek funding to replace culverts in the city.	Loves Park will continue to maintain or replace bad culverts as needed within the City.
Timeline: 1 to 3 years as funds are available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or gran funding/donations					
Install Sump Pumps	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize potential damage to foundations and household/critical facility utilities.	Flooding/ Dam and Levee Failure	High	This mitigation item is ongoing.	We currently only utilize one sump pump that we monitor and maintain as needed.
Timeline: Ongoing; 5-7 years; completed as necessary					
Funding: City of Loves Park general funds					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: 1- 3 years					
Funding: City of Loves Park general funds					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: 1- 3 years					
Funding: City of Loves Park general Funds					

Table G-16: City of Loves Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	The City of Loves Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: 4- 6 years					
Ongoing: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	The City will continue these efforts. However, the cost of burying existing power lines makes this a very difficult reality.	The City would encourage the Power company to bury existing power lines. The cost to the City if we decide is very substantial and can greatly affect the overall cost of a project.
Timeline: 4- 6 years once funding is available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Medium	The City of Loves Park wishes to seek funding to harden existing infrastructure in the event of severe storms and tornadoes.	The City of Loves Park wishes to seek funding to harden existing infrastructure in the event of severe storms and tornadoes.
Timeline: 4-6 years once funding is available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	Medium	This mitigation item is ongoing in the County the Highway Department. The City of Loves Park will work with the County to improve this mitigation item.	The City of Loves Park does not use snow fence. We have made improvements to our equipment and deicing chemicals to help limit the impacts of drifting.
Timeline: 4- 6 years once funding is available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	The City of Loves Park wishes to seek funding to increase the number of heating and cooling shelters for its residents.	The City of Loves Park will continue to work within Winnebago County to provide Heating and Cooling Shelters.
Timeline: 4- 6 years once funding is available					
Funding: City of Loves Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Responsible: Village staff, Fire Chief, Public Works, Community Development					

Table G-17: Village of Machesney Park (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Machesney Park plans to work with Winnebago County to distribute materials to residents at strategic times to raise awareness of potential hazard.	The Village has adopted a local incident response plan which accounts for public outreach during weather-related incidents.
Timeline: Quarterly and annual updates to the villages through newsletters and mailings (Ongoing; as needed)					
Funding: Village of Machesney Park general funds					
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	Machesney Park will work with the Winnebago County Local Emergency Planning Committee (LEPC) and other Agencies in the County to develop and improve mutual aid agreements within the county.	Machesney Park will work with the County and other Agencies in the County to develop and improve mutual aid agreements within the county.
Timeline: 5- 10 years; pending Winnebago County Sheriff's Department approval					
Funding: Village of Machesney Park general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Machesney Park wishes to seek funding to obtain back-up generators for critical facilities.	Machesney Park wishes to seek funding to obtain back-up generators for critical facilities.
Timeline: 2 years after funding identified					
Funding: Village of Machesney Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Machesney park will continue to assist WinGIS in maintaining its list of critical and essential facilities in the county.	Machesney park will continue to assist WinGIS in maintaining its list of critical and essential facilities in the county.
Timeline: Ongoing; annually (reviewed every 1- year)					
Funding: Village of Machesney Park general funds					
Establish Local Emergency Planning Committee	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to residents.	All Hazards	Low	Machesney Park will work with the Winnebago County Local Emergency Planning Committee (LEPC).	Machesney Park will work with the Winnebago County Local Emergency Planning Committee (LEPC).
Timeline: 5 years					
Funding: Village of Machesney Park general funds					

Table G-17: Village of Machesney Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Family Disaster Plans and Kits	Goal: Lessen the impacts of hazards to residents. Objective: Strengthen communication between residents and emergency services.	All Hazards	Medium	Machesney Park will work with Winnebago County to distribute Family Disaster Plans and Kits to residents.	Machesney Park will work with Winnebago County and State of Illinois to distribute Family Disaster Plans and Kits to residents.
Timeline: As needed; trigged when disaster occurs					
Funding: Village of Machesney Park general funds					
Special Needs population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Medium	Machesney Park will work to develop and maintain a special needs population list to strengthen the emergency services.	Machesney Park will coordinate and research a special needs population list to strengthen the emergency services with other governmental agencies.
Timeline: 5- 10 years					
Funding: Village of Machesney Park general funds					
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	Medium	Machesney Park will work to develop, maintain, and distribute a list of the safe rooms and shelters to its residents.	Machesney Park will work to develop, maintain, and distribute a list of the safe rooms and shelters to its residents.
Timeline: 5 years					
Funding: Village of Machesney Park general funds					
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	Machesney Park plans to improve the emergency communication system currently in place.	Machesney Park has and plans to improve the emergency communication system currently in place.
Timeline: 5- 10 years					
Funding: Village of Machesney Park general funds					
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Medium	Machesney Park will continue to maintain updated burn ordinances.	Machesney Park will continue to maintain update burn ordinances.
Timeline: 5- year review schedule					
Funding: Village of Machesney Park general funds					

Table G-17: Village of Machesney Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Participate in the Community Rating System	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Machesney Park will investigate the feasibility of joining the CRS.	Machesney Park will work with Winnebago County will investigate the feasibility of joining the CRS.
Timeline: 1- 2 years					
Funding: Village of Machesney Park general funds					
Participate in the NFIP	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Machesney Park participates in the NFIP and will continue to maintain compliance with the NFIP by evaluating and improving existing ordinances.	Machesney Park participates in the NFIP and will continue to maintain compliance with the NFIP by evaluating and improving existing ordinances.
Develop educational materials, both web-based and in paper form, on the benefits of the NFIP	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of flooding and flood insurance.	Flooding/ Dam and Levee Failure	High	Machesney Park participates in the NFIP and will continue to educate its residents on the benefits of the NFIP.	Machesney Park participates in the NFIP and will continue to education its residents on the benefits of the NFIP.
Timeline: 2 years					
Funding: Village of Machesney Park general funds					
Property Acquisition (Buyouts) & Property Relocation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	Machesney Park currently works and will continue to identify areas where buyouts and property relocations make the most sense. Several projects have already been completed with Federal assistance. Machesney Park will continue to seek federal funding for future property acquisitions.	Machesney Park currently works and will continue to identify areas where buyouts and property relocations make the most sense. Several projects have already been completed with Federal assistance. Machesney Park will continue to seek federal funding for future property acquisitions.
Timeline: 1 year and immediately following funding identification and award					
Funding: Village of Machesney Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Floodplain and Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	Machesney Park has building code restrictions and flood protection requirements in place. The Village will continue to maintain and update these ordinances.	Machesney Park has building code restrictions and flood protection requirements in place. The village will continue to maintain and update these ordinances.
Timeline: 2 year review					
Funding: Village of Machesney Park general funds					
Open Space Preservation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Keep the floodplain and other hazardous areas open and free from development.	Flooding/ Dam and Levee Failure	High	Machesney Park wishes to seek funding to improve open space preservation and decrease the amount of infrastructure exposed to flooding.	Machesney Park wishes to seek funding to improve open space preservation and decrease the amount of infrastructure exposed to flooding.
Timeline: 2 year review after funding identified and awarded					
Funding: Village of Machesney Park general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					

Table G-17: Village of Machesney Park (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Dam Failure Emergency Response Plan	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	Low	Machesney Park will work with Winnebago County Emergency Services to participate in response planning for such events.	Machesney Park will work with Winnebago County Emergency Services to participate in response planning for such events.
Emergency Plan / Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Machesney Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	Machesney Park will consider working with the Winnebago County LEPC to improve the County's HAZMAT response plans upon request.
Timeline: 5- 10 years					
Funding: Village of Machesney Park general funds					
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Machesney Park will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	Machesney Park will consider working with the Winnebago County LEPC to improve the County's HAZMAT response plans upon request.
Timeline: 5- 10 years					
Funding: Village of Machesney Park general funds					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms / Tornadoes	Medium	Machesney Park wishes to seek funding to convert existing power lines. This will minimize loss of energy at critical times of need.	Machesney Park wishes to seek funding to convert existing power lines. This will minimize loss of energy at critical times of need.
Timeline: 10 years after funding identified and received					
Funding: Village of Machesney Park general funds; Pre-Disater Mitigation Funding; private lending; or grant funding					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	Machesney Park wishes to seek funding to increase the number of heating and cooling shelters for its residents. The Village Hall is designated as a cooling center.	Machesney Park shares the locations of area heating and cooling shelters with its residents via social media. Village Hall is no longer a designated heating or cooling shelter location.
Responsible: Village staff, Administration, Public Works, Community Development					

Table G-18: Village of New Milford (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Websites updates ongoing. Village looking into text notification of residents for emergencies.	The Village of New Milford has started a new website, a Facebook page, and has implemented a new notice board by Village Hall that will be used to notify residents about Emergency Procedures or updates as the Village becomes aware of them. Information provided by these sources is updated biweekly.
Timeline: Reviewed annually					
Funding: Village general funds					
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	Ongoing. Village evaluating and pursuing grant options to provide shelter since New Milford School Structure has been demolished.	Ongoing. Village is still evaluating and continues to pursue grant opportunities to provide shelter since New Milford School Structure has been demolished.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Ongoing. Village evaluating funding sources available.	Ongoing; Generator to be purchased and installed within five years once funding is awarded to the Village.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Floodplain and Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/Dam and Levee Failure	Medium	Ongoing. Village continuing to review and update applicable ordinances.	New Milford has ordinances and procedures in place and continues to consult with the County to remain in line with Winnebago County's ordinances. The village will continue to maintain and update these ordinances.
Timeline: Reviewed annually					
Funding: Village general funds					

Table G-18: Village of New Milford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Ongoing. Village is continuing to collaborate with the appropriate agencies and departments at the County.	New Milford continues to consult with the local Fire Department and Police Department regarding the latest information and recommendations for Emergency plans and HAZMAT response plans.
Timeline: Ongoing					
Funding:Village general funds					
Install Tornado Safe Room	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Severe Storms/ Tornadoes	High	Ongoing. Village evaluating and pursuing grant options to provide shelter since New Milford School Structure has been demolished.	The Village continues to monitor for grant opportunities to assist with the construction of tornado safe rooms. Shelter to be constructed within five years once funding is awarded to the Village.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Anchoring of Manufactured Homes and Exterior Attachments	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Medium	Village has updated applicable ordinances and is working with homeowners to comply.	In 2024 New Milford has reviewed and amended their mobile home ordinance to comply with the latest standards for home installation and anchoring in coordination with the Department of Housing and Urban Development (HUD).
Timeline: Ongoing					
Funding: Village general funds					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	Winter Storms/ Drought and Extreme Heat	High	Ongoing. Village evaluating funding sources available.	The Village would like to use the Village Hall as a heating/ cooling shelter, but the required backup generator would need to be funded by a grant or similar funding source. The Village continues to monitor for opportunities for funding this purchase.
Timeline: Within five years after funding is made available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Responsible: Village Staff, Village Board					

Table G-19: New Milford Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Finding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table G-19: New Milford Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table G-20: North Park Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Finding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table G-20: North Park Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table G-21: North Park Water District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Medium	Implemented robo-calls, which allows us to target susceptible customers for advanced notification. Increased social media awareness as an additional communication method.	Continued to implement robo-calls, which allows us to target susceptible customers for advanced notification. Increased social media awareness as an additional communication method.
Timeline: Completed					
Funding: None					
Family Disaster Plans & Kits	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	Medium	NPPWD would like obtain funding for family disaster plans & kits to stress the importance of safe drinking water.	Implemented social media as it relates to source water protection, disaster preparedness ("Know Where Your Master Valve is")
Timeline: Within 2 years after the funding is awarded					
Funding: North Park Water District general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Generators at critical sites are included in the 5 year capital plan.	Back-up generators have been installed at Pump Station 7, Well 4 and the Administration Office. These generators provide firm resilience during power interruptions.
Timeline: Within 3 years after the funding is awarded					
Funding: North Park Water District general funds					
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	Low	Susceptible facilities have been raised above flood plain.	Susceptible facilities have been raised above flood plain.
Timeline: Completed					
Funding: None					
Install Sump Pumps	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize potential damage to foundations and household/critical facility utilities.	Flooding/ Dam and Levee Failure	Medium	Backflow devices are required in all commercial buildings and residential buildings with hazards as defined by IEPA.	Backflow devices are required in all commercial buildings and residential buildings with hazards as defined by IEPA. Device inspection and testing is also performed annually as required.
Timeline: Completed					
Funding: None					

Table G-21: North Park Water District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Medium	No Comment	Implemented Cybersecurity improvements (multi-factor authentication, education for employees, server monitoring by third-party agency).
Timeline: Within 5 years after the funding is awarded					
Funding: North Park Water District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	Low	Have begun converting critical sites to underground power.	Moved Well 4 and Tower 2 power services underground along with NPPWD Administration Building.
Timeline: Within 5 years after the funding is awarded					
Funding: North Park Water District general funds					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Groundwater protection setback zones have been established and communicated with local emergency response agencies.	Updated Source Water Protection Plan in 2023, shared with municipal partners and work to avoid potential hazardous developments in set-back zones.
Timeline: Completed					
Funding: None					
Heating and Colling Shelter	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	Will continue to cooperate with local municipalities in all aspects of severe weather emergencies.	Will continue to cooperate with local municipalities in all aspects of severe weather emergencies.
Timeline:Annually (1 year)					
Funding: North Park Water district general funds					
Develop Safety Procedures for Earthquakes	Goal: Improve emergency sheltering and procedures in the event of an earthquake. Objective: Review and update existing, or create new community earthquake plans.	Earthquakes	Low	Will continue to cooperate with local municipalities in all aspects of emergencies.	Will continue to cooperate with local municipalities in all aspects of emergencies.
Timeline: Annually (1 year)					
Funding: North Park Water District general funds					
Responsible: Director of Government Affairs					

Table G-22: Northwest Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and /or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table G-22: Northwest Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table G-23: Village of Pecatonica (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	This will continue to be overseen by the Village Board in addition to press releases,website we are now able to contact every household with our callout system.	This will continue to be overseen by the Village Employees, we will continue to use our website, newsletter and call out system to inform the public.
Timeline: Ongoing					
Funding: Village general funds					
Develop a Disaster Plan	Goal: Develop Disaster plan. Objective: To inform Citizens of who to call and where to go in case of a disaster.	All Hazards	High	This plan will be developed by the Village Board with input from Police and Fire Departments and Social Service agencies.	Plan will be developed between the Police Department, Fire Department as well as Winnebago County Emergency management.
Timeline: 5 years					
Funding: Village general funds					
Emergency Planning Committee	Goal: Develop an Emergency Planning Committee. Objective: To review and update existing, or create new community plans.	All Hazards	High	This still needs to be setup. In 2014 there was a different Administration in place.	Members of the Police Department will work with the Fire department to create a committee.
Timeline: 5 years					
Funding: Village general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	The Village currently has one and options are being reviewed to increase.	Both water and sewer facilities are covered by back up generators owned by the village.
Timeline: 2 years once funding is available					
Funding: Village general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Develop Procedures Specific to Earthquakes and Educate Public	Goal: Develop Procedures specific to Earthquakes. Objective: Establish guidelines and procedures in case of an earthquake.	Earthquakes	Low/ Medium	This will be assigned to the emergency committee once established.	We will rely on the Winnebago county emergency disaster plans.
Timeline: 5 years					
Funding: Village general funds					

Table G-23: Village of Pecatonica (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Burn/Water Ban Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat / Drought	Medium	Currently the Village does not allow burning. A water ban ordinance can be implemented if needed.	Currently the Village does not allow burning. A water ban ordinance can be implemented if needed.
Timeline: Ongoing					
Funding: Village general funds					
Culvert/Storm Drain Repair	Goal: Culvert/Storm drain Repair. Objective: Ensure all culverts and storm drains are working properly and evaluate if others are needed.	Flooding/ Dam and Levee Failure	Low	Public Works inspects these areas on a regular basis and if there are heavy rains a close eye is kept on these areas.	They are inspected and repaired as needed, by the Public Works Department.
Timeline: Ongoing					
Funding: Village general funds					
Floodplain Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	Medium	This still needs to be setup.	Flood plain will follow the EPA requirements.
Timeline: 2 years once funding is available					
Funding: Village general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Identification of Structures in Floodplains	Goal: Identification of Structures in floodplains. Objective: To create a list of all Structures located in Floodplains.	Flooding/ Dam and Levee Failure	Medium	We currently have a map that identifies the floodplain area however, it still needs more work done by the committee once established.	We currently have a map that identifies the floodplain area.
Timeline: Completed					
Funding: Village general funds					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	These plans are still in effect.	Plans are reviewed annually and are still in place.
Timeline: Ongoing					
Funding: Village general funds					
HAZMAT Spill, Removal, and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	This plan is still in place with the Public Works and Police Department.	This plan is review and updated when needed. The Police Department and Public Works department work together.
Timeline: Ongoing					
Funding: Village general funds					

Table G-23: Village of Pecatonica (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	Severe Storms/ Tornadoes	Low	This will continue to be handled by the Public Works Department.	The Public Works Department address Trees annually or as needed.
Timeline: Ongoing					
Funding: Village general funds					
Provide and Publicize Shelters/Safe Rooms	Goal: Provide and Publicize Shelters/Safe Rooms. Objective: To Inform the Public of where they can go in case of a severe storm.	Severe Storms/ Tornadoes	Medium	This will be assigned to the emergency committee once established.	The Village has identified and published the local shelter.
Timeline: Ongoing					
Funding: Village general funds					
Winter Storms- Dissemination of Information	Goal: Provide contacts for residents if snowed in. Objective: To inform Residents of whom to call if they are stranded at home or in town.	Winter Storms	High	This will be assigned to the emergency committee once established.	The Village has identified and published the local shelter.
Timeline: Ongoing					
Funding: Village general funds					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Low	The Village currently has one building assigned for this more work needs to be done to add other sites.	The Village has identified and published the local shelter.
Timeline: Ongoing					
Funding: Village general funds					
Responsible: Village Administration, Police, and Public Works staff, with cooperation by Fire District					

Table G-24: Pecatonica Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: To update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding: private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table G-24: Pecatonica Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regrading burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table G-25: Pecatonica Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Developing Informational Only Website to provide information. Further Objective: To link with Village of Pecatonica/ Westlake Village Assn websites and a link to Winnebago County website for easier constituent access.
Timeline: The Township will evaluates the website information annually				
Funding: Township general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Pecatonica Township lacks funding to purchase additional needed equipment for dealing with flooding, erosion and hazards i.e. Chipper needed, updated backhoe (curent one is from 1990;s), skid loader, trailer, secondary newer tandum. (funding used to purchase tandum (which we are still awaiting) replacing a 1988, but our secondary truck is a 1998). new mowing tractor and mower.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Floodplain and Stormwater Management Ordinances	Goal: Develop long-term strategies to reduce/eliminate flooding impact in Township.	All Hazards	High	Critical Flooding Failure areas in Township are Blair Road and Anderson Road. Funding needed.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Erosion Control	Goal: Develop long-term strategies to reduce/ eliminate erosion impact in Township.	All Hazards	High	Critical Erosion Failure Westlake Village's whole subdivision has critical issues with storm/sewer drains and sitting water in roadways due to elevation of homeowner's properties. To resolve this issue would to rework all storm drains and waterflow.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Pecatonica Township has a high elderly population including homebound. Critical as many lack computers or cell phones and transportation, and rely on landline and tv or radio. Except for family members of this population, use of website would be to no avail to them. Township lacks transport methods other than Fire Dept or police Emergency Services. Winnebago County is in discussions on transportation.
Timeline: Ongoing				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				

Table G-25: Pecatonica Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Provided and Publicize Location of Safe Rooms and / or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	Township has no storm shelters. Critical would be funding to extend Road District building to serve as a storm shelter for residents and Officers/employees.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Coordinate with County, Village, Westlake Assn, Fire Department, Village Police Department, and other public bodies.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	CRITICAL FOR TO INFRASTRUCTURE. Pecatonica Township does not have alternative power source and has no backup generators for either Township Admin bldg or Road District bldg or equipment and funding is limited.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Winnebago County has Tornado Siren system with practice alert every Tuesday morning. Township seeking to add on to the system through communication/awareness through email /text blasts.
Timeline: 2 years once funding is available				
Funding: Township general funds; Pre-Disaster Mitigation Funding; or grant funding				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with County to develop updated maps for Township including Village of Pecatonica and Westlake Village.
Timeline: Ongoing				
Funding: Township general funds				
Bridges/Waterflow Structures	Goal: to update and repair to guard against damage by flooding, erosion and excessive ground water.	All Hazards	High	CRITICAL FAILURE of at least one bridge currently identified by IDOT/Winnebago County is GOEKE bridge over PINK CREEK in Pecatonica Township. Also County identified a box culvert on BEST ROAD over PINK CREEK. Funding extremely limited beyond any County assistance for bridge projects.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				

Table G-25: Pecatonica Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Burn Ordinance	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	To implement an Ordinance adopting Winnebago County Burn Ordinance.
Timeline: Ongoing				
Funding: Township general funds				
Dam Failure Emergency Response Plan	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding / Dam and Levee Failure	High	Critical Failure if Dam/Levee breaks in Westlake Village. Work with County for disaster planning.
Timeline: Within 5 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County for developing of alternative routes and awareness for flooding of roads and alternative routes for other road closure purposes, such as signage for detours, etc.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Critical in Township for safety and access to roadways. No funding for purchasing snow fence or natural snow fence barriers.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table G-26: City of Rockford (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Create Evacuation Notification Strategies	Goal: Improve Emergency Response procedures. Objective: Create Evacuation Notification Strategies.	All Hazards	High	Completed in 2015 and updated in 2016 and 2018 by ESDA Coordinator.	Complete Emergency Operations Plan re-write due to IEMA 3/2025.
Timeline: Completed					
Funding: None					
Create a Public Works Recovery Plan	Goal: Improve Emergency Response procedures. Objective: Create a Public Works Recovery Plan.	All Hazards	High	Completed in 2015 updated in 2018 PW Emergency Manager oversee this mitigation item.	Update in process through APWA Accreditation process by PW Emergency manager.
Timeline: Completed					
Funding: None					
Create and Update Mutual Aid Agreements with Outside Agencies and Contractors	Goal: Improve Emergency Response procedures. Objective: Create and Update Mutual Aid Agreements with Outside Agencies and Contractors.	All Hazards	High	Completed in 2015 updated in 2018 for PW.	Updated in 2024 with PW Emergency Manager, ESDA Coordinator, and Police Dept.
Timeline: Completed					
Funding: None					
Follow In Place Plans/ Procedures/ Strategies for Hazard Situations	Goal: Improve Emergency Response procedures. Objective: Follow In Place Plans/Procedures/Strategies for Hazard Situations.	All Hazards	High	This mitigation item is ongoing. Funding source from City of Rockford general funds. All City of Rockford Departments oversee this mitigation item.	This mitigation item is ongoing. Funding source from City of Rockford general funds. All City of Rockford Departments oversee this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Run Public Service Announcements and Educational Material for Each Hazard	Goal: Improve safety for our citizens during disasters. Objective: Run Public Service Announcements and Educational Material for Each Hazard.	All Hazards	High	Ongoing mitigation item. Funding source from City of Rockford general funds. Strategic Communications Manager, PW Emergency Manager, ESDA Coordinator, Fire and Police Departments oversee this mitigation item.	Ongoing mitigation item. Funding source from City of Rockford general funds. Strategic Communications Manager, PW Emergency Manager, ESDA Coordinator, Fire and Police Departments oversee this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					

Table G-26: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Follow Load Restrictions on Building Design, Fire Suppression and Electrical/ Plumbing Requirements	Goal: Improve safety for our citizens during disasters. Objective: Follow Load Restrictions on Building Design, Fire Suppression and Electrical/Plumbing Requirements.	All Hazards	High	Ongoing mitigation item. Funding source from City of Rockford general funds. The Building Code Official oversees this mitigation item.	Ongoing mitigation item. Funding source from City of Rockford general funds. The Building Code Official oversees this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Train Additional Staff in Emergency Management	Goal: Improve Emergency Response procedures. Objective: Train Additional Staff in Emergency Management.	All Hazards	Medium	Ongoing mitigation item with funding source from City of Rockford general funds. PW Emergency Manager, ESDA Coordinator, Fire and Police Departments oversee this mitigation item.	Ongoing mitigation item with funding source from City of Rockford general funds. Numerous City Employees are Certified Illinois Professional Emergency Managers through IEMA.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Map City Wells and Cone of Influence	Goal: Monitor Water Supply. Objective: Map city wells and cone of influence.	Extreme Heat and Drought	High	Completed and updated as needed.	Completed and updated as needed.
Timeline: Completed					
Funding: None					
Map Groundwater Ordinances and Plume of Contamination	Goal: Monitor Water Supply. Objective: Map groundwater ordinances & plume of contamination.	Extreme Heat and Drought	High	No Change. Updated as needed will continue to research ordinances prior to 2006.	No Change. Updated as needed will continue to research ordinances prior to 2006.
Timeline: 2 years					
Funding: City of Rockford general funds					
Regularly Check for Leaks to Minimize Water Supply Losses	Goal: Monitor Water Supply. Objective: Regularly Check for Leaks to Minimize Water Supply Losses.	Extreme Heat and Drought	Low	This item is ongoing with no completion date; the City is divided into quadrants and an annual inspection is completed on one quandrant per year. Funding source from City of Rockford Water Funds. Water Superintendent oversees this mitigation Item.	This item is ongoing with no completion date; the City is divided into quadrants and an annual inspection is completed on one quandrant per year. Funding source from City of Rockford Water Funds. Water Superintendent oversees this mitigation Item.
Timeline: Ongoing					
Funding:City of Rockford general funds					
Begin Integrated Planning For Water Quality Improvements	Goal: Monitor Water Supply. Objective: Begin Integrated Planning For Water Quality Improvements.	Extreme Heat and Drought	Medium	The City withdrew from agreement and completed independently through Water Department.	The City of Rockford is a member of the Rock River Watershed Group through FRSA regarding water quality improvements.

Table G-26: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Install Rain Gauges Throughout City to Better Understand Rainfall Trends	Goal: Monitor Water Supply. Objective: Install rain gauges throughout city to better understand rainfall trends.	Extreme Heat and Drought	Medium	Weather Station was designed for a portion of the Alpine Dam Improvements ; Program will be re-evaluated for year 2020; Funding sources from the City of Rockford Water and CIP Funds.	Weather Station is installed at Alpine Dam and Page Park Dam; Program will be re-evaluated as needed; Funding sources from the City of Rockford CIP Funds.
Timeline: 1 to 5 years					
Funding: City of Rockford general funds					
Restrict Water Usage During Drought Events	Goal: Require water conservation during drought conditions. Objective: Restrict Water Usage During Drought Events.	Extreme Heat and Drought	Medium	This mitigation item is ongoing when required. SCADA system has been implemented and assists in this. Funding source from City of Rockford Water funds. The Water Superintendent oversees this mitigation item.	This mitigation item is ongoing when required. SCADA system has been implemented and assists in this. Funding source from City of Rockford Water funds. The Water Superintendent oversees this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Rewrite City's Stormwater Ordinance and Stormwater Technical Manual	Goal: Adopt and enforce building codes and development standards. Objective: Rewrite City's Stormwater Ordinance and Stormwater Technical Manual.	Flooding/ Dam and Levee Failure	High	Both items completed in 2015 with regular updates as needed. The Stormwater Manager oversees this mitigation item.	In process of updating the Stormwater Master Plan and Stormwater Ordinance. Completion scheduled for 2024.
Timeline: In process					
Enforce Flood Mitigation, Flood Control, Stormwater Management	Goal: Adopt and enforce building codes and development standards. Objective: Enforce Flood Mitigation, Flood Control, Stormwater Management.	Flooding/ Dam and Levee Failure	High	SOPs have been created providing guidance on inspection, maintenance and enforcement measures. Ordinance revisions are underway for enforcement and code hearing process for all ordinance violations. Funding source from City of Rockford general funds. The Stormwater Administrator oversees this mitigation item.	SOPs have been created providing guidance on inspection, maintenance and enforcement measures. Ordinance revisions are underway for enforcement and code hearing process for all ordinance violations. Funding source from City of Rockford general funds. The Stormwater Administrator oversees this mitigation item.
Timeline: Completed					
Funding: None					
Enforce Post Construction Management Requirements	Goal: Adopt and enforce building codes and development standards. Objective: Enforce Post Construction Management Requirements.	Flooding/ Dam and Levee Failure	High	This item was completed in 2015 with on-going inspections and updates as needed including code hearing processes. The Stormwater Manager oversees this mitigation item.	This item was completed in 2015 with on-going inspections and updates as needed including code hearing processes. The Stormwater Manager oversees this mitigation item.
Timeline: Completed					
Funding: None					

Table G-26: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Continue To Map Priority Acquisition And Unsuitable For Development Areas	Goal: Limit or restrict development in floodplain areas. Objective: Continue To Map Priority Acquisition And Unsuitable For Development Areas.	Flooding/ Dam and Levee Failure	High	This item is ongoing. The City follows Floodplain regulations The Stormwater Manager and GIS oversee this mitigation item.	This item is ongoing . The City follows Floodplain regulations and is a part of the Community Rating System, which provides flood insurance discounts to residents; On-going buy outs in Churchill Park with plans for future flood mitigation projects.
Timeline: 5 years					
Funding: City of Rockford general funds					
Enforce Landscaping And Buffer Requirements, Open Space Requirements, Impervious Ratio Requirements	Goal: Limit or restrict development in floodplain areas. Objective: Enforce landscaping and buffer requirements, open space requirements, impervious ratio requirements.	Flooding/ Dam and Levee Failure	High	CED	The City of Rockford is revising it's Stormwater Ordinance, which includes a more defined floodplain development requirements.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Map Structures Located Within Floodplains and Map Repetitive Loss and Substantially Damaged Properties	Goal: Improve Flood Risk Assessment. Objective: Map structures located within floodplains and map repetitive loss and substantially damaged properties.	Flooding/ Dam and Levee Failure	High	This item was completed in 2017. The Stormwater Manager oversees this mitigation item.	Updated as needed. The Stormwater Manager oversees this mitigation item.
Timeline: Completed					
Funding: None					
Develop Flood Risk Map Educational Materials for New FEMA Maps	Goal: Improve Flood Risk Assessment. Objective: Develop flood risk map educational materials for new FEMA Maps.	Flooding/ Dam and Levee Failure	High	This item was completed and went into effect in February 2016 with the issuance of new FEMA maps. The Stormwater Manager oversees this mitigation item.	The City of Rockford was approved for enrollment in the Community Rating System in 2022, which includes providing flooding education to residents.
Timeline: Completed					
Funding: None					
Replace Water Level Gauges at Page Park And Levings Lake Dam; Install Water Level Gauge at Alpine Dam	Goal: Improve Flood Risk Assessment. Objective: Replace water level gauges at Page Park and Levings Lake Dam; Install water level gauge at Alpine Dam.	Flooding/ Dam and Levee Failure	High	This mitigation item was completed in 2017 for Page Park and Levings Lake Dam; Alpine Dam Improvements to be completed in 2020 which will include this item. The funding source is CIP general funds. The Stormwater manager oversees this mitigation item.	This mitigation item was completed in 2023 for Alpine Dam and Page Park Dam.
Timeline: Completed					
Funding: City of Rockford general funds					

Table G-26: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Participate in the Community Rating System	Goal: Manage the floodplain beyond minimum requirements. Objective: Participate in the Community Rating System.	Flooding/ Dam and Levee Failure	High	This mitigation item is on-going; The City continues to participate in the Community Rating System. The Stormwater Manager oversees this mitigation item.	The City of Rockford was approved for enrollment in the Community Rating System in 2022, which includes providing flooding education to residents.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Improve Compliance with the NFIP	Goal: Manage the floodplain beyond minimum requirements. Objective: Improve compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	This item is on-going. The flood plain ordinance went into effect in 2015 and the City of Rockford standard is above minimum compliance standards with the NFIP. The Stormwater Manager oversees this item.	This item is on-going. The flood plain ordinance went into effect in 2015 and the City of Rockford standard is above minimum compliance standards with the NFIP. The Stormwater Manager oversees this item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Flood-Proof, Relocate, Elevate and Demolish At-Risk Properties	Goal: Manage the floodplain beyond minimum requirements. Objectives: Flood-proof, relocate, elevate and demolish at risk properties.	Flooding/ Dam and Levee Failure	High	This mitigation item is on-going. Due to limited funds, it is reviewed on a case by case basis and updated as needed. The Stormwater Manager oversees this item along with the Building Code Official.	This mitigation item is on-going. Due to limited funds, it is reviewed on a case by case basis and updated as needed. The Stormwater Manager oversees this item along with the Building Code Official.
Timeline: 3- 4 years					
Funding: City of Rockford general funds					
Complete Alpine Dam Rehabilitation	Goal: Conduct regular maintenance for drainage systems and flood control structures. Objectives: Complete Alpine Dam rehabilitation.	Flooding/ Dam and Levee Failure	High	Funding is now secure for this mitigation items. Design Phase is near completion with implementation set for 2020. The Stormwater Manager and City Engineer oversee this mitigation item.	This mitigation item was completed in 2024 for Alpine Dam.
Timeline: Completed					
Funding: City of Rockford general funds					
Continue Watershed Assessment and Planning	Goal: Form Partnerships to support floodplain management. Objective: Continue Watershed Assessment and Planning.	Flooding/ Dam and Levee Failure	Low	Several watersheds have been completed. Airport East watershed study is in currently in review; Funding is an issue for continued studies, current funding source is CIP. The Stormwater Manager oversees this mitigation item.	Several watersheds have been completed. Airport East watershed study is in currently in review; During revision of the Stormwater Master Plan, the consultant completed a City-wide flood risk analysis; Funding is an issue for continued studies, current funding source is CIP. The Stormwater Manager oversees this mitigation item.
Timeline: 5 years					
Funding: City of Rockford general funds					

Table G-26: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Review and Update Emergency Plan and Protocol for HAZMAT Releases	Goal: Review and update emergency procedures for hazard materials. Objective: Review and update emergency plan and protocol for HAZMAT releases.	HAZMAT	Medium	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Fire Department oversees this mitigation item.	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Fire Department oversees this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Review and Update HAZMAT Spill, Removal and Disposal Procedures	Goal: Review and update emergency procedures for hazard materials. Objective: Review and Update HAZMAT Spill, Removal and Disposal Procedures.	HAZMAT	Medium	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Fire Department oversees this mitigation item.	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Fire Department oversees this mitigation item
Timeline: Ongoing					
Funding: City of Rockford general funds					
Enforce Tree and Brush Trimming/ Pruning Requirements/ Planting and Removal Requirements	Goal: Reduce Impacts to Infrastructure. Objective: Enforce Tree and Brush Trimming/Pruning Requirements/Planting and Removal Requirements.	Severe Storms/ Tornadoes	High	This mitigation item is on-going. Ordinance revisions were complete in 2018 for enforcement and code hearing process for all ordinance violations. The Street Superintendent and Neighborhood Standards oversee this mitigation item.	The City is modifying our Forestry Ordinance and will implement the Urban Forestry Management Plan to address this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Provide and Publicize Heating and Cooling Shelters	Goal: Educate citizens and property owners on severe weather conditions. Objective: Provide and publicize heating and cooling shelters.	Severe Storms/ Tornadoes	Medium	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Strategic Communications Manager, ESDA Coordinator, and Health & Human Services Department oversee this mitigation item.	This mitigation item is ongoing. Funding source from the City of Rockford general funds. The Strategic Communications Manager, ESDA Coordinator, and Health & Human Services Department oversee this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Follow Parking Restrictions for Emergency Events, Follow Salting and Plowing Policies	Goal: Reduce Impacts to Roadways. Objective: Follow parking restrictions for emergency events, follow salting and plowing policies.	Severe Storms/ Winter Storms	Medium	This item is ongoing when required. Funding source from the City of Rockford parking and general funds. The Parking contractor, Street Superintendent, and police oversee this mitigation item.	This item is ongoing when required. Funding source from the City of Rockford parking and general funds. The Parking contractor, Street Superintendent, and police oversee this mitigation item.
Timeline: Ongoing					
Funding: City of Rockford general funds					

Table G-26: City of Rockford (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Educate Property Owners About Freezing Pipes	Goal: Educate citizens and property owners on severe weather conditions. Objective: Educate property owners about freezing pipes.	Winter Storms	Medium	This mitigation item is ongoing as weather relates. The funding source is City of Rockford Water Department. The Water Superintendent oversees this item.	This mitigation item is ongoing as weather relates. The City's PIO posts information as needed. The funding source is City of Rockford Water Department. The Water Superintendent oversees this item.
Timeline: Ongoing					
Funding: City of Rockford general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	This mitigation item is ongoing. Funding source from City General Fund. As critical buildings are updated, the need for a generator is evaluated. The Water Superintendent, Street Superintendent and City Engineer oversee this mitigation item.	This mitigation item is ongoing. Funding source from City General Fund. As critical buildings are updated, the need for a generator is evaluated. Several critical City owned sites have been updated with generator services, including 7 water well houses, 11 Fire Stations, 3 Police District Buildings and Public Works Administration Building. The Water Superintendent, Street Superintendent and City Engineer oversee this mitigation item.
Timeline: Ongoing					
Funding City of Rockford general funds					
Responsible: Noted, where appropriate in 2024 comments column					

Table G-27: Rock Valley College (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Roack Valley College has an All Hazards Plan in place. This is a living document and updated annually.
Timeline: Annual				
Funding: General Funds or Grant Funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Mutual air agreements are in place with other police departments, sheriff department and state agencies.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Rock Valley College has generators at the following buildings: JCSM, SSB, HSC and will have a generator at the new downtown facility when it opens. Other buildings on main campus will be powered by a CoGen.
Timeline: 2 years once funding becomes available				
Funding: General Funds or Grant Funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Currently reviewing plans to update south end of campus parking lots as well as ingress and egress with the City of Rockford.
Timeline: Within 5 years				
Funding: General Funds or Grant Funding				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Snow fences are put up in the winter months at Mulford and Rock Valley Circle to minimize hazards.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				

Table G-27: Rock Valley College (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Structure Elevation	Goal: Decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Rock Valley College has no history of flooding.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Storm drains	Goal: Decrease flooding. Objective: Minimize hazards to public and private infrastructure.	Flooding	High	Rebuilt several storm drain inlets on campus as well as removed sediment from Spring Creek.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Pretreatment of roads	Goal: Decrease the hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Weather	High	Each winter season RVC Facilities and Maintenance personnel preteat the roads to lessen the impact of hazards when needed.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Active Tree Management	Goal: Lesson the impact of hazards to new and existing infrastructure. Objective: Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing- continuous evaluation of any hazardous situations where trees can damage building, roadways or sidewalks.
Timeline: Ongoing				
Funding: General Funds or Grant Funding				
Responsible: Emergency Manager				

Table G-28: Rockford Park District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Create Evacuation Notification Strategies	Goal: Improve Emergency Response procedures. Objective: Create Evacuation Notification Strategies.	All Hazards	High	Ongoing efforts to evaluate methods on improving patron awareness and notification of severe weather. Severe weather policy was updated in 2024 to provide clearer guidance for District programs and facilities, however we will continue to explore infrastructure such as lightning detection systems to enhance awareness and response. This is for both indoor and outdoor facilities that could be impacted by severe weather, and /or sites that have large gathering space for events such as Sports Facilities, Concert Venues, and Golf Courses. Risk Management department oversees this initiative.
Timeline: Ongoing; within 2 years after funding is made available for the project				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations				
Train Additional Staff in Emergency Management	Goal: Improve Emergency Response procedures. Objective: Train Additional Staff in Emergency Management.	All Hazards	Medium	Ongoing mitigation item with funding source from Rockford Park District. Risk Management department oversees this mitigation item.
Timeline: Ongoing				
Funding: District general funds				
Bank stabilization and erosion control	Goal: Address areas impacted by erosion along waterways.	Flooding	Medium	Currently stabilizing portions of the bank along the Rock River within Sinnissippi Park and Shorewood Park as well as Alpine HIlls Adventure Park. Ongoing efforts to evaluate other areas impacted by flooding including Blackhawk Park, MercyHealth Sportscore 1, Martin Park, Rock River Recreation Path, Twin Sisters, Dahlquist Park and Atwood Park. The Capital Planning and Asset Management department oversees this mitigation item.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Flood-Proof, Relocate, Elevate and Demolish At-Risk Properties	Goal: Manage the floodplain beyond minimum requirements. Objectives: Flood-proof, relocate, elevate and demolish at risk properties.	Flooding/ Dam and Levee Failure	High	This mitigation item is on-going. Due to limited funds, it is reviewed on a case by case basis and updated as needed. The Capital Planning and Asset Management department oversees this item.
Timeline: Ongoing				
Funding: District general funds				

Table G-28: Rockford Park District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Review and Update Emergency Plan and Protocol for HAZMAT Releases	Goal: Review and update emergency procedures for hazard materials. Objective: Review and update emergency plan and protocol for HAZMAT releases.	HAZMAT	Medium	This mitigation item is ongoing. Funding source from the Rockford Park District general funds. The Risk Management department oversees this mitigation item.
Timeline: Ongoing				
Funding: District general funds				
Review and Update HAZMAT Spill, Removal and Disposal Procedures	Goal: Review and update emergency procedures for hazard materials. Objective: Review and Update HAZMAT Spill, Removal and Disposal Procedures.	HAZMAT	Medium	This mitigation item is ongoing. Funding source from the Rockford Park District general funds. The Risk Management department oversees this mitigation item.
Timeline: Ongoing				
Funding: District general funds				
Review and update infrastructure and technology for monitoring mechanical systems with Ammonia or Chlorine.	Goal: Update mechanical systems and technology to improve monitoring and oversight of mechanical systems connected to hazardous materials such as ammonia or chlorine.	HAZMAT	High	This mitigation item is on-going. Due to limited funds, it is reviewed on a case by case basis and updated as needed. The Capital Planning and Asset Management department oversees this item.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation funding, private lending; or grant funding				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	This mitigation item is ongoing. Funding source from Rockford Park District capital funding. As critical buildings are updated, the need for a generator is evaluated. The Capital Planning and Asset Management department oversees this mitigation item.
Responsible: Operations Director				

Table G-29: Rockford Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Continue putting information on Township website and providing availability for speaking to the public on all hazards.
Funding: Road and Bridge or Grant Funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Continue relationship with all local governmental bodies and IPMAN.
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	No current back-up generators for any of the township facilities.
Funding: Road and Bridge; Grant Funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County, Emergency Service Providers, and cities to develop plans for alternate routes for all road closure situations.
Funding: Road and Bridge				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No current snow fence installed by the Township. Beneficial in rural areas of the township.
Funding: Road and Bridge				
Structure Elevation	Goal: decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Specific section of Rote Road needs addressing. Grant funding need.
Funding: Grant Funding; Road and Bridge; General Fund				
Storm drains	Goal: Decrease flooding. Objective: Minimize hazards to public and private infrastructure.	Flooding	High	Carbaugh/Bond are areas of flooding that grant is currently being pursued.
Funding: Grant Funding; Road and Bridge; General Fund				
Phase I & Phase II Madigan Creek	Goal: Decrease the impact of hazards. Objective: Reduce or eliminate ditch erosion and runoff.	Severe Weather	High	In cooperation with Winnebago County and City of Rockford, grant funding is being applied for.
Funding: Grant Funding; Road and Bridge; General Fund				
Pretreatment of roads	Goal: decrease the hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Weather	High	Ongoing winter practice that Rockford Township Highway Department performs.
Funding: Road and Bridge				
Active Tree Management	Goal: Lesson the impact of hazards to new and existing infrastructure. Objective: Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing year round practice that Rockford Township Highway perform. Additional funding for equipment needed.
Funding: Road and Bridge				
Responsible: Township Highway, Township Supervisor				

Table G-30: Village of Rockton (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Rockton is periodically updating website and posting information on Facebook with emergency information.	Same comment as 2019.
Timeline: The Village evaluates the website information at least quarterly each year					
Funding: Village of Rockton general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Rockton continues to pursue additional funding for Generators.	Same comment as 2019. We are hoping to purchase within 12 months.
Timeline: Within 3 years after funding is made available for the project					
Funding: Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	Same	Rockton has replaced and improved some systems. Currently planning and strategizing remaining needs and implementation.
Timeline: Within 5 years upon receipt of funding for this project					
Funding: Village of Rockton general funds					
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	All Hazards	Medium	Rockton has developed a yearly tree trimming program and is working with Rock Energy to remove tree hazards by power lines.	Rockton has developed a yearly tree trimming program and is working with Rock Energy to remove tree hazards by power lines.
Timeline: Trees will be removed annually with available funds allocated for such work					
Funding: Village of Rockton general funds					
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Create new or revise existing plans/maps.	All Hazards	Medium/ High	Rockton continues to pursue and obtain Mutual Aid agreements with fellow communities.	Rockton continues to update Mutual Aid agreements as needed.
Timeline: Ongoing					
Funding: Village of Rockton general funds					
Establish Local Emergency Planning Committee	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	Medium/ High	The Village of Rockton in conjunction with the Fire District and the State Of Illinois has formed a committee.	The Village of Rockton in conjunction with the Fire District and the State Of Illinois has formed a committee.
Timeline: Completed					
Funding: None					

Table G-30: Village of Rockton (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Identification of Floodplain Structures	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Examine flood loss areas and generate a comprehensive list of structures located in floodplains.	Flooding/ Dam and Levee Failure	High	Rockton continues to work on and maintain a list of Structures.	Rockton continues to work on and maintain a list of Structures.
Timeline: Structures will be identified annually with available funds that are allocated for this project					
Funding: Village of Rockton general funds					
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	Rockton is working with the Winnebago County Building department to evaluate all structures.	Rockton has not permitted any structure construction in the floodplain since 2019 (nor has permission been sought by any property owner).
Timeline: Within 3 years after the Village is awarded funding					
Funding: Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Floodplain and Stormwater Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	Same	Rockton Village adopted a Floodplain Development Ordinance in 2016 and updates as necessary to comply with County and State requirements.
Timeline: Every 2 year					
Funding: Village of Rockton general funds					
Open Space Preservation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Keep the floodplain and other hazardous areas open and free from development.	Flooding/ Dam and Levee Failure	High	Same	The Village is proactive in its ordinances on open space maintenance polices to ensure land is used for this purpose throughout the village.
Timeline: Ongoing					
Funding: Village of Rockton general funds; as needed					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Same	Rockton will work with the Winnebago County LEPC to improve the County's HAZMAT response plans.
Timeline: Within 3 years after the Village is awarded funding					
Funding: Village of Rockton general funds					
Bury Power Lines	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	Severe Storms/ Tornadoes	High	Same	Rockton Village coordinates with Rock Energy to bury all new and relocated facilities as part of short- and long-term project planning.
Timeline: Within 10 years after the Village is awarded funding					
Funding: Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					

Table G-30: Village of Rockton (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	Low	Rockton Continues to work with the County and has purchased and installs snow fencing.	Rockton Village continues to coordinate with County to implement snow fencing as needed.
Timeline: Completed					
Funding: Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	Same	Rockton Village has identified need and need of funds to assess community need for heating and cooling shelters and implementation funds.
Timeline: Within 5 years after the Village is awarded funding					
Funding:Village of Rockton general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Responsible: Village Public Works Director and Village of Rockton					

Table G-31: Rockton Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazard Preparedness: Fire Suppression, Hazardous Materials, Technical Rescue, Dive & Water Rescue.	High	Rockton Fire is part of MABAS Division 8 and has mutual aid and auto aid agreements with fire districts in Winnebago, Rock, and Walworth Counties.
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazard Preparedness: Fire Suppression, Hazardous Materials, Technical Rescue, Dive & Water Rescue.	High	The Village of Rockton may look at avenues to seek back up generators for critical facilities.
Harden Infrastructure	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	A ll Hazard Preparedness: Fire Suppression, Hazardous Materials, Technical Rescue, Dive & Water Rescue.	High	The Village of Rockton may work with Winnebago County and assess current infrastructure reducing exposure to hazard.
Responsible: Chief/Administration				

Table G-32: Rockton Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	This mitigation is ongoing and we would follow and work with Winnebago County.
Timeline: The Township will evaluates the website information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	We would work with Rockton Fire Department along with the Rockton Village to assist anyway possible.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	This mitigation item is on going- we do not have a back up generator at this time and would be working with the Rockton Village.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	This mitigation item is ongoing and we would follow Winnebago County Health Department if needed.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	This mitigation item is ongoing and is regular practice of the Highway Department.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table G-33: Village of Roscoe (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	The Village has constructed a new Police Department building since 2014. The structure is 100% backed up by a generator, with UPS systems to ensure zero down time. Critical systems, including IT and access control in Village Hall are linked to the generator as well. Additionally, Com Ed has installed a 'Smart Grid' network throughout the Village that involves distribution automation to immediately re-route power to effected areas.	The Village has constructed a new Police Department building since 2014. The structure is 100% backed up by a generator, with UPS systems to ensure zero down time. Critical systems, including IT and access control in Village Hall are linked to the generator as well. Additionally, Com Ed has installed a 'Smart Grid' network throughout the Village that involves distribution automation to immediately re-route power to effected areas.
Timeline: Completed					
Funding: None					
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	Medium	The Village now communicates with multiple agencies utilizing the StarCom radio system.	The Village now communicates with multiple agencies utilizing the StarCom radio system.
Timeline: Completed					
Funding: None					
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	All Hazards	Medium	The Village now contracts with private tree trimming vendors on an annual basis to minimize risk to power lines and other infrastructure.	The Village now contracts with private tree trimming vendors on an annual basis to minimize risk to power lines and other infrastructure.
Timeline: Ongoing					
Funding: Village of Roscoe general funds					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	Medium/ High	The Village has increased communication and inter-governmental cooperation with surrounding communities, including in the areas of mutual aid.	The Village has increased communication and inter-governmental cooperation with surrounding communities, including in the areas of mutual aid.
Timeline: Ongoing					
Funding: Village of Roscoe general funds					

Table G-33: Village of Roscoe (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Establish Local Emergency Planning Committee	Goal: Create new or revise existing plans/maps. Objective: Improve emergency sheltering and procedures in the event of an earthquake.	All Hazards	Medium/ High	Roscoe will develop a Local Emergency Planning Committee with the Winnebago County Local Emergency Planning Committee.	No Update
Timeline: 2 years					
Funding: Village of Roscoe general funds					
Develop Safety Procedures for Earthquakes	Goal: Improve emergency sheltering and procedures in the event of an earthquake. Objective: Review and update existing, or create new community plans and ordinances.	Earthquake	Low	Roscoe will work to develop an earthquake safety procedure for the Village.	No Update
Timeline: 5 Years					
Funding: Village of Roscoe general funds					
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Low	Ordinance updated to require that all property owners maintain a physical presence at all recreational or yard waste fires until fully extinguished.	Ordinance updated to require that all property owners maintain a physical presence at all recreational or yard waste fires until fully extinguished. Fire Dept monitors conditions and issues advisories during exceptionally dry/windy conditions.
Timeline: Ongoing					
Funding: Village of Roscoe general funds					
Participate in the Community Rating System	Goal: Create new or revise existing plans/maps Objective: Support compliance with the NFIP.	Flooding/ Dam Levee Failure	Medium	No Update	No Update
Timeline: 5 years					
Funding: Village of Roscoe general funds					
Identification of Floodplain Structures	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Examine flood loss areas and generate a comprehensive list of structures located in floodplains.	Flooding/ Dam and Levee Failure	Medium	The Village has began the process of compiling a list of all structures existing in identified floodplains. Preliminary indications are that only 4 inhabitable structures exist within a floodplain.	The Village continues the process of compiling a list of all structures existing in identified floodplains. Preliminary indications are that only 4 inhabitable structures exist within a floodplain.
Timeline: 2 years					
Funding: Village of Roscoe general funds					
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps.	HAZMAT	Low	Alternate route mapping is completed.	Alternate route mapping is completed.
Timeline: Complete					
Funding: None					

Table G-33: Village of Roscoe (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
HAZMAT Spill, Removal, and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	Roscoe will continue to work with the Winnebago County LEPC to improve the County's HAZMAT response plans.	No Update
Timeline: 5 years					
Funding: Village of Roscoe general funds					
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	Medium	The Village continues to maintain our roadway network to the highest standard during winter storm events, ensuring that streets are free of ice and snow at all times. No additional measures have been implemented since 2014.	The Village continues to maintain our roadway network to the highest standard during winter storm events, ensuring that streets are free of ice and snow at all times. Roadways prone to snow drifting are maintained by Winnebago County Highway Dept and snow fencing is typically installed in high risk areas.
Timeline: 1- 2 years once funding is made available					
Funding: Village of Roscoe general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	The Village has been working with the Harlem-Roscoe Fire Protection District to inform residents of heating/cooling centers in times of extreme events. We have recently began to employ social media as a tool to communicate such information.	The Village has been working with the Harlem-Roscoe Fire Protection District to inform residents of heating/cooling centers in times of extreme events. We have recently began to employ social media as a tool to communicate such information.
Timeline: 1- 2 years once funding is made available					
Funding: Village of Roscoe general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Responsible: Village Administrator and Village of Roscoe					

Table G-34: Roscoe Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Roscoe Township is unincorporated and passes information made available from Winnebago County.
Timeline: The Township will evaluates the website information annually				
Funding: Township general funds				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Roscoe Township is unincorporated and any emergency services are provided through Winnebago County.
Timeline: Ongoing				
Funding: Township general funds				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Roscoe Township is unincorporated and existing infrastructure consists of small town hall.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Roscoe Township is unincorporated and its thoroughfares are county maintained.
Timeline: Ongoing				
Funding: Township general funds				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	Roscoe Township is unincorporated and 95% of its roads are residential.
Timeline: Within 3 years after funding is made available for the project				
Funding: Township general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Township Highway Department; Township Supervisor				

Table G-35: Seward Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Continue putting information on Township website and providing availability for speaking to the public on all hazards.
Timeline: Ongoing				
Funding: Road and Bridge or Grant Funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Continue relationship with all local governmental bodies and IPMAN.
Timeline: Ongoing				
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	No current back-up generators for any of the township facilities.
Timeline: 2 years once funding is made available				
Funding: Road and Bridge; Grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County, Emergency Service Providers, and adjoining townships to develop plans for alternate routes for all road closure situations.
Timeline: 5 years once funding is made available				
Funding: Road and Bridge				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No current snow fence installed by the Township. Beneficial in rural ares of the township.
Timeline: Ongoing				
Funding: Road and Bridge				
Structure Elevation	Goal: decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Numerous structures that need updating, grant funds needed.
Timeline: 5 years once funding is made available				
Funding: Grant Funding; Road and Bridge, General funds				
Active Tree Management	Goal: Lessen the impact of hazards to new and existing infrastructure Objective: Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing year round practice that Seward Township Highway perform. Additional funding for equipment needed.
Timeline: Ongoing				
Funding: Road and Bridge				
Responsible: Township Highway Department; Township Supervisor				

Table G-36: Shirland Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Continue putting information on Township website and providing availability for speaking to the public on all hazards.
Timeline: Ongoing				
Funding: Road and Bridge or Grant Funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Continue relationship with all local governmental bodies and IPMAN.
Timeline: Ongoing				
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	No current back-up generators for any of the township facilities.
Timeline: Within 3 years after funding is made available for the project				
Funding: Road and Bridge; Pre-Disaster Mitigation Funding; private lending; or Grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County Emergency Service Providers, and adjoining townships to develop plans for alternate routes for all road closure situations.
Timeline: Ongoing				
Funding: Road and Bridge				
Pecatonica River, Sugar River, Sugar Creek	Goal: Decrease the impact of hazards. Objective: Reduce or eliminate ditch erosion and runoff.	Severe Weather	High	In cooperation with Winnebago County, grant funding needed.
Timeline: Within 5 years after funding is made available for the project				
Funding: Grant funding; Road and Bridge; General funds				
Treatment of Roads	Goal: decrease the hazards to new and existing infrastructure. Objective: Maximize efficiency of infrastructure exposed to hazards.	Winter Weather	High	Winter salt storage needed.
Timeline: Within 5 year after funding is made available for the project				
Funding: Grant funding				

Table 8-36: Shirland Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Structure and Roadway Elevation	Goal: Decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Numerous structures and roadways need updating and elevating, grant funds needed.
Timeline: Within 5 years after funding is made available for the project				
Funding: Grant funding; Road and Bridge; General fund				
Active Tree Management	Goal: Lessen the impact of hazards to new and existing infrastructure. Objective:Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing year round practice that Seward Township Highway perform. Additional funding for equipment needed.
Timeline: Ongoing				
Funding: Road and Bridge				
Responsible: Township Highway Department; Township Supervisor				

Table G-37: City of South Beloit (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	South Beloit will increase its public education at the library, sewer billing and city websites. Press releases will also be distributed.	South Beloit will increase its public education at the library, sewer billing and city websites. Press releases will also be distributed.
Timeline: Ongoing					
Funding: City of South Beloit general funds					
Develop Education Materials on the benefits of the NFIP	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of flooding and flood insurance.	Flooding/ Dam and Levee Failure	High	Material will be available at the city hall.	Material will be available at the city hall.
Timeline: Completed					
Funding: None					
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazard	High	Nursing homes currently have mutual aid agreements in place. This agreement includes developing and maintaining a special needs population list for each nursing home.	Nursing homes currently have mutual aid agreements in place. This agreement includes developing and maintaining a special needs population list for each nursing home.
Timeline: Completed					
Funding: None					
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	Low	South Beloit currently has designated heating/cooling shelters and plans to distribute the locations of the shelters to residents in the county.	South Beloit currently has designated heating/cooling shelters and plans to distribute the locations of the shelters to residents in the county.
Timeline: Completed					
Funding: None					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	South Beloit currently has mutual aid agreements in place for the Fire Departments and Public Works.	South Beloit currently has mutual aid agreements in place for the Fire Departments and Public Works.
Timeline: Completed					
Funding: None					

Table G-37: City of South Beloit (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	City Hall, Police and Fire Department, and the Sewer Plant have portable generators.	City Hall, Police Department, and existing Sanitary Lift Station generators require upgrades. Sewer Department and Fire Department generators do not requirer upgrades.
Timeline: Within 3 years after funding is made available for the project					
Funding: City of South Beloit general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/maps. Objective: Review and update existing GIS datasets.	All Hazards	High	WinGIS maintains a list of critical and essential facilities in the county.	WinGIS maintains a list of critical and essential facilities in the county.
Timeline: Ongoing					
Funding: None					
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Ongoing with Fire and Police.	Ongoing with Fire and Police.
Timeline: Ongoing					
Funding: None					
Participate in the NFIP	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Ongoing. The South Beloit will contribute to map revisions.	Ongoing. The South Beloit will contribute to map revisions.
Timeline: Ongoing					
Funding: City of South Beloit general funds					
Property Acquisition (Buyouts)	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	Medium	South Beloit will continue to seek funding for future property acquisitions.	South Beloit will continue to seek funding for future property acquisitions.
Timeline: 2 years once funding is made available					
Funding: City of South Beloit general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding / Dam and Levee Failure	Medium	Ordinances in the village requires all new structures to be raised above the flood level.	Ordinances in the village requires all new structures to be raised above the flood level.
Timeline: Completed					
Funding: None					

Table G-37: City of South Beloit (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Floodplain and Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	South Beloit has building code restrictions and flood protection requirements in place. South Beloit will continue to maintain and update these ordinances.	South Beloit has building code restrictions and flood protection requirements in place. South Beloit will continue to maintain and update these ordinances.
Timeline: Ongoing					
Funding: None					
Open Space Preservation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Keep the floodplain and other hazardous areas open and free from development.	Flooding/ Dam and Levee Failure	Medium	South Beloit will continue working to preserve green space along Turtle Creek and Rock River.	South Beloit will continue working to preserve green space along Turtle Creek and Rock River.
Timeline: 5 year once funding is made available					
Funding: City of South Beloit general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Install Backflow Values and Sump Pumps	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize potential damage to foundations and household/critical facility utilities.	Flooding/ Dam and Levee Failure	High	This mitigation item is ongoing through city ordinances.	This mitigation item is ongoing through city ordinances.
Timeline: Ongoing					
Funding: City of South Beloit general funds					
Anchoring of Manufactured Homes and Exterior Attachments	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	Current building codes address this issue including anchoring.	Current building codes address this issue including anchoring.
Timeline: Ongoing					
Funding: None					
Ordinance for Higher Construction Standards / Techniques Regarding Severe Storms	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Severe Storms/ Tornadoes	High	South Beloit will continue to maintain and update this ordinance.	South Beloit will continue to maintain and update this ordinance.
Timeline: Ongoing					
Funding: City of South Beloit general funds					

Table G-37: City of South Beloit (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Active Tree Management	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Active tree management near critical facilities and essential facilities to minimize risk of damage.	All Hazards	Medium	South Beloit will be implementing additional action plans to minimize tree damage to power lines as well as other infrastructure.	South Beloit will be implementing additional action plans to minimize tree damage to power lines as well as other infrastructure.
Timeline: 10 years					
Funding: City of South Beloit general funds					
Emergency Plan / Protocol for HAZMAT Releases	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Low	South Beloit plans to develop an emergency plan in the event of a HAZMAT release and will work with the Winnebago County LEPC.	South Beloit plans to develop an emergency plan in the event of a HAZMAT release and will work with the Winnebago County LEPC.
Timeline: 5 years					
Funding: City of South Beloit general funds					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Low	South Beloit plans to develop an emergency plan in the event of a HAZMAT release and will work with the Winnebago County LEPC.	South Beloit plans to develop an emergency plan in the event of a HAZMAT release and will work with the Winnebago County LEPC.
Timeline: 5 years					
Funding: City of South Beloit general funds					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	South Beloit wishes to seek funding to increase the number of heating and cooling shelters in the village.	South Beloit wishes to seek funding to increase the number of heating and cooling shelters in the village.
Timeline: 5 years once funding is made available					
Funding: City of South Beloit general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Responsible: City of South Beloit; City of South Beloit Public Works					

Table G-38: Stillman Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education / Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: to update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table G-38: Stillman Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Explore grants to help fund backup generators for our fire station to maintain power during outages.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: district general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table G-39: Win-Bur-Sew Fire Protection District (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents, businesses, and schools within our fire protection district about hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Increase social media outreach and advance planning to create opportunities for public education.
Timeline: Ongoing				
Funding: District general funds				
Equipment Management	Goal: To update by replacing equipment and obtaining new equipment for mitigation situations.	All Hazards	High	Explore grant opportunities for helping with purchasing fire equipment for helping with mitigation efforts.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Staffing Needs	Goal: Explore methods to increase staffing needs emergency situations.	All Hazards	High	Explore grant opportunities for helping with staffing needs in providing help to those within our fire protection district during an emergency.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Work with the County Health Department on their functional needs survey to identify individuals with special needs. Also, preplan efforts to identify facilities in our district for high-risk individuals and train them on plans if that site is impacted during a disaster.
Timeline: Ongoing				
Funding: District general funds				
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	The fire protection district will identify areas within the station that may serve as a safe room and will also locate areas within the community that may serve as a public shelter site in the event of a disaster. If the need for a safe room exists, explore funding opportunities for creating one within the station.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Ongoing	Review the MABAS 8 box cards to ensure the correct resources and departments are listed.
Timeline: Ongoing				
Funding: District general funds				

Table G-39: Win-Bur-Sew Fire Protection District (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Participate in a county-wide radio needs assessment study to improve communication with fire dispatch during emergencies.
Timeline: Ongoing				
Funding: District general funds				
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Work with the County's GIS department to create fire incident hotspot maps for the fire protection district in order to analyze areas of concern.
Timeline: Ongoing				
Funding: District general funds				
Burn Ordinances	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	Ongoing/ Medium	Collaborate with our county and village leadership regarding burn ordinances based on data analysis.
Timeline: Ongoing				
Funding: District general funds				
Training Needs	Goal: Develop long-term training plans for improving first responder hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	Ongoing	Explore grants to supplement our training budget for fire, EMS, hazardous materials, wildland fire, and water safety. Participate in regional training to improve communications and operational understanding.
Timeline: Ongoing				
Funding: District general funds; Pre-Disaster Mitigation Funding; private lending; or grant funding				
Responsible: Chief/Administration				

Table G-40: Village of Winnebago (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Plans to improve public education and awareness remain a consideration; funding sources have not been identified at this time.	Plans to improve public education and awareness remain a consideration; funding sources have not been identified at this time.
Timeline: 2 years once funding is available					
Funding: Pre-Disaster Mitigation Funding; private lending;or grant funding/donations					
Mutual Aid Agreements	Goal: Create new or revise existing plans/maps. Objective: Lessen the impacts of hazards to new and existing infrastructure.	All Hazards	High	The Village of Winnebago is committed to working with Winnebago County Local Emergency Planning Committee and other agencies/entities to develop, refine, and improve agreements throughout the county.	The Village of Winnebago is committed to working with Winnebago County Local Emergency Planning Committee and other agencies/entities to develop, refine, and improve agreements throughout the county.
Timeline: Ongoing					
Funding: Village general funds					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazard	High	The Village Board and department heads within the Village recognize the importance of this category. At this time, funding sources have not been identified.	The Village Board and department heads within the Village recognize the importance of this category. At this time, funding sources have not been identified.
Timeline: 5 years once funding is available					
Funding: Pre-Disaster Mitigation Funding; private lending; or grant funding/donations					
Participate in the NFIP	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	The Village of Winnebago will continue assessments to evaluate and improve existing ordinances.	The Village of Winnebago will continue assessments to evaluate and improve existing ordinances.
Timeline: Ongoing					
Funding: Village general funds					
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	Medium	The Village of Winnebago will work with Winnebago Co. LEPC and other entities/agencies as necessary to improve and implement HAZMAT response plans.	The Village of Winnebago will work with Winnebago Co. LEPC and other entities/agencies as necessary to improve and implement HAZMAT response plans.
Timeline: 5 years					
Funding: Village general funds					

Table G-40: Village of Winnebago (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	The Village Board will oversee this project while working with appropriate department head(s) and try to secure funding.	The Village Board will oversee this project while working with appropriate department head(s) and try to secure funding.
Timeline: 2 years once funding is available					
Funding: Village general funds; Pre-Disaster Mitigation Funding; Private lending; or grant funding/donations					
Heating and Cooling Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering.	Winter Storms/ Extreme Heat	Medium	The Village Board oversees this project while working with appropriate department head(s), as well as outside entities and agencies.	The Village Board oversees this while working with appropriate department head(s), as well as outside entities and agencies.
Timeline: Ongoing					
Funding: Village general funds					
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	The Village Board, and the appropriate sub-committee(s) will oversee and monitor this ordinance. A revised ordinance has not been implemented at this time.	In 2024, The village Board updated its Burning ordinances to prohibit burning whenever there is an official warning by the National Weather Service or any other identified danger.
Timeline: Ongoing					
Funding: Village general funds					
Responsible: Administrator, Police Department, Public Works					

Table G-41: Winnebago County (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Ongoing within Winnebago County.	Ongoing within Winnebago County. Explore strategies for enhancing public awareness.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Devote Section of County Website to Hazard Mitigation Awareness	Goal: Develop long-term strategies to educate residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Ongoing mitigation item. Winnebago County website is utilized. Information should be updated frequently and seasonally.	Ongoing within Winnebago County utilizing the website and social media. Social media continues to be used for timely public awareness messaging.
Timeline: Updated annually					
Funding: Winnebago County general funds					
Family Disaster Plans & IEMA Kits	Goal: Lessen the impacts of hazards to County residents. Objective: Strengthen communication between County residents and emergency services.	All Hazard	High	2014 Comments as well as working with local municipalities and public works.	Engage in collaborative efforts with local municipalities and community partners to offer initiatives aimed at promoting awareness and preparedness.
Timeline: Ongoing					
Funding: Winnebago County general fund; Winnebago County Health Department general fund					
Special Needs Population List	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	Low	Nursing homes within Winnebago county currently have mutual aid agreements in place. This agreement includes developing and maintaining a special needs population list for each nursing home.	Conduct training in healthcare emergency preparedness to ensure mutual aid agreement plans are current and functional. Working with the health department to identify ways to identify special needs populations within the community.
Timeline: Completed					
Funding: None					
Provided and Publicize Location of Safe Rooms and/or Shelters	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Improve emergency sheltering in the county.	All Hazards	High	Winnebago County currently has designated heating/cooling shelters and distributes the locations of the shelters to residents in the county prior/ during each extreme weather event.	Winnebago County currently has designated heating/cooling shelters and distributes their locations to residents prior to/ during each extreme weather event. IEMA has a website listing heating/cooling that contains information for our county.
Timeline: Completed					
Funding: None					

Table G-41: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Establish Local Emergency Planning Committee	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	All Hazards	High	The Winnebago County LEPC continues to hold monthly planning meetings as well as annual public meetings and conferences.	The Winnebago County LEPC continues to hold quarterly meetings along with an annual public meeting. The Winnebago County LEPC is partnering with the Region 1 NIPARC group to plan a disaster preparedness conference.
Timeline: Ongoing					
Funding: None					
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Winnebago County Local Emergency Planning Committee (LEPC) oversees the various mutual aid agreements within the county.	Winnebago County Local Planning Committee (LEPC) oversees various mutual aid agreements. The fire jurisdictions use MABAS. The police jurisdictions use ILEAS.
Timeline: Ongoing					
Funding: None					
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Certain critical facilities within Winnebago County have alternative power sources in the event of a hazardous event. Identify those that do not have alternate power and work with ComEd if they lose power.	Certain critical facilities within Winnebago County have alternative power sources in the event of a hazardous event. Identify those that do not have alternate power and work with ComEd if they lose power.
Timeline: 2 years once funding is available					
Funding: Winnebago County general funds; Pre-Diaster Mitigation Funding; private lending; or grant funding/donations					
Enhance Communication Systems	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	Winnebago County is in the process of implementing a new Emergency Notification System, which is I-PAWS compliant.	Winnebago County utilizes IPAWS to alert the community during non-weather imminent danger. The county is exploring enhancing fire dispatch communications during incidents. Expand the use of Wincoil subscription-based communication.
Timeline: 2 years once funding is available					
Funding: Winnebago County general funds					
Data Acquisition for Future Hazard Mitigation Planning	Goal: Create new or revise existing plans/maps. Objective: Review and update existing GIS datasets.	All Hazards	High	Winnebago County continues to assist the Illinois State Water Survey with FEMA-directed flood risk-map reviews and comments. WinGIS maintains a list of critical and essential facilities in the county.	Winnebago County continues to assist the Illinois State Water Survey with FEMA-directed flood risk map reviews and comments. WinGIS maintains a list of critical and essential facilities in the county, along with other public safety layers.
Timeline: Ongoing					
Funding: Winnebago County general funds					

Table G-41: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
First Responder Training	Goal: Develop long-term strategies to education residents on the hazards affecting their community. Objective: Improve education and training of emergency personnel and public officials.	All Hazards	High	Ongoing within Winnebago County.	Continue to enhance collaboration and form partnerships to achieve regional uniformity in procedures and processes.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Develop Safety Procedures for Earthquakes	Goal: Improve emergency sheltering and procedures in the event of an earthquake. Objective: Review and update existing, or create new community earthquake plans.	Earthquakes	High	Winnebago County will work to develop mutual aid agreements in event of an earthquake.	Winnebago County will continue to develop responses and preparedness activities for earthquake events.
Timeline: 5 years					
Funding: Winnebago County general funds					
Burn Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Extreme Heat and Drought	High	This mitigation item is ongoing and is addressed by current ordinances. The County will continue to maintain update these ordinances.	This mitigation item is ongoing and is addressed by current ordinances. The county will continue to maintain and update these ordinances.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Participate in the NFIP	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Ongoing within Winnebago County. The county will continue to educate and encourage communities/jurisdictions to join the NFIP.	Ongoing within Winnebago County. The county will continue to educate and encourage communities/jurisdictions to join the NFIP.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Participate in the Community Rating System	Goal: Create new or revise existing plans/maps. Objective: Support compliance with the NFIP.	Flooding/ Dam and Levee Failure	High	Winnebago County will investigate the feasibility of joining the CRS.	Winnebago County will investigate the feasibility of joining the CRS.
Timeline: 5 years					
Funding: Winnebago County general funds					
Property Acquisition (Buyouts) & Property Relocation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	Winnebago County currently works and will continue to identify areas where buyouts and property relocations make the most sense. Several projects have already been completed with Federal assistance. The County will continue to seek federal funding for future property acquisitions.	Winnebago County currently works and will continue to identify areas where buyouts and property relocations make the most sense. Several projects have already been completed with Federal assistance. The County will continue to seek federal funding for future property acquisitions.
Timeline: 5 years once funding is made available					
Funding: Winnebago County general fund; Pre-Disaster Mitigation Funding; private lending; or grant funding					

Table G-41: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Structure Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee and Failure	High	Currently, the flood protection elevation is set at Base Flood Elevation + 1 foot; flood protection overlay districts are included in the proposed Unified Development Ordinance.	Currently, the flood protection elevation is set at Base Flood Elevation + 1 foot; flood protection overlay districts are included in the proposed Unified Development Ordinance.
Timeline: Ongoing					
Funding: Winnebago County general fund; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Roadway Elevation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Flooding/ Dam and Levee Failure	High	No Comment	In 2024 the Highway Department completed the elevation of Winnebago Road in west central Winnebago County above the Pecatonica River- Base Flood Elevation. The Highway Department would like to elevate Roscoe Road in north eastern Winnebago County above the Rock River- Base Flood Elevation and Telegraph Road in western Winnebago County above the Pecatonica River- Base Flood Elevation. The Highway Department will continue to apply for funding opportunities at both locations.
Timeline: 5 years once funding is made available					
Funding: Winnebago County general fund; Pre-Disaster Mitigation Funding; private lending; or grant funding					
Floodplain and Stormwater Management Ordinances	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	Winnebago County has building code restrictions and flood protection requirements in place. The County will continue to maintain and update these ordinances.	Winnebago County has building code restrictions and flood protection requirements in place. The County updated its Surface Water Management Ordinance in 2024.
Timeline: Completed; Ongoing					
Funding: Winnebago County general funds					
Dam Failure Emergency Response Plan	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Flooding/ Dam and Levee Failure	High	Winnebago County Emergency Services participate in response planning for such events.	Winnebago County Emergency Services participates in response planning for such events. The Alpine Dam in Rockford, Illinois, is undergoing upgrades to bring it into compliance with modern Army Corps of Engineers regulations.
Timeline: Ongoing					
Funding: Winnebago County general fund					

Table G-41: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Open Space Preservation	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Keep the floodplain and other hazardous areas open and free from development.	Flooding/ Dam and Levee Failure	High	Flood protection overlay districts and conservation design are included in the proposed Unified Development Ordinance.	Flood protection overlay districts and conservation design are included in the proposed Unified Development Ordinance.
Timeline: Ongoing					
Funding: None					
Install Sump Pumps	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize potential damage to foundations and household/critical facility utilities.	Flooding/ Dam and Levee Failure	High	This mitigation item is ongoing within Winnebago County and is part of the building code requirement for specified sites.	This mitigation item is ongoing within Winnebago County and is part of the building code requirement for specified sites.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Emergency Plan/Protocol for HAZMAT Releases	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Winnebago County requires HAZMAT response plans for specified building sites and facilities. Through Mutual Aid, the Rockford Fire Department is the designated response team for Hazardous Materials incidents.	Winnebago County requires HAZMAT response plans for specified building sites and facilities. Tier II reports are filed with LEPC. Through Mutual Aid, the Rockford Fire Department is the designated response team for Hazardous Materials incidents.
Timeline: Completed					
Funding: None					
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	This mitigation item is ongoing.	This mitigation item is ongoing. The Federal Motor Carrier Safety Administration provides a designated National Hazardous Materials Route Registry. Designated evacuation routes are identified for Constellation Nuclear Facility incidents.
Timeline: Ongoing					
Funding: Winnebago County general funds					
HAZMAT Spill, Removal and Disposal Procedure	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	This mitigation item is ongoing and is overseen by the Winnebago County LEPC.	This mitigation item is ongoing and is overseen by the Winnebago County LEPC. Collaboration with reporting to State partners continues to oversee these types of incidents.
Timeline: Ongoing					
Funding: Winnebago County general funds					

Table G-41: Winnebago County (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2019)	Comments (2024)
Anchoring of Manufactured Homes and Exterior Attachments	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Severe Storms/ Tornadoes	High	This mitigation item is ongoing within Winnebago County and is part of the building code requirement for specified structures.	This mitigation item is ongoing within Winnebago County and is part of the building code requirement for specified structures.
Timeline: Ongoing					
Funding: None					
Ordinance for Higher Construction Standards/ Techniques in Regards to Severe Storms	Goal: Create new or revise existing plans/maps. Objective: Review and update existing, or create new community plans and ordinances.	Severe Storms/ Tornadoes	High	This mitigation item is ongoing within Winnebago County and is part of the building code requirement. Example: Per current building code, 90 mph, 2-3 second gusts must be withstood by certain building categories.	This mitigation item is ongoing within Winnebago County and is part of the building code requirement with updates. For example, per the current building code, specific building categories must withstand 105 mph, 2-3 second gusts.
Timeline: Ongoing					
Funding: None					
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	This mitigation item is ongoing and is regular practice of the Highway Department.	This mitigation item is ongoing and is regular practice of the Highway Department.
Timeline: Ongoing					
Funding: Winnebago County general funds					
Responsible: Winnebago County Emergency Management Agency (Winnebago County Sheriff's Department); Winnebago County; Winnebago County Highway Department					

Table G-42: Winnebago Township (2024)

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Public Education/ Awareness	Goal: Develop long-term strategies to educate County residents on the hazards affecting their community. Objective: Raise public awareness of hazard mitigation.	All Hazards	High	Continue putting information on Township website and providing availability for speaking to the public on all hazards.
Timeline: Ongoing				
Funding: Road and Bridge or Grant funding				
Mutual Aid Agreements	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Evaluate and strengthen the communication and transportation abilities of emergency services.	All Hazards	High	Continue relationship with all local governmental bodies and IPMAN.
Timeline: Ongoing				
Funding: Road and Bridge				
Back-up Generators for Critical Facilities	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Equip public facilities and communities to guard against damage caused by secondary effects on hazards.	All Hazards	High	No current back-up generators for any of the township facilities.
Timeline: 2 years once funding is made available				
Funding: Road and Bridge; Grant funding				
Develop Alternate Traffic Routes	Goal: Create new or revise existing plans/ maps. Objective: Review and update existing, or create new community plans and ordinances.	HAZMAT	High	Work with Winnebago County, Emergency Service Providers, and cities to develop plans for alternate routes for all road closure situations.
Timeline: 5 years				
Funding: Grant funding				
Install Snow Fences	Goal: Lessen the impacts of hazards to new and existing infrastructure. Objective: Minimize the amount of infrastructure exposed to hazards.	Winter Storms	High	No current snow fence installed by the Township. Beneficial in rural areas of the township.
Timeline: Ongoing				
Funding: Road and Bridge				
Structure Elevation	Goal: Decrease roadway flooding- Eliminate traffic hazards especially during spring freezing and thawing.	Flooding	High	Numerous structures that need updating. Grant funding need.
Timeline: 5 years once funding is made available				
Funding: Grant funding; Road and Bridge; General funds				
South Fork Kent Creek or Coolige Creek	Goal: Decrease the impact of hazards. Objective: Reduce or eliminate ditch erosion and runoff.	Severe Weather	High	In cooperation with Winnebago County, grant funding needed.
Timeline: 5 years once funding is made available				
Funding: Grant funding; Road and Bridge; General funds				

Table G-42: Winnebago Township (2024) Continued

Mitigation Item	Goals and Objects Satisfied	Hazards Addressed	Priority	Comments (2024)
Treatment of roads	Goal: Decrease the hazards to new and existing infrastructure. Objective: Maximize efficiency of infrastructure exposed to hazards.	Winter Weather	High	Winter salt storage needed.
Timeline: 5 years once funding is made available				
Funding: Grant funding				
Active Tree Management	Goal: Lesson the impact of hazards to new and existing infrastructure. Objective: Active tree management near critical infrastructure to increase safety and minimize damage.	All Hazards	High	Ongoing year round practice that Winnebago Township Highway perform. Additional funding for equipment needed.
Timeline: Ongoing				
Funding: Road and Bridge				
Responsible: Township Highway Department, Township Supervisor				

Endnotes

i Hazard Mitigation Planning. https://www.fema.gov/hazard-mitigation-planning. Accessed, September 30, 2024.

ii Hazard Mitigation Planning. https://www.fema.gov/hazard-mitigation-planning. Accessed, September 30, 2024.

iii National Oceanic and Atmospheric Administration. Jet Stream. https://www.weather.gov/jetstream/climate_max. Accessed, September 30, 2024.

iv Illinois State Climatologist. https://stateclimatologist.web.illinois.edu/data/climate-data/#:~:text=Illinois%201991%20%E2%80%93%202020%20Normals.%20NCEI. Accessed, September 30, 2024.

v SAMHSA. Disaster Technical Assistance Center Supplemental Research Bulletin. https://www.samhsa.gov/sites/default/files/dtac/srb-low-ses_2.pdf. July 2017.

vi Rockford Area Economic Development Council. https://rockfordil.com/doing-business-here/demographics/employment-data/. Accessed, September 30, 2024.

vii Census. https://datausa.io/profile/geo/winnebago-county-il#:~:text=The%20largest%20industries%20in%20Winnebago,Quarrying%2C%20%26%20Oil%20%26%20Gas%20Extraction. Accessed, May 28, 2024

viii Census. https://data.census.gov/table?q=winnebago%20county%20il%20poverty%20by%20group&g=050XX00US17201

ix https://data.census.gov/table?q=winnebago%20county%20il%20housing&g=050XX00US17201. Accessed, May 28, 2024.

x Census Reporter. https://censusreporter.org/profiles/05000US17201-winnebago-county-il/. Accessed, May 28, 2024.

xi Regrid. https://app.regrid.com/store/us/il/winnebago. Accessed, May 28, 2024.

xii FEMA. https://www.fema.gov/disaster/declarations. Accessed, September 12, 2024.

xiii "An Assessment of the Impacts of Climate Change in Illinois." The Nature Conservancy. 2021. https://www.nature.org/content/dam/tnc/nature/en/documents/IL_Climate_Assessment_2021.pdf

xiv "An Assessment of the Impacts of Climate Change in Illinois," The Nature Conservancy.

xv Kenny, Glen P., Jane E. Yardley, Candice M. Brown, Ronald J. Sigal, and Ollie Jay. "Heat Stress in Older Individuals and Patients with Common Chronic Diseases." Canadian Medical Association Journal 182 (10): 1053–60. 2010. https://doi.org/10.1503/cmaj.081050.

xvi Paterson, David L., H. Bunker Wright, and Patrick N A Harris. "Health Risks of Flood Disasters." Clinical Infectious Diseases 67 (9): 1450–54. 2018. https://doi.org/10.1093/cid/ciy227.

xvii "Historical Flood Risk and Costs." Federal Emergency Management Agency (FEMA). 2022. https://www.fema.gov/data-visualization/historical-flood-risk-and-costs.

xviii https://www.fema.gov/about/openfema/data-sets#nfip

xix Federal Emergency Management Agency (FEMA). National Risk Index. U.S. Department of Homeland Security. Accessed September 9, 2024. https://hazards.fema.gov/nri

xx National Flood Insurance Program. https://agents.floodsmart.gov/sites/default/files/fema-nfip-fast-facts-flood-insurance-infographic-04-2023.pdf. Accessed May 28, 2024.

xxi National Centers for Environmental Information. https://www.ncei.noaa.gov/#:~:text=NCEI%20maintains%20one%20of%20the%20most. Accessed, June 24, 2024.

xxii National Weather Service. https://www.weather.gov/lot/2024_07_13-14_Flooding#:~:text=Additional%20Info,Rainfall. Accessed, August 1, 2024

xxiii Federal Emergency Management Agency (FEMA). NFIP Multiple Loss Properties. https://www.fema.gov/openfema-data-page/nfip-multiple-loss-properties-v1. Accessed May 22, 2025.

xxiv Ready. https://www.ready.gov/heat. Accessed June 24, 2004.

xxv Waste Connections. https://www.winnebagolandfill.com/landfill. Accessed, August 1, 2024.

xxvi Waste Connections. https://www.winnebagolandfill.com/landfill. Accessed, August 1, 2024.

xxvii CAMEO Chemicals. http://cameochemicals.noaa.gov/chemical/4860. Accessed, September 12, 2024.

xxviii CAMEO Chemicals. http://cameochemicals.noaa.gov/chemical/2862. Accessed, September 12, 2024.

xxix United States Geological Survey. Groundwater Decline and Depletion. https://www.usgs.gov/special-topics/water-sci-

ence-school/science/groundwater-decline-and-depletion?qt-science_center_objects=0#qt-science_center_objects. Accessed, October 1, 2024.

xxx California State Water Resources Control Board. https://www.waterboards.ca.gov/water_issues/programs/groundwater/gw_basics.html. Accessed, October 1, 2024.

xxxi California Department of Water Resources. Summary of Recent, Historical, and Estimated Potential for Future Land Subsidence in California. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/GWU2013_Apdx_F_Final.pdf. 2014.

xxxii Illinois State Water Survey. "Groundwater Depletion in Chicago's Southwestern Suburbs. Devin H. Mannix, Daniel B. Abrams, et. Al. https://www.isws.illinois.edu/pubdoc/MP/ISWSMP-208.pdf. August 29, 2017.

xxxiii U.S. Centers of Disease Control and Protection: Agency for Toxic Substances and Disease Registry. 2022. What are the health effects of PFAS? https://www.atsdr.cdc.gov/pfas/health-effects/index.html. Accessed September 4, 2024.

xxxiv United State Environmental Protection Agency. Per- and Polyfluoroalkyl Substances Final PFAS National Primary Drinking Water Regulation. https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas. Accessed, September 4, 2024.

xxxv National Library of Medicine. Psychological Toll of the COVID-19 Pandemic: an In-Depth Exploration of Anxiety, Depreseion, and Insomnia and the Influence of Quarantine Measures on Daily Life. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10487588/. Accessed, October 1, 2024.

xxxvi Centers for Disease Control. Symptoms of Covid-19. https://www.cdc.gov/covid/signs-symptoms/index.html. Accessed, October 1, 2024.

xxxvii National Library of Medicine. Covid-19-induced gastrointestinal autonomic dysfunction: A systematic review. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10445067/. Accessed, October 1, 2024.

xxxviii National Oceanic and Atmospheric Administration. https://www.climate.gov/news-features/blogs/beyond-data/2018s-billion-dollar-disasters-context. Accessed, October 1, 2024.

xxxix Federal Emergency Management Agency. Hazard Mitigation Grant Program. https://www.fema.gov/grants/mitigation/learn/hazard-mitigation. Accessed, October 1, 2024.

Extended Descriptions

Figure 7-6: ALOHA Analysis Parameters for Ammonia Release: A screenshot of the ALOHA Analysis Parameters for Ammonia Release text. The text reads:

Site Data:

- Location: CONSERV FS AT MERIDIAN AND C, ILLINOIS. Building Air Exchanges Per Hour: 1.14 (unsheltered single storied). Time: September 13, 2024 1448 hous CDT (user specified).

Chemical Data:

- Chemical Name: Ammonia. CAS Number: 7664-41-7. Molecular Weight: 17.03 g/mol. AEGL-1 (60 min): 30 ppm, AEGL-2 (60 min): 160ppm, AGEL-3 (60 min): 1100 ppm. IDLH: 300 ppm. LEL: 150000ppm. UEL: 280000 ppm. Ambient Boiling Point-29.2 degrees Fahrenheit. Vapor Pressure at Ambient Temperature: greater than 1 atm. Ambient Saturation Concentration: 1,000,000 ppm or 100.0%.

Atmospheric Data: (Manual Input of data):

- Wind: 15 miles/hour from W at 10 meters. Ground Roughness: open country .Cloud Cover: 5 tenths. Air Temperature: 80 degrees Fahrenheit. Stability Class: D. No Inversion Height. Relative Humidity 75%

Source Strength:

- Leak from hole in horizontal cylindrical tank. Flammable chemical escaping from tank (not burning).Tank Diameter: 8 feet. Tank Length: 33 feet. Tank Volume: 12,408 gallons. Tank contains liquid. Internal Temperature 80 degree Fahrenheit. Chemical Mass in Tank: 24.3 tons. Tank is 78% full. Circular Opening Diameter: 2.5 inches. Opening is 12 inches from tank bottom. Release Duration: 9 minutes. Max Average Sustained Release Rate: 8,600 pounds/min (averaged over a minute or more). Total Amount Released: 45,360 pounds. Note: The chemical escaped as a mixture of gas and aerosol (two phase flow).

Threat Zone:

- Model Run: Heavy Gas. Red: 1.0 miles--- (1100 ppm = AEGL-3 [60 min]). Orange: 3.2 miles--- (160 ppm = AEGL-2 [60 min]). Yellow: greater than 6 miles--- (30 ppm = AEGL-1 [60 min])

Figure 7-8: ALOHA Analysis Parameters for Chlorine Release: A screenshot of the ALOHA Analysis Parameters for Chlorine Release text. The text reads:

Site Data:

- Location: Viking Chemical, Illinois. Building Air Exchanges Per Hour: 1.41 (unsheltered single storied). Time: September 12, 2024 1349 hours CDT. (using computer's clock).

Chemical Data:

- Chemical Name: Chlorine. CAS Number: 7782-50-5. Molecular Weight: 70.91 g/mol. AEGL-1 (60 min): 0.5 ppm, AEGL-2 (60 min): 2 ppm, AGEL-3 (60 min): 20 ppm. IDLH: 10 ppm. Ambient Boiling Point:-30.2 degrees Fahrenheit. Vapor Pressure at Ambient Temperature: greater than 1 atm. Ambient Saturation Concentration: 1,000,000 ppm or 100.0%.

Atmospheric Data: (Manual Input of data):

- Wind: 15 miles/hour from SSE at 10 feet. Ground Roughness: open country .Cloud Cover: 0 tenths. Air Temperature: 80 degrees Fahrenheit. Stability Class: D. No Inversion Height. Relative Humidity 75%.

Source Strength:

- Leak from hole in horizontal cylindrical tank. Non-flammable chemical escaping from tank. Tank Diameter: 8 feet. Tank Length: 33 feet. Tank Volume: 12,408 gallons. Tank contains liquid. Internal Temperature: 80 degree Fahrenheit. Chemical Mass in Tank: 56.4 tons. Tank is 78% full. Circular Opening Diameter: 2.5 inches. Opening is 12 inches from tank bottom. Release Duration: 14 minutes. Max Average Sustained Release Rate: 11,400 pounds/min (averaged over a minute or more). Total Amount Released: 104,528 pounds. Note: The chemical escaped as a mixture of gas and aerosol (two phase flow).

Threat Zone:

- Model Run: Heavy Gas. Red: 4.4 miles--- (20 ppm = AEGL-3 [60 min]). Orange:greater than 6 miles--- (2 ppm = AEGL-2 [60 min]). Yellow: greater than 6 miles--- (0.5 ppm = AEGL-1 [60 min]).

Figure 7-15: Comparison of Earthquake Magnitude and Intensity: The Modified Mercalli Scale labeled 1 to 12 with the Richter Magnitude Scale that looks like a ruler. 1. Detected only by sensitive instruments. The ruler shows 0 to approximately 1.5.

2. Felt by few persons at rest, especially on upper floors; delicately suspended objects may swing. The ruler show approximately 1.75 to 2.25.

3. Felt noticeably indoors, but not always recognized as earthquake; standing autos rock slightly, vibration like passing truck. The ruler shows approximately 2.25 to 2.75.

4. Felt indoors by many, outdoors by few, at night some may awaken; dishes, windows, door disturbed; autos rock noticeably. The ruler shows approximately 2.75 to 3.5.

5. Felt by most people; some breakage of dishes, windows, and plaster; disturbance of tall objects. The ruler shows approximately 3.5 to 4.

6. Felt by all, many frightened and run outdoors; falling plaster and chimneys damage small. The ruler shows approximately 4 to 4.25.

7. Everybody runs outdoors; damage to building varies depending on quality of construction; noticed by driver of autos. The ruler shows approximately 4.25 to 4.75.

8. Panel walls thrown out the frames; fall of walls, monuments, chimneys; sand and mud ejected; drivers of autos disturbed. The ruler shows approximately 2.75 to 5.25.

9. Building shifted off foundations, cracked, thrown out of plumb; ground cracked; underground pipes broken. The ruler is approximately 6 to 6.5.

10. Most masonry and frame structures destroyed; ground cracked, rails bent, landslides. The ruler is approximately 6.5 to 7.25.

11. Few structures remain standing; bridges destroyed fissures in ground, pipes broken, landslides, rails bent. The ruler is approximately 7.25 to 7.75.

12. Damage total; waves seen on ground surface, lines of sigh and level distorted, object thrown up in air. The ruler is approximately 7.75 to 9.

Figure D-1: Document Kick-off Meeting Agenda: Winnebago County Hazard Mitigation Plan Update. Document Kick-off Meeting. Wednesday, May 8 8:30 a.m. Mezz North. Agenda:

1. Project Scope Recap – update of 2019 Hazard Mitigation Plan for Winnebago County: Schedule: County-wide stakeholder/community input meeting on 5/22/24; Major Content Deliverable – updated Plan document; Audience(S): County, Municipalities, Townships, Community Organizations, Fire Districts, School Districts, Colleges, Utility providers Hospitals, State & Federal Mitigation officials.
2. Draft Document Outline – following 2019 plan section headings.
3. File Management: a. "P:\METROPOLITAN PLANNING ORGANIZATION- MPO\+Client Projects\WC\ Winnnebago County MultiHazard Mitigation Plan\ MHMP Update_2023"
4. Data Collection and Analysis- Work Plan and monday. com. Maps, NOAA and NWS, Update 2019 maps with any revisions through 2023/2024, US Census Bureau, Hazus Modelling- https://msc.fema.gov/portal/ resources/hazus.
5. Review and Revision Process.
6. Document Layout: Follow 2019 format.
7. Assignments.
8. Open Discussion.

Figure D-2: Community Input Coordination Meeting Update: Winnebago County Hazard Mitigation Plan Update. Community Input Meeting Coordination Update. Wednesday May 15, 2024, 3:30 p.m. R1 Office, 127 N. Wyman. Agenda:

1. Review Presentation for May 22 meeting
2. Adjust Agenda based on presentation (Suggested to add presentation details). Introduction; Presentation – with subitem headings: Mitigation Strategies – transportation assets and critical facilities?; Additional Questions; Public Comment; Next Steps; Adjourn.
3. Document Updates: Public Comment period is now added; R1 completing document design?; FEMA Local Mitigation Plan Review Tool/Checklist
4. Meeting Responses Update.
5. Additional Questions/Comments.
6. Next Steps: Update presentation, if necessary; Update agenda, as needed; Distribute and post agenda; Additional outreach – press release, social media, etc.?

7. Adjourn

Figure D-3: Community Input Meeting Agenda: Winnebago County Hazard Mitigation Plan Update.

Community Input Meeting. Wednesday, May 22, 2024 9:00 a.m. Veteran's Memorial Hall 211 N Main Street Rockford, 61101. Agenda:

1. Welcome and Introduction (Trent/Sean/Eric): Stakeholders
2. Hazard Mitigation Plan Background (Sean).
3. 2024 Plan Update Process and Timeline: Community Input Meeting and feedback; Risk Priority Analysis – today through early June; Mitigation Strategies – June and July; Document revision.
4. Additional Questions/Comments
5. Public Comment
6. Next Steps: Stakeholders complete Risk Priority Analysis spreadsheets, Return by June 14; Week of May 28- Distribute Mitigation strategy worksheets for review and update, Return worksheets by July 12; June and July- Can and will meet with stakeholders to complete Mitigation Strategy worksheets
7. Adjourn

Figure D-6: Public Works Committee Agenda: The full pdf of the agenda can be found on the County's website at this link: https://wincoil.gov/images/government/meeting-agendas-minutes/Packets/2024_Packets/11_27_24_Weekly_Committee_Schedule_1.pdf

Figure D-7: Winnebago County Multi-Hazard Mitigation Plan Update Presentation:
The Winnebago County Multi-Hazard Mitigation Plan Update Presentation link can be found on the Public Works agenda under agenda item 3 or at this link: https://docs.google.com/presentation/d/153SUjgzifT5eY96fYXJjip5FkosD-wm6/edit#slide=id.p1

Figure D-8: Public Meeting Sign-in Sheet: Winnebago County Multi-Hazard Mitigation Plan Public Meeting and signatures.

Figure E-1: Winnebago County Health Department Comments: Scan of an email from the health department comments on the plan. Text reads:

From: Rebecca Lyons [redacted email]. Sent: Monday, June 3, 2024 11:01 AM. To: Eric Tison. Subject: Re:: Winnebago County Hazard Mitigation Plan Update Risk Analysis--Winnebago County Health.

Attachments: Winnebago County_Health.xlsx; Community Input Meeting Presentation 05222024.pdf

Importance: High

Hi Eric, I had some follow up questions regarding the tool. For public health and health care we typically use the Kaiser Permanente Hazard Vulnerability Assessment Tool (HVA). I understand that the FEMA Hazard Mitigation Plan is more specifically focused on natural disasters, however I am wondering about the choice of categories and ranking. Is there a way you would like us to propose new categories be added or modified?

One I would be important to add are as follows: Infectious Disease Outbreak; Air Quality Issue; Water Contamination; Utility Failure or Power Outage; Extreme Cold.

I would also suggest the following changes: Splitting drought and extreme heat into two separate categories; Changing groundwater shortage to water disruption.

Thanks,

Rebecca Lyons, MPH. Director of Public Health Emergency Preparedness. Phone: [redacted phone number] Winnebago County Health Department. 555 N. Court St., Rockford, IL 61103 Main Line: (815) 720-4000 Website: www.publichealth.wincoil.gov

Figure E-3: Public Comment Notes: Scan of Public Comment Note document. Text reads:

Public Comment Notes:

Need to add Pecatonica Fire to table on page iii and page 27

Public Comment to run through 11/20

Page 75 – misspelling of 'Natural'

Four Rivers, 11/13/24

- Page iv, Partner Organizations: Replace Rock River Water Reclamation District with Four Rivers Sanitation Authority.
- Page 18: Replace Rock River Water Reclamation District with Four Rivers Sanitation Authority. FRSA is a sanitary sewer utility provider only, not water.
- Page 27: Replace Rock River Water Reclamation District with Four Rivers Sanitation Authority.
- Page 60: Replace Rock River Water Reclamation District with Four Rivers Sanitation Authority.

Mitigation Strategy Worksheets to be added:

- Blackhawk Fire
- New Milford Fire
- North Park Fire
- Northwest Fire
- Stillman Fire
- WinBurSew Fire

Must add/confirm location in jurisdictional participation charts as well (as above, page iii and page 27)

Screenshot in folder to be added to Appendix E

This notes sheet to be added to Appendix E

Figure E-4: Suggestion for Hazard Mitigation Plan:
Scan of an email from the Dickerson & Nieman Realtors comments on the plan. Text reads:

Dear Eric,

Re Public comment on Winnebago County Hazard Mitigation Plant Update Risk Analysis –Winnebago County

Dear Eric,

Before Jack and I moved to Loves Park in 2022, I was for many years the neighborhood leader for Alpine Ridge Neighborhood Assn.

During that time, I worked with Daniel Nelson, [redacted phone and address]. (He is also the owner of Chocolat by Daniel, [redacted phone and address])

In 2020-2021 we talked about setting up a training for our neighborhood volunteers to link themselves via walky-talky type equipment and short-wave radio to serve as communication volunteers during emergency situations in our neighborhood. Daniel is one of the area ham operators, very knowledgeable, has taken emergency response training with a group up in S Beloit, if I remember correctly). We believe that neighborhood volunteers could be prepared to serve responsibly during disasters.

For about 1 year we worked on setting up a relationship with the Fire Department to develop a link with RFD and our neighborhood Assn (and possibly the Amateur shortwave radio group of people who operate in and around our area of the state). We approached the Fire Department leadership (before the reign of the current female Chief.) Got limited positive response. They were "busy—in the middle of the COVID epidemic – We don't have time now, but soon…") "Soon" never happened. I wanted to push it more, but Daniel was afraid to antagonize them. So, I eventually dropped. It. Then I moved out of the neighborhood. Daniel may have reconnected with the Fire Department – I don't know.

But… After reviewing your summary report online, I am motivated to ask you to explore with the planning committees how to build upon the Citywide neighborhood associations, and strengthen volunteer groups (especially the ham operator group) throughout the City/County, to serve as communicators during disaster situations. With a little planning, coordination and training they could become a valuable resource for all of us in the aftermath of a disaster.

And my perception is that they will be helping anyway – that is what they do… Why not make them more effective throughout the area?

My contact with the City was Barb Chidley [redacted phone number and email],-- a terrific advocate for stronger neighborhoods.

You can contact her to discuss to viability of such an endeavor, from her perspective.

Please contact Daniel. He does not know I am sending this request to you. But I do hope you will push this concept a bit with the planners.

He is VERY KNOWLEDGEABLE, MOTIVATED AND HAS THE SKILLS OF A GOOD DISASTER MITIGATOR in that particular neighborhood.

I would be glad to provide testimony with Daniel about this concept.

Thanks, Sandy Tower, [redacted email and phone number]

P.S. I have copied this message to Barb Chidley

Capability	Winnebago County	Townships	Cherry Valley	Durand	Loves Park	Machesney Park	New Milford	Pecatonica	Rockford	Rockton	Roscoe	Winnebago	Fire Districts	Park District
Plans														
Economic Development*	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	CEDS	n/a	n/a
Emergency Operations	Winnebago County EOP, 2001								City of Rockford EOP, 2001					
Policies, Codes, Ordinances														
Surface Water, Storm, Flood	Surface Water, 2024	Surface Water, 2024	Stormwater Management Plan, 2001			Stormwater Management Plan			Storm Water Master Plan, 2024 update		Stormwater Management Program, 2012		n/a	n/a
Mutual Aid Agreements	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a
Administrative														
Planner	Staff	n/a	None	None	Staff	Staff	None	None	Staff	Staff	None	None	n/a	Staff
Finance/Grants Administration	Staff		None	None	Staff	None	None	None	Staff	None	None	None	None	
Public Information Officer	Staff		None	None	Staff	None	None	None	Staff	None	None	None	Yes	
Grant Writing	Staff		None	None	None	None	None	None	Staff	None	None	None	None	
Technical														
Emergency Manager	Staff	County	County	County	Fire	County	County	County	Staff	County	County	County	Staff	Staff
Floodplain Admin	Staff	County				Staff			Staff				n/a	
Civil Engineer	Staff	County	Consultant	Consultant	Consultant	Consultant	Consultant	Consultant	Staff	Consultant	Consultant	Consultant	n/a	Consultant
Legal Counsel	Staff	Consultant	Consultant	Consultant	Consultant	Consultant	Consultant	Consultant	Staff	Consultant	Consultant	Consultant	Consultant	Consultant
GIS	Staff	County	None	None	None	None	None	None	Staff	None	None	None	n/a	
Financial														
Capital Improvement	As needed	As needed							Annual				As needed	Annual
Utility Fees	none	n/a	Water	Water, Sewer	Water, Sewer	Non Village	None	Water, Sewer	Water, Sewer	Water, Sewer	Non village	Water, Sewer	n/a	n/a
State funding	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT	IDNR, IDOT		IDNR, IEPA
Federal funding (non-FEMA)	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA	EDA		EDA
FEMA funding assistance	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC	BRIC
Education/Outreach														
Newspaper	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current	Rockford Register Star, Rock River Current
Local news stations	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF	WTVO, WREX, WIFR, WQRF
Organizations that interact with underserved/ vulnerable	Community Services Division/ Human Services Department, Salvation Army, Red Cross, Rock River Valley Pantry, Rockford Rescue Mission, NIL Foodbank								Salvation Army, Red Cross, Shelter Care Ministries, YWCA, Prairie State Legal Services					
Social media	Multiple								Multiple					Multiple



Winnebago County, Illinois
404 Elm St.
Rockford, Illinois 61103
815-319-4444



Region 1 Planning Council
127 N Wyman St. Suite 100
Rockford, Illinois 61101
815-319-4180 | info@r1planning.org